AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE

SCIENTIFIC CONGRESS & EXPO

FINAL PROGRAM
JOIN US FOR OUR

Opening Ceremony

Opening Ceremony Breakfast supported by Roche

Monday, October 14th,
7:45 am – 8:30 am

Plenary 1 will immediately follow in the same room.
A complimentary continental breakfast will be available 7:00 am – 7:45 am

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THIS YEAR, WE WELCOME YOU TO THE HISTORICALLY RICH CITY OF PHILADELPHIA, PENNSYLVANIA for the 75th annual meeting of the American Society for Reproductive Medicine and celebration of our 75th anniversary as a society! This year's ASRM Scientific Congress & Expo theme is “Celebrating 75 Years of History and Innovation” in keeping with our anniversary and the critical role of ASRM in focusing on the many innovations in reproductive medicine. Dr. Keith Jarvi, Scientific Congress Program Chair, and Dr. Cigdem (Cori) Tanrikut, Pre-Congress Program Chair, and their teams have designed a comprehensive and provocative program for Congress attendees. The entire program is designed to address the educational and practice needs of physicians, nurses, andrology and embryology laboratory personnel, genetic counselors, social workers, practice and laboratory managers, as well as practitioners in mental health, law, and ethics.

OUR WEEKEND BEGINS with exciting Pre-Congress courses that range from the latest on subchromosomal variations and mosaicism and their clinical significance in ART practices to reproductive aging, cryostorage management, ethical and legal issues related ART and family building, and endometriosis diagnosis and management. The Pre-Congress program has initiated half-day courses into the program for the first time to better meet the differing schedules as our attendees arrive. We hope that you will take advantage of these new offerings. The Pre-Congress Program Committee has collaborated with our affiliated societies and professional, special interest groups, and several International Societies as well as other outside Societies to present a wide range of often multi-disciplinary Pre-Congress courses designed to meet the needs of clinicians, scientists, laboratory technologists, nurses, and other health-care and allied professionals.

The Scientific Congress Continuing Medical Education (CME) course offerings will include morning plenary and dual-afternoon lectures, symposia, and interactive sessions. I am excited to share with you that the lectures will touch on historical perspectives again, as well as innovative lectures that focus on communication between generations, exciting new innovations in live imaging to reveal the mechanisms that form embryos, examination of IVF as a business, with a special focus on male factors in infertility, including the effect of sperm factors on offspring, the ethics of human germline editing, a reflection of the patient’s perspective on fertility preservation, as well as the role of big data in healthcare. We will also have a unique presentation on the role of innovation including use of robotics in surgery, and an overview of male contraception from historical and present perspectives, as well as future directions in contraception.

The symposia and interactive sessions will touch on a range of topics, from politics and ethics in embryo research, access to care, endometrium therapy, regenerative medical therapies for reproductive medicine, reproductive epigenetics, and egg freezing – both lab as well as family building considerations. CME sessions will be complemented by non-CME activities including intimate, in-depth luncheons with recognized experts in our highly successful Expert Encounters; roundtable luncheons covering the breadth and depth of reproductive medicine; and oral and poster-format scientific abstract presentations, representing cutting-edge research in reproductive medicine and biology.

We welcome our members, trainees, and colleagues from around the world to the ASRM 2019 Scientific Congress & Expo! We value your participation and engagement and hope you will take advantage of the opportunities provided by the meeting to interact and network with colleagues.

I look forward to seeing you in the exciting city of Philadelphia, where together, we will celebrate ASRM’s “75 Years of History and Innovation.” I encourage all to consider joining us at the 75th Anniversary Gala on Sunday night, October 13, 2019 at Philadelphia’s beautiful National Constitution Center where we celebrate the Society’s anniversary and support the research efforts of our Society members to further improve medical care provided by our members.

Sincerely,

Peter N. Schlegel, M.D.
ASRM President, 2018-2019
IMMERSE YOURSELF IN AMERICA’S SPIRIT IN THE CITY WHERE IT ALL BEGAN—
with iconic landmarks that played a pivotal role in the establishment of
America—including Independence Hall, a UNESCO World Heritage Site and
the building where the Declaration of Independence and U.S. Constitution
were debated and adopted. While we are known worldwide for our rich
history, Philadelphia has accumulated significant accolades for our walkable
downtown, distinct neighborhoods, outstanding restaurants, exceptional
arts and culture, outdoor life, tax-free shopping on clothing and shoes, and
much more. Use this guide for suggestions on what to explore in the first World
Heritage City in the U.S.

While Philadelphia boasts a wide range of attractions and activities for
all ages and interests, it’s also the perfect starting point for excursions into the
surrounding region. Destinations in the greater Philadelphia region, including
surrounding counties, New Jersey and Delaware, are often just a one-to-two
hour drive from Center City. Whether you’re stopping to smell the flowers in
horticultural hotspot Longwood Gardens, sampling sweetness in Hershey’s
chocolate capital of the world, hitting the outlets in the surrounding counties,
or retracing the footsteps of Revolutionary soldiers in Valley Forge National
Historical Park, there’s no shortage of things to do outside Philadelphia’s limits.
Philadelphia Hotel Information

1. Aloft Philadelphia Downtown
2. Four Points by Sheraton City Center Hotel
3. Hampton Inn Philadelphia Convention Center
4. Hilton Garden Inn Philadelphia Convention Center
5. Home2 Suites by Hilton
6. Le Meridien Philadelphia
7. Loews Philadelphia Hotel
8. Philadelphia 201 Hotel
9. The Notary Hotel, Autograph Collection® by Marriott
10. Philadelphia Marriott Downtown *
11. The Ritz-Carlton, Philadelphia

NEW THIS YEAR; all official ASRM hotels are within walking distance to the convention center. Please note that since all hotels are within walking distance, shuttle bus transportation will not be provided.

Pennsylvania Convention Center
1101 Arch Street
Philadelphia, PA 19107
Committees and Awards

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The 2019 recipient of the ASRM Distinguished Researcher Award is Lawrence C. Layman, M.D. This award recognizes a member of the American Society for Reproductive Medicine who has made outstanding contributions to clinical or basic research in reproduction published during the previous 10 years. The recipient will have demonstrated sustained long-term commitment to advancing the frontiers of research in reproductive sciences and educating future scholars in the field.

Dr. Layman is the Robert B. Greenblatt, M.D. Distinguished Chair in Endocrinology, Professor & Chief of the Section of Reproductive Endocrinology, Infertility, & Genetics in the Department of Obstetrics & Gynecology at the Medical College of Georgia at Augusta University. His decades of focused basic and clinical research efforts have resulted in significant advances in our understanding of genes important in the process of reproductive development, sexual differentiation, puberty, and the function of other organs including the heart and brain. He is among the first to have identified human reproductive gene mutations and their associated phenotypes. Dr. Layman’s research has been published in prestigious journals including Nature Genetics, New England Journal of Medicine, American Journal of Human Genetics, Journal of Clinical Endocrinology & Metabolism, and Fertility & Sterility. His impressive works have led to improved outcomes for patients with infertility and recurrent pregnancy loss, and potentially reduced the likelihood of birth defects.
The 2019 recipient of ASRM’s Lifetime Achievement Award is **David R. Meldrum, M.D.** This award honors a member of the American Society for Reproductive Medicine who has made exemplary contributions to the field of reproduction during his/her career. The recipient has demonstrated innovation, leadership, and other scholarly accomplishments that have a lasting impact on advancing clinical care, the frontiers of research in reproductive sciences, and the education of the scientific community.

Dr. Meldrum is Clinical Professor at both UCLA and UCSD and Scientific Director of the UCSD/Reproductive Partners San Diego IVF Center. He began his career as full-time faculty at UCLA, where he established the University’s first IVF programs in 1983. His program was one of the first to incorporate transvaginal ultrasound into IVF practice, and he reported the first US pregnancy resulting from ultrasound-guided oocyte retrieval. During this time, his mentorship of a team of Chinese IVF physicians and laboratory personnel led to achievement of the first IVF birth in China. While at UCLA, he also was the first to report the use of a GnRH agonist for endometriosis treatment.

Dr. Meldrum remained on clinical faculty as he established one of the first IVF programs in southern California. He remained a prolific author, with over one hundred and fifty scholarly articles and book chapters focusing on IVF techniques and ovarian stimulation. His publication highlights include the first use of an agonist and hormone replacement for oocyte donation recipients, first use of an agonist for modified natural cycle IVF, transdermal estradiol for HRT, the first report of premature luteinization in agonist cycles, the role of growth hormone and androgens in ovarian stimulation, and the importance of single embryo transfer.

Dr. Meldrum has been a national leader of reproductive medicine throughout his career. He was central in the early efforts to assure the highest quality of reproductive laboratories and served as the first Commissioner for the College of American Pathologists/American Society for Reproductive Medicine Reproductive Embryo Laboratory Accreditation Program. He has served as president of the Society for Assisted Reproductive Technology and the Pacific Coast Reproductive Society. One of his most lasting contributions was co-creation of the University of California Comprehensive Postgraduate Course on IV-ET, which he has continued to direct for over three decades.
IRA AND ESTER ROSENWAKS NEW INVESTIGATOR AWARD
(supported by an endowment from Zev Rosenwaks, M.D.)

SAMUEL ZEV WILLIAMS, M.D., PH.D.

Zev Williams, M.D., Ph.D. has been selected as the 2019 recipient of the Ira and Ester Rosenwaks New Investigator Award. This award recognizes a member of ASRM who has made outstanding contributions to clinical or basic research in reproductive sciences published within 10 years after completing research or clinical training and initiating an independent career as an investigator.

Dr. Williams is the Chief of the Division of Reproductive Endocrinology and Infertility and the Wendy D. Havens Associate Professor of Women’s Health at Columbia University Irving Medical Center (CUIMC). His research focuses on the development and implementation of novel technologies and approaches to understand, diagnose and treat disease related to reproductive medicine with a goal of making genetic testing and monitoring of pregnancy faster, safer and more accessible. With NIH funding support, he and his team have been instrumental in developing methods for automated isolation of placental RNA from circulation, genetic analysis of archived products of conception following miscarriage and, most recently, short-read nanopore sequencing. These efforts are helping to advance the technology that allows rapid and low-cost sequencing of clinical samples from embryo biopsy, chorionic villus samples and amniocentesis samples.
2019 AWARDS

SUHEIL J. MUASHER, M.D., DISTINGUISHED SERVICE AWARD
(supported by an endowment from Suheil J. Muasher, M.D.)

EDWARD E. WALLACH, M.D.

The 2019 recipient of the Suheil J. Muasher, M.D., Distinguished Service Award is Edward E. Wallach, M.D. Each year, ASRM honors individuals who have provided distinguished service to ASRM. Recipients are selected based on their scientific, leadership, organizational, political or societal service contributions to the ASRM, reproductive medicine and/or reproductive medicine patients.

Dr. Wallach is Distinguished Service Professor Emeritus and previous Chair of Gynecology and Obstetrics at the Johns Hopkins University School of Medicine. As a scientist, teacher, editor, administrator, and leader, Dr. Wallach unquestionably has been one of the foremost academicians in the field of reproductive endocrinology. He has published hundreds of scientific articles and authored over 20 books. His sentinel investigations of egg maturation and fertilization served as the foundation for modern in vitro fertilization. His publications on ethics have significantly influenced the practice of in-vitro fertilization and set the standard in the field of embryo research and assisted fertilization in the United States. As a clinical educator, he has won numerous teaching awards and trained hundreds of residents and fellows in our field. His commitment to faculty development has led to scores of his trainees becoming division directors, department chairs and deans at a number of prestigious academic institutions. Dr. Wallach has served as President of the Society for Gynecologic Investigation, and as Director of the American Board of Obstetrics and Gynecology and its Division of Reproductive Endocrinology and Infertility. His extensive service to ASRM includes membership on multiple committees, chair of the Ethics and Journal Committees, member of the Board of Directors and ultimately ASRM President. He served as Associate Editor of Fertility & Sterility for 38 years.
KAVOUSSI FAMILY OUTSTANDING TEACHER AWARD

(The Award is made possible through an educational endowment from K.M. Kavoussi, M.D., Homa Kavoussi, Shahryar Kavoussi, M.D., M.P.H., Mehryar Kavoussi, J.D., Parviz Kavoussi, M.D., and Austin Fertility & Reproductive Medicine/Westlake IVF.)

SANDRA A. CARSON, M.D.

Sandra A. Carson, M.D. has been chosen to receive the 2019 Kavoussi Family Outstanding Teacher Award. This award honors an ASRM member who is recognized as an outstanding educator in undergraduate, graduate, postgraduate, professional or patient education in basic and/or clinical reproductive biology and medicine.

Dr. Carson has proven herself to be a remarkable educator throughout her productive career and serves as a role model for all academicians in our field. After receiving her medical degree and residency training at Northwestern University, she completed her fellowship at the University of Chicago. She then served as Professor and REI Division Director at Brown University and then Tufts Medical School. During this time, she taught scores of residents and fellows in reproductive medicine, many of whom have gone on to excel in academic medicine. Her tireless efforts in our Society as an educator and mentor culminated with her election as ASRM President. Her committed efforts as a superb educator resulted in her being chosen to serve as ACOG Vice President of Education. In this role, her contribution to education included development of a course for new Department Chairs in OB/GYN, implementation of the online version of the annual CREOG resident in-training examination, and re-structuring the ACOG annual clinical meeting. She continues to teach medical students, residents and fellows as Professor and Section Chief of the Section of Reproductive Endocrinology and Infertility at Yale University Medical School.
Mark D. Hornstein, M.D. has been selected as the 2019 Arnold P. Gold Foundation Humanism in Medicine Award for Practicing Physicians. This award honors an ASRM member who as a practicing physician has best demonstrated the ideals of compassionate and respectful care for a patient’s physical and emotional well-being. The recipient of the award should demonstrate compassion, empathy, competence, respect, sensitivity, effective communication and trustworthiness.

Dr. Hornstein has served as a superlative role model for a generation of residents and fellows while treating his patients with the highest level of compassion and empathy in his role as Harvard Professor of Obstetrics, Gynecology and Reproductive Biology and Director of the Division of Reproductive Endocrinology at Brigham and Women’s Hospital. In addition to the compassionate care he has exhibited at the bedside, he has focused much of his scientific efforts on issues important to patients, including the influence of economic conditions on infertility treatment, and the outcome of pregnancies resulting from these treatments. His efforts have clearly demonstrated to everyone who knows him his deep understanding and respect for patients, families, co-workers, and trainees.
KY CHA AWARD IN STEM CELL TECHNOLOGY
(supported by an endowment from the Asia-Pacific Biomedical Research Foundation)

GUSTAVO MOSTOSLAVSKY, M.D., PH.D.

Gustavo Mostoslavsky, M.D., Ph.D., has been selected as the 2019 recipient of the KY Cha Award in Stem Cell Technology. This award, which carries a $20,000 research grant, is given competitively by ASRM to provide start-up funds to initiate an innovative research project in regenerative medicine and stem cell technology. A research project in which the applicant is the primary investigator is the essential core of the grant. Selection is based primarily on the scientific merit of the proposal and the qualifications of the applicant.

Dr. Mostoslavsky is Associate Professor of Medicine and Microbiology at Boston University School of Medicine. The subject of his Award research is “Embryonic Stem Cell Modeling of Intestinal Differentiation.” Dr. Mostoslavsky received his M.D. from the University of Tucuman in Argentina and his Ph.D. from the Hebrew University in Jerusalem, Israel. His longstanding interest in basic science and regenerative medicine brought him to Harvard Medical School to pursue postdoctoral studies with stem cells and gene therapy. In 2008, Dr. Mostoslavsky established a laboratory at Boston University to study human biology in normal and disease states through the use of stem cells in general and pluripotent stem cells. His main research interests are stem cells, disease modeling, regenerative medicine, gene correction and use of lentiviral vectors as tools for gene transfer. Dr. Mostoslavsky is a founder and Co-Director of the Boston University Center for Regenerative Medicine.
ASRM Research Grants

The ASRM 2019 Research Grants provide funds in amounts of $10,000 to $50,000 to foster the development of innovative research, to facilitate the research endeavors of new investigators, and to provide bridge funding for projects that advance the Society’s mission. Proposals from junior faculty, particularly those in their first three years of faculty appointment, receive priority in the competitive review by the ASRM Research Committee. Following are the projects funded by the 2019 ASRM Research Grants:

- **Joseph M. Letourneau, M.D., University of Utah Oncofertility Program.** “Effect of Alkylating Agent Chemotherapy on the Uterus of Young Adult Cancer Survivors: Exploring the Uterus as a New Frontier for Fertility Preservation,” $46,078

- **Eve Feinberg, M.D./Elaine Cheung, Ph.D. (co-PI’s), Northwestern University.** “Characterizing Fertility Concerns among Women in Academic Medicine and Evaluating the Economic Impact of Fertility Preservation for Deferred Reproduction,” $50,000

- **Lynae M. Brayboy, M.D., FACOG., Warren Alpert Medical School of Brown University.** “Dysfunctional MDR-1 disrupts mitochondrial homeostasis in the oocyte and ovary,” $40,000

- **Amanda Kallen, M.D., Yale University School of Medicine.** “Novel, Noncoding-RNA-Mediated Mechanisms for Regulation of Follicular Quantity and Quality,” $50,000

Reproductive Scientist Development Program (RSDP)

This program was established in 1988 to train obstetrician-gynecologists committed to academic investigative careers in fundamental biomedical science. The program is supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development in collaboration with private agencies, professional societies, foundations, and private industry. The American Society for Reproductive Medicine supports three clinician-scientists in the subspecialty of reproductive endocrinology and infertility. The RSDP provides career development support for obstetricians and gynecologists who are committed to a basic science career in academic medicine and research. The areas of interests covered by the program are broadly defined, with emphasis in cell and molecular biology as applied to problems in reproductive endocrinology, genetics, maternal-fetal medicine, oncology, infectious disease, or other aspects of reproduction. The 2019-2020 grant year RSDP Scholars are **Valerie Flores, M.D.,** Yale University and **Aleksandar Stanic-Kostic, M.D., Ph.D.,** University of Wisconsin-Madison.

Scientific Congress Prize Papers

Candidates for two Scientific Congress Prizes are selected by the Research Committee from all abstracts submitted to the Congress regardless of designation of group for initial review. These oral presentations will be judged at the congress and selection will be determined by the Research Committee. The presenters of the two Scientific Congress Prize papers will be awarded $1,000.00.

Scientific Congress Prize Posters

Posters must be put up on the appropriate boards on Sunday, October 13, between 1:00 p.m. and 5:00 p.m. or on Monday, October 14, between 9:00 a.m. and 1:00 p.m., and must remain in place for the entire Congress. Posters will be judged by the Prize Poster Committee beginning at 12:00 p.m. Monday. The awardees will receive:

- **First Prize:** $500
- **Second Prize:** $300
- **Third Prize:** $200

Formal recognition of these awards will take place during the ASRM Members Meeting and Awards ceremony on Wednesday, October 16, 2019 at 8:45 am.
2019 AWARDS

Cappy Rothman, M.D., Chuck Sims, M.D., and the California Cryobank Traveling Scholar Award

This award allows a junior physician or basic science researcher to explore a career in male reproduction and urology. The primary purpose of the award is to stimulate the scientific interests of students, residents and fellows in the study of male reproduction. The recipient for 2019 is Kohn Taylor, M.D., who will present abstract O-55 titled “EVALUATION OF FERTILITY PRESERVATION COUNSELING AND REFERRALS IN US CLINICAL PRACTICES: REVIEW OF ASCO’S QUALITY ONCOLOGY PRACTICE INITIATIVE (QOPI)” in the SMRU Traveling Scholars oral abstract session on Monday, October 14, 2019.

SMRU Lipshultz/Lamb Traveling Scholar Award

This award allows a junior physician or basic science researcher to explore a career in male reproduction and urology. The primary purpose of the award is to stimulate the scientific interests of students, residents and fellows in the study of male reproduction. The recipient for 2019 is Patel Darshan, M.D., who will present abstract O-56 titled “LOWER TOTAL MOTILE COUNT IS ASSOCIATED WITH SMALLER HISTORIC INTERGENERATIONAL FAMILY SIZE: A PEDIGREE ANALYSIS FROM THE UTAH POPULATION DATABASE (UPDB)” in the SMRU Traveling Scholars oral abstract session on Monday, October 14, 2019.

Manhattan Cryobank Endowed Traveling Scholar Award

This award allows a junior physician or basic science researcher to explore a career in male reproduction and urology. The primary purpose of the award is to stimulate the scientific interests of students, residents and fellows in the study of male reproduction. The recipient for 2019 is Jayadevan Rajiv, M.D., who will present abstract O-57 titled “DECISIONAL CONFLICT AND KNOWLEDGE AMONG PATIENTS WITH VARICOCELE SEEKING TREATMENT FOR INFERTILITY” in the SMRU Traveling Scholars oral abstract session on Monday, October 14, 2019.

Society for Male Reproduction and Urology Traveling Scholars Program

The annual Society for Male Reproduction and Urology Traveling Scholars Program allows a diverse group of young clinical physicians and basic science researchers the opportunity to explore a career in male reproductive medicine. The primary purpose of the program is to stimulate the scientific interests of residents and fellow in the study of male reproduction. Scholars are selected by the SMRU Research Committee based on the scores of their abstracts submitted for the Scientific Congress. The SMRU Traveling Scholars oral abstract session will take place on Monday, October 14, 2019. The following Traveling Scholars will present their research during the session: Solomon Hayon, M.D., O-58, “SPERM EXTRACTED FROM MEN WITH OBSTRUCTIVE AZOSPERMIA VIA MINIMALLY-INVASIVE EPIDIDYMAL SPERM ASPIRATION (MIESA) RESULTS IN NON-INFERIOR IVF OUTCOMES COMPARED WITH NORMAL EJACULATED SEMEN IN COUPLES WITH UNEXPLAINED INFERTILITY”; Priyanka Bearelly, M.D., O-59, “GONADAL END ORGAN EFFECTS IN MALE TO FEMALE TRANSGENDER PATIENTS ON HORMONAL THERAPY”; Jessica Marinaro, M.D., O-60, “THE UTILITY OF SPERM CRYOPRESERVATION AT THE TIME OF VASECTOMY REVERSAL.”

ASRM Corporate Member Council In-Training Travel Awards

Fifteen awards to trainee abstract presenters from the United States and five awards to trainee abstract presenters from countries outside the United States are made possible through the generous support of the ASRM Corporate Member Council. Recipients of this award are undergraduate, graduate, medical or allied health professions students, postdoctoral trainees, or clinical residents or fellows. Candidates are the first and presenting author of an abstract that has been selected for oral or poster presentation in the ASRM 2019 Scientific Congress. Selection is based on the scientific merit of the abstract and the qualifications of the author. The awardees receive:

- $1,000 (US presenters)
- $2,000 (Non-US presenters)
2019 AWARDS

O-161, Tuesday, October 15, 2019, 11:45 AM
BEYOND PREMATURITY OVARIAN INSUFFICIENCY: CHARACTERIZING REPRODUCTIVE AGING AND RISKS FOR ACCELERATED AGING IN ADOLESCENT AND YOUNG ADULT (AYA) CANCER SURVIVORS.
Alexa C.O. Medica, M.D.\(^1\), Christina Lam, M.D.\(^2\), Kelsey Pinson, M.D.\(^2\), Ksenya Shliakhtsitsava, M.D.\(^3\), Brian W. Whitcomb, Ph.D.\(^4\) and H. Irene Su, M.D., M.S.C.E.\(^1\).
\(^1\)University of California San Diego, La Jolla, CA, \(^2\)University of California, San Diego, La Jolla, CA, \(^3\)UT Southwestern, Dallas, TX, \(^4\)University of Massachusetts, Amherst, Amherst, MA

O-93, Tuesday, October 15, 2019, 11:15 AM
HIGHER INCIDENCE OF POSTPARTUM COMPLICATIONS IN WOMEN WITH POLYCYSTIC OVARY SYNDROME.
Snigdha Alur-Gupta, M.D.\(^1\), Mary Regina Boland, Ph.D, Mary D Sammel, Sc.D.\(^3\), Kurt T. Barnhart, M.D., M.S.C.E.\(^4\) and Anuja Dokras, M.D., Ph.D.\(^5\).
\(^1\)University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, \(^2\)Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania, Philadelphia, PA, \(^3\)University of Pennsylvania, Philadelphia, PA, \(^4\)UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM, PHILADELPHIA, PA

O-129, Tuesday, October 15, 2019, 11:15 AM
LOW ENDOMETRIAL VOLUME IS NOT ASSOCIATED WITH DIMINISHED LIVE BIRTH FOLLOWING TRANSFER OF A SINGLE THAWED EUPLOID BLOASTOCYST.
Shelby A. Neal, M.D.\(^1\), Richard Thomas Scott Jr., M.D.\(^1\) and Linnea R. Goodman, M.D.\(^2\).
\(^1\)IVI-RMA New Jersey, Basking Ridge, NJ, \(^2\)University of North Carolina, Raleigh, NC

P-769, Wednesday, October 16, 2019, 6:30 AM – 7:45 AM
WEEKEND PRESENTATION IMPACTS TIMING OF ECTOPIC PREGNANCY SURGICAL MANAGEMENT AND OUTCOMES.
Jessica Seller, M.D.\(^1\), Timothy Wen, M.D., M.P.H.\(^1\), Jenna M Turowcy, M.D.\(^1\), Eric J. Forman, M.D.\(^1\), Samuel Zev Williams, M.D., Ph.D.\(^1\) and Alexander Friedman, M.D., M.P.H.\(^1\).
\(^1\)Columbia University Medical Center, New York, NY

O-96, Tuesday, October 15, 2019, 12:00 PM
CONSERVATIVE SURGERY FOR OVARIAN TORSION IN YOUNG WOMEN: PERIOPERATIVE COMPLICATIONS AND NATIONAL TRENDS.
Rachel S. Mandelbaum, M.D., Meghan B. Smith, M.D., Lynda D. Roman, M.D., Richard J. Paulson, M.D., M.S. and Koji Matsuo, M.D., Ph.D., University of Southern California, Los Angeles, CA

O-51, Monday, October 14, 2019, 11:15 AM
CANCER TREATMENT IS ASSOCIATED WITH A MEASURABLE DECREASE IN LIVE BIRTHS IN A LARGE, POPULATION-BASED STUDY.
Deepika Garg, M.D.\(^1\), Huong Dieu Meeks, Ph.D.\(^1\), Erica Johnstone, M.D.\(^1\), Alexander W. Pastuszak, M.D., Ph.D.\(^2\), Sarah L. Berga, M.D.\(^2\), Ken R. Smith, Ph.D.\(^1\), James Hotaling, M.D.\(^2\) and Joseph M. Letourneau, M.D.\(^1\).
\(^1\)University of Utah, Salt Lake City, UT, \(^2\)University of Utah School of Medicine, Salt Lake City, UT

O-74, Monday, October 14, 2019, 11:00 AM
DOES PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) HARM EMBRYOS? NO—A MULTICENTER, PROSPECTIVE, BLINDED, NON-SELECTION STUDY EVALUATING THE PREDICTIVE VALUE OF ANEUPLOID DIAGNOSIS AND IMPACT OF BIOPSY.
Ashley W. Tieg\(s\), M.D.\(^1\), Xin Tao, Ph.D.\(^2\), Christine V. Whitehead, B.S.N., R.N.\(^3\), Shelby A Neal, M.D.\(^4\), Emily K. Osman, M.D.\(^5\), Julia G. Kim, M.D., M.P.H.\(^5\), Brent M. Hanson, M.D.\(^3\), Emre Seli, M.D.\(^3\), George Patounakis, M.D., Ph.D.\(^5\), Jacqueline Gutmann, M.D.\(^6\), Arthur J. Castelbaum, M.D.\(^6\) and Richard Thomas Scott Jr., M.D.\(^3\).
\(^1\)Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA, \(^2\)The Foundation for Embryonic Competence, Basking Ridge, NJ, \(^3\)IVI-RMA New Jersey, Basking Ridge, NJ, \(^4\)Sidney Kimmel College of Medicine, Thomas Jefferson University, Philadelphia, PA, \(^5\)IVI-RMA Florida, Lake Mary, FL, \(^6\)IVI-RMA Philadelphia, Philadelphia, PA

O-75, Monday, October 14, 2019, 11:15 AM
PREIMPLANTATION GENETIC TESTING (PGT) IS ASSOCIATED WITH HIGHER ODDS OF A HEALTHY LIVEBIRTH AMONG DONOR OOCYTE RECIPIENTS IN THE UNITED STATES: A 2013-2015 NATIONAL STUDY.
Cassandra Roec\(e\)a, M.D.\(^1\), Rachel L. Johnson, M.S.\(^2\), Nichole Carlson, Ph.D.\(^2\) and Alex J. Polotsky, M.D., M.S.\(^3\).
\(^1\)University of Colorado School of Medicine, Aurora, CO, \(^2\)University of Colorado School of Public Health, Aurora, CO, \(^3\)University of Colorado, Denver, CO

O-248, Wednesday, October 16, 2019, 11:00 AM
DISRUPTION OF MITOCHONDRIAL DYNAMICS IN OOCYTES RESULTS IN INFERTILITY AND DIMINISHED OVARIAN RESERVE.
Man Zhang, M.D, Ph.D.\(^1\), Muhammed Burak Bener, B.S.\(^1\), Zongliang Jiang, Ph.D.\(^2\), Tianren Wang, M.D.,
2019 AWARDS

Ph.D., Ecem Esencan, M.D., Richard Scott III, B.S. and Emre Seli, M.D., 1Yale School of Medicine, New Haven, CT, 2Louisiana State University, Baton Rouge, LA, 3Foundation for Embryonic Competence, Basking Ridge, NJ, 4Foundation of Embryo Competence, Basking Ridge, NJ

O-46, Monday, October 14, 2019, 11:30 AM PERSISTENT WIDENING IN RACIAL DISPARITIES BETWEEN BLACK AND WHITE WOMEN UNDERGOING ART OVER THE LAST 10 YEARS.

Alexander Kollary, M.D., 1David B. Seifer, M.D., 2Burcin Simsek, Ph.D. and Ethan Wantman, M.B.A. 4Yale Fertility Center/Yale University, New Haven, CT, 2Yale University, New Haven, CT, 3University of Pittsburgh, Pittsburgh, PA, 4Redshift Technologies, Inc., New York, NY

O-162, Tuesday, October 15, 2019, 12:00 PM COMPENSATORY OVARIAN HYPERTROPHY AFTER UNILATERAL OOPHORECTOMY: EVALUATION OF OVARIAN VOLUMES IN THE PEDIATRIC AND ADOLESCENT POPULATION.

Allison C. Mayhew, M.D., Mina Farahzad, M.D., Ph.D. and Krista Childress, M.D., Emory University School of Medicine, Atlanta, GA

O-31, Monday, October 14, 2019, 10:45 AM EFFECT OF WILDFIRE SMOKE ON PREGNANCY OUTCOMES IN THE NON-HUMAN PRIMATE.

Bryn Erin Willson, M.D., 1K. K. E. Pinkerton, Ph.D., Bill Lasley, Ph.D. and Nancy Gee, Ph.D. 4UC Davis Health, Sacramento, CA, 2UC Davis Center for Health and the Environment, Davis, CA, 3UC Davis Center for Health & Environment, Davis, CA, 4UC Davis - Center for Health & Environment, Davis, CA

O-18, Monday, October 14, 2019, 12:00 PM PREVALENCE OF CLINICALLY SIGNIFICANT CONGENITAL HEART DEFECTS IN LOW-RISK IVF PREGNANCIES.

Sarah H. Bjorkman, M.D., 1Kurt R. Bjorkman, M.D., Anna K. Sfakianaki, M.D., M.P.H., Joshua A. Copel, M.D. and Mert Ozan Bahtiyar, M.D. 1Yale School of Medicine, New Haven, CT, 2Department of Pediatrics, Yale School of Medicine, New Haven, CT, 3Yale Children’s Hospital, New Haven, CT, 4Yale Maternal Fetal Medicine, Fetal Care Center, New Haven, CT

O-99, Tuesday, October 15, 2019, 11:15 AM HAS THE MASSACHUSETTS INFERTILITY MANDATE LIVED UP TO ITS PROMISE?

Katherine Koniales, M.D., 1Alan S. Penzias, M.D. and Eli Adashi, M.D., 1Tufts Medical Center, Boston, MA, 2Boston IVF, Waltham, MA, 3The Warren Alpert Medical School, Brown University, Providence, RI

O-213, Wednesday, October 16, 2019, 11:15 AM THE IMPACT OF AGE BEYOND PLOIDY: OUTCOME DATA FROM 9,101 EUPLOID SINGLE EMBRYO TRANSFERS.

Andres Reig, M.D., 1Richard Thomas Scott Jr., M.D. and Emre Seli, M.D., 1Yale University - Bridgeport Hospital, Bridgeport, CT, 2IVI-RMA New Jersey, Basking Ridge, NJ

O-135, Tuesday, October 15, 2019, 11:15 AM ROLE OF METFORMIN IN PREVENTION OF PREMATURE LUTEINIZATION IN FRESH INTRACYTOPLASMIC SPERM INJECTION (ICSI) CYCLES: A RANDOMIZED CONTROLLED TRIAL.

Reda S Hussein, M.D., 1Ahmed F. Amin, M.D., Yulian Zhao, Ph.D., Hisham A. Abou-Taleb, M.D., Ph.D., Ahmed M. Abdelmagied, M.D., Osama S Abdalmageed, M.D. and Ihab Elnashar, M.D., 1Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, 2Department of Obstetrics and Gynecology, Mayo Clinic, Rochester, MN

O-220, Wednesday, October 16, 2019, 11:30 AM COMPARISON OF CRYOPROTECTANT FREE VITRIFICATION OF HUMAN SPERMATOZOA IN A NEW SEMEN SIMULANT WITH RAPID FREEZE OF SPERMATOZOA IN GLYCEROL.

SOUNDarya Janani Senthil Kumar, M.B.B.S., M.Sc., N. Sanjeeva Reddy, M.D. (Obstetrics and Gynecology), DGO2, Manjula Daniel G, Ph.D. and Sindhuja Namboori Srinivasan, M.B.B.S., M.Sc. Clinical Embryology, Ph.D. Research Scholar4, 1Clinical Embryology Sri Ramachandra Institute of Higher Education and Research, Chennai, India, 2Professor and Head, Department of Reproductive Medicine and Surgery, Sri Ramachandra Institute of Higher Education and Research, Chennai, India, 3Assistant Professor, Department of Reproductive Medicine and Surgery, Sri Ramachandra Institute of Higher Education and Research, Chennai, India, 4Lecturer, Department of Reproductive Medicine and Surgery, Sri Ramachandra Institute of Higher Education and Research, Chennai, India

O-118, Tuesday, October 15, 2019, 11:30 AM PATERNAL CONTRIBUTIONS IN EARLY EMBRYONIC GENE EXPRESSION: ROLE IN EARLY PREGNANCY LOSS.

Vidhu Dhawan, M.D., 1Manoj Kumar, Ph.D., Neena Malhotra, M.D., F.R.C.O.G., Neeta Singh, M.D. and Vatsla
2019 AWARDS

Tess E. Chase, M.D.¹, Stephanie J. Estes, M.D.², Divya Kelath Shah, M.D., M.M.E.³, Preston Parry, M.D.⁴, Balasubramanian Bhagavath, M.B.B.S.⁵, Steven R. Lindheim, M.D.⁶, John C Petrozza, M.D.⁷ and Samantha Pfeifer, M.D.⁸, ¹Penn State Milton S. Hershey Medical Center, Harrisburg, PA, ²Penn State Milton S. Hershey Medical Center, Hershey, PA, ³University of Pennsylvania, Philadelphia, PA, ⁴Parryscope Fertility, Madison, MS, MS, ⁵University of Rochester Medical Center, Rochester, NY, ⁶Wright State University, Dayton, OH, ⁷Massachusetts General Hospital Fertility Center, Boston, MA, ⁸Weill Medical College of Cornell University, New York, NY

In-Training Awards For Research

Five In-Training Awards for Research are granted in recognition of outstanding research conducted by individuals who are in-training. Recipients of these awards specified that they would like to be eligible for the “In-Training Award for Research” during the online abstract submission process. He/she is the presenting author (first) and a medical student, resident, fellow or undergraduate, graduate or postdoctoral student. The awardees receive:

- $250
- One-year free ASRM membership
- Free registration to ASRM 2019 in Philadelphia, PA

Resident In-Training Award

This award recognizes the presenter of an exceptional abstract who is currently a resident in training in the field of obstetrics and gynecology or urology. Recipients of these awards specified that they would like to be eligible for the “Resident In-Training Award” during the online abstract submission process. The awardee receives:

- $500
- One-year free ASRM membership
- Free registration to ASRM 2019 in Philadelphia, PA

Dadhwal, M.D.² and Rima Dada, M.D., Ph.D.¹, ¹All India Institute of Medical Sciences, Anatomy, New Delhi, India, ²All India Institute of Medical Sciences, Obstetrics & Gynecology, New Delhi, India

P-690, Wednesday, October 16, 2019, 6:30 AM – 7:45 AM

KNOWLEDGE, ATTITUDES AND CONCERNS TOWARDS ELECTIVE SINGLE EMBRYO TRANSFER (ESET) IN COUPLES UNDERGOING FRESH/FROZEN EMBRYO TRANSFER CYCLES IN ASIAN POPULATION.

Hema Vaithianathan, M.D., M.R.C.O.G.¹, Gopinath P. M., M.D., D.G.O., F.M.M.C., F.I.C.S., F.I.C.O.G., MBA(HSM)² and Gayalthi Devi S. S., M.D.(O.G.), F.R.M.³, Postdoctoral Fellow, Chennai, India, ¹Director & Senior Consultant, Chennai, India, ²Consultant - Reproductive Medicine, Chennai, India

P-744, Wednesday, October 16, 2019, 6:30 AM – 7:45 AM

PROTEOMIC SIGNATURES OF EPIGENETIC AND TRANSCRIPTION REGULATORS ARE PIVOTAL IN CONTROLLING PATERNAL FACTORS IN RECURRENT PREGNANCY LOSS.

Gayatri Mohanty, Ph.D.¹, Soumya Ranjan Jena, M.Phil.², Jasmine Nayak, M.Phil.¹, Sujata Kar, M.B.B.S., M.D., D.N.B.² and Luna Samanta, PhD³, ¹Redox Biology Laboratory, Department of Zoology, Center of Excellence in Environment and Public Health, Ravenshaw University, Cuttack, Odisha, India, ²A-32, Unit-4, Kharvel Nagar, Bhubaneswar, India

P-755, Wednesday, October 16, 2019, 6:30 AM – 7:45 AM

SURGICAL SIMULATION SUPPLEMENTS REI FELLOWSHIP TRAINING.
M. van Wely, Dr. Ph.D.¹ and Femke Mol, M.D., Ph.D.², 
¹Amsterdam University Medical Center, Amsterdam, Netherlands, ²Jeroen Bosch Hospital, Department of Obstetrics and Gynecology, Den Bosch, Netherlands, ³Amphia Hospital, Breda, Netherlands, ⁴OLVG Oost Hospital, Department of Obstetrics and Gynecology, Amsterdam, Netherlands, ⁵Amsterdam UMC, Vrij Universiteit Amsterdam, Department of Reproductive Medicine, Amsterdam, Netherlands, ⁶NoordWest Ziekenhuisgroep, Den Helder, Netherlands, ⁷Amsterdam UMC, University of Amsterdam, Center for Reproductive Medicine, Amsterdam, Netherlands

O-157, Tuesday, October 15, 2019, 10:45 AM

Emma Giuliani, M.D.¹, Monica W. Rosen, M.D.², Elisabeth H. Quint, M.D.², Erica E. Marsh, M.D.¹ and Yolanda R. Smith, M.D.², Yolanda R. Smith, M.D.²

O-216, Wednesday, October 16, 2019, 12:00 PM
ENDOMETRIAL COMPACTION (DECREASED THICKNESS) IN RESPONSE TO PROGESTERONE RESULTS IN HIGHER ONGOING PREGNANCY RATE.

Eran Zilberberg, M.D.¹, Dan Nayot, M.D.², Ramsey Genco Smith, B.Sc³, James Meriano, M.Sc.³, Eran Barzilay, M.D.², Ph.D.², Jigal Haas, M.D. and Robert F. Casper, M.D.², Medical Doctor and Assistant Professor, Tanta, Egypt, ³Lecturer at Faculty of Medicine, Tanta University, Tanta, Egypt, ¹Assistant Professor at Faculty of Medicine, Tanta University, Tanta, Egypt

SRS In-Training Awards For Research

Three (3) SRS In-Training Awards for research are granted. The purpose of these awards is to recognize outstanding research conducted by individuals in training. Recipients of these awards specified that they would like to be eligible for the “SRS In-Training Award for Research” during the online abstract submission process and submitted their abstract to the “Reproductive Surgery” category. He/she is presenting author (first), and a medical student, resident, fellow or undergraduate, graduate or postdoctoral student. The awardees receive:

• $250.00
• One-year free ASRM and SRS membership
• Free registration to ASRM 2019 in Philadelphia, PA

O-86, Monday, October 14, 2019, 11:00 AM
OUTCOME OF LAPAROSCOPIC ADHESIOLYSIS IN INFERTILE PATIENTS WITH PELVIC ADHESIONS FOLLOWING CESAREAN DELIVERY: A RANDOMIZED CLINICAL TRIAL. Adel al shahat Algargawy, M.D.¹, Ayman Shehata Dawood, M.D.², Hesham A. Salem, F.A., M.D., F.A., M.D.³ and Ahmed alsayed Alhalwagy, M.D.², ³Assistant Professor, Tanta, Egypt, ¹Lecturer at Tanta University, Tanta, Egypt, ¹Professor at Faculty of Medicine, Tanta University, Tanta, Egypt

O-90, Monday, October 14, 2019, 12:00 PM
SINGLE EUPLOID FROZEN EMBRYO TRANSFER: EVALUATING IMPACT OF INTERVAL SINCE OPERATIVE HYSTEROLOGY. Allison C. Petrini, M.D.¹, Catherine W. Chan, M.D.², Kelly McCarter, M.D.³, Micha Thompson, B.A.¹, Monica Pasternak, M.D.¹, Nigel Pereira, M.D.¹ and Steven Spandorfer, M.D.¹, ¹Ronald O. Perlman and Claudia Cohen Center for Reproductive Medicine, New York, NY, ²Weill Cornell Medicine, New York, NY

P-771, Wednesday, October 16, 2019, 6:30 AM – 7:45 AM
FLUID DEFICIT CALCULATION AT HYSTEROLOGY IN PATIENTS WITH AND WITHOUT TUBAL OCCLUSION: COULD CONSIDERATION OF TUBAL PASSAGE CHANGE SAFETY LIMITS? Irene Peregrin-Alvarez, M.D., Robert Roman, M.D., Mary Emily Christiansen, M.D., Joshua Morris, M.D. and Laura Detti, M.D., University of Tennessee Health Science Center, Memphis, TN
**2019 AWARDS**

**Affiliated Society Prize Papers**


**SART Prize Paper**
O-213, Wednesday, October 16, 2019, 11:15 AM
THE IMPACT OF AGE BEYOND PLOIDY: OUTCOME DATA FROM 9,101 EUPOLOID SINGLE EMBRYO TRANSFERS.

**SREI Prize Paper**
P-348, Tuesday, October 15, 2019, 6:30 AM – 7:45 AM
EFFECT OF ADRIAMYCIN, BLEOMYCIN, VINBLASTINE AND DACARBAZINE (ABVD)TREATMENT ON FEMALE MICE REPRODUCTIVE FUNCTION.

**SRS Prize Paper**
O-86, Monday, October 14, 2019, 11:00 AM
OUTCOME OF LAPAROSCOPIC ADHESIOLYSIS IN INFERTILE PATIENTS WITH PELVIC ADHESIONS FOLLOWING CESAREAN DELIVERY: A RANDOMIZED CLINICAL TRIAL.

**SRBT Basic Science Award**
A prize of $500, made possible by a donation from Fuji Film Irvine Scientific, Inc., is awarded to a basic reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.

**SRBT Clinical Science Award**
A prize of $500, made possible by a donation from LifeAire Systems, is awarded to a basic reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.

**SMRU Prize Paper**
O-146, Tuesday, October 15, 2019, 11:00 AM
THE EFFECT OF ADVANCING PATERNAL AGE ON PREGNANCY AND NEONATAL OUTCOMES FOLLOWING A SINGLE EUPLOID FROZEN EMBRYO TRANSFER IN A DONOR OOCYTE MODEL.

**PROSPECTIVE RANDOMIZED MULTICENTER STUDY ON CULTURE OF SIBLING HUMAN OOCYTES IN A SEQUENTIAL MEDIA SYSTEM WITH AND WITHOUT ANTI-OXIDANTS: THE EFFECT OF FEMALE AGE.**
Shigetoshi Mizumoto, Ph.D., Atsumi Yoshida, M.D., Ph.D., M.B.A., Takeshi Kuramoto, M.D., Ph.D., Miho Tanaka, M.Sc., Markus HM Montag, Ph.D. and David Gardner, Ph.D.

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**Affiliated Society Prize Papers**

**SART Prize Paper**
O-213, Wednesday, October 16, 2019, 11:15 AM
THE IMPACT OF AGE BEYOND PLOIDY: OUTCOME DATA FROM 9,101 EUPOLOID SINGLE EMBRYO TRANSFERS.

**SREI Prize Paper**
P-348, Tuesday, October 15, 2019, 6:30 AM – 7:45 AM
EFFECT OF ADRIAMYCIN, BLEOMYCIN, VINBLASTINE AND DACARBAZINE (ABVD)TREATMENT ON FEMALE MICE REPRODUCTIVE FUNCTION.

**SRS Prize Paper**
O-86, Monday, October 14, 2019, 11:00 AM
OUTCOME OF LAPAROSCOPIC ADHESIOLYSIS IN INFERTILE PATIENTS WITH PELVIC ADHESIONS FOLLOWING CESAREAN DELIVERY: A RANDOMIZED CLINICAL TRIAL.

**SRBT Basic Science Award**
A prize of $500, made possible by a donation from Fuji Film Irvine Scientific, Inc., is awarded to a basic reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.

**SRBT Clinical Science Award**
A prize of $500, made possible by a donation from Fuji Film Irvine Scientific, Inc., is awarded to a basic reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.

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**Affiliated Society Prize Papers**

**SART Prize Paper**
O-213, Wednesday, October 16, 2019, 11:15 AM
THE IMPACT OF AGE BEYOND PLOIDY: OUTCOME DATA FROM 9,101 EUPOLOID SINGLE EMBRYO TRANSFERS.

**SREI Prize Paper**
P-348, Tuesday, October 15, 2019, 6:30 AM – 7:45 AM
EFFECT OF ADRIAMYCIN, BLEOMYCIN, VINBLASTINE AND DACARBAZINE (ABVD)TREATMENT ON FEMALE MICE REPRODUCTIVE FUNCTION.

**SRS Prize Paper**
O-86, Monday, October 14, 2019, 11:00 AM
OUTCOME OF LAPAROSCOPIC ADHESIOLYSIS IN INFERTILE PATIENTS WITH PELVIC ADHESIONS FOLLOWING CESAREAN DELIVERY: A RANDOMIZED CLINICAL TRIAL.

**SRBT Basic Science Award**
A prize of $500, made possible by a donation from Fuji Film Irvine Scientific, Inc., is awarded to a basic reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.

**SRBT Clinical Science Award**
A prize of $500, made possible by a donation from Fuji Film Irvine Scientific, Inc., is awarded to a clinical reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.

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**Affiliated Society Prize Papers**

**SART Prize Paper**
O-213, Wednesday, October 16, 2019, 11:15 AM
THE IMPACT OF AGE BEYOND PLOIDY: OUTCOME DATA FROM 9,101 EUPOLOID SINGLE EMBRYO TRANSFERS.

**SREI Prize Paper**
P-348, Tuesday, October 15, 2019, 6:30 AM – 7:45 AM
EFFECT OF ADRIAMYCIN, BLEOMYCIN, VINBLASTINE AND DACARBAZINE (ABVD)TREATMENT ON FEMALE MICE REPRODUCTIVE FUNCTION.

**SRS Prize Paper**
O-86, Monday, October 14, 2019, 11:00 AM
OUTCOME OF LAPAROSCOPIC ADHESIOLYSIS IN INFERTILE PATIENTS WITH PELVIC ADHESIONS FOLLOWING CESAREAN DELIVERY: A RANDOMIZED CLINICAL TRIAL.

**SRBT Basic Science Award**
A prize of $500, made possible by a donation from Fuji Film Irvine Scientific, Inc., is awarded to a basic reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.

**SRBT Clinical Science Award**
A prize of $500, made possible by a donation from Fuji Film Irvine Scientific, Inc., is awarded to a clinical reproductive science abstract submitted in either a Reproductive Biology or Reproductive Technology category for the ASRM 2019 Scientific Congress. The abstract was selected for either oral or poster presentation. Abstracts were evaluated by the corresponding abstract grading committee based on originality, experimental design, quality, and significance.
2019 AWARDS

Professional and Special Interest Groups

Several groups have selected prize papers for cash awards.

Early Pregnancy SIG Prize Papers

O-116, Tuesday, October 15, 2019, 11:00 AM
IS THERE A PREDISPOSITION TO EMBRYONIC ANEUPLOIDY IN PRE-DIABETIC PATIENTS? Baruch Abittan, M.D.,1 Hillary Pearson, M.D., Randi H. Goldman, M.D.2, Christine Mullin, M.D.4, Weiwei Shan, MS PhD2 and Avner Hershlag, M.D.1,1 Northwell Fertility, Manhasset, NY, 2Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY, 3Northwell Fertility, 4Northwell Health Department of Biostatistics, New Hyde Park, NY

O-115, Tuesday, October 15, 2019, 10:45 AM
RETAINED PREGNANCY TISSUE AFTER MISCARRIAGE ASSOCIATED WITH HIGH RATE OF CHRONIC ENDOMETRITIS. Dana B. McQueen, M.D., M.A.S., Kruti P. Maniar, M.D., Anne Hutchinson, M.D., Rafael Confino, B.S., Jared C Robins, M.D., Lia A. Bernardi, M.D. and Mary Ellen Pavone, M.D., M.S.C.I., Northwestern University, Chicago, IL

Endometriosis SIG Prize Paper

Endometriosis SIG Prize Paper (Best Basic Science)
O-188, Wednesday, October 16, 2019, 11:00 AM
PLATELETS DRIVE FIBROGENESIS THROUGH INDUCTION OF ENDOTHELIAL-MESEMCHYMAL TRANSITION (ENDOMT) IN ENDOMETRIOSIS. Xishi Liu, M.D., Ph.D., Dingmin Yan, M.D. and Sun-Wei Guo, Ph.D., Shanghai Obstetrics and Gynecology Hospital, Fudan University, Shanghai, China

Endometriosis SIG Prize Paper (Best in Clinical/Population Science)
O-190, Wednesday, October 16, 2019, 11:30 AM
CYTOSKELETAL AND EXTRA CELLULAR MATRIX GENES ARE KEY CONTRIBUTORS IN THE PATHOGENESIS OF ENDOMETRIOSIS. Hans M Albertsen, Ph.D., Rakesh Chettiar, M.S. and Kenneth Ward, M.D., Juneau Biosciences, LLC, Salt Lake City, UT

Fertility Preservation SIG Prize Paper

A prize of $500 made possible by a donation from Ferring Pharmaceuticals Inc., is awarded to an abstract submitted in the Fertility Preservation category.

O-51, Monday, October 14, 2019, 11:15 AM
CANCER TREATMENT IS ASSOCIATED WITH A MEASURABLE DECREASE IN LIVE BIRTHS IN A LARGE, POPULATION-BASED STUDY. Deepika Garg, M.D.,1 Huong Dieu Meeks, Ph.D.,1 Erica Johnstone, M.D.,2 Alexander W. Pastuszak, M.D., Ph.D.3, Sarah L. Berga, M.D.3, Ken R Smith, Ph.D.,1 James Hotaling, M.D.2 and Joseph M. Letourneau, M.D.,1 1University of Utah, Salt Lake City, UT, 2University of Utah School of Medicine, Salt Lake City, UT

Health Disparities SIG Prize Paper

A $250 prize, supported by the Health Disparities Special Interest Group Chair.
O-46, Monday, October 14, 2019, 11:30 AM
PERSISTENT WIDENING IN RACIAL DISPARITIES BETWEEN BLACK AND WHITE WOMEN UNDERGOING ART OVER THE LAST 10 YEARS. Alexander Kotlyar, M.D.,1 David B. Seifer, M.D.2, Burcin Simsek, Ph.D.3 and Ethan Wantman, M.B.A.4,1 Yale Fertility Center/Yale University, New Haven, CT, 2Yale University, New Haven, CT, 3University of Pittsburgh, Pittsburgh, PA, 4Redshift Technologies, Inc., New York, NY

Mental Health Professional Group Prize Paper (Best Overall)

A prize of $500, made possible by a donation from Daniel Shapiro, MD/Inception.
P-682, Wednesday, October 16, 2019, 6:30 AM – 7:45 AM
ASSOCIATION OF MENTAL HEALTH DIAGNOSES AND UTERINE ENDOMETRIAL THICKNESS IN WOMEN UNDERGOING IN-VITRO FERTILIZATION. Anna K. Knight, Ph.D.1, Heather S. Hipp, M.D.1, Laurie McKenzie, M.D.2, Jessica B. Spencer, M.D., M.Sc.3 and Sabrina A. Gerkowicz, M.D.3, 1Emory University School of Medicine, Atlanta, GA, 2Baylor College of Medicine, Houston, TX, 3Emory University School of Medicine, Department of Gynecology and Obstetrics, Atlanta, GA
Mental Health Professional Group Prize Paper (Best Randomized, Controlled Trial)

A prize of $500 from the Mental Health Professional Group.
O-154, Tuesday, October 15, 2019, 11:30 AM
HOME- OR HOSPITAL-BASED MONITORING TO TIME FROZEN EMBRYO TRANSFER IN THE NATURAL CYCLE? OUTCOMES FROM A RANDOMIZED CONTROLLED TRIAL (ANTARCTICA-2). Tjitske Zaat, M.D. (M.Sc.)¹, J. P. de Bruin, M.D., Ph.D.², Mariette Goddijn, Prof. Dr. M.D. Ph.D.³, Jantien Visser, M.D. Ph.D.⁴, Harold Verhoeve, M.D., Ph.D.⁴, C. B. Lambalk, M.D. Ph.D.⁵, Eva Groenevoud, M.D. Ph.D.⁶, M. van Wely, Dr. Ph.D.¹ and Femke Mol, M.D., Ph.D.⁷, ¹Amsterdam University Medical Center, Amsterdam, Netherlands, ²Jeroen Bosch Hospital, Department of Obstetrics and Gynecology, Den Bosch, Netherlands, ³Amphia Hospital, Breda, Netherlands, ⁴OLVG Oost Hospital, Department of Obstetrics and Gynecology, Amsterdam, Netherlands, ⁵Amsterdam UMC, Vrij Universiteit Amsterdam, Department of Reproductive Medicine, Amsterdam, Netherlands, ⁶NoordWest Ziekenhuisgroep, Den Helder, Netherlands, ⁷Amsterdam UMC, University of Amsterdam, Center for Reproductive Medicine, Amsterdam, Netherlands

Reproductive Immunology SIG Prize Paper

O-255, Wednesday, October 16, 2019, 11:15 AM
UNRAVELLING THE IMMUNOGENETICS OF PREGNANCY: PARENTAL HLA-C ALLOTYPES ARE PREDICTIVE OF PREGNANCY LOSS AFTER SINGLE EUPLOID EMBRYO TRANSFERS. Diego Marin, M.S.¹, Xin Tao, Ph.D.², Li Sun, Ph.D.² and Richard Thomas Scott Jr., M.D.¹, ¹IVI-RMA New Jersey, Basking Ridge, NJ, ²Foundation for Embryonic Competence, Basking Ridge, NJ

Nutrition SIG Prize Paper

A prize of $250 made possible by a donation from Theralogix, is awarded to an abstract submitted in the Nutrition category.
O-62, Monday, October 14, 2019, 11:00 AM
SERUM OMEGA-3 AND OMEGA-6 FATTY ACID CONCENTRATIONS AND FECUNDITY. Jamie Stanhisler, M.D.¹, Anne Marie Jukic, Ph.D.² and Anne Z. Steiner, M.D., M.P.H.³, ¹University of North Carolina, Chapel Hill, NC, ²National Institute of Environmental Health Sciences, Durham, NC, ³Duke University Medical Center, Durham, NC
VIDEO PRESENTATION AWARDS

The Video Committee selects an overall first prize award video ($1,000), second place video ($500), honorable mention for best laboratory video ($500), and honorable mention for best urology video ($500). Individual category recognitions are identified by a certificate.

First Prize Video

V-1, Monday, October 14, 2019, 4:30 PM
TECHNIQUES FOR SUCCESSFUL VAGINAL ANASTOMOSIS IN THE UTERINE TRANSPLANT PATIENT.
**Jenna M. Rehmer**, M.D., Elliott G. Richards, M.D., Cecile A. Ferrando, M.D., M.P.H. and Rebecca Flyckt, M.D., Cleveland Clinic Foundation, Cleveland, OH

Second Place Video

V-2, Monday, October 14, 2019, 4:42 PM
SURGICAL MANAGEMENT OF DEEP INFILTRATING ENDOMETRIOSIS INVOLVING THE RECTOSIGMOID COLON.
**Natalia C Llarena**, M.D., Anup B. Shah, M.D., M.S., Hermann Kessler, M.D., Ph.D., Tommaso Falcone, M.D. and Rebecca Flyckt, M.D., Cleveland Clinic Foundation, Cleveland, OH

Best Urology Video

V-3, Monday, October 14, 2019, 4:53 PM
NO-SCALPEL VASECTOMY: PUNCTURE-FIRST WITH MULTI-OCCLUSION TECHNIQUE.
**Khushabu Kasabwala**, M.D., Helen Levey Bernie, D.O., M.P.H., Soo Jeong Kim, M.D., Vanessa L. Dudley, M.S.H.S. and Marc Goldstein, M.D., 1New York Presbyterian - Weill Cornell Medical Center, New York, NY, 2Memorial Sloan Kettering Cancer Center, New York, NY, 3Weill Cornell Medicine, New York Presbyterian Hospital, New York, NY

Best Laboratory Video

V-4, Monday, October 14, 2019, 5:06 PM
DEVELOPMENT OF AN AUTOMATIC PRONUCLEAR DETECTION SYSTEM FOR HUMAN EMBRYOS USING DEEP LEARNING TECHNOLOGY.
**Hiroyuki Watanabe**, M.S., Noritaka Fukunaga, Ph.D., Sho Sanami, Ph.D., Hiroya Kitasaka, Ph.D., Yuji Tsuzuki, M.S., Yuta Kida, M.S., Seiji Takeda, M.S. and Yoshimasa Asada, M.D., Ph.D., 1Asada Ladies Clinic, Nagoya, Aichi, Japan, 2Research & Development Center, Dai Nippon Printing Co., Ltd., Kita-ku, Tokyo, Japan
2019 ASRM Star Award

The ASRM Star Award recognizes members who have presented during at least nine of the ASRM Scientific Congresses/Annual Meetings from 2009-2018. Presentations may include postgraduate courses/seminars, Scientific Program symposia, posters and/or oral abstracts.

2019 ASRM Star Award Recipients

Galal Abdo, Ph.D.
Mohamed Aboulghar, M.D.
G. David Adams, M.D.
Ashok Agarwal, Ph.D.
Ayman Al-Hendy, M.D., Ph.D.
Michael Alper, M.D.
Robert Anderson, M.D.
Yoshimasa Asada, M.D., Ph.D.
Cynthia Austin, M.D.
Awoniyi Awonuga, M.B.B.S.
Valerie Baker, M.D.
G. David Ball, Ph.D.
David Barad, M.D.
Kurt Barnhart, M.D.
C. Brent Barrett, Ph.D.
Jason Barratt, Ph.D.
Mohamed Bedaiwy, M.D., Ph.D.
Barry Behr, Ph.D.
Angeline Beltsos, M.D.
Claudio Benadiva, M.D.
Kristin Bendikson, M.D.
Paul Bergh, M.D.
Ricardo Bertolla, D.V.M., Ph.D., M.B.A.
Edson Borges, M.D., Ph.D.
Caitlin Boylan, B.S.
Christine Briton-Jones, Ph.D.
Orhan Bukulmez, M.D.
Samantha Butts, M.D.
Erkan Buyuk, M.D.
Douglas Carrell, Ph.D.
Nicholas Cataldo, M.D., M.P.H
William Catherino, M.D., Ph.D.
Marcelle Cedars, M.D.
T. Arthur Chang, Ph.D.
Jorge Chavarro, M.D., D.Sc., Jerome Check, M.D.
Mindy Christianson, M.D.
Alicia Christy, M.D.
Pak Chung, M.D.
Karine Chung, M.D.
Ana Cristina Cobo, Ph.D.
Charles Coddington, M.D.
Amber Cooper, M.D.
Alan Copperman, M.D.
Christos Coutifaris, M.D., Ph.D.
Said Daneshmand, M.D.
Hai Danzer, M.D.
Alan DeCherney, M.D.
Nina Desai, Ph.D.
Laura Dettl, M.D.
Kathleen Devine, M.D.
Thomas D’Hooghe, M.D., Ph.D.
Michael Diamond, M.D.
Anuja Dokras, M.D., Ph.D.
Alice Domar, Ph.D.
Kevin Doody, M.D.
Marlena Duke, M.Sc.
Antoni Duleba, M.D.
Daniel Dumesic, M.D.
Randall Dunn, M.D.
Jennifer Eaton, M.D.
Lawrence Engmann, M.D.
Navid Esfandiari, Ph.D.
Andrea Esteves, M.D., Ph.D.
Tommaso Falcone, M.D.
Eve Feinberg, M.D.
Rui Alberto Ferriani, M.D., Ph.D.
Rebecca Flyckt, M.D.
Eric Forman, M.D.
Victor Fujimoto, M.D.
Noritaka Fukunaga, Ph.D.
Juan Garcia-Velasco, M.D.
David Gardner, D.Phil., Ph.D.
Antonio Gargiulo, M.D.
Forest Garner, M.S.
William Gibbons, M.D.
Elizabeth Ginsburg, M.D.
Michael Glassner, M.D.
Norbert Gleicher, M.D.
Jeffrey Goldberg, M.D.
James Goldfarb, M.D., M.B.A.
Marc Goldstein, M.D.
Frank Gonzalez, M.D.
Clarisa Gracia, M.D.
James Graham, M.S.
Jamie Grifo, M.D., Ph.D.
Lawrence Grunfeld, M.D.
Karen Hammond, D.N.P.
Carol Hanna, Ph.D.
Tasuk Harada, M.D., Ph.D.
Shu Hashimoto, D.Phil., Ph.D.
Jon Hennebold, Ph.D.
Avner Hershlag, M.D.
Micah Hill, D.O.
Jennifer Hirshfeld-Cytron, M.D.
Brooke Hodes-Wertz, M.D., M.P.H
Heather Huddleston, M.D.
Bradley Hurst, M.D.
Anthony Imudia, M.D.
Keith Isaacson, M.D.
Kristen Ivani, Ph.D.
Jeffrey Jensen, M.D., M.P.H
Sangita Jindal, Ph.D.
Emily Junghem, M.D.
Semra Kahraman, M.D.
Mandy Katz-Jaffe, Ph.D.
William Kearn, Ph.D.
David Keefe, M.D.
Zaraq Khan, M.D.
Chung-Hoon Kim, Ph.D., Ph.D.
William Kutteh, M.D., Ph.D.
Koichi Kyono, M.D.
Dolores Lamb, Ph.D.
Ruth Lathi, M.D.
Angela Lawson, Ph.D.
Richard Legro, M.D.
Joseph Letourneau, M.D.
Michael Levy, M.D.
Clifford Librach, M.D.
Frederick Licciardi, M.D.
Harry Lieman, M.D.
Martha Luna Rajas, M.D.
Monica Mainigi, M.D.
Erica Marsh, M.D.
Caroline McCaffrey, Ph.D.
Blair McCallie, B.S.C.
Susanna McReynolds, Ph.D.
2019 AWARDS

Jennifer Mersereau, M.D.
Marcos Meseguer, Ph.D.
Stacey Misemer, D.Sc., Sc.D.
Kelle Moley, M.D.
Thomas Molinaro, M.D.
Dean Morbeck, Ph.D., M.B.A.
Yoshiharu Morimoto, M.D., Ph.D.
Eduardo Motta, M.D.
Suheil Muasher, M.D.
Tanjmoy Mukherjee, M.D.
Suni Mumford, Ph.D.
Santiago Munne, Ph.D.
Z. Peter Nagy, M.D., Ph.D.
Ajay Nangia, M.B.B.S.
Genevieve Neal-Perry, M.D., Ph.D.
Ceana Nezhat, M.D.
Craig Niederberger, M.D.
Nicole Noyes, M.D.
John Nulsen, M.D.
Sergio Oehninger, M.D., Ph.D.
Kutluk Oktay, M.D., Ph.D.
Joaob Oliveira, M.D., Ph.D.
Kathleen O’Neill, M.D.
Kyle Orwig, Ph.D.
Darius Paduch, M.D., Ph.D.
Lubna Pal, M.B.B.S.
Gianpiero Palermo, M.D., Ph.D.
Lauri Pasch, Ph.D.
Pasquale Patrizio, M.D.
Richard Paulson, M.D.
Mary Ellen Pavone, M.D.
Antonio Pellicer, M.D.
Alan Penzias, M.D.
John Petrozza, M.D.
Samantha Pfeifer, M.D.
Margareta Pisarska, M.D.
Shayne Plosker, M.D.
Alex Polotsky, M.D.
Thomas Price, M.D.
Samuel Prien, Ph.D.
Elizabeth Puscheck, M.D.
Catherine Racowsky, Ph.D.
Kevin Richter, Ph.D.
Paolo Rinoaudi, M.D., Ph.D.
Jared Robins, M.D.
Mitchell Rosen, M.D.
Zev Rosenwaks, M.D.
Ginny Ryan, M.D.
Edmund Sabanegh, M.D.
Ghassan Saed, Ph.D.
Denny Sakkas, Ph.D.
Mary Sammel, D.Sc., Sc.D.
Benjamin Sandler, M.D.
Jay Sandlow, M.D.
Nanette Santoro, M.D.
Mark Sauer, M.D.
Glenn Schattman, M.D.
Robert Schenken, M.D.
Mitchel Schiewe, Ph.D.
Peter Schlegel, M.D.
William Schoolcraft, M.D.
Richard Scott, M.D.
James Segars, M.D.
David Seifer, M.D.
Emre Seli, M.D.
Suneeta Senapati, M.D.
Paulo Serafini, M.D., Ph.D.
Bruce Shapiro, M.D., Ph.D.
Fady Sharara, M.D.
Rakesh Sharma, Ph.D.
Mark Sigman, M.D.
Kaylen Silverberg, M.D.
Carlos Simon, Ph.D.
Ov Slayden, Ph.D.
Irene Souter, M.D.
Steven Spandorfer, M.D.
Amy Sparks, Ph.D.
Laurel Stadmayer, M.D., Ph.D.
Frank Stanczyk, Ph.D.
Anne Steiner, M.D., M.P.H
Mary Stephenson, M.D.
Judy Stern, Ph.D.
Elizabeth Stewart, M.D.
Richard Stouffer, Ph.D.
Irene Su, M.D.
Carlos Sueldo, M.D.
Mark Surrey, M.D.
Jason Swain, Ph.D.
Takumi Takeuchi, M.D., Ph.D.
Atsushi Tanaka, M.D., Ph.D.
Xin Tao, Ph.D.
Tyl Taylor, Ph.D.
Hugh Taylor, M.D.
Michael Thomas, M.D.
Thomas Toth, M.D.
Nathan Treff, Ph.D.
Michael Tucker, Ph.D.
Meike Uhler, M.D.
Rebecca Usadi, M.D.
Takafumi Utsunomiya, M.D., Ph.D.
Bradley Van Voorhis, M.D.
Matthew VerMilyea, Ph.D.
Dagan Wells, Ph.D.
Eric Widra, M.D.
Erin Wolff, M.D.
Wan-Song Wun, Ph.D., H.C.L.D
Tae Ki Yoon, M.D., Ph.D.
Steven Young, M.D., Ph.D.
Nikica Zaninovic, Ph.D.
John Zhang, Ph.D.
Shane Zozula, B.S.

2019 ASRM Service Milestone Award

The ASRM Service Milestone Award recognizes 10, 15, and 20-year milestones for service on boards and/or committees of ASRM or its affiliated societies, professional groups, or special interest groups.

20-Year ASRM Service Milestone Award Recipients
G. David Ball, Ph.D.
Edward Kim, M.D.

15-Year ASRM Service Milestone Award Recipients
Bradley Van Voorhis, M.D.

10-Year ASRM Service Milestone Award Recipients
Erica Behnke, Ph.D.
David Grainger, M.D., M.P.H
Emily Junghem, M.D.
Erlug Kovanci, M.D.
Angela Lawson, Ph.D.
Kelly Lynch, M.D.
Peter McGovern, M.D.

Eli Reshef, M.D.
Ginny Ryan, M.D.
Mark Sauer, M.D.
Carol Wheeler, M.D.
ASRM Scientific Congress Policies and Disclaimers

CANCELLATION POLICY
The American Society for Reproductive Medicine reserves the right to cancel this activity due to unforeseen circumstances. In the event of such cancellation, the full enrollment fee will be returned to the registrant.

REFUND/NON-ATTENDANCE POLICY
Cancellations received before or by September 13th will receive a full refund minus a $150 processing fee. Cancellation requests must be submitted in writing. Cancellations received after September 13th will not be eligible for a refund.

ADA STATEMENT
The American Society for Reproductive Medicine fully complies with the legal requirements of the Americans with Disabilities Act (ADA) and the rules and regulations thereof. Please notify the American Society for Reproductive Medicine, 1209 Montgomery Highway, Birmingham, Alabama, USA, 35216, telephone 1-205-978-5000, a minimum of 10 working days in advance of the event if a reasonable accommodation for a disability is needed.

EQUAL OPPORTUNITY STATEMENT
The American Society for Reproductive Medicine values and promotes diversity among its members, officers, and staff. The Society prohibits discrimination toward any member or employee due to race, color, religion, age, gender, sexual orientation, national origin, citizenship, disability, military status, or other basis prohibited by law. ASRM strives to achieve gender, racial, and ethnic balance in hiring and governance. ASRM maintains policies, procedures, and personnel actions that conform to the letter and spirit of all laws and regulations pertaining to equal opportunity and nondiscrimination in employment, appointments, and elections to office.

DISCLAIMER STATEMENT
The content and views presented in this educational activity are those of the faculty/authors and do not necessarily reflect those of the American Society for Reproductive Medicine. This material is prepared based on a review of multiple sources of information, but it is not exhaustive of the subject matter. Therefore, healthcare professionals and other individuals should review and consider other publications and materials on the subject matter before relying solely upon the information contained within this educational activity to make clinical decisions about individual patients.

Registration and Information

Choices may be limited on-site. Pre-registration is recommended.

ON-SITE REGISTRATION DESK:
PENNSYLVANIA CONVENTION CENTER

<table>
<thead>
<tr>
<th>Day</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday, October 11</td>
<td>2:00 pm – 6:00 pm</td>
</tr>
<tr>
<td>Saturday, October 12</td>
<td>7:00 am – 6:00 pm</td>
</tr>
<tr>
<td>Sunday, October 13</td>
<td>7:00 am – 5:00 pm</td>
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<tr>
<td>Monday, October 14</td>
<td>7:00 am – 5:00 pm</td>
</tr>
<tr>
<td>Tuesday, October 15</td>
<td>7:00 am – 5:00 pm</td>
</tr>
<tr>
<td>Wednesday, October 16</td>
<td>7:00 am – 2:00 pm</td>
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</tbody>
</table>

BE SURE TO VISIT THE EXPO HALL

<table>
<thead>
<tr>
<th>Day</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, October 14</td>
<td>9:00 am – 5:00 pm</td>
</tr>
<tr>
<td>Tuesday, October 15</td>
<td>9:00 am – 5:00 pm</td>
</tr>
<tr>
<td>Wednesday, October 16</td>
<td>9:00 am – 2:00 pm</td>
</tr>
</tbody>
</table>

Children under 16 are allowed on the Expo Floor only when accompanied/supervised by an adult. No strollers allowed.
Share Your Tweets and Pictures on the ASRM 2019 Social Media Wall!

During the ASRM 2019 Scientific Congress, all participants are invited to post tweets, pictures, and feedback on the Congress’s Social Media Walls. The Social Media Walls can be viewed in the Convention Center’s main lobby, at the ASRM Booth in the Expo Hall, as well as in the meeting areas. All you need in order to post is a mobile device with an installed Twitter or Instagram app or use your device’s web browser.

SENDING A TWEET OR POSTING A PICTURE TO THE ASRM 2019 SOCIAL MEDIA WALL

For Twitter, you post a tweet within the Twitter app on your mobile device, or on the Twitter website at www.twitter.com. You are limited to 280 characters in a single tweet. Within your tweet, in order for your message to appear on the Social Media Wall, you must include the hashtag “#ASRM2019,” such as:

For Instagram, you must post your pictures from within the Instagram app on your mobile device, although you can view photos on the Instagram website at www.instagram.com. To appear on the ASRM 2019 Social Media Wall, you must use the hashtag #ASRM2019 in the main caption of your photo before you click “SHARE.”

The #ASRM2019 Plenaries and Symposia in Exhibit Hall C are being translated into Spanish and Mandarin Chinese or

The #ASRM2019 Mobile App has a locate me function. I really need this if I want to make it to the members meeting on time! #TCB

More great hashtags you can use: #Access2Care #Access2IVF #Infertility #InfertilityAwareness #IVF #75th

FOLLOWING ASRM ON TWITTER AND INSTAGRAM

On Twitter, simply search for “#ASRM2019” if you wish to follow the tweets of ASRM and other attendees at the Congress. Search for “@ReprodMed” if you also wish to follow ASRM’s Twitter feed.

On Instagram, search for “#ASRM2019” if you wish to see all the attendees’ photos of the Congress, and search for “americansocietyforreprodmed” to see photos that ASRM is posting of the meeting.

SOCIAL MEDIA ETIQUETTE

All incoming tweets and photos are monitored by ASRM staff, and those that show up with the hashtag #ASRM2019 and that pass moderation will be posted to the Social Media Wall. In order for a tweet or picture to pass moderation, the following guidelines should be kept in mind:

• Messages must be about Congress content or activities.
• Messages cannot contain personal information.
• Messages cannot personally attack another person.
• Messages that ASRM considers unprofessional will not be displayed on the Social Media Wall.

We hope you’ll join us in sharing the ASRM 2019 Scientific Congress!
Ticketed Events

Ticketed events listed in the daily schedule are marked with a ☰ icon.

**SUNDAY, OCTOBER 13, 2019**

8:00 am - 3:45 pm  
Society for Reproductive Endocrinology and Infertility (SREI) Members’ Retreat  
$250 Fee

This course will focus on concrete, actionable techniques to keep clinical practice patterns current and implement quality control metrics to optimize patient care. These techniques can be applied to improve patient satisfaction, retention and grow your practice. This is a non-CME retreat for SREI members only.

3:00 pm - 5:00 pm  
Personal Finance for Physicians Workshop  
Stuart S. Howards, M.D.  
University of Virginia  
$25 Fee

In this non-CME workshop, attendees will receive objective advice and education regarding personal finances (practice finances will not be covered). Topics will include the following: insurance, legal considerations, investments (general principles), retirement investments and planning, savings for college expenses, and estate planning.

**6:00 pm**  
ASRM 75th Anniversary Gala  
National Constitution Center  
Tickets are $500 per person with all proceeds benefiting the ASRM Research Institute. Purchase your ticket at www.asrmcongress.org when you register for the Congress. For larger groups or table sales, contact Cara Dawn Byford at cbyford@asrm.org.

**TUESDAY, OCTOBER 15, 2019**

7:00 am - 8:45 am  
Women’s Council Breakfast  
$50 Fee

**6:00 pm**  
ASRM 75th Anniversary Gala  
National Constitution Center  
Tickets are $500 per person with all proceeds benefiting the ASRM Research Institute. Purchase your ticket at www.asrmcongress.org when you register for the Congress. For larger groups or table sales, contact Cara Dawn Byford at cbyford@asrm.org.

**ROUNDTABLE DISCUSSIONS**

Roundtable Luncheons  
Monday, Tuesday, and Wednesday  
12:15 pm - 1:15 pm  
$60 Fee/day

See pages 172-179 for a list of roundtable titles and speakers.
These intimate, in-depth luncheon sessions are designed for interaction and exchange with recognized experts in their field. Bring your questions and discussion ideas, and be prepared to engage while you enjoy a boxed lunch during the session. Sign up now for this ticketed event with limited registration.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, October 14</td>
<td>12:15 - 1:15 pm</td>
<td>Venture Capital, Private Equity, and Assisted Reproduction: Investing in Innovation in IVF</td>
<td>David Sable, M.D.</td>
<td>Columbia University</td>
</tr>
<tr>
<td>Tuesday, October 15</td>
<td>12:15 - 1:15 pm</td>
<td>Human Genome Editing: Roles and Responsibilities of Fertility Clinics</td>
<td>Françoise Baylis, C.M., O.N.S., Ph.D., F.R.S.C., F.C.A.H.S.</td>
<td>Dalhousie University</td>
</tr>
<tr>
<td>Wednesday, October 16</td>
<td>12:15 - 1:15 pm</td>
<td>Male Infertility Case Discussion</td>
<td>John Amory, M.D., M.P.H.</td>
<td>University of Washington</td>
</tr>
</tbody>
</table>
1. We’ve kept lunch! **Lunch** is a designated time, 12:15 pm - 1:15 pm, for either a ticketed lunchtime activity or for you to grab lunch and network with colleagues. Philadelphia offers lots of local spots to enjoy close to the convention center!

2. **Expert Encounters**! This is your opportunity to ask questions and have a dialogue with an expert in select topic areas. Space is limited and these will sell out so book your slot early!

3. Check out our **Roundtable discussions** – 40 Monday, 35 Tuesday, and 30 Wednesday!

4. We’ve brought back **Journal Club Global** – live at our ASRM 2019 Scientific Congress & Expo! The editorial team at *Fertility and Sterility* is pleased to announce a special **Journal Club Global** live from The ASRM 2019 Scientific Congress & Expo to discuss a recently published article. This exciting event will be streamed live on Saturday, October 12, 2019, at 5:15 pm (EST). Please join us live in Philadelphia or register to watch online.

5. Our fully interactive and very useful **meeting app** is a must-have for all Congress attendees. Complete your in-app profile and network with other attendees, locate your next session easily with directions from where you are to where you need to be, and play the **Expo Passport Game** in the app while on-site at the Congress.

6. **PosterPlus** – in addition to the poster sessions on Tuesday and Wednesday mornings, you can view short video presentations about the poster abstracts. Just click on the PosterPlus icon in the app and search by poster number, author name, or title!

7. **Video sessions** have been expanded! Now we have a **Video Program Prize Session** on Monday and two additional video sessions on Tuesday and Wednesday afternoons.

8. **75th Anniversary Gala** Tickets are $500 per person with all proceeds benefiting the ASRM Research Institute. Purchase your ticket at [www.asrmcongress.org](http://www.asrmcongress.org) when you register for the Congress. For larger groups or table sales, contact Cara Dawn Byford at cbyford@asrm.org.
# SCHEDULE-AT-A-GLANCE

## SPECIAL INTEREST GROUP MEMBERS’ MEETINGS

### SUNDAY, OCTOBER 13, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Meeting</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:15 pm - 6:00 pm</td>
<td>NPG Members’ Meeting and APP Reception</td>
<td>Marriott 404</td>
</tr>
<tr>
<td></td>
<td>MHPG Members’ Meeting</td>
<td>PCC 201A</td>
</tr>
<tr>
<td></td>
<td>Preimplantation Genetic Testing Special Interest Group (PGTSIG)</td>
<td>PCC 201B</td>
</tr>
<tr>
<td></td>
<td>Environment and Reproduction Special Interest Group (ERSIG)</td>
<td>PCC 204A</td>
</tr>
</tbody>
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### MONDAY, OCTOBER 14, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Meeting</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:30 pm - 7:00 pm</td>
<td>Male Reproductive Research Group (Andrology Research Consortium)</td>
<td>PCC 106A</td>
</tr>
<tr>
<td>5:45 pm - 6:30 pm</td>
<td>Uterine Transplant Members’ Meeting (UTSIG)</td>
<td>PCC 204A</td>
</tr>
<tr>
<td></td>
<td>Androgen Excess Special Interest Group (AESIG)</td>
<td>PCC 103A</td>
</tr>
<tr>
<td></td>
<td>Menopause and Ovarian Insufficiency Special Interest Group (MOISIG)</td>
<td>PCC 104A</td>
</tr>
<tr>
<td></td>
<td>Access to Care (ATCSIG)</td>
<td>PCC 103B</td>
</tr>
<tr>
<td></td>
<td>Endometriosis Special Interest Group (EndoSIG)</td>
<td>PCC 105AB</td>
</tr>
<tr>
<td></td>
<td>Regenerative Medicine and Stem Cell Biology Special Interest Group (RMSCBSIG)</td>
<td>PCC 106B</td>
</tr>
<tr>
<td></td>
<td>Physician Scientists Special Interest Group (PSSIG)</td>
<td>PCC 104B</td>
</tr>
<tr>
<td></td>
<td>Pediatric and Adolescent Gynecology Special Interest Group (PAGSIG)</td>
<td>PCC 107AB</td>
</tr>
<tr>
<td></td>
<td>Nutrition Special Interest Group (NutriSIG)</td>
<td>PCC 108A</td>
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<tr>
<td></td>
<td>Indian Special Interest Group (ISIG)</td>
<td>PCC 108B</td>
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<tr>
<td></td>
<td>Reproductive Immunology Special Interest Group (RISIG)</td>
<td>PCC 112AB</td>
</tr>
<tr>
<td></td>
<td>Health Disparities Special Interest Group (HDSIG)</td>
<td>PCC 201C</td>
</tr>
<tr>
<td></td>
<td>Complementary and Integrative Medicine Special Interest Group (CIMSIG)</td>
<td>PCC 109AB</td>
</tr>
<tr>
<td></td>
<td>Legal Professional Group Members Meeting</td>
<td>PCC 201B</td>
</tr>
<tr>
<td>5:45 pm - 7:00 pm</td>
<td>SART Members’ Meeting</td>
<td>PCC 103C</td>
</tr>
<tr>
<td>6:15 pm - 7:00 pm</td>
<td>Fertility Preservation Special Interest Group (FPSIG)</td>
<td>Marriott 403</td>
</tr>
<tr>
<td>6:15 pm - 8:00 pm</td>
<td>SRS Members’ Meeting and Reception</td>
<td>Marriott 407</td>
</tr>
</tbody>
</table>

### TUESDAY, OCTOBER 15, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Meeting</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:45 pm - 6:30 pm</td>
<td>Society for Reproductive Endocrinology and Infertility (SREI)</td>
<td>PCC 201A</td>
</tr>
<tr>
<td></td>
<td>Early Pregnancy Special Interest Group (EPSIG)</td>
<td>PCC 106B</td>
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<tr>
<td></td>
<td>Turkish Special Interest Group (TSIG)</td>
<td>PCC 104B</td>
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<tr>
<td></td>
<td>Complex Family Planning Special Interest Group (CFPSIG)</td>
<td>PCC 106A</td>
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<tr>
<td></td>
<td>Chinese Special Interest Group (ChSIG)</td>
<td>PCC 103B</td>
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<tr>
<td></td>
<td>Imaging in Reproductive Medicine Special Interest Group (IRMSIG)</td>
<td>PCC 201C</td>
</tr>
<tr>
<td></td>
<td>Fibroids Special Interest Group (FSIG)</td>
<td>PCC 107AB</td>
</tr>
<tr>
<td>5:45 pm - 7:00 pm</td>
<td>GCPG Members’ Meeting</td>
<td>Marriott Franklin 7</td>
</tr>
<tr>
<td>5:45 pm - 7:30 pm</td>
<td>SRBT Members’ Meeting and Reception</td>
<td>Marriott Franklin 10</td>
</tr>
<tr>
<td>6:15 pm - 7:00 pm</td>
<td>ARM Members’ Meeting</td>
<td>Marriott 408</td>
</tr>
<tr>
<td>7:00 pm - 9:00 pm</td>
<td>ASRM Professional Group Reception</td>
<td>Marriott Salon H</td>
</tr>
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</table>
## SCHEDULE-AT-A-GLANCE  
### PRE-CONGRESS

### SATURDAY, OCTOBER 12, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:15 am - 12:00 pm</td>
<td>PC01 Subchromosomal Variations and Mosaicism: Clinical Significance in Assisted Reproductive Technology (ART) Practices</td>
</tr>
<tr>
<td></td>
<td>PC02 Fertility Preservation: 2019 and Beyond</td>
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<td></td>
<td>PC03 New Medical Information Involving Gamete Donors: Medical, Legal, and Ethical Considerations</td>
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<td></td>
<td>PC04 Cryostorage Management and the Lost Art of Assisted Reproductive Technology (ART)</td>
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<td></td>
<td>PC05 The Skinny on Obesity</td>
</tr>
<tr>
<td></td>
<td>PC06 Strengthening Your Core Business While Achieving and Sustaining Growth</td>
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<tr>
<td></td>
<td>PC07 Managing Assisted Reproductive Technology (ART) Patient Stress and Anxiety: Integrative Mind-body Approaches</td>
</tr>
<tr>
<td></td>
<td>PC08 Early Pregnancy Loss: Maternal Factors in Implantation and Receptivity</td>
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<tr>
<td></td>
<td>PC09 Gay Men Parenting: A Decade of Change in the Legal, Medical, Societal, and Psychological Landscape</td>
</tr>
<tr>
<td>5:15 pm</td>
<td>PC10 The Transgender Couple and Infertility: A Complicated Journey</td>
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<td></td>
<td>F&amp;S Journal Club Live</td>
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</tbody>
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### SUNDAY, OCTOBER 13, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am - 3:45 pm</td>
<td>PC11 Reproductive Aging: Meeting the Challenges in Clinical and Laboratory Practice</td>
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<td>PC12 Next-generation Assisted Reproductive Technology (ART): Personalized Reproductive Medical Management</td>
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<td>PC13 First 20 Years of Stem Cells: From First Isolation to Clinical Use</td>
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<td>PC14 How to Optimize Assisted Reproductive Technology (ART) Success: From Lab to Clinic</td>
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<td></td>
<td>PC15 Testicular Biopsy: Converting Diagnostic Measures into Efficient Laboratory/Intracytoplasmic Sperm Injection (ICSI) Outcomes</td>
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<td>PC16 Polycystic Ovary Syndrome: at the Crossroads of Metabolism and Reproduction</td>
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<td>PC17 Transparency in Assisted Reproductive Technology (ART): Understanding the Global Legal, Ethical, and Psychosocial Issues of Information Disclosure in ART Today</td>
</tr>
<tr>
<td></td>
<td>PC18 Challenging Reproductive Surgical Scenarios to Optimize Fertility</td>
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<td>PC19 Male Reproduction: the Road to Fertility with Bumps on the Way</td>
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<td></td>
<td>PC20 Endometriosis: from Diagnosis to Therapeutic Strategy (an ASRM-SEUD joint course)</td>
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<td></td>
<td>PC21 How to Debate the Scientific Literature With Real World Examples</td>
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<tr>
<td>1:00 pm - 5:00 pm</td>
<td>PC22 Why the Lab Is Fab: In Vitro Fertilization (IVF) through the Eyes of an Embryologist</td>
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<td></td>
<td>PC23 Dietary Supplements and Fertility: Emerging Evidence and Clinical Guidance</td>
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<td></td>
<td>PC24 Therapies for Uterine Fibroids</td>
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<tr>
<td>6:00 pm</td>
<td>ASRM 75th Anniversary Gala</td>
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</tbody>
</table>
## SCHEDULE-AT-A-GLANCE  
**MONDAY, OCTOBER 14, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am - 7:45 am</td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td>7:00 am - 7:45 am</td>
<td>Opening Ceremony Breakfast supported by</td>
</tr>
<tr>
<td>7:00 am - 12:00 pm</td>
<td>Poster Setup</td>
</tr>
<tr>
<td>7:45 am - 8:30 am</td>
<td><strong>Opening Ceremony</strong></td>
</tr>
<tr>
<td>8:30 am - 9:15 am</td>
<td>Plenary</td>
</tr>
<tr>
<td>9:15 am - 10:00 am</td>
<td>Plenary</td>
</tr>
<tr>
<td>10:00 am - 10:45 am</td>
<td>Break</td>
</tr>
<tr>
<td>10:45 am - 12:15 pm</td>
<td>Scientific Congress Prize Paper Session 1</td>
</tr>
<tr>
<td>11:00 am - 12:00 pm</td>
<td>MHPG Clinical Session</td>
</tr>
<tr>
<td>12:15 pm - 1:15 pm</td>
<td>Break/Lunch</td>
</tr>
<tr>
<td>12:30 pm - 2:00 pm</td>
<td>Resident Learning Session</td>
</tr>
<tr>
<td>1:30 pm - 2:30 pm</td>
<td>Interactive Sessions</td>
</tr>
<tr>
<td>2:30 pm - 3:20 pm</td>
<td>Keynote</td>
</tr>
<tr>
<td>3:20 pm - 4:15 pm</td>
<td>Break</td>
</tr>
<tr>
<td>4:15 pm - 5:30 pm</td>
<td>Symposia</td>
</tr>
<tr>
<td>4:15 pm - 5:30 pm</td>
<td>Video Program Prize Session</td>
</tr>
</tbody>
</table>

### Activities

- **Plenary**
- **Poster Setup**
- **Break**
- **Scientific Congress Prize Paper Session 1**
- **MHPG Clinical Session**
- **Interactive Sessions**
- **Keynote**
- **Symposia**
- **Video Program Prize Session**

### Topics

- **Continental Breakfast**
- **Opening Ceremony**
- **Plenary**
- **Break**
- **Scientific Congress Prize Paper Session 1**
- **MHPG Clinical Session**
- **Interactive Sessions**
- **Keynote**
- **Symposia**
- **Video Program Prize Session**

### Additional Notes

- **Opening Ceremony**: President’s Guest Lecture: Closing the Generational Gap Between Practitioners and Patients
- **Plenary**: Camran Nezhat, M.D. Lectureship in Innovations in Medicine: Using Live Imaging to Reveal the Mechanisms That Form the Mammalian Embryo

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**36**
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30 am - 7:45 am</td>
<td>Poster Abstract Session and Continental Breakfast</td>
</tr>
<tr>
<td>7:00 am - 8:00 am</td>
<td>Women's Council Breakfast</td>
</tr>
<tr>
<td>8:00 am - 8:30 am</td>
<td>Pre-Pleenary Special Session: Eye on AI: Artificial Intelligence in ART</td>
</tr>
<tr>
<td>8:30 am - 9:15 am</td>
<td>Plenary</td>
</tr>
<tr>
<td>9:15 am - 10:00 am</td>
<td>Plenary</td>
</tr>
<tr>
<td>10:00 am - 10:45 am</td>
<td>Break Coffee Station supported by</td>
</tr>
<tr>
<td>10:45 am - 12:15 pm</td>
<td>Scientific Congress Prize Paper Session 2</td>
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<tr>
<td>10:45 am - 12:15 pm</td>
<td>Surgical Video Tutorial: Innovations in Surgical Fertility Preservation</td>
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<td>12:15 pm - 1:15 pm</td>
<td>ASRM CMC Lunch Symposium</td>
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<tr>
<td>12:30 pm - 2:00 pm</td>
<td>Resident Learning Session</td>
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<tr>
<td>1:30 pm - 2:30 pm</td>
<td>Interactive Sessions</td>
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<tr>
<td></td>
<td>Medical and lifestyle treatment options in PCOS, more than just metformin</td>
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<td></td>
<td>Mosaicism Exposed – How to Handle Mosaic Embryos</td>
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<td></td>
<td>Beyond Disclosure: The Psychological, Social, Legal, and Genetic Implications of Intentional and Unintentional Donor Identity</td>
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<td>Insights from Vertebrate Model Reproductive Organ Regeneration: How Do We Unlock Our Regenerative Potential</td>
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<td>Home Sperm Testing: What is Available, Limitations and Opportunities</td>
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<td>Cervical Agenesis- Hysterectomy vs Utero-Vaginal Anastomosis</td>
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<td>Debate: Measuring AMH: A useful investigation in Recurrent Early Pregnancy Loss?</td>
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<td>In Vitro Activation for Primary Ovarian Insufficiency: Is it Ready for Prime Time?</td>
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<tr>
<td>1:30 pm - 2:30 pm</td>
<td>MHPG Clinical Session</td>
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<tr>
<td>2:45 pm - 3:30 pm</td>
<td>Keynote</td>
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<tr>
<td>2:45 pm - 3:30 pm</td>
<td>SRS Lecture: Innovation for Surgery: Surgical Robotics and The Fifth Generation – Non-Invasive Procedures</td>
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<tr>
<td>2:45 pm - 3:30 pm</td>
<td>Keynote</td>
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<tr>
<td>2:45 pm - 3:30 pm</td>
<td>Menopause Keynote Lecture: Future Directions on the Management of Menopause</td>
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<tr>
<td>3:30 pm - 4:15 pm</td>
<td>Break</td>
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<tr>
<td>4:15 pm - 5:30 pm</td>
<td>Symposium</td>
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<tr>
<td>4:15 pm - 5:30 pm</td>
<td>World Health Organization (WHO) Symposium: Global Call to Action to Enhance Fertility Care (A Non-CME Symposium)</td>
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<tr>
<td>4:15 pm - 5:30 pm</td>
<td>Video Session 2</td>
</tr>
</tbody>
</table>
### SCHEDULE-AT-A-GLANCE  
**WEDNESDAY, OCTOBER 16, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>6:30 am - 7:45 am</td>
<td>Poster Abstract Session and Continental Breakfast</td>
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<tr>
<td>8:00 am - 8:45 am</td>
<td>Plenary</td>
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<td>American Urological Association Bruce Stewart Memorial Lecture: The Diagnosis &amp; Treatment of Male Infertility: From the Bench to the Bedside</td>
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<tr>
<td>8:45 am - 9:15 am</td>
<td>ASRM Members' Meeting and Congress Prize Presentation</td>
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<tr>
<td>9:15 am - 10:00 am</td>
<td>Plenary</td>
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<td>Herbert H. Thomas Lecture: Justice and the Privitization of Health Data</td>
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<tr>
<td>10:00 am - 10:45 am</td>
<td>Break</td>
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<td>Coffee Station supported by <em>note</em></td>
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<tr>
<td>10:45 am - 12:15 pm</td>
<td>Oral Abstract Sessions</td>
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<tr>
<td>11:00 am - 12:00 pm</td>
<td>MHPG Clinical Session</td>
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<td>Peeking Under The Hood: Psychological Testing with Sperm Donors</td>
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<tr>
<td>12:15 pm - 1:15 pm</td>
<td>Break/Lunch</td>
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<td>Coffee Station supported by <em>note</em></td>
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<tr>
<td></td>
<td>Male Infertility Case Discussion</td>
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<tr>
<td>Roundtables</td>
<td>RTW01 - RTW30</td>
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<tr>
<td>12:30 pm - 2:00 pm</td>
<td>Resident Learning Session</td>
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<td>1:30 pm - 2:30 pm</td>
<td>Interactive Sessions</td>
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<td>Egg and Embryo Banking for Family Building Prior to Advancing Maternal Age: a Patient and Laboratory Perspective</td>
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<td>Repeated Implantation Failure: Can We Learn from Endometrial Evaluation?</td>
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<td>Reproductive Epigenetics and the Mighty Mitochondria</td>
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<td>Debate: Mullerian Classification: ESHRE vs ASRM - Which is Better?</td>
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<td>Environmental Chemicals and Reproduction: From Knowledge to Action</td>
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<tr>
<td></td>
<td>Family Planning Fellows Showcase: Frontiers in Complex Family Planning</td>
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<tr>
<td>2:45 pm - 3:30 pm</td>
<td>Keynote</td>
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<td>Contraception Keynote Lecture: Male Contraception: Past, Present, and Future</td>
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<tr>
<td>2:45 pm - 3:30 pm</td>
<td>Keynote</td>
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<td>SSR Exchange Keynote Lecture: Motile Ciliopathy is a New Cause of Male Infertility</td>
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<tr>
<td>3:30 pm - 3:45 pm</td>
<td>Break</td>
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<tr>
<td>3:45 pm - 5:00 pm</td>
<td>Symposia</td>
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<tr>
<td></td>
<td>Howard and Georgeanna Jones Endowed Symposium on Assisted Reproductive Technology: Growing Gametes and Embryos: Where Are We Now</td>
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<td>Egg Freezing - Are you ready for prime time? Developing and Implementing an Egg Freezing Program in Your Practice</td>
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<td>Fertility Preservation for Transgender Youth: Special Considerations</td>
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<td>Novel therapies for the treatment of Asherman syndrome</td>
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<td>Risk Management: Patient Education, Compliance and Consenting,</td>
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<td>AMMR Symposium: Strategies in Ovarian Stimulation Protocols to Improve Results in Assisted Reproduction</td>
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<td>CSRM Symposium: Embryo Culture in Vitro and Development</td>
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<tr>
<td>3:45 pm - 5:00 pm</td>
<td>Video Session 3</td>
</tr>
</tbody>
</table>
Daily Schedule Key to Abbreviations

Affiliated Societies
SART  Society for Assisted Reproductive Technology
SMRU  Society for Male Reproduction and Urology
SRBT  Society of Reproductive Biologists and Technologists
SREI  Society for Reproductive Endocrinology and Infertility
SRS  Society of Reproductive Surgeons

Professional Groups
ARM  Association of Reproductive Managers
GCPG  Genetic Counseling Professional Group
LPG  Legal Professional Group
MHPG  Mental Health Professional Group
NPG  Nurses' Professional Group

Special Interest Groups
ATCSIG  Access to Care Special Interest Group
AESIG  Androgen Excess Special Interest Group
CIMSIG  Complementary and Integrative Medicine Special Interest Group
CFPSIG  Complex Family Planning Special Interest Group
ChSIG  Chinese Special Interest Group
EndoSIG  Endometriosis Special Interest Group
EPSIG  Early Pregnancy Special Interest Group
ERSIG  Environment and Reproduction Special Interest Group
FPSIG  Fertility Preservation Special Interest Group
FSIG  Fibroids Special Interest Group
HDSIG  Health Disparities Special Interest Group
ISIG  Indian Special Interest Group
IRMSIG  Imaging in Reproductive Medicine Special Interest Group
MOISIG  Menopause and Ovarian Insufficiency Special Interest Group
NutriSIG  Nutrition Special Interest Group
PAGSIG  Pediatric and Adolescent Gynecology Special Interest Group
PGTSIG  Preimplantation Genetic Testing Special Interest Group
PSSIG  Physician-Scientists' Special Interest Group
RISIG  Reproductive Immunology Special Interest Group
RMSCBSIG  Regenerative Medicine and Stem Cell Biology Special Interest Group
TSIG  Turkish Special Interest Group
UTSIG  Uterine Transplant Special Interest Group (Forming)
WC  Women's Council

Partner Groups
AE-PCOS Society  Androgen Excess and Polycystic Ovary Syndrome Society
ALMER  Latin American Association for Reproductive Medicine
AMMR  Mexican Association of Reproductive Medicine
ASPIRE  Asia Pacific Initiative in Reproduction
CFAS  Canadian Fertility and Andrology Society
CSRM  Chinese Society of Reproductive Medicine
ESHRE  European Society of Human Reproduction and Embryology
ISAR  Indian Society for Assisted Reproduction
JSAR  Japan Society of Assisted Reproduction
MEFS  Middle East Fertility Society
SSR  Society for the Study of Reproduction

Abstract Presenters and Session Speakers: Don't forget to stop by the on-site Speaker Ready Room to upload presentations, trouble-shoot with technicians, view your slides and familiarize yourself with the AV equipment, or pick up your ribbons! Speaker Ready Room is located in PCC204BC.

SPEAKER READY ROOM HOURS OF OPERATION
Friday, 10/11 2:00 pm – 6:00 pm
Saturday, 10/12 7:00 am – 6:00 pm
Sunday, 10/13 7:00 am – 5:00 pm
Monday, 10/14 7:00 am – 5:00 pm
Tuesday, 10/15 7:00 am – 5:00 pm
Wednesday, 10/16 7:00 am – 4:00 pm
2019 SCIENTIFIC CONGRESS DAILY SCHEDULE

SUNDAY, OCTOBER 13, 2019

8:00 am - 3:45 pm
SREI Members’ Retreat

1:00 pm - 5:00 pm
Poster Setup

3:00 pm - 5:00 pm
Workshop
Personal Finance for Physicians
Stuart S. Howards, M.D.
University of Virginia

5:15 pm - 6:00 pm
Members’ Meetings
- NPG Members’ Meeting and APP Reception
- MHPG Members’ Meeting
- Preimplantation Genetic Testing Special Interest Group
- Environment and Reproduction Special Interest Group

6:00 pm
ASRM 75th Anniversary Gala
National Constitution Center

MONDAY, OCTOBER 14, 2019

7:00 am - 7:45 am
Breakfast

7:45 am - 8:30 am
Opening Ceremony

8:30 am - 9:15 am
Plenary
President’s Guest Lecture: Closing the Generational Gap Between Practitioners and Patients
Endowed by a 1987 grant from Ortho Women’s Health
Ryan Jenkins
Speaker, Author, and Inc. Magazine Columnist

9:15 am - 10:00 am
Plenary
Camran Nezhat, M.D. Lectureship in Innovations in Medicine: Using Live Imaging to Reveal the Mechanisms That Form the Mammalian Embryo
Endowed by a 2011 Gift from Camran Nezhat, M.D. Dr. Camran Nezhat pioneered techniques of video-assisted endoscopic surgery, which revolutionized modern day surgery. He along with his brothers, Drs. Farr and Ceana Nezhat, performed some of the most advanced procedures with these techniques for the first time, thus opening the vistas for endoscopic surgeons all over the world.
Nicholas Plachta, Ph.D.
Institute for Molecular and Cell Biology, A*STAR

10:00 am - 10:45 am
Break

10:45 am - 12:15 pm
Oral Abstract Sessions
Scientific Congress Prize Paper Session 1

11:00 am - 12:00 pm
MHPG Clinical Session
ARS
Research Isn’t Just for Nerds: The Easy How-To’s of Conducting Publishable Research in the Field of Reproductive Medicine
Alice Domar, Ph.D.
Boston IVF
Lauri Pasch, Ph.D.
University of California, San Francisco

12:15 pm - 1:15 pm
Break/Lunch Sessions

12:15 pm - 1:15 pm
Break/Lunch
Coffee Station supported by Roche

Expert Encounter
Venture Capital, Private Equity, and Assisted Reproduction: Investing in Innovation in IVF
David Sable, M.D.
Columbia University

Roundtables
12:30 pm - 2:00 pm  Resident Learning Session

Resident Learning Session: Team-based Learning
Divya Kelath Shah, M.D., M.M.E., University of Pennsylvania
Francoise Baylis, C.M., O.N.S., Ph.D., F.R.S.C., F.L.A.H.S., Dalhousie University

1:30 pm - 2:30 pm  Interactive Sessions

Interactive Session
Key Performance Indicators for the IVF Lab
Amy Sparks, Ph.D. (Chair)
University of Iowa
Alison Bartolucci, M.S.
University of Connecticut
Dean Morbeck, Ph.D., M.B.A., H.C.L.D.
Fertility Associates, Auckland, NZ

Interactive Session
How Do We Reach the Goal of Universal Insurance Coverage for IVF?
Jacqueline Ho, M.D. (Chair)
University of Southern California
Sean Tipton, M.A.
ASRM
Barbara Collura, M.A.
RESOLVE

Interactive Session
An Integrative Approach to Treating Dysmenorrhea Associated with Endometriosis
Peter Harvey, M.B.A., L.Ac., F.A.B.O.R.M. (Chair)
Eastern Healing, Inc.
Charles E. Miller M.D.
The Advanced IVF Institute
Holly R. Harris, Sc.D., M.P.H.
Fred Hutchinson Cancer Research Center

Interactive Session
No Satisfaction: Psychological and Medical Perspectives on Infertility and Sexual Dysfunction
William D. Petok, Ph.D. (Chair)
Thomas Jefferson University
Elizabeth A. Grill, Psy.D.
Weill Cornell Medical Center
Robert D. Oates, M.D.
Boston University School of Medicine
Kim Bergman, Ph.D.
Growing Generations

Interactive Session
Moving Hysteroscopy from the Operating Room to the Office: Essentials for Success, Safety, and Patient Satisfaction
Steven R. Lindheim, M.D. (Chair)
Write State University
Stefano Bettocchi, M.D.
University of Bari
Keith Isaacson, M.D.
Harvard Medical School
Brad Senstra, M.H.A.
Seattle Reproductive Medicine

Interactive Session
Non-invasive Preimplantation Genetic Testing (NIPGT): Is it Applicable for ART Practice?
Svetlana Rechitsky, Ph.D. (Chair)
Reproductive Genetic Innovations
Dagan Wells, Ph.D., I.V.I., R.M.A.
University of Oxford
Carlos Rubio, Ph.D.
Igenomix

Interactive Session
Counseling Patients on Mosaicism
JoRene Bigler-Vollman, R.N., M.S.N. (Chair)
Fertility Centers of Illinois
Lisa A. Rinehart, J.D., R.N.
LegalCare Consulting, Inc.
Andria G. Besser, M.S., C.G.C
New York University Langone Fertility Center

Interactive Session
Best Practices in Miscarriage Management
Courtney Schreiber, M.D. (Chair)
University of Pennsylvania
Sarah Horvath, M.D.
University of Pennsylvania
Sarita Sonalkar, M.D., M.P.H.
University of Pennsylvania
Vanessa Dalton, M.D., M.P.H.
University of Michigan

MHPG Clinical Session: The Trauma of Infertility and Pregnancy Loss: Helping Our Patients Heal
Janet Jaffe, Ph.D.
Center for Reproductive Psychology
Karen Hall, Ph.D.
Private Practice
Julie Bindeman, Psy.D.
Private Practice
## 2019 SCIENTIFIC CONGRESS DAILY SCHEDULE

**PLENARIES, LECTURES, AND SYMPOSIA WILL BE TRANSLATED SIMULTANEOUSLY INTO SPANISH AND MANDARIN CHINESE FOR MEMBERS OF THE AUDIENCE IN EXHIBIT HALL C**

<table>
<thead>
<tr>
<th>Time</th>
<th>Lectures</th>
<th>Break</th>
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<tbody>
<tr>
<td>2:35 pm - 3:20 pm</td>
<td>Keynote</td>
<td><strong>Keynote</strong></td>
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<tr>
<td></td>
<td><strong>IVF as a Business</strong></td>
<td>Endowed by a 1990 grant from TAP Pharmaceutical</td>
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<td><strong>Endowed by a 1990 grant from TAP Pharmaceutical</strong></td>
<td>David Sable, M.D. Columbia University</td>
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<td></td>
<td><strong>Keynote</strong></td>
<td><strong>The David and Rosemary Adamson Lecture on Excellence in Reproductive Medicine: Midnight’s Broken Toll: Male Fertility and the Health of Future Generations</strong></td>
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<td><strong>Endowed by Advanced Reproductive Care, Inc. and Rosemary and David Adamson, M.D.</strong></td>
<td>R. John Aitken, Ph.D., Sc.D., F.R.S.E., F.R.S.N., F.A.H.M.S., F.A.A. University of Newcastle</td>
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<tr>
<td>3:20 pm - 4:15 pm</td>
<td>Break</td>
<td><strong>Join us for this special break to celebrate ASRM’s 75th Anniversary with a festive toast and cake.</strong></td>
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<td>4:15 pm - 5:30 pm</td>
<td>Symposia</td>
<td><strong>Symposium</strong></td>
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<td><strong>ABOG - Kenneth J. Ryan Ethics Symposium: Ethics in Embryo Research: In Consideration of Patients, Progeny and Professional Norms</strong></td>
<td>Supported by a 2013 endowment from the American Board of Obsteetrics and Gynecology</td>
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<td><strong>Endowed by the American Board of Obsteetrics and Gynecology</strong></td>
<td>Alto Charo, J.D. (Chair) University of Wisconsin - Madison Ben Hurbut, Ph.D. Arizona State University Feng Zhang, Ph.D. The Broad Institute</td>
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<td><strong>Symposium</strong></td>
<td><strong>Are Specialized Sperm Function Tests Clinically Useful?</strong></td>
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<td><strong>Endowed by the American Board of Obsteetrics and Gynecology</strong></td>
<td>Armand Zini, M.D., F.R.C.S.C. (Chair) McGill University Sandra Esteves, M.D., Ph.D., M.Sc. Campinas, Brazil Douglas T. Carrell, Ph.D. University of Utah School of Medicine</td>
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<td><strong>Symposium</strong></td>
<td><strong>New Updates on Therapies for Infertility in Polycystic Ovary Syndrome (PCOS)</strong></td>
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<td><strong>Endowed by the American Board of Obsteetrics and Gynecology</strong></td>
<td>Juha Tapamainen, M.D., Ph.D. (Chair) University of Helsinki, Finland Richard S. Legro, M.D. Penn State College of Medicine Joop B.E. Laven, M.D., Ph.D. Erasmus University</td>
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<td><strong>Symposium</strong></td>
<td><strong>Management of Infertility in Low Resource Settings</strong></td>
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<td><strong>Endowed by a 2013 endowment from the American Board of Obsteetrics and Gynecology</strong></td>
<td>Christopher Herndon, M.D. (Co-chair) University of Washington Julia V. Johnson, M.D. (Co-chair) University of Massachusetts Medical School Sheryl Vanderpoel, Ph.D. Population Council, W.H.O. (retired) Kevin J. Doody, M.D. CARE Fertility Melissa Harmon, R.N. CARE Fertility</td>
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<td><strong>Symposium</strong></td>
<td><strong>The New Modern Family: Family-building and Co-parenting in the 21st Century</strong></td>
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<td><strong>Endowed by the American Board of Obsteetrics and Gynecology</strong></td>
<td>Linda Kondilis, Psy.D. (Chair) Private Practice Laurie McKenzie, M.D. Baylor College of Medicine Heather Ross, J.D. Ross &amp; Zuckerman, LLP</td>
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<td><strong>Symposium</strong></td>
<td><strong>Ovarian Tissue Cryopreservation and Transplantation: 20 Years of Progress</strong></td>
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<td><strong>Endowed by the American Board of Obsteetrics and Gynecology</strong></td>
<td>Kutluk H. Oktay, M.D., Ph.D. (Chair) Yale University School of Medicine Isabelle Demeestere, M.D., Ph.D. University Libre de Bruxelles Nao Suzuki, M.D., Ph.D. Marianna University</td>
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### 4:15 pm - 5:30 pm

**Symposium**

**How to Build High Functioning Teams in the Embryology Lab**
- Blake R. Welch, M.B.A. (Chair)
- Chicago IVF
- David Ball, Ph.D.
- Seattle Reproductive Medicine

**Symposium**

**The Endometrium and Recurrent Pregnancy Loss**
- Sony Sierra, M.D., M.Sc., F.R.C.S.C. (Chair)
- Trio Fertility
- Steven L. Young, M.D., Ph.D.
- UNC School of Medicine
- Arri Coomarasamy, Ph.D.
- University of Birmingham

**Symposium**

**ESHRE Symposium: Looking Beyond the XX Factor**
- Jackson Kirkman-Brown, M.B.E. (Chair)
- University of Birmingham
- Adelheid Soubry, Ph.D.
- University Leuven

**Symposium**

**ISAR Symposium: Genital Kochs and Infertility**
- Hirishikesh Pai, M.D., M.Sc. (Chair)
- Bloom IVF Lilavati Hospital
- Jaideep Malhotra, M.B.B.S., M.D.
- Rainbow IVF
- Madhuri Patal, M.D.
- Patil Fertility and Endoscopic Clinic
- Firuza Parikh, M.D., D.N.B., Ph.D.
- Jaslok Hospital and Research Centre
- Rishma Dhillon Pai, M.D.
- Lilavati Hospital

**Symposium**

**MEFS Symposium: Controversies in ART**
- University of South Alabama
- Richard J. Paulson, M.D., M.S.
- University of Southern California
- Bruce Shapiro, M.D., Ph.D., H.C.L.D.
- Fertility Center of Las Vegas

### 4:15 pm - 5:30 pm

**Symposium**

**SSR Symposium: Fertility Preservation- Existing and Emerging Fertility Preservations Options for Women and Men**
- Mary B. Zelinski, Ph.D. (Chair)
- Oregon Health & Sciences University
- So-Youn Kim, PhD
- University of Nebraska Medical Center
- Kyle E. Orwig, Ph.D.
- University of Pittsburgh

### 5:30 pm - 7:00 pm

**Members’ Meeting**

- Male Reproductive Research Group (Andrology Research Consortium)

### 5:45 pm - 6:30 pm

**Members’ Meetings**

- Uterine Transplant Members’ Meeting
- Androgen Excess Special Interest Group
- Menopause and Ovarian Insufficiency Special Interest Group
- Access to Care
- Endometriosis Special Interest Group
- LGBTQ Special Interest Group
- Regenerative Medicine and Stem Cell Biology Special Interest Group
- Physician Scientists Special Interest Group
- Pediatric and Adolescent Gynecology Special Interest Group
- Nutrition Special Interest Group
- Indian Special Interest Group
- Reproductive Immunology Special Interest Group
- Health Disparities Special Interest Group
- Complementary and Integrative Medicine Special Interest Group
- Legal Professional Group Members Meeting

### 5:45 pm - 7:00 pm

**Members’ Meeting**

- SART Members’ Meeting

### 6:15 pm - 7:00 pm

**Members’ Meeting**

- Fertility Preservation Special Interest Group

### 6:15 pm - 8:00 pm

**Members’ Meeting**

- SRS Members’ Meeting and Reception
### TUESDAY, OCTOBER 15, 2019

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>6:30 am - 7:45 am</td>
<td>Poster Session/Breakfast</td>
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<tr>
<td>7:00 am - 8:00 am</td>
<td>Women’s Council Breakfast</td>
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<tr>
<td>8:00 am - 8:30 am</td>
<td>Pre-Plenary Special Session: Eye on AI: Artificial Intelligence in ART</td>
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<td>8:30 am - 9:15 am</td>
<td>Plenary: Is Human Germline Editing Ethical? Endowed by Astra-Zeneca</td>
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<tr>
<td>9:15 am - 10:00 am</td>
<td>Plenary: Planned Oocyte Cryopreservation: A Patient’s Perspective</td>
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<tr>
<td>10:45 am - 12:15 pm</td>
<td>Interactive Session: Surgical Video Tutorial</td>
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<tr>
<td>12:15 pm - 1:15 pm</td>
<td>Break/Lunch: Coffee Station supported by Roche</td>
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<tr>
<td>12:30 pm - 2:00 pm</td>
<td>Resident Learning Session: Case Discussions</td>
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**Plenary Lectures**
- **Is Human Germline Editing Ethical?**
  - Francoise Baylis, C.M., O.N.S., Ph.D., FRSC, FCAHS
  - Dalhousie University

- **Planned Oocyte Cryopreservation: A Patient’s Perspective**
  - Brigitte K. Adams
  - Eggsurance

**Interactive Session**
- **Surgical Video Tutorial: Innovations in Surgical Fertility Preservation**
  - John C. Petrozza, M.D. (Chair)
  - Massachusetts General Hospital
  - Kutluh H. Oktay, M.D., Ph.D.
  - Yale University
  - Mindy S. Christianson, M.D.
  - Johns Hopkins University

**Oral Sessions**
- **Scientific Congress Prize Paper Session 2**
- **Oral Abstract Sessions**

**Break/Lunch**
- Coffee Station supported by Roche

**Roundtables**
- **Expert Encounter: Human Genome Editing: Roles and Responsibilities of Fertility Clinics**
  - Francoise Baylis, C.M., O.N.S., Ph.D., F.R.S.C., F.C.A.H.S.
  - Dalhousie University

**Resident Learning Session**
- **Case Discussions**
  - Ranjith Ramasamy, M.D.
  - University of Miami
  - Elizabeth A. Stewart, M.D.
  - Mayo Clinic
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<tr>
<th>Time</th>
<th>Interactive Sessions</th>
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<td>1:30 pm - 2:30 pm</td>
<td>Interactive Session</td>
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<tr>
<td></td>
<td>Medical and Lifestyle Treatment Options in PCOS, More Than Just Metformin</td>
<td>Home Sperm Testing: What is Available, Limitations and Opportunities</td>
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<td></td>
<td>Nanette Santoro, M.D. (Chair) University of Colorado Denver</td>
<td>Natan Bar-Chama, M.D. (Chair) Reproductive Associates of New York</td>
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<td>Anuja Dokras, M.D., Ph.D. University of Pennsylvania Perelman School of Medicine</td>
<td>Michael Eisenberg, M.D. Stanford University</td>
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<td>Heather G. Huddleston, M.D. University of California, San Francisco</td>
<td>Benjamin Leader, M.D., Ph.D. ReproSource Inc.</td>
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<td>Mosaicism Exposed – How to Handle Mosaic Embryos</td>
<td>Cervical Agenesis- Hysterectomy vs Utero-Vaginal Anastomosis</td>
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<td>Timothy N. Hickman, M.D. (Chair) Houston IVF</td>
<td>Stephanie J. Estes, M.D. (Chair) Penn State</td>
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<td>Mandy Katz-Jaffe, Ph.D. Colorado Center for Reproductive Medicine</td>
<td>Bala Bhagavath, M.B.B.S. University of Rochester</td>
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<td>Cassandra Catoni, M.S., C.G.C. Ovation Fertility</td>
<td>Leslie Coker Appiah, M.D. University of Colorado Denver School of Medicine – Anschutz Medical Campus</td>
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<td>Mike Large, Ph.D. CooperSurgical</td>
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<td>Beyond Disclosure: The Psychological, Social, Legal, and Genetic Implications of Intentional and Unintentional Donor Identity</td>
<td>Debate: Measuring AMH: A Useful Investigation in Recurrent Early Pregnancy Loss?</td>
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<td>Claudia Pascale, Ph.D. (Chair) Institute for Reproductive Medicine and Science at Saint Barnabas</td>
<td>Paul Robert Brezina, M.D., M.B.A. (Chair) Fertility Associates of Memphis</td>
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<td>Judith Daar, J.D. Chase College</td>
<td>A. Musa Zamah, M.D., Ph.D. The University of Chicago</td>
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<td>Heidi Hayes, M.A. California Cryobank</td>
<td>Sasha A. Krieg, M.D., Ph.D. Oregon Health and Science University</td>
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<td>Neha Kumar, Sc.M. Invitae</td>
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<td>Insights from Vertebrate Model Reproductive Organ Regeneration: How Do We Unlock Our Regenerative Potential</td>
<td>In Vitro Activation for Primary Ovarian Insufficiency: Is it Ready for Prime Time?</td>
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<td>Kyle E. Orwig, Ph.D. (Chair) University of Pittsburgh</td>
<td>Mindy Christianson, M.D. (Chair) Johns Hopkins University</td>
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<td>Cesar Diaz-Garcia, M.D., M.P.H. IVI London</td>
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<td>MHGP Clinical Session</td>
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<td>MHGP Clinical Session — To SKYPE or Not to SKYPE: Ethics of Third-party Teleconsultations in the Age of High-tech</td>
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<td>Lauren Magalnick Berman, Ph.D. Fertility Psychology Center of Atlanta</td>
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<td></td>
<td>Lindsay Childress-Beatty, J.D., Ph.D. American Psychological Association</td>
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</table>
### 2:45 pm - 3:30 pm  Lectures

**Lecture**


*Endowed by a 1990 grant from Ethicon Endo-Surgery, Inc.*

Richard M. Satava, M.D., F.A.C.S.
University of Washington

**Lecture**

Menopause Keynote Lecture: Future Directions on the Management of Menopause

Rogerio A. Lobo, M.D.
Columbia University

### 4:15 pm - 5:30 pm  Symposia

**Symposium**

KY Cha Symposium in Stem Cell Technology and Reproductive Medicine: Germline and Mitochondrial Gene Therapy

*Supported by the Asia-Pacific Biomedical Research Foundation*

Charles A. Easley, Ph.D., M.S. (Chair)
University of Georgia
Ina Dobrinski, Ph.D., D.V.M.
University of Calgary
Hugh S. Taylor, M.D.
Yale University

**Symposium**

Access to Fertility Preservation Care: From Policy to the Patient

Akanksha Mehta, M.D., M.S. (Chair)
Emory University School of Medicine
H. Irene Su, M.D., M.S.C.E.
University of California
Joyce Reinecke, J.D.
Alliance for Fertility Preservation
Jim M. Dupree, IV, M.D., M.P.H.
University of Michigan

**Symposium**

Quality Management in Human ART: Time to Revisit the Issues

Barry R. Behr, Ph.D. (Chair)
Stanford Fertility and Reproductive Medicine Center
Mitchel C. Schiewe, Ph.D., M.S.
Ovation Fertility
Dawn A. Kelk, Ph.D., H.C.L.D.
Yale Fertility Center

**Symposium**

Implementation of an Embryo Donation Program Within Your Practice: Medical, Legal and Psychological Aspects

Eric A. Widra, M.D. (Chair)
Shady Grove Fertility Center
Angela K. Lawson, Ph.D.
Northwestern University
Nidhi Desai, J.D.
Desai & Miller

**Symposium**

RESPECT YOUR ENEMY: Marketing Your Practice Within the SART Advertising Guidelines in a Competitive Market

Sara Mooney, B.A. (Chair)
Seattle Reproductive Medicine
Amy Hall, R.Ph.
Catalyst Healthcare Marketing
Paul C. Lin, M.D.
Seattle Reproductive Medicine

**Symposium**

Fertility Trajectory of Klinefelter Syndrome: From Childhood, Adolescence to Adulthood

Peter Chan M.D., C.M., M.Sc., F.R.C.S.(C), F.A.C.S (Chair)
McGill University
Robert D. Oates, M.D.
Boston University
Darius A. Paduch, M.D., Ph.D.
Weill Cornell Medical College
4:15 pm - 5:30 pm  Symposia

Symposium
Patient-Centered Research in Uterine Fibroids: The COMPARE-UF Experience
Elizabeth A. Stewart, M.D. (Chair)
Mayo Clinic
Sateria Venable, B.Arch.
The Fibroid Foundation
Wanda K Nicholson, M.D., M.B.A., M.P.H.
University of North Carolina
Evan Myers, M.D., M.P.H.
Duke University

Symposium
ASPIRE Symposium: New Approach in PCOS
Peng Cheang Wong, M.B.B.S, F.R.C.O.G., F.A.M.S. (Chair)
Yong Loo Lin School of Medicine
Duru Shah, M.D. (India)
Gynaecworld Assisted Fertility Center
Thi Ngoc Lan Vuong, M.D., Ph.D. (Indonesia)
University of Medicine at Ho Chi Minh
Budi Wiweko, M.D., Ph.D.
Universitas Indonesia. Jakarta - Indonesia

Symposium
ALMER Symposium: Management of Mosaic Embryos After PGT-A in ART
Newton Busso, M.D., Ph.D. (Chair)
Projeto Aíta
Benjamin Sandler, M.D.
Reproductive Medicine Associates of New York
Carlos E. Sueldo, M.D.
University of California, San Francisco

Symposium
Oocyte Maturation In Vitro and Female Fertility Preservation
Rong Li, M.D., Ph.D. (Chair)
Peking University Third Hospital
Xiaoyan Liang, M.D., Ph.D.
The 6th affiliated Hospital of Sun Yat-sen University
Heng-yu Fan, Ph.D.
Life Sciences Institute, Zhejiang University

Symposium
FDA Symposium: Reproductive HCT/P Donor Eligibility and Compliance Update for Reproductive HCT/P Establishments
Simone P. Porter, M.D., M.P.H. (Chair)
Food and Drug Administration, Center for Biologic Evaluation and Research

Symposium
World Health Organization (WHO) Symposium: Global Call to Action to Enhance Fertility Care A Non-CME Symposium
James Kiarie, M.B.Ch.B., M.M.E.D (Chair)
World Health Organization
Rachel Snow, Sc.D.
United Nations Population Fund
Dr. Kittipong Sae-Jeng
Thailand Department of Health
Oladapo A. Ashiru, O.F.R., M.B.B.S., M.Sc., Ph.D.
Medical ART Center, Nigeria
David Ntirushwa, M.D.
University Teaching Hospital of Kigali
Dmitry Kissin, M.D., M.P.H.
Centers for Disease Control and Prevention

4:15 pm - 5:30 pm  Video Session

Video Session 2

5:45 pm - 6:30 pm  Members’ Meetings

• Society for Reproductive Endocrinology and Infertility
• Early Pregnancy Special Interest Group
• Turkish Special Interest Group
• Complex Family Planning Special Interest Group
• Chinese Special Interest Group
• Imaging in Reproductive Medicine Special Interest Group
• Fibroids Special Interest Group

5:45 pm - 7:00 pm  Members’ Meeting

• Genetic Counseling Professional Group

5:45 pm - 6:30 pm  Members’ Meeting

• SRBT Members’ Meeting and Reception

6:15 pm - 7:00 pm  Members’ Meetings

• ARM Members’ Meeting

7:00 pm - 9:00 pm  Members’ Meetings

• ASRM Professional Group Reception
## 2019 SCIENTIFIC CONGRESS DAILY SCHEDULE

### WEDNESDAY, OCTOBER 16, 2019

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<td>6:30 am - 7:45 am</td>
<td>Poster Session/Breakfast</td>
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<tr>
<td>8:00 am - 8:45 am</td>
<td>Lecture CME</td>
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<td>8:45 am - 9:15 am</td>
<td>Members’ Meeting</td>
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<tr>
<td>9:15 am - 10:00 am</td>
<td>Plenary CME</td>
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<td>10:00 am - 10:45 am</td>
<td>Break CME</td>
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<td>10:45 am - 12:15 pm</td>
<td>Oral Abstract Sessions</td>
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<td>11:00 am - 12:00 pm</td>
<td>MHPG Clinical Session CME</td>
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<td>12:15 pm - 1:15 pm</td>
<td>Break/Lunch Coffee Station supported by Roche</td>
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<td>12:30 pm - 2:00 pm</td>
<td>Resident Learning Session CME</td>
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**Poster Session/Breakfast**
- **Lecture**
  - **American Urological Association Bruce Stewart Memorial Lecture:** The Diagnosis & Treatment of Male Infertility: From the Bench to the Bedside
  - Supported by a grant from the American Urological Association
  - Larry I. Lipshultz, M.D.
  - Baylor College of Medicine

**Members’ Meeting**
- **ASRM Members’ Meeting & Congress Prize Presentation**

**Plenary**
- **Herbert H. Thomas Lecture:** Justice and the Privitization of Health Data
  - Endowed by a 1992 grant from EMD Serono, Inc.
  - Kayte Spector-Bagdady, J.D.
  - University of Michigan

**Break/Lunch**
- Coffee Station supported by Roche

**MHPG Clinical Session**
- **MHPG Clinical Session: Peeking Under The Hood: Psychological Testing with Sperm Donors**
  - Andrea Braverman, Ph.D.
  - Jefferson OBGYN
  - John Kurtz, Ph.D.
  - Villanova University

**Resident Learning Session**
- **Interactive Learning Pedagogies and Fellowship Panel Discussion**
  - Ann J. Davis, M.D.
  - Dartmouth Medical School

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### Interactive Sessions

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<td><strong>Interactive Session</strong>&lt;br&gt;Egg and Embryo Banking for Family Building Prior to Advancing Maternal Age: A Patient and Laboratory Perspective&lt;br&gt;Jennifer Mersereau, M.D. (Chair)&lt;br&gt;UNC Fertility&lt;br&gt;Kara N. Goldman, M.D.&lt;br&gt;Northwestern University&lt;br&gt;Sangita K. Jindal, Ph.D.&lt;br&gt;Montefiore Institute for Reproductive Medicine and Health</td>
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<td><strong>Interactive Session</strong>&lt;br&gt;Repeated Implantation Failure – Can We Learn From Endometrial Evaluation?&lt;br&gt;Svetlana Dambaeva, M.D., Ph.D. (Chair)&lt;br&gt;Rosalind Franklin University of Medicine and Science&lt;br&gt;Emilio Francisco Fernandez, M.D.&lt;br&gt;Clinical Las Condes&lt;br&gt;Udo R. Markert, M.D.&lt;br&gt;Universitats Klinikum</td>
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<td><strong>Interactive Session</strong>&lt;br&gt;Reproductive Epigenetics and the Mighty Mitochondria&lt;br&gt;Paul C. Magarelli, M.D., Ph.D. (Chair)&lt;br&gt;HQA Fertility Centers&lt;br&gt;Kelly Lee Whiteside, L.A.C, D.pl.O.M., F.A.B.O.R.M.&lt;br&gt;Harmony Health, Inc.</td>
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<td><strong>Interactive Session</strong>&lt;br&gt;Debate: Mullerian Classification: ESHRE vs ASRM - Which is Better?&lt;br&gt;John C. Petrozza, M.D. (Chair)&lt;br&gt;Massachusetts General Hospital&lt;br&gt;Samantha Pfeifer, M.D.&lt;br&gt;Weill Medical College of Cornell University&lt;br&gt;Artur Ludwin, M.D., Ph.D.&lt;br&gt;Jagiellonian University</td>
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<td><strong>Interactive Session</strong>&lt;br&gt;Environmental Chemicals and Reproduction: From Knowledge to Action&lt;br&gt;Jorge E. Chavarro, M.D., Sc.D. (Chair)&lt;br&gt;Harvard University&lt;br&gt;Audrey J. Gaskins, Sc.D.&lt;br&gt;Emory University&lt;br&gt;Linda Guidice, M.D., Ph.D.&lt;br&gt;University of California, San Francisco</td>
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<td><strong>Interactive Session</strong>&lt;br&gt;Family Planning Fellows Showcase: Frontiers in Complex Family Planning&lt;br&gt;Maureen Baldwin, M.D., M.P.H.&lt;br&gt;Oregon Health and Science University&lt;br&gt;Andrea H. Roe, M.D., M.P.H.&lt;br&gt;University of Pennsylvania&lt;br&gt;Erica P. Cahill, M.D., M.S.&lt;br&gt;Stanford University&lt;br&gt;Nora Doty, M.D., M.C.R.&lt;br&gt;Oregon Health and Science University</td>
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### Lectures

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<tr>
<td>2:45 pm - 3:30 pm</td>
<td><strong>Lecture</strong>&lt;br&gt;Contraception Keynote Lecture: Male Contraception: Past, Present, and Future&lt;br&gt;John K. Amory, M.D., M.P.H.&lt;br&gt;University of Washington</td>
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<td><strong>Lecture</strong>&lt;br&gt;SSR Exchange Keynote Lecture: Motile Ciliopathy is a New Cause of Male Infertility&lt;br&gt;Wei Yan, M.D., Ph.D.&lt;br&gt;University of Nevada</td>
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### Symposium

**Howard and Georgeanna Jones Endowed Symposium on Assisted Reproductive Technology:** 
**Growing Gametes and Embryos: Where Are We Now**
Endowed by a 2010 educational grant from EMD Serono, Inc.
Rebecca Krisher, Ph.D. (Chair)
Colorado Center for Reproductive Medicine
Michelle Lane, Ph.D.
Monash IVF Group
T. Arthur Chang, Ph.D., E.L.D., H.C.L.D.
University of Texas

**Egg Freezing - Are You Ready for Prime Time?**
Developing and Implementing an Egg Freezing Program in Your Practice: What Does the Science Say?
Paul C. Lin, M.D. (Chair)
Seattle Reproductive Medicine
Caroline McCaffrey, Ph.D., H.C.L.D.
New York University Fertility Center
Tamara M. Tobias, N.P.
Seattle Reproductive Medicine
Kimball O. Pomeroy, Ph.D.
The World Egg Bank

**Fertility Preservation for Transgender Youth: Special Considerations**
Molly B Moravek, M.D., M.P.H. (Chair)
Michigan Medicine
James F. Smith, M.D.
University of California
Gwendolyn P. Quinn, Ph.D.
New York University
Leena Nahata, M.D.
 Nationwide Children’s Hospital

**Novel therapies for the Treatment of Asherman Syndrome**
Fady I. Sharara, M.D. (Chair)
Virginia Center for Reproductive Medicine
James Liu, M.D.
UH MacDonald Women’s Hospital
Carlos Simon, M.D., Ph.D.
University of Valencia

### Symposium

**Risk Management: Patient Education, Compliance and Consenting**
Lindsey McBain, B.A. (Chair)
IVI RMA NJ
Heather Ross, J.D.
Ross and Zuckerman
Brad Senstra, M.H.A.
Seattle Reproductive Medicine
Sue Jasulaitis, M.S.N., R.N.
Fertility Centers of Illinois

**AMMR Symposium: Strategies in Ovarian Stimulation Protocols to Improve Results in Assisted Reproduction**
Jose Luis Castro Lopez, M.D. (Chair)
Prodigy
Antonio M. Gutierrez, M.D.
Instituto de Ciencias en Reproduccion Humana
Efrain Perez Pena, M.D.
Instituto de Ciencias en Reproduccion Humana

### Symposium

**Embryo Culture in Vitro and Development**
Deng Chengyen (Co-chair)
Peking Union Medical College Hospital
Zhou Canquan (Co-chair)
The First Affiliated Hospital of Sun Yatsen University
Sun Yingpu, M.D., Ph.D.
The First Affiliated Hospital of Zhongzon University
Huang Guoning
Chorgqing Genetic and Reproductive Institute
Sun Haixiang, M.D., Ph.D.
The First Affiliated Hospital of Ranjing University Medical School

### Video Session

**Video Session 3**
Your company is invited to become a member of the ASRM Corporate Member Council

The Mission of the ASRM Corporate Member Council reflects a partnership between the ASRM Officers and Directors and the Corporate Members and is designed to facilitate open and ongoing dialogue between the two; to identify and maximize common interests related to reproductive medicine; and to develop collaborative educational initiatives which serve to enhance the practice of reproductive medicine.

Why become a Corporate Member?

• Participation in Collaborative Initiatives
• Visibility
• Networking
• Website Link on ASRM Website
• Interaction/Collaboration with ASRM Board of Directors
• Special Recognition
• Preferred Support Opportunities
• Two (full) ASRM Memberships (CMC Representatives)

Making a Difference One Initiative at a Time

• Patient Education Fact Sheets
• Patient Education Videos
• www.ReproductiveFacts.org
• In-Training Awards
• Question-based Learning Program
• Webinar Training
• Industry-Specific Sessions

For more information please contact Keith Ray at kray@asrm.org or call 205-978-5001

2019 ASRM Corporate Member Council

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Bayer Pharmaceuticals
Cook Medical
Cooper Surgical
Elsevier
EMD Serono
Ferring Pharmaceuticals Inc.
GE Healthcare
Growing Generations
TherapeuticsMD
The Premier Supporters of the ASRM 2019 Scientific Congress:

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EMD Serono
Ferring Pharmaceuticals Inc.

**PLATINUM LEVEL**
Cooper Surgical

**SILVER LEVEL**
AbbVie
Myovant Sciences, Inc.
Sema4
Vitrolife, Inc.

**BRONZE LEVEL**
America Medic & Science
California Cryobank
Coast Science
Esco Technologies Inc.
Freedom Fertility Pharmacy
FUJIFILM Irvine Scientific
Future Family
Hamilton Thorne, Inc.
Kitazato
Merck & Co., Inc.
NextGen LifeLabs
Roche Diagnostics
TherapeuticsMD
TMRW Life Sciences
Continuing Education/ CME Sessions

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Continuing Professional Development:
Continuing Medical Education | Continuing Education Credits

ASRM Continuing Education Programs
The goal of ASRM is to sponsor educational activities that provide learners with the tools needed to conduct research, practice the best medicine, and provide the best, most current care to patients.

ASRM adheres to the Essentials and Policies of the Accreditation Council for Continuing Medical Education (ACCME), CME activities must address specific, documented, clinically important gaps in physician knowledge, competence, or performance; be documented to be effective at increasing physician knowledge, competence, performance, or outcomes; and conform to the ACCME Standards for Commercial Support.

All planners and presenters disclose commercial and financial relationships pertaining to reproductive medicine. These disclosures were reviewed by the Subcommittee for Standards for Commercial Support of the ASRM CME Committee and the Executive Program Committee, which resolved perceived potential conflicts of interest.

How to Claim Continuing Medical Education/Continuing Education Credits

For Pre-Congress Courses:
• Attend your course.
• Complete an evaluation and a post-course assessment using a web link emailed to you at the end of each day.

For the Scientific Congress:
• Attend the Congress sessions of your choice.
• Complete an evaluation and a post-Congress assessment for the sessions you attended using a web link emailed to you at the end of each day.

To print certificate and claim credits an Overall Evaluation must be completed.

Final date to claim credit is December 31, 2019.
Email questions to education@asrm.org.

The following may receive honoraria and/or discounted or free registration: Plenary, Symposia, and Interactive Session speakers, and Pre-Congress faculty. Honoraria are not provided for Roundtable presenters, Oral and Poster Abstract presenters, and Video presenters.

Disclosures of faculty and presenters for the Pre-Congress and Scientific Congress may be in a presentation slide, printed material, or oral statement, and will be printed in the ASRM Final Program. Abstract authors’ disclosures will be printed in the 2019 Program. Roundtable and Expert Encounter presenters should provide a copy of their disclosure to participants at their table.

Audience Response Sessions

Use your personal mobile device to respond to questions.

Respond using
Text messaging
OR
link on your device

Learn more at
www.asrmcongress.org
or in the ASRM app.
Full instructions provided in each session.
How to Claim Continuing Medical Education/Continuing Education Credits

For Pre-Congress Courses:
• Attend your course.
• Complete an evaluation and a post-course assessment using a web link emailed to you at the end of each day.

For the Scientific Congress:
• Attend the Congress sessions of your choice.
• Complete an evaluation and a post-Congress assessment for the sessions you attended using a web link emailed to you at the end of each day.

To print certificate and claim credits an Overall Evaluation must be completed.

The Accreditation Council for Continuing Medical Education (ACCME)
The American Society for Reproductive Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

ASRM 2019 Scientific Congress Designation Statement
The American Society for Reproductive Medicine designates this live activity for a maximum of 15.50 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ASRM 2019 Pre-Congress Program Designation Statement
The American Society for Reproductive Medicine designates Pre-Congress Courses 1–8 & 11–20 for a maximum of 6.5 AMA PRA Category 1 Credits™ per course. Course 24 is approved for a maximum of 2.75 AMA PRA Category 1 Credits™. Courses 09, 21, 23, and 25 are approved for a maximum of 3.0 AMA PRA Category 1 Credits™. Courses 10 and 22 are approved for a maximum of 3.5 AMA PRA Category 1 Credits™.

Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The American College of Obstetricians and Gynecologists (ACOG)
The American College of Obstetricians and Gynecologists has assigned 16 Cognates to the Scientific Congress; 7 Cognates each to Pre-Congress Courses 1, 2, 3, 5, 7, 8, 11, 12, 16, 18, 20. 4 Cognates to course 10, and 3 Cognates each to courses 21, 23, and 24.

American Board of Bioanalysis (ABB)
The American Society for Reproductive Medicine has been approved to provide Professional Enrichment Education Renewal (PEER) credit through the American Board of Bioanalysis for this event. Up to 0.65 PEER CEUs (6.5 hours each) will be recognized for Pre-Congress Courses 1-4, 11-15 and 19. Pre-Congress Course 22 will be recognized for 0.35 CEUs (3.5 hours) and 25 will be recognized for 0.30 CEUs (3.0 hours). Scientific Congress has been approved for up to 11.25 hours or 1.125 CEUs.

Nursing Credits: National Association of Nurse Practitioners in Women’s Health (NPWH) Pre-Congress Course 10: The Transgender Couple and Infertility: A Complicated Journey has been evaluated and approved by the Continuing Education Approval Program of the National Association of Nurse Practitioners in Women’s Health for 3.5 contact hours of continuing education credit. NPWH Activity no. 19-14. The ASRM 2019 Congress has been evaluated and approved by the Continuing Education Approval Program of the National Association of Nurse Practitioners in Women’s Health for 15.50 contact hours of continuing education credit. NPWH Activity no. 19-15.

American Psychological Association (APA)
The Mental Health Professional Group (MHPG) of the American Society for Reproductive Medicine is approved by the American Psychological Association to sponsor continuing education for psychologists. MHPG maintains responsibility for this program and its content. CE credits will be available for Pre-Congress Courses 07, 09, 10, and 17; MHPG Symposia I, II, III; MHPG Clinical Sessions 01-04; and other selected sessions.

National Association of Social Workers (NASW)
Pre-Congress Courses 7, 9, 10, and 17 have been approved by the National Association of Social Workers (Approval # 886496548) for a total of 13.0 continuing education contact hours. Pre-Congress Courses 7 and 17 each for 6.5 contact hours. Pre-Congress Course 9 is approved for 3.0 contact hours and Pre-Congress Course 10 is approved for 3.5 contact hours.

National Society of Genetic Counselors (NSGC)
The National Society of Genetic Counselors (NSGC) has authorized the American Society for Reproductive Medicine to offer up to 2.275 CEUs or 22.75 Category 1 contact hours for select sessions in the ASRM 2019 Scientific Congress and Pre-Congress Courses 1, 3, and 11. The American Board of Genetic Counseling (ABGC) accepts CEUs approved by NSGC for purposes of recertiﬁcation. Participants requesting NSGC CEUs will have a service fee of $30 added to their meeting registration to cover payment to the National Society of Genetic Counselors for the ﬁling and awarding of CEU certiﬁcates.

Final date to claim credit is December 31, 2019.
Questions? email education@asrm.org
**ASRM 2019 Pre-Congress Program**

**SATURDAY, OCTOBER 12, 2019**

**PC01 Subchromosomal Variations and Mosaicism: Clinical Significance in Assisted Reproductive Technology (ART) Practices**

Developed in Cooperation with the Preimplantation Genetic Testing Special Interest Group

**Faculty**

Semra Kahraman, M.D. (Co-Chair)  
*Istanbul Memorial Hospital, Turkey*

Svetlana Rechitsky, Ph.D. (Co-Chair)  
*Reproductive Genetic Innovations*

Eric Forman, M.D.  
*Columbia University Fertility Center*

David Cram, Ph.D.  
*Berry Genomics Corporation*

**Needs Assessment and Description**

Next-generation sequencing (NGS) in preimplantation genetic testing (PGT) has further confirmed that more than half of preimplantation embryos in assisted reproductive technology (ART) patients of advanced reproductive age are chromosomally imbalanced. A currently emerging problem in pre-selection of embryos for transfer is a high rate of genetic instability, such as chromosomal mosaicism and segmental aneuploidy, throughout preimplantation development. While more research is needed to investigate the origin and clinical significance of these phenomena, the best acceptable policies in a clinical setting should be explored. It is evident that subchromosomal abnormalities and mosaicism may arise in preimplantation embryos through mitotic errors or other possible mechanisms which have become evident with the application of high-resolution NGS (hNGS). According to available experience, 10%–20% of human blastocysts are mosaic and up to 50% may have segmental aneuploidies. The rates of subchromosomal aneuploidy and mosaicism vary in samples obtained from different in vitro fertilization centers, suggesting that they may be technically derived, which should be distinguished from those with biological significance. The variation may be related to the quality of biopsy or the quality of NGS procedures, including the use of laser for biopsy, the efficiency of whole-genome amplification (WGA), and the NGS platforms used for a quantitative assessment of chromosomal copy number. Accumulated experience on the outcome of segmental and mosaic embryo transfers, their types and origin, and reproductive potential depending on specific chromosomes...
involved in mosaicism and segmental aneuploidy should be considered for possible strategies related to the transfer of embryos with mosaicism and segmental aneuploidies. This course will discuss current diagnostic problems as well as advantages and disadvantages of available technologies in regards to better utilization and wider application of PGT in ART. This course is designed for obstetricians/gynecologists, specialty physicians, nurses, laboratory scientists and technologists, geneticists, genetic counselors, and legal professionals.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Explain the diagnostic implications of detected subchromosomal aneuploidies and mosaicism in biopsy samples of blastocysts.
2. Summarize reproductive potential depending on specific chromosomes involved in mosaicism and segmental variations.
3. Describe the criteria for distinguishing technically derived mosaicism and segmental aneuploidies from ones with biological significance.
4. Discuss the strategies for possible transfer of these embryos in the absence of transferable euploid embryos.

PC02  Fertility Preservation: 2019 and Beyond
Developed in Cooperation with the Society for Male Reproduction and Urology (SMRU) and the Fertility Preservation Special Interest Group

Faculty
Akanksha Mehta, M.D., M.S. (Chair)
Emory University School of Medicine
Pasquale Patrizio, M.D.
Yale University IVF Program
Tommaso Falcone, M.D.
Cleveland Clinic
Joanne Kelvin, M.S.N.
Memorial Sloan-Kettering Cancer Center

Needs Assessment and Description
The field of fertility preservation has advanced substantially over the last several years. New insights and innovations have been made in male and female fertility preservation care, both in pre- and post-cancer treatment. Practice gaps exist in female and male fertility preservation, as made evident in recent American Society for Reproductive Medicine (ASRM) Continuing Medical Education (CME) Committee documents. These practice gaps include lack of clear knowledge about optimal female and male fertility potential in survivorship, lack of familiarity regarding fertility preservation counseling, and lack of innovative strategies for prepubescents or those without a functional uterus. Guidelines for fertility preservation in non-oncologic populations are also lacking and require standardization. This course will address these practice gaps while exploring experimental approaches in both males and females that might prove to be mainstay therapies of the future. This live course is targeted for reproductive endocrinologists, urologists, adult and pediatric oncologists, nursing professionals, mental health professionals, and clinical investigators.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Describe special fertility considerations as well as the optimal reproductive care of male and female patients in survivorship.
2. Discuss uterus transplantation and its past, present, and future direction.
3. Examine reproductive success rates using oocytes and sperm that were cryopreserved prior to the initiation of cancer therapy.
4. Summarize strategies to facilitate fertility preservation education and execution in both males and females.
PC03 New Medical Information Involving Gamete Donors: Medical, Legal, and Ethical Considerations
Developed in Cooperation with the Legal Professional Group (LPG) and the Genetic Counseling Professional Group

Faculty
Pamela Callum, M.S. (Chair)
California Cryobank
Amy Vance, M.S., C.G.C.
Bay Area Genetic Counseling
Susan Crockin, J.D.
Crockin Law & Policy Group
Jeanne O’Brien, M.D., M.Sc.
Shady Grove Fertility Center

Needs Assessment and Description
The Centers for Disease Control and Prevention (CDC) and US Surgeon General emphasize the importance of knowing one’s family health history to aid in management of his or her own health. Donor-conceived individuals often have only partial family medical histories, limited to the information self-reported by their donors at the time of entry into a donor program. However, there are numerous cases in which new diagnoses arise or become known in gamete donors, their family members, and donor-conceived individuals, which have been shown to be critical to the health and medical management of biologically related individuals. Updated health information is frequently but inconsistently reported to gamete providers and variably communicated to the relevant parties. The diagnoses reported differ significantly and include: isolated birth defects, multifactorial conditions (for example, autism, autoimmune disease, mental illness), genetic carrier states for recessively inherited disease, and known or possible diagnoses of conditions that are inherited in autosomal dominant manners. The variation in the diagnoses, degree of heritable risk, and actionability of information available make assessment of this information extraordinarily challenging for gamete providers who are tasked with determining its significance to other parties, which may be in part dependent upon the length of time that has elapsed since the donation and use of gametes. The communication or notification of relevant parties is additionally complex because it necessitates determinations as to which populations should be informed, by whom, and what efforts to contact are sufficient. This session will include review of current legislation and case law (for example, duty to warn) and obligations of parties which include gamete donors, reproductive endocrinologists, gamete facilities, primary physicians, and intended parents.

We will discuss best practice recommendations for consents and agreements among the parties, as well as a summary of current strategies for collecting, assessing, and tracking original and new medical information in these populations. This course is for physicians, embryologists, nurses, mental health providers, genetic counselors, attorneys, and administrators to inform health-care providers of the regulations related to these processes, increase awareness of the legal issues, and explain how to manage risks and information as these situations arise.

ACGME Competency
Professionalism
Interpersonal and Communication Skills

Interprofessional Competency
Values/Ethics for Interprofessional Practice

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Compare the approaches for family history screening and tracking of updates involving gamete donors.
2. Summarize the limitations of family history evaluations and explain the possibility of future medical history updates to prospective recipients.
3. Develop a clinic policy on how to manage newly reported donor information.
PC04 Cryostorage Management and the Lost Art of Assisted Reproductive Technology (ART)
Developed in Cooperation with the Society of Reproductive Biologists and Technologists (SRBT)

Faculty
Mitchel C. Schiewe, Ph.D. (Chair)
Ovation Fertility
Thomas “Rusty” Pool, Ph.D.
Fertility Center of San Antonio
Donald Fish, B.S.
California Cryobank Life Sciences

Needs Assessment and Description
Training embryologists has become an urgent need in today’s growing assisted reproductive technology (ART) industry without the luxury of long instructional programs. Embryologists entering today’s in vitro fertilization (IVF) labs have fewer opportunities to learn or optimize certain IVF lab skills which also prepare them for problem-solving and understanding why certain practices are performed. Commercialization of product manufacturing for ART is both a blessing and a curse. It has improved quality control (QC) but at the sacrifice of embryologists learning some advanced yet fundamental techniques. This course will address many of the QC needs in today’s IVF lab with an emphasis on cryostorage management to prevent catastrophic loss. This course is designed for embryologists, physicians, laboratory technicians, administrators, and all allied health professionals who would like to gain knowledge about laboratory basics and quality control, as well as better prepare and improve their QC programs and cryostorage management.

ACGME Competency
Systems-based Practice

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Review the importance of cryostorage management.
2. Discuss the history and current state of today’s IVF lab.
3. Optimize laboratory QC practices.
PC05  The Skinny on Obesity  
Developed in Cooperation with the Society for Reproductive Endocrinology and Infertility (SREI) and the Society for Male Reproduction and Urology (SMRU)

Faculty
Eve C. Feinberg, M.D. (Co-Chair)  
Northwestern University Feinberg School of Medicine  
Christina E. Boots, M.D., M.S.C.I. (Co-Chair)  
Northwestern University  
Janine Kyrillos, M.D., F.A.C.P.  
Thomas Jefferson University  
Jorge E. Chavarro, M.D.  
Harvard Medical School  
John Magaña Morton, M.D., M.P.H.  
Stanford University School of Medicine

Needs Assessment and Description
More than one third of US adults are obese. Obesity is associated with significant morbidity in reproductive aged women. Not only does obesity increase the risk of infertility, but it makes the treatment of infertility more complicated. The pathophysiology of obesity is complex; newer treatments are being developed that target the underlying hormonal pathways. Obesity contributes to pregnancy-associated complications both for the mother and neonate. ASRM has reported a knowledge gap and educational need in the pathophysiology of obesity and management options during fertility treatment and pregnancy. This course will address the impact of obesity on fertility and pregnancy. Topics of discussion will include obesity as an endocrine disorder and treatments for obesity such as lifestyle modification, pharmacotherapy, and surgical therapy. This course is designed to increase competence in understanding the impact of obesity and how to best help patients achieve optimal health prior to conception to ultimately result in the birth of a healthy baby. This live course is targeted for reproductive endocrinologists, urologists, general obstetricians/gynecologists, nurses, nurse practitioners, and other allied health professionals in reproductive care to optimize treatment for obese patients of reproductive age.

ACGME Competency
Patient Care  
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Discuss the impact of obesity on fertility, pregnancy, and the neonate.
2. Identify which patients would benefit from lifestyle interventions and could be counseled on methods for weight loss.
3. Determine which patients require pharmacotherapy or surgery for weight loss and recommend the most appropriate treatment options.
PC06  Strengthening Your Core Business While Achieving and Sustaining Growth  
Developed in Cooperation with the Association of Reproductive Managers (ARM)

Faculty
Sara Mooney, B.A. (Chair)
Seattle Reproductive Medicine
Lindsey N. McBain, B.A.
Reproductive Medical Associates of New Jersey
Brad Senstra, B.S., M.H.A.
Seattle Reproductive Medicine
Blake Welch, M.B.A.
Chicago IVF

Needs Assessment and Description
Management of a reproductive endocrinology and infertility (REI) practice requires a strong team to sustain the business. The health-care field requires special management techniques that are not found in other businesses. It is important for clinical and business units to work together to achieve a successful practice. This course is designed to provide key skills, tools, and business knowledge to strengthen and grow (know when to expand a line of services) all levels and sizes of practices. This live activity is designed for administrators, managers, supervisors, physicians, nurses, and all professionals involved in optimizing an REI practice.

ACGME Competency
Systems-based Practice

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Discuss tools to strengthen teams and increase retention.
2. Recommend resources to best utilize patient services and financial counselors to optimize performance and leverage patient retention.
3. Describe strategies to expand a line of service to convert patients, increase conversion rates, and know when to grow their market.
Managing Assisted Reproductive Technology (ART) Patient Stress and Anxiety: Integrative Mind-body Approaches

Developed in Cooperation with the Mental Health Professional Group (MHPG) and the Complementary and Integrative Medicine Special Interest Group

Faculty
Carmelo Sgarlata, M.D. (Chair)
ORM Fertility
Alice D. Domar, Ph.D.
Harvard Medical School
University of California, San Francisco

Needs Assessment and Description
Recent research indicates that stress is the most common reason why insured infertility patients terminate treatment before achieving pregnancy. In addition, symptoms of anxiety and/or depression are reported by the majority of women undergoing infertility. Taking care of highly distressed patients can take a toll on the entire health-care team. Supporting patients undergoing assisted reproduction treatments is vital to their overall psychological and reproductive well-being. Many patients need concrete interventions to reduce the psychological burden of assisted reproductive technology (ART). This course will present evidence-based integrative mind-body approaches to support patients facing infertility-related stress, such as mindfulness, mind-body programs, and acupuncture. Methods will be presented to incorporate integrative mind-body therapies with usual care using examples from two in vitro fertilization centers that have successful integrative care programs. This live activity is designed for physicians, nurse practitioners, nurses, nutritionists, fellows, residents, mental health professionals, and allied health providers, this course will review integrative mind-body therapies.

ACGME Competency
Patient Care
Interpersonal and Communication Skills

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Define and describe integrative methods in the ART clinic.
2. Analyze evidence of effectiveness or efficacy of integrative approaches.
3. Summarize methods of integration for mind-body patient support into the ART clinic.
4. Examine the physiological impact of anxiety and depression on the reproductive system.
5. Describe how acupuncture could impact both pregnancy rates and patient distress levels during ART.
6. Assess the research on the psychological aspects of infertility as well as the research on the efficacy of psychosocial interventions.
PC08 Early Pregnancy Loss: Maternal Factors in Implantation and Receptivity
Developed in Cooperation with the Early Pregnancy Special Interest Group

Faculty
Lora Shahine, M.D., F.A.C.O.G. (Chair)
Pacific NW Fertility and IVF Specialists
Kristin Bendikson, M.D.
Keck School of Medicine of the University of Southern California, Los Angeles
Fertility Associates of Memphis
Steven Spandorfer, M.D.
Weill Medical College of Cornell University
Dana B. McQueen, M.D., M.A.S.
University of California, San Diego

Needs Assessment and Description
Recurrent early pregnancy loss (REPL) affects up to 5% of the reproductive population. One in four pregnancies end in clinical miscarriage and approximately 5% of reproductive-aged women have had more than one miscarriage. As women delay childbearing, the incidence of miscarriage is increasing. The most common cause of first-trimester miscarriage is a genetic issue in the embryo which can be addressed with expectant management and hope for a euploid embryo or in vitro fertilization (IVF) with preimplantation genetic testing (PGT) to screen for euploid embryos, which is a costly and invasive option. However it is important to exclude other factors that could increase miscarriage risk prior to turning to assisted reproductive technologies to treat women with recurrent pregnancy loss. ASRM identifies evaluation and management of recurrent early pregnancy loss as an educational need. This live activity is designed to review evidence surrounding the maternal contribution to early pregnancy loss including anatomical, endocrine, infectious, immune, lifestyle, obesity, and environmental factors. The course is targeted to reproductive endocrinologists, obstetricians/gynecologists, and any medical providers investigating and treating women during conception and the early pregnancy phase. Evidence-based investigations will be discussed as well as strategies to enable clinicians to investigate and manage maternal contribution in early pregnancy loss.

ACGME Competency
Medical Knowledge
Patient Care

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Describe maternal factors associated with early pregnancy loss.
2. Summarize an evidence-based evaluation for recurrent early pregnancy loss.
3. Demonstrate knowledge of evidence-based treatment options for maternal factors surrounding early pregnancy loss.
SATURDAY, OCTOBER 12, 2019  HALF DAY, 8:15 AM - 12:00 PM

PC09 Gay Men Parenting: A Decade of Change in the Legal, Medical, Societal, and Psychological Landscape

Developed in Cooperation with the Legal Professional Group (LPG), Mental Health Professional Group (MHPG), and the LGBTQ Special Interest Group

This half-day course is approved for a maximum of 3.0 AMA PRA Category 1 Credits™.

Faculty
Kim Bergman, Ph.D. (Chair)
Growing Generations
Angela Lawson, Ph.D.
Northwestern University
Will Halm, J.D.
International Reproductive Law Group

Needs Assessment and Description
Practitioners of assisted reproductive technology (ART) routinely offer fertility treatment to patients who identify as lesbian, gay, bisexual, or transgender (LGBT). However, much of the focus in research and in clinical practice is on female patients who present for fertility treatment. The literature and clinical focus is relatively limited for the growing number of gay men presenting for fertility treatment. Although gay men represent a minority of patients presenting for treatment, the use of surrogacy by gay men has been steadily increasing since the “gay baby boom” of the 1990s. Although there is limited research on gay men who use surrogacy to grow their families, they are likely to be at risk of discriminatory behaviors similar or greater than that experienced by lesbian and transgender patients at some fertility clinics. Social stereotypes about who should be allowed to parent and their assumed motivations for parenthood can be particularly harmful for men who conceive. Even in the absence of discriminatory behaviors, gay male patients must overcome similar and unique obstacles compared to lesbian, transgender, and bisexual patients undergoing fertility treatment. In addition to the social and treatment-related obstacles, gay male patients must also face the ambiguous legal and social status for children conceived by all LGBT couples. Although federal marriage is now the law of the land, many parenting laws have yet to be altered to provide parenting rights to gay families. Further, the uniqueness of gay male parenting via surrogacy and egg donation is associated with other recent legal cases and highlights the importance of the provision of appropriate counseling to gay male patients who desire family-building via fertility treatment. Multiple unique treatment issues could arise during the course of fertility treatment with gay male patients that may expose these patients to unnecessary emotional risk. A partner’s gametes could not result in desired outcomes. If two gestational carriers are employed and one miscarries, does not get pregnant, or conceives a child with medical challenges while the other woman does not experience such events, this may expose the partners to risk of psychological distress, resentment, and relationship discord. To address these issues, increased awareness and attention is needed from ART practitioners, clinic staff, mental health professionals, and attorneys. This session will address and update the medical, psychosocial, ethical, and legal issues in treating gay male patients and will provide direction to providers for how to address these issues in their clinics. This live course is designed for physicians, nurses, nurse practitioners, attorneys, psychologists, administrators, and other allied health professionals.

ACGME Competency
Interpersonal and Communication Skills
Professionalism

Interprofessional Competency
Values/Ethics for Interprofessional Practice

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Review legal issues that arise for gay male couples pursuing fertility treatment.
2. Summarize psychological issues surrounding gay male patients who present for fertility treatment.
3. Examine their own clinic practices and determine what changes should be made to make their clinic a safer and supportive environment for gay male patients.
4. Describe unique treatment-related ethical issues that may arise in the course of fertility treatment with gay male patients.
SATURDAY, OCTOBER 12, 2019  HALF DAY, 1:15 PM - 5:00 PM

PC10  The Transgender Couple and Infertility: A Complicated Journey  
Developed in Cooperation with the Legal Professional Group (LPG), Mental Health Professional Group (MHPG), Nurses' Professional Group (NPG), and the LGBTQ Special Interest Group

This half-day course is approved for a maximum of 3.5 AMA PRA Category 1 Credits™.

Faculty
Jennifer M. Wood, R.N, B.S.N. (Chair)
Shady Grove Fertility Center
Jamie M. Joseph, Ph.D.
Private Practice
Marjorie E. Dixon, M.D.
Anova Fertility and Reproductive Health

Needs Assessment and Description
The entire reproductive team needs a robust understanding of the complexities of transgender patients, particularly in light of the ever-changing landscape of patients seeking fertility treatment. Collaboration is critical between the fertility team, mental health professionals, legal professionals and other LGBTQ resources. Fertility health-care providers and support staff need to be aware of resources available to support transgender couples faced with infertility, even when fertility preservation measures have been completed before their transition. An ASRM Gap Analysis identified fertility treatment and fertility preservation in the lesbian, gay, bisexual, and transgender (LGBT) population as an educational need to improve practice awareness and transgender patient experience in family-building. The course will explore some of the challenges transgender patients face which are further compounded when they are finding themselves struggling with infertility. It will focus on recognizing the emotional and medical needs of transgender patients pursuing fertility treatment and will examine the unique challenges of patients seeking fertility preservation after transitioning as well as considerations for adolescents before beginning transition hormones. In addition, this educational program will address some of the legalities of transgender patients including but not limited to changing their sex on legal documentation and its impact upon seamless patient care. This live course is targeted to reproductive endocrinologists, mental health professionals, nurses, nurse practitioners, legal professionals, and other professionals in reproductive care to address psychological, ethical, and legal issues in treating transgender patients.

ACGME Competency
Patient Care
Professionalism

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Summarize the complexities of fertility treatment in transgender patients and identify various areas in practice and marketing that could improve the patient experience.
2. Explain the importance of mental health providers in fertility support as well as emotional support with the difficult decisions that transgender patients are faced with for treatment.
3. Identify common misconceptions related to transgender patients and couples and provide resources for staff to better understand the patient journey.
4. Discuss various legalities regarding sex and gender, legal documentation issues, as well as consenting adolescents for fertility preservation.
SUNDAY, OCTOBER 13, 2019

PC11  Reproductive Aging: Meeting the Challenges in Clinical and Laboratory Practice
Developed in Cooperation with the Turkish Special Interest Group

Faculty
Kutluk Oktay, M.D., Ph.D. (Chair)
Yale University School of Medicine
Murat Sonmezzer, M.D.
Ankara University School of Medicine
Aleksander Rajkovic, M.D.
University of Pittsburgh
Nanette Santoro, M.D.
University of Colorado, Denver

Needs Assessment and Description
The consequences of reproductive aging affect both women and men. While many practitioners are aware of the significance of reproductive aging, some might have limited understanding of its underlying mechanisms, possible diagnostic approaches, and potential treatments. An ASRM Gap Analysis identified a significant education and training gap on the known mechanisms of reproductive aging, due at least in part to recent rapid advances in preimplantation genetic diagnosis technology. The goals of this activity are to update practitioners on available laboratory and clinical remedies in addressing reproductive aging while providing insight into areas of development and research. Lectures and discussions by the expert faculty will strengthen the skills of practitioners dealing with clinical and laboratory challenges related to reproductive aging. This live course is designed for reproductive endocrinologists, embryologists, fellows, researchers, patient advocates, genetic counselors, geneticists, and nurses.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Develop diagnosis and treatment strategies for individuals with reduced gamete reserve.
2. Identify genetic methods to diagnose gametes and embryos affected by the reproductive aging process.
3. Summarize the known mechanisms of reproductive aging.
4. Describe future treatments for reproductive aging that are in trials or in development.

Fertility and Sterility

The editorial team at Fertility and Sterility is pleased to announce a special Journal Club Global live from The ASRM 2019 Scientific Congress & Expo to discuss a recently published article. This exciting event will be streamed live on Saturday, October 12, 2019, at 5:15 pm (EST). Please join us live in Philadelphia or register to watch online: https://www.workcast.com/register?cpak=2433551716191399
PC12  Next-generation Assisted Reproductive Technology (ART): Personalized Reproductive Medical Management
Developed in Cooperation with the Middle Eastern Fertility Society (MEFS)

Faculty
Johnny Awwad, M.D. (Co-Chair)
American University of Beirut
Mohamed Aboulghar, M.D. (Co-Chair)
Egyptian IVF Center
Alan Penzias, M.D.
Boston IVF
Matheus Roque, M.D., Ph.D.
ORIGEN - Center for Reproductive Medicine, Rio de Janeiro, Brazil

Needs Assessment and Description
Significant advancement in the field of assisted reproduction lately has favored personalizing treatment recommendations on the basis of individual patient characteristics. As the number of clinical, hormonal, and genetic biomarkers available to physicians has increased, predictive models that integrate multiple variables have become attractive strategies to guide medical decision-making for the purpose of bringing greater efficiency and safety to reproductive practices. The burden of medical information has grown so rapidly and controversially over the past few years that reaching a level of understanding has become challenging and confusing to the individual physician. This activity appraises scientific evidence which evaluates the pros and cons of current reproductive practices with the aim of developing best practice models while leveraging the significance of relevant biomarkers and the contribution of clinical variables. Through an active learning format that evolves around team-based problem-solving of clinical vignettes, this course will help clinicians, embryologists, scientists, and allied health professionals update and gain basic and advanced knowledge of treatment and management protocols based on individual patient characteristics.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Design ovarian stimulation protocols tailored to patients’ individual characteristics.
2. Demonstrate safe strategies to trigger final oocyte maturation without compromising outcome.
3. Identify clinical parameters associated with improved outcomes related to freeze-all policy.
4. Evaluate the advantages of a day-5 versus day-3 embryo transfer.
5. Develop a management approach to improve the use of elective single-embryo transfer while maximizing benefit.

Due to the team-based learning format, this course is limited to 100 participants.
PC13 First 20 Years of Stem Cells: From First Isolation to Clinical Use
Developed in Cooperation with the European Society of Human Reproduction and Embryology (ESHRE)

Faculty
Cristina Eguizabal, Ph.D. (Chair)
Unidad de Terapia Celular y Celulas Madre
Susana Chuva de Sousa Lopes, Ph.D.
LUMC Leiden
Nuria Montserrat, Ph.D.
Institute for Bioengineering of Catalonia, Spain
Bernard Roelen, Ph.D.
Utrecht University, Netherlands

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this seminar, participants should be able to:
1. Review the history of human pluripotent stem cells (hPSC).
2. Discuss the development of the field of stem-cell research.
3. Summarize the use of stem cells in regenerative medicine and clinical applications.

Needs Assessment and Course Description
The 20th anniversary of the derivation of human pluripotent stem-cell (hPSC) lines offers an ideal opportunity to look back over the past 20 years in this field, as well as to look forward to what the future may hold. This Pre-Congress course will review the history of hPSC derivation in the context of the scientific and technical environment at the time, then proceed to give a historical account of the development of the field of stem-cell research with a special emphasis on regenerative medicine and clinical applications. This course for embryologists, stem-cell researchers, reproductive genetic researchers, physicians, nurses, genetic counselors, and all allied health professionals will help bridge the gap between the past and future clinical research of stem cells.
PC14 How to Optimize Assisted Reproductive Technology (ART) Success: From Lab to Clinic

Developed in Cooperation with and presented by the Chinese Special Interest Group

Faculty
Rong Li, M.D., Ph.D. (Chair)
Peking University Third Hospital
Yanwen Xu, M.D.
First Affiliated Hospital of Sun Yat-sen University
Huailiang Feng, Ph.D., H.C.L.D.
New York-Presbyterian Health System Affliate Weill Cornell Medical College
Ge Lin, M.D., Ph.D.
Reproductive and Genetic Hospital of CITIC-XIANGYA

Needs Assessment and Description
In the last decades, human in vitro fertilization (IVF) has become more successful, more tolerable, and easier to perform. The IVF laboratory has improved significantly in the past three decades with new media and equipment for embryo cultures and a significant amount of new scientific knowledge. Additional technologies extending the scope and efficiency of IVF have been developed and implemented, including intracytoplasmic sperm injection, preimplantation genetic testing, and cytotechnology which allows for the freezing and storage of sperm, oocytes, embryos, and testicular and ovarian tissue. Even so, fertilization failure continues to be an unpredictable and significant limitation to IVF success. An ASRM Gap Analysis identified optimization of ART success as an educational need; despite technologic advances, when a morphologically normal blastocyst is transferred into a seemingly normal uterus during IVF, the reproductive success of a cycle is very limited and has not significantly improved since the 1990s. This course will involve current clinical and laboratory issues such as sperm deoxyribonucleic acid (DNA) fragmentation index (DFI), artificial intelligence technology in ART, oocyte cryopreservation, and genomic technology. The course is targeted to assist physicians, laboratory scientists, embryologists, and all health professionals in applying treatment strategies to improve pregnancy outcomes of infertile women.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Summarize factors that may affect pregnancy outcomes of IVF.
2. Discuss possible clinical and laboratory measures to improve the pregnancy outcome of IVF.
3. Describe genomic technology in the field of reproductive health.
Testicular Biopsy: Converting Diagnostic Measures into Efficient Laboratory/Intracytoplasmic Sperm Injection (ICSI) Outcomes

Developed in Cooperation with the Society for Male Reproduction and Urology (SMRU) and the Society of Reproductive Biologists and Technologists (SRBT)

Faculty
Shane Zozula, B.S. (Chair)
Ovation Fertility
Aaron Spitz, M.D.
Orange County Urology Associates, Inc.
Delores Lamb, Ph.D.
Weill Cornell Medicine Center for Reproductive Medicine
Joseph Alukal, M.D.
New York University School of Medicine

Needs Assessment and Description
The harmonization of urology with clinical and laboratory activities can be challenging as severe male-factor cases can complicate scheduling, consume hours of staff time, and result in unpredictable, substandard specimen-processing outcomes. Are there simpler and more effective ways to attain, process, and cryopreserve testicular sperm that ensure overt post-thaw motility, improved sperm selection, and flexible schedules? Furthermore, how are DNA fragmentation and epigenetic concerns actually influencing clinical and laboratory practices? Meanwhile, diagnostic approaches and clinical preferences have evolved and have been published for the most part on anecdotal beliefs, such as fresh is better than frozen or fresh testicular biopsy (TBx) is better than a poor ejaculated specimen. Much doubt has centered around the concept of reactive oxygen species and its potentially damaging effect to sperm DNA fragmentation index (DFI), but science and theory have yet to be correlated well to clinical outcomes. ASRM has identified gaps in knowledge regarding when to adopt and implement new technology into in vitro fertilization (IVF) laboratories and when to revise protocols to improve patient outcomes and laboratory work flow efficiency. This course will review how diagnostic measures are best integrated into laboratory practices, how pre-freeze in vitro culture and delayed cryopreservation of whole testicular biopsy (TBx) tissue may optimize laboratory activities and patient outcomes. This course is targeted for urologists, embryologists, reproductive endocrinology and infertility physicians, nurses, nurse practitioners, administrators, and clinic staff who want to optimize laboratory activities and patient outcomes.

ACGME Competency
Patient Care
Medical Knowledge
System-based Practice

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Determine how diagnostic measures are best integrated into laboratory activities.
2. Explain when TBx is the preferred option for best practice among all personnel involved.
3. Assess how pre-freeze in vitro culture and delayed cryopreservation of whole TBx tissue optimize laboratory activities and patient outcomes.
4. Evaluate the role that sperm epigenetic and DNA fragmentation may play in optimizing lab practices.
PC16  Polycystic Ovary Syndrome: at the Crossroads of Metabolism and Reproduction
Developed in Cooperation with the Androgen Excess Special Interest Group

Faculty
Daniel A. Dumesic, M.D. (Chair)
University of California, Los Angeles
Oklahoma University Health Sciences Center
Marla E. Lujan, M.Sc., Ph.D.
Cornell University
Joop S.E. Laven, M.D., Ph.D.
Erasmus University

Needs Assessment and Description
Women’s health care for polycystic ovary syndrome (PCOS) remains confusing to many health-care providers. Multiple forms of PCOS exist and differ in adverse reproductive and metabolic consequences, ranging from infertility and signs of androgen excess to diabetes and cardiovascular disease. Women with PCOS are often dissatisfied with their health care due to a diagnosis that can be delayed for more than 2 years and visits to three or more health-care providers for confirmation. This course provides an evidenced-based approach to the health care of women with PCOS by integrating lectures relevant to metabolic and reproductive dysfunction with clinical discussions that address the needs of women with PCOS according to age. The course updates knowledge regarding the diagnosis and management of PCOS based upon state-of-the-art technology and addresses early detection of PCOS to optimize the short- and long-term reproductive and metabolic health of women with PCOS and their offspring. This course will assist physicians, nurse practitioners, nurses, nutritionists, fellows, and residents to address the educational needs underlying critical practice gaps by discussing the diagnosis of PCOS, its early warning signs, and providing new information regarding factors impairing fertility and metabolism.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. State how the current criteria for diagnosing PCOS are affected by age.
2. Develop a management plan for the infertile patient with PCOS that optimizes her safety and the health of her offspring.
3. Summarize the indications for diagnosing and treating metabolic dysfunction in women with PCOS.

Due to the team-based learning format, this course is limited to 100 participants.
PC17  Transparency in Assisted Reproductive Technology (ART): Understanding the Global Legal, Ethical, and Psychosocial Issues of Information Disclosure in ART Today

Developed in Cooperation with Legal Professional Group (LPG) and the Mental Health Professional Group (MHPG)

Faculty
Lisa Rinehart, R.N., J.D. (Co-Chair)
LegalCare Consulting
Linda Applegarth, Ed.D. (Co-Chair)
Weill Cornell Medical College of Cornell University
Narelle Dickinson, Ph.D.
Greenslopes Obstetrics and Gynecology (Australia)
Lisa Campo-Engelstein, Ph.D.
Albany Medical College

Needs Assessment and Description
Recent legislation and case law reflect rapid changes in the world of ART, particularly regarding disclosure of information. Many of these new laws introduce requirements for independent legal counsel and mental health counseling. More comprehensive genetic testing/interventions and availability of commercial DNA tests can influence a parent’s meaningful choice regarding disclosure or non-disclosure. This course is designed to examine the complex collaboration of medical clinics, lawyers, and mental health professionals with intended parents, donors, gestational carriers, significant others, clinic providers, and other parties through donor-assisted reproduction. The intersection of legal, cross-cultural, and ethical considerations of a multidisciplinary team will be explored with an emphasis on appropriate responses to questions about disclosure for various health-care and legal disciplines. This interprofessional course will discuss global legislation, cultural mores and values, ethical concerns, and psychological factors that lead to resistance to disclosure and the maintenance of secrecy, and also demonstrate how ART teams can counsel their clients/patients within appropriate cultural, legal, and ethical frameworks. We will present appropriate ways to approach patients about sensitive issues with consideration of cultural and religious backgrounds. This course for physicians, nurses, nurse practitioners, attorneys, mental health professionals, and practice administrators will assist multidisciplinary providers in maneuvering through the quickly changing legal, sociocultural, and psychological realities that clinicians face in donor-assisted reproduction.

ACGME Competency
Professionalism
Interpersonal and Communication Skills

Interprofessional Competency
Values/Ethics for Interprofessional Practice

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Identify best practices and current standards of care in medical, legal, and mental health approaches to ART.
2. Differentiate how legal, ethical, sociocultural, and psychological realities shape practice and attitudes regarding anonymity, secrecy, and privacy in donor-assisted reproduction.
3. Discuss the increased need for a multidisciplinary approach to ART in all patient populations.
4. Describe how legal regulations may impact disclosure decision-making around the world.
5. Identify how different psychosocial and cultural factors affect attitudes regarding disclosure/non-disclosure for parents and clinicians.
6. Interpret how commercial DNA testing influences the ethics of secrecy and disclosure.
PC18  Challenging Reproductive Surgical Scenarios to Optimize Fertility
Developed in Cooperation with the Society of Reproductive Surgeons (SRS)

Faculty
Steven Lindheim, M.D. (Chair)
Wright State University Integrated OB/GYN Residency Program
John Petrozza, M.D.
Massachusetts General Hospital Fertility Center
Samantha Pfeifer, M.D.
Weill Cornell Medical College of Cornell University
Bala Bhagavath, M.B.B.S.
University of Rochester

Needs Assessment and Description
Reproductive surgery continues to play an important role in the treatment of appropriately selected infertility patient. There is a lack of awareness about advanced laparoscopic, endoscopic, and microsurgical techniques, and one in five graduating reproductive endocrinology and infertility (REI) fellows believes that their skill set would be augmented by additional surgical training. This suggests that there is a need for an increased focus on reproductive surgical training, particularly for laparoscopic, endoscopic, and microsurgical techniques. This Pre-Congress course will consist of presentations by experienced reproductive surgeons describing strategies for minimally invasive surgical management of common causes of infertility. This course is designed in a lecture format for recent graduates from fellowship programs and practitioners who wish to enhance their laparoscopic and hysteroscopy skills for challenging scenarios in clinical reproductive infertility to enhance fertility outcome.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Summarize when minimally invasive reproductive surgery is indicated, pearls to help manage specific pathologies, and strategies for managing and minimizing the risks of complications during operative laparoscopy and hysteroscopy.
2. Discuss pelvic and retroperitoneal anatomy and how it applies to myomectomy, extensive endometriosis, ovarian-tubal surgery, septum, cesarean scar isthmocele, Müllarian uterine and vaginal anomalies, and management of complications including bladder and bowel injury.
PC19 Male Reproduction: the Road to Fertility with Bumps on the Way
Developed in Cooperation with the Society for the Study of Reproduction (SSR)

Faculty
Humphrey Hung-Chang Yao, Ph.D. (Chair)
National Institute of Environmental Health Sciences
Tony De Falco, Ph.D.
Cincinnati Children’s Hospital Medical Center
Christopher Geyer, Ph.D.
Brody School of Medicine at East Carolina University
Sarah Kimmins, Ph.D.
McGill University

Needs Assessment and Description
Male reproductive function and fertility involves integration of gene expression, somatic and germ-cell lineages, and environmental inputs during development of the gonads and reproductive tract. Disruptions in these early morphogenic events result in altered body size, metabolism, and immune function, disease susceptibility, and male infertility. Sperm counts have declined 1.4% per year from 1973–2011. Much of this decline in sperm production has been linked to alterations in gonadal development and increased environmental factors such as stress, obesity, and environmental toxins. The purpose of this course is to explore endocrine somatic, immune, and germ-cell lineages and their differentiation in the testis. Furthermore, this course will investigate how genetic and environmental factors may impact male reproductive fertility and health. In an interactive session with the audience, we will also consider genetic and environmental effects on development of the testis and reproductive tract and discuss clinical methods to measure and identify strategies to treat and restore fertility. Clinicians, scientists, embryologists, geneticists, and all health-care professionals will benefit from having more information related to male infertility to use in practice and to explore further research opportunities in male infertility.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Differentiate how somatic and germ cells develop in the testis and their impact on the reproductive tract.
2. Discuss the impact of altered cellular differentiation and environment on spermatogenesis.
3. Review the clinical consequences of genetic and environmental inputs on testis development and sperm production.

This Pre-Congress course complements a Symposium on Monday, October 14, 2019, SSR Symposium: Fertility Preservation: Existing and Emerging Fertility Preservation Options for Women and Men, which will feature preservation methods and options for women and men.
PC20  

Endometriosis: from Diagnosis to Therapeutic Strategy (an ASRM-SEUD joint course)  
Developed in Cooperation with the Society of Endometriosis and Uterine Disorders (SEUD)

Faculty
Felice Petraglia, M.D. (Chair)  
University of Florence  
Charles Chapron, M.D.  
Paris Descartes University  
Stacey Mismer, D.Sc., Sc.D.  
Michigan State University  
Katy Vincent, D.Phil, M.B.B.S  
University of Oxford

ACGME Competency
Patient Care  
Medical Knowledge

Needs Assessment and Description
Endometriosis is a common but often misunderstood disease affecting women across the lifespan. Yet, many clinicians and other care providers are not familiar with the etiology, diagnosis, treatment options, and complications of endometriosis. There is an educational need for clinicians who treat patients with infertility and endometriosis to improve knowledge of the hormonal, anatomical, and metabolic aspects of the disorder. This live course on endometriosis will have a multi-level approach, first to develop and enhance knowledge of correct diagnostic approaches, starting from genetic and epigenetic aspects, then to develop and enhance the physician’s awareness of the pathogenesis for understanding the best imaging approach for patients, and finally to lay out all the strategic medical and surgical treatments related to infertility for patients. The course will assist obstetricians/gynecologists, reproductive endocrinology and infertility specialists, nurse practitioners, nurses, allied health providers, fellows, and residents in addressing practical, patient-centered management of endometriosis.

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Discuss the differential diagnosis of endometriosis with other causes of infertility.
2. Identify a strategic plan for the treatment of young patients with endometriosis.
This half-day course is approved for a maximum of 3.0 AMA PRA Category 1 Credits™.

**Faculty**
Kurt Barnhart, M.D., M.S.C.E.  
*University of Pennsylvania*
Micah Hill, D.O.  
*National Institutes of Health*
Suneeta Senapati, M.D., M.S.C.E.  
*University of Pennsylvania Perelman School of Medicine*
H. Irene Su, M.D., M.S.C.E.  
*University of California, San Diego*

**Needs Assessment and Description**
Clinicians and health professionals are constantly called upon to decide what treatment is best, evaluate the efficacy of new and standard treatments, and assess if a therapy is cost-effective. The medical literature, and the press, are replete with claims of scientific evidence supporting a claim. Not all experts agree on what is considered strong evidence. There is often debate in the medical literature as to when a therapy is preferred or inferior and it is often difficult to assess who wins a debate on a scientific subject. Is one medication better than another? When should a technology be introduced or rejected? The ASRM needs assessment outlines the need to interpret evidence-based practice of reproductive medicine and assessment of new technologies. This course will review the quality of scientific evidence and how one presents and defends one’s position on a scientific topic. Skills will be reviewed on how to formulate an opinion based on evidence, how to present a strong argument, and if an argument is based on strong scientific underpinnings. We will examine the scientific evidence supporting some of the most frequently employed practices in reproductive medicine such as fresh versus frozen transfer, preimplantation genetic testing for aneuploides (PGT-A), intracytoplasmic sperm injection (ICSI) for non-male factor infertility, and single- versus double-embryo transfer. This live activity will involve the audience by exploring what makes good scientific evidence, how does one present a case for strong evidence, and how can one tell that a proposed point of view is not based on evidence. Themes discussed will include: Can you ever trust observational data? When can a randomized controlled trial steer you wrong? What is a conflict of interest, its implications, and how can we use the data? The perspective will be from editors of scientific journals and consumers of the medical literature. This course is for clinicians, scientists, and allied health professionals in reproductive medicine.

**ACGME Competency**
Practice-based Learning and Improvement  
Medical Knowledge

**Learning Objectives**
At the conclusion of this course, participants should be able to:
1. Utilize the hierarchy of scientific evidence to assess a scientific claim in the medical literature.
2. Describe how to present a strong specific argument for or against a medical topic such as fresh versus frozen transfer, evidence to support PGT-A, the use of ICSI for non-male factor infertility, and the benefit of endometrial scratching.
3. Summarize strong and weak arguments in a scientific debate.
SUNDAY, OCTOBER 13, 2019        HALF DAY, 1:15 PM - 5:00 PM

PC22  Why the Lab Is Fab: In Vitro Fertilization (IVF) through the Eyes of an Embryologist

Developed in Cooperation with the Society for Assisted Reproductive Technology (SART) and the Society of Reproductive Biologists and Technologists (SRBT)

This half-day course is approved for a maximum of 3.5 AMA PRA Category 1 Credits™.

Faculty
Sangita Jindal, Ph.D.
Montefiore Institute for Reproductive Medicine and Health
Kristen Ivani, Ph.D., H.C.L.D.
Reproductive Science Center of the San Francisco Bay Area
Michael Lee, M.S.
Fertility Solutions, P.C. and Massachusetts Fertility Center, L.L.C.

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Explain how clinical decisions may impact key performance indicators in the IVF laboratory.
2. Describe the daily quality control, procedures, and other activities that are performed in the IVF laboratory.
3. Summarize the key performance indicators and elements that compose an effective IVF laboratory quality management program.

Needs Assessment and Description
The success of assisted reproductive technology (ART) relies upon an interdisciplinary team that continuously measures the effectiveness of each discipline’s activities and overall outcomes, and is able to discuss and resolve problems when targets are not met. The in vitro fertilization (IVF) laboratory has had a number of changes in practice and performance expectations in the recent past. This course will give physicians, nurses, nurse practitioners, practice managers, scientists, and technicians a better understanding of the workflow, procedures, and strategies for quality management that embryologists employ to optimize laboratory performance.
SUNDAY, OCTOBER 13, 2019             HALF DAY, 8:15 AM - 12:00 PM

PC23 Dietary Supplements and Fertility: Emerging Evidence and Clinical Guidance
Developed in Cooperation with the Endometriosis Special Interest Group and the Nutrition Special Interest Group

This half-day course is approved for a maximum of 3.5 AMA PRA Category 1 Credits™.

Faculty
Sunni Mumford, Ph.D.
Eunice Kennedy Shriver National Institute of Child Health and Human Development
Holly Harris, M.P.H., Sc.D.
Fred Hutchinson Cancer Research Center
Alex Polotsky, M.D., M.S.
Georgetown University

ACGME Competency
Patient Care

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Summarize current methods utilized to investigate the impact of supplements on fertility and endometriosis and be able to interpret published data on the topic.
2. Describe mechanisms in female and male reproductive physiology that may be impacted by dietary supplements.

Needs Assessment and Course Description
The direct-to-patient marketing of supplements is a large and growing industry; supplements are increasingly used by both men and women in an effort to boost their fertility. However, evidence is limited regarding whether these supplements are beneficial or not. There is limited knowledge among fertility-care providers on how to counsel patients about supplement use and consuming a healthy diet. The 2017-2018 ASRM Gap Analysis identified guidance on natural supplements for fertility and infertility as an educational need. This Pre-Congress course will address these knowledge gaps by presenting the latest research from population scientists, reproductive endocrinology and infertility specialists, and registered dieticians, translating this information into usable advice from an expert clinical perspective. There will be an additional focus on the role of supplements with gynecologic conditions such as endometriosis. This course targeted to primary-care physicians, reproductive-medicine and specialty physicians, physician assistants, nurses, nurse practitioners, laboratory scientists, and dieticians will not only present complementary views across professional groups, but how to interact across disciplines to advance research in this area to obtain the best outcomes for fertility patients.
SUNDAY, OCTOBER 13, 2019    HALF DAY, 1:15 PM - 5:00 PM

PC24 Therapies for Uterine Fibroids  CME
Developed in Cooperation with the Fibroids Special Interest Group

This half-day course is approved for a maximum of 2.75 AMA PRA Category 1 Credits™.

Faculty
Digna R Velez Edwards, Ph.D., M.S.
Vanderbilt University Medical Center
William Catherino, M.D., Ph.D.
Uniformed Services University of the Health Sciences
Jeffrey Goldberg, M.D.
The Cleveland Clinic Foundation

Needs Assessment and Description
Fibroids affect a large percentage of reproductive aged women and can be associated with heavy and painful menses, pelvic pain, infertility and pregnancy complications. An increasing number of surgical and nonsurgical treatments have been developed. Depending on reproductive desires, treatment recommendations for fibroids continue to change as research trials and systematic reviews of evidence reveal new knowledge about comparative effectiveness. This course will provide an update on the latest developments and current best practices in the clinical management of patients with uterine fibroids, including data from evidence-based research and clinical practice. The courses is designed for clinicians, clinical scientists, and basic researchers.

ACGME Competency
Medical Knowledge
Patient Care

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Describe the state of current research on the effectiveness of fibroid treatments.
2. Summarize the current best practice for the treatment of uterine fibroids.
3. Discuss a broad overview of future directions of fibroid treatments.

Do you know a resident attending the Scientific Congress?

Participants in the ASRM Resident Education Program will attend a flipped-classroom, interactive learning session, led by experts in reproductive medicine and medical education (boxed lunch provided), and a related symposium.

This ASRM-sponsored program (no additional cost to participants) is open to the first 100 residents who opt in at the time they register for the Scientific Program using a dialogue box that will open during the registration process.

Questions? Email Jessica Goldstein at jgoldstein@asrm.org.
SUNDAY, OCTOBER 13, 2019  HALF DAY, 8:15 AM - 12:00 PM

PC25  Interprofessional Approach to Manage Reproductive Failure due to Elevated Sperm DNA Fragmentation: from Etiologies to Diagnostic Approaches and Management Strategies
Developed in Cooperation with the Society of Reproductive Surgeons (SRS)

This half-day course is approved for a maximum of 3.0 AMA PRA Category 1 Credits™.

Faculty
Peter Chan, M.D., C.M., M.Sc., F.R.C.S.(C), F.A.C.S.
McGill University
Gianpiero Palermo, M.D., Ph.D.
Cornell University

Needs Assessment and Course Description
Male factor infertility can be identified in about half of infertile couples. In the remaining couples, unexplained infertility remains one of the most common and challenging diagnostic categories of reproductive failure. Evaluation of sperm DNA and chromatin quality has been a tool in basic science research among spermatologists for decades. Recent studies have found that elevated levels of sperm deoxyribonucleic acid (DNA) fragmentation, a condition undetectable by conventional semen analyses, are associated with adverse reproductive outcomes including prolonged time to pregnancy, poor embryo quality and development, pregnancy loss, and decreased rates of both pregnancy and live-birth. Despite being one of the most successful examples of knowledge translation from basic science to clinical use, standard evaluation methodologies for sperm DNA fragmentation, and thus this test is not yet considered to be a part of the standard evaluation in infertile couples. Further, the most efficacious and cost-effective management options for men with elevated sperm DNA fragmentation remain to be established. This Pre-Congress course will provide a comprehensive review of the latest developments in both basic science aspects and in the clinical values of evaluation for sperm DNA fragmentation. In collaboration with world-renowned experts in multiple disciplines including basic science, andrology, clinical embryology and reproductive urology, we will discuss the etiologies, evaluation approaches, and management strategies of elevated sperm DNA fragmentation in the context of reproductive failure.

This course is designed for a broad range of healthcare professionals in reproductive medicine ranging from embryologists, basic scientists, nurses, andrologists, urologists, reproductive endocrinology and infertility specialists, technicians, and allied health professionals.

ACGME Competency
Medical Knowledge
Patient Care

Learning Objectives
At the conclusion of this course, participants should be able to:
1. Describe the indications for evaluation of sperm DNA and chromatin integrity in the management of infertile couples.
2. Explain the various methodologies currently available in the evaluation of sperm DNA and chromatin integrity.
3. Discuss various proposed etiologies of abnormal sperm DNA fragmentation and the efficacies of different potential management options for the condition.
Needs Assessment and Description

The theme of the 2019 Scientific Congress of the American Society for Reproductive Medicine is “Celebrating 75 Years of History and Innovation.” Reproductive medicine covers a broad range of topics from puberty to menopause, in both the female and male. Its depths of focus include basic science, translational and clinical areas. This Scientific Congress will explore advances in reproductive care and cutting-edge research in the field presented by expert scientists and clinicians. The program is balanced between basic and clinical research at all levels, applied medical care, and ancillary fields crucial to family-building including clinical laboratory science, mental health, reproductive law. This live program is designed for physicians, nurses, andrology and embryology laboratory personnel, genetic counselors, social workers, practice and laboratory managers, as well as specialists in mental health, law, and ethics.

The Continuing Medical Education (CME)/Continuing Education (CE) portion of the Scientific Congress will include a wide array of educational activities, including plenary lectures, symposia, and interactive sessions interweaving the theme of this year’s Congress. Plenary lectures will feature exceptional speakers covering a wide range of themes in reproductive research and clinical medicine including: closing the generational gap between practitioners and patients; using live imaging to reveal the mechanisms that form the mammalian embryo; exploring the ethics of human germline editing; and understanding the role of elective egg freezing on the care of infertility patients. Congress symposia will provide more in-depth coverage of basic and clinical subjects. Topics range from ethics in embryo research, usefulness of specialized sperm function tests, new updates on therapies for infertility in polycystic ovary syndrome (PCOS), management of infertility in low resource settings, family building and co-parenting in the 21st century, oogonial stem cells to improve oocyte quality and ovarian reserve; building high functioning teams in the embryology laboratory, the endometrium and recurrent pregnancy loss, looking beyond the XX factor, infertility and tuberculosis, controversies in assisted reproductive technology (ART), fertility preservation options for women and men, regenerative medical therapies for reproductive medicine, access to fertility preservation care from policy to the patient, quality management issues in human ART, marketing your practice in a competitive market, fertility trajectory of Klinefelter syndrome from childhood to adulthood, patient-centered research in uterine fibroids, management of mosaic embryos after PGT-A in ART, oocyte maturation in vitro and female fertility preservation, status of growing gametes and embryos, developing an egg freezing program in your practice, fertility preservation for transgender youth, novel therapies for the treatment of Asherman syndrome, risk management in patient education and consenting, ovarian stimulation protocols to improve results in assisted reproduction, and psychological, medical, and legal aspects of implementing an embryo donation program in a practice.

The interactive sessions cover a wide range of stimulating topics and are meant to be a forum for discussion and interaction, including topics such as non-invasive preimplantation genetic testing, moving hysteroscopy from the operating room to the office, Mullerian classification debate, reproductive epigenetics and mitochondria, environmental threats to reproduction, egg and embryo banking prior to advancing maternal age, insights from vertebrate model reproductive organ regeneration, disclosure implications of intentional and unintentional donor identity, how to handle mosaic embryos, hysterectomy versus utero-vaginal anastomosis to treat cervical agenesis, universal insurance coverage for IVF, key performance indicators for the IVF lab, and innovative approaches to treat dysmenorrhea, miscarriages, primary ovarian insufficiency, and recurrent pregnancy loss. Supplementing the CME/CE program will be non-CME/CE events including roundtable luncheons and Expert Encounters that will provide opportunities for in-depth discussion with experts in small-group settings as well as oral and poster scientific abstract presentations that enable investigators to present cutting-edge scientific research in reproductive medicine and biology.

Included in the diverse program are “tracks” for specialty and interest areas that can enable participants to focus on specific topics and identify areas to expand their knowledge. The 2019 Scientific Congress should provide ample opportunity for learning, improvement of clinical competence, and potential scientific collaboration.

Learning Objectives

At the conclusion of the Scientific Congress, participants should be able to:

1. Summarize appropriate treatments for reproductive dysfunctions in females and males at different ages throughout life—childhood, adolescence, adulthood, and reproductive senescence.
2. Discuss the relevance of genetics and genomics to reproductive care.
3. Analyze the ethical, legal, and psychosocial ramifications of reproductive technologies on family building.
4. Apply strategies that simplify technology, reduce costs, and broaden accessibility to assisted reproductive technology care.
5. Examine current knowledge and innovative approaches to treat endometriosis, fibroids, miscarriages, menopause, contraception, polycystic ovary syndrome, Klinefelter syndrome, and Asherman syndrome.
6. Describe how the extensive range of reproductive technologies from the cellular level to clinical application impact family building.
7. Explain the latest scientific advances in embryo biology and assessment to the optimization of embryo transfer.

ACGME Competencies

**Interpersonal and Communication Skills**
- Medical Knowledge
- Patient Care
- Professionalism
- Systems-based Practice

**Interprofessional Competencies**
- Values/ethics for interprofessional practice
- Roles/responsibilities
- Interprofessional communication
- Teams and teamwork
## ASRM 2019 SCIENTIFIC CONGRESS SCHEDULE

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PLENARY SESSIONS

Monday, October 14, 2019  8:30 am - 9:15 am

PLENARY 1

President’s Guest Lecture: Closing the Generational Gap Between Practitioners and Patients

Endowed by a 1987 grant from Ortho Women’s Health

Ryan Jenkins
Speaker, Author, and Inc. Magazine Columnist

Introducer: Peter Schlegel, M.D.

Needs Assessment and Description

Over 50% of workers say they are least likely to get along with someone from another generation. More than 60% of Generation Z (the generation after Millennials) anticipate challenges working with Baby Boomers and Generation X. Soon, Millennials and members of Generation Z will become the majority of the labor force, and these two generations have widely divergent perspectives on a number of topics, including communication, work and leadership. Not surprisingly, understanding of cross-generational interacting, influencing, and working was recently identified by ASRM as an important educational need. This session will review the generational gap in depth, discuss strategies to close the gap, summarize ways to interact with young patients, and give examples of organizations intent on closing the generational gap to improve patient care. This session is designed for physicians, embryologists, administrators, nurses, mental health professionals, counselors, fellows, and residents involved in patient care.

ACGME Competency

Interpersonal and Communication Skills

Learning Objectives

At the conclusion of this session, participants should be able to:

1. Assess the generational gap and why it exists.
2. Review of each generation’s values, behaviors, and expectations.
3. Summarize each generation’s varying views of communication, work, and leadership.
4. Describe strategies that are proven and actionable to close the generational gap.
5. Examine best-in-class examples of organizations successfully closing the generational gap.
6. Identify ways to interact with and influence young patients.
PLENARY SESSIONS

Monday, October 14, 2019
9:15 am - 10:00 am

PLENARY 2

Camran Nezhat, M.D. Lectureship in Innovations in Medicine: Using Live Imaging to Reveal the Mechanisms That Form the Mammalian Embryo

Endowed by a 2011 Gift from Camran Nezhat, M.D.
Dr. Camran Nezhat pioneered techniques of video-assisted endoscopic surgery, which revolutionized modern day surgery. He along with his brothers, Drs. Farr and Ceana Nezhat, performed some of the most advanced procedures with these techniques for the first time, thus opening the vistas for endoscopic surgeons all over the world.

Nicholas Plachta, Ph.D.
Institute for Molecular and Cell Biology, A*STAR

Introducer: Christos Coutifaris, M.D., Ph.D.
(Certificate Presented by Dr. Nezhat)

Needs Assessment and Description
As a result of emerging technologies in embryo development, the ASRM gap analysis and educational needs assessment identified in 2019 a need to identify clinical implications of the cellular pathways and how it relates to improving embryo implantation. This session will review how advanced imaging technologies can be used to study preimplantation development in real time, along with summarizing processes and morphogenetic events that pattern the early embryo. The results reveal the dynamic molecular mechanisms, explaining how cells choose their fate, shape, and position within the early embryo. The presentation targets embryologists, scientists, reproductive endocrinologists, geneticists, nurses, and genetic counselors.

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe how imaging techniques can be used to reveal mechanisms controlling embryonic development.
2. Identify key dynamic processes and morphogenetic events patterning the early embryo.
PLENARY SESSIONS
Tuesday, October 15, 2019 8:30 am - 9:15 am

PLENARY 3

Is Human Germline Editing Ethical?

Endowed by a 1990 grant from Astra-Zeneca

Françoise Baylis, C.M., O.N.S., PH.D., FRSC, FCAHS Dalhousie University

Introducer: Hugh Taylor, M.D.

Needs Assessment and Description
In late November 2018, the world learned that twin girls Lulu and Nana (pseudonyms) were created from embryos that had been genetically modified to provide them with resistance to HIV. The birth announcement was greeted with swift and near uniform condemnation. Among those who objected were many who quoted from the 2015 Summit Statement, On Human Gene Editing, according to which “It would be irresponsible to proceed with any clinical use of germline editing unless and until (i) the relevant safety and efficacy issues have been resolved...and (ii) there is broad societal consensus about the appropriateness of the proposed application.” At the same time, others sought to assure the public that the Chinese researcher who created the gene-edited babies was an irresponsible scientist; rather, the responsible members of the scientific community could be trusted to do “well” what he had done “poorly.” The 2018 Summit Statement, On Human Genome Editing II, stated “the procedure was irresponsible and failed to conform with international norms.” The Summit-organizing committee then identified the need for a translational pathway that would include the following criteria: “strict independent oversight, a compelling medical need, an absence of reasonable alternatives, a plan for long-term follow-up, and attention to societal effects.” Each of these proposed criteria will be interrogated through arguing the pros and cons associated with the proposed transitional pathway, identifying the elements of “broad societal consensus” on the use of this technology, and encouraging to develop one’s own professional opinion on the ethics of heritable human genome editing. Targeted to clinic staff in reproductive medicine, this presentation therefore serves as a guide to reflect carefully on the ethics of heritable human genome editing.

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify the elements of broad societal consensus.
2. Summarize the elements of the proposed translational pathway for heritable human genome editing.
3. Describe the problems with the proposed translational pathway for heritable human genome editing.
4. Develop a professional opinion on the ethics of heritable human genome editing.
Planned Oocyte Cryopreservation: A Patient’s Perspective

Endowed by a 1992 grant from Wyeth.

Brigitte K. Adams
Eggsurance

Introducer: Christos Coutifaris, M.D., Ph.D.

Needs Assessment and Description
The number of women interested in electively freezing their eggs has grown exponentially since the ASRM Ethics Committee’s 2012 determination that oocyte cryopreservation was no longer experimental. In order to support these women medically and emotionally, it is important for clinicians to understand the motivations of this new generation of egg freezers and this has been identified by ASRM as an educational need for care providers. A better understanding from the patient’s perspective will help clinicians develop new and more targeted communication strategies, information protocols, and emotional guidelines for women delaying child birth by choice. This presentation will discuss reasons a woman might want to undergo elective oocyte cryopreservation, identify what these patients want and need to be told prior to planned oocyte cryopreservation, and summarize the difference between oocyte cryopreservation patients and infertility patients undergoing IVF. The target audience includes reproductive endocrinologists, nurses, psychologists, social workers, lab personnel, legal professionals, and administrators.

ACGME Competency
Interpersonal and Communication Skills

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Summarize the different motivations and experiences between an IVF patient and an oocyte cryopreservation patient.
2. Discuss the reasons a woman might undergo elective oocyte cryopreservation.
3. Identify what information patients want, do not want and, more importantly, need to be told prior to planned oocyte cryopreservation: distinguish between verbal and written communication.
Plenary 6: Herbert H. Thomas Lecture: Justice and the Privatization of Health Data

Endowed by a 1992 grant from EMD Serono, Inc.

Kayte Spector-Bagdady, J.D.
University of Michigan

Introducer: Keith Jarvi, M.D.

Needs Assessment and Description
Our data are collected at every turn: where we drive, who we email, what we google, and what we buy. Perhaps a last bastion of expected privacy protections surrounds our health data. But while some data collection systems (like a hospital system) have stringent governance, others (like health apps) do not. Ready access and linkage of medical information can help us provide better care to our patients, but it can also serve to harm, alienate, and erode trust. This talk will explore how health data are currently being collected and by whom, as well as ways we can both serve and protect our patients in the future. This session is for all clinicians, legal professionals, administrators, and allied health professionals.

ACGME Competency
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe different ways that health data are generated and collected.
2. Identify holes in our current health data governance structure.
3. Review opportunities to protect our patients and their data better.
LECTURES

Monday, October 14, 2019  
2:35 pm - 3:20 pm

LECTURE 1: KEYNOTE

Endowed Lecture: IVF as a Business

Endowed by a 1990 grant from TAP Pharmaceutical

David Sable, M.D.  
Columbia University

Introducer: Richard J. Paulson, M.D.

Needs Assessment and Description
Clinicians, embryologists, and nurses are rightly focused on acute patient care and practice management. Recent changes in the economic landscape of reproductive medicine that may have gone unnoticed contain the potential to fundamentally alter the demands placed on those who own, control, and operate medical practices performing in vitro fertilization (IVF). An educational need of how to build REI practices has existed over the past years due to the evolution of access to care and emerging technologies. This presentation will address underlying changes in the population of patients pursuing care in IVF centers, emergence of previously untreated patient groups, acceleration of oocyte cryopreservation for delayed conception, and evolution in the financing of the industry. This plenary session is designed for physicians, nurses, embryologists, administrators, and allied health professionals to contribute to the success of the REI practice.

ACGME Competency
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify changes in the IVF patient population that will radically alter the demands on IVF programs in the near future.
2. Discuss the challenges of accommodating a much larger infertility patient population in countries like the United States and China without sacrificing quality of care and underserved genetic disease prevention and onco-fertility patients.
3. Review emerging technologies that could alter practice patterns and increase the efficiency of care delivery.
Monday, October 14, 2019

LECTURE 2 : KEYNOTE

The David and Rosemary Adamson Lecture on Excellence in Reproductive Medicine: Midnight’s Broken Toll: Male Fertility and the Health of Future Generations

Endowed by Advanced Reproductive Care, Inc. and Rosemary and David Adamson, M.D.

University of Newcastle

Introducer: Peter N. Schlegel, M.D.

Needs Assessment and Description
Defective sperm quality is one of the most prevalent causes of male subfertility and yet little is known about the etiology of this condition or its impact on the health of future generations. This is of concern when ICSI is used as the insemination procedure, since it permits conception with spermatozoa that would have been rejected under physiological circumstances in vivo. Two major causes of male infertility or subfertility have been identified in recent years: Y-chromosome deletions and oxidative stress. The use of spermatozoa exhibiting either of these pathological changes has been identified as an educational need to determine the consequences for the health and well-being of the offspring following assisted reproductive technology (ART). In this lecture, the major causes of male infertility and the potential impact of genetic defects in spermatozoa on future offspring will be discussed; then, we will describe possible approaches to the clinical resolution of this problem. There is a need for reproductive biologists, andrologists, urologists, reproductive endocrinologists, nurses, and genetic counsellors to realize the nature of these relationships and how they can be addressed from a clinical perspective.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify the major causes of male infertility.
2. Describe the potential impacts that genetic and epigenetic defects in spermatozoa might have on the health and well-being of the offspring.
3. Summarize possible approaches to the clinical resolution of this problem.
Pre-Plenary Special Session: Eye on AI: Artificial Intelligence in ART

Cristina Hickman, Ph.D.
Imperial College

Nikica Zeninovic, Ph.D.
Weill Cornell Medicine

Introducer: Catherine Racowsky, M.D.

Needs Assessment and Description
In this plenary lecture, we will explore the different types of artificial intelligence, with a specific focus on the current and potential applications of AI in ART. This lecture was developed in response to the need to explore technology and the impact it has on ART. This lecture will explore embryo evaluation and selection, prediction of aneuploidies in embryos, evaluation of ovarian reserves, sperm identification and selection, identification of embryos that result in miscarriage, and how to provide personalized precision medical care. This presentation will discuss AI concepts and different AI platforms, and explain novel concepts and future development of AI application in ART. The target audience includes physicians, nurses, embryologists, scientists, and all allied health professionals.

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Explain basic AI concepts and recognize different platforms of AI applications.
2. Identify the potential of AI applications in ART.
3. Describe the novel concepts and future development of AI application in ART.
LECTURE 4 : KEYNOTE


Endowed by a 1990 grant from Ethicon Endo-Surgery, Inc.

Richard M. Satava, M.D., F.A.C.S.
University of Washington

Introducer: Bala Bhagavath, M.B.B.S.

Needs Assessment and Description
Even as the fourth revolution in surgery in 25 years, robotic surgery, is gaining in popularity, a much more disruptive change is beginning with the next revolution: directed energy surgery. While surgeons have been investigating a few different types of energy for decades, including success with some forms such as lithotripsy, photonics, and high-intensity focused ultrasound (HIFU), these pioneering techniques are but the tip of the iceberg that heralds the transition to non-invasive surgery. Such systems are based upon the premise which robotics and automation can bring precision, speed and reliability, especially as surgery descends into operating at the cellular and molecular level. ASRM 2018 gap analysis and educational needs assessment developed by the continuing medical education committee, identified as an educational need information on new emerging surgical technologies. Designed for physicians, nurses, allied health professionals, and health care administrators, this session will identify the new non-invasive therapies, discuss the principles in surgery that are changing, explain how new technologies at the molecular level will impact surgery, and summarize how emerging technologies will enhance or make obsolete current surgeries.

ACGME Competency
Practice-based Learning and Improvement
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss the fundamental principles in surgery that are changing.
2. Identify the new non-invasive therapies which will come after robotic surgery.
3. Assess how new technologies at the molecular and atomic level will impact surgery.
4. Explain how emerging technologies will enhance or make obsolete current surgery.
**LECTURE 5 : KEYNOTE**

**Menopause Keynote Lecture: Future Directions on the Management of Menopause**

Rogerio A. Lobo, M.D.

*Columbia University*

Introducer: TBD

**Needs Assessment and Description**

In recent years, little attention has been paid to teaching about menopause, its consequences and possible treatment options. Current and future approaches for the management of women after menopause has been identified as an educational need by ASRM. This lecture will discuss morbidity and mortality in postmenopausal women, update information on treatments and effects of hormones, and summarize the future for postmenopausal women. The session is designed for physicians, nurses, and all clinic staff who provide care for this patient population.

**ACGME Competency**

Patient Care

Medical Knowledge

**Learning Objectives**

At the conclusion of this session, participants should be able to:

1. Discuss what the major causes of morbidity and mortality in postmenopausal women and the role of prevention are.
2. Identify the most recent information regarding possible treatments and the effects of hormones if prescribed early after menopause.
3. Summarize what therapies are in development and what the future may hold for postmenopausal women.

**LECTURE 6**

**American Urological Association Bruce Stewart Memorial Lecture: The Diagnosis and Treatment of Male Infertility – From the Bench to the Bedside**

Supported by a grant from the American Urological Association

Larry I. Lipshultz, M.D.

*Baylor College of Medicine*

Introducer: Harris Nagler, M.D.

**Needs Assessment and Description**

The ASRM has identified a need for education on the identification, evaluation, and treatment of male factors that affect male fertility. This presentation will review the many basic research discoveries that have been translated into better patient care for the infertile male, discuss research that has improved men’s reproductive health, and look to the future using innovative research techniques that will undoubtedly impact men’s reproductive health. The target audience is physicians, andrologists, nurses, and all allied health professionals.

**ACGME Competency**

Patient Care

Medical Knowledge

**Learning Objectives**

At the conclusion of this session, participants should be able to:

1. Review the significance of translational research in improving men’s reproductive health.
2. Summarize how today’s innovative studies will impact tomorrow’s reproductive health care.
Contraception Keynote Lecture: Male Contraception: Past, Present, and Future

John K. Amory, M.D., M.P.H.
University of Washington

Introducer: TBD

Needs Assessment and Description
Despite current contraception options being available, unintended pregnancy still commonly occurs. Therefore, an educational need to determine which contraceptive choices are being used and understand the effectiveness of male contraceptives on prevention. This talk will review advantages and disadvantages of currently available male contraceptives, along with efforts to develop novel contraceptive methods for men. Physicians, nurses, and allied health professionals are the target audience for this session.

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss the pros and cons of existing methods of male contraception.
2. Summarize the status of ongoing research into developing novel hormonal and non-hormonal methods of male contraception.

SSR Exchange Keynote Lecture: Motile ciliopathy as a new cause of male infertility

Wei Yan, M.D., Ph.D.
University of Nevada

Introducer: Christos Coutifaris, M.D., Ph.D.

Needs Assessment and Description
Obstructive azoospermia is a well-known cause of male infertility, but the most commonly known obstruction sites have been vas deferens and epididymis. We have new data showing that obstructions can occur in the efferent ducts, and efferent ductal obstructions cause oligoasthenoteratozoospermia (OAT) or azoospermia due to fluid retention. This has never been described in humans and should be investigated in clinical practice. This session is based on the educational need for appropriate workup and new treatment options for male infertility. During the lecture, the structure and function of the efferent ducts will be reviewed, the pathology caused by dysfunction of motile cilia will be explained, and the potential treatment of male infertility caused by efferent ductal obstructions will be discussed. The target audience is physicians, andrologists, nurses, and all allied health professionals.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Explain the pathology caused by dysfunction of motile cilia in the efferent duct.
2. Discuss potential treatment of male infertility caused by efferent ductal obstructions.
MHPG Clinical Session (Research)  
Research Isn’t Just for Nerds: The Easy How-To’s of Conducting Publishable Research in the Field of Reproductive Medicine

Alice Domar, Ph.D.  
Boston IVF
Lauri Pasch, Ph.D.  
University of California, San Francisco

Needs Assessment and Description
Mental health professionals who attend ASRM are keenly aware of the lack of up-to-date research on psychological aspects of infertility care and long-term psychosocial implications of reproductive technologies. This session will address practical aspects of conducting research in mental health and psychosocial aspects of ART to try to reduce the gap between intention and implementation. This session will cover the major areas on which mental health professionals desire additional guidance, including developing testable questions, working with Institutional Review Boards, study design, finding needed analytical resources, and methods for optimal dissemination. This session is designed for mental health professionals.

ACGME Competency
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the different kinds of research designs.
2. Summarize the IRB application process.
3. Determine how to conduct different kinds of research in an infertility clinic.
4. Identify potential barriers to psychosocial research in an ART clinic and review ways to circumvent them.

MHPG Clinical Session 2

MHPG Clinical Session: The Trauma of Infertility and Pregnancy Loss: Helping Our Patients Heal

Janet Jaffe, Ph.D.  
Center for Reproductive Psychology
Karen Hall, Ph.D.  
Private Practice
Julie Bindeman, Psy.D.  
Private Practice

Needs Assessment and Description
Many fertility patients, whether struggling to conceive or suffering pregnancy demise, are in crisis: they have been traumatized by recurrent losses and exhibit high levels of distress. A history of traumatic events can also exacerbate and complicate fertility treatment. The purpose of this session is to expand the clinician’s understanding of the patient’s experience of trauma and offer specific counseling techniques for the management of grief, loss and stress. We will also identify ways in which trauma can complicate third party cases. This session is designed for mental health professionals.

ACGME Competency
Patient Care  
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Define psychological trauma.
2. Identify risks of trauma in the treatment of fertility patients.
3. Determine the effects of a history of trauma on current reproductive crisis.
4. Describe specific counseling techniques (CBT, EMDR, narrative therapy) used to manage stress and grief reactions of fertility patients.
5. Identify ways in which trauma can complicate third party cases.
MHPG Clinical Session: To SKYPE or not to SKYPE: Ethics of Third-party Teleconsultations in the Age of High-tech

Lauren Magalnick Berman, Ph.D.
Fertility Psychology Center of Atlanta
Lindsay Childress-Beatty, J.D., Ph.D.
American Psychological Association

Needs Assessment and Description
With the ubiquity of free and low-cost video conferencing platforms, mental health professionals receive increasing numbers of requests for third-party consultations and evaluations over video conference. There are ethical and legal challenges inherent in the use of video conferencing. The presentation will describe and discuss the appropriate use, competencies to practice, and the type of training necessary to develop required skills in video conferencing. This session is for mental and legal health professionals to provide insight into the challenges of using teleconsultations in regard to confidentiality, HIPAA, informed consent, and licensure.

ACGME Competency
- Professionalism
- Interpersonal and Communication Skills

Learning Objectives
At the conclusion of this session, participants should be able to:
1. Describe the appropriate contexts and benefits for use of telemental health.
2. Summarize the ethical and legal challenges of telemental health in regard to confidentiality, HIPAA, informed consent, and licensure.
3. Identify the competencies necessary for practicing telemental health.
4. Determine the type of training needed in order to develop competency in telemental health.

MHPG Clinical Session: Peeking Under The Hood: Psychological Testing with Sperm Donors

Andrea Braverman, Ph.D.
Jefferson OBGYN
John Kurtz, Ph.D.
Villanova University

Needs Assessment and Description
Psychological testing is a new addition to the evaluation of sperm bank donors and is an often- misunderstood tool in the psychological assessment of these donors. In 2018 an educational need was identified by ASRM for strategies to assist health care personnel on counseling donors. Professional practice guidelines recommend a psychological screening and assessment of sperm donors. In this clinical mental health session, we will discuss the advantages of psychological assessment for sperm donors, describe respondent behavior, and assess strategies for evaluating defensiveness with psychological testing. This session was developed for psychologists, social workers, and other allied health professionals.

ACGME Competency
- Patient Care
- Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:
1. Describe the unique advantages of psychological assessment for sperm donors.
2. Summarize types of respondent behavior that can be explored through normed instruments such as the Personality Assessment Inventory and the MMPI-2.
3. Explore strategies for evaluating and understanding defensiveness with psychological testing.
INTERACTIVE SESSION

Key Performance Indicators for the IVF Lab

Amy Sparks, Ph.D. (Chair)
University of Iowa
Alison Bartolucci, M.S.
University of Connecticut
Dean Morbeck, Ph.D., M.B.A., H.C.L.D.
Fertility Associates, Auckland, NZ

Needs Assessment and Description
When carefully chosen, Key Performance Indicators (KPI) can give lab managers a bird’s eye view of internal and external factors affecting laboratory performance. Identified by ASRM 2018 as an educational need, a quality control program in the IVF lab is crucial for assuring the delivery of optimal patient care and trouble shooting when outcomes are less than optimal. The live session will focus on the key performance indicators and benchmarks for laboratories, identify the tools that are available for tracking KPI, and explain situations where key performance indicators could aid with troubleshooting issues that may arise in the lab. This interactive session is designed for physicians, laboratory directors, laboratory technicians, nurses, and clinic staff to be educated on KPI in labs to improve performance.

ACGME Competency
Patient Care
Systems-based Practice

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify key performance indicators and benchmarks established.
3. List the tools that are being made available to SART members for tracking their own KPI and comparing their performance with national aggregate data.
INTERACTIVE SESSIONS

Monday, October 14, 2019

1:30 pm - 2:30 pm

INTERACTIVE SESSION

How Do We Reach the Goal of Universal Insurance Coverage for IVF?

Jacqueline Ho, M.D. (Chair)
University of Southern California
Sean Tipton, M.A.
ASRM
Barbara Collura, M.A.
RESOLVE

Needs Assessment and Description
The cost of infertility treatments, including ART, often acts as a barrier for accessing care when patients do not have health insurance coverage for assisted reproductive technology (ART). In a recent Ethics Committee Opinion, the American Society for Reproductive Medicine (ASRM) stated that “reproduction is a fundamental interest and human right, and the access, treatment, and outcome disparities that are associated with ART are a form of stratified reproduction that warrants correction.” This interactive session will address current gaps in infertility care through a generative discussion of strategies to achieve goals of increased insurance coverage and access. The target audience includes physicians, nurses, embryologists, administrators, and allied health professionals in reproductive medicine.

ACGME Competency
Patient Care
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Examine barriers in accessing and utilizing infertility services and identify populations with unmet infertility care needs.
2. Identify ways to improve access to infertility services to patients through increased insurance coverage and alternatives including philanthropy.
3. Utilize tools for advocacy at the local and national level to change policy regarding access to reproductive care.
An Integrative Approach to Treating Dysmenorrhea Associated with Endometriosis

Peter Harvey, M.B.A., L.Ac., F.A.B.O.R.M. (Chair)
Eastern Healing, Inc.
Charles E. Miller M.D.
The Advanced IVF Institute
Holly R. Harris, Sc.D., M.P.H.
Fred Hutchinson Cancer Research Center

Needs Assessment and Description
Dysmenorrhea is a common problem often seen in practices with more than one half of women who have menstrual pain for 1-2 days. Women suffering with dysmenorrhea associated with endometriosis will often seek help from their physician. There are multiple ways to address this problem from an allopathic treatment prospective to an integrative one. These patients are unsure of their options and are worried that surgery is the only answer. This interactive presentation will summarize current western options, review acupuncture and Chinese medicine options, develop diet and vitamin lifestyle recommendations, evaluate when to integrate both eastern and western treatments, and when to refer patients for allopathic treatment of dysmenorrhea. This session is for obstetrics and gynecologists, general physicians, reproductive endocrinologists, nurses, and allied health professionals that work with patients who suffer from dysmenorrhea and would like to incorporate allopathic treatments into their practice.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Review current western options for the treatment of dysmenorrhea the pros and cons and long term considerations.
2. Identify acupuncture and Chinese medicine options along with its strengths and limitations to the patient.
3. Apply diet and vitamin lifestyle recommendations.
4. Determine when to integrate both eastern and western treatments without negatively impacting either of them and address concerns of doctors and acupuncturists.
5. Assess when to refer patients and how to choose an allopathic clinic for referral of patients.
INTERACTIVE SESSIONS

Monday, October 14, 2019 1:30 pm - 2:30 pm

INTERACTIVE SESSION

No Satisfaction: Psychological and Medical Perspectives on Infertility and Sexual Dysfunction

William D. Petok, Ph.D. (Chair)
Thomas Jefferson University
Elizabeth A. Grill, Psy.D.
Weill Cornell Medical Center
Robert D. Oates, M.D.
Boston University School of Medicine
Kim Bergman, Ph.D.
Growing Generations

Needs Assessment and Description
Sexual problems/dysfunctions are common for infertility patients and can lead to failure to conceive and, conversely, failure to conceive can lead to sexual dysfunction. The resulting stress on patients presents a treatment dilemma for many health care providers: should one condition be treated before the other or should concurrent services be offered. The ASRM 2018 gap analysis and educational needs assessment identified mental health, stress, and wellness for infertility patients as an educational need. This interactive session for physicians, nurses, mental health professionals, and all allied health care providers, will summarize common sexual problems, discuss interventions, and identify resources that may be available for treatment of sexual dysfunction.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Summarize common sexual problems/dysfunctions presented by infertility patients.
2. Describe interventions for these problems.
3. Identify resources for appropriate treatment of sexual dysfunction, if none exists in their practice setting.
Moving Hysteroscopy from the Operating Room to the Office: Essentials for Success, Safety, and Patient Satisfaction

Steven R. Lindheim, M.D. (Chair)
Wright State University
Stefano Bettocchi, M.D.
University of Bari
Keith Isaacson, M.D.
Harvard Medical School
Brad Senstra, M.H.A.
Seattle Reproductive Medicine

Needs Assessment and Description
Technological advances coupled with patient preference and economic considerations increasingly favor office hysteroscopy relative to the operating room setting. However, few OB/GYN’s and reproductive endocrinologists perform diagnostic office hysteroscopy and still fewer perform operative office hysteroscopy. The ASRM 2018 gap analysis and needs assessment identified as a need to implement technology into clinical care and how to assess utility and use of new technology in your practice to optimize patient care. This symposium will address core components of successful, safe, and satisfying care helping to bridge the gap from the OR to the office. Critical factors contributing to these goals include preoperative management, access to technology, surgical technique. Additional opportunities relate to analgesia, staff and patient expectations, and reimbursement. This session is designed for reproductive endocrinologists, obstetrics and gynecologists, nurse practitioners, nurses, administrative staff, and all allied health professionals working in clinics.

ACGME Competency
Medical Knowledge
Patient care

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss core components needed to perform safe office hysteroscopy.
2. Summarize critical factors that address from the preoperative management of patients, access to technology, surgical technique, analgesia, staff, patient expectations, and reimbursement.
Non-invasive preimplantation genetic testing (NIPGT): Is it applicable for ART practice?

Svetlana Rechitsky, Ph.D. (Chair)
Reproductive Genetic Innovations
Dagan Wells, Ph.D., I.V.I., R.M.A.
University of Oxford
Carlos Rubio, Ph.D.
Igenomix

Needs Assessment and Description
Recent attempts have been made to perform non-invasive preimplantation genetic testing (NIPGT) by examining embryo-derived DNA in either blastocoel fluid or spent culture medium. While aspiration of blastocoelic fluid is less invasive than trophectoderm biopsy, it is not completely non-invasive, and its accuracy remains to be adequately demonstrated. Examining cell free DNA in spent culture medium is non-invasive. However, data for this approach are preliminary, and many limitations and problems have yet to be overcome. This session will cover diagnostic implications of NIPGT, potential approaches for NIPGT, and adjustments needed for molecular methods to test small for amounts of embryonic DNA. The target audience for this session is obstetrics and gynecologists, specialty physicians, laboratory scientists, laboratory technologists, geneticists, genetic counsellors and legal advisors.

ACGME Competency
Practice-based Learning and Improvement
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss the expected diagnostic implications of NIPGT.
2. Describe the potential approaches for NIPGT, based on testing blastocoel fluid and spent culture medium.
3. Analyze the molecular methods adjusted to testing of an extremely small amount of embryonic DNA from the blastocoel fluid and spent culture medium.
INTERACTIVE SESSIONS

Monday, October 14, 2019  
1:30 pm - 2:30 pm

INTERACTIVE SESSION

Counseling Patients on Mosaicism

JoRene Bigler-Vollman, R.N., M.S.N. (Chair
Fertility Centers of Illinois  
Lisa A. Rinehart, J.D., R.N.
LegalCare Consulting, Inc.
Andria G. Besser, M.S., C.G.C.
New York University Langone Fertility Center

Needs Assessment and Description

With the advancement of Preimplantation Genetic Testing (PGT), clinicians have the ability to detect aneuploidy and known genetic diseases in order to prevent unhealthy embryos from being transferred to the uterus. However, controversy is growing regarding the disposition of mosaic embryos. Should they be discarded? If the patient has no other viable embryos, should these embryos be transferred in hopes for a normal pregnancy? What will be the clinical phenotype of a mosaic embryo? There is a great need for quality patient education and effective counseling regarding PGT and mosaicism due to these game changing questions regarding the viability of mosaic embryos. This course will cover legal implications, complications, pros and cons, and counseling of patients regarding the transfer of mosaic embryos. The target audience it is designed for includes physicians, scientists, nurses, legal professionals, genetic counselors, practice administrators, and allied health professionals to review issues associated with mosaic embryos.

ACGME Competency

Patient Care  
Interpersonal and Communication Skills  
Professionalism

Learning Objectives

At the conclusion of this session, participants should be able to:

1. Demonstrate an understanding of mosaicism.
2. Review mosaicism and complication of transferring to the uterus.
3. Identify future legal implications of transferring mosaic embryos and the birth of a child.
4. Debate the pros and cons of transferring mosaic embryos.
5. Counsel patients regarding PGT and mosaicism.
Best Practices in Miscarriage Management

Courtney Schreiber, M.D. (Chair)
University of Pennsylvania
Sarah Horvath, M.D.
University of Pennsylvania
Sarita Sonalkar, M.D., M.P.H.
University of Pennsylvania
Vanessa Dalton, M.D., M.P.H.
University of Michigan

Needs Assessment and Description
Miscarriages affects up to 5% of the reproductive population. As women delay childbearing, the incidence of miscarriage is increasing. ASRM identified the evaluation and management of miscarriages as an educational need. This session reviews common practices for medical and surgical management of miscarriage, including updates to best practices, myth-busting, and new evidence for superior medical management regimens. Additionally, we discuss emerging evidence regarding Rh immunoglobulin use in early pregnancy and examine methods for integration of manual vacuum aspiration. Physicians, researchers, clinic managers, nursing, and clinic staff will find this session valuable.

ACGME Competency
Patient Care
Systems-based Practice
Medical Knowledge
Practice-based Learning

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Integrate evidence-based regimens for medical management of miscarriage.
2. Discuss preferences for medical or surgical management of miscarriage.
4. Discuss emerging data in threshold for Rh sensitization in early pregnancy.
Tuesday, October 15, 2019
1:30 pm - 2:30 pm

INTERACTIVE SESSION

Medical and Lifestyle Treatment Options in PCOS, More Than Just Metformin

Nanette Santoro, M.D. (Chair)
University of Colorado, Denver
Anuja Dokras, M.D., Ph.D.
University of Pennsylvania Perelman School of Medicine
Heather G. Huddleston, M.D.
University of California, San Francisco

Needs Assessment and Description
Women with PCOS struggle with lifelong concerns including a propensity for obesity, diabetes, hirsutism, and infertility. Comprehensive lifestyle and medical treatments should be undertaken across the lifespan from adolescence through the reproductive years. Thus, an educational need has been identified to raise recognition of the complexities of PCOS presentation and individual needs, manage symptoms, and institute prevention early in a patient’s care to potentially enhance overall patient well-being. Topics to be discussed during this session include medical management of the symptoms of PCOS including benefits of lifestyle management, first line therapies for adolescent girls with PCOS, and determining the need for emotional support for patients suffering with PCOS. Additionally, cases will be presented to demonstrate evidence-based patient care, which adhere to the international guidelines for management of PCOS. Developed for obstetricians, gynecologists, reproductive endocrinologists, fellows, residents, nurses, and allied health providers, this session helps them to discern the medical and emotional management of PCOS.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:
1. Review medical management of symptoms of PCOS including benefits of lifestyle management.
2. Discuss appropriate first line therapies with adolescent girls with PCOS.
3. Assess the need for emotional well being in PCOS.
Mosaicism Exposed – How to Handle Mosaic Embryos

Timothy N. Hickman, M.D. (Chair)
Houston IVF
Mandy Katz-Jaffe, Ph.D.
Colorado Center for Reproductive Medicine
Cassandra Catoni, M.S., C.G.C.
Ovation Fertility
Mike Large, Ph.D.
CooperSurgical

Needs Assessment and Description
Increased granularity of test results for preimplantation genetic testing for aneuploidy (PGT-a) may allow for better prioritization of embryos for future frozen embryo transfer cycle. The additional information may be difficult to interpret, increasing the challenge of an already complex discussion with patients. In the 2018 ASRM gap analysis and needs assessment, the CME committee identified as a need, better understanding of PGT-A, transfer of mosaic embryos, and patient understanding of mosaic embryos. We will address the challenges of counseling patients about their mosaic embryos, provide insight into how to interpret the PGT-a report, translate the information for a discussion with your patient, and provide updated data on outcomes of transferring mosaic embryos. This session is designed for physicians, embryologists, nurses, genetic counselors, mental health professionals, legal professionals, and administrative staff.

ACGME Competencies
Patient care
Medical Knowledge
Practice-Based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the challenges facing clinicians and embryologist as we counsel patients what to do with their mosaic embryos.
2. Describe current PGT technologies including appropriate interpretation of the data and what that means for patients.
3. Summarize updates on outcomes of transferring mosaic embryos.
Beyond Disclosure: The Psychological, Social and Legal Implications of Intentional and Unintentional Donor Identity

Claudia Pascale, Ph.D. (Chair)
Institute for Reproductive Medicine and Science at Saint Barnabas
Judith Daar, J.D.
Chase College
Heidi Hayes, M.A.
California Cryobank
Neha Kumar, Sc.M.
Invitae

Needs Assessment and Description
As stated in the ASRM 2018 Ethics Committee document, “An important question in gamete and embryo donation is whether donor-conceived persons should be informed about the facts of their conception and, if so, how much information should be revealed.” Today, discovering that one is donor-conceived or discovering the name of donor-conceived offspring or half-siblings is as simple as spitting in a tube. This interactive session will begin a discussion to address questions of how to approach this issue today and what to do about donations of the past from a psychological, ethical, and legal perspective. This session is for physicians, embryologists, nurses, mental health professionals, genetic counselors, legal professionals, and administrators.

ACGME Competencies
Patient Care
Professionalism
Interpersonal and Communication Skills

ACGME Interprofessional Competencies
Values/Ethics for Interprofessional Practice

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Summarize the psychological issues for offspring, donors and recipients in “forced” disclosure.
2. Define ethical and legal issues for ART programs, sperm and egg banks, and embryo donation programs for present and past matches.
3. Identify potential legal issues and responsibilities regarding forced disclosure for ART programs and gamete banks.
4. Describe possible remedies to the problem of “forced disclosure” to all parties concerned.
**Insights from Vertebrate Model Reproductive Organ Regeneration: How Do We Unlock Our Regenerative Potential**

Kyle E. Orwig, Ph.D. (Chair)
*University of Pittsburgh*
James R. Monaghan, Ph.D.
*Northeastern University*

**Needs Assessment and Description**
One of the hallmarks of regenerative medicine is the ability to use a patient’s own cells to regenerate lost tissue or organs. Human adult male and female sex organs have limited potential to regenerate following loss of gamete precursors; however, some lower vertebrates are able to regenerate their reproductive tissue and organs such as ovaries. Understanding how these unique organisms are able to regenerate their reproductive tissue may provide insight into developing novel regenerative medicine therapies for human patients. This interactive session will provide insight to interested researchers, scientists, physicians, and other clinical and allied health professionals about how regenerative medicine could be deployed in the fertility clinic. The presentation will also provide fundamental information on how a unique vertebrate species, the axolotl, regenerates its reproductive organs.

**ACGME Competency**
Medical Knowledge

**Learning Objectives**
At the conclusion of this session, participants should be able to:

1. Discuss the impact of chemotherapy and radiation treatments on fertility.
2. Describe experimental stem cell-based therapies for treating infertility caused by medical treatments.
3. Review how a unique vertebrate species regenerates its reproductive tissue.
4. Examine similarities between axolotl and human reproductive organ formation to identify differences in regenerative potential in axolotl versus humans.
Home Sperm Testing: What is Available, Limitations, and Opportunities

Natan Bar-Chama, M.D. (Chair)
Reproductive Associates of New York
Michael Eisenberg, M.D.
Stanford University
Benjamin Leader, M.D., Ph.D.
ReproSource Inc.

Needs Assessment and Description
A knowledge gap exists between several FDA approved home sperm screening tests and physicians' understanding of the different techniques being utilized. Male home fertility testing is emerging as a tool commonly used by couples early in their fertility journey. Thus, it is important for physicians to better appreciate how this opportunity can be optimized. This presentation will be a comprehensive analysis of the numerous available home sperm testing tools by focusing on each one’s technology, accuracy, and limitations. The target audience for this session includes urologists, reproductive endocrinologists, scientists, laboratory clinicians, nurses, and clinic staff.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Review available home sperm testing technologies.
2. Develop competency in the ability to counsel patients appropriately regarding results of each technique.
3. Describe the difference between sperm home testing and home semen collection, along with the pros and cons of each technique.
4. Summarize how these tools can be utilized to engage infertile couples early in their path to family building.
Cervical Agenesis-Hysterectomy vs Utero-Vaginal Anastomosis

Stephanie J. Estes, M.D. (Chair)
Penn State
Bala Bhagavath, M.B.B.S.
University of Rochester
Leslie Coker Appiah, M.D.
University of Colorado Denver School of Medicine – Anschutz Medical Campus

Needs Assessment and Description
Historically, loss of reproductive capacity was assumed and accepted under certain conditions including congenital absence of uterus. Today, this concept is being challenged with the advent of innovative surgeries such as uterine transplantation. There are many less invasive and innovative techniques developed and advocated for other uterine anomalies including congenital absence of the cervix and/or vagina. Traditionally, the symptomatic patient with hematometra due to this outflow tract obstruction has been managed with removal of the uterine body. However, in the past decade, attempts at conserving uterine function have been made with innovative techniques including utero-vaginal anastomosis. There is debate as to whether this is effective and even appropriate. ASRM identifies advances in emerging technologies for fertility preservation as an educational need. This presentation will discuss surgical methods available for the management of cervical agenesis, summarize pros and cons of conserving the uterine body while managing the hematometra, and explain the advantages and disadvantages of removing the uterine body for the management of hematometra. The session will serve to educate reproductive endocrinologists, obstetricians/gynecologists, and any medical providers that may be treating women about the condition and the appropriate management options for these patients.

ACGME Competency
Medical Knowledge
Patient Care
Interprofessional Communication

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the various surgical methods available for the management of cervical agenesis.
2. Explain the various potential advantages and disadvantages of conserving the uterine body while managing the hematometra.
3. Discuss the advantages and disadvantages of removing the uterine body for the management of hematometra.
Tuesday, October 15, 2019  
1:30 pm - 2:30 pm

Debate: Measuring AMH: A Useful Investigation in Recurrent Early Pregnancy Loss?

Paul Robert Brezina, M.D., M.B.A. (Chair)  
Fertility Associates of Memphis  
A. Musa Zamah, M.D., Ph.D.  
The University of Chicago  
Sasha A. Krieg, M.D., Ph.D.  
Oregon Health and Science University

Needs Assessment and Description
Endocrine disorders have been frequently linked to recurrent pregnancy loss (RPL). Because embryo attachment and early implantation are controlled by local hormones, endocrine-related pregnancy failures are likely to occur early in gestation. ASRM identified the evaluation and management of recurrent pregnancy loss as an educational need. This session will present in a debate format the evidence for and against including Anti-Mullerian Hormone (AMH) in the work up of RPL and review the endocrinology of RPL. The targeted audience will include physicians, nurses, and counselors who work in the field of RPL.

ACGME Competency
Patient Care  
Medical Knowledge  
Professionalism  
Interpersonal and Communication Skills

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Review the endocrinology of RPL.
2. Discuss and debate the role of AMH in the investigation of RPL.
In Vitro Activation (IVA) for Primary Ovarian Insufficiency: Is it Ready for Prime Time?

Mindy Christianson, M.D. (Chair)
Johns Hopkins University
James H. Segars, Jr., M.D., F.A.C.O.G.
Johns Hopkins University
Cesar Diaz-Garcia, M.D., M.P.H.
IVI London

Needs Assessment and Description
Primary Ovarian Insufficiency (POI) also known as Premature Ovarian Failure, is the premature cessation of ovarian function, which affects 1% of women. In most cases the cause is unknown and, unfortunately, there are currently no effective treatments. Infertility in this group of patients is challenging, as they often desire their own biological children and are most often unsuccessful with controlled ovarian hyperstimulation and in vitro fertilization. According to the 2018 Gap Analysis and Educational Needs Assessment, how to approach fertility treatment in this group of patients was an identified gap and a need for future approaches to treatment was identified. In vitro activation (IVA) is a newly-described technique based on in vitro activation of ovarian tissue fragments by mechanical separation and protein kinase (Akt) stimulation, and as such may represent a paradigm shift for treatment of impaired ovarian function. There have been several live births reported worldwide from IVA. This session will cover the technique of IVA as well as the current status of the IVA treatment modality for women with POI.

This presentation is designed for infertility providers of all levels, physicians, fellows, residents, nurses, embryologists, and all allied health professionals.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:
1. Describe the technique of In vitro activation (IVA).
2. Discuss the current status of the IVA treatment modality for women with POI who desire pregnancy.
Egg and Embryo Banking for Family Building Prior to Advancing Maternal Age: A Patient and Laboratory Perspective

Jennifer Mersereau, M.D. (Chair)
UNC Fertility
Kara N. Goldman, M.D.
Northwestern University
Sangita K. Jindal, Ph.D.
Montefiore Institute for Reproductive Medicine and Health

Needs Assessment and Description
This session will tackle the common questions that patients ask when they consider egg and embryo banking, such as “Is egg or embryo banking for family building purposes prior to advancing maternal age helpful to patients,” and “how do laboratories handle these cases?” Speakers will engage the audience in the best practices for laboratories regarding data collection and reporting of embryo banking, including how patients decide when they have enough eggs or embryos, and whether or not there is there a limit to the number patients should bank. Target audience includes reproductive endocrinologists, reproductive urologists, laboratory personnel, nurses, administrators, genetic counselors, mental health professionals, and allied health professionals that work with advancing maternal age patients.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement
Interpersonal and Communication Skills

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Review best laboratory practices and data management in egg and embryo banking.
2. Summarize best decision-making practices for egg retrieval and embryo number.
Repeated implantation failure – can we learn from endometrial evaluation?

Svetlana Dambaeva, M.D., Ph.D. (Chair)
Rosalind Franklin University of Medicine and Science
Emilio Francisco Fernandez, M.D.
Clinical Las Condes
Udo R. Markert, M.D.
Universitats Klinikum

Needs Assessment and Description
Repeated implantation failure (RIF) of unknown etiology after euploid transfers in otherwise healthy women, represents a significant portion of all RIF, up to 20% based on CDC data, 2015. Recent studies suggest that endometrium testing may reveal immuno-regulatory changes in the uterus related to poorer embryo implantation. Current available tests for evaluation of the endometrium will be discussed at this session. An educational need was identified to review clinical results and the science behind testing the endometrium in women who have had repeated implantation failures. It is important to evaluate factors that are important for a receptive endometrium and evaluate the altered endometrial pattern. This interactive session will discuss the definition, criteria, clinical significance of problem, time options for biopsy, current available tests, follow up testing, and available treatments for RIF. The target audience includes physicians, clinician scientists, laboratory scientists, pathologists, nurses, laboratory technologists, and all allied health professionals.

ACGME Competency
Patient Care
Systems-based Practice
Medical Knowledge
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Summarize recurrent implantation failure by definition, criteria, clinical significance of the problem, and time options for endometrial biopsy study.
2. Assess current available assays for endometrial evaluation in RIF, the need for follow up testing, and the available treatments.
Reproductive Epigenetics and the Mighty Mitochondria

Paul C. Magarelli, M.D., Ph.D. (Chair)
HQA Fertility Centers
Harmony Health, Inc.

Needs Assessment and Description
The role of mitochondrial function on reproductive competencies has traditionally been focused on the oocyte’s decline of mitochondrial activity thereby causing chromosomal abnormalities. A new view is that it is the follicle itself that is the “source” of energy for oocyte function, not the oocyte itself. Focusing support on the mitochondrial function of the granulosa cells of the follicle may indeed improve reproductive outcomes. The educational need for this session was identified in the 2018 ASRM gap analysis and needs assessment to integrate complementary alternative medicine practices into interventions to improve health, wellness, and reproduction. This presentation will explain energy dynamics in the cell, the role of mitochondria, controversies regarding the role of mitochondria on reproduction, and recommend interventions for managing energy potential of gametes and or embryos. The session is designed for physicians, nurses, scientists, and all allied health professionals to improve reproductive outcomes in patients.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Explain the energy dynamics in the cell and whole organism and how the role of mitochondria plays in health and wellness and reproduction.
2. Discuss controversies regarding the role of mitochondria on reproductive competency and outcomes.
3. Summarize and recommend the interventions, both western and integrative, for managing energy potential of the gametes and or embryo.
Debate: Mullerian Classification: ESHRE vs ASRM - Which is Better?

John C. Petrozza, M.D. (Chair)
Massachusetts General Hospital

Samantha Pfeifer, M.D.
Weill Medical College of Cornell University

Artur Ludwin, M.D., Ph.D.
Jagiellonian University

Needs Assessment and Description
Historically, loss of reproductive capacity was assumed and accepted under certain conditions including congenital absence of uterus. Today, this concept is being challenged with the advent of innovative surgeries such as uterine transplantation. There are many less invasive and innovative techniques developed and advocated for other uterine anomalies including congenital absence of the cervix and/or vagina. Traditionally, the symptomatic patient with hematometra due to this outflow tract obstruction has been managed with removal of the uterine body. In the past decade, attempts at conserving uterine function have been made with innovative techniques including utero-vaginal anastomosis. There is debate as to whether this is effective and even appropriate. Many reproductive endocrinologists are unaware of the surgical approaches and the pros and cons of this option identified in the ASRM gap analysis and needs assessment. This debate designed for physicians, nurses, and all allied health professionals, will discuss surgical methods for the management of cervical agenesis, and the advantages and disadvantages of conserving the uterine body while managing the hematometra.

ACGME Competency
Medical Knowledge
Patient Care
Interprofessional Collaborative Skills

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the various surgical methods available for the management of cervical agenesis.
2. Explain the various potential advantages and disadvantages of conserving the uterine body while managing the hematometra.
Environmental Chemicals and Reproduction: From Knowledge to Action

Jorge E. Chavarro, M.D., Sc.D. (Chair)
Harvard University
Audrey J. Gaskins, Sc.D.
Emory University
Linda Guidice, M.D., Ph.D.
University of California, San Francisco

Needs Assessment and Description
The American Society for Reproductive Medicine (ASRM) 2017 gap analysis identified as a need an update on current knowledge on environmental factors affecting fertility. This interactive session will directly address this gap by providing an update on emerging literature on novel environmental threats to reproduction that reproductive medicine specialists need to know for patient education. This session is targeted for clinical and allied health professionals that interact with patients who are in the reproductive process.

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify the most important sources of air pollution and their impact on female and male fertility.
2. Identify the most important sources of human exposure to pesticides and their impact on female and male fertility.
3. Describe the emerging literature on how technologies used for power generation may impact human reproduction.
Wednesday, October 16, 2019
1:30 pm - 2:30 pm

INTERACTIVE SESSION

**Family Planning Fellows Showcase: Frontiers in Complex Family Planning**

Maureen Baldwin, M.D., M.P.H.
Oregon Health and Science University
Andrea H. Roe, M.D., M.P.H.
University of Pennsylvania
Erica P. Cahill, M.D., M.S.
Stanford University
Nora Doty, M.D., M.C.R.
Oregon Health and Science University

**Needs Assessment and Description**

Fellowship training in complex family planning includes a research component. The fellows are asked to do research on topics where little research exists and therefore the demand for outcomes data is needed. In this session three fellows, who recently graduated, will share their research outcomes on the topics of pregnancy intendedness after miscarriage, novel strategies for on-demand contraception, and the effect of progestin on mood symptoms and cortisol levels in hair. This classic panel presentation targets physicians, nurses, mental health professionals, counselors, fellows, and residents to educate participants on the latest research about complex family building.

**ACGME Competency**

Practice-based Learning and Improvement
Medical Knowledge

**Learning Objectives**

At the conclusion of this session, participants should be able to:

1. Identify characteristics of women who will prefer contraception after miscarriage.
2. Describe pregnancy outcomes after novel oral on-demand contraception.
3. Compare mood outcomes after intrauterine progestin.
SURGICAL VIDEO TUTORIAL

**Surgical Video Tutorial: Innovations in Surgical Fertility Preservation**

John C. Petrozza, M.D. (Chair)
Massachusetts General Hospital
Kutluk H. Oktay, M.D., Ph.D.
Yale University
Mindy S. Christianson, M.D.
Johns Hopkins University

**Needs Assessment and Description**
ASRM has also determined that, even though there is a significant role of reproductive surgery in appropriately selected patients, there is a relative insufficiency of training in advanced laparoscopic, endoscopic, and microsurgical skills. It has been reported that one in five graduating REI trainees believe that additional surgical training would augment their skill set. This interactive video session will feature video footage of surgical cases reviewing optimal methods and approaches for ovarian and uterine fixation, techniques for partial oophorectomy for ovarian tissue cryopreservation, and orthoptic approaches for ovarian tissue transplantation. This session is designed for the reproductive endocrinology and infertility specialist and general obstetrics and gynecologist who desires to enhance their surgical experience and knowledge of laparoscopic skills.

**ACGME Competency**
Practice-based Learning and Improvement
Patient Care
Medical Knowledge

**Learning Objectives**
At the conclusion of this session, participants should be able to:

1. Discuss ovarian and uterine transposition techniques: laparotomy; robotic and traditional laparoscopy by viewing case presentations.
2. Summarize ovarian tissue harvesting techniques for ovarian tissue cryopreservation for fertility preservation.
3. Describe options for transplantation of thawed ovarian tissue to optimize follicular development.
SYMPOSIA

Monday, October 14, 2019
4:15 pm - 5:30 pm

ABOG - Kenneth Ryan Ethics Symposium: Ethics in Embryo Research: In Consideration of Patients, Progeny, and Professional Norms

Supported by a 2013 endowment from the American Board of Obstetrics and Gynecology

Alto Charo, J.D. (Chair)
University of Wisconsin - Madison
Ben Hurlbut, Ph.D.
Arizona State University
Feng Zhang, Ph.D.
The Broad Institute

ACGME Competency
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe formal regulatory approaches toward germline editing in the US and other developed countries.
2. Summarize ongoing governance deliberations at the World Health Organization.
3. Discuss embryo research from the perspective of emerging technologies.

Needs Assessment and Description
Rapid advances in research involving human embryos, including developments in germline genome editing with potential heritable implications, raise a myriad of questions traversing scientific, social, political, legal, and ethical realms. This presentation will frame the current debate over embryo research from the perspectives of emerging technologies, developing governance structures, and societal concerns for patient and offspring protection. Overarching ethical principles will guide discussion of embryo research and its potential to transition from the mind’s eye to clinical applications. This session is for clinicians, researchers, scientists, legal professionals, and allied health professionals.
Are Specialized Sperm Function Tests Clinically Useful?

Armand Zini, M.D., F.R.C.S.C. (Chair)
McGill University
Sandro Esteves, M.D., Ph.D., M.Sc.
Campinas, Brazil
Douglas T. Carrell, Ph.D.
University of Utah School of Medicine

Needs Assessment and Description
Advanced sperm function tests have demonstrated some value in predicting reproductive outcomes and guiding therapeutic decisions. With the advent of new sperm function markers and further refinements in assisted reproduction, a re-evaluation of these tests is needed per ASRM 2017 gap analysis and needs assessment. Recently, in order to optimize ICSI pregnancy outcomes, clinicians have proposed utilizing testicular rather than ejaculated sperm for ICSI in those couples with poor sperm quality, particularly, sperm DNA fragmentation. The rationale for this approach is that in infertile men, testicular sperm have lower levels of damage than ejaculated sperm because sperm defects, such as, DNA fragmentation are presumed to occur in the post-testicular environment. Although data on the clinical value of sperm function tests are promising, there are too few studies to make firm recommendations for clinical practice. This session will discuss the biological basis of specialized sperm function tests, describe the clinical utility of specialized sperm function tests, and summarize the role of testicular sperm retrieval in infertile men with abnormal sperm function. The target audience includes physicians, nurses, and allied health professionals.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss the biological basis of specialized sperm function tests.
2. Describe the clinical utility of specialized sperm function tests.
3. Summarize the role of testicular sperm retrieval in infertile men with abnormal sperm function.
New Updates on Therapies for Infertility in Polycystic Ovary Syndrome (PCOS)

Juha Tapanainen, M.D., Ph.D. (Chair)
University of Helsinki, Finland
Richard S. Legro, M.D.
Penn State College of Medicine
Joop B.E. Laven, M.D., Ph.D.
Erasmus University

Needs Assessment and Description
The international Guidelines for diagnosis and treatment in PCOS was developed by an international committee to meet the needs of this diverse population and will be introduced at the 2019 ASRM Annual Congress and Expo. Translating these guidelines into clinical care will be an important component of improving care in PCOS patients. This symposium is designed to assist clinicians with understanding and using the guidelines to effectively chose between different treatment options for patient with PCOS. The target audience is physicians, nurses, mental health professionals, and clinic staff.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:
1. Discuss different ovulation regimens in PCOS.
2. Demonstrate the ability to chose between treatment options as well as identifying the risks and benefits of each.
Management of Infertility in Low Resource Settings

Christopher Herndon, M.D. (Co-chair)
University of Washington
Julia V. Johnson, M.D. (Co-chair)
University of Massachusetts Medical School
Sheryl Vanderpoel, Ph.D.
Population Council, W.H.O. (retired)
Kevin J. Doody, M.D.
CARE Fertility
Melissa Harmon, R.N.
CARE Fertility

Needs Assessment and Description
It has been estimated that only a quarter of infertile couples in the United States can sufficiently access infertility care. Globally, that percentage is less than 5%. In 2015, ASRM launched the Access to Care movement as a collaborative call to action for universal access to reproductive care through education, research, clinical innovation, and outreach. This symposium will discuss barriers that limit access to care and evidence-based clinical approaches to optimize management of infertility in challenging resource constrained settings. The presentation will describe psychosocial impact associated with involuntary childlessness, identify factors that contribute to disparities in access to infertility care, review strategies to optimize clinical management of infertility in resource-constrained settings, and examine current data for emerging approaches to lower cost and complexity assisted reproductive technologies such as intravaginal culture.

ACGME Competency
Patient Care

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe psychosocial impact associated with involuntary childlessness in patients from lower resource, and often socioculturally diverse, communities.
2. Identify factors contributing to disparities in access to infertility care in both national and global settings.
4. Examine current data for emerging approaches to lower cost and complexity assisted reproductive technologies such as intravaginal culture.
SYMPOSIA

Monday, October 14, 2019
4:15 pm - 5:30 pm

SYMPOSIUM

The New Modern Family: Family-building and Co-parenting in the 21st Century

Linda Kondilis, Psy.D. (Chair)
Private Practice
Laurie McKenzie, M.D.
Baylor College of Medicine
Heather Ross, J.D.
Ross & Zuckerman, LLP

Needs Assessment and Description
Reproductive endocrinology practices, mental health professionals, and attorneys are encountering patients with a variety of nontraditional family structures including families with multiple parents, polyamourous groups, or known donor arrangements where the donor has a parental role. Creating an inclusive and legally valid environment for the multiple parenting arrangements is critical for a family’s well-being.

In this session we will review methods for creating inclusivity, describe medical, psychological, and legal approaches, and discuss the difference between assumptions and research regarding multi-parent child rearing. This symposium will describe important nuances in the contemporary social framework from a medical, mental health, and legal perspective to help physicians, nurses, legal professionals, mental health professionals, and administrators work more sensitively and knowledgeably with polyamory groups and multiple parenting arrangements.

ACGME Competency
Patient Care

Learning Objectives
At the conclusion of this session, participants should be able to:

2. Describe methods for creating inclusivity with diverse family structures within a practice setting.
3. Evaluate the difference between assumptions regarding multi-parent child rearing and empirical evidence research.
Ovarian Tissue Cryopreservation and Transplantation: 20 Year of Progress

Kutluk H. Oktay, M.D., Ph.D. (Chair)
Yale University School of Medicine
Isabelle Demeestere, M.D., Ph.D.
University Libre de Bruxelles
Nao Suzuki, M.D., Ph.D.
Marianna University

Needs Assessment and Description

Ovarian tissue cryopreservation and transplantation technology has shown tremendous progress in the last 20 years. As a result, it has recently been accepted as an established procedure by many societies, and there is a renewed interest in the procedure. This session is designed will review the scientific evidence and clinical data behind the development of ovarian tissue cryopreservation and transplantation, describe the contemporary methods of ovarian tissue cryopreservation and transplantation, and will summarize the areas of future development. The target audience for this presentation includes laboratory personnel, nurses, embryologists, REI specialists and reproductive surgeons.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Review the scientific evidence and clinical data behind the development of ovarian tissue cryopreservation and transplantation.
2. Describe the contemporary methods of ovarian tissue cryopreservation and transplantation.
3. Summarize the areas of future development.
How to Build High Functioning Teams in the Embryology Lab

Blake R. Welch, M.B.A. (Chair)
Chicago IVF
David Ball, Ph.D.
Seattle Reproductive Medicine

Needs Assessment and Description
The presentation will present concepts and offer examples of how laboratory personnel can be successfully identified, hired, trained and assessed for competency. In 2018, the ASRM gap analysis and needs assessment identified as a need to develop tools for managers to be able to assess the appropriate personnel to hire for the laboratory and best methodology to train them. This course is designed to provide physicians, nurses, managers, supervisors, administrators, and staff from all levels and sized practices with tools they can use in their practices to assess competency, motivate personnel, proper communication to patients, what is needed to produce the best conditions for embryo development, and when is a good time to introduce new procedures and techniques to lab personnel.

ACGME Competency
Practice-based Learning and Improvement
Professionalism
Teams and Teamwork

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Assess competency in escalating skill set procedures.
2. Discuss how to motivate personnel to achieve their highest capability.
3. Determine when new techniques and procedures may be introduced into the laboratory.
4. Review what laboratories need to produce the best conditions for embryo development.
5. Discuss how to properly communicate to patients on what happens in the lab.
SYMPOSIA
Monday, October 14, 2019  
4:15 pm - 5:30 pm

SYMPOSIUM

The Endometrium and Recurrent Pregnancy Loss
Sony Sierra, M.D., M.Sc., F.R.C.S.C. (Chair)
TRIO Fertility
Steven L. Young, M.D., Ph.D.
UNC School of Medicine
Arri Coomarasamy, Ph.D.
University of Birmingham

Needs Assessment and Description
Almost 50% of women and couples with recurrent early pregnancy loss have no clear diagnosis. This session will address what is known in regards to endometrial influence on recurrent early pregnancy loss including current knowledge with respect to molecular techniques to assess chronic endometritis, progesterone supplementation, and the role of the microbiome in predicting live births. The intended audience will include physicians, scientists, nurses, mental health professionals, and all clinic staff involved in the care of couples with recurrent early pregnancy loss.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss the current evidence for endometrial support with progesterone.
2. Review new molecular techniques for the assessment of the endometrium including haematoxylin and eosin staining (H&E) and CD 138 immunohistochemistry.
3. Assess the microbiome to predict live births.
ESHRE Symposium: Looking Beyond the XX Factor:

Jackson Kirkman-Brown, M.B.E., Ph.D. (Chair)
University of Birmingham
Adelheid Soubry, Ph.D.
University Leuven

Needs Assessment and Description
When considering reproductive potential, little focus has been directed toward men and even less on the outcomes beyond successful fertilization. New evidence suggests that paternal genetics and sperm DNA quality can influencing the risk of miscarriage and epigenetic factors can affect subsequent children and even grandchildren. New studies continue to emerge regarding both of these issues. However, firm recommendations for decreasing miscarriage risk cannot yet be made because of a lack of well-defined criteria and other methodological inconsistencies of these studies. For epigenetic inheritance, no useful tests exist, but considerations have been given to lifestyle and health considerations. This session will discuss available and potential diagnostic options and their clinical implications. The audience will be encouraged to ask questions and discuss their thoughts about post-conception paternal effects. This target audience includes anyone involved in reproductive medicine.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the biological and clinical implications of sperm DNA quality in miscarriage.
2. Identify paternal sperm risk factors for idiopathic miscarriage.
3. Appraise current diagnostic options related to paternal causes of miscarriage.
4. Describe the biological and clinical implications of paternal epigenetic factors in multi-generational offspring health.
5. Define paternal lifestyle and behaviors that may have implications for offspring health.
ISAR Symposium: Infertility & Tuberculosis

Hrishikesh Pai, M.D., M.Sc. (Chair)
Bloom IVF Lilavati Hospital
Jaideep Malhotra, M.B.B.S., M.D.
Rainbow IVF
Madhuri Patil, M.D.
Patil Fertility and Endoscopic Clinic
Firuza Parikh, M.D., D.N.B., Ph.D.
Jaslok Hospital and Research Centre
Rishma Dhillon Pai, M.D.
Lilavati Hospital

Needs Assessment and Description
Tuberculosis (TB) remains a major health problem in the developing world, where genital TB is responsible for a significant proportion of the couples presenting with infertility. With the globalization and movement of patients, this problem is no longer confined to the developing world. As a result, clinicians need to be educated about infertility related to genital TB. This course will compare different diagnostic modalities used by clinicians to identify patients with genital TB, summarize the impact of TB on patients’ fertility and overall health, and discuss management modalities which can be used to optimize patient outcomes. The session is designed for obstetric and gynecologists, reproductive endocrinologists, fellows, residents, nurses, and social workers.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify a case of genital tuberculosis.
2. Compare the different diagnostic modalities and know their clinical application.
3. Review the impact of tuberculosis on the genital tract in both men and women, and the impact on their overall health.
4. Analyze the management modalities to optimize patient outcomes.
MEFS Symposium: Controversies in ART

University of South Alabama
Richard J. Paulson, M.D., M.S.
University of Southern California
Bruce Shapiro, M.D., Ph.D., H.C.L.D.
Fertility Center of Las Vegas

Needs Assessment and Description
Highly controversial topics in reproductive medicine today include preimplantation genetic testing for aneuploidy, compulsive day-5 embryo transfer and freeze-all policies. Debates on the relative merits of these practices are ongoing and a need has been identified to obtain more clinical research data on these topics. This session will identify clinical conditions which favor day 3 versus day 5 transfers, discuss pros and cons of PGT-A, and interpret the evidence on freeze-all policies. The presentation is designed to critically appraise the medical evidence and offer a balanced view on each of these topics. The target audience includes reproductive endocrinologists, embryologists, scientists, nurses, mental health professionals, and genetic counselors.

ACGME Competency
Patient Care
Practice-based Learning and Improvement
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify the clinical conditions which favor day 3 and day 5 transfers.
2. Discuss the pros and cons of PGT-A.
3. Interpret the evidence on the freeze-all policy.
SYMPOSIUM

Monday, October 14, 2019

SYMPOSIUM

SSR Symposium: Fertility Preservation- Existing and Emerging Fertility Preservations Options for Women and Men

Mary B. Zelinski, Ph.D. (Chair)
Oregon Health & Sciences University
So-Youn Kim, Ph.D.
University of Nebraska Medical Center
Kyle E. Orwig, Ph.D.
University of Pittsburgh

Needs Assessment and Description
Fertility preservation is recognized as an important pre-treatment consideration for patients diagnosed with malignancies and other life-threatening conditions. While cryopreservation of sperm, oocytes and embryos remains the standard of care, many other innovative techniques are emerging as options for these patients. Awareness of fertility preservation techniques for both women and men has been identified as an educational need by the ASRM Continuing Medical Education Committee. This symposium will outline emerging fertility preservation options including cryopreservation of ovarian and testicular tissue, ovarian transplantation, precision medicine approaches, and stem cell therapy. Each fertility preservation method will be reviewed to determine benefits and which option best fits into the treatment plan for patients prior to or after chemotherapy. The target audience for this symposium includes obstetrics and gynecologists, reproductive endocrinologists, andrologists, embryologists, scientists, nurses, mental health professionals, and clinic staff interested in fertility preservation options.

ACGME Competency
Systems-based Learning
Medical Knowledge
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe new methodologies developed for fertility preservation in the ovary and testis.
2. Determine benefits; success rate, amount of restoration of fertility, and endocrine hormones, of each fertility preservation method.
3. Evaluate how a fertility preservation option fits into treatment for patients prior to or after chemotherapy or due to another infertility issue.
KY Cha Symposium in Stem Cell Technology and Reproductive Medicine: Germline and Mitochondrial Gene Therapy

Supported by the Asia-Pacific Biomedical Research Foundation

Charles A. Easley, Ph.D., M.S. (Chair)
University of Georgia
Ina Dobrinski, Ph.D., D.V.M.
University of Calgary
Hugh S. Taylor, M.D.
Yale University

Needs Assessment and Description
Regenerative medicine research continues to expand, and the use of stem cells to treat reproductive disorders represents a future clinical therapy option. Understanding how stem cells can be utilized to treat reproductive disorders is of major importance to driving stem cell-based therapies to the clinic. This symposium addresses the educational need identified in the ASRM gap analysis and needs assessment by highlighting novel stem cell-based approaches for treating reproductive disorders including endometrial regeneration, reconstruction of uterine abnormalities, and mesenchymal stem cell therapies for prolapse and incontinence in children. We will discuss state of the art stem cell-based therapies, summarize clinical impacts of current therapies, and examine therapies to improve fertility outcomes of patients. The session is designed for physicians, embryologists, scientists, nurses, geneticists, and all allied health professionals in reproductive medicine.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Examine state-of-the-art stem cell-based therapies for reproductive disorders.
2. Assess clinical impacts of current stem cell-based therapies.
3. Discuss potential for current therapies to improve fertility outcomes.
Access to Fertility Preservation Care: From Policy to the Patient

Akanksha Mehta, M.D., M.S. (Chair)
Emory University School of Medicine
H. Irene Su, M.D., M.S.C.E.
University of California
Joyce Reinecke, J.D.
Alliance for Fertility Preservation
Jim M. Dupree, IV, M.D., M.P.H.
University of Michigan

Needs Assessment and Description
Access to fertility preservation is critically important to patients with benign and malignant conditions. This access is often limited by a number of barriers including insurance coverage, geographically limited clinical expertise, and lack of knowledge about fertility preservation techniques and options. This course will cover the state of regional and national health policy efforts to improve access to care and explore barriers in access to fertility preservation and the means to break down these barriers. The target audience consists of practicing infertility clinicians, including REI, reproductive urology, patient advocates.

ACGME Competency
Patient Care
Systems-based Practice

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Explain the current state and national policies for fertility preservation.
2. Review the barriers to fertility preservation for men and women.
Quality Management in Human ART: Time to Revisit the Issues

Barry R. Behr, Ph.D. (Chair)
Stanford Fertility and Reproductive Medicine Center
Mitchel C. Schiewe, Ph.D., M.S.
Ovation Fertility
Dawn A. Kelk, Ph.D., H.C.L.D.
Yale Fertility Center

Needs Assessment and Description
Quality control practices are an imperative part of a laboratory’s quality management (QM) system. Daily data collection events can become mundane and tedious to staff pressed by a busy IVF lab schedule. Effective quality control practices in the lab insure that a pattern of out-of-range values or potentially problematic symptoms are not being ignored, before patient samples are put at risk of suboptimal care or possible loss. An educational need identified by ASRM is to review best practices on data entry and reporting of results to improve patient outcomes. In this symposium, we will discuss methods to detect patterns of sub-optimal lab functioning as well as innovative methods for remote data collection and alarm monitoring systems, the importance of laboratory QC, and how to prioritize QC measures for staff. The target audience includes embryologists, andrologists, reproductive endocrinologists, nurses, laboratory technicians, and clinic staff.

ACGME Competency
Patient Care
Systems-based Practice
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Explain the value of teaching staff the importance of prioritizing QC measures to establish patterns of sub-optimal function and potential default.
2. Review with embryologist and andrologists the importance of laboratory QC and how it can improve patient outcomes.
3. Discuss with embryologist and andrologist innovative remote data collection and alarm monitoring systems that are more comprehensive in the assessment of equipment function.
Implementation of an Embryo Donation Program within Your Practice: Medical, Legal, and Psychological Aspects

Eric A. Widra, M.D. (Chair)
Shady Grove Fertility Center
Angela K. Lawson, Ph.D.
Northwestern University
Nidhi Desai, J.D.
Desai & Miller

Needs Assessment and Description
Supernumerary embryos are a frequent consequence of ART. The most common options for embryo disposition after completion of family building include discarding, donation to research, and donation to another individual or couple. Embryo donation is an under-utilized option and provides a lower cost option for family building. This course will focus on strategies for incorporating embryo donation into your practice. The medical discussion will focus on identification of potential embryo donors and recipients, counseling couples regarding embryo donation as a disposition option, creation of a database for selection including what information is pertinent to share, and fee structures. The mental health discussion will address the unique psychological issues that may arise with embryo donation compared to other methods of third party reproduction. The legal discussion will focus on the issues of informed consent, disclosure, and protection of both donor and recipient couples and their families. This session is for physicians, nurses, laboratory scientists, mental health professionals, legal professionals, genetic counselors, and REI administrators.

ACGME Competency
Patient Care
Medical Knowledge
Systems-based Practice

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify potential embryo donors and embryo recipients within your practice.
2. Develop and use an embryo donation database.
3. Describe the unique psychological issues that arise with embryo donation.
4. Assess the legal ramifications of embryo donation and explore the issues of disclosure and protection.
RESPECT YOUR ENEMY: Marketing your practice within the SART Advertising Guidelines in a competitive market

Sara Mooney, B.A. (Chair)
Seattle Reproductive Medicine
Amy Hall, R.Ph.
Catalyst Healthcare Marketing
Paul C. Lin, M.D.
Seattle Reproductive Medicine

Needs Assessment and Description
Fertility practices aspire to attract and serve as many patients possible with the highest standards of integrity. SART has developed advertising guidelines for its members to keep the market fair, factual and respectful to their competition without making claims that are unsubstantiated. ASRM has identified as an educational need ways to use websites, social media, and patient communication avenues to increase clinic market shares. This session will review SART advertising guidelines and examine strategies for utilizing SART summary reports to market practices within these guidelines. The session will also consider other practice marketing strategies and ways to monitor marketing firms that don’t follow SART guidelines. The intended audience is reproductive managers, physicians, nurses, embryologist and administrators.

ACGME Competency
Interpersonal and Communication Skills
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Review and inform the audience of the SART Advertising Guidelines and the rationale of those guidelines.
2. Utilize your SART clinic summary report and other tools to educate your current or prospective patients in a competitive marketplace.
3. Discuss and recommend marketing strategies for your practice that are in compliance with the SART Advertising Guidelines.
4. Identify options and tools to monitor outside marketing firms that don’t understand SART Advertising Guidelines. What is the responsibility of the clinic?
Fertility Trajectory of Klinefelter Syndrome: From Childhood, Adolescence to Adulthood

Peter Chan, M.D., C.M., M.Sc., F.R.C.S.(C.), F.A.C.S. (Chair)
McGill University
Robert D. Oates, M.D.
Boston University
Darius A. Paduch, M.D., Ph.D.
Weill Cornell Medical College

Needs Assessment and Description
Klinefelter syndrome is the most frequently diagnosed genetic disorder on classical karyotype analysis. Over 90% of men with non-mosaic Klinefelter syndrome are azoospermic and will require surgical sperm extraction with intracytoplasmic sperm injection (ICSI) to have genetic children. Recent studies have generated controversy as to whether young boys and young men with Klinefelter syndrome should have sperm retrieved surgically and cryopreserved for future use with ICSI. On the one hand there is clear evidence of germ cell depletion in testes of boys and men with Klinefelter syndrome, and some studies indicating an age-related decline in the chance of obtaining sperm usable for ICSI. On the other hand surgical sperm retrieval carries significant risks and costs that must be justified prior to offering the procedure to youngsters who may not be ready to consider fertility issues. With the increasing availability of minimally invasive techniques for prenatal genetic diagnosis for pregnancies at risk, it is foreseeable that more patients with Klinefelter syndrome will be identified in childhood. Thus, there is an educational need identified for healthcare professionals in reproductive medicine to be aware of the indication of fertility preservation for these subjects with Klinefelter syndrome. This session will discuss current evidence in the fertility status of patients with Klinefelter syndrome, review barriers to implementing fertility preservation for young patients with Klinefelter syndrome, and summarize the controversies surrounding fertility preservation for young patients with Klinefelter syndrome. The target audience includes physicians, nurses, and allied health professionals.

ACGME Competency
Patient Care
Medical Knowledge
Interpersonal and Communication Skill

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the current evidence suggesting an age-dependent decline in the fertility status of patients with Klinefelter syndrome.
2. Review the bio-psycho-social barriers in implementing fertility preservation for young patients with Klinefelter syndrome.
3. Summarize the controversies around fertility preservation for young patients with Klinefelter syndrome.
Patient-Centered Research in Uterine Fibroids: The COMPARE-UF Experience

Elizabeth A. Stewart, M.D. (Chair)
Mayo Clinic
Sateria Venable, B.Arch.
The Fibroid Foundation
Wanda K Nicholson, M.D., M.B.A., M.P.H.
University of North Carolina
Evan Myers, M.D., M.P.H.
Duke University

Needs Assessment and Description

Uterine fibroids are one of the most common problems in reproductive age women and yet there is relatively little research to guide therapy. Moreover, there has been little patient input research in this key field. Risk and benefits of uterine fibroid treatment has been identified by ASRM as an educational need. This symposium will describe the process used to establish a 9-center comparative effectiveness study of uterine fibroid treatment (COMPARE_UF) and share early results of the study. The target audience includes gynecologists, reproductive endocrinologists, fellows, residents, nurses, and clinic staff involved in the care of patient with fibroids.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the barriers to comparative effectiveness research in uterine fibroids.
2. Discuss findings of the comparative effectiveness of surgical treatments for uterine fibroids.
ASPIRE Symposium: New IVM Approaches for PCOS Patients

Peng Cheang Wong, M.B.B.S, F.R.C.O.G., F.A.M.S. (Chair)
Yong Loo Lin School of Medicine
Duru Shah, M.D. (India)
Gynaecworld Assisted Fertility Center
Thi Ngoc Lan Vuong, M.D., Ph.D. (Indonesia)
University of Medicine at Ho Chi Minh
Budi Wiweko, M.D., Ph.D.
Universitas Indonesia. Jakarta - Indonesia

Needs Assessment and Description
There are ethnic and phenotypic differences in Asian patients with PCOS versus other ethnic groups. In the context of cross-border reproductive care, there is a need for physicians to understand and recognize that these differences exist. Although in vitro maturation (IVM) was introduced many years ago, its clinical application is not extensive. This session will cover a new IVM approach that was developed in Vietnam and will update the audience with the latest guidelines on management of insulin resistance in PCOS patients. The target audience for this presentation is fertility physicians, clinical practitioners, obstetrics and gynecologists, and general practice physicians.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the ethnic and phenotypic differences in Asian PCOS patients.
2. Determine how a new IVM approach may be used for PCOS patients undergoing IVF treatments.
3. Summarize recent guidelines on the management of insulin resistance in patients with PCOS.
ALMER Symposium: Management of mosaic embryos after PGT-A in ART

Newton Busso, M.D., Ph.D. (Chair)
Projeto Alfa
Benjamin Sandler, M.D.
Reproductive Medicine Associates of New York
Carlos E. Sueldo, M.D.
University of California, San Francisco

Needs Assessment and Description
Mosaic embryos have become a challenge to clinicians and ART patients, especially since next generation sequencing (NGS) has become the platform of choice for PGT-A. ASRM has identified this issue as an educational need for several years. Whether to discard, freeze or transfer mosaic embryos in different clinical situations is ultimately a joint decision made by the clinician and the patient after comprehensive counseling. In this session, we will examine the biologic mechanisms involved in the formation of mosaic embryos during ART procedures and elucidate the significance of mosaic embryos as determined by PGT-A. This knowledge will help clinicians make appropriate recommendations to their patients. This presentation is designed for reproductive endocrinologists, embryologists, geneticists, genetic counselors, nurses, legal professionals, mental health professionals, and reproductive medicine administrators.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe the biologic mechanisms involved in generating mosaic embryos during ART procedures.
2. Evaluate the significance of mosaic embryos in ART, so that clinicians can make appropriate recommendations to their patients.
Oocyte maturation in vitro and female fertility preservation

Rong Li, M.D., Ph.D. (Chair)
*Peking University Third Hospital*
Xiaoyan Liang, M.D., Ph.D.
*The 6th Affiliated Hospital of Sun Yat-sen University*
Heng-yu Fan, Ph.D.
*Life Sciences Institute, Zhejiang University*

**Needs Assessment and Description**
Oocytes of high quality are the basis for successful assisted reproductive treatments. Unfortunately, there has been little success in efforts to improve oocyte quality in either clinical practice and basic research settings. A better understanding of emerging technologies and scientific advancements in embryo development to improve oocyte in vitro maturation (IVM) has been identified by ASRM as an educational need. This session will describe basic protocols and the clinical status of IVM technology, review the key molecular mechanism of oocyte IVM, and solicit recommendations to improve IVM methods. This presentation is for physicians, embryologists, scientists, bioethicists, geneticists, nurses, and other professionals interested in oocyte maturation in vitro.

**ACGME Competency**
Medical Knowledge

**Learning Objectives**
At the conclusion of this session, participants should be able to:

1. Explain the basic protocols and clinical status of IVM technology.
2. Review the key molecular mechanism of oocyte maturation in vitro.
3. Recommend strategies to improve IVM system.
FDA Symposium: Reproductive Donor Eligibility and Compliance Update for Reproductive Establishments

Simone P. Porter, M.D., M.P.H. (Chair)
Food and Drug Administration, Center for Biologic Evaluation and Research
Ping He, M.D.
Food and Drug Administration, Center for Biologic Evaluation and Research

Needs Assessment and Description
The Food and Drug Administration (FDA) is responsible for protecting the public health by assuring the safety, effectiveness, quality, and security of human drugs and biologics. Its mission is to ensure that safe, effective drugs and biologics are available to the American people. The Division of Human Tissues, Office of Tissues, and Advanced Therapies within The Center for Biologics Evaluation and Research (CBER) provide regulatory oversight for human cells, tissues, or cellular or tissue-based products (HCT/Ps) such as semen, oocytes, and embryos used in assisted reproductive technology (ART) procedures. This presentation will provide in-depth information about donor eligibility requirements, including donor screening, testing, and donor eligibility determinations. In this session, we will review recently published rulemaking and guidance documents relevant to reproductive HCT/P establishments, discuss the risk-based inspectional approach to prioritizing HCT/P inspections, and provide an overview of inspection data and compliance actions. This session is designed for physicians, nurses, allied health professionals, embryologists, scientists, administrators, and law professionals to educate them on FDA rules and regulations that govern HCT/Ps.

ACGME Competency
Professionalism
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Describe how to make a donor eligibility determination in accordance with existing and recently published rulemaking and guidance documents.
2. Summarize the final rule: revisions to exceptions applicable to certain HCT/Ps.
3. Describe the risk-based inspectional approach to prioritizing HCT/P inspections.
4. Identify the most common deficiencies among reproductive HCT/P establishments.
World Health Organization (WHO) Symposium: Global Call to Action to Enhance Fertility Care
A Non-CME Symposium

James Kiarie, M.B.Ch.B., M.M.E.D (Chair)
World Health Organization

Rachel Snow, Sc.D.
United Nations Population Fund

Dr. Kittipong Sae-Jeng
Thailand Department of Health

Oladapo A. Ashiru, O.F.R., M.B.B.S., M.Sc., Ph.D.
Medical ART Center, Nigeria

David Nitirushwa, M.D.
University Teaching Hospital of Kigali

Dmitry Kissin, M.D., M.P.H.
Centers for Disease Control and Prevention

Needs Assessment and Description
Infertility affects millions of couples globally and is associated with negative social and mental health impacts. However, provision of assisted reproduction services is limited in many settings. Addressing the gap in availability of assisted reproduction services is important to ensure universal access to sexual and reproductive health services for all. Furthermore, professionals involved in sexual and reproductive care often encounter patients with infertility or subfertility and require regular updates on assisted reproduction. The session will focus on the global call to action to address inequalities in the availability of assisted reproduction services. Panelists will discuss how to implement the global call to action in-order to improve access to assisted reproduction services. The session will provide insights into successes, lessons learnt and ongoing challenges as various countries from the Americas, Asia and Africa seeks to strengthen provision of assisted reproductive services as part of Universal Health Care (UHC). This presentation is designed for physicians, nurses, policy makers, administrators, and other health-care professionals involved in caring for patients with infertility, or developing policies related to infertility.

ACGME Competency
Systems-based Practice

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss the global call to action and strategies to enhance availability of assisted reproduction globally.
2. Describe the challenges and opportunities in implementing the call to action at the country and global level.
Wednesday, October 16, 2019
3:45 pm - 5:00 pm

Howard and Georgeanna Jones Endowed Symposium on Assisted Reproductive Technology: Growing Gametes and Embryos; Where Are We Now?

Endowed by a 2010 educational grant from EMD Serono, Inc.

Rebecca Krisher, Ph.D. (Chair)
Colorado Center for Reproductive Medicine
Michelle Lane, Ph.D.
Monash IVF Group
T. Arthur Chang, Ph.D., E.L.D., H.C.L.D.
University of Texas

Needs Assessment and Description
Breakthroughs in gamete and embryo biology are being reported faster than ever. As basic research leads to new technologies, we gain the ability to manipulate in vitro systems and translate new knowledge to clinical application. However, it can be difficult to keep up with the promise and potential of new reports in this area. This interactive session will discuss basic research from the perspective of practical procedures for the laboratory and potential clinical breakthroughs for application in this dynamic field. The intended audience includes clinicians, embryologists, scientists, nurses, managers, and anyone wishing to update their knowledge and ask questions about cutting edge technologies in the area of gametes and embryos.

ACGME Competency
Patient Care
Medical Knowledge
Systems-based Learning
Practice-based Learning and Improvement
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Explain the science and procedures behind recent advancements in the production of gametes from stem cells, and the clinical application of in vitro maturation (IVM) before day 0.
2. Discuss how emerging knowledge of preimplantation embryo physiology may impact the clinical practice of ART between days 1 to 7.
3. Describe the biological implications and potential clinical applications of extended embryo culture in vitro, the production of synthetic blastoids, and trophoblast organoids beyond day 7.
4. Summarize the bioethical debate and regulatory environment concerning investigation and application of gamete and embryo technologies in the US and globally.
SYMPOSIA

Wednesday, October 16, 2019 3:45 pm - 5:00 pm

SYMPOSIUM

Egg freezing - Are you ready for prime time?
Developing and implementing an egg freezing program in your practice

Paul C. Lin, M.D. (Chair)
Seattle Reproductive Medicine
Caroline McCaffrey, Ph.D., H.C.L.D.
New York University Fertility Center
Tamara M. Tobias, N.P.
Seattle Reproductive Medicine
Kimball O. Pomeroy, Ph.D.
The World Egg Bank

Needs Assessment and Description
Egg freezing is prime time in social media, but are clinics prepared? How do you educate patients, provide informed consent, and set realistic expectations regarding success and the reality that they may never need these cryopreserved eggs? This symposium will discuss the details of egg freezing, patient education, utilization of egg banks and implementation in your practice and laboratory. This presentation is designed for physicians, nurses, lab directors, lab technicians, embryologists, and administrators.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss the risks and benefits of egg freezing with patients.
2. Review logistics, the patient experience and program development for these fertile (non-infertile) patients.
3. Summarize lab storage concerns, volumes, additional vitrification training and personnel.
4. Analyze studies of patient outcomes using frozen oocytes and the challenges of an egg bank in tracking those outcomes.
5. Debate if oocyte cryopreservation is a reliable preservation of a woman’s fertility.
Fertility Preservation for Transgender Youth: Special Considerations

Molly B Moravek, M.D., M.P.H. (Chair)
Michigan Medicine
James F. Smith, M.D.
University of California
Gwendolyn P. Quinn, Ph.D.
New York University
Leena Nahata, M.D.
Nationwide Children’s Hospital

Needs Assessment and Description
Approximately 150,000 youth (ages 13-17) in the United States identify as transgender, gender non-conforming, or non-binary with an increasing number of adolescents presenting for gender-affirming hormone therapy. The World Professional Organization for Transgender Health, Endocrine Society, and the American Society for Reproductive Medicine (ASRM) recommend fertility preservation counseling prior to the initiation of gender-affirming hormone therapy; however, there is a paucity of data on the effects of long-term hormone therapy within future reproductive capacity. The shifting paradigm toward treating transgender adolescents with gender-affirming hormones at earlier ages has created a clinical dilemma for fertility specialists, who may not be historically trained to provide fertility care for adolescents or transgender people. Additionally, some transgender youth start puberty blockers in early puberty, a time when the success of established fertility preservation procedures is limited. ASRM identified transgender care as an educational need in 2018. This symposium will focus on fertility preservation counseling and procedures in transgender youth, both transfeminine and transmasculine. The medical discussion will contain the following components: hormonal interventions for transgender youth and logistics of interrupting them for fertility procedures; review of the available literature on the effect of gender-affirming hormone therapy on fertility; and options for fertility preservation in transgender youth, stratified by pubertal stage and stage of gender transition. The mental health discussion will address the unique psychological issues that may arise with discussing fertility with transgender youth compared to adults and cisgender patients. These include inability to visualize a future until transition is complete, challenges in hearing how to refer their natal reproductive parts and capacities, and concerns about romantic partnering and fluid sexual orientation. This session was designed for reproductive endocrinologists, obstetricians, gynecologists, general practitioners, embryologists, andrologists, nurse practitioners, nurses, mental health professionals, social workers, and genetic counselors.

ACGME Competency
Patient Care
Medical Knowledge
Practice-based Learning and Improvement
Interpersonal and Communication Skills

Interprofessional Competencies
Interprofessional Communication
Teams and Teamwork

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Discuss what is currently known (and unknown) about the effect of different methods of gender affirming hormone therapy initiated in adolescence on future reproduction.
2. Describe the unique psychological issues that arise with fertility preservation counseling and procedures in transgender youth.
3. Identify inclusive language terminology for use in discussions or counseling with transgender youth that incorporates acknowledgement of gender dysphoria and body image concerns.
4. Counsel transgender youth at different stages of puberty about available options, including risks and benefits, for fertility preservation.
Novel therapies for the treatment of Asherman syndrome

Fady I. Sharara, M.D. (Chair)
Virginia Center for Reproductive Medicine
James Liu, M.D.
UH MacDonald Women’s Hospital
Carlos Simon, M.D., Ph.D.
University of Valencia

Needs Assessment and Description
Asherman syndrome is an acquired uterine condition characterized by the formation of scar tissue inside the uterus. In many cases the endometrial cavity is obliterated, functional endometrium is lost and sequelae such as secondary amenorrhea, infertility and abnormal placentation occur. Historically, the treatment has been limited to hysteroscopy with lysis of adhesions and it was not uncommon to require multiple surgeries. Unfortunately, surgery is often not curative for this condition despite improvements in surgical techniques. Over the past several years, novel therapies for the treatment of Asherman syndrome have emerged. The ASRM 2017 gap analysis and education needs assessment identified as an educational need the use of stem cells in the management of Asherman syndrome. This course will focus on the various types of medical treatments being developed and used in clinical trials or practice to promote endometrial development and regeneration. Discussion will be focused on the use of immunotherapies such as G-CSF, amniografting and the use of CD133 + Bone Marrow Derived Stem Cell therapy. The biologic plausibility of these treatments will be explored as well as counseling patients on the treatment options available to them at this time. The target audience includes physicians, scientists, nurses, mental health professionals, and counselors.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, the participant should be able to:

1. Describe the clinical challenges posed by Asherman syndrome and the biologic plausibility for different modalities of treatment.
2. Discuss the efficacy and limitations of novel therapeutics for the treatment of Asherman syndrome.
3. Counsel patients on available treatment options.
Risk Management: Patient Education, Compliance, and Consenting

Lindsey McBain, B.A. (Chair)
IVI RMA NJ
Heather Ross, J.D.
Ross and Zuckerman
Brad Senstra, M.H.A.
Seattle Reproductive Medicine
Sue Jasulaitis, M.S.N., R.N.
Fertility Centers of Illinois

Needs Assessment and Description
The Healthcare field requires special management techniques that are not found in other businesses. It is important for the clinical and business units to work together to achieve a successful practice. This course is designed to provide key skills and business knowledge to support a manager from any department in a REI practice to ensure compliance and minimize risk. The target audience for this course consists of physicians, nurses, legal professionals, mental health professionals, and administrators.

ACGME Competency
Interpersonal and Communication Skills
Professionalism

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Identify best practices of how and when to advise patients to consult with an attorney when engaging in assisted reproductive technology.
2. Examine a clinic’s potential liability for failing to protect their patients’ legal interests when participating in third party reproduction.
3. Discuss business knowledge that will assist managers to minimize risk in clinics.
AMMR Symposium: Strategies in Ovarian Stimulation Protocols to Improve Results in Assisted Reproduction

Jose Luis Castro Lopez, M.D. (Chair)
Prodigy
Antonio M. Gutierrez, M.D.
Instituto de Ciencias en Reproduccion Humana
Efrain Perez Pena, M.D.
Instituto de Ciencias en Reproduccion Humana

Needs Assessment and Description
Clinical data on different ovarian stimulation strategies with regard to the risk and benefits and outcomes of the protocols has been identified as an educational need by the ASRM Continuing Medical Education Committee. This presentation will review ovarian stimulation protocols, identify strategies in protocols for different patient groups, and describe individualized protocols for assisted reproduction to potentially improve outcomes. The intended audience for this presentation includes reproductive endocrinologists, embryologists, nurses, counselors, and all allied health professionals.

ACGME Competency
Patient Care
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Review ovarian stimulation protocols.
2. Identify strategies in ovarian stimulation protocols to use for different groups.
3. Describe individualized patient protocols for assisted reproduction.
CSRM Symposium: Embryo Culture in Vitro and Development

Deng Chengyen (Co-chair)
Peking Union Medical College Hospital
Zhou Canquan (Co-chair)
The First Affiliated Hospital of Sun Yatsen University
Sun Yingpu, M.D., Ph.D.
The First Affiliated Hospital of Zhengzon University
Huang Guoning
Chorgqing Genetic and Reproductive Institute
Sun Haixiang, M.D., Ph.D.
The First Affiliated Hospital of Ranjing University
Medical School

Needs Assessment and Description
ASRM gap analysis identified the following as educational needs: an understanding of ART clinical data to improve outcomes, methods for selecting appropriate embryo culture medium for best results, and knowledge of emerging technologies for proving embryo development and assessment. This presentation will include a summary of Chinese ART data and comparison of this data with that of other countries, discussion of non-invasive rapid time-lapse imaging analysis of embryos before 4 blastomeres, review cytokinesis models in first mitosis, summarize embryo energy metabolism modes, and review of culture media buffer systems allowing ideal embryo development. The target audience includes physicians, embryologists, laboratory technicians, scientists, nurses, and allied health professionals.

ACGME Competency
Medical Knowledge

Learning Objectives
At the conclusion of this session, participants should be able to:

1. Summarize data for each type of ART in China such as total cycle number, average patient age, main adverse complications and live birth rate for each type of ART.
2. Compare ART outcomes between China and other countries.
3. Discuss non-invasive rapid time-lapse imaging analysis of embryos before 4 blastomeres and how it has improved embryo morphology assessments.
4. Review Cytokinesis Models in first mitosis; associated with chromosome aneuploidy. Summarize embryo energy metabolism mode and include culture medium energy substrate.
5. Review culture media buffer system and their association with embryo pH homeostasis.
## Specialty Track Pages

These at-a-glance content track pages are built around attendee special interests, so that groupings of course offerings according to content can easily be identified. Most of the content of the Scientific Congress addresses the interests of our REI and ART-focused attendees. Therefore, REI and ART content courses are not shown as separate tracks.

### Access to Care Track

#### Monday, October 14

**12:15 pm - 1:15 pm Roundtable Discussion**  
Disparities in Male Reproductive Health  
Jim Dupree, M.D., M.P.H.  
University of Michigan

**1:30 pm - 2:30 pm Interactive Session**  
How Do We Reach the Goal of Universal Insurance Coverage for IVF?  
Jacqueline Ho, M.D. (Chair)  
University of Southern California  
Sean Tipton, M.A.  
ASRM  
Barbara Collura, M.A.  
RESOLVE

**4:15 pm - 5:30 pm Symposium**  
Management of Infertility in Low Resource Settings  
Christopher Herndon, M.D. (Co-chair)  
University of Washington  
Julia V. Johnson, M.D. (Co-chair)  
University of Massachusetts Medical School  
Sheryl Vanderpoel, Ph.D.  
Population Council, W.H.O. (retired)  
Kevin J. Doody, M.D.  
CARE Fertility  
Melissa Harmon, R.N.  
CARE Fertility

#### Tuesday, October 15

**12:15 pm - 1:15 pm Roundtable Discussion**  
Climate and Health Challenges in Vulnerable Populations  
Rubin Alvero, M.D.  
Stanford University

**4:15 pm - 5:30 pm Symposium**  
Access to Fertility Preservation Care: From Policy to the Patient  
Akanksha Mehta, M.D., M.S. (Chair)  
Emory University School of Medicine  
H. Irene Su, M.D., M.S.C.E.  
University of California  
Joyce Reinecke, J.D.  
Alliance for Fertility Preservation  
Jim M. Dupree, IV, M.D., M.P.H.  
University of Michigan

#### Wednesday, October 16

**12:15 pm - 1:15 pm Roundtable Discussions**  
Time to Get Creative: How to Improve Access to Care in Your Community  
Tia Jackson-Bey, M.D.  
University of Illinois College of Medicine at Chicago

**4:15 pm - 5:30 pm Symposium**  
Abnormal Myometrial Stem Cells Are Responsible for Health Disparity in Uterine Fibroids  
Qiwei Yang, Ph.D.  
University of Illinois @ Chicago (UIC)
Assisted Reproductive Technology Lab Track

Monday, October 14

12:15 pm - 1:15 pm Roundtable Discussions
Understanding Mosaicism – What You Need to Know
Amy Jones, M.S.
Ovation Fertility

Overview on emerging technologies and breakthrough research in Assisted Reproductive Technology (ART)
Rebecca Krishner, Ph.D.
Colorado Center for Reproductive Medicine

Cryo Tank Failure: What Every REI & Embryologist Should Know
Dawn Kelk, Ph.D., H.C.L.D.
Yale Fertility Center

1:30 pm - 2:30 pm Interactive Session
Key Performance Indicators for the IVF Lab
Amy Sparks, Ph.D. (Chair)
University of Iowa
Alison Bartolucci, M.S.
University of Connecticut
Dean Morbeck, Ph.D., M.B.A., H.C.L.D.
Fertility Associates, Auckland, NZ

Tuesday, October 15

12:15 pm - 1:15 pm Roundtable Discussions
Assisted Reproductive Technology (ART) laboratory networks/mergers: Do they improve outcome?
Jason Swain, Ph.D.
Colorado Center for Reproductive Medicine

TESE for Male Factor Infertility Patient
Who Can Ejaculate (Oligozoospermia or Oligoasthenozoospermia or Oligoteratozoospermia): Where is the Evidence?
Jason Kavoc
Urology of IN

1:30 pm - 2:30 pm Interactive Session
Mosaicism Exposed – How to Handle Mosaic Embryos
Timothy N. Hickman, M.D. (Chair)
Houston IVF
Mandy Katz-Jaffe, Ph.D.
Colorado Center for Reproductive Medicine
Mike Large, Ph.D.
Cooper Genomics
Cassandra Latoni, M.S., CGC

4:15 pm - 5:30 pm Symposium
Quality Management in Human ART: Time to Revisit the Issues
Barry R. Behr, Ph.D. (Chair)
Stanford Fertility and Reproductive Medicine Center
Mitchel C. Schiewe, Ph.D., M.S.
Ovation Fertility
Dawn A. Kelk, Ph.D., H.C.L.D.
Yale Fertility Center
Assisted Reproductive Technology Lab Track

Wednesday, October 16

12:15 pm - 1:15 pm Roundtable Discussions
Clinical embryologist career paths – Excelling in the Multi-dimensional Role of a Clinical Embryologist
T. Arthur Chang, Ph.D., E.L.D., H.C.L.D.
University of Texas Health Science Center
What to Do When Euploid Embryos Fail to Implant?
John Whitney, B.S.
Ovation Fertility
Environmental Pollutants and their Effect on In Vitro Fertilization (IVF) Outcomes
Eva Schenkman, M.S.
Colorado Center for Reproductive Medicine

1:30 pm - 2:30 pm Interactive Session
Egg and Embryo Banking for Family Building Prior to Advancing Maternal Age: a Patient And Laboratory Perspective
Jennifer Mersereau, M.D. (Chair)
UNC Fertility
Kara N. Goldman, M.D.
Northwestern University
Sangita K. Jindal, Ph.D.
Montefiore Institute for Reproductive Medicine and Health

3:45 pm - 5:00 pm Symposia
Howard and Georgeanna Jones Symposium on Assisted Reproductive Technology: Growing Gametes and Embryos: Where Are We Now
Rebecca Krisher, Ph.D. (Chair)
Colorado Center for Reproductive Medicine
Michelle Lane, Ph.D.
T. Arthur Chang, Ph.D., E.L.D., H.C.L.D.
Egg Freezing - Are You Ready for Prime Time?
Developing and Implementing an Egg Freezing Program in Your Practice
Paul C. Lin, M.D. (Chair)
Seattle Reproductive Medicine
Caroline McCaffrey, Ph.D., H.C.L.D.
New York University Fertility Center
Tamara M. Tobias, N.P.
Seattle Reproductive Medicine
Kimball o. Pomeroy, Ph. D.
The World Egg Bank
Contraception Track

Monday, October 14

1:30 pm - 2:30 pm Interactive Session
Best Practices in Miscarriage Management
Courtney Schreiber, M.D. (Chair)
University of Pennsylvania
Sarah Horvath, M.D.
University of Pennsylvania
Sarita Sonalkar, M.D., M.P.H.
University of Pennsylvania
Vanessa Dalton, M.D., M.P.H.
University of Michigan

Tuesday, October 15

12:15 pm - 1:15 pm Roundtable Discussion
Incorporating the Use of Mifepristone Pretreatment for Medical Management of Miscarriage into Your Practice
Sarita Sonalkar, M.D., M.P.H.
University of Pennsylvania

Wednesday, October 16

2:45 pm - 3:30 pm Lecture
Contraception Keynote Lecture: Male Contraception
John K. Amory, M.D., M.P.H.
University of Washington

1:30 pm - 2:30 pm Interactive Session
Family Planning Fellows Showcase: Frontiers in Complex Family Planning
Maureen Baldwin, M.D., M.P.H.
Oregon Health and Science University
Andrea H. Roe, M.D., M.P.H.
University of Pennsylvania
Erica P. Cahill, M.D., M.S.
Stanford University
Nora Doty, M.D., M.C.R.
Hackensack Meridian Health
Ethics, Legal, & Mental Health Track

Monday, October 14

8:30 am - 9:15 am Plenary
Plenary 1: President’s Guest Lecture: Closing the Generational Gap Between Practitioners and Patients
Endowed by a 1987 grant from Ortho Women’s Health
Ryan Jenkins
Speaker, Author, and Inc. Magazine Columnist

12:15 pm - 1:15 pm Roundtable Discussions
The Assisted Reproductive Technology (ART) of Couple Satisfaction
Kristy Koser, Ph.D., L.P.C.C.
Apora Counseling and Psychotherapy, PLLC
Surrogacy and the Modern Family:
Addressing the Ethical and Emotional Challenges of Complex Gestational Surrogacy Cases
Lisa Schuman
The Center for Family Building

1:00 am - 12:00 pm MHPG Clinical Session
MHPG Clinical Session: The Trauma of Infertility and Pregnancy Loss: Helping Our Patients Heal
Janet Jaffe, Ph.D. (Chair)
Center for Reproductive Psychology
Karen Hall, Ph.D.
Private Practice
Julie Bindeman, Psy.D.
Private Practice

4:15 pm - 5:30 pm Symposia
ABOG - Kenneth Ryan Ethics Symposium:
Ethics in Embryo Research: In Consideration of Patients, Progeny and Professional Norms
Alto Charo, J.D. (Chair)
University of Wisconsin - Madison
Ben Hurlbut, Ph.D.
Arizona State University
Feng Zhang, Ph.D.
The Broad Institute

The New Modern Family: Family-building and co-parenting in polyamorous and multi-parent families.
Linda Kondilis, Psy.D. (Chair)
Private Practice
Laurie McKenzie, M.D.
Baylor College of Medicine
Heather Ross, J.D.
Ross & Zuckerman, LLP

Tuesday, October 15

8:30 am - 9:15 am Plenary
Plenary 4: Is Human Germline Editing Ethical?
Endowed by a 1990 grant from Astra-Zeneca
Françoise Baylis, C.M., O.N.S., Ph.D., F.R.S.C., F.C.A.H.S.

9:15 am - 10:00 am Plenary
Plenary 6: Planned Oocyte Cryopreservation: A Patient’s Perspective
Endowed by a 1992 grant from Wyeth
Brigitte K. Adams
Eggsurance
Ethics, Legal, & Mental Health Track

12:15 pm - 1:15 pm Roundtable Discussions
Is Sharing really Caring? The Use of Self-Disclosure in Infertility Counseling.
Julie Bindeman, Psy.D.
Integrative Therapy of Greater Washington

CBT for Recurrent Pregnancy Loss: Benefits, Limitations, and Alternatives
Danielle Kaplan, Ph.D.
NYU Langone

1:30 pm - 2:30 pm Interactive Session
Beyond Disclosure: The Psychological, Social, Legal, and Genetic Implications of Intentional and Unintentional Donor Identity
Claudia Pascale, Ph.D. (Chair)
Institute for Reproductive Medicine & Science
Judith Daar, J.D.
Chase College
Heidi Hayes, M.A.
California Cryobank
Neha Kumar, Sc.M.
Invitae

1:30 pm - 2:30 pm MHPG Clinical Session
Beyond Disclosure: The Psychological, Social, Legal, and Genetic Implications of Intentional and Unintentional Donor Identity
Claudia Pascale, Ph.D. (Chair)
Institute for Reproductive Medicine & Science
Judith Daar, J.D.
Chase College
Heidi Hayes, M.A.
California Cryobank
Neha Kumar, Sc.M.
Invitae

4:15 pm - 5:30 pm Symposium
Implementation of an Embryo Donation Program Within Your Practice: Medical, Legal and Psychological Aspects
Eric Widra, M.D. (Chair)
Shady Grove Fertility Center
Angela K. Lawson, Ph.D.
Northwestern University
Nidhi Desai, J.D.
Desai & Miller

Wednesday, October 16

9:15 am – 10:00 am Plenary
Plenary 6: Herbert H. Thomas Lecture:
Justice and the Privatization of Health Data
Kayte Spector-Bagdady, J.D., M.Bioethics
University of Michigan

11:00 am – 12:00 pm MHPG Clinical Session
MHPG Clinical Session: Peeking Under The Hood: Psychological Testing with Sperm Donors
Andrea Braverman, Ph.D. (Chair)
Jefferson OBGYN
John Kurtz, Ph.D.
Villanova University

12:15 pm - 1:15 pm Roundtable Discussions
Modeling Good Behavior- The Ethics of Surrogacy
Deborah Levy, M.A., L.P.C.
ConceiveAbilities

Lessons from An Adoption Plan: Differences, Similarities in Disclosure to Donor-Conceived Offspring
Dori Kavanagh, L.C.S.W.
Private Practice

3:45 pm - 5:00 pm Symposia
Fertility Preservation for Transgender Youth: Special Considerations
Molly B Moravek, M.D., M.P.H. (Chair)
Michigan Medicine
James F. Smith, M.D.
University of California, San Francisco
Gwendolyn P. Quinn, Ph.D.
New York University
Leena Nahata, M.D.
Nationwide Children’s Hospital

Risk Management: Patient Education, Compliance and Consenting.
Lindsey McBain, B.A. (Chair)
Reproductive Associates of New Jersey
Heather Ross, J.D.
Ross and Zuckerman
Brad Senstra, M.H.A.
Seattle Reproductive Medicine
Sue Jasulaitis, M.S.N., R.N.
Fertility Centers of Illinois
Genetics Track

Monday, October 14

12:15 pm - 1:15 pm Roundtable Discussions

Limits and Complications of Genetic Screening in Egg Donors
Amber Gamma, M.S., C.G.C.
Northwell Health Fertility

Progress in Comprehensive PGT
Dagan Wells, Ph.D., I.V.I., R.M.A. University of Oxford

PGT for Late-Onset Disorders
Svetlana Rechitsky, Ph.D.
Reproductive Genetic Innovations

Understanding Mosaicism – What You Need to Know
Amy Jones, M.S.
Ovation Fertility

1:30 pm - 2:30 pm Interactive Sessions

Non-invasive Preimplantation Genetic Testing (NI-PGT): Is it Applicable for ART practice?
Svetlana Rechitsky, Ph.D. (Chair)
Reproductive Genetic Innovations
Dagan Wells, Ph.D., I.V.I., R.M.A. University of Oxford
Carlos Rubio, Ph.D.
Igenomix

Tuesday, October 15

8:30 am - 9:15 am Plenary
Plenary 4: Is Human Germline Editing Ethical?
Endowed by a 1990 grant from Astra-Zeneca
Françoise Baylis, C.M., O.N.S., Ph.D., F.R.S.C., F.C.A.H.S.

12:15 pm - 1:15 pm Roundtable Discussions

Expanded Versus Targeted Genetic Testing Before Pregnancy: Discussion Of Guidelines, Options, and Cost Effectiveness
Heather Hipp, M.D.
Emory University

Direct to Consumer (DTC) Genetic Testing: Exploring The Benefits, Limitations And What To Do When A Patient Brings Results To The Clinic
Rachel Donnell, M.M.Sc., L.C.G.C.
Seattle Reproductive Medicine

Prospect for Non Invasive PGT
Carmen Rubio, Ph.D.
Igenomix Spain

Detection of Mosaicism and Segmental Variations
Mandy Katz-Jaffe
Colorado Center for Reproductive Medicine in Lone Tree, CO

1:30 pm - 2:30 pm Interactive Sessions

Mosaicism Exposed – How to Handle Mosaic Embryos
Timothy N. Hickman, M.D. (Chair)
Houston IVF
Mandy Katz-Jaffe, Ph.D.
Colorado Center for Reproductive Medicine
Mike Large, Ph.D.
Cooper Genomics
Cassandra Latoni, M.S., CGC
Ovation Fertility

Beyond Disclosure: The Psychological, Social, Legal, and Genetic Implications of Intentional and Unintentional Donor Identity
Claudia Pascale, Ph.D. (Chair)
Institute for Reproductive Medicine & Science
Judith Daar, J.D.
Chase College
Heidi Hayes, M.A.
California Cryobank
Neha Kumar, Sc.M.
Invitae

Wednesday, October 16

12:15 pm - 1:15 pm Roundtable Discussions

PGT-M for Mild Conditions
Rachael Cabey, M.S., L.C.G.C.
CooperGenomics

Update of Randomized Control Trials on Clinical Outcome of PGT-A
Eric Forman, M.D.
Columbia University Fertility Center

Prospective Carrier Screening and its Impact of PGT Uptake
Charles Strom, M.D., Ph.D.
Celmatix, USA
LGBTQ Track

Monday, October 14

12:15 pm - 1:15 pm Roundtable Discussion
Not-So-Secret “Anonymous Egg Donations”: How Home DNA Testing, Donor Registries, and Social Media Are Turning the Donor World Upside Down
Will Halm, J.D.
International Reproductive Law Group

1:30 pm - 2:30 pm Interactive Session
No Satisfaction: Psychological and Medical Perspectives on Infertility and Sexual Dysfunction
William D. Petok, Ph.D. (Chair)
Thomas Jefferson University
Elizabeth A. Grill, Psy.D.
Weill Cornell Medical Center
Robert D. Oates, M.D.
Boston University School of Medicine
Kim Bergman, Ph.D.
Growing Generations

4:15 pm - 5:30 pm Symposia
The New Modern Family: Family-building and co-parenting in the 21st Century
Linda Kondilis, Psy.D. (Chair)
Private Practice
Laurie McKenzie, M.D.
Baylor College of Medicine
Heather Ross, J.D.
Ross & Zuckerman, LLP

SSR Symposium: Fertility Preservation-Existing and Emerging Fertility Preservations Options for Women and Men
Mary B. Zelinski, Ph.D. (Chair)
Oregon Health & Sciences University
So-Youn Kim, Ph.D.
University of Nebraska Medical Center
Kyle E. Orwig, Ph.D.
University of Pittsburgh

Wednesday, October 16

12:15 pm - 1:15 pm Roundtable Discussion
Ovarian Stimulation in Transgender Men
Molly Moravek, M.D.
University of Michigan

3:45 pm - 5:00 pm Symposium
Fertility Preservation for Transgender Youth: Special Considerations
Molly B Moravek, M.D., M.P.H. (Chair)
Michigan Medicine
James F. Smith, M.D.
University of California, San Francisco
Gwendolyn P. Quinn, Ph.D.
New York University
Leena Nahata, M.D.
Nationwide Children's Hospital
Male Reproduction Track

Monday, October 14

12:15 pm - 1:15 pm Roundtable Discussions
The Current Role of Varicocele Repair in Optimizing Male Fertility and Assisted Reproductive Technology (ART) Outcomes
Ed Kim, M.D.
University of Tennessee

Optimizing Male Fertility Utilizing Lifestyle Modifications
Michael Eisenberg, M.D.
Stanford University

2:35 pm - 3:20 pm Lecture
The David and Rosemary Adamson Lecture on Excellence in Reproductive Medicine: Midnight’s Broken Toll: Male Fertility and the Health of Future Generations Endowed by Advanced Reproductive Care, Inc. and Rosemary and David Adamson, M.D.
University of Newcastle

4:15 pm - 5:30 pm Symposium
Are Specialized Sperm Function Tests Clinically Useful?
Armand Zini, M.D., F.R.C.S.C. (Chair)
McGill University
Sandro Esteves, M.D., Ph.D., M.Sc.
Campinas, Brazil
Douglas T. Carrell, Ph.D.
University of Utah School of Medicine

Tuesday, October 15

12:15 pm - 1:15 pm Roundtable Discussions
Hypogonadism: Implications of Disease and Treatment for the Infertile Male
Mohit Khera, M.D.
Baylor College of Medicine

Patient-Centered Approach to Azoospermia: Choosing the Best Technique for Sperm Retrieval
Thomas Walsh, M.D.
Washington University

1:30 pm - 2:30 pm Interactive Session
Home Sperm Testing: What is Available, Limitations and Opportunities
Natan Bar-Chama, M.D. (Chair)
Reproductive Associates of New York
Michael Eisenberg, M.D.
Stanford University
Benjamin Leader, M.D., Ph.D.
ReproSource Inc.

4:15 pm - 5:30 pm Symposium
Access to Fertility Preservation Care: From Policy to the Patient
Akanksha Mehta, M.D., M.S. (Chair)
Emory University School of Medicine
H. Irene Su, M.D., M.S.C.E.
University of California
Joyce Reinecke, J.D.
Alliance for Fertility Preservation
Jim M. Dupree, IV, M.D., M.P.H.
University of Michigan
## Male Reproduction Track

### Wednesday, October 16

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| 8:00 am - 8:45 am | Lecture CME: American Urological Association Bruce Stewart  
Memorial Lecture: The Diagnosis & Treatment of Male Infertility: From the Bench to the Bedside  
Supported by a grant from the American Urological Association  
Larry Lipshultz, M.D.  
Baylor College of Medicine |                                                                                               |
| 12:15 pm - 1:15 pm | Expert Encounter CME: Male Infertility Case Discussion  
John Amory, M.D., M.P.H.  
University of Washington |                                                                                               |
| 12:15 pm - 1:15 pm | Roundtable Discussions CME: Male Home Fertility Testing: Pros and Cons for the Consumer and Medical Practitioner  
Natan Bar-Chama, M.D.  
Reproductive Medicine Associates of New York  
The Future of Male Infertility Microsurgery: Promising Emerging Technologies  
Philip Li, M.D.  
Cornell University  
Fertility Preservation in the Male Across the Lifespan  
Robert Brannigan, M.D.  
Northwestern University |                                                                                               |
| 2:45 pm - 3:30 pm | Lecture CME: Contraception Keynote Lecture: Male Contraception  
John K. Amory, M.D., M.P.H.  
University of Washington |                                                                                               |
| 2:45 pm - 3:30 pm | Lecture CME: SSR Exchange Keynote Lecture: Motile Ciliopathy is a New Cause of Male Infertility  
Wei Yan, M.D., Ph.D.  
University of Nevada |                                                                                               |
### Menopause Track

**Monday, October 14**

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| 12:15 pm - 1:15 pm | Roundtable Discussion  
Stem Cell Therapy for Premature Ovarian Insufficiency  
Ayman al-Hendy, M.D., Ph.D.  
University of Illinois at Chicago |
| 4:15 pm - 5:30 pm | Symposium  
Ovarian Tissue Cryopreservation and Transplantation: 20 Years of Progress  
Kutluk H. Oktay, M.D., Ph.D. (Chair)  
Yale University School of Medicine  
Isabelle Demeestere, M.D., Ph.D.  
University Libre de Bruxelles  
Nao Suzuki, M.D., Ph.D.  
Marianna University |

**Tuesday, October 15**

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| 12:15 pm - 1:15 pm | Roundtable Discussion  
Is there a role for testosterone use in women?  
Jan Shifren, M.D.  
Massachusetts General Hospital |
| 1:30 pm - 2:30 pm | Interactive Session  
In Vitro Activation for Primary Ovarian Insufficiency: Is it Ready for Prime Time?  
Mindy S. Christianson, M.D. (Chair)  
Johns Hopkins University  
James H. Segars, Jr., M.D., F.A.C.O.G.  
Johns Hopkins University  
Cesar Diaz-Garcia, M.D., M.P.H.  
IVI London |
| 2:45 pm - 3:30 pm | Lecture  
Menopause Keynote Lecture: Future Directions on the Management of Menopause  
Rogerio A. Lobo, M.D.  
Columbia University |

**Wednesday, October 16**

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<th>Time</th>
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| 12:15 pm - 1:15 pm | Roundtable Discussion  
Ovarian Stimulation in Transgender Men  
Molly Moravek, M.D.  
University of Michigan |
Professional and Practice Development Track

Sunday, October 7

3:00 pm - 5:00 pm Workshop
Personal Finance for Physicians
Stuart S. Howards, M.D.
University of Virginia

Monday, October 8

8:30 am - 9:15 am Plenary
Plenary 1: President’s Guest Lecture: Closing the Generational Gap Between Practitioners and Patients
Endowed by a 1987 grant from Ortho Women’s Health
Ryan Jenkins
Speaker, Author, and Inc. Magazine Columnist

12:15 pm - 1:15 pm Expert Encounter
Venture Capital, Private Equity, and Assisted Reproduction: Investing in Innovation in IVF
David Sable, M.D.
Columbia University

12:15 pm - 1:15 pm Roundtable Discussions
Staying Together for the Kids: Clear Expectations that Partners and Associates Need to Agree Upon in Order to Grow the Practice and Avoid Separation
Griffin Jones, B.A.
Fertility Bridge

Managing Patient Complaints And Setting Expectations
Beth Hume, B.A.
Seattle Reproductive Medicine

1:30 pm - 2:30 pm Interactive Session
Moving Hysteroscopy from the Operating Room to the Office: Essentials for Success, Safety, and Patient Satisfaction
Steven R. Lindheim, M.D. (Chair)
Wright State University
Stefano Bettocchi, M.D.
University of Bari
Keith Isaacson, M.D.
Harvard Medical School
Brad Senstra, M.H.A.
Seattle Reproductive Medicine

2:35 pm - 3:20 pm Lecture
Endowed Lecture: IVF as a Business
Endowed by a 1990 grant from TAP Pharmaceutical
David Sable, M.D.
Columbia University

4:15 pm - 5:30 pm Symposium
How to Build High Functioning Teams in the Embryology Lab
Blake R. Welch, M.B.A. (Chair)
Chicago IVF
David Ball, Ph.D.
Seattle Reproductive Medicine
Professional and Practice Development Track

Tuesday, October 15

9:15 am - 10:00 am Plenary
Plenary 5: Planned Oocyte Cryopreservation: A Patient’s Perspective
Endowed by a 1992 grant from Wyeth
Brigitte K. Adams
Eggsurance

12:15 pm - 1:15 pm Roundtable Discussion
HIPPAA Headaches and Ways to Avoid Them
Lindsey McBain, B.A.
Reproductive Management Associates of New Jersey

4:15 pm - 5:30 pm Symposia
RESPECT YOUR ENEMY: Marketing Your Practice Within The Sart Advertising Guidelines In A Competitive Market
Sara Mooney, B.A. (Chair)
Seattle Reproductive Medicine
Eli Reshef, M.D.
Henry G. Bennett Jr. Fertility Institute
Amy Hall, R.Ph.
Catalyst Healthcare Marketing
Paul C. Lin, M.D.
Seattle Reproductive Medicine

Wednesday, October 16

9:15 am - 10:00 am Plenary
Plenary 6: Herbert H. Thomas Lecture: Justice and the Privatization of Health Data
Endowed by a 1992 grant from EMD Serono, Inc.
Kayte Spector-Bagdady, J.D., M.Bioethics
University of Michigan

12:15 pm - 1:15 pm Roundtable Discussion
Embryo Disposition and Divorce
Jessica Medvedich, M.B.A., B.S.N., R.N.
Reproductive Management Associates of New Jersey

3:45 pm - 5:00 pm Symposia
Risk Management: Patient Education, Compliance and Consenting.
Lindsey McBain, B.A. (Chair)
Reproductive Associates of New Jersey
Heather Ross, J.D.
Ross and Zuckerman
Brad Senstra, M.H.A.
Seattle Reproductive Medicine
Sue Jasulaitis, M.S.N., R.N.
Fertility Centers of Illinois

Egg Freezing - Are You Ready For Prime Time? Developing and Implementing an Egg Freezing Program In Your Practice
Paul C. Lin, M.D. (Chair)
Seattle Reproductive Medicine
Caroline McCaffrey, Ph.D., H.C.L.D.
New York University Fertility Center
Tamara M. Tobias, N.P.
Seattle Reproductive Medicine
Kimball O. Pomeroy, Ph.D.
The World Egg Bank
2019 Resident Education Program

Purpose
ASRM is committed to facilitating and promoting education of reproductive health professionals at all levels. As part of this mission, the Society develops and coordinates educational activities for resident physicians in training in reproductive medicine. The program emphasizes the understanding of complex topics, the interaction with other disciplines, and the psychosocial sequelae and ethical concerns in human reproduction. Residents will also be exposed to a variety of interactive educational methods and have an opportunity to network/interaction with faculty with expertise in the specific topic for the day.

Description
ASRM has organized an education program consisting of two parts:

1. Medical Education: A series of educational sessions coupled with corresponding scientific symposia. On two days of the Scientific Congress, there will be interactive educational presentations corresponding to a symposium on each of those days. The activities will be evidence-based, free from bias, and independent of commercial influence. The discussions, which will utilize different learning pedagogies, will require advance independent study of articles, videos, or handouts relevant to the topic of ~20 minutes. Fifteen minutes are reserved at the end of these sessions for interaction with fellows who are also attending the sessions.

2. Networking/Interaction with Fellows: Fellows will attend the educational sessions as peer faculty. Learners are encouraged to ask questions about the fellowship interview process and the panelists’ experiences.

Procedure
1. Residents will register online for the program during their regular registration process by checking YES on the invitation that will appear for all registrants who designate “resident” as their practice code. There is no charge for participation.
2. Registrants will receive an email 2 weeks in advance of the Scientific Congress with a link to materials to prepare for the learning sessions and symposia.
3. A boxed lunch is provided for learners Monday through Wednesday at the lunchtime learning sessions.
4. On Monday and Tuesday of the Scientific Congress, registrants will gather for an interactive learning session with a prominent medical educator and content expert(s) from the day’s corresponding symposium or plenary. Each day will employ an interactive learning modality that will require a small amount of advance preparation. Those sessions will include an opportunity to interact with current fellows throughout the session. Registrants are encouraged to attend the symposium or plenary corresponding to the day’s learning session.
5. On Wednesday, the session will be comprised of interactive learning sessions on various topics and panel discussion with current fellows and fellowship directors.
6. After the Congress, registrants will receive a survey.

Monday, October 14, 2019
12:30 pm – 2:00 pm Resident Learning Session: Team-based Learning
8:30 am – 9:15 am (on Plenary: Is Human Germline Editing Ethical? Tuesday, Oct 15)
Content experts: Ben Hurlbut, Ph.D.
Education faculty: Ranjith Ramasamy, M.D.

Tuesday, October 15, 2019
12:30 pm – 2:00 pm Resident Learning Session: Case Discussions
4:15 pm – 5:30 pm Symposium: Patient-Centered Research in Uterine Fibroids: The COMPARE-UF Experience
Content expert: Elizabeth Stewart, M.D.
Education faculty: Divya Shah, M.D., M.Ed.

Wednesday, October 16, 2019
12:30 pm – 2:00 pm Resident Learning Session: Interactive Learning Pedagogies and Fellowship Panel Discussion
Activity: Panel discussion with current fellows and fellowship directors and participation in various interactive learning pedagogies
Faculty: Ann Davis, M.D.

*Brought to you by the ASRM Education Committee, Professor Ann J Davis, MD, Chair – BOXED LUNCH provided
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All speakers at the 2019 ASRM Scientific Congress were required to complete a disclosure form.
Each speaker listed below disclosed a relationship pertaining to themselves or their partner/spouse.

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<td>Direct Stockholder</td>
<td>Aitken, R. J.</td>
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<td>3</td>
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<td>Alukal, J. P.</td>
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<td>Amory, J. K.</td>
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Aboulghar, M. A. Ferring⁶ (travel expenses to attend conference covered by the company); IBSA⁸ (travel expenses to attend conference covered by the company)

Aitken, R. J. Celloxess⁶ (Honorary Scientific Advisor); Memphasis²,⁶
Alukal, J. P. Ezra⁶; Phosphorus⁶; Sandstone⁶
Amory, J. K. Clarus Therapeutics⁶
Awwad, J. Merck Serono⁵; Rovi Pharmaceutical⁴
Baldwin, M. Medicines 360⁸ (Research Co-I)
Ball, G. D. Serono EMD⁴
Barnhart, K. T. AbbVie⁶; Bayer⁶
Bartolucci, A. Cooper Genomics⁵; Cooper Surgical⁵
Behr, B. R. DX Now⁶ (Consultant)
Bendikson, K. theralogix⁶ (medical advisory board)
Bergman, K. Growing Generations¹
Bhagavath, B. Hologic Inc⁴,⁸ (Scientific advisory board)
Braverman, A. M. California Cryobank⁶; Merck⁷
Brezina, P. R. Advagenix¹,²; Fertility Associates of Memphis¹,²,³
Busso, N. ABBOTT Laboratorios do Brasil Ltda.⁷
Callum, P. California Cryobank⁵; Tandem Genetics¹
Catherino, W. Abbvie⁶; Allergan⁶; American Board of Obstetrics and Gynecology⁶; American Society for Reproductive Medicine⁵; Bayer⁶; EMD Serono³a
Chapron, C. AbbVie⁶; Bayer⁶; Ipsen⁶
Cram, D. Berry Genomics¹
Crockin, S. Amgen⁶a; Astrazeneca⁶a; BMS⁶a,⁸a (Advisory Board); Boehringer-Ingelheim⁶a; Eisai⁶a; Exelixis⁶a; Genentech-Roche⁶a; Merck⁶a,⁸a⁶a,⁸a (Advisory Board); Novartis⁶a,⁸a (Advisory Board); Pfizer⁶a (Advisory Board); Werewolf⁸a (Stock options); BMS⁶a (Advisory Board); Eisai⁶a; ImmunoCore⁶a; Pfizer⁶a,⁸a (Advisory Board)
Dalton, V. Bayer⁶ (expert witness)
Diaz-Garcia, C. Ferring⁷
Dokras, A. Abbvie⁶; Ferring⁶; Medtronics⁶
Domar, A. D. Abbott⁶; Aliz Health Apps¹; EMD Serono⁵; Ferring⁴,⁶; FertiCalm LLC¹; FertiStrong LLC¹; Merck⁷
Doody, K. J. Ferring Pharmaceuticals⁶⁷; INVO Bioscience¹,²
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Dupree, J. M.  Blue Cross Blue Shield of Michigan⁶; Lipocine²

Eisenberg, M. L.  Dadi²; Gilead⁴; Roman²; Sandstone Diagnostics²; Underdog²

Estes, S. J.  Abbvie⁶,⁷,⁸ (research support); Obseva⁸ (research support)

Esteves, S. C.  Gedeon-Richter⁷; Merck⁷

Feng, H.  NEW YORK EGG BANK¹; REPROBIOTECH CORP¹; RUIBAI MEDICAL USA¹

Fernandez, E. F.  IMH²

Forman, E. J.  Ferring Pharmaceuticals⁷

Giudice, L. C.  Celmatix⁶; ForEndo Pharmaceuticals⁶; Merck²b; Myovant Biosciences⁶; NextGen Jane⁶; Pfizer²b

Grill, E. A.  Aliz LLC⁸ (Co owner); Donor Egg Meeting⁵; FertiCalm⁸ (Co owner); FertiStrong⁸ (Co owner); Merck⁷

Guoning, H.  Chongqing Genetic and Reproductive Institute³b

Hayes, H.  Donor Egg Bank USA³

Hickman, C.  Apricity¹; Cooper surgical, Apricity, Hamilton Thorne, vitrolife, Ferring, Merck Serono, TMRW, Attieh Medical, Parallabs, Cook, Spectrun, Salveapp⁵,⁶,⁷,⁸ (Advisory Board); TMRW⁸ (Advisor)

Hill, M. J.  Ohana Biosciences⁸ (Research Advisor)

Isaacson, K.  Karl Storz⁶; Medtronics⁶

Jasulaitis, S.  EMD Serono²

Jukic, A.  Theralogix⁶ (Vitamin D supplements from this company were donated for a clinical trial of which I am PI.)

Kim, E.  Endo⁷

Kurtz, J. E.  Fairfax Cryobank⁶

Kyrillos, J. V.  Novo Nordisk⁷

Lamb, D. J.  2019 5th PuJiang Reproductive Medicine Forum⁸ (Travel costs); Celmatix⁸ (Scientific Advisory Board- No financial compensation); Ferring⁶; Hanzhou first hospital of Zhejiang University⁸ (Travel Costs); Shanghai General Hospital and Shanghai Andrology Society⁴,⁸ (Travel costs); Suzhou University IVF and fertility center⁶ (Travel costs)

Lane, M.  Monash IVF Group²,³; Vitrolife⁸ (Have commercialised IP for Vitrification devices.)

Large, M.  CooperSurgical²,³

Laven, J. S.  Danone⁶; Euroscreen⁴; Ferring⁴,⁶; Merck Serono⁴

Legro, R. S.  AbbVie⁶; Bayer⁶; Ferring⁶; Fractyl⁶; Guerbet⁴

Lindheim, S.  Crossbay²

Lipshultz, L. I.  AbbVie⁶; American Medical Systems⁷; Aytu Bioscience⁶; Endo Pharmaceuticals⁶,⁷; Lipocine⁶

Liu, J. H.  AbbVie⁸ (Clinical Trial); Allergan⁶,⁸ (Clinical Trial); AMAG⁶; Astellas⁸ (Clinical Trial); Bayer⁶ (Data Safety Monitoring Board Chair); Femasys⁸ (Clinical Trials); Fering⁶; Mitsubishi-Tanabe⁶; Therapeutics MD⁶

Markert, U. R.  Gedeon Richter⁴

McQueen, D. B.  Innovative Drive Corporation⁶a


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Merhi, Z.  HOCATT LLC

Miller, C. E.  AbbVie; Allergan; Blue Seas Med Spa, Naperville, IL (Ownership interest); Espiner Medical; Gynecosics; Halt Medical, Inc.; Karl Storz; Medtronic; Pacira Pharmaceuticals; Richard Wolf; Thomas Medical/Catheter Research, Inc. (Royalties)

Missmer, S. A.  AbbVie (Advisory Board Member); Department of Defense; Endometriosis Foundation of America; Marriott Family Foundations; National Institutes of Health

Moravek, M. B.  Arthrex; Probility Physical Therapy; Team Rehab Physical Therapy

Morbeck, D.  CooperSurgical; Fertility Associates; Irvine Scientific

Morton, J. M.  Novo nordisk

Myers, E.  AbbVie; Allergan; Bayer; Merck

Nahata, L.  Antares

O’Brien, J. E.  Ohana

Omurlag, K.  Medical Electronic Systems; Nestle

Paduch, D. A.  Consulting Research Services INC

Parry, P.  Parryscope Fertility (Intellectual property rights relating to a surgical technique and device)

Patrizio, P.  FertileSafe (co-founder and consultant)

Petrozza, J. C.  Boston Scientific

Pfeifer, S.  Abbvie Pharmaceuticals; Merck & Company; Theralogix

Pomeroy, K. O.  The World Egg Bank

Pool, T.  Innovative Cryo Enterprises (Scientific Advisory Board)

Ramasamy, R.  Aytu Biosciences; Boston Scientific; Coloplast; Direx; ENDO Pharmaceuticals

Rechitsky, S.  Reproductive Genetic Innovations

Rizk, B.  Abbvie; Fairhavenhealth; Hologic

Ross, H. E.  Accelerate Diagnostics

Rubio, C.  Igenomix

Sable, D.  Celmatix (Board of Directors); Hamilton Thorne (Board of Directors); MedAnswers; Ovo; Progyny (Advisory board member); TMRW (Board of Directors observer)

Santoro, N.  Astellas/Ogeda (Scientific Advisory Board); Menogenix, Inc. (Scientific Advisory Board, Stock options)

Satava, R. M.  Advent Health; In Touch Technologies, Inc; Lumineu, LLC; Medicaroid, Inc; Patient Innovations, Inc (Board of Advisors); Society of Laproendoscopic Sureons (Advisory Board)

Sgarlata, C. S.  ConnectWell (Scientific Advisory Board- non-paid position)

Shapiro, B.  Ovation

Sharara, F. I.  Ferring Pharmaceuticals; Innovus Pharmaceuticals; MAP Sciences

Simon, C.  Ferring; Igenomix (Head of the Scientific Advisory Board); Merck; TEVA
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University of Michigan

Androgen Excess
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Joop Laven, M.D., Ph.D.
Erasmus University

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RTM3
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Sergio Oehninger, M.D., Ph.D.
Sher Institute

Assisted Reproductive Technology
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Amanda Kallen, M.D.
Yale University

Assisted Reproductive Technology
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Sangita Jindal, Ph.D.
Einstein COM, Montefiore

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Ping Xia, M.D., Ph.D.
Johns Hopkins School of Medicine

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Jennifer Mersereau, M.D.
University of North Carolina at Chapel Hill

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James Nodler, M.D.
Houston In Vitro Fertilization (IVF)

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Carmen Messerlian, Ph.D.
Harvard T.H. Chan School of Public Health

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Akanksha Mehta, M.D., M.S.
Emory University

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Erica Marsh, M.D.
University of Michigan

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Amber Gamma, M.S., C.G.C.
Northwell Health Fertility

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Larry Lipshultz, M.D.
Baylor University

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Fertility Preservation in Cancer Patients
Madhuri Patil, M.D.
Clinical Director of Dr. Patil’s Fertility & Endoscopy Clinic, Bangalore
ROUND TABLE DISCUSSIONS  
MONDAY, OCTOBER 14, 2019

Legal

RTM15
Legal and Ethical Considerations When Representing the “Non-Traditional” Family
Deborah Guston, J.D.
Guston & Guston, L.L.P.

RTM16
Insurance Concerns in Fertility Arrangements
Amani Hassoun, J.D.
Vorzimer Masserman

LGBTQ

RTM17
Not-So-Secret “Anonymous Egg Donations”: How Home DNA Testing, Donor Registries, and Social Media Are Turning the Donor World Upside Down
Will Halm, J.D.
International Reproductive Law Group

Male Reproduction and Urology

RTM18
The Current Role of Varicocele Repair in Optimizing Male Fertility and Assisted Reproductive Technology (ART) Outcomes
Ed Kim, M.D.
University of Tennessee

RTM19
Optimizing Male Fertility Utilizing Life Style Modifications
Michael Eisenberg, M.D.
Stanford University

Mental Health

RTM20
The Assisted Reproductive Technology (ART) of Couple Satisfaction
Kristy Koser, Ph.D., L.P.C.C.
Aporia Counseling and Psychotherapy, PLLC

RTM21
Surrogacy and the Modern Family: Addressing the Ethical and Emotional Challenges of Complex Gestational Surrogacy Cases
Lisa Schuman, L.C.S.W.
The Center for Family Building

Nurses

RTM22
Calling All Donor Nurse Coordinators: Communication and Education of Disclosure Strategies in the Era of 23andMe
Patricia Hershberger, Ph.D., R.N., F.N.P.
UIC College of Nursing

RTM23
How is Your Advanced Practice Provider Best Utilized?
Hayley Eichlin, D.N.P., A.P.R.N., W.H.N.P.-B.C.
Reproductive Medical Associates of New Jersey

Nutrition

RTM24
Weighing the Evidence on Vitamin D and Reproduction
Anne Marie Jukic, Ph.D.
National Institute of Environmental Health Sciences

Preimplantation Genetic Testing

RTM25
Progress in Comprehensive PGT
Dagan Wells, Ph.D., I.V.I., R.M.A.
University of Oxford

RTM26
PGT for Late-Onset Disorders
Svetlana Rechitsky, Ph.D.
Reproductive Genetic Innovations

Regenerative Medicine and Stem Cell Biology

RTM27
Stem Cell Therapy for Premature Ovarian Insufficiency
Ayman al-Hendy, M.D., Ph.D.
University of Illinois at Chicago
ROUND TABLE DISCUSSIONS
MONDAY, OCTOBER 14, 2019

Reproductive Biology and Technology
RTM28
Understanding Mosaicism – What You Need to Know
Amy Jones, M.S.
Ovation Fertility

RTM29
Overview on Emerging Technologies and Breakthrough Research in Assisted Reproductive Technology (ART)
Rebecca Krisher, Ph.D.
Colorado Center for Reproductive Medicine

RTM30
Cryo Tank Failure: What Every REI & Embryologist Should Know
Dawn Kelk, Ph.D., H.C.L.D.
Yale Fertility Center

Reproductive Endocrinology and Infertility
RTM31
Opening Your Door to Same Sex Male Couples and a Process for Your Practice
Mark Leondires, M.D.
Reproductive Medicine Associates of Connecticut

RTM32
Cultivating the Use of Social Media in Your Practice
Kenan Ormurtag, M.D.
Washington University School of Medicine

RTM33
Optimal management of Recurrent Pregnancy Loss
Lia Bernardi, M.D.
Northwestern University

Reproductive Surgery
RTM36
Intrauterine Adhesion Prevention – a Global and Scientific Perspective
Joe Findley, M.D.
University of Vermont

RTM37
Laparoscopic Tissue Extraction Techniques – Pearls to Maximize Success
Zaraq Khan, M.D.
Mayo Clinic

RTM38
Hysteroscopy Fibroid Resection: Pearls for Challenging Cases
Pres Parry, M.D.
University of Mississippi

Spanish Reproductive Medicine
RTM39
Estados Asociados Que Modifican El Éxito De Implantación
Marcelino Valencia Hernandez, M.D.
AMMR

Turkish Reproductive Medicine
RTM40
Current State and Individualized Success Rates of Oocyte Cryopreservation
Aylin Cil, M.D.
American Hospital - Istanbul, Turkey

Reproductive Managers
RTM34
Staying Together for the Kids: Clear Expectations that Partners and Associates Need to Agree Upon in Order to Grow the Practice and Avoid Separation
Griffin Jones, B.A.
Fertility Bridge

RTM35
Managing Patient Complaints and Setting Expectations
Beth Hume, B.A.
Seattle Reproductive Medicine
RounDTable DiScuSSionS  
Tuesday, October 15, 2019

Androgen Excess  
RTT1  
Weight Gain and Ovulation Induction in Polycystic Ovary Syndrome (PCOS)  
Wendy Vitek, M.D.  
University of Rochester

Assisted Reproductive Technology  
RTT2  
National Trends in In Vitro Fertilization (IVF) Practice, Lessons From the SART Database  
Jennifer Kawwass, M.D.  
Emory University

RTT3  
Expanded Versus Targeted Genetic Testing Before Pregnancy: Discussion of Guidelines, Options, and Cost Effectiveness  
Heather Hipp, M.D.  
Emory University

RTT4  
An Update on Immunomodulatory treatment in Reproductive Medicine and Early Pregnancy  
Abey Eapen, M.B.B.S., Ph.D., D.R.C.O.G.  
University of Iowa

Complimentary and Integrative Medicine  
RTT5  
The Pros and Cons of In House Integrative Medicine & What’s Best for Your Clinic  
Steven Mavros, L.OM., M.A.D.M.  
Healing Arts Center of Philadelphia

Contraception  
RTT6  
Incorporating the Use of Mifepristone Pretreatment for Medical Management of Miscarriage Into Your Practice  
Sarita Sonalkar, M.D., M.P.H.  
University of Pennsylvania

Early Pregnancy  
RTT7  
Obesity and Pregnancy Loss  
Christina Boots, M.D., M.S.C.I.  
Northwestern University

Educational Modalities  
RTT8  
Educational Strategies for an Effective Journal Club  
Ranjith Ramasamy, M.D.  
University of Miami

Endometriosis  
RTT9  
Are Most In Vitro Fertilization (IVF) Failures Due to Undiagnosed Endometriosis?  
Bruce Lessey, M.D.  
Wake Forest School of Medicine

Environment and Reproduction  
RTT10  
Air Pollution and Human Fertility: What is the Evidence and what can your patients do?  
Audrey Gaskins, Sc.D.  
Emory University

Fertility Preservation  
RTT11  
Fertility Preservation for the Transgender Patient  
Evelyn Mok-Lin, M.D.  
University of California, San Francisco

Genetic Counseling  
RTT12  
Direct To Consumer (DTC) Genetic Testing: Exploring the Benefits, Limitations and What to Do When a Patient Brings Results to the Clinic  
Rachel Donnell, M.M.Sc., L.C.G.C.  
Seattle Reproductive Medicine

Health Disparities  
RTT13  
Climate and health Challenges in Vulnerable Populations  
Rubin Alvero, M.D.  
Stanford University
ROUND TABLE DISCUSSIONS
TUESDAY, OCTOBER 15, 2019

Legal
RTT14
Legal and Ethics Challenges in Independent Surrogacy Arrangements
Molly O’Brien
Law offices of Molly O’Brien

RTT15
HIPAA Risk Assessment: Hand-On Help for the Administrator
Lisa Rinehart, R.N., J.D.
Legal Care Consulting

Male Reproduction and Urology
RTT16
Hypogonadism: Implications of Disease and Treatment for the Infertile Male
Mohit Khera, M.D.
Baylor College of Medicine

RTT17
Patient-Centered Approach to Azoospermia: Choosing the Best Technique for Sperm Retrieval
Thomas Walsh, M.D.
Washington University

Menopause and Ovarian Insufficiency
RTT18
Is there a role for testosterone use in women?
Jan Shifren, M.D.
Massachusetts General Hospital

Mental Health
RTT19
Is Sharing really Caring? The Use of Self-Disclosure in Infertility Counseling
Julie Bindeman, Psy.D.
Integrative Therapy of Greater Washington

RTT20
CBT for Recurrent Pregnancy Loss: Benefits, Limitations, and Alternatives
Danielle Kaplan, Ph.D.
NYU Langone

Nurses
RTT21
Tips From a Third Party Nurse on Ways to Improve Our LGBTQ Patients’ Experience
Michelle Flanagan, B.S.N., R.N.
IVI-RMA Global

Pediatric and Adolescent Gynecology
RTT22
Pediatric and Adolescent Gynecology from A to Z
Serena Chan, M.D.
University of Pittsburgh

Physician-Scientists
RTT23
How to Do Research Using Publicly Available Databases and Biorepositories
Zaher Merhi, M.D.
New Hope Fertility Center

Preimplantation Genetic Testing
RTT24
Prospect for Non Invasive PGT
Carmen Rubio, Ph.D.
Igenomix Spain

RTT25
Detection of Mosaicism and Segmental Variations
Mandy Katz-Jaffe
Colorado Center for Reproductive Medicine in Lone Tree, CO

Reproductive Biology and Technology
RTT26
Assisted Reproductive Technology (ART) Laboratory Networks/Mergers: Do They Improve Outcome?
Jason Swain, Ph.D.
Colorado Center for Reproductive Medicine

RTT27
TESE for Male Factor Infertility Patient Who Can Ejaculate (Oligozoospermia or Oligoasthenozoospermia or Oligoteratozoospermia): Where is the Evidence?
Speaker TBD
ROUND TABLE DISCUSSIONS
TUESDAY, OCTOBER 15, 2019

Reproductive Endocrinology and Infertility

RTT28
Management of Polycystic Ovary Syndrome (PCOS) from Adolescence Through Senescence
Laura Cooney, M.D.
University of Wisconsin

RTT29
The Ethics of Baby Making in the Age of CRISPR
Sigal Klipstein, M.D.
InVia Fertility

Reproductive Immunology

RTT30
Immune Etiology of Recurrent Pregnancy Loss
Joanne Kwak-Kim, M.D., M.P.H.
Chicago Medical School, Rosalind Franklin University of Medicine and Science

Reproductive Managers

RTT31
HIPPA Headaches and Ways to Avoid Them
Linsey McBain, B.A.
Reproductive Management Associates of New Jersey

Reproductive Surgery

RTT32
Racial Differences in Fibroid Care - Why is This Happening?
Erica Marsh, M.D.
University of Michigan

RTT33
Ovarian Surgery – Maximizing Results and Limiting Trauma
Linnea Goodman, M.D.
University of North Carolina

Spanish Reproductive Medicine

RTT34
Triggering with GNRH-Agonists in Assisted Reproductive Technology (ART) Patients.
Claudio Benadiva, M.D.
University of Connecticut

Turkish Reproductive Medicine

RTT35
Random Start Ovarian Stimulation-Is It For My Practice?
Hakan Cakmak, M.D.
University of California, San Francisco
ROUNDTABLE DISCUSSIONS
WEDNESDAY, OCTOBER 16, 2019

Access to Care
RTW1
Time To Get Creative: How To Improve Access To Care In Your Community
Tia Jackson-Bey, M.D.
University of Illinois College of Medicine at Chicago

Androgen Excess
RTW2
Ultrasound in the Diagnosis of Polycystic Ovary Syndrome (PCOS)
Marla Lujan, M.Sc., Ph.D.
Cornell University

Assisted Reproductive Technology
RTW3
"For Cryo-ing Out Loud: Protecting Your Cryo Assets"
Stephanie Nichols-Burns, Ph.D.
Yale University

RTW4
Primary Ovarian Insufficiency (POI): Diagnosis, Causes, and Long-Term Health
Heather Hipp, M.D.
Emory University

Complementary and Integrative Medicine
RTW5
Ayurveda Integrative Medicine in Infertility Treatment
Olark Musigavong, M.D., M.Sc.
Chaophya Abhaibhubejhr Hospital, Thailand

Early Pregnancy
RTW6
Aneuploidy as it Relates to Early Pregnancy Loss
William Kearns, Ph.D.
Johns Hopkins University School of Medicine, Advagenix

Fibroids
RTW7
Tips and Tricks for Surgical Management of Uterine Fibroids
Zaraq Khan, M.D.
Mayo Clinic

Genetic Counseling
RTW8
PGT-M for Mild Conditions
Rachael Cabey, M.S., L.C.G.C.
CooperGenomics

Health Disparities
RTW9
Abnormal Myometrial Stem Cells Are Responsible For Health Disparity In Uterine Fibroids
Qiwei Yang, Ph.D.
University of Illinois at Chicago

Legal
RTW11
Legal and Ethical Considerations in Multiple Surrogate Situations
Meryl Rosenberg, J.D.
Private Practice

LGBTQ
RTW12
Ovarian Stimulation in Transgender Men
Molly Moravek, M.D.
University of Michigan

Male Reproduction and Urology
RTW10
Male Home Fertility Testing: Pros and Cons for the Consumer and Medical Practitioner
Natan Bar-Chama, M.D.
Reproductive Medicine Associates of New York

RTW13
The Future of Male Infertility Microsurgery: Promising Emerging Technologies
Philip Li, M.D.
Cornell University

RTW14
Fertility Preservation in the Male Across the Lifespan
Robert Brannigan, M.D.
Northwestern University
**Mental Health**

**RTW15**
Modeling Good Behavior- The Ethics Of Surrogacy
Deborah Levy, M.A., L.P.C.
ConceiveAblities

**RTW16**
Lessons from an Adoption Plan: Differences, Similarities in Disclosure to Donor - Conceived Offspring
Dori Kavanagh, L.C.S.W.
Private Practice

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**Reproductive Biology and Technology**

**RTW22**
Clinical Embryologist Career Paths– Excelling in the Multi-dimensional Role
T. Arthur Chang, Ph.D., E.L.D., H.C.L.D.
University of Texas Health Science Center

**RTW23**
What to do When Euploid Embryos Fail to Implant?
John Whitney, B.S.
Ovation Fertility

**RTW24**
Environmental Pollutants and Their Effect on In Vitro Fertilization (IVF) Outcomes
Eva Schenkman, M.S.
Mellowood Medical

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**Nutrition**

**RTW17**
Tips from a Fertility Pharmacy Nurse Educator: Ways to Improve Patient Experience with Fertility Medications
Mary Vietzke, B.S.N., R.N.
Schrafts 2.0 Pharmacy

**RTW18**
Polycystic Ovary Syndrome (PCOS): Optimizing Fertility Through Nutrition
Angela Grassi, M.S., R.D.N., L.D.N.
Polycystic Ovary Syndrome (PCOS) Nutrition Center

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**Preimplantation Genetic Testing**

**RTW19**
Update of Randomized Control Trials on Clinical Outcome of PGT-A
Eric Forman, M.D.
Columbia University Fertility Center

**RTW20**
Prospective Carrier Screening and its Impact of PGT Uptake
Joe Leigh Simpson, M.D.
Florida International University

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**Regenerative Medicine and Stem Cell Biology**

**RTW21**
New Technologies for Stimulating Gametogenesis in a Dish
Philip Jordan, Ph.D.
Johns Hopkins University Bloomberg School of Public Health

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**Reproductive Endocrinology and Infertility**

**RTW25**
Incorporating Principles of Quality Improvement into Your Practice
Marissa Weiss, M.D.
University of Pennsylvania

**RTW26**
Optimizing Your Fertility Preservation Program
Mary Ellen Pavone, M.D.
Northwestern University

**RTW27**
Increasing Access to Fertility Care
Christopher Herndon, M.D.
University of Washington

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**Reproductive Managers**

**RTW28**
Embryo Disposition and Divorce
Jessica Medvedich, M.B.A., B.S.N., R.N.
Reproductive Medicine Associates of New Jersey

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**Reproductive Surgery**

**RTW29**
Office Based Tissue Extraction Devices – Which is Best For You?
Preston Parry, MD
Parryscope Fertility

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**Turkish Reproductive Medicine**

**RTW30**
Alternate Topic: Surgical Approach to Endometriosis
Erca Bastu, M.D.
Fulya Acibadem Hastanesi
VIDEO PROGRAM PRIZE SESSION

Prize Presenter: Tommaso Falcone
Moderators: Steven Lindheim and Grace Janik

4:30 PM V-1 TECHNIQUES FOR SUCCESSFUL VAGINAL ANASTOMOSIS IN THE UTERINE TRANSPLANT PATIENT. Jenna M Rehmer, MD, Elliott G Richards, MD, Cecile A Ferrando, MD, MPH and Rebecca Flyckt, MD, Cleveland Clinic Foundation, Cleveland, OH

4:42 PM V-2 SURGICAL MANAGEMENT OF DEEP INFILTRATING ENDOMETRIOSIS INVOLVING THE RECTOSIGMOID Colon. Natalia C Llarena, MD, Anup B. Shah, MD, MS, Hermann Kessler, MD, PhD, Tommaso Falcone, MD, and Rebecca Flyckt, MD, Cleveland Clinic Foundation, Cleveland, OH

4:53 PM V-3 NO-SCALPEL VASECTOMY: PUNCTURE-FIRST WITH MULTI-OCCCLUSION TECHNIQUE. Khushabu Kasabwala, MD, Helen Levey Bernie, DO MPH, Soo Jeong Kim, MD, Vanessa L Dudley, MSHS and Marc Goldstein, MD, New York Presbyterian - Weill Cornell Medical Center, New York, NY, Memorial Sloan Kettering Cancer Center, New York, NY, Weill Cornell Medicine, New York, NY, Weill Cornell Medicine, New York Presbyterian Hospital, New York, NY

5:06 PM V-4 DEVELOPMENT OF AN AUTOMATIC PRONUCLEAR DETECTION SYSTEM FOR HUMAN EMBRYOS USING DEEP LEARNING TECHNOLOGY. Hiroyuki Watanabe, M.S., Noritaka Fukunaga, Ph.D., Sho Sanami, Ph.D., Hiroya Kitasaka, Ph.D., Yuji Tsuzuki, M.S., Yuta Kida, M.S., Seiji Takeda, M.S. and Yoshimasa Asada, M.D., Ph.D., Asada Ladies Clinic, Nagoya, Aichi, Japan, Research & Development Center, Dai Nippon Printing Co., Ltd., Kita-ku, Tokyo, Japan

VIDEO SESSIONS
Tuesday, October 15, 2019
4:15 pm - 5:30 pm

VIDEO SESSION 2

Moderators: Ceana Nezhat and Mark Trolice

4:15 PM  V-6  CONTINUOUS MONITORING OF THE EMBRYO DEVELOPMENT: A LEAP TOWARDS AUTOMATED SYSTEMS. Lorena Bori, PhD1, Raquel Del Gallego, PhD1, Lucia Alegre, PhD1, Antonio Pellicer, MD2 and Marcos Meseguer, PhD3, 1IVIRMA Global, Valencia, Spain, 2IVI Foundation Innovation - Reproductive Medicine IIS La Fe, Valencia, Spain, 3IVIRMA Global, Valencia, Spain, Tel Aviv, Israel

4:23 PM  V-7  COMPARISON OF SPERM RETRIEVAL TECHNIQUES FOR MEN WITH OBSTRUCTIVE AZOOSPERMIA. Joshua N Bitran, BS1, Premal Patel, MD2 and Ranjith Ramasamy, M.D3, 1University of Miami, Miami, FL, 2University of Miami Miller School of Medicine, Miami, FL, 3University of Miami

4:28 PM  V-8  POST-ABLATION RESIDUAL DISEASE: HISTOLOGICAL ASSESSMENT OF EXCISED PERITONEAL ENDOMETRIOSIS. Christine Hur, MD1, Tommaso Falcone, M.D.2 and Rebecca Flyckt, MD3, 1Cleveland Clinic, Cleveland, OH, 2Cleveland Clinic, Cleveland, OH, 3Cleveland Clinic Foundation, Cleveland, OH

4:34 PM  V-9  TEACHING SURGERY FOR MASSIVE ADENOMYOSIS WHICH PRESERVES THE UTERUS. Sherman Silber, MD1, Yuting Fan, M.D.2 and Sierra Goldsmith, B.S.1, 1Infertility Center of St. Louis, Chesterfield, MO, 2University of Michigan, Ann Arbor, MI

4:53 PM  V-10  LAPAROSCOPIC RELOCATION OF THE OVARIAN AFTER PRIOR TRANSPOSITION. Jessica Traylor, M.D., Jaclyn Friedman, M.D. and Magdy P Milad, M.D., MS, Northwestern University Feinberg School of Medicine, Chicago, IL

5:01 PM  V-11  OPTIMIZING FERTILITY PRESERVATION USING MULTIPLE MODALITIES IN A YOUNG PATIENT WITH CERVICAL CANCER. Natalia C Llarena, MD, Bouran Kilany, MD, Mariam Alhilli, MD and Rebecca Flyckt, MD, Cleveland Clinic, Cleveland, OH

5:09 PM  V-12  LEFT OVARIAN TRANSPOSITION OF UNDESCENDED Ovary WITH UNICORNUATE UTERUS. Kirsten Sasaki, M.D.1 and Charles E. Miller, M.D.2, 1Advocate Lutheran General Hospital, Naperville, IL, 2The Advanced Gynecologic Surgery Institute/The Advanced IVF Institute, Charles E. Miller, MD & Associates, Naperville, IL

5:15 PM  V-13  EXCISION OF A PELVIC SIDE-WALL FIBROID. Alexander Kotliyar, MD1 and Pinar Kodaman, MD/PhD2, 1Yale University, New Haven, CT, 2Yale School of Medicine, New Haven, CT
Wednesday, October 16, 2019

3:45 PM V-14  2- PORT MYOMECTOMY TECHNIQUE FOR UTERUS ADHERENT TO THE ANTERIOR ABDOMINAL WALL. Hadi Ramadan, M.D., Jerri A Waller, M.D., Traci E Ito, M.D. and Joseph L Hudgens, M.D., Eastern Virginia Medical School, Norfolk, VA

3:53 PM V-15  PROOF OF CONCEPT FOR AN AUTOMATED TANK STORING FROZEN EMBRYOS AND GAMETES IN AN ART LABORATORY. Timothy Allen Sharp, B.S.¹, William N Garbarini Jr., MBA², Chad A Johnson, PhD¹, Ann Watson, B.A.¹ and Kathryn J Go, PhD¹, ¹TMRW Life Sciences, New York, NY, ²TMRW Life Sciences, Inc., New York, NY

3:56 PM V-16  LAPAROSCOPIC RESECTION OF FUNCTIONAL, NON-COMMUNICATING UTERINE HORN. Rachel M. Whynott, M.D., Rachel Mejia, D.O.², ¹University of Iowa Hospitals and Clinics, Iowa City, IA, ²University of Iowa, Iowa City, IA

4:03 PM V-17  MEIOTIC SPINDLE AVOIDANCE USING A POLARIZING FILTER AT THE TIME OF ICSI, A STEP CLOSER TOWARDS INDIVIDUALIZED ICSI. Alejandro Chavez-Badiola, MD¹, Rodolfo Garcia-Sánchez, MSc², Erika L Iniguez-Arteaga, Bio³, Dante Joséus Sánchez González, Bio¹, Carmen Ortega Madera, Bio¹ and Sarahi Vazquez-Pacheco, Bio¹, ¹New Hope Fertility Center Mexico, Mexico City, EM, Mexico, ²New Hope Fertility Center Mexico, Guadalajara, JA, Mexico

4:21 PM V-18  LAPAROSCOPIC MANAGEMENT OF TUBAL DISEASE TO IMPROVE FERTILITY OUTCOMES. Aarathi Cholkeri-Singh, M.D.¹ and Charles E. Miller, M.D.², ¹The Advanced Gynecologic Surgery Institute, Naperville, IL, ²The Advanced Gynecologic Surgery Institute/The Advanced IVF Institute, Charles E. Miller, MD & Associates, Naperville, IL

4:27 PM V-19  ROBOTIC ASSISTED LAPAROSCOPIC RESECTION OF ANTERIOR ADENOMYOMA. Papri Sarkar, MD¹ and Anthony N. Imudia, MD², ¹OBGYN Resident, Tampa, FL, ²University of South Florida, Tampa, FL

4:35 PM V-20  SPECIALIZED PIEZO-ICSI FOR LOW QUALITY OOCYTES. Atsushi Tanaka, M.D., Ph.D., Motoi Nagayoshi, M.D., Izumi Tanaka, Phar.B., Takashi Yamaguchi, M.D., Ph.D. and Motoharu Ohno, M.D., Saint Mother Hospital, Kitakyushu, Japan

4:42 PM V-21  NOVEL UTERINE CLOSURE TECHNIQUE TO PREVENT INTRAUTERINE ADHESIONS. Clarissa J Lam, MD and Anthony N Imudia, MD, University of South Florida, Tampa, FL
ASRM appreciates those who volunteered to review the 2019 abstract submissions. Thank you for your time and participation.

Galal Abdo
Glen Adaniya
Lusine Aghajanova
Asima Ahmad
Ali Ahmady
Ayman Al-Hendy
Christine Allen
Joseph Alukal
Ruben Alvero
Paula Amato
Linda Anderson
Marlane Angle
David Archer
Kenneth Aston
Valerie Baker
G. Ball
Kurt Barnhart
Kenneth Beaman
Barry Behr
Kristin Bendikson
Dara Berger
Lia Bernardi
Andria Besser
Zeki Beyhan
Balasubramanian
Bhagavath
Andrea Bird
Cecily Bishap
Silvina Bocca
Charles Bormann
Pietro Bortoletto
Robert Brannigan
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Paul Brezina
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Gregory Christman
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Robert Coward
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Michael Dahan
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Lynn Davis
Christina Davis-Kankanamge
Canice Dersch
Nina Desai
Laura Deti
Kate Devine
Anuja Dokras
Alice Domar
Andrew Dorfmann
Emra Drobnis
Jamie Dubaut
Anil Dubey
Antoni Duleba
Eyup Duran
Abey Eapen
Jennifer Eaton
Michael Eisenberg
Ahmed El-Damen
Ronny Elias
Lawrence Engmann
Ashley Eskew
Max Ezzati
Tommaso Falcone
Ruth Farrell
Simone Ferrero
Rebecca Flyckt
Eric Forman
Nastaran Foyouzi
Melanie Freeman
Aisaku Fukuda
Atsushi Fukui
Amber Gamma
Audrey Gaskins
Ghina Ghazeeri
Luca Gianaroli
Daniella Gilboa
Elizabeth Ginsburg
Kathryn Go
Kara Goldman
Bruce Goldstein
Linee Goodman
Emily Goulet
Ellen Greenblatt
Daniel Grow
Lisa Halvorson
Karen Hammond
Alan Handyside
Karl Hansen
Gary Harton
Michael Heard
Christopher Herndon
Patricia Hershberger
Timothy Hickman
Micah Hill
Heather Hipp
Jennifer Hirshfeld-Cytron
Devin Hodge
Kathleen Hoeger
Sarah Holley
Rebecca Holmes
Peter Holoch
Stan Honig
James Hotaling
Luis Hoyos
Kathleen Hung
Anthony Imudia
Mohammad Irani
Lauren Isley
Kristen Ivani
Tarun Jain
Grace Janik
Jeffrey Jensen
Sangita Jindal
Beth Johnson
Julia Johnson
Amy Jones
Philip Jordan
Emily Jungheim
Semra Kahraman
Amanda Kallen
Joshua Kapfhamer
Mandy Katz-Jaffe
Jennifer Kawwass
Jeffrey Keenan
Dawn Kelk
Maureen Kelly
Levent Keskintepe
Zaraq Khan
Edward Kim
Violet Klenov
Sigal Klipstein
Jennifer Knudtson
Peter Koletts
Alexander Kotlyar
Jessica Kresowiak
Rebecca Krisher
Abby Kruper
Rashmi Kudesia
Anver Kulev
Satu Kuokkanen
Vitaly Kushnir
William Kutteh
Antoine La
Dolores Lamb
Michael Lanham
Shannon Laughlin-Tommaso
Joop Laven
Angela Lawson
Michael Lee
Chelsey Leisinger
Mark Leondires
Eric Levens
Gary Levy
Philip S. Li
Yu Liang
Juergen Liebermann
Paul Lin
Steven R. Lindheim
Larry Lipshultz
Kirk Lo
Erica Louden
Marla Lujan
Kelly Lynch
Cristina Magli
Winifred Mak
Abigail Mancuso
Diego Marin
Courtney Marsh
Erin Masaba
Bat-Sheva Maslow
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Wael Megid
Akanksha Mehta
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Rachel Mejia
Pauline Mendola
Geralyn Messorian
Brad Milette
Charles Miller
Fred Miller
Sharon Moayeri
Thomas Molinaro
Molly Moravek
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Sunni Mumford
Erika Munch
Santiago Munne
Rink Murray
Zsolt Nagy
Kanad Nayar
Elham Neisani Samani
Ceana Nezhad
John Nichols
Nancy Nugent
John Nulsen
Oroma Nwanodi
Jeanne O’Brien
Thomas O’Leary
Sergio Oehninger
Dana Ohl
Kenan Omurtag
Kelly Pagidas
Tarita Pakrashi
Gianpiero Palermo
Firuza Parikh
Preston Parry
Premal Patel
Pasquale Patrizio
MaryEllen Pavone
Mary Peavey
John Petrosza
Margareta Pisarska
Torie Plowden
Kimball Pomeroy
Thomas Pool
Jean Popwell
Marc P. Portmann
Scott Purcell
Gwendolyn Quinn
Molly Quinn
Leslie Ramirez
Svetlana Rechitsky
Christine Reda
Michael Reed
Matthew Retzlaff
Alice Rhoton-Vlasak
Joan Riley
Jared Robins
Mitchell Rosen
Evan Rosenbluth
William Roudebush
Carmen Rubio
Bo Rueda
Ginny Ryan
Denny Sakkas
Sana Salih
Mary Samplaski
Mireia Sandalinis
Jay Sandlow
Mark Sauer
Ann Scalia
Mitchel Schiewe
Austin Schirmer
Kate Schoyer
Alessandro Schuffner
David Seifer
Brad Senstra
Bruce Shapiro
Fady Sharara
Gena Shepherd
David Shin
Yimin Shu
Sony Sierra
Mark Sigman
Joe Leigh Simpson
Fethiye Sinem Karipcin
Malgorzata Skaznik-Wiikiel
Ov Slayden
James Smith
Yolanda Smith
Irene Souter
Steven Spandorfer
Jessica Spencer
Rajesh Srivastava
James Stachexki
Laurel Stadtmauer
Andrea Stein
Mary Stephenson
Judy Stern
Eleanor Stevenson
Charles Strom
H. Su
Jason Swain
Reshef Tal
Serena Talcott Baughman
Laura Tatpati
Tyl Taylor
Salli Tazuke
Colin Thomas
Michael Thomas
James Toner
Thomas Toth
Mark Trolice
Michael Tucker
Togas Tulandi
Outi Uimari
Rae van Tol
Denis Vaughan
Digna Velez Edwards
Debbie Venier
Matthew VerMilyea
Tiffany Von Wald
Thomas Walsh
Tianren Wang
Blake Welch
Dagan Wells
Marie Werner
Lynn Westphal
Carol Wheeler
John Whitney
Rachel Whynott
Halina Wicyzk
Robert Wild
Daniel Williams
Zev Williams
Lauren Wise
Barry Witt
Jennifer Wood
Kangpu Xu
Qiwei Yang
Belinda Yauger
Bo Yu
Pavel Zagadailov
A. Musa Zamah
Yulian Zhao
Julianne Zweifel
PRIZE PAPER SESSION

SCIENTIFIC CONGRESS PRIZE PAPER SESSION 1

The first six papers are candidates for the ASRM Scientific Congress Prize Paper Awards.
Six additional candidates will be presented during the Prize Paper Candidates’ session on Tuesday.
Moderator: Lauren Bishop

10:45 AM  O-1  ANTIDEPRESSANT MEDICATION EXPOSURE: TIME TO PREGNANCY AND RISK OF PREGNANCY LOSS. Lindsey A Sjaarda, PhD1, Jeannie G Radoc, BS1, Kerry S Flannagan, PhD1, Sunni L Mumford, PhD1, Neil J Perkins, PhD1, Robert M Silver, MD2 and Enrique F Schisterman, PhD1, 1Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 2University of Utah, Salt Lake City, UT

11:00 AM  O-2  EFFECTS OF FOLIC ACID AND ZINC SUPPLEMENTATION IN MEN ON SEMEN QUALITY AND LIVE BIRTH AMONG COUPLES UNDERGOING INFERTILITY TREATMENT: FINDINGS FROM THE FAZST RANDOMIZED TRIAL. Enrique F Schisterman, PhD1, Lindsey A Sjaarda, PhD2, Traci Clemons, PhD3, Douglas T Carrell, PhD4, Neil J Perkins, PhD1, Erica Johnstone, MD5, Denise Lamb, BSN5, Kayla Chaney, BA5, Bradley J Van Voorhis, MD5, Ginny L Ryan, MD, MA7, Karen M Summers, MPH CHES9, James Hotaling, MD4, Jared C Robins, MD9, James L Mills, MD, MS1, Pauline Mendola, PhD10, Zhen Chen, PhD1, C Matthew Peterson, MD5 and Sunni L Mumford, PhD11, 1NICHD, Bethesda, MD, 2Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 3The Emmes Company LLC, Rockville, MD, 4University of Utah School of Medicine, Salt Lake City, UT, 5University of Utah, Salt Lake City, UT, 6University of Iowa Carver College of Medicine, Iowa City, IA, 7University of Iowa Hospitals and Clinics, Iowa City, IA, 8University of Iowa, Iowa City, IA, 9Northwestern University, Chicago, IL, 10National Institutes of Child Health and Human Development, Bethesda, MD, 11National Institute of Child Health and Human Development, Bethesda, MD

11:15 AM  O-3  CAN HYSTEROSALPINGO FOAM SONOGRAPHY (HYFOSY) REPLACE HYSTEROSALPINGOGRAPHY (HSG) AS FIRST CHOICE TUBAL PATENCY TEST: A RANDOMIZED COMPARISON (FOAM STUDY)? Nienke van Welie, M.D.1, Joukje van Rijswijk, M.D.1, Kim Dreyer, M.D., PhD1, Marcel H.A. van Hoot, M.D., PhD2, Harold Verhoeve, M.D., PhD4, J. P. de Bruin, M.D., PhD4, Femke Mol, M.D., PhD5, Marchien van Baal, M.D., PhD4, Bob van de Laar, M.D.6, Niels B. Lambalk, M.D., PhD1, Madelon van Wely, PhD5, Jaap Stoker, M.D., PhD5, Ben W Mol, M.D., Ph.D. Prof.11, Velja Mijatovic, M.D., PhD4 and FOAM study Group, 1Amsterdam UMC, Vrije Universiteit Amsterdam, Department of Reproductive Medicine, Amsterdam, Netherlands, 2Department of Reproductive Medicine, Amsterdam UMC, Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 3Franciscus Hospital, Department of Obstetrics and Gynecology, Rotterdam, Netherlands, 4OLVG Oost Hospital, Department of Obstetrics and Gynecology, Amsterdam, Netherlands, 5Jeroen Bosch Hospital, Department of Obstetrics and Gynecology, Den Bosch, Netherlands, 6Amsterdam UMC, University of Amsterdam, Center for Reproductive Medicine, Amsterdam, Netherlands, 7Flevo Hospital, Department of Obstetrics and Gynecology, Almere, Netherlands, 8OLVG
ORAL ABSTRACTS

West, Department of Obstetrics and Gynecology, Amsterdam, Netherlands, Amsterdam UMC, University of Amsterdam, Department of Epidemiology, Biostatistics and Bioinformatics, Amsterdam, Netherlands, Amsterdam UMC, University of Amsterdam, Department of Radiology and Nuclear Medicine, Amsterdam, Netherlands, Monash University, Monash Medical Centre, Department of Obstetrics and Gynecology, Melbourne, VIC, Australia

11:30 AM O-4 MALE MARIJUANA USE AND SPONTANEOUS ABORTION. Alyssa F Harlow, MPH, Amelia K Wesselink, Ph.D., Kenneth J Rothman, Dr.P.H., Elizabeth E Hatch, Ph.D. and Lauren A Wise, Sc.D., Boston University School of Public Health, Boston, MA, Boston, MA

11:45 AM O-5 BEETROOT, WATERMELON AND GINGER JUICE SUPPLEMENTATION MAY INCREASE THE CLINICAL OUTCOMES OF INTRACYTOPLASMIC SPERM INJECTION CYCLES. Gabriela Halpern, MSc, Amanda Souza Setti, MSc, Daniela Paes de Almeida Ferreira Braga, PhD, Assumpto Iaconelli Jr., MD and Edson Borges Jr., PhD, Fertility Medical Group, Sao Paulo, Brazil, Fertility Medical Group / Sapientiae Institute, Sao Paulo, Brazil

12:00 PM O-6 PHASE 3 TRIAL RESULTS: EFFICACY AND SAFETY OF ELAGOLIX IN A SUBSET OF WOMEN WITH UTERINE FIBROIDS AND ADENOMYOSIS. Ozgul Muneyyirci-Delale, MD, David F Archer, MD, Jin Hee Jeannie Kim, MD, Ran Liu, PhD, Charlotte D Owens, MD and Elizabeth E Puscheck, MD, MS, MBA, State University of New York, Brooklyn, NY, Eastern Virginia Medical School, Norfolk, VA, Columbia University, New York, NY, AbbVie, Inc., North Chicago, IL, Wayne State University, Detroit, MI
ORAL ABSTRACT SESSION

Monday, October 14, 2019  
10:45 am - 12:15 pm

ART LAB: BASIC

Moderators: Melanie Clemmer and Dawn Kelk

10:45 AM O-7 IMPLEMENTATION OF AN ELECTRONIC WHITEBOARD FOR QUALITY MANAGEMENT IN THE IN VITRO FERTILIZATION LABORATORY. Phillip A Romanski, MD1, Ann M Thomas, PhD2, Jay Patel, MS3, Dan Zhang, MD, PhD1 and Catherine Racowsky, PhD2, 1Brigham & Women’s Hospital and Harvard Medical School, Boston, MA, 2Brigham & Women’s Hospital, Boston, MA, 3Brigham and Womens Hospital, Boston, MA

11:00 AM O-8 THE CLINICAL RESULTS OF PIEZO-ICSI COMPARED TO CONVENTIONAL-ICSI: A SIBLING-OOCYTE STUDY. Noriyuki Okuyama, M.Sc.1, Ryuichiro Obata, Ph.D.1, Nao Oka, M.Sc.1, Nobuya Aono, Ph.D.2, Tomoko Hashimoto, M.D., Ph.D.1 and Koichi Kyono, M.D., Ph.D.1, 1Kyoto ART Clinic Takanawa, Tokyo, Japan, 2-3-13-1, takanawa, Minato-ku, Tokyo, Japan

11:15 AM O-9 WOULD AN AUTOMATED SYSTEM DETECTING EMBRYO DEVELOPMENTAL EVENTS SELECT THE SAME EMBRYO AS AN EMBRYOLOGIST USING A MORPHOKINETIC ALGORITHM? Raquel Del Gallego, PhD1, Lorena Bori Arnal, PhD1, Lucia Alegre, PhD1, Teija Peura, PhD2, Manuel Ugidos, PhD3 and Marcos Meseguer, PhD4, 1IVIRMA Global, Valencia, Spain, 2Genea Biomedx, Sydney, NSW, Australia, 3Instituto de Biomedicina de Valencia, Valencia, Spain, 4IVIRMA Global, Valencia, Spain, Tel Aviv, Israel

11:30 AM O-10 PROPORTION OF PATIENTS DETECTED WITH SUBCLINICAL HYPOTHYROIDISM IS INDEPENDENT OF TIME OF BLOOD DRAW. Christine Briton-Jones, PhD, HCLD1, Jenna Friedenthal, MD2, Sydney Chang, MD2, Taraneh Gharib Nazem, MD2, Dmitry Gounko, MA1, Joseph A. Lee, BA1 and Alan B Copperman, MD2, 1Reproductive Medicine Associates of New York, New York, NY, 2Icahn School of Medicine at Mount Sinai, New York, NY

11:45 AM O-11 PRELIMINARY RESULTS FROM THE FIRST REGISTERED PILOT TRIAL WITH MATERNAL SPINDLE TRANSFER TO OVERCOME INFERTILITY. Nuno Costa-Borges, PhD1, Eros Nikitos, MSc2, Katharina Spath, PhD3, Dagan Wells, PhD3, Klaus Rink, PhD1, Yannis Vasilopoulos, MD4, Ioannis Zervomanolakis, MD2, Dimitopoulos Konstantinos, MD2, Polyzos Panagiotis, MD2, Stylianos Grigorakis, MD, FRCOG2, George Kontopoulos, MD2, Konstantinos Kostaras, MD, PhD4, Panagiotis S Psathas, MD4 and Gloria Calderon, PhD1, 1Embryotools, Barcelona, Spain, 2Institute of Life, Athens, Greece, 3VI RMA, Oxford, United Kingdom, 4Institute of Life, Athens, Greece
12:00 PM  **O-12 EFFECT OF SPERM SELECTION USING MACS TECHNOLOGY IN THE PGT-A PROGRAM COMPARED WITH STANDARD SPERM PREPARATION.**
Laura Romany, PhD, Jesús Aguilar, PhD, Lucia Alegre, PhD, Belén Aparicio-Ruiz, PhD, Arantza Delgado, PhD, Jose Alejandro Remohi, MD, PhD and Marcos Meseguer, PhD, 1IVIRMA, Valencia, Spain, 2IVI VIGO, vigo, Spain, 3IVIRMA Global, Valencia, Spain, 4IVIRMA Valencia, Valencia, Spain, 5IVIRMA Valencia, Valencia, Spain, 6IVIRMA Valencia, Valencia, Spain, 7IVIRMA Valencia, Tel Aviv, Israel

MD MPH1, Dmitry Dukhovny, MD MPH2, Daksha Gopal, MPH2, Howard Cabral, PhD, MPH3, Hafsatou Diop, MD, MPH4 and Judy E Stern, PhD5.
1University of Colorado School of Medicine, Aurora, CO, 2Affiliation not provided, 3Boston University, Boston, MA, 4MDPH, Boston, MA, 5Dartmouth-Hitchcock, Lebanon, OR

ART OFFSPRING
Moderators: Emily Jungheim and Elliott Richards

10:45 AM  **O-13 THIRD GRADE ACADEMIC ACHIEVEMENT AMONG CHILDREN CONCEIVED WITH IVF: A POPULATION-BASED STUDY IN TEXAS.** Stephanie Watkins, PhD1, Morton B Brown, PhD2, Barbara Luke, ScD, MPH3, Mary K Ethen, MPH4, Mark A Canfield, PhD4, Ethan Wantman, MBA5, Nina E Forestieri, MPH6, Mahsa M Yazdy, PhD7, Sarah C Fisher, MPH7, Marilyn L Browne, PhD7, Hazel B Nichols, PhD7, Valerie L Baker, MD8, Michael L Eisenberg, M.D.9, Sergio C Oehninger, MD, PhD10 and Kevin J. Doody, M.D.,11 1TARGET PharmaSolutions, Durham, NC, 2University of Michigan, Ann Arbor, MI, 3Michigan State University, East Lansing, MI, 4Texas Department of State Health Services, Austin, TX, 5Redshift Technologies, Inc., New York, NY, 6N.C. Birth Defects Monitoring Program, Raleigh, NC, 7Affiliation not provided, 8Johns Hopkins University School of Medicine, Division of Reproductive Endocrinology and Infertility, Lutherville, MD, 9Stanford University, Stanford, CA, 10300 E. 55th street, New York, NY, 11CARE Fertility, Bedford, TX

11:15 AM  **O-15 CONCEPTION BY INFERTILITY TREATMENT AND NEWBORN DNA METHYLATION.** Edwina Yeung, PhD1, Pauline Mendola, PhD1, Rajeshwari Sundaram, PhD1, Xuehuo Zeng, PhD2, Weihua Guan, PhD3, Michael Y Tsai, PhD4, Sonia L Robinson, PhD1, Judy E Stern, PhD4 and Erin M Bell, PhD5.
1National Institutes of Child Health and Human Development, Bethesda, MD, 2Glotech Inc, Rockville, MD, 3University of Minnesota, Minneapolis, MN, 4Dartmouth-Hitchcock, Lebanon, OR, 5University at Albany, Albany, NY

10:45 AM  **O-15 CONCEPTION BY INFERTILITY TREATMENT AND NEWBORN DNA METHYLATION.** Edwina Yeung, PhD1, Pauline Mendola, PhD1, Rajeshwari Sundaram, PhD1, Xuehuo Zeng, PhD2, Weihua Guan, PhD3, Michael Y Tsai, PhD4, Sonia L Robinson, PhD1, Judy E Stern, PhD4 and Erin M Bell, PhD5.
1National Institutes of Child Health and Human Development, Bethesda, MD, 2Glotech Inc, Rockville, MD, 3University of Minnesota, Minneapolis, MN, 4Dartmouth-Hitchcock, Lebanon, OR, 5University at Albany, Albany, NY

11:00 AM  **O-14 SEX DIFFERENCES IN BIRTH OUTCOMES FOR MASSACHUSETTS INFANTS FOLLOWING ART.** Sunah S Hwang,

11:30 AM  **O-16 BABIES BORN FOLLOWING ADMINISTRATION OF NOLASIBAN BEFORE EMBRYO TRANSFER (ET) AFTER IVF: NEONATAL AND INFANT DEVELOPMENT OUTCOMES FROM A DOUBLE-BLIND, PLACEBO-CONTROLLED, CLINICAL TRIAL.** Andrew Humberstone, PhD1, Paul Terrill, PhD2, Lynne Macgregor, MSc1 and Ernest Loumaye, MD, PhD1, 1ObsEva SA, Planles-Ouates, Switzerland, 2Cytel Inc, London, United Kingdom

11:45 AM  **O-17 SIMILAR SUCCESS RATES WITH FROZEN OOCYTES BUT INCREASED RATE OF LARGE FOR GESTATIONAL AGE (LGA) INFANTS COMPARED TO FRESH OOCYTES.** Channing Burks, MD1, Kristin Van Heertum, MD1, Alexandra C Purdue-Smith, PhD2, Sunni L Mumford, PhD3, James Goldfarb, MD, MBA4 and Rachel S Weinerman, MD1, 1University Hospitals Fertility Center/Case Western Reserve University, Beachwood, OH, 2NICHHD, Bethesda, MD, 3National Institute of Child Health and Human Development, Bethesda, MD, 4OH
ORAL ABSTRACTS

12:00 PM  O-18 PREVALENCE OF CLINICALLY SIGNIFICANT CONGENITAL HEART DEFECTS IN LOW-RISK IVF PREGNANCIES. Sarah H Bjorkman, MD1, Kurt R Bjorkman, MD2, Anna K Stakianaki, MD, MPH3, Joshua A Copel, MD1 and Mert Ozan Bahtiyar, MD3, 1Yale School of Medicine, New Haven, CT, 2Department of Pediatrics, Yale School of Medicine, New Haven, CT, 3Yale Maternal Fetal Medicine, Fetal Care Center, New Haven, CT

11:30 AM  O-22 INFLUENCE OF GENETIC VARIANTS ON WEIGHT GAIN AMONG ETONOGESTREL CONTRACEPTIVE IMPLANT USERS. Aaron Lazorwitz, MD, MSCS1, Eva Dindinger, MPH1, Margaret A Harrison, BA1, Christina L Aquilante, PharmD2, Jeanelle Sheeder, PhD1 and Stephanie Teal, MD, MPH1, 1University of Colorado Anschutz Medical Campus, Aurora, CO, 2University of Colorado Anschutz Medical Campus, Skaggs School of Pharmacy and Pharmaceutical Sciences, Aurora, CO

CONTRACEPTION AND COMPLEX FAMILY PLANNING

Moderator: Torie Plowden and Alessandro Schoffrer

10:45 AM  O-19 TOPICAL LIDOCAINE-PRILOCAINE CREAM VERSUS LIDOCAINE 1% SUBCUTANEOUS INFILTRATION DURING NEXPLANON INSERTION: A RANDOMIZED CONTROLLED STUDY. Ahmed M Abbas, MD1, Mohamed Khalaf, MD1, Eman El-said, MBBCh2 and Ahmed Nasr, MD1, 1Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, 2Department of Obstetrics and Gynecology, Luxor General Hospital, Luxor, Egypt

11:00 AM  O-20 A RANDOMIZED CLINICAL TRIAL BETWEEN ULTRASOUND-GUIDED AND UTERINE SOUND-SPARING APPROACH FOR COPPER INTRAUTERINE DEVICE INSERTION. Mohammed Khairy Ali, MD1, Ahmed M Abbas, MD1, Asmaa Ramadan, MBCh2, Ahmed M. Abdelmagied, MD1, Mostafa Nasr Ibrahim, MD1 and Ahmed Abu-Ellassan, MD1, 1Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, 2Department of Obstetrics and Gynecology, Qous Central Hospital, Qena, Egypt

11:15 AM  O-21 EFFECT OF CELL-PHONE ASSISTED POSTPARTUM COUNSELING ON THE USE OF LONG-ACTING REVERSIBLE CONTRACEPTIVES: A RANDOMIZED CONTROLLED TRIAL. Omar M Shaaban, MD1, Ahmed M Abbas, MD1, Treza Saber, MSc2, Entisar Youness, MD2 and Manal Farouk, MD2, 1Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, 2Department of Obstetrics & Gynecological Nursing, Faculty of Nursing, Assiut University, Assiut, Egypt

11:45 AM  O-23 EFFICACY AND SAFETY OF A MULTIPURPOSE VAGINAL pH-REGULATOR: RESULTS FROM THE PHASE 3, AMPOWER CONTRACEPTION CLINICAL TRIAL. Michael A. Thomas, MD1, Kelly R. Culwell, MD, MPH2, Clint Dart, MS3 and Brandi Howard, PhD2, 1University of Cincinnati, Cincinnati, OH, 2Evofem, Inc., San Diego, CA, 3Health Decisions, Durham, NC

12:00 PM  O-24 BLEEDING PATTERNS AND ENDOMETRIAL SAFETY WITH A 1-YEAR, SEGESTERONE ACETATE/ETHINYL ESTRADIOL CONTRACEPTIVE VAGINAL SYSTEM. David F Archer, MD1, Kurt T Barnhart, MD, MSC2, Anita L Nelson, MD3, Mitchell D Creinin, MD4, Jeffrey T Jensen, MD, MPH5, Sebastian Mirkin, MD4 and Ruth B Merkatz, PhD7, 1Eastern Virginia Medical School, Norfolk, VA, 2University of Pennsylvania, Perelman School Of Medicine, Philadelphia, PA, 3Essential Access Health, Los Angeles, CA, 4University of California - Davis, Sacramento, CA, 5Oregon Health & Science University, Portland, OR, 7TherapeuticsMD, Boca Raton, FL, 8Population Council, New York, NY
CRYOPRESERVATION AND FROZEN EMBRYO TRANSFER

Moderators: Alicia Broussard and Sangita Jindal

10:45 AM O-25 UNIVERSAL WARMING PROTOCOL” FOR A TRANSNATIONAL EGG DONATION PROGRAM WITH VITRIFIED OOCYTES: A RETROSPECTIVE MULTI-CENTRE STUDY.
Lodovico Lodovic Parmegiani, Ph.D, Maria Giulia Minasi, M.Sc, Alessandra Amona, M.Sc, Valentina Casciani, Ph D, Graciela Estela Cognigni, MD, Rita Viñoles, MD, Maria Teresa Variccchio, MD, Luis Alberto Quintero, MD, Ermanno Greco, MD and Marco Filicori, MD, GynePro Medical Centers- NexctClinics International, Bologna, Italy

11:00 AM O-26 MORPHOLOGY STILL MATTERS WHEN SELECTING EUPLOID EMBRYOS: INNER CELL MASS (ICM) AND TROPHECTODERM (TE) ARE PREDICTIVE OF PREGNANCY OUTCOMES.
Sarah Druckenmiller, MD1, Nicole Noyes, MD2, Megan E Sutter, PhD1, David H. McCulloh, Ph.D.3 and James A Grifo, MD, PhD3, 1NYU Langone Health, New York, NY, 2Northwell Health, New York, NY, 3NYU Langone Prelude Fertility Center, New York, NY

11:15 AM O-27 CLINICAL FACTORS ASSOCIATED WITH THAW SURVIVAL IN A COHORT OF 6167 VITRIFIED-WARMED, EUPLOID BLASTOCYSTS.
Margeaux Oliva, MD1, Christine Briton-Jones, PhD, HCLD2, Dmitry Gounko, MA2, Joseph A. Lee, BA2, Alan B Copperman, MD1 and Lucky Sekhon, MD1, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY

11:30 AM O-28 ANTIOXIDANTS INCREASE BLASTOCYST CRYOSURVIVAL AND VIABILITY POST VITRIFICATION.
Thi T Truong, Bachelor of Sciences and David Gardner, Ph.D., School of BioSciences, University of Melbourne, Melbourne, VIC, Australia

11:45 AM O-29 DIFFERENCES IN OOCYTE SURVIVAL BETWEEN DONOR EGG BANKS AND SATELlITE CLINICS WITHIN THE SAME COMPANY.
Whitney Hewitt, BS1, Jennifer L Patrick, PhD1, Lauren Johnson, MD, MSCE1, Matrika Johnson, MD2, Seth Katz, MD1, Joe Whelan III, MD1 and Tyl Taylor, PhD2, 1Reproductive Endocrinology Associates of Charlotte, Charlotte, NC, 2REACH, Charlotte, NC

12:00 PM O-30 IMPROVED EMBRYOLOGY OUTCOME AND MORPHOKINETIC CHARACTERISTICS OF EMBRYOS DERIVED FROM FROZEN/THAWED OOCYTES INJECTED 3 VERSUS 2 HOURS POST-WARMING.
Christopher Norberg, MS1, Qiansheng Zhan, MSc1, Richard J Bodine, MS1, Samuel H Jones, BS1, Jason Park, MS1, Katherine Larkins, BS1, Zhen Ye, MS1, Robert Clarke, PhD1, Zev Rosenwaks, M.D.2 and Nikica Zaninovic, Ph.D.1, 1Ronald O. Perlman and Claudia Cohen Center for Reproductive Medicine, New York, NY, 2The Ronald O. Perlman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

ENVIRONMENT AND REPRODUCTION

Moderators: Jorge Chavarro and Lauren Wise

10:45 AM O-31 EFFECT OF WILDFIRE SMOKE ON PREGNANCY OUTCOMES IN THE NON-HUMAN PRIMATE.
Bryn Erin Willson, MD1, Kent E Pinkerton, PhD2, Bill Lasley, PhD3 and Nancy Gee, PhD4, 1UC Davis Health, Sacramento, CA, 2UC Davis Center for Health and the Environment, Davis, CA, 3Center for Health & Environment, Davis, CA, 4UC Davis - Center for Health & Environment, Davis, CA

11:00 AM O-32 STRESS AND SUCCESS: DATA FROM A PROSPECTIVE COHORT INVESTIGATING THE IMPACT OF EARLY LIFE STRESS ON IVF OUTCOMES.
Marissa Steinberg Weiss, MD1, Jessica R Walter, MD2, Nathanael C Koelper, MPH2, Charikleia Kaliora, MD2, Rachel B Brooks, BS1, Natalie Clark Stentz, MD, MSCE2, Kurt T Bamhart, MD, MSCE2, C. Neill Epperson, MD2 and Sunee S Senapati, MD, MSCE2, 1University of Pennsylvania,
ORAL ABSTRACTS

Philadelphia, PA, 2University of Pennsylvania, Division of Reproductive Endocrinology and Infertility, Philadelphia, PA, 2Penn Center for Women’s Behavioral Wellness, Philadelphia, PA, 2Shady Grove Fertility, Atlanta, GA, 2Department of Psychiatry, University of Colorado School of Medicine- Anschutz Medical Campus, Aurora, CO


11:30 AM O-34 BLOOD CADMIUM ASSOCIATED WITH HIGHER TESTOSTERONE AND ANTI-MÜLLERIAN HORMONE IN HEALTHY PREMENOPAUSAL WOMEN. Keewan Kim, PhD1, Carrie J Nobles, PhD1, Anna Z Pollack, PhD2, Lindsey A Sjaarda, PhD1, Alexandra C Purdue-Smithe, PhD2, Jean Wactawski-Wende, PhD3, Jessica R Zolton, DO1, Joshua R Freeman, MPH1, Jeannie G Radoc, BS1, Victoria C Andriessen, BS1, Zeina Alkhalaf, MPH1 and Sunni L Mumford, MD1. 1Harvard School of Public Health, Boston, MA, 2Harvard Medical School- Anschutz Medical Campus, Aurora, CO, 3University of Colorado School of Medicine- Anschutz Medical Campus, Aurora, CO.

11:45 AM O-35 THE ASSOCIATION OF URINARY CONCENTRATIONS OF BISPHENOL-A, AND DI-ETHYLHEXYL PHthalate METabolites WITH THYROID FUNCTION & AUTOIMMUNITY IN WOMEN FROM A FERTILITY CENTER: RESULTS FROM THE ENVIRONMENT AND REPRODUCTIVE HEALTH STUDY. Irene Souter, MD1, Lidia Mínguez-Alarcón, PhD2, Tim Korevaar, MD PhD2, Jennifer B Ford, RN2, Jorge E Chavarro, MD, Sc.D.3 and Russ Hauser, MD, MPH, Sc.D.2, 1MGH Fertility Center and Harvard Medical School, Boston, MA, 2Harvard T.H. Chan School of Public Health, Boston, MA, 3Harvard School of Public Health, Boston, MA

12:00 PM O-36 NON-CHRONIC PRECONCEPTION OPIOID USE AND REPRODUCTIVE OUTCOMES. Kerry S Flanagan, PhD1, Jeannie G Radoc, BS1, Sunni L Mumford, PhD1, Victoria C Andriessen, BS2, Lindsey A Sjaarda, PhD1, Jessica R Zolton, DO3, Neil J Perkins, PhD1, Keewan Kim, PhD1, Robert M Silver, MD4 and Enrique F Schisterman, PhD1. 1Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 2NICHD, Bethesda, MD, 3National Institute of Child Health and Human Development, NIH, Bethesda, MD, 4University of Utah, Salt Lake City, UT

GENETIC COUNSELING

Moderators: Rachel Donnell and Lauren Isle

10:45 AM O-37 LESSONS LEARNED FROM EVALUATING DECISIONAL REGRET SURROUNDING PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY. Amy Wijekoon, MD1, Mitchell P Rosen, MD, HCLD2 and Molly M Quinn, MD3. 1University of California, San Francisco, San Francisco, CA, 2UCSF, San Francisco, CA, 3University of California, Los Angeles, Los Angeles, CA

11:00 AM O-38 FOCUSING ON PARENTAL ORIGIN OF ANEUPLOIDY: DOES PATERNAL AGE IMPACT ANEUPLOIDY RATES IN EMBRYOS? Katrina Merrion, MS1, Diane Ahern, MS1, Jessica Adsit, MS2, Katherine L Howard, MS1, Dusan Kijacic, MS2 and Michelle Kiehl, MS2. 1Natera, Inc., San Carlos, CA, 2Affiliation not provided

11:15 AM O-39 DO BRCA MUTATIONS IMPACT ANEUPLOIDY RATES IN EMBRYOS? Carrie Chou, MS1, Ellen Thomas, MS2, Katrina Merrion, MS1 and Nina Wemmer, MS2. 1Natera, Inc., San Carlos, CA, 2Affiliation not provided
11:30 AM  

**O-40**  
THE TP53 GENE (rs1625895) C>T POLYMORPHISM IS ASSOCIATED WITH OVARIAN RESERVE AND OVARIAN RESPONSE TO RECOMBINANT FSH DURING IVF/ICSI TREATMENT.  
Joao Batista A Oliveira, M.D., Ph.D., Claudia G Petersen, Ph.D., Ana Lucia Mauri, B.Sc., Laura D Vagnini, B.Sc., Adriana Renzi, Ph.D., Bruna Petersen, B.Sc., Mariana Mattila, B.Sc., Camila Zamara, R.N., Felipe Dieamant, M.D., Ricardo L R Baruffi, M.D., and Jose G Franco Jr., M.D., Ph.D., 1Center for Human Reproduction Prof. Franco Jr/ Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 2Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 3Center for Human Reproduction Prof. Franco Jr, Ribeirao Preto, Brazil

11:45 AM  

**O-41**  
NON-INVASIVE PREGNATAL TESTING HAS ALTERED POSITIVE PREDICTIVE VALUE FOLLOWING TRANSFER OF A EUPLOID BLASTOCYST.  
Amber M Klimczak, MD, Christine V Whitehead, BSN, RN, Shelby A Neal, MD, Ashley W Tiegts, MD, Emily K Osman, MD, Brent M Hanson, MD, Julia G Kim, MD, MPH, Marie D Werner, MD, Jason M Fransasiak, MD and Richard Thomas Scott Jr., MD, IVI-RMA New Jersey, Basking Ridge, NJ

12:00 PM  

**O-42**  
SONOGRAPHIC ABNORMALITIES IN PREGNANCIES CONCEIVED FOLLOWING IVF WITH AND WITHOUT PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY.  
Carrie Riestenberg, MD, Kimberly Moyle, MD, Neil Silverman, MD, Lawrence D Platt, MD, Christina Shih-chi Han, MD and Molly M Quinn, MD, 1University of California, Los Angeles, Los Angeles, CA, 2Cedars-Sinai Medical Center, Los Angeles, CA, 3Center for Fetal Medicine and Women’s Ultrasound, Los Angeles, CA

HEALTH DISPARITIES

Moderators: Tia Jackson-Bey and Qiwei Yang

10:45 AM  

**O-43**  
COMPARISON OF EUPLOID RATES VIA PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) AND SUBSEQUENT PREGNANCY OUTCOMES BETWEEN ASIAN AND WHITE PATIENTS.  
David Huang, MD, Eleni A Greenwood, MD, MSc, Phil Marsh, BS, Andrew Runge, BS, Marcelle I Cedars, MD and Mitchell P Rosen, MD, HCLD, 1University of California San Francisco, San Francisco, CA, 2University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA

11:30 AM  

**O-46**  
PERSISTENT WIDENING IN RACIAL DISPARITIES BETWEEN BLACK AND WHITE WOMEN UNDERGOING ART OVER THE LAST 10 YEARS.  
Alexander Kotlyar, MD, David B. Seifer, MD, Burcin Simsek, Ph.D., and Ethan
ORAL ABSTRACTS

Wontman, MBA¹, Yale Fertility Center/ Yale University, New Haven, CT, ²Yale University, New Haven, CT, ³University of Pittsburgh, Pittsburgh, PA, ⁴Redshift Technologies, Inc., New York, NY

11:45 AM  O-47  SOUTH ASIAN WOMEN HAVE POORER IVF OUTCOMES DESPITE BEING YOUNGER AND HAVING BETTER OVARIAN RESERVE COMPARED TO CAUCASIANS. Fady I Sharara, M.D., Kaci D Rogers, MS and Megan Goodwin, MS, Virginia Center for Reproductive Medicine, Reston, VA

12:00 PM  O-48  REGIONAL DISPARITIES IN ASSISTED REPRODUCTIVE TECHNOLOGY ACCESS TO CARE: EMPLOYING MODERN TECHNOLOGY TO CLOSE THE GAP. Sasha Mikhail, MD/MS¹, Anna Gaidis, MD², Hannah N Smith, BS³ and Larisa Gavrilova-Jordan, MD², ¹Medical College of Georgia at Augusta University, Augusta, GA, ²Medical College of Georgia at Augusta University, Augusta, GA, ³Augusta University, August, GA

INFERTILITY AND CANCER

Moderators: Ali Ahmadt and Pasquale Patrizio

10:45 AM  O-49  PREGNANCIES IN CANCER SURVIVORS: OVARIAN RESERVE IS A POOR PROGNOSTICATOR. Julie A Suyama, MD, PhD¹, Katherine E Cameron, MD, MBE¹, Mary D Sammel, ScD² and Clarisa R Gracia, MD, MSCE¹, ¹Hospital of the University of Pennsylvania, Philadelphia, PA, ²Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania, Philadelphia, PA

11:00 AM  O-50  THE POTENTIAL IMPACT OF NEWER CHEMOTHERAPY REGIMENS ON FUTURE FERTILITY IN MEN AND WOMEN TREATED FOR LYMPHOMA. Deepika Garg, MD¹, Taylor P Kohn, MD, MPhil², Alexander W Pastuszak, MD, PhD³, Joseph M Letourneau, MD¹ and James Hotaling, MD³, ¹University of Utah, Salt Lake City, UT, ²Johns Hopkins University School of Medicine, Baltimore, MD, ³University of Utah School of Medicine, Salt Lake City, UT

11:15 AM  O-51  CANCER TREATMENT IS ASSOCIATED WITH A MEASURABLE DECREASE IN LIVE BIRTHS IN A LARGE, POPULATION-BASED STUDY. Deepika Garg, MD¹, Huong Dieu Meeks, PhD¹, Erica Johnstone, MD¹, Alexander W Pastuszak, MD, PhD², Sarah L Berga, MD², Ken R Smith, PhD¹, James Hotaling, MD² and Joseph M Letourneau, MD³, ¹University of Utah, Salt Lake City, UT, ²University of Utah School of Medicine, Salt Lake City, UT

11:30 AM  O-52  PREGNANCY OUTCOMES AMONG CANCER SURVIVORS: A POPULATION-BASED ANALYSIS. Deepika Garg, MD¹, Huong Dieu Meeks, PhD¹, Erica Johnstone, MD¹, Alexander W Pastuszak, MD, PhD², Sarah L Berga, MD², Ken R Smith, PhD¹, James Hotaling, MD² and Joseph M Letourneau, MD³, ¹University of Utah, Salt Lake City, UT, ²University of Utah School of Medicine, Salt Lake City, UT

11:45 AM  O-53  STIMULATION OF THE OVARIANS IN WOMEN WITH BREAST CANCER UND GOING FERTILITY PRESERVATION: ALTERNATIVE VERSUS STANDARD STIMULATION PROTOCOLS. E. M.E. Balkenende, MD¹, T. Dahhan, M.D., PhD¹, C. C.M. Beerendonk, M.D. PhD.², K. Fleischer, MD, PhD², A. M.E. Bos, M.D., PhD., C. B. Lambalk, MD PhD², Roelof Schats, MD PhD³, L. Louwé, M.D.³, A. E.P. Cantineau, M.D. PhD.⁴, J. M.J. Smeenk, M.D. PhD.⁵, J. P. de Bruin, M.D., PhD⁶, F. van der Veen, Prof. MD. PhD.¹, S.C. Linn, Prof. MD. PhD.¹, M. van Wely, Dr. PhD.¹ and Mariette Goddijn, Prof. Dr. MD. PhD.¹, ¹Amsterdam University Medical Center, Amsterdam, Netherlands, ²Radboud UMC, Nijmegen, Netherlands, ³Amsterdam UMC, Amsterdam, Netherlands, ⁴Leiden University Medical Center, Leiden, Netherlands, ⁵UMCG, Groningen, Netherlands, ⁶ETZ,
ORAL ABSTRACTS

MALE REPRODUCTION AND UROLOGY: TRAVELING SCHOLARS

Moderators: Michael Eisenberg and AJ Nangia

10:45 AM O-55 EVALUATION OF FERTILITY PRESERVATION COUNSELING AND REFERRALS IN US CLINICAL PRACTICES: REVIEW OF ASCO’S QUALITY ONCOLOGY PRACTICE INITIATIVE (QOPI). Taylor P Kohn, MD, MPhil1, Premal Patel, MD, Benjamin Shiff, MD1, Jaden R Kohn, MD, MPH1 and Ranjith Ramasamy, MD2, 1Johns Hopkins University School of Medicine, Baltimore, Maryland, MD, 2University of Miami Miller School of Medicine, Miami, FL, 3Section of Urology, University of Manitoba, Winnipeg, MB, Canada, 4Johns Hopkins University School of Medicine, Department of GYN/OB, Baltimore, MD

11:00 AM O-56 LOWER TOTAL MOTILE COUNT IS ASSOCIATED WITH SMALLER HISTORICAL INTERGENERATIONAL FAMILY SIZE: A PEDIGREE ANALYSIS FROM THE UTAH POPULATION DATABASE (UPDB). Darshan P. Patela, MD1, Huong Dieu Meeks, PhD2, Alexander W Pastuszak, MD, PhD3, Ken R Smith, PhD2 and James Hotaling, MD4, 1University of Utah Health, Salt Lake City, UT, 2University of Utah, Salt Lake City, UT, 3University of Utah School of Medicine Andrology and IVF Laboratories, Salt Lake City, UT

11:15 AM O-57 DECISIONAL CONFLICT AND KNOWLEDGE AMONG PATIENTS WITH VARIOCELE SEEKING TREATMENT FOR INFERTILITY. Rajiv Jayadevan, MD1, Arash Amighi, B.S.1, Ali A Almuzeni, MD1, Steven Alexander Mills, MD1, Justin Nork, D.O., Lorna Kwan, MPH1, Matthew Pollard, M.D.1, Sylvia I Lambrechts, MPH, MA2, Srim Eleswarapu, M.D., Ph.D.2 and Jesse Mills, M.D., 1David Geffen School of Medicine at UCLA, Los Angeles, CA, 2University of California, Los Angeles, Los Angeles, CA

11:30 AM O-58 SPERM EXTRACTED FROM MEN WITH OBSTRUCTIVE AZOSPERMIA VIA MINIMALLY-INVASIVE EPIDIDYMAL SPERM ASPIRATION (MIESA) RESULTS IN NON-INFERIOR IVF OUTCOMES COMPARED WITH NORMAL EJACULATED SEMEN IN COUPLES WITH UNEXPLAINED INFERTILITY. Solomon Hayon, MD1, Sarah M Moustafa, MD2, Caitlin Boylan, BS3, Mary Peavey, MD1 and Robert M Coward, MD1, 1University of North Carolina, Chapel Hill, NC, 2UNC School of Medicine, Chapel Hill, NC, 3Affiliation not provided

11:45 AM O-59 GONADAL END ORGANS EFFECTS IN MALE TO FEMALE TRANSGENDER PATIENTS ON HORMONAL THERAPY. Priyanka Bearelly, MD, Jaromir Slama, MD and Robert D. Oates, M.D., Boston University School of Medicine, Boston, MA

12:00 PM O-60 THE UTILITY OF SPERM CRYOPRESERVATION AT THE TIME OF VASECTOMY REVERSAL. Jessica A Marinaro, MD1, Russell P Hayden, MD2, Paul Shin, MD3 and Cigdem Tanrikut, MD4, 1MedStar Georgetown University Hospital, Washington, DC, 2Weill Cornell Medicine, New York, NY, 3Shady Grove Fertility, Washington DC, DC, 4Shady Grove Fertility, Rockville, MD
**NUTRITION**

Moderators: Sunni Mumford and Malgorzata Skaznik-Wikiel

10:45 AM  **O-61**  **PRECONCEPTION MARIJUANA USE, ANOVLATION, AMH, AND PREGNANCY OUTCOMES.**  Sunni L Mumford, PhD1, Kerry S Flannagan, PhD1, Jeannie G Radoc, BS1, Torie C Plowden, MD1, Keewan Kim, PhD1, Alexandra C Purdue-Smithe, PhD1, Jessica R Zolton, DO2, Lindsey A Sjaarda, PhD3, Neil J Perkins, PhD1, Josh Freeman, MPH1, Zeina Alkhalaf, MPH1, Victoria C Andriessen, BS1, Robert M Silver, MD4 and Enrique F Schisterman, PhD1, 1NICHD, Bethesda, MD, 2Walter Reed National Military Medical Center, Bethesda, MD, 3Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 4University of Utah, Salt Lake City, UT

11:15 AM  **O-63**  **THE ROLE OF MATERNAL PRECONCEPTION VITAMIN D STATUS IN HUMAN OFFSPRING SEX RATIO.**  Alexandra C Purdue-Smithe, PhD1, Keewan Kim, PhD1, Carrie J Nobles, PhD1, Enrique F Schisterman, PhD1, Karen C Schliep, PhD2, Neil J Perkins, PhD1, Lindsey A Sjaarda, PhD3, Josh Freeman, MPH1, Sonia L Robinson, PhD4, Jeannie G Radoc, BS1, James L Mills, MD, MS1, Robert M Silver, MD3 and Sunni L Mumford, PhD2, 1NICHD, Bethesda, MD, 2University of Utah, Salt Lake City, UT, 3Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 4National Institutes of Child Health and Human Development, Bethesda, MD

**ORAL ABSTRACTS**

11:00 AM  **O-62**  **SERUM OMEGA-3 AND OMEGA-6 FATTY ACID CONCENTRATIONS AND FECUNDITY.**  Jamie Stanhiser, M.D.1, Anne Marie Jukic, PhD2 and Anne Z Steiner, MD, MPH3, 1University of North Carolina, Chapel Hill, NC, 2National Institute of Environmental Health Sciences, Durham, NC, 3Duke University Medical Center, Durham, NC

11:15 AM  **O-64**  **CAFFEINATED BEVERAGE INTAKE AND SERUM CAFFEINE METABOLITES AND RISK OF PREGNANCY LOSS.**  Alexandra C Purdue-Smithe, PhD1, Keewan Kim, PhD1, Enrique F Schisterman, PhD1, Karen C Schliep, PhD2, Neil J Perkins, PhD1, Lindsey A Sjaarda, PhD3, James L Mills, MD, MS1, Robert M Silver, MD2, Victoria C Andriessen, BS1, Zeina Alkhalaf, MPH1, Jeannie G Radoc, BS1 and Sunni L Mumford, PhD2, 1NICHD, Bethesda, MD, 2University of Utah, Salt Lake City, UT, 3Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 4National Institute of Child Health and Human Development, Bethesda, MD

11:45 AM  **O-65**  **LEPTIN IS A MEDIATOR IN THE ASSOCIATION BETWEEN PERCENT BODY FAT AND DECREASED AMH AMONG HEALTHY WOMEN.**  Jasmine Aly, MD1, Elizabeth A DeVillibiss, PhD2, Sunni L Mumford, PhD2, Micah J Hill, DO1, Alan H DeCherney, MD1, Laura Zalles, MD2, Neil J Perkins, PhD2, Robert M Silver, MD4 and Enrique F Schisterman, PhD1, 1Program in Reproductive Endocrinology and Gynecology, NICHD, NIH, Bethesda, MD, 2National Institute of Child Health and Human Development, Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 3Cooper University Hospital, Department of Obstetrics and Gynecology, Camden, NJ, 4University of Utah, Salt Lake City, UT

12:00 PM  **O-66**  **OMEGA-3 FATTY ACID SUPPLEMENTATION AND FECUNDABILITY.**  Jamie Stanhiser, M.D.1, Anne Marie Jukic, PhD2 and Anne Z Steiner, MD, MPH3, 1University of North Carolina, Chapel Hill, NC, 2National Institute of Environmental Health Sciences, Durham, NC, 3Duke University Medical Center, Durham, NC

**OVARIAN STIMULATION**

Moderators: Daniel Grow and Sarah Moustafa

10:45 AM  **O-67**  **A COMPUTERIZED DECISION SUPPORT SYSTEM FOR DAY TO DAY MANAGEMENT OF OVARIAN STIMULATION CYCLES DURING IN VITRO FERTILIZATION.**  Gerard S Letterie, DO and Andrew MacDonald, MS, Seattle Reproductive Medicine, Seattle, WA
ORAL ABSTRACTS

11:00 AM  O-68 DUAL TRIGGERING OF FINAL OOCYTE MATURATION IN POOR OVARIAN RESPONDERS: A PROSPECTIVE RANDOMIZED CONTROLLED TRIAL.
Dalia Khalife, M.D., Johnny Awad, M.D., HCLD, Suleiman Ghunaim, M.D., Antoine Abu-Musa, M.D., Christine Beyrouthy, MPH and Ghina Said Ghazeeri, M.D., American University of Beirut Medical Center, Beirut, Lebanon

11:15 AM  O-69 RISK OF HARM ASSOCIATED WITH THE USE OF LETROZOLE AS A FERTILITY DRUG: A SYSTEMATIC REVIEW AND META-ANALYSIS.
Jyotsna Pundir, MD1, Chiara Achilli, MBBS2, Priya Bhide, MD3, Luca Sabatini, MD4, Richard S. Legro, M.D.5, Luk Rombauds, PHD6, Helena Teede, PHD7, Javier Zamora, PHD8, Arri Coomarasamy, PHD8 and Shakila Thangaratinam, PHD9, 1St Bartholomew’s Hospital and Queen Mary University, London, London, United Kingdom, 2Hewitt Fertility Centre, L, Liverpool, United Kingdom, 3Homerton University Hospital NHS Foundation trust, London, United Kingdom, 4St. Bartholomew’s Hospital, London, London, United Kingdom, 5Penn State College of Medicine, Hersey, PA, 4Monash University, Monash, Australia, 7Queen Mary University of London, London, United Kingdom, 8Queen Mary University of London, Queen’s National Centre for Miscarriage Research, Birmingham, United Kingdom, 9Women’s Health Research Unit, Queen Mary University of London, London, United Kingdom

11:30 AM  O-70 PREMATURE LUTEINIZATION IN THE ERA OF PGT-A: EMBRYONIC REPRODUCTIVE POTENTIAL IS NOT AFFECTED BY ELEVATED PROGESTERONE LEVELS DURING OVARIAN HYPERSTIMULATION.
Carlos Hernandez-Nieto, MD1, Joseph A. Lee, BA1, Tamar Alkon, MD1, Martha Luna-Rojas, MD1, Jeffrey Klein, M.D.1, Alan B Copperman, MD2 and Benjamin Sandler, M.D.1, 1Reproductive Medicine Associates of New York, New York, New York, NY, 2Icahn School of Medicine at Mount Sinai, New York, NY

11:45 AM  O-71 DETERMINING CORRELATION BETWEEN BODY MASS INDEX AND MINIMUM REQUIRED HCG DOSE WHEN USING DUAL TRIGGER WITH HCG AND GnRH AGONIST.
Lilli D Zimmerman, MD1, Kolbe Hancock, MD1, Nirali J Shah, MD2, Chelsea Canon, MD2, Alexis Melnick, MD1 and Zev Rosenwaks, M.D.1, 1The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY, 2Weill Cornell Medicine, New York, NY

12:00 PM  O-72 EFFECT OF DEHYDROEPIANDROSTERONE (DHEA) SUPPLEMENTATION ON INTRACYTOPLASMIC SPERM INJECTION OUTCOME IN INFERTILE WOMEN WITH ANTICIPATED NORMO-OVARIAN RESPONSE.
Mustafa Khodry, MD1, Hazem Ahmed, MD1, Abd El-Naser Ali, MD1, Sayed Taha, MD1, Mohammed Fawzy, MD2 and Ahmed M Abbas, MD3, 1Department of Obstetrics & Gynecology, Faculty of Medicine, South Valley University, Qena, Egypt, 2Ibn-Sina and Banon IVF Centers, Sohag, Egypt, 3Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt

PREIMPLANTATION GENETIC TESTING

Moderators: Semra Kahraman and Kangpu Xu

10:45 AM  O-73 PGT FOR ANEUPLOIDY IMPROVES PERINATAL OUTCOMES COMPARED WITH FET ALONE: AN ANALYSIS OF THE 2014 AND 2015 SART DATA.
Kristin Van Heertum, MD1, Channing Burks, MD1, Kerry S Flannagan, PhD2, Sunni L Mumford, PhD3, Alexandra C Purdue-Smithe, PhD2, James Goldfarb, MD, MBA1 and Rachel S Weinerman, MD1, 1University Hospitals Fertility Center/ Case Western Reserve University, Beachwood, OH, 2NICHD, Bethesda, MD, 3National Institute of Child Health and Human Development, Bethesda, MD
11:00 AM  O-74  DOES PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) HARM EMBRYOS? NO—A MULTI-CENTER, PROSPECTIVE, BLINDED, NON-SELECTION STUDY EVALUATING THE PREDICTIVE VALUE OF AN ANEUPLOID DIAGNOSIS AND IMPACT OF BIOPSY
Ashley W Tiegs, MD,1 Xin Tao, Ph.D2, Christine V Whitehead, BSN, RN3, Shelby A Neal, MD4, Emily K Osman, MD5, Julia G Kim, MD, MPH6, Brent M Hanson, MD7, Emre Seli, M.D.8, George Patounakis, MD, PhD9, Jacqueline Gutmann, MD9, Arthur J Castelbaum, MD9 and Richard Thomas Scott Jr., MD9, 1Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA, 2The Foundation for Embryonic Competence, Basking Ridge, NJ, 3IVI-RMA New Jersey, Basking Ridge, NJ, 4Sidney Kimmel College of Medicine, Thomas Jefferson University, Philadelphia, PA, 5IVI-RMA Florida, Lake Mary, FL, 6IVI-RMA Philadelphia, Philadelphia, PA

11:15 AM  O-75  PREIMPLANTATION GENETIC TESTING (PGT) IS ASSOCIATED WITH HIGHER ODDS OF A HEALTHY LIVEBIRTH AMONG DONOR OOCYTE RECIPIENTS IN THE UNITED STATES: A 2013-2015 NATIONAL STUDY
Cassandra Roeca, MD1, Rachel L Johnson, MS2, Nichole Carlson, PhD2 and Alex J Polotsky, M.D., M.S.3, 1University of Colorado School of Medicine, Aurora, CO, 2University of Colorado School of Public Health, Aurora, CO, 3University of Colorado, Denver, CO

11:30 AM  O-76  PREGNANCY OUTCOMES FOLLOWING IN VITRO FERTILIZATION FROZEN EMBRYO TRANSFER (IVF-FET) WITH OR WITHOUT PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) IN WOMEN WITH RECURRENT PREGNANCY LOSS (RPL): A SART-CORS STUDY
Shweta Bhatt, MD1, Jason Roy, PhD2, Sara S Morelli, MD, PhD1 and Peter Mcgovern, MD3, 1Rutgers New Jersey Medical School, Newark, NJ, 2Rutgers - Department of Biostatistics and Epidemiology, Piscataway, NJ, 3University Reproductive Associates, NJ

11:45 AM  O-77  CONCURRENT PRE-IMPLANTATION GENETIC TESTING FOR SINGLE GENE DISORDERS AND ANEUPLOIDY SCREENING FROM A SINGLE TROPHOECTODERM (TE) BIOPSY USING TARGETED NEXT GENERATION SEQUENCING (NGS) WITHOUT WHOLE GENOME AMPLIFICATION (WGA).
Heather Garnessy, BS, MPS1, Chaim Jalas, N/A1, Yiping Zhan, Ph.D2, Cara Vega, BS1, Vaidehi Jobanputra, PhD1, Richard Thomas Scott Jr., MD3 and Xin Tao, Ph.D1, 1Foundation for Embryonic Competence, Basking Ridge, NJ, 2The Foundation for Embryonic Competence, Basking Ridge, NJ, 3IVI-RMA New Jersey, Basking Ridge, NJ

12:00 PM  O-78  MOSAIC EMBRYOS - A COMPREHENSIVE AND POWERED ANALYSIS OF CLINICAL OUTCOMES.
Manuel Viotti, PhD1, Andrea Victor, MS2, Alan Brake, MS2, Santiago Munne, PhD3, Frank Barnes, PhD1 and Christo Zouves, MD1, 1Zouves Foundation for Reproductive Medicine, Foster City, CA, 2Zouves Fertility Center, Foster City, CA, 3Overture Life, Madrid, Spain

REPRODUCTIVE BIOLOGY: HUMAN STUDIES
Moderators: Erica Behnke and Kimball Pomeroy
10:45 AM  O-79  THE RELATIONSHIP BETWEEN CHRONOLOGIC AGE, OVARIAN RESPONSE, AND DNA METHYLATION OF WHITE BLOOD CELLS AND CUMULUS CELLS AMONG INFERTILE WOMEN UNDERGOING IVF.
Brent M Hanson, MD1, Xin Tao, Ph.D2, Yiping Zhan, Ph.D2, Timothy G Jenkins, PhD3, Julia G Kim, MD, MPH1, Emily K Osman, MD1, Ashley W Tiegs, MD1, Shelby A Neal, MD1, Richard Thomas Scott Jr., MD1 and Emre Seli, M.D.1, 1IVI-RMA New Jersey, Basking Ridge, NJ, 2The Foundation for Embryonic Competence, Basking Ridge, NJ, 3Foundation for Embryonic Competence, Basking Ridge, NJ, 4University of Utah Department of Surgery, Salt Lake City, UT
11:00 AM  O-80  THE INCLUSION OF BLASTOMERES INTO THE INNER CELL MASS IN EARLY-STAGE HUMAN EMBRYOS DEPENDS ON THE SEQUENCE OF CELL CLEAVAGES DURING THE FOURTH DIVISION. Junko Otsuki, Ph.D., 1 Toshiroh Iwasaki, D.V. M., Ph.D., 2 Noritoshi Enatsu, M.D., Ph.D., 2 Yuya Katada, B.S., 2 Kohyu Furuhashi, B.S., 2 and Masahide Shiotani, M.D., Ph.D., 1 1Okayama University, Okayama, Japan, 2Hanabusa Womens clinic, Kobe, Japan

11:15 AM  O-81  THE EFFECT OF AGE ON BIOENERGETICS OF HUMAN GRANULOSA CELLS. Gustavo N Cecchino, MD1, Alberto Pacheco, PhD2, Juan A Garcia-Velasco, PhD3 and Eduardo Rial, PhD4 1IVIRMA-Madrid, Madrid, Spain, 2IVI Madrid, Madrid, Spain, 3Affiliation not provided, 4Centro de Investigaciones Biológicas - CSIC, Madrid, Spain

11:30 AM  O-82  REPEATED IMPLANTATION FAILURE PATIENTS DISPLAYS A GREATER DELAY OF THEIR RECEPTIVITY WINDOW DIAGNOSED USING A GENOMIC TEST UNDER HRT TREATMENT COMPARED TO NATURAL CYCLES. Delphine Haouzi, PhD1, Frida Entezami, MD2, Charlène Innocenti, Engineer3, Alice Ferrieres-Hoa, MD1, Chloé Baron, PhD student1, Claire Vincens, MD3, Sophie Bringer-Deutsch, MD3, Cecile Brunet, MD3, Antoine Torre, MD, PhD4 and Samir Hamamah, MD, PhD2 1Inserm U1203, CHU Montpellier, St-Eloi Hospital, Montpellier, France, 2American Hospital of Paris, Neuilly-sur-Seine, France, 3ART-PGD department, Arnaud de Villeneuve Hospital, CHU Montpellier, Montpellier, France, 4Division of Child Health, Obstetrics & Gynecology department, University of Nottingham, Nottingham, United Kingdom, 5Arnaud de Villeneuve Hospital, CHU Montpellier, Montpellier, France

11:45 AM  O-83  THE ROLE OF VITAMIN D AS A PIECE OF THE UTERINE FACTOR INFERTILITY PUZZLE. Karine Matevossian, DO1, Lauren Grimm, MA2, Elisabeth Rosen, BS, MA2, Lucas E Rasnic, BSE, MA2, Jacqueline Sehring, MA2, Jody M Esguerra, MA2, Anisa Hussain, MA2, Angelina Beltso, MD2 and Roohi Jeelani, MD2, 1Advocate Lutheran General Hospital, Park Ridge, IL, 2Vios Fertility Institute, Chicago, IL

12:00 PM  O-84  DYNAMIC DNA METHYLATION DURING TROPHOBLAST DIFFERENTIATION IN HUMAN PERI-IMPLANTATION STAGE EMBRYOS REVEALED BY SINGLE-CELL WHOLE GENOME BISULFITE SEQUENCING. Ye Yuan, PhD1, Jiangwen Sun, Ph.D.2, Hao Ming, M.S.3, Deirdre M Logsdon, MS1, William B Schoolcraft, MD1, Rebecca L. Krisher, PhD4 and Zongliang Jiang, Ph.D4, 1Colorado Center for Reproductive Medicine, Lone Tree, CO, 2Old Dominion University, Norfolk, VA, 3Louisiana State University, Baton Rouge, LA

10:45 AM  O-85  A SURVEY OF MICROSURGERY TRAINING AMONG UROLOGY RESIDENCY PROGRAMS. Thomas A Masterson III, MD1, Quinn Carroll Rainer, BS2, Sirpi Nackeeran, BA1 and Ranjith Ramasamy, M.D.1, 1University of Miami Miller School of Medicine, Miami, FL, 2Medical Student, Miami, FL

11:00 AM  O-86  OUTCOME OF LAPAROSCOPIC ADHESIOLYSIS IN INFERTILE PATIENTS WITH PELVIC ADHESIONS FOLLOWING CESAREAN DELIVERY: A RANDOMIZED CLINICAL TRIAL. Adel al shahat Algergawy, M.D.1, Ayman Shehata Dawood, M.D.2, Hesham A Salem, FA, M.D., M.D.3 and Ahmad alsayed Alhalwagy, M.D4, Assistant professor, tanta, Egypt, 1Lecturer at Tanta University, Tanta, Egypt, 2Professor at Faculty of Medicine, Tanta University, Tanta, Egypt, 3Assistant professor at Faculty of Medicine, Tanta University, Tanta, Egypt
ORAL ABSTRACTS

11:15 AM  O-87  RESULTS OF CROMOSOMAL ANALYSIS OF PRODUCTS OF CONCEPTION USING TARGETED DIRECT EMBRYO BIOPSY BY OPERATIVE HYSTEROSCOPY. Jean Paul Rouleau, MD1, Roberta Vicario, MD, PhD2, Linda M.A. Pirolo, MD2, Manuela Costa, CNM2, Frederick Naftolin, MD, PhD3, Jairo Hernandez, PhD1 and Angela Palumbo, MD, PhD1, 1Centro de Asistencia a la Reproducción Humana de Canarias, La Laguna, Spain, 2Clinica Quisisana, Roma, Italy, 3Department of Obstetrics and Gynecology, New York University, New York, NY

11:30 AM  O-88  UTERUS TRANSPLANTATION - LIVING DONOR OUTCOME. Liza Johannesson, MD, PhD and Giuliano Testa, MD, Baylor University Medical Center, Dallas, TX

11:45 AM  O-89  PREGNANCY OUTCOMES FOLLOWING HYSTEROSCOPIC CORRECTION OF T-SHAPED UTERI. Shelby A Neal, MD1, Richard Thomas Scott Jr., MD1 and Linnea R Goodman, MD2, 1IVI-RMA New Jersey, Basking Ridge, NJ, 2University of North Carolina, Raleigh, NC

12:00 PM  O-90  SINGLE EUPLOID FROZEN EMBRYO TRANSFER: EVALUATING IMPACT OF INTERVAL SINCE OPERATIVE HYSTEROSCOPY. Allison C Petrini, MD1, Catherine W Chan, MD2, Kelly McCarter, MD2, Micha Thompson, BA1, Monica Pasternak, MD1, Nigel Pereira, MD1 and Steven Spandorfer, M.D.1, 1Ronald O. Perlman and Claudia Cohen Center for Reproductive Medicine, New York, NY, 2Weill Cornell Medicine, New York, NY
ORAL ABSTRACTS

Tuesday, October 15, 2019
10:45 am - 12:15 pm

PRIZE PAPER SESSION

SCIENTIFIC CONGRESS PRIZE PAPER SESSION 2

The first six papers are candidates for the ASRM Scientific Congress Prize Paper Awards. Six additional candidates will be presented during the Prize Paper Candidates’ session on Monday.

Moderators: William Catherino and Katherine Cameron

10:45 AM  O-91 ARTIFICIAL INTELLIGENCE ASSESSMENT OF TIME-LAPSE IMAGES CAN PREDICT WITH 77% ACCURACY WHETHER A HUMAN EMBRYO CAPABLE OF ACHIEVING A PREGNANCY WILL MISCARRY. Rishabh Hariharan, BSc¹, Peter He, -¹, Marcos Meseguer, PhD², Marco Toschi, MSc³, Jose Celso Rocha, PhD⁴, Nikica Zaninovic, Ph.D.⁵, Jonas Malmsten, MSc⁶, Qiansheng Zhan, MSc⁶ and Cristina Hickman, PhD⁶, ¹Imperial College London, London, United Kingdom, ²IVIRMA Global, Valencia, Spain, ³IVIRMA, Rome, Italy, ⁴State University of São Paulo Júlio de Mesquita Filho, Assis, Brazil, ⁵Ronald O. Perlman and Claudia Cohen Center for Reproductive Medicine, New York, NY

11:00 AM  O-92 CONTRIBUTIONS TO PREMATURITY OF MATERNAL HEALTH CONDITIONS, SUBFERTILITY, AND ASSISTED REPRODUCTIVE TECHNOLOGY (ART). Judy E Stern, PhD¹, Chia-Ling Liu, ScD², Hafsatou Diop, MD, MPH² and Howard Cabral, PhD, MPH³, ¹Dartmouth-Hitchcock, Lebanon, OR, ²MPDH, Boston, MA, ³Boston University, Boston, MA

11:15 AM  O-93 HIGHER INCIDENCE OF POSTPARTUM COMPLICATIONS IN WOMEN WITH POLYCYSTIC Ovary SYNDROME. Snigdha Alur-Gupta, M.D.¹, Mary Regina Boland, Ph.D², Mary D Sammel, ScD³, Kurt T Barnhart, MD, MSCE⁴ and Anuja Dokras, M.D., Ph.D.⁵, ¹University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, ²Affiliation not provided, ³Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania, Philadelphia, PA, ⁴University of Pennsylvania, Philadelphia, PA, ⁵University of Pennsylvania Health System, Philadelphia, PA

11:30 AM  O-94 DEVELOPMENTAL POTENTIAL OF ANEUPLOID HUMAN EMBRYOS BEYOND IMPLANTATION. Marta Nasila Shahbazi, Ph.D¹, Tianren Wang, M.D., Ph.D.², Xin Tao, Ph.D.², Li Sun, Ph.D², Yiping Zhan, Ph.D³, Antonio Pellicer, MD, PhD³, Richard Thomas Scott Jr., MD⁴, Emre Selii, M.D.⁴ and Magdalena Zernicka-Goetz, Ph.D.¹, ¹Department of Physiology, Development and Neuroscience, Mammalian Embryo and Stem Cell Group, University of Cambridge, Cambridge, United Kingdom, ²The Foundation for Embryonic Competence, Basking Ridge, NJ, ³IVIRMA ROMA, Roma, Italy, ⁴IVI-RMA New Jersey, Basking Ridge, NJ

11:45 AM  O-95 A LIFESTYLE INTERVENTION TARGETING WOMEN WITH OBESITY AND INFERTILITY IMPROVES THEIR FERTILITY OUTCOMES, ESPECIALLY IN WOMEN WITH PCOS: A RANDOMIZED CONTROLLED TRIAL. Matea Belan, MSc¹, Belina Carranza-Mamane, MD1, Youssef AinMelk, MD², Marie-Hélène Pesant, MD², Karine Duval, PhD¹, Farrah Jean-Denis, MSc¹, Marie-France Langlois, MD¹, Hélène Lavoie, MD³, Guy Waddell, MD⁴ and Jean-Patrice Ballargeon, MD⁴, ¹Research Center of the Centre Hospitalier Universitaire de Sherbrooke, Sherbrooke, QC, Canada, ²Université de Sherbrooke - Department of Obstetrics and Gynecology, Sherbrooke, QC, Canada, ³Fertility Clinic Procrea, Montréal, QC, Canada, ⁴Université
**ORAL ABSTRACTS**

**CONSERVATIVE SURGERY FOR OVARIAN TORSION IN YOUNG WOMEN: PERIOPERATIVE COMPLICATIONS AND NATIONAL TRENDS.**

*Rachel S Mandelbaum, MD, Meghan B Smith, MD, Lynda D Roman, MD, Richard J Paulson, MD, MS and Koji Matsuo, MD, PhD, University of Southern California, Los Angeles, CA*

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**Tuesday, October 15, 2019**

**ORAL ABSTRACT SESSION**

10:45 am - 12:15 pm

**ACCESS TO CARE**

**ANDROGEN EXCESS**

**ART LAB: OUTCOME PREDICTORS**

**EARLY PREGNANCY**

**ETHICS**

**IMAGING AND REPRODUCTIVE MEDICINE**

**IVF OUTCOME PREDICTORS 1**

**LGBTQ**

**MALE REPRODUCTION AND UROLOGY: CLINICAL**

**MENTAL HEALTH**

**PEDIATRIC AND ADOLESCENT GYNECOLOGY**

**PRACTICE MANAGEMENT**

**PROCEDURES AND TECHNIQUES**

**REPRODUCTIVE BIOLOGY: ANIMAL AND EXPERIMENTAL STUDIES**

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**ACCESS TO CARE**

**Moderators:** Asima Ahmad and Holly Mehr

10:45 AM  **O-97 CATCHING UP TO THE MANDATE: A MYSTERY CALLER STUDY OF SOCIETY FOR ASSISTED REPRODUCTIVE TECHNOLOGY (SART) MEMBER CLINICS IN STATES MANDATING FERTILITY PRESERVATION (FP) COVERAGE.**

*Emma C. Trawick, Kristin Smith, Maryam Guiahi, Saied Eden Cardozo, and Kara N. Goldman, MD, PhD, 1Northwestern University, Feinberg School of Medicine, Chicago, IL, 2Northwestern University Feinberg School of Medicine, Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, Chicago, IL, 3University of Colorado, Department of Obstetrics and Gynecology, Division of Family Planning, Aurora, CO, 4Women and Infants Fertility Center, Brown University Warren Alpert Medical School, Providence, RI*

11:00 AM  **O-98 HUMAN SPERM MORPHOLOGY ANALYSIS USING SMARTPHONE MICROSCOPY AND DEEP LEARNING.**

*Prudhvi Thirumalaraju, Manoj Kumar Kanakasabapathy, Charles L Bormann, Hemanth Kandula, Sandeep Kota Sai Pavan, Divyank Yarravarapu, and Hadi Shafiee, 1Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, 2Massachusetts General Hospital, Harvard Medical School, Boston, MA*

11:15 AM  **O-99 HAS THE MASSACHUSETTS INFERTILITY MANDATE LIVED UP TO ITS PROMISE?**

*Katherine Koniares, Alan S. Penzias, and Eli Adashi, Tufts Medical Center, Boston, MA, 2Boston IVF, Waltham, MA, 3The Warren Alpert Medical School, Brown University, Providence, RI*
ORAL ABSTRACTS

11:30 AM O-100  RIGHT TO HEALTH: THE SITUATION OF ASSISTED REPRODUCTION TECHNIQUES WITH GAMES DONATION IN ITALY. Giulia Scaravelli, PhD, Roberto De Luca, Master degree, Roberta Spoletini, Master degree, Vincenzo Vigiliano, Master degree, Simone Bolli, high school, Simone Fiaccavento, high school, Lucia Speziale, Master degree and Anna Bertini, Master degree, Italian Assisted Reproductive Technology Register, Italian National Institute of Health, Rome, Italy

11:00 AM O-104  SEVERE ENDOMETRIOSIS IN RHESUS MACAQUES CONSUMING A WESTERN-STYLE DIET (WSD) AND CHRONICALLY TREATED WITH ANDROGEN. Ov D Slayden, PhD, Cecily V Bishop, PhD, Emily Mishler, MS, Lauren Drew Martin, DVM, Heather M Sidener, DVM, DAACLAM, Jon D Hennebold, PhD and Richard L Stouffer, PhD, 1Professor, Portland, OR, 2Oregon State, Corvallis, OR, 3Affiliation not provided, 4Oregon National Primate Research Center, Division of Reproductive & Developmental Sciences, Beaverton, OR

11:45 AM O-101  THE PRICE IS RIGHT? ANALYSIS OF PRICE TRANSPARENCY IN ASSISTED REPRODUCTION Katherine Elise McDaniel, MD, Meghan B Smith, MD, Brittany L Klooster, MD, Rachel Blair Danis, MD, Kristin Bendikson, M.D., Richard J Paulson, MD, MS and Jacqueline Ho, MD MS, University of Southern California, Los Angeles, CA

11:15 AM O-105  POSTPARTUM WEIGHT RETENTION IN WOMEN WITH PCOS AND CONTROLS. IRIS TIENLYNN Lee, MD, Snigdha Alur-Gupta, M.D. and Anuja Dokras, M.D., Ph.D., 1UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM, PHILADELPHIA, PA, 2University of Pennsylvania Perelman School of Medicine, Philadelphia, PA

11:30 AM O-106  METABOLIC SYNDROME (MetS): FECUNDABILITY AND ADVERSE PREGNANCY OUTCOMES WITH OVULATION INDUCTION (OI) IN POLYCYSTIC OVARY SYNDROME (PCOS). Sushila Arya, MD, Karl R Hansen, MD PhD, Richard S. Legro, M.D. and NICHD’s Reproductive Medicine Network, 1University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma city, OK, 2Penn State College of Medicine, Hersey, PA

11:45 AM O-107  OXIDATIVE CAPACITY IS PRESERVED IN LIPOPOLYSACCHARIDE (LPS) TOLERANT MONONUCLEAR CELLS (MNC) OF OBESE WOMEN WITH ANDROGEN EXCESS

ANDROGEN EXCESS

Moderators: Marla Lujan and Wendy Vitek

10:45 AM O-103  PREGNANCY-RELATED ECONOMIC BURDEN OF POLYCYSTIC OVARY SYNDROME (PCOS). Carrie Riestenberg, MD, Anika Jagasia, BA and Ricardo Azziz, MD, MPH, 1University of California, Los Angeles, Los Angeles, CA, 2University of Pennsylvania, Philadelphia, PA, 3University at Albany, SUNY, Albany, NY
POLYCYSTIC OVARY SYNDROME (PCOS). Frank González, M.D., Robert V. Considine, Ph.D., Jiaping Xue, Ph.D., and Anthony J. Acton Jr., B.S., University of Illinois at Chicago College of Medicine, Chicago, IL, Indiana University School of Medicine, Indianapolis, IN

11:15 AM O-111 HUMAN BLASTOCYSTS DERIVED FROM MONOPRONUCLEAR ZYGOTES: A BIOLOGICAL MODEL FOR THE STUDY OF PLOIDY, EUPLOIDY, TOPOGRAPHY AND HETERO-PARENTAL INHERITANCE. Noelia Grau, PhD, Nuria Soler, MSc, Ana González-Picazo, MSc, Xavier Vendrell, PhD, Maria José Escribá, PhD, and Pilar Gámiz, PhD, IVIRMA-Valencia, Valencia, Spain, 2Universidad de Valencia, Valencia, Spain, 3IVI Foundation, Valencia, Spain, 4Sistemas Genómicos, Paterna, Spain, 5IVIRMA Valencia, Valencia, Spain

11:30 AM O-112 USE OF NEXT GENERATION SEQUENCING FOR THE ANALYSIS OF IN VITRO MATURATED OOCYTES AND THEIR POLAR BODIES. Marga Esbert, PhD, Cristina Garcia, MSc, Evelin E. Lara-Molina, MSc, Nicolas Garrido, PhD, Dagan Wells, PhD, Emre Seli, M.D., Georgina Cutts, MSc, Agustin Ballesteros, PhD, Javier Herreros Sr., MSc, Marissa Riqueros, MSc and Elpida Fragouli, PhD, IVIRMA Barcelona, Barcelona, Spain, 2IVI Foundation IVIRMA Global, Biomedical Research Institute La Fe, Valencia, Spain, 3IVI Foundation IIS La Fe, Valencia, IIS, Spain, 4IVI RMA, Oxford, United Kingdom, 5IVI-RMA New Jersey, Basking Ridge, NJ

12:00 PM O-114 COMPARISON OF EMBRYO SPECIFIC TIME-LAPSE DISH FOR INDIVIDUAL CULTURE VERSUS AN EMBRYO SPECIFIC DISH FOR GROUP CULTURE. Rebecca Holmes, PhD, Jaime Weinberg, BS, Laurie Kalaghan, BS, Brett Goode, BS, William B

ART LAB: OUTCOME PREDICTORS
Moderators: Matthew VerMilyea and John Zhang

10:45 AM O-109 THE EFFECT OF HIGH HUMIDITY ON EMBRYO CULTURE MEDIA OXIDATION. Carmela Albert, PhD, Raquel Del Gallego, PhD, Lucia Alegre, PhD, Zaloo ZL Larraeategui, PhD, Julian Marcos Sr., PhD, Belén Aparicio-Ruiz, PhD, and Marcos Meseguer, PhD, IVIRMA, Valencia, Spain, 2IVIRMA Global, Valencia, Spain, 3IVI RMA Global, Valencia, Spain, 4EMBRYOLOGIST, BILBAO, Spain, 5embryologist, Murcia, Spain, IVIRMA Global, Valencia, Spain, Tel Aviv, Israel

11:00 AM O-110 PUTRESCINE SUPPLEMENTATION PROMOTE THE MATURATION OF OOCYTES AND IMPROVE THE QUALITY OF OOCYTES AND THE POTENTIAL OF EMBRYOS DEVELOPMENT. Wei Wu, MD, Lingbo Cai, PhD, Yuting Ling, Master and Johne Liu, PhD, The First Affiliated Hospital of Nanjing Medical University, Nanjing, China, 2Ottawa Hospital Research Institute, Ottawa, ON, Canada

11:15 AM O-111 HUMAN BLASTOCYSTS DERIVED FROM MONOPRONUCLEAR ZYGOTES: A BIOLOGICAL MODEL FOR THE STUDY OF PLOIDY, EUPLOIDY, TOPOGRAPHY AND HETERO-PARENTAL INHERITANCE. Noelia Grau, PhD, Nuria Soler, MSc, Ana González-Picazo, MSc, Xavier Vendrell, PhD, Maria José Escribá, PhD, and Pilar Gámiz, PhD, IVIRMA-Valencia, Valencia, Spain, 2Universidad de Valencia, Valencia, Spain, 3IVI Foundation, Valencia, Spain, 4Sistemas Genómicos, Paterna, Spain, 5IVIRMA Valencia, Valencia, Spain

11:30 AM O-112 USE OF NEXT GENERATION SEQUENCING FOR THE ANALYSIS OF IN VITRO MATURATED OOCYTES AND THEIR POLAR BODIES. Marga Esbert, PhD, Cristina Garcia, MSc, Evelin E. Lara-Molina, MSc, Nicolas Garrido, PhD, Dagan Wells, PhD, Emre Seli, M.D., Georgina Cutts, MSc, Agustin Ballesteros, PhD, Javier Herreros Sr., MSc, Marissa Riqueros, MSc and Elpida Fragouli, PhD, IVIRMA Barcelona, Barcelona, Spain, 2IVI Foundation IVIRMA Global, Biomedical Research Institute La Fe, Valencia, Spain, 3IVI Foundation IIS La Fe, Valencia, IIS, Spain, 4IVI RMA, Oxford, United Kingdom, 5IVI-RMA New Jersey, Basking Ridge, NJ

12:00 PM O-114 COMPARISON OF EMBRYO SPECIFIC TIME-LAPSE DISH FOR INDIVIDUAL CULTURE VERSUS AN EMBRYO SPECIFIC DISH FOR GROUP CULTURE. Rebecca Holmes, PhD, Jaime Weinberg, BS, Laurie Kalaghan, BS, Brett Goode, BS, William B
EARLY PREGNANCY

Moderators: Lia Bernardi and Paul Brezina

10:45 AM  O-115  RETAINED PREGNANCY TISSUE AFTER MISCARRIAGE ASSOCIATED WITH HIGH RATE OF CHRONIC ENDOMETRITIS. Dana B. McQueen, M.D., M.A.S., Kruti P Maniar, M.D., Anne Hutchinson, M.D., Rafael Confino, BS, Jared C Robins, MD, Lia A. Bernardi, MD and Mary Ellen Pavone, MD, MSCI, Northwestern University, Chicago, IL

11:00 AM  O-116  IS THERE A PREDISPOSITION TO EMBRYONIC ANEUPLOIDY IN PRE-DIABETIC PATIENTS? Baruch Abittan, M.D., Hillary Pearson, M.D., Randi H. Goldman, M.D., Christine Mullin, M.D., Weiwei Shan, MS PhD and Avner Hershlag, M.D., 1Northwell Fertility, Manhasset, NY, 2North Shore University Hospital, Manhasset, NY, 3Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY, 4Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY, 4Northwell Health Fertility, 4Northwell Health Department of Biostatistics, New Hyde Park, NY

11:15 AM  O-117  DIRECT CORRELATION BETWEEN B-HCG LEVELS AND TROPHECTODERM MORPHOLOGY QUALITY IN SINGLE EUPLOID EMBRYO TRANSFER CYCLES. Carlos Hernandez-Nieto, MD, Joseph A. Lee, BA, Marlena Duke, MSc, ELD, Daniel E. Stein, MD, Alan B Copperman, MD, Benjamin Sandler, M.D. and Tammy Mukherjee, MD, 1Reproductive Medicine Associates of New York, New York, NY, 2Cahn School of Medicine at Mount Sinai, New York, NY

11:30 AM  O-118  PATERNAL CONTRIBUTIONS IN EARLY EMBRYONIC GENE EXPRESSION: ROLE IN EARLY PREGNANCY LOSS. Vidhu Dhawan, MD, Manoj Kumar, Ph.D, Neena Malhotra, MD FRCOG, Neeta Singh, MD, Vatsla Dadhwal, MD and Rima Dada, MD, Ph.D, 1All India Institute of Medical Sciences, New Delhi, India, 2All India Institute of Medical Sciences, New Delhi, India

11:45 AM  O-119  PREGNANCY VIABILITY IDENTIFIED BY EARLY SERUM HCG LEVEL MEASURED IN THE PERI-IMPLANTATION PERIOD FOLLOWING THAWED SINGLE BLASTOCYST TRANSFER. Ankita Raman, MD, Angela H Liu, MD, Carrie E Bedient, MD, Leah A Kaye, MD, Forest C Garner, MS and Bruce Shapiro, M.D., Ph.D., H.C.L.D., 1University of Nevada, Las Vegas, School of Medicine, Las Vegas, NV, 2Fertility Center of Las Vegas, Las Vegas, NV, 3Fertility Center of Las Vegas, Las Vegas, NV, 3Fertility Center of Las Vegas, Las Vegas, NV

12:00 PM  O-120  SEMINAL EXOSOMES PROTEOME PROFILING REVEAL IMPAIRED CELL SIGNALING AND DEFECTS IN CHROMATIN REMODELING AS PATERNAL CONTRIBUTORS IN RECURRENT PREGNANCY LOSS PATIENTS. Luna Samanta, Ph.D, Soumya Ranjan Jena, M.Phil, Jasmine Nayak, M.Phil, Gayatri Mohanty, PhD and Sujata Kar, MBBS MD DNB, 1Redox Biology Laboratory, Department of Zoology, Center of Excellence in Environment and Public Health, Ravenshaw University, Cuttack, Odisha, India, 2Redox Biology Laboratory, Center of Excellence in Environment and Public Health, Ravenshaw University, Cuttack-753003, India, Cuttack, India, 3A-32, Unit-4, Kharvel Nagar, Bhubaneswar, India

ETHICS

Moderators: Mary Samplaski and Lynn Westphal

10:45 AM  O-121  ETHICAL AND LEGAL ANALYSIS OF ADVERTISING FOR PLANNED OOCYTE CRYOPRESERVATION. Michelle J
ORAL ABSTRACTS

Bayefsky, B.A. and Louise Perkins
King, MD, JD, Harvard Medical School, Boston, MA

11:00 AM O-122 IVF CLINIC WEBSITES: BUYER BEWARE THE SYSTEM IS BROKEN. May-Tal Sauerbrun-Cutler, MD, Emma Charlotte Brown, BA, Warren J Huber III, MD, PHD, Phinnara Has, MS and Gary N Frishman, MD, 1Warren Alpert Medical School of Brown University; Women & Infants Hospital, Providence, RI, 2Brown University, Providence, RI, 3Division of Research Warren Alpert Medical School of Brown University; Women & Infants Hospital, Providence, RI, 4Brown University; Women & Infants Hospital, Providence, RI

11:15 AM O-123 INFERTILITY IN THE DIGITAL AGE: AN OPPORTUNITY FOR REI PHYSICIANS TO COMBAT THE SPREAD OF MISINFORMATION AND FILL SUPPORT GAPS IN INFERTILITY CARE ONLINE. Emily A Jacobs, MD and Ginny L Ryan, MD, MA, University of Iowa Carver College of Medicine, Iowa City, IA

11:30 AM O-124 ADVANCING LAWS TO PERMIT SURROGACY IN US STATES: CHALLENGES & SOLUTIONS FOR ART PROVIDERS & OTHERS. Robert Klitzman, MD, Columbia University, NY, NY

11:45 AM O-125 EVALUATING THE SART CLINIC SUMMARY REPORTS – IS IT ONLY ABOUT THE LIVE BIRTH RATES? WHAT ABOUT THE SIGNIFICANT MORBIDITY/MORTALITY RISK FACTORS ASSOCIATED WITH MULTIPLE GESTATIONS? Carrie Riestenberg, MD, Alin Lina Akopians, MD, PhD, Deborah E Johnson, MA, Zachary Haimowitz, BS, Hal C Danzer, MD, Mark W Surrey, MD and Jason A Barritt, PhD, 1University of California, Los Angeles, Los Angeles, CA, 2Southern California Reproductive Center, Beverly Hills, CA, 3ART Reproductive Center, Beverly Hills, CA

12:00 PM O-126 INSTITUTIONAL POLICIES ON POSTHUMOUS REPRODUCTION USING OOCYTES AND EMBRYOS: PRELIMINARY RESULTS FROM A CROSS-SECTIONAL STUDY. Emma C. Trawick, M.D., Amani Sampson, B.A., David L. Keefe, M.D., Arthur L. Caplan, Ph.D., Kara N. Goldman, M.D., 1Northwestern University, Feinberg School of Medicine, Chicago, IL, 2New York University School of Medicine, Department of Obstetrics and Gynecology, New York, NY, 3New York University School of Medicine, Department of Population Health, Division of Medical Ethics, New York, NY, 4Northwestern University Feinberg School of Medicine, Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, Chicago, IL

IMAGING AND REPRODUCTIVE MEDICINE

Moderators: Laura Detti and Laurel Stadtmauer

10:45 AM O-127 ORAL HYOSCINE BUTYL BROMIDE PLUS CERVICAL LIDOCAINE 5% CREAM IN REDUCING PAIN DURING HYSTEROSALPINGOGRAPHY. Ahmed M Abbas, MD, Yehia Ali, MD, Tarek Farghaly, MD and Mohamed Khalaf, MD, 1Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, 2Department of Obstetrics and Gynecology, Faculty of Medicine, Qena, Egypt

11:00 AM O-128 THE DEVELOPMENT OF A SYSTEM TO AUTOMATICALLY EVALUATE THE NUMBER OF PRONUCLEI USING DEEP LEARNING TECHNOLOGY. Yuta Kida, M.S., Noritaka Fukunaga, Ph.D., Sho Sanami, Ph.D., Hiroyuki Watanabe, M.S., Yuji Tsuzuki, M.S., Hiroya Kitasaka, Ph.D., Seiji Takeda, M.S. and Yoshiyama Asada, M.D., Ph.D., 1Asada Ladies Clinic, Nagoya, Aichi, Japan, 2Research & Development Center, Dai Nippon Printing Co., Ltd., Kita-ku, Tokyo, Japan
11:15 AM O-129  LOW ENDOMETRIAL VOLUME IS NOT ASSOCIATED WITH DIMINISHED LIVE BIRTH FOLLOWING TRANSFER OF A SINGLE THAWED EUPLOID BLASTOCYST. Shelby A Neal, MD,1 Richard Thomas Scott Jr., MD2 and Linnea R Goodman, MD2,1IVI-RMA New Jersey, Basking Ridge, NJ, 2University of North Carolina, Raleigh, NC

11:30 AM O-130  COMPARISON OF SINGLETON AND TWIN PREGNANCY OUTCOMES IN WOMEN WITH A CONGENITAL UNICORNATE UTERUS AFTER IN VITRO FERTILIZATION-EMBRYO TRANSFER. Qingqing Wu, Bachelor’s degree1, Yan Ouyang, MD./Ph.D2, Xihong Li, MD./Ph.D2 and Pei Cai, Master3,1Institute of Reproductive & Stem Cell Engineering, Central South University, Changsha, China, 2Reproductive and Genetic hospital of Citic-Xiangya, Changsha, China, 3Central South University, Changsha, China

11:45 AM O-131  UTERINE SUBSEPTATIONS AN INDICATION FOR SURGICAL CORRECTION IN INFERTILITY PATIENTS: A COMPARISON OF FOUR SYSTEMS. Mary Emily Christiansen, MD1, Irene Peregrin-Alvarez, MD1, Robert Roman, MD2, Roberto Levi D’Ancona, MD2, Jennifer Gordon, MD3 and Laura Detti, MD2, 1The University of Tennessee Health and Science Center, Memphis, TN, 2University of Tennessee Health Science Center, Memphis, TN, 3UTHSC, Memphis, TN

12:00 PM O-132  PRE-OPERATIVE MAGNETIC RESONANCE IMAGING VERSUS ULTRASONOGRAPHY FOR PREDICTING THE OPERATIVE OUTCOMES OF ABDOMINAL OR LAPAROSCOPIC MYOMECTOMY. Nigel Pereira, MD1, Catherine W Chan, MD2, Nirali J Shah, MD2, Isaac Kligman, M.D.1 and Zev Rosenwaks, M.D.3,1Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, New York, NY, 2Weill Cornell Medicine, New York, NY

IVF OUTCOME PREDICTORS 1

Moderators: Brent Hanson and Bruce Shapiro

10:45 AM O-133  GONADOTROPIN-SPECIFIC FOLLICULAR STEROIDOGENESIS IN OVARIAN STIMULATION: EVIDENCE FROM THE MENOPUR IN GNRH ANTAGONIST SINGLE EMBRYO TRANSFER - HIGH RESPONDER (MEGASET-HR) TRIAL. Fady I Sharara, M.D.1, Eric D Foster, PhD2, Anshul Sinha, B.Tech2, Gaurang S Daftary, MD, MBA2 and Patrick W Heiser, PhD2, 1Virginia Center for Reproductive Medicine, Reston, VA, 2Ferring Pharmaceuticals Inc, Parsippany, NJ

11:00 AM O-134  IN VITRO FERTILIZATION WITH PERSONALIZED BLASTOCYST TRANSFER VERSUS FROZEN OR FRESH BLASTOCYST TRANSFER: A MULTICENTER, RANDOMIZED CLINICAL TRIAL. Carlos Simon, MD, PhD1, Carlos Gomez, M.Sc.2, Sergio Cabanillas, M.D., Ph.D.3, Iavor K. Vladimirov, M.D., Ph.D.4, Gemma Castillon, M.D., Ph.D.5, Juan Giles, M.D., Ph.D.3, Fazilet Kubra Boynukalin, M.D., MSc6, Necati Findikli, Ph.D.6, Israel Ortega, M.D., Ph.D.7, Carmen Vidal, M.D., Ph.D.8, Alexandra Izquierdo, M.D., Ph.D.9, Susana Portela, MD10, Nilo Frantz, M.D.11, Sagiri Taguchi, M.D., Ph.D.12, Elena Labarta, MD PhD13, Francisco Colucci Coelho, M.D., Ph.D.14, Shari Mackens, MD15, Xavier Santamarina, M.D., Ph.D.5, Elkin Muñoz, M.D., Ph.D.8, Saul Guillermo Barrera Sr., M.D., Ph.D.17, Manuel Fernández-Sánchez, MD, PhD18, Marcos Ferrando, M.D.19, Antonio Pellicer, M.D., Ph.D.3, Ben W Mol, M.D., Ph.D. Prof.20 and Diana Valbuena, M.D., Ph.D.2, 1University of Valencia;
ORAL ABSTRACTS

Igenomix Foundation-INCLIVA, Valencia, Spain, 1Igenomix SL, Paterna, Spain, 2IVI-RMA Valencia, Valencia, Spain, 3SALAGRM-Sofia, Sofia, Bulgaria, 4IVI-RMA Barcelona, Barcelona, Spain, 5Bahçeci Health Group-Fulya IVF Centre, Istanbul, Turkey, 6IVI-RMA Madrid, MADRID, Spain, 7ProcreaTec, Madrid, Spain, 8IVI-RMA, Valencia, Spain, 9IVI RMA Barcelona, Barcelona, Spain, 10Bahçeci Health Group-Fulya IVF Centre, Istanbul, Turkey, 11IVI RMA Madrid, Madrid, Spain, 12Nilo Frantz Reproductive Medicine, Porto Alegre, Brazil, 13Oak Clinic, Japan, Osaka, Japan, 14IVI-RMA, Valencia, Spain, 15Universitasit Ziekenhuis Brussel, Jette, Belgium, 16Universitasit Ziekenhuis Brussel, Jette, Belgium, 17Universitasit Ziekenhuis Brussel, Jette, Belgium, 18Universitasit Ziekenhuis Brussel, Jette, Belgium

11:15 AM O-135 ROLE OF METFORMIN IN PREVENTION OF PREMATURE LUTEINIZATION IN FRESH INTRACYTOPHASIC SPERM INJECTION (ICSI) CYCLES: A RANDOMIZED CONTROLLED TRIAL. Reda S Hussein, MD1, Ahmed F Amin, MD1, Yulian Zhao, PhD2, Hisham A. Abou-Taleb, MD, PhD1, Ahmed M. Abdelmagied, MD1, Osama S Abdalmageed, MD1 and Ihab Elnashar, MD1, 1Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, 2Department of Obstetrics and Gynecology, Mayo Clinic, Rochester, MN

11:30 AM O-136 DIMINISHED OVARIAN RESERVE (DOR) IS ASSOCIATED WITH REDUCED EUPLOID RATES VIA PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) INDEPENDENT OF AGE: EVIDENCE FOR CONCOMITANT REDUCTION IN OOCYTE QUALITY WITH QUANTITY. Eleni A Greenwood, MD, MSc1, Charles E McCulloch, PhD2, Marcelle I Cedars, MD3 and Mitchell P Rosen, MD, HCLD3, 1University of California San Francisco, San Francisco, CA, 2UCSF, San Francisco, CA, 3University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA

11:45 AM O-137 DAY 7 EUPLOID BLASTOCYSTS HAVE COMPROMISED DEVELOPMENTAL COMPETENCE AND HALF THE LIVE BIRTH RATE POTENTIAL OF DAY 5 EUPLOID BLASTOCYSTS. Sue McCormick, BS, Robin Smith, BS, Laura Reed, BS, William B Schoolcraft, MD and Mandy G Katz-Jaffe, Ph.D., Colorado Center for Reproductive Medicine, Lone Tree, CO

12:00 PM O-138 PROTOCOL MATTERS: A PROPENSITY GROUP ANALYSIS SHOWS THAT PROGESTERONE ELEVATIONS ON DAY OF TRIGGER DURING FRESH IVF-ET AFFECT LIVE BIRTH RATES DIFFERENTLY ACCORDING TO STIMULATION PROTOCOL. Chantal Bartels, MD1, James Grady, PhD2, Chaoran Hu, M.S.2 and Grow R Daniel, MD1, 1Center for Advanced Reproductive Services, University of Connecticut, Farmington, CT, 2University of Connecticut, Farmington, CT

LGBTQ

Moderator: Nicole Ulrich

10:45 AM O-139 REPRODUCTIVE FUNCTION IN A TRANSGENDER MOUSE MODEL FOLLOWING CESSATION OF TESTOSTERONE. Molly B Moravek, MD, MPH1, Hadrian M Kinnear, BA1, Vasantha Padmanabhan, MS, PhD1 and Ariella Shikanov, PhD2, 1University of Michigan, Ann Arbor, MI, 2University of Michigan, ANN ARBOR, MI

11:00 AM O-140 REPRODUCTIVE LIFE PLANNING AND INTEREST IN FERTILITY PRESERVATION AMONG TRANSGENDER AND GENDER NON-BINARY INDIVIDUALS. Nina
ORAL ABSTRACTS

11:15 AM  O-141  MEDICAL ASPECTS OF FERTILITY PRESERVATION (FP) FOR TRANSGENDER ADOLESCENTS AND YOUNG ADULTS (TAYAS): A SYSTEMATIC REVIEW. Vyas, MD, Alisse Singer, BA, Armen Ter-Barsegyan, MPH, Alena Kantor, BS, Chris Mann, MSW, ASW, Sylvia Lambrechts, MA, and Moly M Quinn, MD, University of California, Los Angeles, Los Angeles, CA

11:15 AM  O-142  THE BURDEN OF FAMILY BUILDING AS A GAY MALE COUPLE: THE MAJORITY OF GAY MALE COUPLES SEEN AT A LARGE REPRODUCTIVE MEDICINE PRACTICE DESIRE A CHILD WITH EACH OF THEIR GENETICS. Vyas, MD, Alisse Singer, BA, Armen Ter-Barsegyan, MPH, Alena Kantor, BS, Chris Mann, MSW, ASW, Sylvia Lambrechts, MA, and Moly M Quinn, MD, University of California, Los Angeles, Los Angeles, CA

11:30 AM  O-144  IMPORTANT DECISION-MAKING CONSIDERATIONS FOR SAME-SEX MALE COUPLES (SSMC) AND SINGLE MEN (SM) WHEN PURSUING ASSISTED REPRODUCTIVE TECHNOLOGIES (ART). Vyas, MD, Alisse Singer, BA, Armen Ter-Barsegyan, MPH, Alena Kantor, BS, Chris Mann, MSW, ASW, Sylvia Lambrechts, MA, and Moly M Quinn, MD, University of California, Los Angeles, Los Angeles, CA

MALE REPRODUCTION AND UROLOGY: CLINICAL

10:45 AM  O-145  THE PREVALENCE OF Y-CHROMOSOME MICRODELETIONS IN OLIGOZOOSPERMIC MEN: A SYSTEMATIC REVIEW AND META-ANALYSIS OF NORTH AMERICAN AND EUROPEAN STUDIES. Vyas, MD, Alisse Singer, BA, Armen Ter-Barsegyan, MPH, Alena Kantor, BS, Chris Mann, MSW, ASW, Sylvia Lambrechts, MA, and Moly M Quinn, MD, University of California, Los Angeles, Los Angeles, CA

11:00 AM  O-146  THE EFFECT OF ADVANCING PATERNAL AGE ON PREGNANCY AND NEONATAL OUTCOMES FOLLOWING A SINGLE EUPLOID FROZEN EMBRYO TRANSFER IN A DONOR OOCYTE MODEL. Vyas, MD, Alisse Singer, BA, Armen Ter-Barsegyan, MPH, Alena Kantor, BS, Chris Mann, MSW, ASW, Sylvia Lambrechts, MA, and Moly M Quinn, MD, University of California, Los Angeles, Los Angeles, CA

11:15 AM  O-147  THE EFFECT OF TETRAHYDROCANNABINOL ON TESTOSTERONE AMONG MEN IN THE UNITED STATES: RESULTS FROM THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY. Vyas, MD, Alisse Singer, BA, Armen Ter-Barsegyan, MPH, Alena Kantor, BS, Chris Mann, MSW, ASW, Sylvia Lambrechts, MA, and Moly M Quinn, MD, University of California, Los Angeles, Los Angeles, CA
ORAL ABSTRACTS

11:30 AM  O-148  UTILIZING THE YO® HOME SPERM TEST NOVICE USERS OBTAINED ACCURATE RESULTS AS COMPARED TO TRAINED TECHNICIANS. Natan Bar-Chama, MD, Lev Rabinovich, PhD and Stan Honig, MD, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Medical Electronic Systems, Caesarea Industrial Park, Israel, 3Yale University, New Haven, CT

11:45 AM  O-149  UNDERUTILIZATION OF PRIMARY MEDICAL CARE AMONG MEN PRESENTING FOR FERTILITY EVALUATION. Joshua A. Halpern, MD, MS, 1Anne L. Darves-Bornoz, MD, 2Richard Jacob Fantus, MD, 3Mary Kate Keeter, MPH, 4James Wren, MD, 5Nelson E. Bennett Jr., 6Northwestern University Feinberg School of Medicine, Chicago, IL, 2Vanderbilt University, Nashville, IL, 3University of Chicago, Chicago, IL, 4Northwestern University, Chicago, IL

12:00 PM  O-150  SALVAGE ULTRASOUND GUIDED TARGETED CRYOABLATION OF THE PERI-SPERMATIC CORD FOR PERSISTENT CHRONIC SCROTAL CONTENT PAIN AFTER MICROSURGICAL DENERVATION OF THE SPERMATIC CORD. Sijo Joseph Parekkattil, MD, 1Jamin Brahmbhatt, MD, 2Nahomy Calixte, MD, 3Mohamed Etafy, MD, 4Richard A Mendelson, Ph.D., 1PUR Clinic, South Lake Hospital & University of Central Florida, Clermont, FL, 2PUR Clinic, Clermont, FL, 3PUR Clinic, Clermont, FL, 4Keiser University, Cooper City, FL

MENTAL HEALTH

Moderators: Alice Domar and Sarah Holley

10:45 AM  O-151  THE IMPACT OF KLINEFELTER SYNDROME ON QUALITY OF LIFE – A MULTICENTRE STUDY. Sebastian Franik, MSc, MD, 1Kathrin Fleischer, MD, PhD, 2Barbara Kortmann, MD, PhD, 3Kathleen D’Hauwers, MD, PhD, 4Joanna Int’Hout, PhD, 5Claire Bouvattier, MD, Jolanta Slowikowska-Hliczer, MD, PhD, Solange Grunenwald, MD, Tim van de Griff, MD, PhD, Audrey Cartault, MD, Annette Richter-Unruh, MD, PhD, Ute Thyen, PhD and Hedi Claahsen - van der Grinten, MD, PhD, 1Resident in Obstetrics and Gynecology, Nijmegen, Netherlands, 2Department of Obstetrics and Gynecology, Radboudumc, Nijmegen, Netherlands, 3Department of pediatric urology, Nijmegen, Netherlands, 4Department of Urology, Nijmegen, Netherlands, 5Department for Health Evidence, Nijmegen, Netherlands, 6Department of pediatric endocrinology, Paris, France, 7Department of Andrology and Reproductive Endocrinology, Medical University of Lodz, Lodz, Poland, 8Department of Endocrinology and Metabolic Disease, Toulouse, France, 9Vu medisch centrum, Amsterdam, Netherlands, 10Department of pediatrics, Toulouse, France, 11Department of Pediatric Endocrinology, Bochum, Germany, 12Department of Pediatrics, Lübeck, Germany, 13Department of pediatric endocrinology, Radboudumc, Nijmegen, Netherlands

11:00 AM  O-152  INTIMATE PARTNER VIOLENCE AMONG POSTPARTUM WOMEN REPORTING PRIOR FERTILITY TREATMENT. Jerrine Renee Morris, MD, MPH, 1Jennifer F Kawwass, MD, 2and Heather S Hipp, MD, 3Emory University, Atlanta, GA

11:15 AM  O-153  IMPACT OF IN-CENTER STRESS REDUCTION MODALITIES ON SART-REPORTED LIVE BIRTH RATES. Jessica N Tozour, MD, PhD, 1Randi H. Goldman, M.D. and Christine Mullin, M.D., 1NYU Winthrop Hospital, Mineola, NY, 2Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY
11:30 AM  O-154  HOME- OR HOSPITAL -BASED MONITORING TO TIME FROZEN EMBRYO TRANSFER IN THE NATURAL CYCLE? OUTCOMES FROM A RANDOMIZED CONTROLLED TRIAL (ANTARCTICA-2) Tjitske Zaat, MD. (MSc)1, J. P. de Bruin, M.D., PhD2, Mariette Goddijn, Prof. Dr. MD. PhD.1, Jantien Visser, MD PhD3, Harold Verhoeve, M.D., PhD4, C. B. Lambalk, MD PhD5, Eva Groenewoud, MD PhD6, M. van Wely, Dr. PhD.1 and Femke Mol, M.D., PhD7, 1Amsterdam University Medical Center, Amsterdam, Netherlands, 2Jeroen Bosch Hospital, Department of Obstetrics and Gynecology, Den Bosch, Netherlands, 3Amphia Hospital, Breda, Netherlands, 4OLVG Oost Hospital, Department of Obstetrics and Gynecology, Amsterdam, Netherlands, 5Amsterdam UMC, Vrij Universiteit Amsterdam, Department of Reproductive Medicine, Amsterdam, Netherlands, 6NoordWest Ziekenhuisgroep, Den Helder, Netherlands, 7Amsterdam UMC, University of Amsterdam, Center for Reproductive Medicine, Amsterdam, Netherlands

11:45 AM  O-155  DOES UTILIZATION OF PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) ALTER DROPOUT RATES? Denny Sakkas, PhD1, Alice D. Domar, Ph.D.1 and Laura E Dodge, ScD, MPH2, 1Boston IVF, Waltham, MA, 2Harvard Medical School, Boston, MA

12:00 PM  O-156  HAIR CORTISOL AS A NEW BIOMARKER OF UNDERLYING CHRONIC STRESS, ANXIETY AND DEPRESSION IN INFERTILITY: A PILOT STUDY, Diana C. Santa-Cruz, MSc1, Rafael Caparros-Gonzalez, PhD2 and Juan A. García-Velasco, MD, PhD1, 1IVI-RMA Madrid, Madrid, Spain, 2Universidad de Jaen, Jaen, Spain

10:45 AM  O-157  ADOLESCENTS AND ECTOPIC PREGNANCY: TRENDS IN EMERGENCY DEPARTMENT UTILIZATION BETWEEN 2006-2014, Emma Giuliani, MD1, Monica W Rosen, MD2, Elisabeth H Quin, MD2, Erica E Marsh, MD1 and Yolanda R. Smith, MD1, 1Reproductive Endocrinology and Infertility, University of Michigan, Ann Arbor, MI, 2University of Michigan, Ann Arbor, MI

11:00 AM  O-158  PARENT COMPREHENSION FOLLOWING VIDEO-BASED EDUCATION FOR PEDIATRIC FERTILITY PRESERVATION. Nicole Henda, BS1, Courtney J Harris, MD2, Kristine S Corkum, MD2, Aminata Bangoura, BS2, Shaina M Goff, -3, Monica M Laronda, PhD3 and Erin E Rowell, MD4, 1Northwestern University Feinberg School of Medicine, Chicago, IL, 2Department of Pediatric Surgery, Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 3Stanley Manne Children’s Research Institute, Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 4Division of Pediatric Surgery, Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL

11:15 AM  O-159  FACTORS ASSOCIATED WITH CHOOSING FERTILITY PRESERVATION IN A PEDIATRIC, ADOLESCENT AND YOUNG ADULT POPULATION. Megan R Sax, MD1, Tara Schafer-Kalkhoff, MA2, Brycen Ferrara, BS3, Olivia Jaworek Frias, MSN, RN, CNL3, Lesley Breech, MD3, Karen Burns, MD, MS3, Andrew C Strine, MD4 and Julie Sroga Rios, MD5, 1University of Cincinnati and Cincinnati Children’s Medical Center, Cincinnati, OH, 2Cincinnati Children’s Hospital medical center, Cincinnati, OH, 3Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, 4Division of Pediatric Urology, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, 5University of Cincinnati and Cincinnati Children’s Hospital Medical Center, Cincinnati, OH
ORAL ABSTRACTS

11:30 AM O-160 WHO SEES FERTILITY SPECIALISTS? CANCER TREATMENTS AND SEEKING FERTILITY SERVICES IN ADOLESCENTS AND YOUNG ADULTS (AYA) WITH CANCER. Christina Lam, MD1, Alexa CO Medica, MD1, Kelsey Pinson, MD2, Ksenya Shliakhtsitsava, MD3, Brian W Whitcomb, PhD4 and H. Irene Su, M.D., M.S.C.E.1, 1University of California San Diego, La Jolla, CA, 2University of California, San Diego, La Jolla, CA, 3UT Southwestern, Dallas, TX, 4University of Massachusetts, Amherst, Amherst, MA

11:00 AM O-164 DOES THE OPERATOR PERFORMING THE EMBRYO TRANSFER SIGNIFICANTLY INFLUENCE THE CYCLE OUTCOME? Federico Cirillo, MD, EFRM ESHRE/EBCOG1, Pasquale Patrizio, M.D.2, Emanuela Morenghi, Prof3, Michela Baccini, Prof4, Elena Zannoni, MD1, Luca Cafaro, MD1, Camilla Ronchetti, MD1, Annamaria Baggiani, MD1 and Paolo Emanuele Levi Setti, MD1, 1Humanitas Research Hospital, Rozzano (Milan), Italy, 2Yale Fertility Center, New Haven, CT, 3Biostatistics Unit, Humanitas Research Hospital,, Rozzano (MI), Italy, 4Department of Statistics, Computer Science, Applications, University of Florence, Florence, Italy

11:45 AM O-161 BEYOND PREMATURE OVARIAN INSUFFICIENCY: CHARACTERIZING REPRODUCTIVE AGING AND RISKS FOR ACCELERATED AGING IN ADOLESCENT AND YOUNG ADULT (AYA) CANCER SURVIVORS. Alexa CO Medica, MD2, Christina Lam, MD1, Kelsey Pinson, MD2, Ksenya Shliakhtsitsava, MD3, Brian W Whitcomb, PhD4 and H. Irene Su, M.D., M.S.C.E.1, 1University of California San Diego, La Jolla, CA, 2University of California, San Diego, La Jolla, CA, 3UT Southwestern, Dallas, TX, 4University of Massachusetts, Amherst, Amherst, MA

11:15 AM O-165 ONLINE PATIENT REVIEWS ARE INFLUENCED BY TYPE OF PHYSICIAN-BASED INFERTILITY PRACTICE. Ricci Allen, BA, BS, MSc1, Shruti Agarwal, DO2 and Mark P Trolice, MD3, 1University of Central Florida College of Medicine, Orlando, FL, 2UCF College of Medicine/HCA Consortium of Greater Orlando, Kissimmee, FL, 3Fertility CARE: The IVF Center; University of Central Florida College of Medicine – Associate Professor, Winter Park, FL

12:00 PM O-162 COMPENSATORY OVARIAN HYPERSTROPHY AFTER UNILATERAL OOPHORECTOMY: EVALUATION OF OVARIAN VOLUMES IN THE PEDIATRIC AND ADOLESCENT POPULATION. Allison C Mayhew, MD, Mina Farahzad, MD, PhD and Krista Childress, MD, Emory University School of Medicine, Atlanta, GA

11:30 AM O-166 FREQUENCY AND CLAIMS BASIS FOR LAWSUITS OVER LOST, DISCARDED AND DAMAGED FROZEN EMBRYOS OVER A 10 YEAR PERIOD. Gerard Letterie, MD1 and Dov Fox, JD, DPhil, LLM2, 1Seattle Reproductive Medicine, San Diego, CA, 2Professor of Law and Director of the Center for Health Law Policy and Bioethics at the University of San Diego, San Diego, CA

PRACTICE MANAGEMENT

Moderators: Sara Mooney and Colin Thomas

10:45 AM O-163 CURRENT STATUS OF REPRODUCTIVE LABORATORY PROFESSION: WORKLOAD, WELLNESS, EARNINGS AND JOB SATISFACTION. T. Arthur Chang, PhD, HCLD, ELD1, Ching-Chien Chang, PhD, HCLD2, Liesl Nel-Themaat, PhD, HCLD3, Scott E. Smith, PhD, HCLD4, Shane Zozula, B.S., T.S. (ABB)5 and Y. Tina Su, PhD6, 1University of Texas Health Science Center, San Antonio, TX, 2Reproductive Biology Associates, Atlanta, GA, 3University of Colorado Anschutz Medical Campus, Aurora, CO, 4Abington IVF & Genetics, Abington, PA, 5Ovation Fertility, Newport Beach, CA, 6Affiliation not provided

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## Oral Abstracts

### 11:45 AM O-167
**Improved Monitoring of Human Embryo Culture Conditions Using a Deep Learning-Derived Key Performance Indicator (KPI).**
Manoj Kumar Kanakasabapathy, MS¹, Prudhvi Thirumalaraju, BS¹, Raghav Gupta, BTech¹, Rohan Pooniwala, BTech², Hemanth Kandula, BS¹, Irene Souter, MD², Irene Dimitriadis, MD², Charles L Bormann, PhD² and Hadi Shafiee, PhD¹, ¹Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, ²Massachusetts General Hospital, Harvard Medical School, Boston, MA

### 11:15 AM O-171
**Effects of Intraovarian Injection of Autologous Platelet Rich Plasma on Ovarian Reserve and IVF Outcomes in Women with Premature Ovarian Insufficiency.**
Yigit Cakiroglu, M.D.¹, Ayse Saltik, M.D.¹, Aysen Yuceturk, M.D.¹, Ozge Karaosmanoglu, M.D.¹, Ahmet TANAY Tayyar, M.D.², Richard Thomas Scott Jr., MD³, Bulent Tiras, M.D.⁴ and Emre Selii, M.D.⁵, ¹M.D., Istanbul, Turkey, ²Assoc.Prof., Istanbul, Turkey, ³VI-RMA New Jersey, Basking Ridge, NJ, ⁴Prof., Acibadem Maslak Hospital Assisted Reproductive Techniques Unit, Istanbul, Turkey

### 12:00 PM O-168
**Automated Quality Assessment of Individual Embryologists Performing ICSI Using Deep Learning-Enabled Fertilization and Embryo Grading Technology.**
Prudhvi Thirumalaraju, BS¹, Manoj Kumar Kanakasabapathy, MS¹, Raghav Gupta, BTech¹, Rohan Pooniwala, BTech², Hemanth Kandula, BS¹, Irene Souter, MD², Irene Dimitriadis, MD², Charles L Bormann, PhD² and Hadi Shafiee, PhD¹, ¹Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, ²Massachusetts General Hospital, Harvard Medical School, Boston, MA

### 11:30 AM O-172
**Endometrial Receptivity Analysis Does Not Increase Live Birth Rates in First Frozen Embryo Transfer with a Euploid Blastocyst.**
Deborah A Lee, M.D., M.S.¹, Kaylen Silverberg, MD¹, Alicia Picou, M.S.², Hongyu Miao, Ph.D.³, Christina M Garcia, B.S.¹ and Anthony M Propst, M.D.¹, ¹Texas Fertility Center, Austin, TX, ²Ovation Fertility, Austin, TX, ³School of Public Health, University of Texas Health Science Center at Houston, Houston, TX

### 11:45 AM O-173
**Safety of Oil-Based Contrast Medium for Hysterosalpingography: A Systematic Review.**
Inez Roest, BSc¹, Nienke van Welie, M.D., Velja Mijatovic, M.D., PhD¹, Kim Dreyer, M.D., PhD³, Carolien A.M. Koks, M.D., PhD¹ and Ben W Mol, M.D., Ph.D. Prof.³, ¹Department of Reproductive Medicine, Maxima Medical Center, Eindhoven/Veldhoven, Veldhoven, Netherlands, ³Department of Reproductive Medicine, Colorado Center for Reproductive Medicine, Lone Tree, CO

### Procedures and Techniques

**Moderators: Amy Jones and Jason Swain**

### 10:45 AM O-169
**Embryo Transfer Maneuvers and Manipulations – The Effect on In Vitro Fertilization (IVF) Outcomes.**
Briana O’Leary, MD¹, Andrea Lanes, PhD¹, Ann M Thomas, PhD², Elizabeth S Ginsburg, MD² and Malinda S Lee, MD, MBA¹, ¹Brigham and Women’s Hospital, Boston, MA, ²Brigham & Women’s Hospital, Boston, MA

### 11:00 AM O-170
**Minimally Invasive Uterine Aspiration 24 Hours Ahead of Embryo Transfer Characterizes the Compromised RIF Uterine Microenvironment and Is Predictive of Reproductive Outcome.**
Jason C Parks, BS, Blair R McCallie, BS, Mary E Haywood, PhD, Taylor Pini, PhD, William B Schoolcraft, MD and Mandy G Katz-Jaffe, Ph.D., Colorado Center for Reproductive Medicine, Lone Tree, CO
ORAL ABSTRACTS

12:00 PM  O-174  NATIONAL TRENDS IN EMBRYO TRANSFER TRAINING. Dana B. McQueen, M.D., M.A.S., Jared C Robins, MD and Eve C. Feinberg, M.D., Northwestern University, Chicago, IL

REPRODUCTIVE BIOLOGY: ANIMAL AND EXPERIMENTAL STUDIES

Moderators: Eva Schenkman and Liesl Nel-Themaat

10:45 AM  O-175  HIGH-FAT DIET CAUSES DYSREGULATION OF OVARIAN ENDOTHELIN-2 EXPRESSION ACROSS THE ESTROUS CYCLE. Natalie M Hohos, PhD, Emily M Elliott, BS and Malgorzata E Skaznik-Wiikel, MD, UNIVERSITY OF COLORADO - ANSCHUTZ MEDICAL CAMPUS, Aurora, CO

11:00 AM  O-176  REGULATION OF EMBRYONIC DEVELOPMENT BY PLATELET-ACTIVATING FACTOR IS MOST LIKELY VIA THE INTRINSIC APOPTOSIS PATHWAY. Tracy Oyugi, BS1, Lindsay Michele Grasso, BS, MS1, Charlotte Leblang, BA, MS1, Lauren Tyler, BS1, Amav Lal, na1, Jonathan L Blalock, BS1, Shawn Zimmerman, PhD, HCLD2, Renee J. Chosed, PhD and William E. Roudebush, PhD1, 1University of South Carolina School of Medicine Greenville, Greenville, SC, 2Vios Fertility Institute, Swansea, IL

11:15 AM  O-177  OOCYTE SPECIFIC TRANSCRIPTION REGULATORS, NOBOX AND FIGLA, ARE IDENTIFIED AS KEY CONTRIBUTORS TO THE DECLINE IN FECUNDITY ASSOCIATED WITH OVARIAN AGING. Jennifer E Russ, BS, Jason C Parks, BS, Blair R McCallie, BS, Mary E Haywood, PhD, William B Schoolcraft, MD and Mandy G Katz-Jaffe, Ph.D., Colorado Center for Reproductive Medicine, Lone Tree, CO

11:30 AM  O-178  SAFE AND EFFICIENT DETECTION OF EGG MATURITY WITHOUT CUMULUS CELL REMOVAL BY NON-INVASIVE TOMOGRAPHY. Rebecca L. Krisler, PhD1, Deiradh M Logsdon, MS1, Benjamin B Goheen, BS1, Sandeep K Rajput, PhD1, Travis A. Morgan, MBA2, William B Schoolcraft, MD1, Ran An, PhD2 and Brian A Levine, MD3, 1Colorado Center for Reproductive Medicine, Lone Tree, CO, 2Animated Dynamics, Inc., Indianapolis, IN, 3CCRM NY, New York, NY

11:45 AM  O-179  THE PLASMINOGEN ACTIVATOR SYSTEM IN THE PRIMATE OVARIAN CYCLE AND MENSTRUATION. Reem Sabouni, MD1, Esra Demirel, MD2 and David F Archer, MD3, 1EVMS/ Jones Institute for Reproductive Medicine, Norfolk, VA, 2North Shore University Hospital & Long Island Jewish Medical Center, Manhasset, NY, 3Eastern Virginia Medical School, Norfolk, VA

12:00 PM  O-180  THE ROLE OF GLYPHOSATE IN INFERTILITY: THE MECHANISTIC LINK. Charalampos Chatzicharalampous, MD, PhD, Zeina A Yahfoufi, BS, David Bai, BS, Awniyi Olumide Awonuga, MD and Husam Abu-Soud, PhD, Wayne State University, Detroit, MI
Wednesday, October 16, 2019
10:45 am - 12:15 pm

ORAL ABSTRACT SESSION

ART LAB: TECHNOLOGY
ENDOMETRIOSIS
FEMALE REPRODUCTION
FERTILITY PRESERVATION
FIBROIDS
IVF OUTCOME PREDICTORS 2
MALE FACTOR
MALE REPRODUCTION AND UROLOGY: RESEARCH
NURSING
PROFESSIONAL DEVELOPMENT
REGENERATIVE MEDICINE AND STEM CELLS
REPRODUCTIVE ENDOCRINOLOGY
REPRODUCTIVE IMMUNOLOGY
PARENTAL AGING
LATE-BREAKING

ART LAB: TECHNOLOGY
Moderators: Gerard Celia and Brad Milette

10:45 AM O-181 SHORTER TELOMERE LENGTH OF WHITE BLOOD CELLS IS ASSOCIATED WITH HIGHER RATES OF ANEUPLOIDY IN WOMEN UNDERGOING IN VITRO FERTILIZATION. Brent M Hanson, MD1, Xin Tao, Ph.D2, Yiping Zhan, Ph.D3, Julia G Kim, MD, MPH1, Emily K Osman, MD1, Ashley W Tieg, MD1, Shelby A Neal, MD1, Richard Thomas Scott Jr., MD1 and Emre Seli, M.D.1, 1IVI-RMA New Jersey, Basking Ridge, NJ, 2The Foundation for Embryonic Competence, Basking Ridge, NJ, 3Foundation for Embryonic Competence, Basking Ridge, NJ

11:15 AM O-183 mtDNA CONTENT IS NOT ASSOCIATED WITH EMBRYONIC REPRODUCTIVE COMPETENCE. Richard Scott III, B.S1, Li Sun, Ph.D2, Yiping Zhan, Ph.D3, Diego Marin, M.S.4, Xin Tao, Ph.D2 and Emre Seli, M.D.4, 1Yale School of Medicine, New Haven, CT, 2The Foundation for Embryonic Competence, Basking Ridge, NJ, 3Foundation for Embryonic Competence, Basking Ridge, NJ, 4IVI-RMA New Jersey, Basking Ridge, NJ

11:30 AM O-184 IS THERE ANY ROOM TO IMPROVE EMBRYO SELECTION? ARTIFICIAL INTELLIGENCE TECHNOLOGY APPLIED FOR IVE BIRTH PREDICTION ON BLASTOCYSTS Marcos Meseguer, PhD1, Cristina Hickman, PhD2, Lorena Bori Arnal, PhD3, Lucia Alegre, PhD3, Marco Toschi, MSc4, Raquel Del Gallego, PhD4 and Jose Celso Rocha, PhD5, 1IVIRMA Global, Valencia, Spain, Tel Aviv, Israel, 2Imperial College London, London, United Kingdom, 3IVIRMA Global, Valencia, Spain, 4IVIRMA, Rome, Italy, 5State University of São Paulo Júlio de Mesquita Filho, Assis, Brazil

11:45 AM O-185 A DEEP LEARNING FRAMEWORK OUTPERFORMS EMBRYOLOGISTS IN SELECTING DAY 5 EUPLOID BLASTOCYSTS WITH THE HIGHEST IMPLANTATION POTENTIAL. Eduardo Hariton, MD, MBA1, Irene Dimitriadis, MD1, Manoj Kumar Kanakasabapathy, MS2, Prudhvi Thirumalaraju, BS3, Raghav Gupta, BTech3, Rohan Pooniwala, BTech1
Irene Souter, MD¹, Sarah T Rice, MS¹, Pragati Bhowmick, MD¹, Leslie B Ramirez, PhD³, Carol Lynn Curchoe, PhD, TS (ABB)¹⁴, Jason E Swain, PhD⁵, Lynn M Boehnlein, BS⁶, Charles L Bormann, PhD¹ and Hadi Shafiee, PhD², ¹Massachusetts General Hospital, Harvard Medical School, Boston, MA, ²Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, ³Extend Fertility, New York, NY, ⁴San Diego Fertility Center, San Diego, CA, ⁵CCRM Fertility Network, Lone Tree, CO, ⁶Division of Reproductive Endocrinology and Infertility, Department of Obstetrics and Gynecology, University of Wisconsin, Madison, WI

12:00 PM O-186 THE ASSOCIATION BETWEEN RAPIDLY DIVIDING EMBRYOS AND EMBRYONIC EUPLOIDY DETECTED VIA NEXT GENERATION SEQUENCING (NGS).
Jenna Friedenthal, MD¹, Dmitry Gounko, MA², Joseph A. Lee, BA², Lawrence Grunfeld, MD² and Alan B Copperman, MD¹, ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²Reproductive Medicine Associates of New York, New York, NY

10:45 AM O-187 CORRELATION BETWEEN FOLLICULAR LEVELS OF INTERLEUKIN 6 (IL-6) AND ANTI-MULLERIAN HORMONE (AMH) AND ICSI OUTCOME IN WOMEN WITH PROVEN ENDOMETRIOSIS.
Khadija Fériel Kacem Berjeb, Associate Professor¹, Marouen Brahaim, Associate professor², Cirine BEN Massaoud, Research Master’s Degree in Biomedical Sciences³, Manel Hamdoun, Medical Degree⁴, Asma Chaabene, Bachelor’s degree in medical biology⁵, Anis Fadhlaoui, Associate Professor⁶, Olfa Bahri Sr., Professor⁷ and Fethi Zhioua, Pr², ¹Aziza Othmana Hospital, Tunis, Tunisia, ²Aziza Othmana University hospital, Tunis, Tunisia, ³Aziza Othmana hospital, Tunis, Tunisia, ⁴Aziza Othmana University hospital, Tunis, Tunisia, ⁵Aziza Othmana hospital, Tunis, Tunisia, ⁶Aziza Othmana hospital, Tunis, Tunisia, ⁷Aziza Othmana hospital, Tunis, Tunisia, ⁸Biochemistry Department, Aziza Othmana University hospital, Tunis, Tunisia,

11:15 AM O-189 SOMATIC CANCER DRIVER MUTATIONS IN ENDOMETRIOSIS LESIONS CONTRIBUTE TO SECONDARY CANCER RISK.
Kenneth Ward, MD¹, Rakesh Chettier, MS², Hans M Albertsen, PhD², Terry Morgan, MD, PhD³ and Todd Williams, MD³, ¹Predictive Laboratories Inc, Salt Lake City, UT, ²Juneau Biosciences, LLC, Salt Lake City, UT, ³Oregon Health Sciences University, Portland, OR

11:30 AM O-190 CYTOSKELETAL AND EXTRA CELLULAR MATRIX GENES ARE KEY CONTRIBUTORS IN THE PATHOGENESIS OF ENDOMETRIOSIS.
Hans M Albertsen, PhD, Rakesh Chettier, MS and Kenneth Ward, MD, Juneau Biosciences, LLC, Salt Lake City, UT

11:45 AM O-191 ENDOMETRIOSIS DOES NOT IMPACT LIVE BIRTH RATES IN FROZEN EMBRYO TRANSFER (FET) OF EUPLOID BLASTOCYSTS.
Lauren A Bishop, MD¹, Kate Devine, MD², Justin C Gunn, BS³, Eric A Widra, M.D.⁴, Rhiana D. Saunders, MD⁵, Alan H Decherney, MD⁶, Breonna Slocum, MD⁷ and Micah J Hill, DO⁸, ¹NIH, Bethesda, MD, ²Shady Grove Fertility, Washington D.C., DC, ³F. Edward Hébert School of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD, ⁴SG Fertility, Washington, DC, ⁵Walter Reed National Military Medical Center, Bethesda, MD, ⁶Eunice Kennedy Shriver National Institute of Child Health and Human Development,
ORAL ABSTRACTS

Bethesda, MD, 7Medstar Georgetown University/Washington Hospital Center, Washington, DC, 8National Institute of Child Health and Human Development, NIH, Bethesda, MD

12:00 PM  O-192  NON-INVASIVE DIAGNOSIS OF ENDOMETRIOSIS: USING MACHINE LEARNING INSTEAD OF THE OPERATING ROOM. Kathryn L Shaia, MD, MHA1, Chaitanya R Acharya, PSM, PhD2, Stephanie Smeltzer, MD1, Herbert K Lyerly, MD2 and Kelly S. Acharya, MD1, 1Division of Reproductive Endocrinology and Infertility, Duke University Medical Center, Durham, NC, 2Duke Center for Applied Therapeutics, Department of Surgery, Durham, NC

11:15 AM  O-195  REPRODUCTIVE OUTCOMES FOLLOWING A RUPTURED ECTOPIC PREGNANCY. Barry E Perlman, DO1, Kavitha Krishnamoorthy, MD1, Ruchi Karsalia, BS2 and Debra Heller, MD1, 1Rutgers New Jersey Medical School, Newark, NJ, 2Rutgers-New Jersey Medical School, Newark, NJ

11:30 AM  O-196  PROGESTIN THERAPY FOR WOMEN WITH COMPLEX ATYPICAL HYPERPLASIA: LEVONORGESTREL INTRAUTERINE DEVICE VERSUS SYSTEMIC THERAPY. Rachel S Mandelbaum, MD, Marcia A Ciccone, MD, David J Nusbaum, BS, Heena Purswani, MD, Elise B. Morocco, MD, Christina E Dancz, MD, Begum Ozel, MD, Lynda D Roman, MD, Mahdi Khoshcheshreh, MD, MS, Meghan B Smith, MD, Richard J Paulson, MD, MS and Koji Matsuo, MD, PhD, University of Southern California, Los Angeles, CA

10:45 AM  O-193  METABOLIC SYNDROME (MetS): FECUNDABILITY AND ADVERSE PREGNANCY OUTCOMES IN UNEXPLAINED INFERTILITY. Sushila Arya, MD1, Karl R Hansen, MD PhD1, Michael P. Diamond, MD2, Robert A. Wild, M.D., M.P.H. Ph.D.1 and NICHD’s Reproductive Medicine Network, 1University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma city, OK, 2Augusta University, Augusta, GA

11:10 AM  O-197  PRECONCEPTION A1c AND TIME TO PREGNANCY, PREGNANCY LOSS, AND LIVE BIRTH. Jessica R Zolton, DO1, Kerry S Flannagan, PhD1, Sunni L Mumford, PhD1, Lindsey A Sjaarda, PhD1, Jeannie G Radoc, BS1, Samrawit F Yisahak, PhD1, Neil J Perkins, PhD1, Keewan Kim, PhD1, Robert M Silver, MD2, Micah J Hill, DO1, Alan H DeCherney, MD1 and Enrique F Schisterman, PhD1, 1National Institute of Child Health and Human Development, NIH, Bethesda, MD, 2University of Utah, Salt Lake City, UT

11:00 AM  O-194  THE AROMATASE INHIBITOR, LETROZOLE: A NOVEL TREATMENT FOR ECTOPIC PREGNANCY. Mohamed F. Mitwally, MD, FACOG1, Walaa G. Hozayen, PhD2, Kamel M. A. Hassanin, PhD3, Kamal A Abdalla, MD2 and Noha K. Abdalla, B.Sc.2, 1Odessa Reproductive Medicine Center, Helotes, TX, 2Biochemistry Division, Chemistry Department, Faculty of Science, Beni-Suef University, Beni-Suef, Egypt, 3Biochemistry Department, Faculty of Veterinary Medicine, Minia University, Minia, Egypt

11:45 AM  O-198  A LONGITUDINAL ASSESSMENT OF OVARIAN RESERVE AFTER MYOMECTOMY. Devora Aharon, MD1, Lucky Sekhon, MD2, Joseph A. Lee, BA3, Mackenzie Naert, BA1, Ahmad Kerr, MD1, Charles Ascher-Walsh, MD1 and Alan B Copperman, MD1, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY
FERTILITY PRESERVATION

Moderators: David Cohen and Robert Coward

10:45 AM O-199 HOW OPEN IS THE WINDOW OF OVARIAN FUNCTION AFTER CANCER TREATMENT? Brian Kwan, PhDC1, Shaylyn S Stark, MPH1, Mary D Sammel, ScD2, Brian W Whitcomb, PhDD3, Andrew C Dietz, MD, MSCR4, Elena Martinez, PhDD5, Loki Natarajan, PhDD3 and H. Irene Su, M.D., M.S.C.E.1, 1University of California San Diego, La Jolla, CA, 2University of Pennsylvania Health System, Philadelphia, PA, 3University of Massachusetts, Amherst, Amherst, MA, 4University of California San Diego Moores Cancer Center, San Diego, CA, 5University of California, San Diego, Family and Preventive Medicine and Public Health, La Jolla, CA

11:00 AM O-200 IN SEARCH OF THE CRYSTAL BALL - HOW MANY EGGS TO A LIVE BIRTH? A 2-STEP PREDICTION MODEL FOR EGG FREEZING COUNSELING BASED ON INDIVIDUAL PATIENT AND CENTER DATA Serena H Chen, M.D.1, Yajing Angela Xie, PhD2, Natalie A Cekleniak, MD1, Debbra A Keegan, MD1 and Mylene WM Yao, MD2, 1Division of Reproductive Medicine, IRMS at St Barnabas, Livingston, NJ, 2Univfy Inc., Los Altos, CA

11:15 AM O-201 CHEMOTHERAPY CAUSES PRIMORDIAL FOLLICLE DEATH IN THE HUMAN OVARY VIA MULTIPLE APOPTOTIC PATHWAYS AND NOT BY “BURN OUT”. Shiny Titus, Ph.D. and Kutluk H Oktay, M.D., Ph.D., Yale University School of Medicine, New Haven, CT

11:30 AM O-202 METFORMIN: A NOVEL OPTION OF FERTILITY PRESERVATION DURING CYCLOPHOSPHAMIDE-CONTAINING CHEMOTHERAPY. Chu-Chun Huang, MD1, Mei-Jou Chen, MD, PhD2, Shee-Uan Chen, MD, PhD1, Hong-Nerng Ho, MD, PhD3 and Yu-Shih Yang, MD, PhD4, 1Department of Obstetrics and Gynecology, National Taiwan University Hospital, Taipei, Taiwan, 2National Taiwan University Livia Shangyu Wan Scholar, Taipei, Taiwan, 3Taipei Medical University, Taipei, Taiwan, 4Department of Obstetrics and Gynecology, Fu Jen Catholic University Hospital, New Taipei, Taiwan

11:45 AM O-203 WORLD WIDE UPDATE: RESULTS WITH CRYOPRESERVED OVARIAN TISSUE TRANSPLANT. Sherman Silber, MD1, Yuting Fan, M.D.2 and Sierra Goldsmith, B.S.1, 1Infertility Center of St. Louis, Chesterfield, MO, 2University of Michigan, Ann Arbor, MI

12:00 PM O-204 ARE GENDER DYSPHORIA PATIENTS COUNSELED ON FERTILITY PRESERVATION PRIOR TO INITIATING HORMONAL THERAPY? Ross G Everett, MD MPH, Bryce A Toburen, BA, Kaylee M Luck, BS, Johnathan Doolittle, MD and Jay I Sandlow, MD, Medical College of Wisconsin, Milwaukee, WI

FIBROIDS

Moderators: Bradley Hurst and Zaraq Khan

10:45 AM O-205 EFFECT OF FIBROID LOCATION AND SIZE ON EFFICACY OF ELAGOLIX: RESULTS FROM PHASE 3 CLINICAL TRIALS. Ayman Al-Hendy, MD PhD1, James Simon, MD2, Sandra M Hurtado, MD3, Linda D Bradley, MD4, Charlotte D Owens, MD5, Ran Liu, PhD5, Kurt T Barnhart, MD, MSCE6 and Veronica Gillispie, MD7, 1University of Illinois College of Medicine, Chicago, IL, 2IntimMedicine Specialists, Washington DC, 3The Woman’s Hospital of Texas Clinical Research Center, Houston, TX, 4Cleveland Clinic, Cleveland, OH, 5AbbVie, Inc., North Chicago, IL, 6University of Pennsylvania, Philadelphia, PA, 7Ochsner Baptist Hospital, New Orleans, LA

11:00 AM O-206 SUBLINGUAL MISOPROSTOL 400 VS. 200 MCG FOR REDUCING BLOOD LOSS DURING ABDOMINAL MYOMECTOMY: A RANDOMIZED
DOUBLE-BLINDED CLINICAL TRIAL
Ahmed M Abbas, MD¹, Hossam Ramdan, MSc², Shymaa Ali, MSc³, Yehia Ali, MD⁴ and Mohammed Khairy Ali, MD¹, ¹Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, ²Department of Obstetrics and Gynecology, Faculty of Medicine, Asswan University, Asswan, Egypt, ³Department of Obstetrics and Gynecology, Faculty of Medicine, Suez University, Suez, Egypt, ⁴Department of Obstetrics and Gynecology, Faculty of Medicine, Qena, Egypt
11:45 AM O-209

MULTI-OMIC ANALYSIS OF UTERINE LEIOMYOMAS IN AFRICAN AMERICANS AND CAUCASIANS: INSIGHTS INTO HEALTH DISPARITY.
George L. Maxwell, MD¹, Christopher Tarney, MD², Nicholas Bateman, PhD³, Anthony R Soltis, PhD⁴, Brian L Hood, PhD⁵, Clifton L Dalgard, PhD⁶, Matthew Wilkerson, PhD⁷, Kathleen M Darcy, PhD⁸, Yovanni Casablanca, MD², Ayman Al-Hendy, MD PhD⁶ and Thomas Conrads, PhD², ¹Department of Obstetrics and Gynecology, Inova Fairfax Hospital, Falls Church, VA, ²Gynecologic Cancer Center of Excellence, Murtha Cancer Center Research Program, Uniformed Services University of the Health Science, Henry M Jackson FDN, Bethesda, MD, ³Gynecologic Cancer Center of Excellence, Murtha Cancer Center Research Program, Uniformed Services University of the Health Science, Henry M Jackson FDN, Annandale, VA, ⁴The American Genome Center, Uniformed Services University, Bethesda, MD, ⁵The American Genome Center, Bethesda, MD, ⁶University of Illinois College of Medicine, Chicago, IL
11:45 AM O-209

URINARY PARABEN CONCENTRATIONS AND INCIDENCE OF UTERINE LEIOMYOMATA: A PROSPECTIVE ULTRASOUND STUDY.
Lauren A Wise, Sc.D.¹, Olivia R Orta, Ph.D.¹, Traci N Bethea, Ph.D., M.P.A.², Amelia K Wesselink, Ph.D.¹, Jennifer Weuve, Sc.D.¹, Michael McClean, Sc.D.¹, Paige L Williams, Sc.D.³, Russ Hauser, MD, MPH, Sc.D.³ and Donna D Baird, Ph.D.⁴, ¹Boston University School of Public Health, Boston, MA, ²Boston University School of Medicine, Boston, MA, ³Harvard T.H. Chan School of Public Health, Boston, MA, ⁴National Institute of Environmental Health Sciences, Durham, NC
11:15 AM O-207

VITAMIN D LONG-TERM TREATMENT DECREASES HUMAN UTERINE LEIOMYOMA SIZE THROUGH SPECIFIC MOLECULAR MECHANISMS IN A XENOGRAFT ANIMAL MODEL. Ana Corachán, MS¹, Hortensia Ferrero, PhD², Julia Escrig, MD³, Javier Monleón, MD³, Amparo Faus, Lab Technician¹, Irene Cervelló, PhD⁴ and Antonio Pellicer, MD⁵, ¹IVI Foundation - University of Valencia, Valencia, Spain, ²IVI Foundation - Instituto de Investigación Sanitaria INCLIVA, Valencia, Spain, ³Servicio de Ginecología, Hospital Universitario y Politécnico La Fe, Valencia, Spain, ⁴IVI Foundation, Valencia, Spain, ⁵IVI Foundation Innovation - Reproductive Medicine IIS La Fe, Valencia, Spain
12:00 PM O-210

PREOPERATIVE TREATMENT WITH LEUPROLIDE ACETATE AND ULIPRISTAL ACETATE BEFORE OUTPATIENT Hysteroscopic Myomectomy: Prospective Comparative Study.
Simone Ferrero, MD, PhD¹, Fabio Barra, MD¹, Umberto Leone Roberti Maggiore, MD, PhD², Valerio Gaetano Vellone, MD, PhD³ and Carolina Scala, MD⁴, ¹DINOGMI, University of Genova, Genova, Italy, ²Department of Gynecologic Oncology, IRCCS National Cancer Institute, Milan, Italy, ³DISC, University of Genova, Genova, Italy, ⁴Istituto G. Gaslini, Genova, Italy
12:00 PM O-210
IVF OUTCOME PREDICTORS 2
Moderators: Sarah Bjorkman and Thomas Toth

10:45 AM  O-211  IMPACT OF BODY WEIGHT ON OVARIAN RESPONSE AFTER INDIVIDUALIZED OR FIXED FOLLICLE-STIMULATING HORMONE DOSSING IN WOMEN UNDERGOING OVARIAN STIMULATION FOR IN VITRO FERTILIZATION. Scott M Nelson, MD, PhD1, Antonio La Marca, MD, PhD2, Juan A Garcia-Velasco, MD, PhD3, Marie Göthberg, PhD4, Daniel M Jonker, PhD4 and Bernadette Mannaerts, PhD4, 1University of Glasgow, Glasgow, United Kingdom, 2University of Modena and Reggio Emilia and Clinica Eugin Modena, Modena, Italy, 3IVI Madrid, Rey Juan Carlos University, Madrid, Spain, 4Ferring Pharmaceuticals, Copenhagen, Denmark

11:00 AM  O-212  PREDICTORS OF EARLY PREGNANCY LOSS FOR 7,261 INFERTILE PATIENTS AFTER IN VITRO FERTILIZATION. Yan Ouyang, MD./Ph.D1, Xihong Li, MD./Ph.D1, Yuyao Mao, Master1 and Pei Cai, Master2, 1Reproductive and Genetic hospital of Citic-Xiangya, Changsha, China, 2Central South University, Changsha, China


11:30 AM  O-214  THREE-DIMENSIONAL ULTRASOUND DIAGNOSIS OF ADENOMYOSIS IS NOT ASSOCIATED WITH DIMINISHED LIVE BIRTH FOLLOWING SINGLE THAWED EUPLOID BLASTOCYST TRANSFER: A PROSPECTIVE COHORT STUDY. Shelby A Neal, MD1, Scott J Morin, MD2, Marie D Werner, MD1, Ndeye-Aicha Gueye, MD3, Paul Pirtea, MD1, George Patounakis, MD, PhD4, Richard Thomas Scott Jr., MD1 and Linnea R Goodman, MD2, 1IVI-RMA New Jersey, Basking Ridge, NJ, 2IVI-RMA Northern California, San Francisco, CA, 3IVI-RMA Pennsylvania, Allentown, PA, 4IVI-RMA Florida, Lake Mary, FL, 5University of North Carolina, Raleigh, NC

11:45 AM  O-215  ART OUTCOMES AMONG PRE-PREGNANCY CANCER SURVIVORS: LINKAGE OF MASSACHUSETTS SART CORS AND CANCER REGISTRY. Leslie V. Farland, Sc.D.1, Judy E Stern, PhD2, Chia-Ling Liu, ScD3, Howard Cabral, PhD, MPH4, Richard Knowlton, MS5, Susan T Gershman, PHD, MS, MPH5, Hafsatou Diop, MD, MPH5, Ferring Pharmaceuticals, Copenhagen, Denmark

12:00 PM  O-216  ENDOMETRIAL COMPACTION (DECREASED THICKNESS) IN RESPONSE TO PROGESTERONE RESULTS IN HIGHER ONGOING PREGNANCY RATE. Eran Zilberberg, M.D.1, Dan Nayot, M.D.2, Ramsey Genco Smith, B.Sc3, James Meriano, M.Sc3, Eran Barzilay, M.D., Ph.D.4, Jigal Haas, M.D.5 and Robert F. Casper, M.D.6, 1Trio Fertility, Toronto, ON, Canada, 2Trio Fertility; Staff Physician, Toronto, ON, Canada, 3TRIO Fertility, Toronto, ON, Canada, 4Department of Obstetrics and Gynecology, Samson Assuta Ashdod University Hospital, Ashdod, Israel, 5Affiliation not provided, 6TRIO Fertility and University of Toronto, Toronto, ON, Canada
ORAL ABSTRACTS

MALE FACTOR

Moderators: Robert Brannigan and Mark Sigman

10:45 AM  O-217  A MICROFLUIDIC SPERM-SORTING DEVICE REDUCES THE PROPORTION OF SPERM WITH DOUBLE STRAND DNA FRAGMENTATION. Aïda Pujol Masana, PhD1, Agustin Garcia-Peiró Sr., PhD2, Rafael Lafuente, PhD3, Karinna Lattes, MD, MSc4, Rita Vassena, DVM, PhD5 and Daniel Mataró, MD, PhD4, 1CIRH (Centro de Infertilidad y reproducción Humana), Barcelona, Spain, 2Barcelona Male Infertility Center (CIMAB) Vallcorba street, 1, Sant Quirze del Valles, Spain, 3Affiliation not provided, 4CIRH (Centro de Infertilidad y Reproducción Humana), Barcelona, Spain, 5Clinica EUGIN, Barcelona, Spain

11:00 AM  O-218  A STEP TOWARDS THE AUTOMATION OF INTRACYTOPLASMIC SPERM INJECTION (ICSI): REAL TIME CONFIRMATION OF OOCYTE PENETRATION BY ELECTRICAL RESISTANCE MEASUREMENT. Amir Mor, MD PhD1, Man Zhang, M.D, Ph.D1, Ecem Esencan, M.D.1, Burcin Simsek, Ph.D.2, Stephanie M Nichols-Burns, PhD3, Yifei Liu, Ph.D1, Jonathan Lo, MSc1, Dawn A Kelk, Ph.D., HCLD1, Xiao-Bing Gao, PhD1 and Emre Seli, M.D.1, 1Yale School of Medicine, New Haven, CT, 2University of Pittsburgh, Pittsburgh, PA, 3Yale University, New Haven, CT

11:15 AM  O-219  SIMPLE VITRIFICATION OF A SMALL NUMBER OF TESTICULAR SPERMATOZOA USING RAPID-I CARRIERS IN NON-OBSTRUCTIVE AZOOSPERMIA. Yozo Nagao, MS, Keiko Tanaka, MS, Hitomi Otsubo, BS, Shigetoshi Mizumo, Ph.D., Takeshi Kuramoto, M.D., Ph.D. and Masao Murakami, PhD, Kuramoto Women’s Clinic, Fukuoka, Japan

11:30 AM  O-220  COMPARISON OF CRYOPROTECTANT FREE VITRIFICATION OF HUMAN SPERMATOZOA IN A NEW SEMEN SIMULANT WITH RAPID FREEZE OF

11:45 AM  O-221  SURGICAL SPERM EXTRACTION VS. SEMEN CENTRIFUGATION: METHOD OF SPERMATOZOA RECOVERY DOES NOT CORRELATE WITH EUPLOIDY RATES IN PATIENTS WITH CRYPTOZOOSPERMIA. Carlos Hernandez-Nieto, MD1, Joseph A. Lee, BA1, Martha Luna-Rojas, MD1, Tamar Alkon, MD1, Christine Briton-Jones, PhD, HCLD1, Natan Bar-Chama, MD2, Alan B Copperman, MD2 and Benjamin Sandler, MD2, 1Reproductive Medicine Associates of New York, New York, NY, 2Icahn School of Medicine at Mount Sinai, New York, NY

12:00 PM  O-222  TRANSIT THROUGH THE MALE GENITAL TRACT INCREASES SPERM CHROMATIN FRAGMENTATION. Derek Keating, B.A., Philip Xie, B.S., Alessandra Parrella, M.Sc., Zev Rosenwaks, M.D. and Gianpiero D. Palerme, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY
**MALE REPRODUCTION AND UROLOGY: RESEARCH**

Moderators: Ranjith Ramasamy and Thomas Walsh

10:45 AM O-223 **A NOVEL MOUSE MODEL TO INVESTIGATE PLACEMENT, PROCESSING AND REMOVAL OF SPERM PROTAMINES.** Samantha B Schon, MD, MTR1, Lindsay Moritz, BS2 and Sue Hammoud, Ph.D.1, 1University of Michigan, Ann Arbor, MI, 2University of Michigan, Cellular and Molecular Biology Graduate Program, Ann Arbor, MI

12:00 PM O-228 **NOVEL EX VIVO CULTURE OF NEONATAL MOUSE TESTICULAR ORGANOID MAINTAINED IN A HANGING DROPLET WITH RETINOIC ACID.** Philip Xie, B.S., Zev Rosenwaks, M.D. and Gianpiero D. Palermo, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

**ORAL ABSTRACTS**

11:00 AM O-224 **POLYMORPHISMS IN THE HUMAN PRDM9 GENE MAY LEAD TO MEIOTIC ARREST AND AZOOSPERMIA.** M. Blake Evans, DO, Sherry Rolls, BA, Mohamed Mahgoub Mohamed, MD, PhD, Alan H DeCherney, MD and Todd Macfarlan, PhD, NIH-NICHD, Bethesda, MD

11:15 AM O-225 **A RANDOMIZED CONTROLLED ANIMAL TRIAL: EFFICACY OF A 4K3D VIDEO MICROSCOPE VERSUS AN OPTICAL OPERATING MICROSCOPE FOR UROLOGIC MICROSURGERY.** Russell P Hayden, MD1, Huixing Chen, MD1, Marc Goldstein, MD2 and Philip S. S Li, MD3, 1Weill Cornell Medicine, New York, NY, 2Weill Cornell Medicine, New York Presbyterian Hospital, New York, NY, 3Weill Cornell Medical College, New York, NY

11:30 AM O-226 **MALE PARTNER AGE AND THE RISK OF ISCHEMIC PLACENTAL DISEASE IN AUTOLOGOUS IVF PREGNANCIES.** Anna Merport Modest, PhD, MPH1, Ai-ris Y. Collier, MD1, Emily A Seidler, MD2 and Laura E Dodge, ScD, MPH1, 1Beth Israel Deaconess Medical Center; Harvard Medical School, Boston, MA, 2Boston IVF; Beth Israel Deaconess Medical Center; Harvard Medical School, Boston, MA

11:45 AM O-227 **EVALUATION OF SPERM PROTEOME IN CANCER PATIENTS PRIOR TO TREATMENT.** Manesh Kumar Panner Selvam, PhD1, Ashok Agarwal, PhD1 and Peter Natesan Pushparaj, PhD2,

11:15 AM O-231 **THE EFFECTIVENESS OF EDUCATION USING VIDEOS WITH SMART PHONES AND A BOOKLET ON FERTILITY WOMEN - FOCUSED ON THE PROCESS OF IN VITRO FERTILIZATION.**

**NURSING**

Moderators: Lauren Nervi and Eleanor Stevenson

10:45 AM O-229 **TRIGGER PREPARATION ONLINE VIDEOS IMPROVE WORKPLACE EFFICIENCY & NURSING SATISFACTION.** Viji Sundaram, MD1, Katrina Cruz, BSN, MSN2, Maria Farinha, BSN, Martha Noel, MD2, Marcelle I Cedars, MD3 and Heather G. Huddleston, MD3, 1University of California, San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA, 2University of California, San Francisco, San Francisco, CA, 3University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA

11:00 AM O-230 **ELECTIVE EGG FREEZING AND MALE SUPPORT: A QUALITATIVE STUDY OF MEN’S HIDDEN ROLES IN WOMEN’S FERTILITY PRESERVATION.** Marcia C. Inhorn, PhD, MPH1, Daphna Birenbaum-Carmeli, PhD2 and Pasquale Patrizio, M.D.3, 1Yale University, New Haven, CT, 2University of Haifa, Haifa, Israel, 3Yale Fertility Center, New Haven, CT
ORAL ABSTRACTS

Eun Hee Seo, MS¹, Hwayeon Cho, Master¹, Eunjung Jeon, master¹, Kyongyol Kim, MS¹, Jisuk Lee, BS³, Hyunju Choi, BS¹, Mi Ok Moon, MS¹, Hayoung Lee, MS¹, Tae Ki Yoon, M.D, Ph.D. and Hyeok Kim, MD, PhD², ¹CHA University,CHA fertility center, Seoul station, Seoul, Korea, Republic of (South), ²CHA Fertility Center Seoul Station, Obstetrics and Gynecology, Seoul, Korea, Republic of (South)

11:30 AM O-232 EVALUATION OF ANXIETY IN FREEZE-ALL PATIENTS. Nagihan Dinçer, Bsc¹, Aysel Salgün, Bsc¹, Necati Findikli, Ph.D.², Fazilet Kubra Boynukalin, M.D., MSc³ and Mustafa Bahçeci, M.D., Ph.D.², ¹BAHÇECİ FULYA IVF CENTER, İSTANBUL, Turkey, ²Bahçeci Health Group-Fulya IVF Centre, İstanbul, Turkey, ³Bahçeci Health Group-Fulya IVF Centre, İSTANBUL, Turkey

11:45 AM O-233 CLINICAL EXPERIENCE OF NURSING TEAM IN PRECONCEPTION GENETIC COUNSELING AT A LARGE, DIVERSE INFERTILITY PRACTICE. Marlene De La Mota, BS¹, Elizabeth Lipov, BS¹, Karina Yaipen, RN¹, Joseph A. Lee, BA¹, Teresa A. Caccione, MS, CGC¹, Melissa Bell, RN¹, Margaret Daneyko, RN¹ and Alan B Copperman, MD², ¹Reproductive Medicine Associates of New York, New York, NY, ²Icahn School of Medicine at Mount Sinai, New York, NY

12:00 PM O-234 WHAT IS THE IDEAL NUMBER OF VIALS OF DONOR SPERM TO PURCHASE FOR PATIENTS UNDERGOING DONOR SPERM INTRAUTERINE INSEMINATION (DIUI)? Sydney Chang, MD¹, Dmitry Gounko, MA², Joseph A. Lee, BA², Melissa Bell, RN², Margaret Daneyko, RN², Alan B Copperman, MD¹ and Tanmoy Mukherjee, MD², ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²Reproductive Medicine Associates of New York, New York, NY

PROFESSIONAL DEVELOPMENT

Moderators: Abbey Kruper and Premal Patel

10:45 AM O-235 IMPROVING THE REI FELLOWSHIP INTERVIEW EXPERIENCE: A SURVEY. Erika P New, MD, MPH¹, Papri Sarkar, MD², Ruben J Alvero, MD² and Anthony N Imudia, MD³, ¹University of South Florida, Brandon, FL, ²USF, Tampa, FL, ³Stanford University, Palo Alto, CA

11:00 AM O-236 THE STATE OF WOMEN IN ACADEMIC REPRODUCTIVE ENDOCRINOLOGY PROGRAMS. Jessica Selter, MD, Emily Spurlin, MD and Paula C. Brady, MD, Columbia University Medical Center, New York, NY

11:15 AM O-237 EVALUATION OF OFFICE HYSTEROSCOPY SIMULATION AS PART OF AN OB/GYN RESIDENCY TRAINING CURRICULUM. Jessica Selter, MD, Sally F. Vitez, MD, Eric J. Forman, MD and Samuel Zev Williams, M.D., Ph.D., Columbia University Medical Center, New York, NY

11:30 AM O-238 FERTILITY KNOWLEDGE IN OBSTETRICS AND GYNECOLOGY RESIDENTS. Leah Roberts, MD¹, Rashmi Kudesia, MD², Shaliz Dolan, MD¹ and Marisa Rose, MD¹, ¹Temple University Hospital, Philadelphia, PA, ²CCRM Fertility Houston, Houston, TX

11:45 AM O-239 COLLABORATIVE AND MULTIDISCIPLINARY APPROACH TO THE REI FELLOWSHIP APPLICATION. Randi H. Goldman, M.D., Christine Mullin, M.D., Esther Lopez, M.P.A., Jeanette Tomasho, Ph.D., Martina Borovica, M.B.A. and Avner Hershlag, M.D., Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY

12:00 PM O-240 REI EXPOSURE IN RESIDENCY: HOW MUCH IS ENOUGH? Jason A. Schneider, M.D.¹, Tomer Singer, MD², Avner Hershlag, M.D.² and Randi H. Goldman, M.D.², ¹Zucker School of Medicine at Hofstra/Northwell at Lenox Hill Hospital, New York, NY, ²Northwell Health Fertility, Zucker School of Medicine at Hofstra/ Northwell, Manhasset, NY
REGENERATIVE MEDICINE AND STEM CELLS

Moderators: Monica Laronda and Kyle Orwig

10:45 AM  O-241  DIFFERENTIATION OF EMBRYONIC STEM CELLS INTO MALE GERM LINE CELLS IN A BIOREACTOR USING DECELLULARIZED SEMINIFEROUS TUBULE MATRIX IMMERSED IN A CONDITIONED MEDIUM. Philip Xie, B.S., Aysha Trout, B.A., Zev Rosenwaks, M.D. and Gianpiero D. Palermo, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

11:00 AM  O-242  EFFICIENT GENERATION OF GRANULOSA CELL LIKE CELLS FROM HUMAN ENDOMETRIUM DERIVED IPS CELLS AS A SOURCE FOR AUTOLOGOUS ESTRADIOL PRODUCTION. Joo Hyun Park, MD, PhD, Heeyon Kim, M.D., Hyun Kyung Kim, MS and SiHyun Cho, M.D., Ph.D., Yonsei University College of Medicine, Gangnam Severance Hospital, Seoul, Korea, Republic of (South)

11:15 AM  O-243  TARGETING ACTIVATED PRO-INFLAMMATORY PATHWAY IN PRIMED MYOMETRIAL STEM CELLS WITH VITAMIN D3 AND PARICALCITOL. Hoda Elhossiny Elkafas, MSc¹, Osama A Badary, PhD², Eny Elmosry, PhD², Rehab Kamel, PhD³, Ayman Al-Hendy, MD PhD¹ and Qiwei Yang, PhD⁴, ¹University of Illinois at Chicago College of Medicine, Chicago, IL, ²National Organization for Drug Control and Research (NODCAR), Giza, Egypt, ³pharmacology and toxicology department faculty of pharmacy Helwan University, Cairo, Egypt, ⁴University of Illinois at Chicago, Chicago, IL

11:30 AM  O-244  BONE MARROW MESENCHYMAL STEM CELLS ARE MOBILIZED TO THE CIRCULATION DURING PREGNANCY AND ARE A SOURCE OF DECIDUAL STROMAL CELLS. Reshef Tal, MD¹, Pallavi Pallavi, MD¹, Yuan-Yuan Fang, MD¹, Shruti Chinchankanar, MBBS¹ and Hugh S. Taylor, M.D.², ¹Yale School of Medicine, New Haven, CT, ²Yale University School of Medicine, New Haven, CT

11:45 AM  O-245  USE OF CRISPR/dCas9 SYSTEM FOR INDUCTION OF MESENCHYMAL STEM CELLS. Sercin Karahuseyinoglu, MD¹, Ayse Kose, MD, Gizem Nur Sahin, MS² and Yagmur Ergun, MS. Student³, ¹Asst. Prof., Istanbul, Turkey, ²MS, Istanbul, Turkey, ³MS, Student, Istanbul, Turkey

12:00 PM  O-246  POST-MEIOtic MALE GERM CELL DIFFERENTIATION OF MOUSE EMBRYONIC STEM CELLS BY EXPOSURE TO CONDITIONED MEDIUM. Aysha Trout, B.A., Philip Xie, B.S., Alessandra Parella, M.Sc., Zev Rosenwaks, M.D. and Gianpiero D. Palermo, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

REPRODUCTIVE ENDOCRINOLOGY

Moderators: Malinda Lee and Jennifer Eaton

10:45 AM  O-247  VARYING LEVELS OF SERUM ESTRADIOL DO NOT ALTER THE TIMING OF THE EARLY ENDOMETRIAL SECRETORY TRANSFORMATION. Emily K Osman, MD¹, Tianren Wang, M.D., Ph.D.², Min Yang, PhD², Yiping Zhan, Ph.D², Caroline R Juneau, MD³, Scott J Morin, MD⁴, Emre Seli, M.D., ¹Richard Thomas Scott Jr., MD, ²MD, ³Audubon Fertility, New Orleans, LA, ⁴IVI-RMA Northern California, San Francisco, CA

11:00 AM  O-248  DISRUPTION OF MITOCHONDRIAL DYNAMICS IN OOCYTES RESULTS IN INFERTILITY AND DIMINISHED OVARIAN RESERVE. Man Zhang, M.D, Ph.D., Muhammed Burak Bener, B.S, ¹
**ORAL ABSTRACTS**

Zongliang Jiang, Ph.D², Tianren Wang, M.D., Ph.D.³, Ecem Esencan, M.D.¹, Richard Scott III, B.S.² and Emre Seli, M.D.¹, ¹Yale School of Medicine, New Haven, CT, ²Louisiana State University, Baton Rouge, LA, ³Foundation for Embryonic Competence, Basking Ridge, NJ, ⁴Foundation of Embryonic Competence, Basking Ridge, NJ

11:15 AM O-249  **CELL TYPE SPECIFIC EFFECTS OF HYPERLIPIDEMIA AND HYPERINSULINEMIA, CHARACTERISTIC OF REPROMETABOLIC SYNDROME, ON PITUITARY FUNCTION.** Rosemary McDonald, BS¹, Katherine Kuhn, MS², Andrew P Bradford, PhD² and Nanette Santoro, M.D.², ¹University of Colorado Anschutz Medical Campus, Aurora, CO, ²University of Colorado School of Medicine, Aurora, CO

11:30 AM O-250  **CHRONIC EXPOSURE TO AMH MAY ACCELERATE GROWTH OF FOLLICLES VIA DOWNREGULATION OF AMHRII.** Limor Man, M.D, M.Med.Sc¹, Eleni Kallinos, B.S², Daylon James, PhD³ and Zev Rosenwaks, M.D.³, ¹Assistant Professor of research, NYC, NY, ²NYC, NY, ³The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

11:45 AM O-251  **ANDROGEN HORMONES AND SEXUAL FUNCTION AMONG CANCER SURVIVORS: SHORT AND LONG-TERM TREATMENT EFFECTS.** Leigh A Humphries, MD¹, Katherine E Cameron, MD, MBE², Mary D Sammel, ScD³ and Clarisa R Gracia, MD, MSCE¹, ¹Hospital of the University of Pennsylvania, Philadelphia, PA, ²University of Pennsylvania, Philadelphia, PA, ³Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania, Philadelphia, PA

12:00 PM O-252  **ETHNIC DISCORDANCE IN SERUM MÜLLERIAN HORMONE (AMH) IN HEALTHY WOMEN: POPULATION STUDY FROM CHINA AND EUROPE.** Scott M Nelson, MD, PhD¹, Gemma L Clayton, PhD², Abigail Fraser, PhD³ and Sun Aijun, PhD⁴, ¹University of Glasgow, Glasgow, United Kingdom, ²University of Bristol, Bristol, ³University of Bristol, Bristol, United Kingdom, ⁴Peking Union Medical College Hospital, Beijing, China

**REPRODUCTIVE IMMUNOLOGY**

Moderators: Raymond Anchan and Svetlana Dambaeva

10:45 AM O-253  **INTERFERON GAMMA-INDUCED PROTEIN 10 (IP-10) IS SIGNIFICANTLY LOWER AT EARLY IMPLANTATION IN TWIN VERSUS SINGLETON PREGNANCIES.** Samantha Simpson, MD¹, Janina Kaislasuo, MD, PhD¹, Gang Peng, PhD², Paulomi Aldo, MS¹, Michael Paidas, MD², Seth Guller, PhD², Gil Mor, MD, PhD² and Lubna Pal, MBBS², ¹Yale University, New Haven, CT, ²Affiliation not provided

11:00 AM O-254  **SUPEROVULATION ALTERS THE HUMAN UTERINE NATURAL KILLER CELL REPERTOIRE DURING THE WINDOW OF IMPLANTATION.** Anna Sokalska, MD, PhD¹, Scott Gordon, MD, PhD², Sneha Mani, PhD¹, Charikleia Kalliara, MD¹ and Monica Mainigi, MD¹, ¹University of Pennsylvania, Philadelphia, PA, ²Children’s Hospital of Philadelphia, Division of Neonatology, Philadelphia, PA

11:15 AM O-255  **UNRAVELLING THE IMMUNOGENETICS OF PREGNANCY: PARENTAL HLA-C ALLOTYPES ARE PREDICTIVE OF PREGNANCY LOSS AFTER SINGLE EUPLOID EMBRYO TRANSFERS.** Diego Marin, M.S.¹, Xin Tao, Ph.D², Li Sun, Ph.D² and Richard Thomas Scott Jr., MD¹, ¹IVI-RMA New Jersey, Basking Ridge, NJ, ²Foundation for Embryonic Competence, Basking Ridge, NJ

11:30 AM O-256  **EFFICIENCY OF IMMUNOMODULATION OF ENDOMETRIUM WITH MIXED PATERNAL AND MATERNAL
PERIPHERAL MONONUCLEAR CELLS IN REPEATED IMPLANTATION FAILURES. Hanen Elloumi, Dr, Khaled Mahmoud, Dr, Sonia Mnallah, Dr, Mariem ben Khelifa, Phd, Fathi Zhioua, Dr, Khaled Terras, Dr and Mohamed Khrouf, Dr, clinique la rose, centre FERTILLIA, Tunis, Tunisia

11:45 AM  O-257  UTERINE NK CELL ACTIVITY IN RECURRENT IMPLANTATION FAILURE-ROLE OF INTRALIPIDS. Krishna Deepika, MS, FRM 1 and Arveen Vohra, MS, FRM 2, 1Consultant in Rep Med, Bangalore, India, 2Senior Consultant, Milann Fertility Centre, Bangalore, India

12:00 PM  O-258  EXPRESSION AND FUNCTION OF THE PD-1 IMMUNE CHECKPOINT IN THE HUMAN OVARY AND FALLOPIAN TUBE. Joshua Johnson, PhD 1, Evelyn Mercedes Llerena Carí, M.S. 1, Peter Ka Sam, B.S. 1, Elise S Bales, B.S. 1, Susan Ryu, Ph.D. 1, Liesl Nel-Themaat, PhD, HCLD 1, Amanda Nicole Kallen, MD 2, Alex J Polotsky, M.D., M.S. 1, Miriam D. Post, M.D. 3, David J Orlicky, Ph.D. 3, Kimberly Jordan, Ph.D. 4 and Benjamin G Bitler, Ph.D. 4, 1University of Colorado Anschutz Medical Campus, Aurora, CO, 2Yale University, New Haven, CT, 3University of Colorado Anschutz Medical Campus, Department of Pathology, Aurora, CO, 4University of Colorado Anschutz Medical Campus, Department of Immunology and Microbiology, Aurora, CO

PARENTAL AGING

Moderators: John Nichols and Luis Hoyos

10:45 AM  O-259  INFLUENCE OF MATERNAL AGE AND OVARIAN RESERVE ON THE DECISION TO CONTINUE OR TO CANCEL IVF CYCLES IN PATIENTS WITH ONE OR TWO LARGE FOLLICLES. Guy Shrem, M.D. 1, Alina Mariana Mahfoudh, M.A. 2, Jacques Balayla, M.D. 3, Naama Steiner, M.D. 4, Alexander Volodarsky-Perel, M.D. 3, Sara Henderson, M.Sc 5, Atif Zeadna, M.D. 3, Weon-Young Son, Ph.D. 6, Mali Salmon-Divon, Ph.D. 7, Maliel H. Dahan, M.D. 8, 1McGill University, Montreal, QC, Canada, 2Montreal, QC, Canada, 3Division of Reproductive Endocrinology and Infertility, McGill University Health Care Centre, Montreal, QC, Canada, 4Senior Lecturer, Ariel, Israel

11:00 AM  O-260  SUBDERMAL HORMONE IMPLANT AS TREATMENT FOR THE IMPROVEMENT OF MENOPAUSAL SYMPTOMS IN A PRIVATE FERTILITY CENTER. Arnoldo Gonzalez, M.D. 1, Pasquale Patrizio, M.D. 2, Julio C. Rosales, M.D. 1, Guillermo Russell, M.D. 1, Salomon Alvarado, M.D. 1 and Roberto Santos, M.D. 1, 1IECH, Monterrey, NL, Mexico, 2Yale Fertility Center, New Haven, CT

11:15 AM  O-261  CIRCULATING ESTRADIOL (E2) LEVELS IN POSTMENOPAUSAL USERS AND NON-USERS OF VAGINAL ESTROGEN. Molly B Moravek, MD, MPH 1, Sybil L Crawford, PhD 2, Daniel McConnel, PhD 1, John F Randolph, MD 1, Elaine Waetjen, MD 3, Fangbai Sun, MPH 4, Heping Zhang, PhD 4 and Nanette Santoro, M.D. 5, 1University of Michigan, Ann Arbor, MI, 2University of California Davis School of Medicine, Sacramento, CA, 3Yale University School of Public Health, New Haven, CT, 4University of Colorado Denver, Aurora, CO

11:30 AM  O-262  DO ORAL OVULATION INDUCTION AGENTS OFFER BENEFITS IN WOMEN 38 YEARS AND OLDER? Naama Steiner, M.D. 1, Jacob Rutler-Ligeti, M.D. 1, Guy Shrem, M.D. 1, Alexander Volodarsky-Perel, M.D. 2, William Buckett, M.D. 2 and Michael H. Dahan, M.D. 3, 1McGill University Health Centre, Montreal, QC, Canada, 2Division of Reproductive
ORAL ABSTRACTS

11:45 AM O-263 A 5-YEAR ANALYSIS OF DEMOGRAPHICS, CYCLE CHARACTERISTICS AND REPRODUCTIVE OUTCOMES OF 907 EGG FREEZING CYCLES IN PATIENTS WITH DIMINISHED OVARIAN RESERVE AND AGE-RELATED FERTILITY
Aylin P. Cil, M.D.1, Remzi Abali, M.D.2, Aysen Boza, M.D.1, Lale S. Karak, M.D.2, Mehmet Ceyhan, M.D.1, Ece Aksakal, M.D.1, Ipek Keles, M.D.3, Ozgur Oktem, M.D.3, Mustafa Baris Ata, M.D.3, Mustafa Bahçeci, M.D., Ph.D.2 and Bulent Urman, M.D.1, 1American Hospital, Istanbul, Turkey, 2Bahçeci Health Group-Fulya IVF Centre, Istanbul, Turkey, 3Koc University School of Medicine, Istanbul, Turkey

11:00 AM O-266 OPEN-LABEL PHASE IV CLINICAL TRIAL TO EVALUATE THE EFFECT OF NASAL TESTOSTERONE GEL ON REPRODUCTIVE HORMONES AND SEMEN PARAMETERS IN HYPOGONADAL MEN.
Thomas A Masterson III, MD1, Joshua N Bitran, BS2, Manuel Molina, MD3, Emad Ibrahim, MD, HCLD(ABB)3, Ursula Kaiser, MD4 and Ranjith Ramasamy, MD5, 1University of Miami Miller School of Medicine, Miami, FL, 2University of Miami, Miami, FL, 3Brigham and Women’s Hospital, Division of Endocrinology, Boston, MA

11:15 AM O-267 DECREASED LIVE BIRTH RATE WITH LONGER OVARIAN STIMULATION IN FRESH BUT NOT FREEZE-ALL IN VITRO FERTILIZATION (IVF) CYCLES: ANALYSIS
Sci, Inc., Brisbane, CA, 7Mayo Clinic, Rochester, MN
OF 17,830 CYCLES FROM THE SART REGISTRY. Rachel S Gerber, MD, Michelle Kappy, MD, Melissa Fazzari, Ph.D., Sharon Galperin, BS, Alexa Cohen, MD, Harry Lieman, MD, Sangita K Jindal, Ph.D. and Erkan Buyuk, MD, Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY, Montefiore Institute for Reproductive Medicine and Health, Hartsdale, NY

11:30 AM  O-268  IN VITRO MATURATION (IVM) VERSUS IN VITRO FERTILIZATION (IVF) IN WOMEN WITH HIGH ANTRAL FOLLICLE COUNT (AFC): A RANDOMIZED CONTROLLED TRIAL (NCT03405701). Lan N Vuong, M.D; Ph.D., Vu N A Ho, MD, Tuong M Ho, MD, Vinh Q Dang, MD2, Tuan H Phung, MD, Nhu H Giang, MD, Anh H Le, MSc, Toan D Pham, BSc, Rui Wang, MD, Robert J Norman, MD, PhD, Robert B Gilchrist, Ph.D., Johan Smitz, MD, PhD, and Ben W Mol, M.D., Mount Sinai Hospital, Toronto, ON, Canada, The University of Adelaide, Robinson Research Institute, Adelaide, SA, Australia, School of Women’s and Children’s Health, University of New South Wales Sydney, Sydney, NSW, Australia, follicle biology Laboratory, University of Brussels, Brussels, Belgium

11:45 AM  O-269  ANTI-MULLERIAN HORMONE (AMH) IN THE CALIPER COHORT OF HEALTHY COMMUNITY CHILDREN AND ADOLESCENTS: IMPROVING CARE IN ONCOFERTILITY. Ruth Ronn, M.D., Mary Kathryn Bohn, BSc, Khosrow Adeli, PhD, FCACB, DABCC, Barry Hoffman, PhD, FCACB, Ellen M Greenblatt, MD, Mount Sinai Fertility, Sinai Health System, Toronto, ON, Canada, The Hospital for Sick Children/University of Toronto, Toronto, ON, Canada, Mount Sinai Hospital, Toronto, ON, Canada

12:00 PM  O-270  DAMAGED SPERM PARAMETERS AND SPERMIATION FAILURE IN VENLAFAXINE-TREATED RATS: A CORRELATION WITH HIGH TESTICULAR AROMATASE IMMUNOREXPRESSION AND REDUCED EPIDIDYMAL V-ATPASE. Estela Sasso-Cerri, PhD, Fabiane de Santi, Master degree, André AS da Silva, Under graduate student, Beatriz M Rodrigues, Under graduate student, Flávia L Beltrame, PhD, and Paulo S Cerri, PhD, São Paulo State University - UNESP, Araraquara, Brazil, São Paulo Federal University - UNIFESP, Morphology and Genetics, São Paulo, Brazil

Wednesday, October 16, 2019  10:45 am - 12:15 pm

LATE-BREAKING ABSTRACT SESSION 2

Moderators: Katheryn Go and Peter McGovern

10:45 AM  O-271  THE AGE TAX: OOCYTE CRYOPRESERVATION (OC) AGE-BASED COST ANALYSIS. Bat-Sheva L Maslow, MD, MSCTR, Kristen Mancinelli, MSPH, Jennifer Nicole Lannon, BS, Sidonia R Swarm, BS and Joshua U Klein, MD, Extend Fertility, New York, NY, Freeze Health, Miami, FL

11:00 AM  O-272  MENSTRUAL CYCLE REGULARITY AND LENGTH AND RISK OF MORTALITY: A PROSPECTIVE COHORT STUDY. Yixin Wang, MD, Mariel Arvizu, MD, ScD, Bernard Rosner, PhD, Jennifer J Stuart, ScD, Janet Rich-Edwards, PhD, JoAnn E. Manson, MD, DrPH, An Pan, PhD and Jorge E Chavarro, 228
ORAL ABSTRACTS

11:15 AM  O-273  THE EFFECT OF EXTENDED BLASTOCYST EXPOSURE OF HYALURONAN ENRICHED TRANSFER MEDIA ON IMPLANTATION RATE IN FROZEN EMBRYO TRANSFERS. Oscar Perez, Ph.D., Hannalie Adriaanse, BS, Breanna Tilley, MSc, Gabriella Navarrete, BS, Linda Lay, BS, Lucille M Little, BS, Ravi Gada, MD, Laura Lawrence, MD, Karen Lee, MD, Mika R Thomas, MD and Samuel Chantilis, MD, 1Dallas Fertility Center, Dallas, TX, 2Dallas Fort Worth Fertility Associates, Dallas, TX

11:30 AM  O-274  THE RATE OF TRUE RECURRENT IMPLANTATION FAILURE (RIF) IS LOW: RESULTS OF THREE SUCCESSIVE FROZEN EUPLOID SINGLE EMBRYO TRANSFERS (SET). Paul Pirtea, MD, Dominique De Ziegler, MD, Diego Marin, M.S., Li Sun, Ph.D, Yiping Zhan, Ph.D, Jean Marc Ayoubi, MD,PhD, Emre Seli, M.D., Jason M Franasiak, MD and Richard Thomas Scott Jr., MD, 1IVI-RMA New Jersey, Basking Ridge, NJ, 2Hospital FOCH, Paris, France, 3Foundation for Embryonic Competence, Basking Ridge, NJ

11:45 AM  O-275  A SINGLE INJECTION OF LONG ACTING GnRH-ANTAGONIST -DEGARELIX- DOWNREGULATES HYPOPHYSIS DURING OVARIAN STIMULATION. A RANDOMIZED CONTROLLED TRIAL Tatiana Chartomatsidou, MSC, Robert Najdecki, MD, PhD, Foteini Chouliara, MD, Evangelia Timotheou, MSC, Petroula Tatsi, MSC, Eirini Asouchidou, MD, PhD, Sofia Bouchliariotou, MD, PhD, Evangelos Mbambas, MD, PhD, Lazaros Konstantinos Karagiannidis, MD, Nikolaos Nikolettos, MD, PhD and Evangelos Papanikolaou, MD, PhD, 1Assisting Nature, Center of Assisted Reproduction and Genetics, Thessaloniki, Greece, 2Medical Department, Aristotle University of Thessaloniki, Thessaloniki, Greece, 3Medical Department, Democritus University of Thrace, Alexandroupolis, Greece

12:00 PM  O-276  EFFICACY OF LF111 IN OBESE WOMEN, AN INVESTIGATIONAL PROGESTIN-ONLY ORAL CONTRACEPTIVE. Carolyn L Westhoff, MD, MSc, Kurt T Barnhart, MD, MSC, Anne E Burke, MD, MPH, Thomas D Kimble, MD, David F Archer, MD and Enrico Colli, MD, 1Columbia University, New York, NY, 2University of Pennsylvania, Division of Reproductive Endocrinology and Infertility, Philadelphia, PA, 3Johns Hopkins School of Medicine, Baltimore, MD, 4Eastern Virginia Medical School, Norfolk, VA, 5Exeltis, Madrid, Spain
POSTER SESSIONS

ACCESS TO CARE
CANCER
CRYOPRESERVATION
DONOR GAMETES
EMBRYO CULTURE
EMBRYO PHYSIOLOGY
ENDOMETRIAL PHYSIOLOGY
EUPLOID EMBRYO PREDICTORS
FERTILITY PRESERVATION
IN-VITRO OOCYTE MATURATION
IVF OUTCOME PREDICTORS - AGE
IVF OUTCOME PREDICTORS - EMBRYO CULTURE
IVF OUTCOME PREDICTORS - EMBRYO TRANSFER
IVF OUTCOME PREDICTORS - EMBRYOS
IVF OUTCOME PREDICTORS - ENDOMETRIUM
IVF OUTCOME PREDICTORS - GESTATIONAL CARRIERS
IVF OUTCOME PREDICTORS - HORMONE LEVELS
IVF OUTCOME PREDICTORS - LUTEAL SUPPORT
IVF OUTCOME PREDICTORS - OOCYTES
IVF OUTCOME PREDICTORS - OTHER
IVF OUTCOME PREDICTORS - OVARIAN STIMULATION
IVF OUTCOME PREDICTORS - PROGESTERONE LEVELS
IVF OUTCOME PREDICTORS - SPERM
IVF OUTCOME PREDICTORS - TRIGGER
NURSING
OBESITY
OVARIAN HYPERSTIMULATION SYNDROME
OVARIAN STIMULATION
OVARIAN STIMULATION - POOR RESPONDERS
PREIMPLANTATION GENETIC TESTING
REPRODUCTIVE BIOLOGY
REPRODUCTIVE BIOLOGY - BASIC
REPRODUCTIVE GENETICS
SPERM PHYSIOLOGY
BASIC REPRODUCTIVE RESEARCH
CLINICAL ART
CRYO TANK ISSUES

ACCESS TO CARE

P-1

DOES AN INSURANCE MANDATE TO COVER INFERTILITY TREATMENT INCREASE ACCESS TO IN VITRO FERTILIZATION? Kelly Payne, B.A., Nannan Thirumavalavan, M.D., Jabez Gondokusumo, B.S., Adithya Balasubramanian, BA, Michael Lehner, B.S., Jason Scovell, Ph.D., J. Scott Gabrielsen, M.D., Ph.D., Dolores J. Lamb, Ph.D. and Larry I. Lipshultz, M.D.

P-2

DEFINING INFERTILITY: HOW THE LANGUAGE USED TO DESCRIBE INFERTILITY SHAPES PUBLIC PERCEPTION AND POLICY. Abigail C Mancuso, MD, Karen M Summers, MPH CHES, Rebecca K Chung, MD, Aaron Scherer, PhD and Ginny L Ryan, MD, MA, University of Iowa Carver College of Medicine, Iowa City, IA

P-3

PATIENT ACCESS AND UNTAPPED POTENTIAL: CAN NEW DATA DRIVE PROGRESS? Howard T Barske, BA, Patty Stull, BS, Andrew F Khair, PhD, MBA and Gaurang S Daftary, MD, MBA, Fertility Dynamics, Washington, DC, Ferring Pharmaceuticals Inc, Parsippany, NJ

P-4

GENDER AND FERTILITY STATUS AFFECT PERCEPTIONS OF INFERTILITY AND SUPPORT FOR ACCESS TO CARE: A CROSS SECTIONAL STUDY. Rebecca K Chung, MD, Karen M Summers, MPH CHES, Abigail C Mancuso, MD, Aaron Scherer, PhD and Ginny L Ryan, MD, MA, University of Iowa Hospitals and Clinics, Iowa City, IA

P-5

VARIATION IN AVAILABILITY OF FERTILITY CARE TREATMENTS ACROSS US REGIONS. Leslie B Ramirez, PhD, Alexis Adler, BS, Bat-Sheva L Maslow, MD, MSCTR, Joshua U Klein, MD and Urbano L Franca, PhD, Extend Fertility, New York, NY, Boston Children’s Hospital / Harvard Medical School, Boston, MA

P-6

NATIONWIDE SURVEY OF ACCESS TO CARE INITIATIVES IN REI PRACTICES ASSOCIATED WITH OB/GYN RESIDENCY PROGRAMS. Tia Jackson-
CANCER

P-7 ONCOLOGIC OOCYTE CRYOPRESERVATION FOR FERTILITY PRESERVATION: NATIONAL TRENDS AND COMPARISON OF CYCLE CHARACTERISTICS BETWEEN WOMEN WITH AND WITHOUT CANCER. Jennifer F Kawwass, MD¹, Lisa M Shandley, MD, MSc², Sheree L Boulet, DrPH³ and Heather S Hipp, MD¹, ¹Emory University, Atlanta, GA, ²Affiliation not provided, ³Emory University School of Medicine, Atlanta, GA

P-8 RISK FACTORS FOR ATYPICAL HYPERPLASIA AND ENDOMETRIAL CANCER IN THE INFERTILITY POPULATION: A CASE-CONTROL STUDY. Jenna Lipson Kahn, M.D.,¹, Lindsey Buckingham, M.D.,², Nathanael C Koelper, MPH,² Mary D Sammel, ScD² and Divya Kelath Shah, MD,² ¹Pennsylvania Hospital, University of Pennsylvania Health System, Philadelphia, PA, ²Affiliation not provided, ³University OF PENNSYLVANIA HEALTH SYSTEM, PHILADELPHIA, PA, ⁴UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM, PHILADELPHIA, CA, ⁵University of Pennsylvania, Philadelphia, PA

P-9 UTILIZATION OF GONADOTROPIN-RELEASING HORMONE AGONISTS FOR PRESERVATION OF OVARIAN FUNCTION IN WOMEN WITH BREAST CANCER RECEIVING CHEMOTHERAPY. Sally F. Vitez, MD, Ling Chen, MD MPH, Paula C. Brady, MD and Jason D. Wright, MD, Columbia University Medical Center, New York, NY

P-10 EVIDENCE THAT ALKYLATING CHEMOTHERAPY IS NOT RELATED TO CLINICAL INFERTILITY IN ADOLESCENT AND YOUNG ADULT (AYA) CANCER SURVIVORS. Kelsey Pinson, MD¹, Christina Lam, MD¹, Alexa CO Medica, MD², Brian W Whitcomb, PhD³, Ksenya Shliakhtitsava, MD⁴ and H. Irene Su, M.D., M.S.C.E.⁵, ¹University of California, San Diego, La Jolla, CA, ²UCSD resident, San Diego, CA, ³University of Massachusetts, Amherst, MA, ⁴UT Southwestern, Dallas, TX, ⁵University of California San Diego, La Jolla, CA

P-11 REPRODUCTIVE POTENTIAL OF VITRIFIED OOCYTES AND EMBRYOS PRODUCED FROM IN VITRO MATURATION CYCLES OF CANCER PATIENTS FOR FERTILITY PRESERVATION. Weon-Young Son, Ph.D, Helene Creux, M.D., Sara Henderson, M.Sc, Shaoguang Jin, Ph.D., Jin-Tae Chung, M.Sc. and William Buckett, M.D., Division of Reproductive Endocrinology and Infertility, McGill University Health Care Centre, Montreal, QC, Canada

P-12 FEASIBILITY OF FERTILITY PRESERVATION IN PRE-PUBERTAL MALES SCHEDULED TO RECEIVE CHEMOTHERAPY. Helen Levey Bernie, DO MPH, Elizabeth Schofield, MPH, Nicole Benfante, BS and John P. Mulhall, MD MSc FECSM FACS, Memorial Sloan Kettering Cancer Center, New York, NY

P-13 FERTILITY PRESERVATION DISCUSSION IN CANCER PATIENTS IS UNDERUTILIZED AND VARIES BASED ON AGE. Peter N Dietrich, MD, G Luke Machen, MD, Pranav Dadhich, MD, Johnathan Doolittle, MD and Jay I Sandlow, MD, Medical College of Wisconsin, Milwaukee, WI

P-14 FERTILITY-SAVING TREATMENT (FST) AND ASSISTED REPRODUCTIVE TECHNOLOGY (ART) IN PATIENTS WITH ENDOMETRIAL CARCINOMA (EMCA) AND ENDOMETRIAL INTRAEPITHELIAL NEOPLASIA (EIN): PREGNANCY OUTCOMES AFTER EMBRYO TRANSFER (ET). Hilary Friedlander, MD¹, Jennifer K Blakemore, MD², David H. McCulloh, Ph.D.³ and Mary Elizabeth Fino, MD⁴, ¹NYU School of Medicine, New York, NY, ²NYU Langone School of Medicine, New York, NY, ³NYU Langone Health, New York, NY, ⁴NYU Langone Fertility Center, New York, NY

P-15 OVARIAN STIMULATION IN CANCER PATIENTS: RANDOM VERSUS CONVENTIONAL START. Andrea Natalia Coscia, MD¹, Mariana Miguens, M.D.¹, Mariana Cecilia Calvo, MD¹, Rocio Belén Anria, M.D.¹, Milfrå Espinal, MD², Eloyne Margarita Vasquez, MD¹ and Sergio D Papier Sr., M.D.¹, ¹CEGYR, Ciudad Autonoma de Buenos Aires, Argentina, ²Cegyr, Buenos Aires, Argentina
P-16  **ADDED BENEFIT OF IMMATURE OO CYTE MATURATION FOR FERTILITY PRESERVATION IN WOMEN WITH MALIGNANCY.** Yoni Cohen, M.D., Ph.D., Samer Tannus, M.D., Alexander Volodarsky-Perel, M.D., Weon-Young Son, Ph.D., Togas Tulandi, M.D. and William Buckett, M.D.1, 2

1 Reproductive center - IVF unit, Tel Aviv Soursary Medical Center, Tel Aviv, Israel. 2Division of Reproductive Endocrinology and Infertility, McGill University Health Care Centre, Montreal, QC, Canada

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P-17  **ACCESS TO FERTILITY-SAPPING TREATMENT OF ENDOMETRIAL INTRAEPITHELIAL NEOPLASIA: REPRODUCTIVE OUTCOMES AND PATIENT SATISFACTION.** Matthew Shear, MD,1 Alice Kennedy, BS,1 Hannah Stack-Dunnibier, BS,1 Emily A Seidler, MD,2 Michele Hacker, ScD, MSPH3 and Katharine M Esselen, MD, MBA1

1 Beth Israel Deaconess Medical Center, Boston, MA. 2 Boston IVF, Waltham, MA. 3 Harvard Medical School, Boston, MA

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P-18  **LETROZOLE AND FERTILITY PRESERVATION IN PATIENTS WITH BREAST CANCER.** Marouen Braham Sr., Associate professor1, Sarah Amari, Medical Degree2, Khadjia Feriel Kacem Berjeb, Associate professor3, Haithem Khalil Sr., Doctorate in Medecine1, Manel Hamdoun, Medical Degree4, Mounir Ben Meftiah Sr., Medical Degree5, Habiba Essoussi, Medical Degree5, Olfa Bahri Sr., Professor6, Anis Fadhlaoui, Associate Professor1 and Fethi Zhioua, Pr1

1 Aziza Othmana University hospital, Tunis, Tunisia. 2 Gynecology, Obstetric and Reproductive Medecine Department, Aziza Othmana University Hospital, Tunis, Tunisia. 3 Reproductive Medecine Laboratory, Aziza Othmana University Hospital, Tunis, Tunisia. 4 Biochemistry Department. Aziza Othmana University hospital, Tunis, Tunisia

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P-19  **OO CYTE YIELD WITH IMMEDIATE SUBSEQUENT OO CYTE CRYOPRESERVATION (OC) CYCLES COMPARED TO INTERVAL CYCLES.** Bat-Sheva L Maslow, MD, MSCTR, Dayna Hennessy, MSN, NP-C, Michael M Guarnaccia, MD, MPH, Leslie B Ramirez, PhD and Joshua U Klein, MD

Extend Fertility, New York, NY

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P-20  **INITIAL VALIDATION OF AN AUTOMATED CRYOSTORAGE AND INVENTORY MANAGEMENT SYSTEM.** Timothy Allen Sharp, B.S.1, William N Garbarini Jr., MBA2, Chad A Johnson, PhD3, Ann Watson, B.A.1, Rachel Greenberg, B.A.1 and Kathryn J Go, PhD1

1 TMRW Life Sciences, New York, NY. 2 TMRW Life Sciences, Inc., New York, NY

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P-21  **CRYOPRESERVATION OF BOTH MALE AND FEMALE GAMES LEADS TO REDUCED EMBRYO DEVELOPMENT AND IMPLANTATION POTENTIAL.** Assumpto Iaconelli Jr., MD1, Amanda Souza Setti, MSc1, Daniela Paes de Almeida Ferreira Braga, PhD1, Matheus de Castro Azevedo, BSc2 and Edson Borges Jr., PhD1

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P-22  **AUTOMATED VITRIFICATION FOR EMBRYO CRYOPRESERVATION: PRELIMINARY COMPARATIVE RESULTS AND FIRST LIVE BIRTH IN EUROPE.** Mariabeatrice Dal Canto, BSci, PhD1, Clarissa Moutier, BSci1, Fausta Brambillasca, BSci, PhD2, Maria Cristina Gugilelmo, BSci, PhD1, Alessandro Bartolacci, BSci1, Mario Mignini Renzini, MD1, Rubens Fadini, MD1 and Jose Buratini, DVM, PHD1

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P-23  **PROLONGED SEMEN CRYOPRESERVATION DECREASES MO TLE CONCENTRATION.** Rhodel Simbulan, MS, Emani Harris, BS, Fleurdeliza Rabara, BS, CLS, Sean Pae, BS, MS, Fang Xie, PhD, Liza Jalalian, BS, CLS and Mitchell P Rosen, MD, HCLD, University of California San Francisco, San Francisco, CA

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P-25  **THE TWO-STEP ASYNCHRONOUS VITRIFIED-TA WED BLASTOCYST EMBRYO TRANSFER STRATEGY. THE IMPACT ON MULTIPLE PREGNANCY RATE.** Viktor Veselovskyy, MD, Nadiya Clinic, Kyiv, Ukraine
P-26 IMPACT OF EQUILIBRATION DURATION DURING OOCYTE VITRIFICATION PROTOCOL: PRELIMINARY RESULTS OF A PROSPECTIVE OBSERVATIONAL STUDY. Charlene Herbemont, Pharm.D., Isabelle Cedrin-Dumerin, M.D., Michael Gryenberg, M.D., PhD, and Christophe Sifer, M.D., Jean Verdier Hospital, Bondy, France.

P-27 COMPARATIVE STUDY OF FERTILITY PARAMETERS IN VITRIFIED HUMAN SPERM IN THE PRESENCE AND ABSENCE OF EMBRYORP®: A NOVEL ANTIOXIDANT. César Rodrigo Coria, College degree, Paulina Torres, Master Degree, Lina Villar Sr., MD, Israel Maldonado, MD, Israel Jiménez Sr., MD, and Claudia Lydia Treviño, PhD, Instituto de Biofotecnología, Cuernavaca, MR, Mexico, Clínica de Reproducción Asistida en la Ciudad de México, Ciudad de México, DF, Mexico.

P-28 IS THE INCREASE IN EGG FREEZING CYCLES RELATED TO INCREASED NUMBERS OF SINGLE WOMEN IN THE UNITED STATES? Alexandra Peysen, M.D. and Avner Hershlag, M.D., Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY.

P-29 THE IMPACT OF THE SHORT-TERM HUMAN SPERM STORAGE IN THE CRYOPROTECTANT-FREE MEDIUM ON SPERM MOTILITY AND VITALITY. Nabil Sayme, Dr. med., Marija Kljajic, Master of Biology Science, Thomas Krebs, Biology, and Dieter Maas, Prof. Dr. med., Team Kinderwunsch Hannover, Hannover, Germany, Saarland University Medical Center, Homburg, Germany.

DONOR GAMETES

P-30 CHANGES IN U.S. UTILIZATION OF DONOR EGG IVF CYCLES AT DIFFERENT FEMALE AGES BETWEEN 2005-2016. Norbert Gleicher, MD, Sarah K Darmon, PhD, David F Albertini, PhD and David H Barad, MD, MS, Center for Human Reproduction, New York, NY.

P-31 DONOR OOCYTE PREGNANCIES AND FETAL FRACTION: MANAGING PATIENT EXPECTATIONS AND PROVIDING ACCURATE INFORMATION. Melissa K Maisenbacher, MS, Georgina Goldring, MS, Wendy DiNonno, MS and Allison Ryan, PhD, Natera, San Carlos, CA.

P-32 FRESH OOCYTE CYCLES YIELD IMPROVED EMBRYO QUALITY AND SURPLUS EMBRYO.

EMBRYO CULTURE

P-33 CRYOPRESERVATION RATES COMPARED TO FROZEN OOCYTE CYCLES IN AN EGG-SHARING DONATION PROGRAMME. Amanda Souza Settfi, MSc, Daniela Paes de Almeida Ferreira Braga, PhD, Matheus de Castro Azevedo, BSc, Assumpeto Iaconelli Jr., MD and Edson Borges Jr., PhD.

P-34 DONOR DIALOGUE: A CROSS-SECTIONAL ASSESSMENT OF LONG-TERM MEDICAL AND PSYCHOLOGICAL HEALTH STATUS AFTER ELECTIVE OOCYTE DONATION. Jennifer K Blakemore, MD, Paxton E Voigt, BA, Mindy R Schifffman, PhD, Shelley Lee, PhD and Mary Elizabeth Fino, MD, NYU Langone School of Medicine, New York, NY.

P-35 PROSPECTIVE RANDOMIZED MULTICENTER STUDY ON CULTURE OF SIBLING HUMAN OOCYTES IN A SEQUENTIAL MEDIA SYSTEM WITH AND WITHOUT ANTIOXIDANTS: THE EFFECT OF FEMALE AGE. Shigetoshi Mizimoto, Ph.D., Atsumi Yoshida, M.D. Ph.D., Mamba, Takeshi Kuramoto, M.D., Ph.D., Miho Tanaka, M.Sc., Markus HM Montag, Ph.D., and David Gardner, Ph.D., Kuramoto Women’s Clinic, Fukuoka, Japan, Kiba Park Clinic, Tokyo, Japan, Eibachem Group, Eisenachstr, Sankt Augustin, Germany, School of BioSciences, University of Melbourne, Melbourne, VIC, Australia.

P-36 MODELING OF AIRBORNE EMBRYOTOXIC VOLATILE ORGANIC COMPOUNDS (VOCs) IN THE IVF CULTURE ENVIRONMENT – THEIR CONCOMITANT CYTOTOXIC CONCENTRATION WITHIN THE GROWTH MEDIA AND EMBRYO. Kathryn Colonna Worrilow, Ph.D., Alicia R Urrufa, B.S., Huey T. Huynh, M.S. and John T Fox, Ph.D., LifeAire Systems, Allentown, PA, Lehigh University, Bethlehem, PA.
P-37 RANDOMIZED STUDY OF EMBRYO COMPETENCE AND DEVELOPMENTAL POTENTIAL IN GLOBAL BLASTOCYST MEDIUM AND G-TL MEDIUM, DESIGNED FOR TIME LAPSE. Nina Desai, Ph.D., HCLD1, Jeffrey M Goldberg, M.D.,2, Rebecca Flyckt, MD1, Marjan Attaran, M.D.,1, Julie Tantibhedhyangkul, M.D.,1 and Cynthia M Austin, M.D.,1, 1Cleveland Clinic, Beachwood, OH, 2Cleveland Clinic, Cleveland, OH

P-38 3D GYRATORY ROCKER MAY ACCELERATE EMBRYONIC Z01 EXPRESSION AND FURTHER EMBRYONIC DEVELOPMENT IN MOUSE EMBRYOS. Sook Young Yoon, Ph D1, Miseon Park, Master2, Jin Hee Eum, Ph.D1, Jin Young Kim, M.D. Ph.D3 and Woo Sik Lee, M.D. Ph.D1, 1Fertility Center of CHA Gangnam Medical Center, Seoul, Korea, Republic of (South), 2Affiliation not provided, 3CHA Fertility Center Gangnam Medical Center, Seoul, Korea, Republic of (South)

P-39 GROUP EMBRYO CULTURE STRATEGIES AFFECT THE OXIDATIVE STATUS OF THE SPENT CULTURE MEDIA AND EMBRYO DEVELOPMENT RESULTS. Lorena Bori, PhD1, Raquel Del Gallego, PhD1, Lucia Alegre, PhD1, Silvia Azarfa, MSc1, Tamara Vilotia, PhD1 and Marcos Megesper, PhD2, 1IVIRMA Global, Valencia, Spain, 2IVIRMA Global, Valencia, Spain, Tel Aviv, Israel

P-40 THE EFFICACY OF THE NEW EMBRYO CULTURE MEDIUM WHICH DESIGNED FROM THE COMPONENTS OF HUMAN TUBAL FLUID; PROSPECTIVE RANDOMIZED TRIAL. Takafumi Utsunomiya, M.D., Ph.D., Yoko Kumasako, PhD, Eiko Otsu, PhD, Yufuko Kai, M.D., Ph.D., Yuichi Furukawa, M.D., Ph.D. and Hiroko Itoh, M.D., Ph.D., St.Juke Clinic, Oita, Japan

P-41 A NOVEL ZONA-FREE CULTURE SYSTEM FOR SEVERE CYTOPLASMIC FRAGMENTATION CASES: A PILOT STUDY USING 3PN EMBRYOS AND TIME-LAPSE CINEMATOGRAPHY. Keitaro Yumoto, B.S.,1, Toko Shimura, B.S.,1, Minako Sugishima, B.S.,2 and Yasuyuki Mio, MD, PHD1, 1Mio Fertility Clinic, Yonago, Japan, 2Japan

P-42 TYPE OF CULTURE MEDIUM IS ASSOCIATED WITH PREIMPLANTATION EMBRYO DEVELOPMENT. Linette van Duijn, MD1, Melek Rousian, MD, PhD1, Eva S. van Marion, MD2, Joop S.E. Laven, MD, PhD2, Régine P.M. Steegers-Theunissen, MD, PhD1 and Esther B. Baart, PhD1, 1Erasmus University Medical Centre, Rotterdam, Netherlands, 2Erasmus MC University Medical Center, Rotterdam, Netherlands

P-43 BLASTULATION AND GOOD BLASTULATION BETWEEN DAYS 5 AND 6 OF EXTENDED EMBRYO CULTURE. Edward B Nguyen, MD, PhD1, Emily A Jacobs, MD2, Violet E Klenov, MD1, Karen M Summers, MPH CHES2, Amy E Sparks, PhD3, Bradley J Van Voorhis, MD4 and Eyup Hakan Duran, MD2, 1University of Iowa Hospitals and Clinics, Iowa City, IA, 2University of Iowa, Iowa City, IA, 3University of Iowa Center for Advanced Reproductive Care, Iowa City, IA, 4University of Iowa Carver College of Medicine, Iowa City, IA

P-44 EMBRYO CULTURE IN TIME-LAPSE SYSTEM PROVIDES BETTER RATES OF BLASTOCYST FORMATION, DECREASES EMBRYO DEVELOPMENT ARREST RATE COMPARED TO TRADITIONAL TRIPLE-GAS CULTURE SYSTEM. Mariana Nicolileo, BSc1, Catherine Jacobs, BSc1, Andrea Belo, BSc1, Ana Paula Reis, BSc1, Renata Erberelli, BSc1, Fabiana Mendez, BSc1, Marina Fanelli, BSc1, Livia Cremonesi, BSc1, Paulo Cesar Serafini, MD, Phd2, Eduardo LA Motta, MD, Phd2, Aline R Lorenzon, PhD3 and Jose Roberto Alegretti, MSc1, 1Huntington Medicina Reproductiva, Sao Paulo, Brazil, 2Huntington Medicina Reproductiva, Clinical Department, Sao Paulo, Brazil, 3Scientific Coordinator, Huntington Medicina Reproductiva, Sao Paulo, Brazil

P-45 INHIBITION OF LINE-1 TRANPOSITION BLOCKS TELOMERE ELONGATION AND DOWNREGULATES TOTIPOTENCY GENES DURING MOUSE EMBRYO DEVELOPMENT. Isaac J. Chamani, B.A.,1, Fang Wang, Ph.D2, Danxia Luo, MD,2 Paula Andrea Navarro, MD2, Vanessa Lynn Cortes, B.A.,2 and David L. Keefe, M.D.,2, 1New York University School of Medicine, New York, NY, 2New York University School of Medicine, Department of Obstetrics and Gynecology, New York, NY

P-46 HYPERGLYCOXYLATED HUMAN CHORIONIC GONADOTROPIN IN BLASTOCYST CULTURE MEDIUM OF MALE AND FEMALE HUMAN EMBRYOS. Georgi Stamnenov Stamnenov, MD/PhD1, Kristina Nikolova, MSc1, Magdalena
P-47 STUDY ON THE RELATIONSHIP BETWEEN PRONUCLEAR PROXIMITY IN ZYGOTE AND MULTINUCLEATION OF EARLY CLEAVAGE EMBRYOS IN HUMAN USING TIME-LAPSE SYSTEM. So Young Kim, M.S., Sojung Kwon, PhD, Soyoung Bang, M.S., Wonyun Choi, phD, Jin Hee Eum, Ph.D, Hyunjin Kim, M.D., Han Moie Park, M.D, Ph.D., Jin Young Kim, M.D, Ph.D, Eun Mi Chang, M.D, and Woo Sik Lee, MD, Fertility Center of CHA Gangnam Medical Center, Seoul, Korea, Republic of (South)

P-48 OXIDATIVE STRESS IN HUMAN TESTICULAR TISSUE BEFORE AND AFTER CRYOPRESERVATION: A COMPARATIVE STUDY. Alaa Moubasher, MD,1 Hanan Morsy, MD,2 Aya Hassan Younis, MD,3 Mikel Effat, MD4 and Emad Taha, MD5, 1Assist University, Assiut, Egypt, 2Affiliation not provided, 3Assit University, Biochemistry departement, Assiut, Egypt

P-49 SELF-CORRECTION OF ANEUPLOIDY IN HUMAN BLASTOCYSTS AND SELF-ORGANIZING GASTRULOID. Tiago Rito, PhD1, Jeff Naftaly, BA1, Norbert Gleicher, MD2 and Ali H Brivanlou, PhD3, 1Rockefeller University, New York, NY, 2Center for Human Reproduction, New York, NY

P-50 EMBRYO RESPIRATION TO EVALUATE THE EMBRYO QUALITY AND VIABILITY, AND ITS CLINICAL OUTCOME. Atsushi Fukui, MD, PhD, Yuji Ukita, MD, Ryu Takeyama, MD, Toru Kato, MD and Hiroaki Shibahara, MD, PhD, Hyogo College of Medicine, Nishinomiya, Hyogo, IL, Japan

P-51 REPLICATION STRESS LIMITS DEVELOPMENTAL POTENTIAL OF HUMAN PREIMPLANTATION EMBRYOS. Katherine L. Palmerola, MD1, Eric J. Forman, MD1, Rogerio A. Lobo, MD1 and Dieter M. Egli, PhD2, 1Columbia University Fertility Center, New York, NY, 2Division of Molecular Genetics, Department of Pediatrics and Naomi Berrie Diabetes Center, New York, NY

P-52 THE EFFECT OF ZONA PELLUCIDA THICKNESS VARIATION ON FERTILIZATION AND SUBSEQUENT EMBRYONIC DEVELOPMENT: A LARGE SINGLE CENTER COHORT STUDY. Makiko Kawakami, M.S., Tadashi Okimura, B.S., Kazuo Uchiyama, M.T., Akiko Yabuuchi, Ph.D., Tamotsu Kobayashi, M.D. and Keiichi Kato, M.D., Ph.D., Kato Ladies Clinic, Tokyo, Japan

P-53 IDENTIFICATION OF NUCLEOLAR CHANNEL SYSTEMS (NCSS) IN ENDOMETRIAL SECRETIONS AT THE TIME OF FROZEN EMBRYO TRANSFER IN ARTIFICIAL CYCLES WITH SUCCESSFUL IMPLANTATION. Rachel S Gerber, MD1, Erkan Buyuk, MD1, Harry Lieman, MD1 and U. Thomas Meier, Ph.D.2, 1Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY, 2Dept. of Anatomy & Structural Biology, Albert Einstein College of Medicine, Bronx, NY

P-54 SINGLE-CELL MITOCHONDRIAL STAINING OF HUMAN BLASTOCYSTS. Taraneh Gharib Nazem, MD1, Kristin Beaumont, PhD1, Christine Briton-Jones, PhD, HCLD2, Joseph A. Lee, BA2, Robert P. Sebra, PhD3 and Alan B Copperman, MD3, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY, 3Sema4, a Mount Sinai Venture, Stamford, CT

P-55 COMPARATIVE ANALYSIS OF DNA METHYLATION IN EUPLOID AND ANEUPLOID HUMAN EMBRYOS USING REDUCED REPRESENTATION BISULFITE SEQUENCING. Xin Tao, Ph.D.1, Yiping Zhan, Ph.D.2, Katherine Scott, MS.3, Richard Thomas Scott Jr., MD1 and Emre Seli, M.D.4, 1The Foundation for Embryonic Competence, Basking Ridge, NJ, 2Foundation for Embryonic Competence, Basking Ridge, NJ, 3IVI-RMA Southern California, Los Angeles, CA, 4IVI-RMA New Jersey, Basking Ridge, NJ

P-56 MATERNAL AGE AND BLASTOCYST QUALITY DO NOT INFLUENCE THE EMBRYO PRODUCTION OF HYPERGLYCOXYLATED HUMAN CHORIONIC GONADOTROPIN. Dimitar Parvanov, PhD1, Dragomira Nikolova, PhD2, Rumiana Ganeva, MSc1, Kristina Nikolova, MSc1, Magdalena Vasileva, MSc1, Ivaylo Rangelov, MSc1, Fabio Scarpellini, MD3 and Georgi Stamenov Stamenov, MD/PhD1, 1Nadezhda Women’s Health Hospital, Sofia, Bulgaria, 2Department of Medical Genetics, Medical Faculty, Medical University – Sofia, Sofia, Bulgaria, 3Centre for Endocrinology and Reproductive Medicine, Rome, Italy
P-57 EVALUATING THE ABILITY OF AN OOCYTE TO REPAIR FRAGMENTED SPERM CHROMATIN.
Derek Keating, B.A., Alessandra Parrella, M.Sc., Zev Rosenwaks, M.D. and Gianpiero D. Palermo, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

P-60 IS LOW MITOCHONDRIAL DNA (mtDNA) CONTENT AFTER FERTILIZATION FAILURE DUE TO OOCYTE AGING IN CULTURE? Marta Pérez, phd student1, Amparo Mercader, PhD2, Diana Beltrán, Master2, Aranta Delgado, PhD2, Laura Escrich, phd2, Antonio Pellicer, MD, PhD3, Carmen Vidal, M.D., Ph.D.4 and Mª José de los Santos, PhD5, 1IVI foundation, Instituto de Investigación Sanitaria la Fe, Valencia, Spain, 2IVIRMA Valencia, Valencia, Spain, 3IVIRMA Roma, Roma, Italy

P-61 DO MALE EMBRYOS GROWFASTER THAN FEMALE EMBRYOS? Musang Liu, BS1, Samuel Yongxin Sun, Ph.D.2, Li Li, BS3, Jing Xu, BS3, Tetyana Nesterchuk, MS3 and Preston Sacks, MD3, 1Columbia Fertility Associates, Washington DC, DC, 2Columbia Fertility Associates, Falls Church, VA, 3Affiliation not provided

P-62 TROPHOCTEDERM CELL DEVELOPMENT FROM DAY-6 HUMAN BLASTOCYSTS. IS IT POSSIBLE TO REPRODUCE THEM IN VITRO? Oscar Perez, Ph.D.1, Hannalie Adriaanse, BS1, Breanna Tilley, MSc1, Gabriella Navarrete, BS1, Linda Lay, BS1, Lucille M Little, BS1, Ravi Gada, MD2, Laura Lawrence, MD2, Karen Lee, MD2, Mika R Thomas, MD2 and Samuel Chantilis, MD2, 1Dallas Fertility Center, Dallas, TX, 2Dallas Fertility Institute, Chicago, IL

P-63 CAN GROWTH HORMONE REALLY IMPACT ANEUPLOIDY RATES? Ruchi Kaushik Amin, MD1, Lauren Grimm, MA2, Elisabeth Rosen, BS, MA2, Angeline Beltos, MD2 and Roohi Jeelani, MD2, 1Wayne State University, Detroit, MI, 2Vios Fertility Institute, Chicago, IL

ENDOMETRIAL PHYSIOLOGY

P-64 THE INFLUENCE OF HYPOXIA ON ANGIOGENESIS AND METABOLISM IN HUMAN ENDOMETRIAL STROMAL CELLS. Hidetaka Okada, MD and Takeharu Kido, MD, Kansai Medical University, Hirakata, Japan

P-65 DOES THE ENDOMETRIUM HAVE A ROLE IN SELECTING EMBRYO GENDER? Javier Herreros Sr., MSc, Hector Huete Ferriz, MSc, Mireia Floresna, MSc and Marga Esert, PhD, IVI RMA Barcelona, Barcelona, Spain

EUPLOID EMBRYO PREDICTORS

P-66 THE ASSOCIATION OF AGING MARKERS IN LUTEINIZED GRANULOSA CELLS AND EMBRYO ANEUPLOIDY RATE IN PREIMPLANTATION GENETIC TEST FOR ANEUPLOIDY CYCLES. Tsung-Hsien Lee, MD, PhD1, En-Hui Cheng, PhD2 and Maw-Sheng Lee, MD, PhD3, 1Chung Shan Medical University Hospital, Taichung, Taiwan, 2Lee Women’s Hospital, Taichung, Taiwan, 3Chung Shan Medical University, Taichung, Taiwan

P-67 BLASTOCYST PLOIDY IS NOT RELATED TO THE NUMBER OF EMBRYOS GENERATED NOR TO THE TYPE OF OVARIAN STIMULATION. Sandro C Esteves, M.D., Ph.D.1, Peter Humaidan, M.D., Ph.D.2, José F. Carvalho, Ph.D.3, Danilo Cimadomo, Ph.D4, Alberto Vaiarelli, M.D.4, Hakan Yarali, M.D.5, Irem Y Ozbek, Ph.D.5, Thor Haahr, M.D.2, Alessandro Conforti, M.D.4, Carlo Alviggi, MD, Ph.D5 and Filippo Maria Ubaldi, M.D., Ph.D.4, 1Medical Director, Campinas, Brazil, 2The Fertility Clinic, Skive Regional Hospital, Skive, Denmark, 3Statistica Consulting, Campinas, Brazil, 4GENERA, Center for Reproductive Medicine, Rome, Italy, 5Anatolia IVF, Ankara, Turkey, 6Department of Neuroscience, University of Naples Federico II, Naples, Italy
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P-68 **THE IMPACT OF LEAD FOLLICLE SIZE AND DURATION OF STIMULATION ON THE PROBABILITY OF EUPOLOID EMBRYOS.** Denis Schapira Wajman, MD1, David L. Keefe, M.D.2, David H. McCulloh, Ph.D.3, James A Grifo, MD, PhD3 and Cheongueon Oh, PhD1, 1NYU Langone, New York, NY, 2New York University School of Medicine, Department of Obstetrics and Gynecology, New York, NY, 3NYU Langone Fertility Center, New York, NY

P-69 **EXOGENOUS GONDOTROPIN USE NOT ASSOCIATED WITH INCREASE IN ANEUPLOIDY OF IN VIVO RECOVERED BLASTOCYSTS.** Steven T Nakajima, MD1, Sam Najmabadi, MD2, Santiago Munne, PhD3, Alex Nadal, BA4, Kajal Choudhary, PhD4 and John E Buster, MD4, 1Stanford University School of Medicine, Stanford, CA, 2Punta Mita Hospital, Punta Mita Fertility Center/Center for Reproductive Health and Gynecology, Punta de Mita, NA, Mexico, 3Overture Life, Madrid, Spain, 4Previvo Genetics Inc., San Carlos, CA

P-70 **ADJUVANT GROWTH HORMONE USE IMPROVES EUPOLOID RATE IN WOMEN UNDERGOING IVF/PGT-A WHO ARE NOT POOR RESPONDERS.** Whitney A Leonard, MD - PGY2, Winifred Mak, MD, Ph.D2, Amanda Skillern, MD, FACOG3 and Jordyn Pike, MPH4, 1University of Texas Dell Medical School, Dept of Women’s Health, Austin, TX, 2University of Texas Dell Medical School, Women’s Health, Austin, TX, 3Aspire Austin, Austin, TX, 4University of Texas Dell Medical School, Women’s Health, Austin, TX

P-71 **EMBRYO EUPOLOID RATES DIFFER IN SAME-SEX MALE COUPLES UTILIZING A SINGLE OVUM DONOR.** Nasario E Ramos, BS1, Deborah E Johnson, MA1, Zachary Haimowitz, BS1, Mark W Surrey, MD2, Hal C Danzer, MD2, Shahin Ghadir, MD2, Wendy Y Chang, MD2, Carolyn J Alexander, MD2 and Jason A Barritt, PhD1, 1ART Reproductive Center, Beverly Hills, CA, 2Southern California Reproductive Center, Beverly Hills, CA

P-72 **ANEUPOLOID RATE IN BRCA CARRIERS IS SIMILAR TO AGE-MATCHED INFERTILE WOMEN.** Maria Facadio Antero, MD1, Mindy S Christianson, MD2 and William G. Kearns, MD, PhD3, 1John Hopkins University School of Medicine, Lutherville, MD, 2John Hopkins University School of Medicine, Lutherville, OR, 3Johns Hopkins University School of Medicine, Advagenix, 9430 Key West Hwy, Suite 130, MD

P-73 **SUBOPTIMAL STIMULATION IS PREDICTIVE OF INCREASED ANEUPLOIDY AND REDUCED PREGNANCIES PER CYCLE START.** John B. Whitney, BS1, Robert E. Anderson, MD2 and Michel C. Schiewe, MS, PhD1, 1Ovation Fertility, Newport Beach, CA, 2SCCRM, Newport Beach, CA

FERTILITY PRESERVATION

P-74 **ESTIMATES OF INFERTILITY IN AN ERA OF INCREASING STI RATES, 2002-2015.** Morgan Snow, BA1, Tyler McClung, BS, MS2, Maria Trent, MD, MPH1 and Jamie Perin, PhD1, 1Johns Hopkins School of Medicine, Baltimore, MD, 2Johns Hopkins University, Baltimore, MD

P-75 **FERTILITY PRESERVATION FOR SOCIAL REASONS IN A POPULATION OF OLDER WOMEN. ¿MYTH OR REALITY?** Raymond Joseph Osés, MD, Alberto Valcarcel, PhD, Marisa Tiveron, MS, Mercedes Leticia Guidobono, MS, Macarena Felici, MS, Soledad Bouzas, MS and Alberto Kenny, MD, IFER, Ciudad Autónoma de Buenos Aires, Argentina

P-76 **THE QUANTIFICATION OF RESIDUAL CRYOPROTECTANTS IN THE THAWED OVARIAN TISSUE FOR OVARIAN TISSUE TRANSPLANTATION.** Yodo Sugishita, M.D., Ph.D.1, Yuki Suzuki, M.D., Ph.D.1, Sandy Nishimura, Ms.1, Meng Lingbo, M.D.2, Atsushi Uekawa, Ph.D.2, Akiko Tozawa, M.D., Ph.D.2 and Nao Suzuki, M.D., Ph.D.2, 1St.Marianna University, School of Medicine, Kawasaki, Kanagawa, Japan, 2St. Marianna University, Kanagawa, Japan

P-77 **EMPLOYER-BASED INSURANCE COVERAGE DRAMATICALLY INCREASES UTILIZATION OF PLANNED OOCYTE CRYOPRESERVATION.** Arielle S Yeshua, MD, Christine Mullin, M.D., Avner Hershlag, M.D., Tomer Singer, MD and Randi H. Goldman, M.D., Northwell Health Fertility, Zucker School of Medicine at Hofstra/ Northwell, Manhasset, NY

P-78 **OOCYTE VITRIFICATION FOR ANTICIPATED GAMETE EXHAUSTION (AGE-BANKING) - A SYSTEMATIC REVIEW AND META-ANALYSIS OF SOCIAL TRENDS AND EFFICACY.** Shira Baram, MD1, Noga Fuchs Weisman, MD1, Janice Montbriand, Ph.D.2 and Clifford Lawrence Librach, MD1, 1CREATe Fertility
P-79  FERTILITY PRESERVATION: FROZEN IN TIME?
Stephanie R Baum, MD\(^1\), Randi H. Goldman, MD\(^2\), Tomer Singer, MD\(^3\) and Christine Mullin, M.D.\(^4\), \(^1\)Lenox Hill Hospital - Northwell Health, New York, NY, \(^2\)Northwell Health Fertility, Manhasset, NY, \(^3\)Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY

P-80  PROVIDING PATIENTS WITH SUBSIDIZED FERTILITY PRESERVATION SERVICES IMPROVES ACCESS TO CARE.
Lauren T Bouchard, MD\(^1\), Kristin Van Heertum, MD\(^2\), Amelia Baffa, MSN, RN, PMHNP-BC\(^3\), Kathryn D Coyne, MD\(^4\), Daniel L Kuhr, MD\(^5\), James Goldfarb, MD, MBA\(^6\) and Rachel S Weinerman, MD\(^2\), \(^1\)University Hospital Cleveland Medical Center, Case Western Reserve University, Cleveland, OH, \(^2\)University Hospitals Fertility Center/Case Western Reserve University, Beachwood, OH, \(^3\)University Hospitals of Cleveland Rainbow Babies & Children’s Hospital, Cleveland, OH, \(^4\)University Hospitals Cleveland Medical Center, Cleveland, OH, \(^5\)Department of Obstetrics and Gynecology, University Hospitals Cleveland Medical Center, Case Western Reserve University, Cleveland, OH, \(^6\)OH

P-81  SPERM CRYOPRESERVATION FOR FERTILITY PRESERVATION IN MEN WITH NON-MALIGNANT DISEASES.
Teppei Takeshima, M.D, Shinnosuke Kuroda, M.D and Yasushi Yumura, Ph.D, Yokohama City University, Medical Center, Yokohama, Japan

P-82  EQUAL OPPORTUNITY FOR ALL? AN ANALYSIS OF RACE AND ETHNICITY IN FERTILITY PRESERVATION (FP) IN A MAJOR AMERICAN CITY
Paxton E Voigt, BA\(^1\), Jennifer K Blakemore, MD\(^2\), David H. McCulloh, Ph.D\(^3\) and Mary Elizabeth Fino, MD\(^4\), \(^1\)NYU School of Medicine, New York, NY, \(^2\)NYU School of Medicine, New York, NY, \(^3\)NYU Langone Health, New York, NY, \(^4\)NYU Langone Fertility Center, New York, NY

P-83  WHAT IS IMPORTANT TO WOMEN CONSIDERING FERTILITY PRESERVATION BEFORE CANCER TREATMENT? COMPARING DECISION-MAKING VALUES WITH AND WITHOUT USING THE PATHWAYS PATIENT DECISION AID WEBSITE
Sukhkamal Campbell, MD\(^1\), Aubri Hoffman, PhD\(^2\), June Weston, Sr Research Coordinator\(^2\), Laura Covarrubias Crocker, MSPH\(^2\), Deborah Holman, CRNP\(^3\), Ashley Houston, MSCI, OTD\(^2\), Robert Volk, PhD\(^2\) and Terri Woodard, MD\(^1\), \(^1\)Baylor College of Medicine, Houston, TX, \(^2\)The University of Texas MD Anderson Cancer Center, Houston, TX

P-84  ELECTIVE OOCYTE CRYOPRESERVATION COUNSELING TOOL BASED ON NEXT GENERATION SEQUENCING RESULTS.
Mariana Miguens, M.D.\(^1\), Andrea Natalia Coscia, MD\(^1\), Daniela Lorenzi, B.Sc\(^2\), Melina Elena Bilinski, B.Sc\(^2\), Mariana Cecilia Calvo, MD\(^1\), Rocio Belén Anria, M.D.\(^1\), Milfra Espinal, M.D\(^1\) and Sergio D Papier Sr., M.D.\(^1\), \(^1\)CEGYR, Ciudad Autonoma de Buenos Aires, Argentina, \(^2\)NOVAGEN, Ciudad Autonoma de Buenos Aires, Argentina

IN-VITRO OOCYTE MATURATION

P-85  ENHANCING REPRODUCTIVE OPPORTUNITIES: THE BIOLOGIC POTENTIAL OF VITRIFIED IN-VITRO MATURED OOCYTES.
Carlos Hernandez-Nieto, MD\(^1\), Christine Briton-Jones, PhD, HCLD\(^1\), Daniel E. Stein, MD\(^2\), Tanmoy Mukherjee, MD\(^1\), Benjamin Sandler, M.D.\(^1\) and Alan B Copperman, MD\(^2\), \(^1\)Reproductive Medicine Associates of New York, New York, NY, \(^2\)NYU Langone and Rikikazu Sugiyama, MD, PhD\(^1\), \(^1\)Sugiyama Clinic Shinjuku, Tokyo, Japan

SUPPLEMENTING IN-VITRO MATURATION MEDIA WITH HUMAN FOLLICULAR FLUID IMPROVES BOTH THE MATURATION RATE OF MOUSE IMMATURE OOCYTES AND THE SUBSEQUENT EMBRYONIC DEVELOPMENT.
Takashi Horioka, MD\(^1\), Yasuyuki Araki, Ph.D.\(^2\), Koji Nakagawa, MD, PhD\(^1\), Keiji Kuroda, MD, PhD\(^1\), Satoru Takamizawa, MD, PhD\(^1\), Yuichi Sato, MD, PhD.\(^3\) and Rikikazu Sugiyama, MD, PhD\(^1\), \(^1\)Takasaki ART clinic, Takasaki, Japan

IN VITRO OOCYTE MATURATION (IVM) IS A SUCCESSFUL ART OPTION FOR PCOS PATIENTS.
Terry Schlenker, BSc, MA, MT, Rebecca Kile, MS, Rachel Makloski, RN, Ann Schneiderman, BS, Sue McCormick, BS, William B Schoolcroft, MD and Rebecca L. Krisher, PhD, Colorado Center for Reproductive Medicine, Lone Tree, CO
P-89  EMBRYOLOGIST FRIENDLY PROGRAMMED IVM WITH DELAYED BLASTOCYST TRANSFER. 
Bruce I Rose, MD, PhD, Kevin Nguyen, MS and Samuel Brown, MD, Brown Fertility LLC, Jacksonville, FL

IVF OUTCOME PREDICTORS - AGE

P-90  INCREASED PATERNAL AGE IS ASSOCIATED WITH DECREASED BLASTULATION AND EUPLOID RATES BUT NOT PREGNANCY OUTCOMES IN THE SETTING OF A EUPLOID SINGLE EMBRYO TRANSFER. Brent M Hanson, MD1, Julia G Kim, MD, MPH1, Emily K Osman, MD1, Ashley W Tiets, MD2, Shelby A Neal, MD1, Ruth B Lathi, MD3, Richard Thomas Scott Jr., MD1 and Jason M Fransasiak, MD1, 1IVI-RMA New Jersey, Basking Ridge, NJ, 2Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA, 3Stanford Fertility and Reproductive Medicine Center, Sunnyvale, CA

P-91  ADVANCED PATERNAL AGE IS ASSOCIATED WITH AN INCREASED RISK FOR SEGMENTAL ABERRATIONS IN EMBRYOS DERIVED FROM YOUNG OOCYTE DONORS. Michal Dviri, MD1, Svetlana Madjunkova, MD1, Ran Antles, PhD1, Rina Abramov, MSc1, Jordana Mashiach, MD1, Sergey Moskovtsev, MD2 and Clifford Lawrence Librach, MD2, 1CREAte fertility centre, Toronto, ON, Canada, 2CREAte Fertility Centre, Toronto, ON, Canada

P-92  CLINICAL PREGNANCY OUTCOME ACCORDING TO AGE OF PATIENTS WITH HIGH PROPORTION OF FAILED OOCYTE MATURATION IN ICSI CASES. Yeon Sook Park, MS, Su Hyeon Kim, MS, Han Su Kim, MS, Jae Won Kim, M.D., Hee Sun Lee, M.D, Myung Hee Kim, M.D., Hyeon Jeong Jeong, M.D and Mi Kyung Chung, Ph.D, Seoul Rachel Fertility Center, Seoul, Korea, Republic of (South)

IVF OUTCOME PREDICTORS - EMBRYO TRANSFER

P-93  IS THE NUMBER OF BLASTOCYST MORPHOLOGIC EVALUATIONS (BMA) ON DAY 6 CORRELATED WITH DAY 7 EMBRYONIC COMPETENCE? Jenna Friedenthal, MD1, Dmitry Gounko, MA2, Joseph A. Lee, BA2, Christine Britton-Jones, PhD, HCLD2, Alan B Copperman, MD1 and Lawrence Grunfeld, MD2, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY

P-94  INFLUENCE OF POST-THAW EMBRYO CULTURE INTERVAL ON ASSISTED REPRODUCTION TECHNIQUES PREGNANCY RATES. Laudislena Colodetti, MD PhD1, Patricia Pinho de França, PhD2, Marcos Sampaio, MD PhD2 and Selmo Geber, Professor1, 1Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, 2ORIGEN, Belo Horizonte, Brazil

P-95  USABLE BLASTOCYST DEVELOPMENT RATE IS INFLUENCED BY MATERNAL AGE AND ULTRA-LOW OXYGEN TENSION IN EXTENDED CULTURE. Alice Fournier, MD1, Aneta Andreeva, RESIDENT1, Anna Gala, MD2, Sophie Brouillet, PharmD, PHD2, Cecile Brunet, MD3, Claire Vencens, MD3 and Samir Hamamah, MD, PhD1, 1Amaud de Villeneuve Hospital, CHU Montpellier, Montpellier, France, 2Inserm U1203, CHU Montpellier, St-Eloi Hospital, Montpellier, France, 3ART-PGD department, Arnaud de Villeneuve Hospital, CHU Montpellier, Montpellier, France

P-96  THE EFFECTS OF CO-CULTURE WITH AUTOLOGOUS CUMULUS CELL ON PREGNANCY OUTCOMES BY MATERNAL AGE. Dae-han Kim, Master, Jeong-Ho Cha, Ph.D., Sun-Hee Shin, Master, Yun-Jung Kim, Master, Seul-Ki Lee, Master, Ji-Hae Kim, Master, Hwa-Yeong Kim, Master, Seung-Hyun Back, Master, Ji-Hyun Ahn, M.D., Hye-Young Kim, M.D., Kyung-Ah Pak, M.D., Ji-Sung Yoon, M.D. and Seo-Young Park, M.D., Agaon fertility clinic, seoul, Korea, Republic of (South)

IVF OUTCOME PREDICTORS - EMBRYO CULTURE

P-97  LIVE BIRTH RATES AFTER BLASTOCYST TRANSFERS PERFORMED BY FELLOWS. Dana B. McQueen, M.D., M.A.S.,1 Jared C Robins, MD1, John Zhang, PhD2 and Eve C. Feinberg, M.D.,1 1Northwestern University, Chicago, IL, 2Northwestern Medicine, Chicago, IL
P-98 PREGNANCY OUTCOME AFTER BED REST VERSUS EARLY AMBULATION FOLLOWING EMBRYO TRANSFER DURING IVF/ICSI CYCLES: A RANDOMISED CONTROLLED STUDY. Neena Malhotra, MD FRCOG1 and Plabani Sarkar, MD2, 1All India Institute of Medical Sciences, New Delhi, India, 2Member AOGD, NEW DELHI, India

P-99 THE CONTINUED PUSH TOWARDS ELIMINATING TWIN PREGNANCY: THE CLINICAL IMPACT OF THE 2017 ASRM EMBRYO TRANSFER GUIDELINES. Allison E Eubanks, MD1, Anthony DeAngelis, MD, PhD2, Mae W Healy, DO1, Rhiana D. Saunders, MD1, Saioo Torrealdy, MD1, Alan H Decherney, MD, PhD1 and Paul Chungyu Sipe, MD, Fertility Centers of Illinois, Chicago, IL

P-100 HIGHER PREGNANCY RATES ARE OBSERVED AFTER SINGLE EUPLOID FROZEN EMBRYO TRANSFER UTILIZING TIME-LAPSE MONITORING TECHNOLOGY WHEN COMPARED TO TRADITIONAL EMBRYO INCUBATION. Lauren W Sundheimer, MD, MS1, Zachary Haimowitz, BS2, Alin Lina Akopians, MD, PhD1, Deborah E Johnson, MA2, Wendy Y Chang, MD1, Mark W Surrey, MD1, Hal C Danzer, MD1, Shahin Ghadir, MD1, Carolyn J Alexander, MD1 and Jason A Barritt, PhD2, 1Southern California Reproductive Center, Beverly Hills, CA, 2ART Reproductive Center, Beverly Hills, CA

P-101 DECREASING RATES OF MULTIPLE GESTATION AND NUMBER OF EMBRYOS TRANSFERRED IN GESTATIONAL CARRIER PREGNANCIES: A LONGITUDINAL ANALYSIS. Rachel S Mandelbaum, MD, Meghan B Smith, MD, Jacqueline Ho, MD MS, Richard J Paulson, MD, MS and Kristin Bendikson, M.D., University of Southern California, Los Angeles, CA

P-102 DOES CATHETER TYPE AND/OR SONOGRAPHER IMPACT SUCCESS RATES FOR EMBRYO TRANSFER? Emily Sarah Lin, BA pending1, Angela claire Thyer, MD2 and Paul Chunghyu Lin, MD2, 1Northwestern University, Evanston, IL, 2Seattle Reproductive Medicine, seattle, WA

P-103 EVIDENCE BASED QUANTITATIVE PREDICTION OF RISK OF MULTIPLE GESTATION RESULTING FROM THE TRANSFER OF MULTIPLE EMBRYOS. Michael Awadalla, MD, Kristin Bendikson, M.D., Jacqueline Ho, MD MS, Ali Ahmady, PhD and Richard J Paulson, MD, MS, University of Southern California, Los Angeles, CA

P-104 REDUCING SIZE OF TRANSFER SYRINGE IS BENEFICIAL FOR IVF PREGNANCY OUTCOMES. Van Pham, B.S.1, Randall Dunn, M.D.1, Subodh Chauhan, M.D.1, 2Leah Schenk, M.D.1, 2Rakesh Mangal, M.D.1, 2Ertug Kovanci, M.D.1, 2George M Grunert, M.D.1 and Wan-Song A Wun, PhD2, 1Aspire Fertility, Houston, TX, 2Harvest Fertility, Arcadia, TX

IVF OUTCOME PREDICTORS - EMBRYOS

P-105 ONGOING PREGNANCY RATE OF VITRIFIED-WARMED BLASTOCYST TRANSFERS IN AUTOLOGOUS PATIENTS: SINGLE VS DOUBLE TRANSFER ACCORDING TO THE DAY OF DEVELOPMENT. Juergen Liebermann, PhD, HCLD, Sara Sanchez-Jullas, BS, Rebecca Brohammer, BS, Janna Schwab, MS, Meike L Uhler, M.D., Jennifer E Hirschfield-Cytron, MD and Christopher Sipe, MD, Fertility Centers of Illinois, Chicago, IL

P-106 RELATIONSHIP OF EMBRYO SEX TO EMBRYO QUALITY, DAY OF BLASTOCYST TRANSFORMATION, AND IVF OUTCOMES. Christopher P Moutos, MD1, William G. Kearns, MD, PhD2, Sarah E Farmer, MS3, Jon P Richards, MS3, Antonio F Saad, MD1 and John R Crochet Jr., MD3, 1University of Texas Medical Branch, Galveston, TX, 2Johns Hopkins University School of Medicine, Advagenix, 9430 Key West Hwy, Suite 130, MD, 3Center of Reproductive Medicine, Houston, TX

P-107 IMPACT OF FRESH-EMBRYO PARAMETERS ON SURVIVAL AND IMPLANTATION IN VITRIFIED BLASTOCYST CYCLES: ANALYSIS OF 11936 WARMED BLASTOCYSTS. Aila Coello, PhD1, Mª José de los Santos, PhD2, Mar Nohales, PhD1, Marcos Meseguer, PhD2, Jose Alejandro Remohi, MD, PhD4 and Ana Cobo, PhD1, 1IVIRMA VALENCIA, VALENCIA, Spain, 2IVIRMA Valencia, Valencia, Spain, 3IVIRMA Global, Valencia, Spain, Tel Aviv, Israel, 4IVIRMA Valencia,, VALENCIA, Spain

P-108 DEVELOPMENT AND PRELIMINARY VALIDATION OF AN AUTOMATED STATIC DIGITAL IMAGE ANALYSIS SYSTEM UTILIZING MACHINE LEARNING FOR BLASTOCYST SELECTION. Alejandro Chavez-Badiola, MD1, Adolfo Flores-Saiffe
Farias, MSc, PhD2; Gerardo Mendizabal-Ruiz, PhD3; Rodolfo Garcia-Sanchez, MSc4 and Andrew J Drakeley, MD FRCOG2; 1New Hope Fertility Center Mexico, Mexico City, EM, Mexico, 2New Hope Fertility Center, Guadalajara, JA, Mexico, 3Departamento de Ciencias Computacionales, Universidad de Guadalajara, Guadalajara, JA, Mexico, 4Affiliation not provided, 5Hewitt Centre for Reproductive Medicine, Liverpool Women’s Hospital, Liverpool, United Kingdom

P-109  ODDS OF EUPLOIDY ARE SIGNIFICANTLY ASSOCIATED WITH NOT ONLY AGE BUT BLASTOCYST MORPHOKINETIC PARAMETERS AND ICM/TROPHECTODERM CHARACTERISTICS. Nina Desai, Ph.D., HCLD1; Jeffrey M Goldberg, M.D.2; Rebecca Flyckt, MD1; Marjan Attaran, M.D.1; Julie Tantibhedhyangkul, M.D.1 and Cynthia M Austin, M.D.1. 1Cleveland Clinic, Beachwood, OH, 2Cleveland Clinic, Cleveland, OH

P-110  BLASTOCYST GRADE PREDICTS OUTCOME AFTER FROZEN EUPLOID TRANSFER IN PATIENTS WITH RECURRENT PREGNANCY LOSS. Gayathree Murugappan, MD1; Julia G Kim, MD, MPH2; Jonathan D Kort, MD3; Brent M Hanson, MD2; Shelby A Neal, MD2; Ashley W Tiets, MD4; Emily K Osman, MD2; Richard Thomas Scott Jr., MD2 and Ruth B Lathi, MD1; 1Stanford University Medical Center, Sunnyvale, CA, 2IVI-RMA New Jersey, Basking Ridge, NJ, 3IVI/Reproductive Medicine Associates of Northern California, San Francisco, CA, 4Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA

P-111  SURVIVAL BEHAVIOR OF EMBRYO COHORT IN CULTURE IS ASSOCIATED WITH PREGNANCY PERFORMANCE OF A SURVIVING EUPLOID BLASTOCYST AFTER SINGLE EMBRYO TRANSFER (SET): THE CANARIES IN THE COAL MINE? Eleni A Greenwood, MD, MSc1; Rhodel Simbulan, MS1; Charles E McCulloch, PhD2; Marcelle I Cedars, MD3 and Mitchell P Rosen, MD, HCLD2; 1University of California San Francisco, San Francisco, CA, 2UCSF, San Francisco, CA, 3University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA

P-112  FULLY HATCHED EUPLOID BLASTOCYSTS EXHIBIT LOWER PREGNANCY OUTCOMES WHEN COMPARED TO OTHER BLASTOCYST STAGES IN FROZEN SET CYCLES. Ahmad Morsi Abu Maizar, M.Sc, TS(ABB)1; Eric Urcia, M.Sc, TS(ABB)2; Matthew David VennMy Leya, PhD3; Richard Marrs, MD2; Guy E Ringler, MD4 and Kelly Baek, MD2; 1California Fertility Partners, Los Angeles, CA, 2Affiliation not provided, 3Ovation Fertility, Austin, TX

P-113  BLASTOCYST MORPHOLOGY CORRELATES WITH PREIMPLANTATION GENETIC TESTING FOR EUPLOIDY (PGT-A) RESULTS AND MAY FURTHER PREDICT PREGNANCY POTENTIAL AFTER EUPLOID SINGLE EMBRYO TRANSFER (SET). Eleni A Greenwood, MD, MSc1; Charles E McCulloch, PhD2; Giovanna Olivera, MS3; Wingka Lin, MSc3; Fang Xie, PhD4; Marcelle I Cedars, MD2 and Mitchell P Rosen, MD, HCLD3; 1University of California San Francisco, San Francisco, CA, 2UCSF, San Francisco, CA, 3Affiliation not provided, 4University of California - San Francisco, San Francisco, CA, 5University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA

P-114  INCREASED MALE LIVE-BIRTH RATES AFTER BLASTOCYST-STAGE FROZEN-THAVED EMBRYO TRANSFERS COMPARED WITH CLEAVAGE STAGE: A SOCIETY FOR ASSISTED REPRODUCTIVE TECHNOLOGIES CLINICAL OUTCOMES REPORTING SYSTEM STUDY. Barry E Perlman, DO1; Kavitha Krishnamoorthy, MD1; Sara S Morelli, MD, PhD1; Patricia Greenberg, MS2; Sangita K Jindal, Ph.D.3 and Peter Mcgovern, MD4; 1Rutgers New Jersey Medical School, Newark, NJ, 2Rutgers School of Public Health, New Brunswick, NJ, 3Einstein COM, Montefiore, Hartsdale, OR, 4University Reproductive Associates, NJ

P-115  EMBRYO SELECTION IN DEVELOPING COUNTRIES-INNER CELL MASS TO BLASTOCYST DIMENSION RATIO AS A PREDICTOR OF PREGNANCY OUTCOME. Deepika Krish, MS, FRM, Consultant in Rep Med, BANGALORE, India

P-116  DOUBLE BIOPSY, NOT DOUBLE VITRIFICATION, LEADS TO DECREASED PROBABILITY OF ESTABLISHING AND SUSTAINING A VIABLE CLINICAL PREGNANCY. Terry Schlenker, BSc, MA, MT, Sue McCormick, BS, Robin Smith, BS, William B Schoolcraft, MD and Mandy G Katz-Jaffe, Ph.D., Colorado Center for Reproductive Medicine, Lone Tree, CO
P-117 DEGREE OF RE-EXPANSION FOLLOWING VITRIFICATION/REWARMING OF EUPLID BLASTOCYSTS IS INVERSELY CORRELATED WITH IMPLANTATION AND ONGOING PREGNANCY/LIVE BIRTH RATES. Sydney Chang, MD, Taranee Gharib Nazem, MD, Dmitry Gounko, MA, Marlena Duke, MSc, ELD, Christine Briton-Jones, PhD, HCLD, Alan B Copperman, MD and Beth McAvey, MD, 'Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY

P-118 PREDICTIVE ABILITY OF A BLASTOCYST GRADE ON REPRODUCTIVE OUTCOMES IN ELECTIVE FRESH EMBRYO TRANSFER. Alyson M Digby, MD, Bsc, Lesley Roberts, MD FRCPSC, Mary M Brown, MSc, Megan Dufton, PhD Sc and Renda Bouzayan, MD FRCPSC, 1IWK Health Centre, Dalhousie University, Halifax, NS, Canada, 2University of Manitoba, Winnipeg, MB, Canada, 3IWK Health Centre Dalhousie University, Halifax, NS, Canada, 4Atlantic Assisted Reproductive Technologies, Halifax, NS, Canada

P-119 IS THERE A RELATIONSHIP BETWEEN MITOCHONDRIAL DNA CONTENT AND ABORTION RATE IN PATIENTS UNDERGOING SINGLE EUPLID EMBRYO TRANSFER? Ahmed El-Damen, MSc, Ibrahim Elkhatib, MSc, Asina Bayram, MSc, Ana Armanz, MSc, Suzan Samir, BVM, Neelke De Munk, PhD, Barbara Lawrenz, MD, PhD and Human M Fatemi, MD, PhD, IVIRMA Middle East Fertility Clinic, Abu Dhabi, United Arab Emirates

P-120 FROZEN-THAWED EMBRYO TRANSFER IS BETTER THAN FRESH EMBRYO TRANSFER IN GnRH ANTAGONIST CYCLE IN NORMO-RESPONDERS: A RETROSPECTIVE COHORT STUDY. Xitong Liu, Resident and Haiyan Bai, Physician, Northwest women’s and children’s hospital, Xi’an, China

P-121 REGAINING OF FULL EXPANDED STAGE AT 3 HOURS POST-WARMING IS A SUPERIOR MORPHOLOGICAL MARKER FOR LIVE BIRTH RATES IN VITRIFIED-WARMED SINGLE BLASTOCYST TRANSFER CYCLES. Natchandra Manoharanoo Chimote, M.Sc., Ph.D and Bindu N. Chimote, M.Sc., M.Phil, Ph.D.(Biochemistry); M.Sc. Clinical Embryology (Leeds-UK), 1Scientific Director, Vaunshdhara Fertility Centre, Nagpur, India, 2Consultant Clinical Embryologist, Nagpur, India

P-122 DOUBLE EMBRYO TRANSFERS OF POOR QUALITY BLASTOCYSTS GIVE THE SAME LIVE BIRTH RATE AS A SINGLE EMBRYO TRANSFER OF A GOOD QUALITY BLASTOCYST. Maiko Hanada, Associate, Ogikubo hospital Niji clinic, Tokyo, Japan

P-123 THE IMPACT OF TEMPERATURE AND RELATIVE HUMIDITY ON OUTCOMES OF OVARIAN STIMULATION AND IN VITRO FERTILIZATION USING AN OOCYTE DONATION COHORT. Audrey J Gaskins, ScD, Zsolt Peter Nagy, MD, PhD, Sarah M Capelouto, MD, Daniel B Shapiro, MD, Jessica B Spencer, MD, MSc and Heather S Hipp, MD, 1Emory University, Atlanta, GA, 2Reproductive Biology Associates, Atlanta, GA, 3The University of Texas, Southwestern Medical Center, Dallas, TX

P-124 TIMING OF BLASTOCYST DEVELOPMENT IS THE SOLE PREDICTOR OF POSITIVE PREGNANCY OUTCOME IN ADVANCED MATERNAL AGE PATIENTS FOLLOWING SINGLE EUPLID BLASTOCYST TRANSFER. Mandy G Katz-Jaffe, Ph.D., Annette Matts, MS, Amy Bartoli, MS, Diane Klepacka, MS, Danielle Young, MS, Emily Anderson, BS, Michelle M Denomme Tignanelli, PhD and William B Schoolcraft, MD, Colorado Center for Reproductive Medicine, Lone Tree, CO

P-125 AUTOMATED HALO IDENTIFICATION: A NOVEL PREDICTIVE FEATURE FOR IVF SUCCESS IDENTIFIED THROUGH AN ARTIFICIAL INTELLIGENCE (AI) ALGORITHM. Marcos Meseguer, PhD, Ron Uriel Maor, BSc, Lucia Alegre, PhD, Raquel Del Gallego, PhD, Antonio Pellicer, MD, PhD, Daniel S Seidman, M.D, MMSsc and Daniella Gilboa, MSc, 1IVIRMA Global, Valencia, Spain, 2AIVF, Tel Aviv, Israel, 3The Foundation For Embryonic Competence, Basking Ridge, NJ, 4Department of Obstetrics and Gynecology Sheba Medical Center affiliated to The Sackler Faculty of Medicine, Tel Aviv, Israel

P-126 HIGHER CUMULATIVE LIVE BIRTH RATES (CRLBR) ARE EXPECTED WITH A FREEZE-ALL POLICY AS COMPARED TO A FRESH EMBRYOTRANSFER POLICY, WHEN MORE THAN TWO BLASTOCYSTS ARE AVAILABLE. Petroula Tatsi, MSc, Tatiana Chartomatisdou, MSc, Christina Vlachou, MSc, George Michos, MD, PhD, Robert Najdecki, MD, PhD, Evangelos Papanikolaou, MD, PhD, Eros Nikitos, MSc and Evangelia Timotheou, MSc, 1Assisting
Nature, Center of Assisted Reproduction and Genetics, Thessaloniki, Greece, 23rd Department of Obstetrics and Gynecology, Aristotle University of Thessaloniki, Thessaloniki, Greece, 3Institute of Life, Athens, Greece

P-127 IMPACT OF MEIOTIC SPINDLE IMAGING ON FERTILIZATION, EMBRYO DEVELOPMENT, CLINICAL OUTCOME AND MORPHOKINETIC PARAMETERS: AN ANALYSIS OF 415 IN-VIVO MATURED AND 317 IN-VITRO MATURED HUMAN OOCYTE SIBLINGS. Yukiko Nakajo, AS1, Nobuya Aono, Ph.D.,2 Hiromitsu Hattori, M.Sc.,1 Yusuke Nakamura, BS1, Chiyuri Kumaos, BS1, Noriyuki Okuyama, M.Sc.,3 Tomoko Hashimoto, M.D., Ph.D.,3 Mayumi Toya, M.D., Ph.D.,1 Hideki Igarashi, M.D., Ph.D.1 and Koichi Kyono, M.D., Ph.D.,3;1Kyoto ART Clinic, Sendai, Miyagi, Japan, 23-13-1, takanawa, Minato-ku, Tokyo, Japan, 3Kyoto ART Clinic Takanawa, Tokyo, Japan

P-128 CORRELATION BETWEEN BLASTOCYST STAGE OF EXPANSION AND CLINICAL OUTCOME: A RETROSPECTIVE ANALYSIS OF 810 SINGLE EUPLOID BLASTOCYST TRANSFER CYCLES AT A SINGLE IVF CENTER. Vikrant V Reddy, MSc1, Qianying Zhao, MSc2, Odgerel Badamjav, MSc1, Jennifer Dasig, MSc1, Jeong Hee Moon, Ph.D.,1 Yimin Qin, Ph.D.,1 Ali Masoudi, BS1, Kenney Tuyen, BS1 and Barry R Behr, Ph.D.,3 1Stanford University Medical Center (LPCH), Sunnyvale, CA, 2Stanford Fertility and Reproductive Medicine Center (LPCH), Sunnyvale, CA, 3Stanford Fertility and Reproductive Medicine Center, Sunnyvale, CA

P-129 PREGNANCY OUTCOMES OF FROZEN THAWED CLEAVAGE STAGE EMBRYOS WITH OR WITHOUT EXTENDED CULTURE TO BLASTOCYST STAGE. Cindy Chan, MD, Huang Yung Ling, MS, Chi-Huang Chen, MD, PhD and Chi-Ruey Tzeng, MD, MPH, Taipei Medical University Hospital, Taipei, Taiwan

P-130 FACTORS PREDICTIVE OF HAVING SUPERNUMERARY EMBRYOS IN FREEZE-ALL CYCLES: AN ANALYSIS OF SART CORS DATA. Yetunde O. Ibrahim, MD1, Greg Stoddard, MS2 and Erica Johnstone, MD3; 1Utah Center for Reproductive Medicine, Salt Lake City, UT, 2Affiliation not provided, 3University of Utah, Salt Lake City, UT

P-131 LIVE BIRTH DATA FROM 498 ELECTIVE AND NON-ELECTIVE AUTOLOGOUS OOCYTE THAW CYCLES (2009-2018). Anne Martini, DO1, Rachel Horowitz, MD2, Kate Devine, MD3

Jui-He Tsai, PhD3, Micah J Hill, DO1, Alan H DeCherney, MD1, Joseph Doyle, MD3 and Caleb Kalen, MD, PhD2; 1National Institute of Child Health and Human Development, NIH, Bethesda, MD, 2Shady Grove Fertility and Lankenau Medical Center, Philadelphia, PA, 3Shady Grove Fertility, Rockville, MD

P-132 WHAT ARE THE CHANCES OF SUCCESS FOR COUPLES PERFORMING AN IVF CYCLE WITH ONLY POOR QUALITY DAY-3 EMBRYOS CULTURED TO THE BLASTOCYST STAGE? Camille Gryselle, MD, Simon Phillips, PhD, Lise Preaubert, MD, PhD and Louise Lapensée, MD, Ovo Clinic, Montréal, QC, Canada

P-133 SUITABLE TIMING TO TRANSFER BLASTOCYSTS VITRIFIED ON DAY 6 IN FROZEN-THAWED CYCLES MAY BE DAY 5, NOT DAY 6. Huiing Xu, master1, Shumin Qiu, bachelor2 and Beihong Zheng, bachelor3; 1Fujian Provincial Maternity and Children’s Hospital, FuZhou, China, 2Affiliation not provided

P-134 DOES THE DAY OF FINAL OOCYTE MATURATION INJECTION PREDICT OUTCOMES IN COUPLES UNDERGOING IN VITRO FERTILIZATION/INTRACYTOPLASMIC SPERM INJECTION — AN ANALYSIS BASED ON AGE AND INDIVIDUAL CONTROLLED OVARIAN STIMULATION PROTOCOL. Abey Eappen, MBBS DRCOG PhD, Amy E Sparks, PhD, Yunshu Zhou, MS, Karen M Summers, MPH CHES, Patrick Ten Eyck, MS PhD and Eyup Hakan Duran, MD, University of Iowa, Iowa City, IA

P-135 ASSISTED HATCHING: IS IT ALL IT’S CRACKED UP TO BE? Charis E Ng, BHSc1, Marta Wais, MD1 and Crystal Chan, MD, MSc2; 1University of Toronto, Toronto, ON, Canada, 2Lunenfeld-Tanenbaum Research Institute, Mount Sinai Hospital, Toronto, ON, Canada

P-136 RELATIONSHIP BETWEEN THE PREGNANCY AND THE SIZE OF ARRESTED BLASTOMERE DERIVED FROM ABNORMAL CYTOKINESIS IN BLASTOCYST TRANSFER CYCLES. Hiroki Izumi, M.S1, Manabu Satoh, Ph.D.1, Shu Hashimoto, Ph.D.2, Yoshiharu Nakaoka, MD, PhD.1 and Yoshiharu Morimoto, MD, PhD.1, IVF NAMBA CLINIC, Osaka, Japan, 2Reproductive Science, Osaka City University Graduate School of Medicine, Osaka, Japan, 3HORAC Grand Front Osaka clinic, Osaka, Japan

P-137 EMBRYO SELECT ASSAY: A NON-INVASIVE, DIPSTICK ELISA STRIP ASSAY TO IDENTIFY...
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INTENTIONAL ENDOMETRIAL INJURY TRYING TO IMPROVE CLINICAL OUTCOMES OF AN OOCYTE DONATION PROGRAM IN PATIENTS WITHOUT RIF. INTERYM ANALYSIS OF A RANDOMIZED CONTROLLED TRIAL. Carmen Vidal, M.D., Ph.D.¹, Juan Giles, M.D., Ph.D.², Elena Labarta, MD PhD³, Gemma Castillon, M.D., Ph.D.⁴, Javier Martinez-Salazar, MD⁵, Laura Fernandez, MD⁶, Yanira Ayllon Sr., MD⁷, Manuel Muñoz, MD⁸, Jose Belver, MD PhD⁹, Antonia Tocino Sr., MD¹⁰, Elkin Muñoz, M.D., Ph.D.¹¹, Antonio Pellicer, MD PhD¹² and Nicolas Garrido, PhD¹³. IVI-RMA, Valencia, Spain, ¹IVI-RMA Valencia, Valencia, Spain, ²IVI-RMA Valencia, Spain, ³IVI-RMA Barcelona, Barcelona, Spain, ⁴IVI- Madrid, Madrid, Spain, ⁵IVI Murcia, Murcia, Spain, ⁶IVI-RMA Las Palmas de GC, Spain, ⁷IVI-RMA ALICANTE, Alicante, Spain, ⁸Affiliation not provided, ⁹IVI RMA Sevilla, SEVILLA, Spain, ¹⁰IVI-RMA Vigo, Vigo, Spain, ¹¹IVI Foundation, IIS La Fe, Valencia, IIS, Spain

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Yanping Li, PhD, Xiangya hospital Central-south university, Changsha, China

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Xiaoyan Chen, PhD, The Chinese University of Hong Kong, Hong Kong

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Anna Sokalska, MD, PhD, Nathanael C Koelper, MPH, Charikleia Kaliora, MD, Monica Mainigi, MD, Christos Coutifaris, MD, PhD and Suneeta Senapati, MD, MSCE, University of Pennsylvania, Philadelphia, PA

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Federico Galera Fernandez, OBGYN1, Enriqueta Garijo Lopez, OBGYN1, Carmen Galera, Biologist2 and Laura Garcia Bernardo, OBGYN2, 1Instituto Madrileño de Fertilidad, Madrid, Spain, 2IMF, Madrid, Spain, 3Instituto Madrileño de Fertilidad, Madrid, Spain

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Sydney Chang, MD1, Taraneh Gharib Nazem, MD1, Dmitry Gounko, MA2, Joseph A. Lee, BA2, Alan B Copperman, MD1 and Eric Flisser, MD2, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY

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Jenna Reich, BS1, Jennifer K Blakemore, BS1, Alan B Copperman, MD1 and James A Grifo, MD, PhD1, 1NYU School of Medicine, New York, NY, 2NYU Langone School of Medicine, New York, NY, 3NYU Langone Prelude Fertility Center, New York, NY
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P-160  **“PREDICTIVE VALUE OF SERUM PROGESTERONE LEVEL ON DAY 4, DAY 7 AND DAY 11 AFTER BLASTOCYST TRANSFER IN A HORMONAL REPLACEMENT THERAPY CYCLE.”** Elena Labarta, MD PhD1, Giulia Mariani, MD2 and Ernesto Bosch, MD PhD1, 1IVI-RMA, Valencia, Spain, 2IVI-RMA, Valencia, Valencia, Spain.

P-161  **THE PREDICTIVE VALUE OF FSH BASAL LEVELS FOR ART OUTCOMES IS AGE DEPENDENT.** Jose Buratini, DVM, PhD, Claudio M.M Brigante, MD, Silvana Gippone, MD, Mara Zanirato, MD, Maria Cristina Guglielmo, BSc, PHD, Mariabeatrice Dal Canto, BSc, PhD, Mario Mignini Renzini, MD and Rubens Fadini, MD, Biogenesi Reproductive Medicine Centre, Monza, Italy.

P-162  **THE IMPACT OF SPONTANEOUS LH SURGE DURING A NATURAL CYCLE FROZEN EMBRYO TRANSFER.** Jasymn K Johal, MD, MSc1, Brindha Bavan, MD1, Ruth B Lathi, MD2 and Amin A Milki, MD2, 1Stanford University, Stanford, CA, 2Stanford Fertility and Reproductive Medicine Center, Sunnyvale, CA.

P-163  **THE RELATIONSHIP BETWEEN ANTI-MÜLLERIAN HORMONE AND ANEUPLOIDY IN REPRODUCTIVE-AGE WOMEN UNDERGOING PREIMPLANTATION GENETIC TESTING: IS THERE A CORRELATION?** Monica Pasternak, MD1, Micha Thompson, BA1 and Steven Spandorfer, M.D.2, 1Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, New York, NY, 2The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY.

P-164  **DO PROGESTERONE LEVELS ON DAY OF EMBRYO TRANSFER CORRELATE WITH PREGNANCY OUTCOMES IN ARTIFICIAL FROZEN-THAW CYCLES?** Michelle Volovsky, MBBS (Hons)1, Cassandra Louise Pakes, MD2, Genia Rozen, MBBS (Hons), FRANZCOG3 and Alex Polyakov, MBBS, FRANZCOG, MClintEpid, MReproMed, GradCertEBM4, 1Royal Women’s Hospital, Melbourne, VIC, Australia, 2Royal Women’s Hospital, Melbourne, VIC, Australia, 3Royal Women’s Hospital, Melbourne IVF, Melbourne, VIC, Australia, 4University of Melbourne and Melbourne IVF, Melbourne, VIC, Australia.

P-165  **COMPARING FROZEN EMBRYO TRANSFER OUTCOMES WITH BASELINE LH LEVELS.** Ariel Z Benor, M.D. and Richard Grazi, M.D., Maimonides Medical Center, Brooklyn, NY.

P-166  **SERUM HCG LEVEL MEASURED 5 DAYS AFTER SINGLE THAWED BLASTOCYST TRANSFER AS A PREDICTOR OF OUTCOME.** Angela H Liu, MD1, Ankita Raman, MD1, Carrie E Bedient, MD2, Leah A Kaye, MD2, Forest C Garner, MS2 and Bruce Shapiro, M.D., Ph.D., H.C.L.D.2, 1University of Nevada, Las Vegas, Las Vegas, NV, 2Fertility Center of Las Vegas, Las Vegas, NV.

P-167  **A NOVEL CYTOKINE PANEL CAN BETTER PREDICT OOCYTE COMPETENCY IN OVERWEIGHT PATIENTS.** Miranda K Defer, BA, Brandon A Wyse, MSc, Peter Szaraz, PhD, Sahar Jahangiri, MSc, Noga Fuchs Weizman, MD and Clifford Lawrence Librach, MD, CReATe Fertility Centre, Toronto, ON, Canada.

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P-168  **IN PATIENTS WITH SUB-OPTIMAL ENDOMETRIAL LINING, DOES THE ROUTE OF ADMINISTRATION OF SUPPLEMENTAL ESTROGEN CORRELATE WITH FROZEN EMBRYO TRANSFER OUTCOMES?** Devora Aharon, MD1, Sass Wodoslawsky, BA2, Ariel Megan Schnur, RN, BSN1, Jordyn Banks, RN2, Melissa Bell, RN2, Margaret Danevko, RN2, Lawrence Grunfeld, MD2 and Alan B Copperman, MD1, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY.

P-169  **NATURAL FROZEN EMBRYO TRANSFER WITH HCG BOOSTER FOR OPTIMIZATION OF CYCLE OUTCOMES: A RETROSPECTIVE COHORT STUDY.** Claire Stewart, BA1, David Reichman, MD2 and Zev Rosenwaks, M.D.3, 1Weill Cornell Medical College, New York, NY, 2Weill Cornell Medicine, New York, NY, 3The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY.
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P-181 LEVERAGING A COMPOSITE OVARIAN RESERVE SCORE IN A MACHINE LEARNING MODEL OF LIVE BIRTH OUTCOMES IN IVF. Karen Hunter Cohn, PhD,1 Cameron Wellock, PhD,1 Piraye Yurttas Beim, PhD1 and Polaris Data Network, 1Celmatix, NEW YORK, NY

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P-183 INCREASED OCCURRENCE OF TWIN AND VERY PRE-TERM BIRTHS IN PATIENTS UNDERGOING IN VITRO FERTILIZATION (IVF) USING FROZEN DONOR OOCYTES. Luke Y. Ying, M.D.1, James Baron, M.D.1, Mark D. Sanchez, M.D.1 and Ying Ying, Ph.D.2, 1HCA West Florida GME Consortium/Brandon Regional Hospital, Brandon, FL, 2University of South Florida Department of Obstetrics and Gynecology, Tampa, FL


P-185 EFFECT OF VARIATION IN LABORATORY AND CLINICAL PRACTICES DURING THE LAST DECADE ON IVF OUTCOME. Maria Teresita W. Lao, MSc1, Rajput Isha, M.Med Sci2, Essam S.N. Michael, M.D.1, Alex C Varghese, Ph.D1 and Kannamannnadayar Jayaprakasan, Ph.D.2, 1Astra Fertility Clinic, Mississauga, ON, Canada, 2Department of Obstetrics and Gynecology, Royal Derby Hospital and University of Nottingham, United Kingdom

P-186 CONCENTRATIONS OF STROMAL CELL-DERIVED FACTOR-1 IN HUMAN FOLLICULAR FLUIDS ARE ASSOCIATED WITH CLINICAL IN VITRO FERTILIZATION OUTCOMES. Hidetaka Okada, MD and Akemi Nishigaki, PhD, Kansai Medical University, Hirakata, Japan

P-187 PREDICTIVE FACTORS FOR OOCYTE RETRIEVAL FAILURE IN TREATMENT CYCLES WITH ASSISTED REPRODUCTIVE TECHNOLOGY: A RETROSPECTIVE COHORT STUDY USING THE NATION-WIDE ART REGISTRY OF JAPAN. Toshibumi Takahashi, M.D. and Kunichi Ota, M.D., Fukushima Medical University, Hirakata, Japan

P-188 PREDICTING CLINICAL PREGNANCY BY MACHINE LEARNING ALGORITHM USING NONINVASIVE EMBRYO MORPHOKINETICS AT AN ACADEMIC CENTER. Liubin Yang, MD, PhD1, Mary Peavey, MD2, Khalied Kaskar, MS1, Neil Chappell, MD, MCS1, Darius J Devlin, BS3, Terri Woodard, MD1, Paul Zarutskie, MD1, Richard Cochran, PhD1 and William Gibbons, MD, 1Baylor College of Medicine, Houston, TX, 2University of North Carolina, Chapel Hill, NC, 3Interdepartmental Program in Translational Biology & Molecular Medicine, Baylor College of Medicine, Houston, TX

P-190 IMPROVING IMPLANTATION RATE BY ADDING RECOMBINANT LH SUPPLEMENTATION TO RECOMBINANT FSH DURING CONTROLLED OVARIAN STIMULATION IN GnRH ANTAGONIST REGIMEN. Edson Borges Jr., PhD1, Daniela Paes de Almeida Ferreira Braga, PhD1, Matheus de Castro Azevedo, BSc2, Assumpção Iaconelli Jr., MD1 and Amanda Souza Setti, MSc1, 1Fertility Medical Group / Sapientiae Institute, Sao Paulo, Brazil, 2Fertility Medical Group, Sao Paulo, Brazil

P-191 FRESH VERSUS FREEZE-ALL STRATEGY IN ASSISTED REPRODUCTIVE TECHNOLOGY – A COCHRANE REVIEW. Tjitske Zaat, MD, (MSc), Miriam S. Zagers, MSc., Femke Mol, M.D., PhD, Mariette Goddijn, Prof. Dr. MD, PhD., M. van Wely, Dr. PhD. and Sebastiaan Mastenbroek, PhD, Amsterdam UMC, University of Amsterdam, Center for Reproductive Medicine, Amsterdam Reproduction & Development Research Institute, Meibergdreef 9, Amsterdam, Amsterdam, Netherlands

P-192 PREDICTING CUMULATIVE LIVE BIRTH RATE FOR THE FIRST CYCLE OF IN VITRO FERTILIZATION. Yao Lu, M.D.1, Guiquan Wang, M.D.1, Steven R. Lindheim, M.D.2 and Yun Sun, M.D.1, 1Center for Reproductive Medicine, Ren Ji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China, 2Wright State University, OB/GYN, Dayton, OH

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P-194 ASSOCIATION OF THE VAGINAL MICROBIOME WITH PROPHYLACTIC ANTIBIOTIC EXPOSURE AND CLINICAL OUTCOMES IN WOMEN UNDERGOING IN VITRO FERTILIZATION: A RANDOMIZED CONTROLLED PILOT STUDY. Ashley Eskew, MD, MSCI1, Bronwyn Bedrick, BA2, Joan Riley, PhD, HCLD3, Emily S Junghem, MD, MSCI1 and Kristine Wylie, PhD1, 1Washington University School of Medicine, St. Louis, MO, 2Washington University in St. Louis, Saint Louis, MO, 3Washinon University School of Medicine, St. Louis, MO

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C Petrini, MD1, Alexis Melnick, MD1 and Zev Rosenwaks, M.D., 1 The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY, 2New York Presbyterian Well Cornell, New York, NY, 3Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, New York, NY

P-257 EFFECT OF DUAL TRIGGER ON THE OUTCOME OF CONTROLLED HYPERSTIMULATION IN ART CYCLES. N Sanjeeva Reddy, MD (Obstetrics and Gynecology), DGO1, Ujwala Jati, MS (Ob & Gyn)2, Radha Vembu, DGO, DNB (Obstetrics and Gynecology), MNAMS, FICS, FIGOG, PhD3, Monna Pandurangi, MD (Ob & Gyn)2 and Siddhartha Nagireddy, MCh(Reproductive medicine and surgery)4, 1Professor and Head, Department of Reproductive Medicine and Surgery, Sri Ramachandra Institute of Higher Education and Research, Chennai, India, 2Fellow in Reproductive Medicine, Department of Reproductive Medicine and Surgery, Sri Ramachandra Institute of Higher Education and Research, Chennai, India, 3Associate Professor, Department of Reproductive Medicine and Surgery, Sri Ramachandra Institute of Higher Education and Research, Chennai, India, 4Assistant Professor, Sri Ramachandra Institute of Higher Education and Research, Chennai, India

NURSING

P-258 CONTENT AND ACCURACY OF FERTILITY COUNSELING VIA ASYNCHRONOUS DIGITAL WOMEN’S HEALTH CLINICS. Lindsey N Ulin, B.S., 1 and Rashmi Kudesia, MD2, 1McGovern Medical School at The University of Texas Health Science Center at Houston, Houston, TX, 2CCRM Fertility Houston, Houston, TX

P-259 WITHDRAWN

P-260 OPTIMIZING UTILIZATION OF EMOTIONAL SUPPORT DURING INFERTILITY TREATMENT. Sarah A Hirsch, DO1, Pippa Simpson, PhD2, Kathryn E Flynn, PhD1, Melodee Nugent, MA1 and Abbey Kruper, PsyD1, 1Medical College of Wisconsin, Milwaukee, WI, 2Affiliation not provided

P-261 A NEW ERA IN MEDICINE: SOCIAL MEDIA AND PATIENT CARE. Anisa Hussain, MA1, Jacqueline Sehring, MA1, Elisabeth Rosen, BS, MA1, Lauren Grimm, MA1, Jody M Esquerra, MA1, Karine Matevossian, DO2, Ruchi Kaushik Amin, MD3, Roohi Jeelani, MD1 and Angeline Beltsos, MD1, 1Vias Fertility Institute, Chicago, IL, 2Advocate Lutheran General Hospital, Park Ridge, IL, 3Wayne State University, Detroit, MI

P-262 DOES FERTILE YOGA CLASS REDUCE STRESS AND SADNESS AND PROVIDE HOPE FOR INFERTILE PATIENTS IN TREATMENT IN A PRIVATE FERTILITY PRACTICE? Lisa Rosenthal, BA, MA1, Hannah Shakartzi, M.D.2, Shehzeen Kamil, M.D.2, Robin Mangieri, MA1, Mark Leonides, M.D.1 and Spencer S Richlin, M.D.1, 1Reproductive Medicine Associates of Connecticut, Norwalk, CT, 2The Stamford Hospital Dept of OB/GYN, Stamford, CT

P-263 EFFECT OF MUSIC IN REDUCING PATIENT ANXIETY DURING COLPOSCOPY: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS. Ahmed M. Abdelhalim, MBBSCh, Ahmed Samy, MD1 and Ahmed M Abbas, MD2, 1Kasr Al-Ainy Faculty of Medicine, Cairo University, Cairo, Egypt, 2Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt

OBESITY

P-264 DIETARY PATTERNS ARE ASSOCIATED WITH OVARIAN RESERVE IN OVERWEIGHT AND OBESE WOMEN IN A REPRODUCTIVE AGE COHORT. Ashley Eskew, MD, MSCI1, Bronwyn Bedrick, BA2, Joan Riley, PhD, HCLD2, Jorge E Chavarro, MD, Sc.D.4 and Emily S Junghen, MD, MSCI1, 1Washington University School of Medicine, St. Louis, MO, 2Washington University in St. Louis, Saint Louis, MO, 3Washington University School of Medicine, St. Louis, MO, 4Harvard School of Public Health, Boston, MA

P-265 OBESITY CAUSES SIGNIFICANT CHANGES TO THE HUMAN SPERM PROTEOME. Taylor Pini, PhD1, Jason C Parks, BS1, Monika Dzieciatkowska, PhD2, Kirk C Hansen, PhD2, William B Schoolcraft, MD2 and Mandy G Katz-Jaffe, Ph.D.1, 1Colorado Center for Reproductive Medicine, Lone Tree, CO, 2Affiliation not provided

P-266 IMPACT OF OBESITY ON OOCYTE CRYOSURVIVAL AFTER VITRIFICATION. Luis R. Hoyos, M.D.1, Connie Y Cheng, M.D.2, Carrie Riestenberg, MD3, Abigail A. Armstrong, M.D.2 and Molly M Quinn, MD3, 1UCLA, Los Angeles, CA, 2Affiliation not provided, 3University of California, Los Angeles, Los Angeles, CA
P-267 OBESITY IS ASSOCIATED WITH INCREASED QUANTITY BUT NO DIFFERENCE IN QUALITY OF OOCYTES AND EMBRYOS IN WOMEN WITH LOW ANTI-MULLERIAN HORMONE LEVEL. Guifeng Xu, M.D., Ph.D., and Catherine Racowsky, Ph.D. 1 Brigham and Women’s Hospital, BOSTON, MA, 2 Brigham and Women’s Hospital, Boston, MA

P-268 ABC TRIAL: BODY MASS INDEX AND PERCENTAGE BODY FAT ARE NOT DIFFERENT IN POSITIVE PREDICTIVE VALUE OF MISCARRIAGE OR PRETERM DELIVERY IN PATIENTS UNDERGOING IVF. Julia G Kim, MD, MPH1, George Patounakis, MD, PhD2, Caroline R Juneau, MD3, Jason M Franasiak, MD1, Scott J Morin, MD1, Shelby A Neal, MD1, Ashley W Tiegs, MD1, Emily K Osman, MD1, Brent M Hanson, MD1, Emre Selif, M.D.1 and Richard Thomas Scott Jr., MD1, 1IVI-RMA New Jersey, Basking Ridge, NJ, 2IVI-RMA Florida, Lake Mary, FL, 3Audubon Fertility, New Orleans, LA, 4IVI-RMA Northern California, San Francisco, CA

P-269 LIFESTYLE MODIFICATIONS IN MALE PARTNERS OF SUBFERTILE COUPLES IN WHICH THE SPOUSE IS OBESE IMPROVES THE CHANCES OF THE COUPLE TO CONCEIVE. Matea Belan, MSc1, Belina Carranza-Mamane, MD2, Youssef AinMelk, MD3, Marie-Héliène Pesant, MD4, Karine Duval, PhD1, Farrah Jean-Denis, MSc1, Marie-France Langlois, MD1 and Jean-Patrice Baillargeon, MD4, 1Research Center of the Centre Hospitalier Universitaire de Sherbrooke, Sherbrooke, QC, Canada, 2Université de Sherbrooke, Sherbrooke, QC, Canada, 3Université de Sherbrooke - Department of Obstetrics and Gynecology, Sherbrooke, QC, Canada, 4Université de Sherbrooke, Department of Medicine, Sherbrooke, QC, Canada

P-270 IMPACT OF BMI ON PREGNANCY OUTCOMES WITH RESPECT TO DIFFERENTIAL TSH LEVELS. Maria Bustillo, M.D.1, Ineabelle Collazo, BS2, Jessica Lapalme Ricard, BS2, Juergen Eisermann, M.D.1, Nicholas Hendon, BS1 and Himanshu Arora, PhD2, 1IVFMD, South Florida Institute for Reproductive Medicine, MIAMI, FL, 2University of Miami Miller School of Medicine, Miami, FL

P-271 THE EFFECT OF BODY MASS INDEX (BMI) ON INTRATERTERINE INSEMINATION (IUI) CYCLE SUCCESS. Rachel M. Whynott, M.D.1, Karen M Summers, MPH CHES2, Amy E Sparks, PhD3 and Rachel Mejia, D.O.2, 1University of Iowa Hospitals and Clinics, Iowa City, IA, 2University of Iowa Center for Advanced Reproductive Care, Iowa City, IA

P-272 DIET, OBESITY, AND OVARIAN RESERVE IN A HEALTHY REPRODUCTIVE AGE COHORT. Bronwyn Bedrick, BA1, Ashley Eskew, MD2, Jorge E Chavarro, MD, Sc.D.3, Joan Riley, PhD, HCLD4 and Emily S Junghem, MD, MSCI5, 1Washington University in St. Louis, St Louis, MO, 2Washington University School of Medicine, St. Louis, MO, 3Harvard School of Public Health, Boston, MA, 4Washington University School of Medicine, St. Louis, MO

OVARIAN HYPERSTIMULATION SYNDROME

P-273 A NOVEL GnRH ANTAGONIST PROTOCOL BY SWITCHING ANTAGONIST TO PROVERA TO PREVENT PREMATURE LUTEINIZING HORMONE SURGE WHEN PATIENTS TURNED OUT TO BE AT HIGH RISK OF OVARIAN HYPERSTIMULATION SYNDROME DURING OVARIAN STIMULATION. Ting-Chi Huang, MD1, Jiann-Loung Hwang, MD2, Kuang-Han Chao, M.D.1, Mei-Jou Chen, MD, PhD1, Chu-Chun Huang, MD1 and Shee-Uan Chen, MD, PhD1, 1National Taiwan University Hospital, Taipei, Taiwan, 2IVF Taipei, Taiwan

P-274 ANALYSIS OF THE EFFECT OF A DELAYED SECOND DOSE OF GONADOTROPIN RELEASING HORMONE-AGONIST (GnRH-A) ON OOCYTE AND BLASTOCYST QUALITY AND RISK OF OVARIAN HYPERSTIMULATION SYNDROME (OHSS). Emily Michelle Weidenbaum, MD1, Jennifer K Blakemore, MD2 and James A Grifo, MD, PhD3, 1New York University, New York, NY, 2NYU Langone School of Medicine, New York, NY, 3NYU Langone Prelude Fertility Center, New York, NY

P-275 WITHHOLDING LUTEAL HCG IS ASSOCIATED WITH DECREASED LIVE BIRTH (LB) IN WOMEN AT HIGH RISK FOR OVARIAN HYPERSTIMULATION SYNDROME (OHSS) DESPITE “INTENSIVE” LUTEAL SUPPORT WITH INTRAMUSCULAR PROGESTERONE (IMP). Lauren A Bishop, MD1, Natalie Clark Stentz, MD, MSCE2, Micah J Hill, DO3, Kate Devine, MD4, Saioa Torralday, MD5, Eric A Widra, M.D.6, Alan H DeCherney, MD7 and Frank E Chang, MD7, 1NIH, Bethesda, MD, 2Shady Grove Fertility, Atlanta, GA, 3National Institute of Child Health...
OVARIAN STIMULATION

P-278 EFFECTIVENESS AND OPTIMAL DOSE OF CHLORMADINONE ACETATE (CMA) AS PROGESTIN-PRIMED OVARIAN STIMULATION. Ari Kobayashi, RN, Emiko Funahashi, RN, Chiharu Tanaka, RN, Sachiko Nonaka, RN, Atsuko Tanaka, RN, Marina Kiuchi, RN, Yumi Suzuki, Medical doctors clerk, Chihiro Kumo, BS, Mizuho Takahashi, BS, Noriyuki Okuyama, M.Sc., Nobuya Aono, Ph.D., Yoshihiro Tani, M.D., Ph.D., Mayumi Toya, M.D., Ph.D., Hideki Igarashi, M.D., Ph.D., Suguru Kikuchi, M.D., Ph.D., Tomoko Hashimoto, M.D., Ph.D., and Koichi Kyono, M.D., Ph.D., "Kyono ART Clinic Takanawa, Tokyo, Japan, "Kyono ART clinic, Human Ovarian tissue Preservation Enterprise (HOPE), Tokyo, Japan

P-279 DOES EXTENDING CONTROLLED OVARIAN HYPERSTIMULATION DURING A GnRH ANTAGONIST PROTOCOL IN VITRO FERTILIZATION CYCLE AFFECT OOCYTE QUALITY? Sydny Chang, MD, Taraneh Gharib Nazem, MD, Carlos Hernandez-Nieto, MD, Dmitriy Gounko, MA, Beth McAvey, MD, Daniel E. Stein, MD and Alan B Copperman, MD, "Icahn School of Medicine at Mount Sinai, New York, NY, "Reproductive Medicine Associates of New York, New York, NY

P-280 CIRCULATING MIR-181d-5p LEVELS AS PREDICTOR OF OVARIAN RESPONSE IN WOMEN UNDERGOING CONTROLLED OVARIAN STIMULATION. Maria Gabriela Mulato, BS c, Daniela Paes de Almeida Ferreira Braga, PhD, Amanda Souza Setti, MSc, Assumpeto Iaconelli Jr., MD, Edson Borges Jr., PhD and Murilo Vieira Geraldo, PhD, "UNICAMP, Campinas, Brazil, "Fertility Medical Group SAPientia Institute, Sao Paulo, Brazil

P-281 PHYSICIANS SHOULD AVOID CHANGING A PATIENT’S OVARIAN STIMULATION PROTOCOL FOR THE PURPOSE OF IMPROVING LABORATORY OUTCOMES. Kaitlyn Wald, MD, Eleni A Greenwood, MD, MSc, Marcelle I Cedars, MD and Mitchell P Rosen, MD, HCLD, "University of California San Francisco, San Francisco, CA

P-282 CAN TREATMENT CHOICE AFFECT COST OF THERAPY IN PATIENTS PREDICTED TO BE HIGH-RESPONDERS? RESULTS OF AN ECONOMIC ANALYSIS OF THE MENOPUR IN GnRH ANTAGONIST SINGLE EMBRYO TRANSFER - HIGH RESPONDER (MEGASET-HR) TRIAL Andrew F Khair, PhD, MBA, Winnie Nelson, PharmD, MS, MBA, Anshul Sinha, B.Tech, Masakazu Ando, PhD, Patrick W Heiser, PhD, Jared C Robins, MD and Gaurang S Daftary, MD, MBA, "Ferring Pharmaceuticals Inc, Parsippany, NJ, "Northwestern University, Chicago, IL


P-284 EFFECT OF VARIANT β LH POLYMORPHISM (rs1800447)(TREP 8 ARG) IN AN EGYPTIAN IVF POPULATION ON OVARIAN RESPONSE IN ASSISTED REPRODUCTION. Mohamad Ghanem, MD, Ekbal Mohamed Abovahsem, MD, Nessma Ahmed Nosser, MD, Nawal A Ghereeb, MD, Reham M El-fatrahaty, MD, and Adel Alboaghday, MSc, Mansoura Integrated fertility center, Mansoura, Egypt, "Mansoura
P-285  EFFECT OF OVARIAN STIMULATION OF OOCYTE DONORS ON IN-VITRO FERTILIZATION OUTCOMES. Heather S Hipp, MD,1, Audrey J Gaskins, ScD1, Zsolt Peter Nagy, MD, PhD2, Sarah M Capelouto, MD3, Daniel B Shapiro, MD2 and Jessica B Spencer, MD, MSc1, 1Emory University, Atlanta, GA, 2Reproductive Biology Associates, Atlanta, GA, 3The University of Texas, southwestern medical center, Dallas, TX

P-286  THE IMPACT OF FOLLISTATIN HORMONE ON OVARIAN RESPONSE. Yahia Mohamed El-Faisal1, Alaa Amer, B.Sc.2, Mohamed A Abouilghar, M.D.3, Gamal Serour, M.D.4 and Ragaa Mansour, M.D., Ph.D.4, 1Cairo University, Cairo, Egypt, 2The Egyptian IVF-ET center, Maadi, Cairo, Egypt, 3Cairo University, Egyptian IVF center, Cairo, Egypt, 4The Egyptian IVF-ET center, Maadi, Al Azhar University, Cairo, Egypt

P-287  ORAL OVULATION INDUCTION MEDICATIONS VERSUS GONADOTROPINS FOR UNEXPLAINED INFERTILITY: A SYSTEMIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS. Jessica R Zolton, DO1, Peter G Lindner, M.D.,2, Nancy Terry, B.S., M.L.S.3, Alan H DeCherney, MD1 and Micah J Hill, DO1, 1National Institute of Child Health and Human Development, NIH, Bethesda, MD, 2Walter Reed National Military Medical Center, Bethesda, MD, 3NIH, Bethesda, MD

P-288  OVULATION RATE WITH LETROZOLE STAIR-STEP PROTOCOL AND IN SUBSEQUENT LETROZOLE CYCLE. Reeva B Makhijani, MD1, Chantal Bartels, MD2, Jeffrey Thorne, MD1, Grow R Daniel, MD1, John Nulsen, MD,1, Lawrence Engmann, MD, and Claudio Benadiva, MD1, 1Center for Assisted Reproductive Services, University of Connecticut School of Medicine, Farmington, CT, 2Center for Advanced Reproductive Services, University of Connecticut School of Medicine, Farmington, CT

P-289  SINGLE DOSE VERSUS 5 DAY DOING OF AN AROMATASE INHIBITOR FOR OVULATION INDUCTION. Kaitlin McGrail, MD1, Susan C Conway, MD2, John Stormert, MD2, Sarah Buzhardt, MD1 and Neil Chappell, MD, MSC1, 1LSU OB/GYN (Baton Rouge) Residency Program, Baton Rouge, LA, 2Fertility Answers, Baton Rouge, LA

P-290  PHASE 4, NON-INTERVENTIONAL, OPEN LABEL STUDY EVALUATING DOSING CHARACTERISTICS AND OVARIAN RESPONSE USING THE REDESIGNED FOLLITROPIN ALFA PEN INJECTOR IN ASSISTED REPRODUCTIVE TECHNOLOGIES (ART) TREATMENT IN ASIA: IMPROVE STUDY. Bum Chae Choi, MD, PhD1, Canquan Zhou, MD2, Hong Ye, MD3, Sun Yun, M.D.4, Ying Zhong, Doctor5, Fei Gong, PhD6, Nadezda Abramova, MD, PhD7, Salvatore Longobardi, MD7, Teoman Ulas, MD8 and Thomas D’Hooghe, MD, PhD7, 1Creation and love Women’s Hospital, Gwang-ju, Korea, Republic of (South), 2First Affiliated Hospital, Sun Yatsen University, Guangzhou, Guangdong, China, 3Chongqing Maternity and Child Healthcare Hospital, Chongqing, China, 4Center for Reproductive Medicine, Ren Ji Hospital, School of medicine, Shanghai Jiao Tong University, Shanghai, China, 5Chengdu Jinjiang District Maternal and Child Health Hospital, Chengdu Shí, China, 6Reproductive and Genetic Hospital of CITC-Xiangan, Changsha, Hunan, China, 7Merck Healthcare KGaA, Darmstadt, Germany, 8Merck Pte Ltd, Ascent, Singapore

P-291  USE OF LUTEINIZING HORMONE SUPPLEMENTATION FOR OVARIAN STIMULATION IN IVF/ICSI CYCLES OF WOMEN WITH GOOD OVARIAN RESERVE. Liang Hsuan Chen, MD, Tzu-Hsuan Chin, MD, Ya-Chiung Hsu, MD, Shang Yu Huang, MD, Hsing-Tse Yu, MD, Hsien-Ming Wu, MD, PhD, Chia-Lin Chang, MD, Hong-Yuan Huang, MD, Hsin-Shih Wang, PhD and Yung-Kuei Soong, MD, Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital Linkou Medical Center, Taoyuan, Taiwan R.O.C., Taipei, Taiwan

P-292  CHOOSING THE OPTIMUM MEDICATION AND DOSE IN OVULATION INDUCTION-INTRAUTERINE INSEMINATION CYCLES (OI-IUI) TO AVOID MULTIPLE GESTATION PREGNANCIES. M. Blake Evans, DO1, Micah J Hill, DO1, Kate Devine, MD2, Alan H DeCherney, MD1 and Natalie Clark Stentz, MD, MSCE1, 1NIH-NICHD, Bethesda, MD, 2Shady Grove Fertility, Washington D.C., DC, Shady Grove Fertility, Atlanta, GA
P-298  IN WOMEN WITH POOR OVARIAN RESPONSE, INTROOVARIAN INJECTION OF AUTOLOGOUS PLATELET RICH PLASMA IMPROVES OVARIAN RESERVE AND IVF OUTCOME PARAMETERS.
Yigit Cakiroglu, MD; Ayse Saltik, MD; Ayse Yuceturk, MD; Ozge Karaosmanoglu, MD

P-299  PREVENTION OF PREMATURE LUTEINIZING HORMONE SURGE IN POOR RESPONDERS WITH TWICE-DAILY GNRH-AGONIST ADMINISTRATION. Nigel Pereira, MD, Nirali J Shah, MD, Isaac Kligman, MD, and Zev Rosenwaks, MD

P-300  TWELVE PREGNANCIES AFTER SURGICAL ACTIVATION OF FOLLICLES IN POOR RESPONDER PATIENTS. Atsushi Tanaka, M.D., Ph.D., Motoi Nagayoshi, M.D., Izumi Tanaka, Ph.D., Takashi Yamaguchi, M.D., Ph.D., Motoharu Ohno, M.D., Masayuki Shimada, Ph.D and Kazuhiro Kawamura, M.D.

P-301  APPLICATION OF CONTROLLED OVARIAN HYPERSTIMULATION WITH AGONIST-ANTAGONIST PROTOCOL IN POSEIDON GROUP 3 AND GROUP 4 PATIENTS WITH DIMINISHED OVARIAN RESERVE. Rui Yang, Doctor; Xiaoguo Du, Master; Lixue Chen, M.D. and Xinna Chen, Professor; Peking University Third Hospital, Beijing, China

P-302  CONVENTIONAL PROTOCOL VERSUS MINIMAL OVARIAN STIMULATION IN PATIENTS WITH POOR REPRODUCTIVE PROGNOSIS ACCORDING TO POSEIDON CRITERIA. Mauro Cozzolino, M.D, Gustavo N Cecchino, M.D and Nicolas Garrido, PhD

P-303  THE EFFECTIVENESS OF TRANSDERMAL TESTOSTERONE GEL 1% (ANDROGEL) FOR POOR RESPONDERS UNDERGOING IN VITRO FERTILIZATION. Anjali Chaudhary, MD DNB, CONSULTANT AAROGYA HOSPITAL, Delhi, India

OVARIAN STIMULATION - POOR RESPONDERS

P-293  DO INFERTILE PATIENTS WHO TEST POSITIVE FOR GROWTH DIFFERENTIATION FACTOR 9 (GDF9) POLYMORPHISM C447T EXHIBIT AN ALTERED RESPONSE TO CONTROLLED OVARIAN HYPERSTIMULATION (COH)? Jenna Friedenthal, MD, Dmitry Gounko, MA, Joseph A. Lee, BA, Teresa A. Caccione, MS, CGC and Alan B Copperman, MD

P-294  OOCCYTE RECRUITMENT OF PATIENTS SUBMITTED TO THE NEW OVARIAN STIMULATION REGIMEN USING PROGESTIN TO BLOCK THE LH SURGE. Michelli Suemi Tanada, BSc, Elen Souto Vieira Porto, BSc, Ivan Henrique Yoshida, BSc, MSc, Renato de Oliveira, MD, PhD, Emerson Barchi Cordts, MD, MSc and Caio Parente Barbosa, MD, PhD, Instituto Ideia Fertil de Saúde Reprodutiva, Santo André, Brazil

P-295  COMPARISON OF TRADITIONAL AND STEP UP PROTOCOLS WITH LETROZOLE. Shelun Tsai, MD, Stephanie Smeltzer, MD and Thomas M. Price, MD, Division of Reproductive Endocrinology and Infertility, Duke University Medical Center, Durham, NC

P-296  CORIFOLLITROPIN ALFA IN THE ULTRASHORT GONADOTROPIN-RELEASING HORMONE AGONIST (GnRH-ANT) PROTOCOL: A NOVEL PATIENT-FRIENDLY ALTERNATIVE. Tzu-Ning Yu, MD, MS, Yung-Liang Liu, MD, Chi-Huang Chen, MD, PhD and Chi-Ruey Tzeng, MD, MPH, Taipei Medical University Hospital, Taipei, Taiwan, 3Tri-Serve General Hospital, National Defense Medical Center, Taipei, Taiwan

P-297  FLEXIBLE VERSUS FIXED GONADOTROPIN RELEASE IN TERCYVL ADMINISTRATION PROTOCOL (GnRH-ANT) STARTING DAY DURING CONTROLLED OVARIAN HYPERSTIMULATION IN VITRO FERTILIZATION (IVF): A SYSTEMATIC REVIEW & META-ANALYSIS. Clara Q. Wu, M.D., Cheng Wei Xiao, M.D., Paul Claman, M.D. and Doron Shmorgun, M.D., Ottawa Fertility Centre, Ottawa, ON, Canada

P-298  IN WOMEN WITH POOR OVARIAN RESPONSE, INTRAOVARIAN INJECTION OF AUTOLOGOUS PLATELET RICH PLASMA IMPROVES OVARIAN RESERVE AND IVF OUTCOME PARAMETERS. Yigit Cakiroglu, M.D.; Ayse Saltik, M.D.; Ayse Yuceturk, M.D.; Ozge Karaosmanoglu, M.D.

P-299  RESERVE AND IVF OUTCOME PARAMETERS. Pl; Yuceturk, M.D.; Yigit Cakiroglu, M.D.

P-300  TP: IIS La Fe, Valencia, IIS, Spain

P-301  M.D., Instituto Ideia Fertil de Saúde Reprodutiva, Santo André, Brazil

P-302  M.D.

P-303  MD and Emre Selii, M.D. 3. IVI-RMA New Jersey, Basking Ridge, NJ 4Prof., Acibadem Maslak Hospital Assisted Reproductive Techniques Unit., Istanbul, Turkey
PREIMPLANTATION GENETIC TESTING

P-305 IMPACT OF PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) ON GESTATIONAL CARRIER (GC) CYCLES IN THE UNITED STATES. Reeva B Makhijani, MD1, Madeline Couter, BA1, Jeffrey Thorne, MD1, Chantal Bartels, MD2, John Nelsen, MD1, Lawrence Engmann, MD1, Claudio Benadiva, MD1 and Grow R Daniel, MD1, 1Center for Assisted Reproductive Services, University of Connecticut School of Medicine, Farmington, CT, 2Center for Advanced Reproductive Services, University of Connecticut School of Medicine, Farmington, CT.

P-306 NGS EUPLOID EMBRYOS HAVE HIGHER DELIVERY RATES THAN THOSE DIAGNOSED AS EUPLOID BY aCGH/SNP. Caroline McCaffrey, Ph.D., David H. McCulloh, Ph.D., Xinjian He, MS, Patty Ann Labella, BS, Melicia Clarke-Williams, BA, Mary Elizabeth Fino, MD and James A Grifo, MD, PhD, NYU Langone Fertility Center, New York, NY.

P-307 PREIMPLANTATION GENETIC TESTING ALTERS THE SEX RATIO: AN ANALYSIS OF 44,939 CYCLES FROM THE SOCIETY FOR ASSISTED REPRODUCTIVE TECHNOLOGY DATABASE. Kathryn L Shaia, MD, MHA1, Benjamin S Harris, MD, MPH2, Tracy Truong, MS3, Carl F. Pieper, DrPH3 and Anne Z Steiner, MD, MPH3, 1Duke Center for Applied Therapeutics, Department of Surgery, Durham, NC, 2Duke University Medical Center, Durham, NC, 3Department of Biostatistics & Bioinformatics, Duke University Medical Center, Durham, NC.

P-308 BLASTOCYST CONVERSION RATE AND PLOIDY IN TRANSLOCATION CARRIERS. Iris Insogna, MD, MBE, Andrea Lanes, PhD, Ann M Thomas, PhD, Lori J Dobson, MS, LCGC, Elizabeth S Ginsburg, MD, Catherine Racowsky, PhD and Elena Yanushpolsky, MD, Brigham & Women’s Hospital, Boston, MA.

P-309 THE IDENTIFICATION OF CHROMOSOME DELETIONS IN TROPHOCYTOPLASM BIOPSIES IS SIGNIFICANTLY REPRESENTATIVE OF THE ENTIRE BLASTOCYST. Lauren Henry, BS, Rachel S Mann, BS, MS, Susanna McReynolds, PhD, Nathan McCubbin, BS, Taylor Jarvis, BS, William B Schoolcraft, MD and Mandy G Katz-Jaffee, Ph.D., Colorado Center for Reproductive Medicine, Lone Tree, CO.

P-310 IMPACT OF DIFFERENT DEGREES OF GENETIC MOSAICISM IN THE KINETIC PROFILE OF THE HUMAN EMBRYO. Angel M Bastida, MSc1, Carmen Vidal, M.D., Ph.D.3, Lorena Rodrigo, PhD2, Amparo Mercader, PhD1, Carmen Rubio, PhD4, Juan Giles, M.D., Ph.D.1, Jose de los Santos, PhD1, 1IVIRMA Valencia, Valencia, Spain, 2igenomix Spain, Paterna (Valencia), Spain, 3IVIRMA Valencia,, Valencia, Spain.

P-311 FOUR YEARS OF PROSPECTIVE MOSAIC EMBRYO TRANSFER: A SINGLE CENTER’S EXPERIENCE. Andria G Besser, MS1, Jennifer K Blakemore, MD2, Elizabeth J Del Buono, MS3, Caroline McCaffrey, Ph.D.4, David H. McCulloh, Ph.D.2 and James A Grifo, MD, PhD4, 1NYU Langone Fertility Center, New York, NY, 2NYU Langone School of Medicine, New York, NY, 3NYU Langone School of Medicine, New York, NY, 4New York Langone Health, NYU Fertility Center, New York, NY, 5NYU Langone Health, New York, NY, 6NYU Langone Prelude Fertility Center, New York, NY.

P-312 PREIMPLANTATION GENETIC TESTING (PGT) AND FROZEN EMBRYO TRANSFER (FET) SYNERGISTICALLY DECREASE PRE-TERM DELIVERY IN PATIENTS UNDERGOING IN VITRO FERTILIZATION (IVF). Luke Y. Ying, M.D.1, Mark D. Sanchez, M.D.1, James Baron, M.D.1 and Ying Ying, Ph.D.2, 1HCA West Florida GME Consortium/Brandon Regional Hospital, Brandon, FL, 2University of South Florida Department of Obstetrics and Gynecology, Tampa, FL.

P-313 HOW MANY SINGLE EMBRYO TRANSFERS WOULD BE NEEDED TO PERFORM AN EUPLOID EMBRYO TRANSFER ACCORDING TO THE AGE OF THE PATIENT? Carmen Rubio, PhD1, Mónica Clemente-Ciscar, PhD1,
P-314 ARTIFICIAL VISION AND MACHINE LEARNING DESIGNED TO PREDICT PGT-A RESULTS. Alejandro Chavez-Badiola, MD¹, Adolfo Flores-Saife Farias, MSc, PhD², Gerardo Mendizabal-Ruiz, PhD³, Andrew J Drakeley, MD FRCOG⁴, Rodolfo Garcia-Sánchez, MSc⁵ and John J Zhang, MD, PhD⁶. ¹New Hope Fertility Center Mexico, Mexico City, EM, Mexico, ²New Hope Fertility Center, Guadalajara, JA, Mexico, ³Departamento de Ciencias Computacionales, Universidad de Guadalajara, Guadalajara, JA, Mexico, ⁴Hewitt Centre for Reproductive Medicine, Liverpool Women’s Hospital, Liverpool, United Kingdom, ⁵New Hope Fertility Center Mexico, Guadalajara, JA, Mexico, ⁶New Hope Fertility Center, New York, NY

P-315 REBIOPSY OF BLASTOCYSTS REVEALS THAT NEXT GENERATION SEQUENCING PROVIDES EXCELLENT CLINICAL ACCURACY DESPITE MINOR DISCORDANCES. David H. McCulloh, Ph.D.¹, Nidhee Sachdev, MD², Caroline McCaffrey, Ph.D.³ and James A Grifo, MD, PhD⁴. ¹NYU Langone Health, New York, NY, ²OC Fertility, Newport Beach, CA, ³New York Langone Health, NYU Fertility Center, New York, NY, ⁴NYU Langone Prelude Fertility Center, New York, NY

P-316 A UNIVERSAL SINGLE TUBE PCR-BASED LIBRARY PREPARATION FOR PGT-A ALLOWING CROSS-PLATFORM NGS SEQUENCING. Melinda Jane Jasper, PhD¹, Steven Anthony Myers, PhD¹, Kimberly Warren, B BTech. (Hons)², Lann Tay, B Sc.² and Sandra Protopsaltis, Associate Diploma Medical Laboratory Science³. ¹PerkinElmer Health Sciences (Australia) Pty Ltd, Thebarton, SA, Australia, ²Affiliation not provided, ³PerkinElmer Health Sciences, Adelaide, SA, Australia

P-317 HOW IMPORTANT IS IT TO VISUALIZE 2PN IN ZYGOTES DESTINED FOR PGT-A TESTING BY NEXT GENERATION SEQUENCING (NGS)? Caroline McCaffrey, Ph.D.¹, David H. McCulloh, Ph.D.², Frederick L. Licciardi, M.D.², James A Grifo, MD, PhD³, Hsiao-Ling Lee, M.S.², Xinjian He, MS⁴ and Andria G Besser, MS⁵. ¹New York Langone Health, NYU Fertility Center, New York, NY, ²NYU Langone Health, New York, NY, ³NYU Langone Prelude Fertility Center, New York, NY, ⁴New York University Fertility Center, New York, NY, ⁵NYU Langone Fertility Center, New York, NY

P-318 INDIVIDUAL CHROMOSOME MOSAICISM RATES AFTER PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY: IMPLICATIONS FOR MECHANISMS RELATED TO THE EARLY STAGES OF EMBRYO DEVELOPMENT. Amy Jones, MS¹, Ping Zou, PhD¹, Minjae Kwon, MS¹, Melissa Wilmarth, BS², Cecilia Rios, CG², Ashlie M West, BS² and Jordan Clarke, MS¹, ¹Ovation Fertility, Franklin, TN, ²Ovation Genetics, Henderson, NV

P-319 RATES OF EMBRYONIC MOSAICISM ARE CONSISTENT AMONGST EMBRYOLOGISTS PERFORMING OR LOADING TROPHECTODERM BIOPSIES FOR PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY. Emily K Osman, MD, Shelby A Neal, MD, Ashley W Tieg, MD, Brent M Hanson, MD, Julia G Kim, MD, MPH, Jason M Fransasiak, MD and Richard Thomas Scott Jr., MD, IVI-RMA New Jersey, Basking Ridge, NJ

P-320 WITHDRAWN

P-321 IN VITRO FERTILIZATION (IVF) WITH PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) IS NOT COST EFFECTIVE TO ACHIEVE A LIVE BIRTH COMPARED TO IVF ALONE IN DONOR OOCYTE CYCLES. Maria Facadido Antero, MD¹, Bhuchitra Singh, M.D., MPH, MS², Megan E Gornet, MD³, William G. Kearns, MD, PhD⁴, Valerie L Baker, MD⁵ and Mindy S Christianson, MD⁶. ¹John Hopkins University School of Medicine, Lutherville, MD, ²Johns Hopkins School of Medicine, Baltimore, MD, ³Johns Hopkins University School of Medicine, Baltimore, MD, ⁴Johns Hopkins University School of Medicine, Baltimore, MD, ⁵Johns Hopkins University School of Medicine, Advagenix, 9430 Key West Hwy, Suite 130, MD, ⁶Johns Hopkins University School of Medicine, Division of Reproductive Endocrinology and Infertility, Lutherville, OR, ⁷John Hopkins University School of Medicine, Lutherville, OR
P-322  THE COST-EFFECTIVENESS OF PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A): AN ANALYSIS OF 153,865 SART CYCLES. Malinda S Lee, MD, MBA1, Katherine T Lofgren, MPH2, Ann M Thomas, PhD3, Andrea Lanes, PhD3, Randi H. Goldman, M.D.3, Elizabeth S Ginsburg, MD1 and Mark D Hornstein, MD1, 1Brigham and Women’s Hospital, Boston, MA, 2Harvard University, Cambridge, MA, 3Northwell Health Fertility, Zucker School of Medicine at Hofstra/Northwell, Manhasset, NY

P-323  A COST EFFECTIVENESS ANALYSIS OF PREIMPLANTATION GENETIC TESTING FOR SICKLE CELL TRAIT COUPLES. Christina N Cordeiro Mitchell, M.D.1, Bhuchitra Singh, M.D., MPH, MS2, Rakhi Naik, M.D., M.H.S.3, Valerie L Baker, MD4, Sophie M Lanzkron, M.D., M.H.S.3, Mindy S Christianson, MD5 and Lydia H Pecker, M.D.6, 1Johns Hopkins University School of Medicine, Lutherville-Timonium, MD, 2Johns Hopkins School of Medicine, Baltimore, MD, 3Johns Hopkins University School of Medicine, Medicine, Baltimore, MD, 4Johns Hopkins University School of Medicine, Division of Reproductive Endocrinology and Infertility, Lutherville, OR, 5John Hopkins University School of Medicine, Lutherville, OR, 6Johns Hopkins University School of Medicine, Division of Hematology, Baltimore, MD

P-324  TRANSFERRING SELECTED EMBRYOS, AFTER PGT-A DIAGNOSED AS “ABNORMAL,” WHERE PATIENTS WERE REFUSED SUCH TRANSFERS AT THEIR ORIGINAL IVF CENTERS. David H Barad, MD, MS, Sarah K Darmon, PhD, David F Albertini, PhD and Norbert Gleicher, MD, Center for Human Reproduction, New York, NY

P-325  CLINICAL OUTCOMES OF SINGLE EMBRYO TRANSFER WITH MOSAIC EMBRYO: HIGH-GRADE MOSAIC OR LOW-GRADE MOSAIC EMBRYO, DOES IT MATTER? Pin-Yao Lin, MD1, Maw-Sheng Lee, MD, PhD2 and En-Hui Cheng, PhD2, 1Chung Shan Medical University, Taichung, Taiwan, Taichung, Taiwan, 2Lee Women’s Hospital, Taichung, Taiwan

P-326  CLINICAL EXPERIENCE FOLLOWING PGT ANALYSIS OF >138,000 CONSECUTIVE EMBRYOS USING A FAST-SEQS NGS-BASED ASSAY. Dana Neitzel, MS, CGC, Kristina Robinson, PhD, Lauren Walters-Sen, PhD, Jocelyn Leahey, MS, CGC, Charlene A Alouf, PhD and Nicole Faulkner, PhD, Invitae, San Francisco, CA

P-327  PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) AND TECHNOLOGY PLATFORM: DOES PLATFORM INFLUENCE EUPLOID CALL RATES AND/OR SUBSEQUENT PREGNANCY OUTCOMES? Eleni A Greenwood, MD, MSc1, Charles E McCulloch, PhD2, Kaitlyn Wald, MD1, Salustiano Ribeiro, MSc3, Phil Marsh, BS1, Marcelle I Cedars, MD4 and Mitchell P Rosen, MD, HCLD5, 1University of California San Francisco, San Francisco, CA, 2UCSF, San Francisco, CA, 3University of California - San Francisco, San Francisco, CA, 4University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA

P-328  PREVIOUSLY VITRIFIED EMBRYOS CAN BE SUCCESSFULLY WARMED, BIOPSIED OR REBIOPSIED, AND PROVIDE RESULTS. Nicole George, BS, Carolyn MacDonough, BS, Christopher Hibray, BS, Lynn B Davis, MD, MS and G David Ball, Ph.D., Seattle Reproductive Medicine, Seattle, WA

P-329  ARTIFICIAL INTELLIGENCE: NON-INVASIVE DETECTION OF MORPHOLOGICAL FEATURES ASSOCIATED WITH ABNORMALITIES IN CHROMOSOMES 21 AND 16. Matthew David VerMilyea, PhD1, Jonathan M Hall, PhD2, Don Perugini, PhD3, Andrew P Murphy, BS3, Tuc Nguyen, PhD2, Cecilia Rios, CG2, Alicia Picou, M.S.1, Andrew Miller, M.S1, Andrew W Dinsmore, BS4, Kaylen Silverberg, MD5 and Michelle Perugini, PhD3, 1Ovation Fertility, Austin, TX, 2Life Whisperer, Adelaide, SA, Australia, 3Ovation Genetis, Henderson, NV, 4California Fertility Partners, Los Angeles, CA, 5Texas Fertility Center, Austin, TX

P-330  IF ANY MOSAICISM IS IDENTIFIED IN THE TROPHECTODERM, THERE IS A 26% CHANCE OF MOSAICISM BEING PRESENT IN THE INNER CELL MASS: A CLINICAL PARADIGM, DO YOU TRANSFER MOSAIC EMBRYOS? Paul Robert Brezina, M.D.1, Kyle J Tobler, MD2, Kamaria C Cayton Vaught, MD3, Anil K Dubey, PhD1, Amber Cooper, MD4 and William G. Kearns, MD, PhD5, 1Advagenix, Rockville, MD, 2Womack Army Medical
P-331
PRE-IMPLANTATION GENETIC TESTING (PGT-A) USING FAST-SEQS NGS OF IN VIVO CONCEIVED BLASTOCYSTS RECOVERED BY UTERINE LAVAGE. Charlene A Alouf, PhD1, Sam Najmabadi, MD2, Steven T Nakajima, MD3, John E Buster, MD4 and Nicole Faulkner, PhD1. 1Invitae, San Francisco, CA, 2Center for Reproductive Health & Gynecology, Beverly Hills, CA, 3Stanford University School of Medicine, Stanford, CA, 4Professor Emeritus of Obstetrics and Gynecology, Brown University, Providence, RI

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PGT-A (PREIMPLANTATIONAL GENETIC SCREENING) IN PATIENTS WITH PARTIAL X MONOSOMY USING OWN OOCYTES: IS A SUITABLE INDICATION? Juan Giles, M.D., Ph.D.1, Amparo Mercader, PhD2, Carmen Rubio, PhD1, Carmen Vidal, M.D., Ph.D.3, Lucia Alegre, Ph.D4, Martina Trabalon, MD PhD2 and Marcos Meseguer, PhD5. 1IVI-RMA Valencia, Valencia, Spain, 2Igenomix Spain, 3Amplification. without using a cell lysis step before amplification.

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EMBRYO CULTURING CONDITIONS AND THE DEVELOPMENT OF NON-INVASIVE PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY DETECTION (NI-PGT-A). Christine Robinson, Cert Med Science and Melinda Jane Jasper, PhD, PerkinElmer Health Sciences (Australia) Pty Ltd, Thebarton, SA, Australia

P-334
APPLICATION OF WHOLE GENOME NEXT GENERATION SEQUENCING (NGS) ANALYSIS OF PRODUCTS OF CONCEPTION (POC) AFTER SINGLE EMBRYO TRANSFER. Siwei Chen, MD1, Rina Abramov, MSc2, Ran Antes, PhD2, Valeriy Kuznyetsov, PhD2, Svetlana Madjunkova, MD2 and Clifford Lawrence Librach, MD3. 1Create Fertility Centre, Toronto, ON, Canada, 2CooperGenomics, Los Angeles, CA

P-335
RETROSPECTIVE EVALUATION OF PGT-HLA CASES FOR DIVERSE GENETIC DISEASES. Gamze Bilgili, MSc1, Tolga Ecemis, MD2, Hasan Huseyin Kazan, MSc3 and Yaman Saglam, MD4. 1Department of Physiology, Faculty of Medicine, Gazi University, Ankara, Turkey, 2Ecemis Clinics, Ankara, Turkey, 3Department of Biological Sciences, Middle East Technical University, Ankara, Turkey, 4Department of Medical Genetics and Biology, Maltepe University, Istanbul, Turkey

P-336
DOES PGT WITH FRESH EMBRYO TRANSFER AFFECT PERINATAL OUTCOMES?: AN ANALYSIS OF THE 2014 AND 2015 SART DATA. Kristin Van Heertum, MD1, Channing Burks, MD1, Kenny S Flannagan, PhD2, Sunni L Mumford, PhD3, Alexandra C Purdue-Smithe, PhD3, James Goldfarb, MD, MBA4 and Rachel S Weinerman, MD5. 1University Hospitals Fertility Center/Case Western Reserve University, Beachwood, OH, 2Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD, 3NICHD, Bethesda, MD, 4OH

P-337
ACCURACY OF CELL-FREE EMBRYONIC DNA TESTING FOR EUPLOIDY AND ANEUPLOIDY IN COMBINED SPENT EMBRYO CULTURE MEDIUM AND BLASTOCOEEL FLUID SAMPLES WITH OR WITHOUT USING A CELL LYSIS STEP BEFORE AMPLIFICATION. Valeriy Kuznyetsov, PhD1, Svetlana Madjunkova, MD2, Rina Abramov, MSc2, Ran Antes, PhD2, Iryna Kuznyetsova, PhD2 and Clifford Lawrence Librach, MD1. 1CReAte Fertility Centre, Toronto, ON, Canada, 2CReAte fertility centre, Toronto, ON, Canada

P-338
MOUSIAC EMBRYO DIAGNOSIS CORRELATED WITH ABNORMAL 15q DUPLICATION SYNDROME IN OFFSPRING. Emily L Mounts, MS, CGC1, Shihui Olive Zhu, MSc1, Rebecca K Sanderson, PhD2, Alison Coates, PhD1 and John S Hesla, MD1. 1ORM Fertility, Portland, OR, 2CooperGenomics, Los Angeles, CA

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OUTCOMES OF A SIMPLIFIED MOSAIC RANKING SYSTEM. Andrijana Jovasevic, Bachelor of Science (Molecular Genetics and Biotechnology), 1, Mark Livingstone, Genea Deputy Medical Director, MB, ChB, FRANZCOG, CREI, MM2, Maria Victoria Traversa, MScMed1, Jolene Stockton, Bachelor of Science1, Steve Grkovic, PhD1
and Steven J McArthur, BSc, PLD (Harvard Business School) 1, 2Genea, Sydney, NSW, Australia, 2Genea Sydney, Sydney, NSW, Australia

P-340 EVALUATION OF THE IMPACT OF THE PULLING AND FLICKING TROPHOCTEDERM BIOPSY PROCEDURES ON THE INTEGRITY OF THE BIOPSIED CELLS AND THEIR CORRELATION TO PGT-A RESULTS. Marina Benavent, MSc 1, Maria Escriba, MSc 2, Clara Miret, MSc 2, Ivette Vanrell, MSc 2, Nuno Costa-Borges, PhD 2, Gloria Calderón, PhD 2, Juana Crespo, MD 1 and Jose Teruel, MSc 1, 1Equipo Juana Crespo, Valencia, Spain, 2Embryotools, Barcelona, Spain

P-341 DEVELOPMENT OF A NEXT GENERATION SEQUENCING METHOD (PGT-SR PLUS) TO DETERMINE CARRIER STATUS OF BALANCED TRANSLOCATION PATIENT EMBRYOS. Hua Jin, PhD, Hui Zheng, MA, Alysha Nicole Salbato, BS, Robert Snyder, BS, Man Li, MD, PhD and Lian Liu, MD, PacGenomics, Agoura Hills, CA

P-342 IMPACT OF TROPHOECDERM BIOPSY FOR PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) ON EARLY BETA-HCG TRENDS IN SINGLE FROZEN EMBRYO TRANSFERS (FET) RESULTING IN LIVE BIRTH. Laura Perez Sorianio, BA 1, Joshua Stewart, M.D. 2, Steven Spandorfer, M.D. 2 and Zev Rosenwaks, M.D. 2, 1Weill Cornell Medical College, New York, NY, 2The Ronald O. Perelman and Claudia Cohen Fertility Center, New York, NY

P-343 ANTHROPOMETRIC, HORMONAL AND HEMATOLOGICAL CHARACTERISTICS OF WOMEN UNDERGOING IN VITRO FERTILIZATION. Tendai M Chiware, MBChB 1, Maria Cristina Bravo, PhD 2, Elizabeth A McGee, MD 1, Michael DeSarno, MS 2, Thomas Orfeo, PhD 2 and Ira Bernstein, MD 1, 1University of Vermont Medical Center, Burlington, VT, 2University of Vermont, Burlington, VT

P-344 HUMAN MURAL GRANULOSA CELLS CULTURED IN SERUM-FREE CONDITIONS CAN BE USED TO STUDY MOLECULAR MECHANISMS OF HUMAN GRANULOSA CELL DIFFERENTIATION IN VITRO. Sarah Baumgarten, MD, PhD 1, Nicola Winston, PhD 2, Michelle Fierro, BS 3, Humberto Scoccia, MD 4 and Carlos Stocco, PhD 4, 1Mayo Clinic, Rochester, MN, 2University of Illinois at Chicago, Chicago, IL, 3UIC, Chicago, IL

P-345 ATYPICAL VAGINAL TEMPERATURE PATTERNS MAY IDENTIFY SUBTLE, NOT YET RECOGNIZED, CAUSES OF INFERTILITY. Bradley S Hurst, M.D. 1, Al Pirrie, DPhil 2, R C Milnes, B.A. 3 and Toby G Knowles, PhD 4, 1Carolinas Medical Center Atrium Health, Charlotte, NC, 2Fertility Focus Limited, Warwick, Warwickshire, United Kingdom, 3Fertility Focus Limited, Warwick, United Kingdom, 4Faculty of Health Sciences, University of Bristol, Bristol, Somerset, United Kingdom

P-346 IGFB-1 AND IGFBP-3 SERUM CONCENTRATIONS IN PATIENTS UNDERGOING PROGRAMMED FROZEN-THAWED EMBRYO TRANSFER OF EUPLOID PGT-A EMBRYOS. Robert Setton, MD, Antonia Athanasiou, MD, Daylon James, PhD and Steven Spandorfer, M.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

REPRODUCTIVE BIOLOGY - BASIC

P-347 UPREGULATION OF THE LONG NON-CODING RNA TUG1 INHIBITS GRANULOSA CELL APOPTOSIS AND AUTOPHAGY IN POLYCYSTIC OVARY SYNDROME BY REGULATING ERK/MAPK PATHWAY. Ying Li, M.D. 1 and Shi-Ling Chen, PhD 2, 1Nanjing Hospital, Southern Medical University, Guangzhou, AP, China, 2Center for Reproductive Medicine, Department of Gynecology and Obstetrics, Nanfang Hospital, Southern Medical University, Guangzhou, China

P-348 EFFECT OF ADRIAMYCIN, BLEOMYCIN, VINBLASTINE AND DACARBazine (ABVD) TREATMENT ON FEMALE MICE REPRODUCTIVE FUNCTION. Yubing LIU Sr., Ph.D. 1, Xinmei LU Sr., Master 2, Xiaocan LEI Sr., Ph.D 3 and Richeng Chian Sr., Ph.D 1, 1Shanghai 10th People’s Hospital of Tongji University, Shanghai, China, 2Zhumgshan Hospital, Fudan University, Shanghai, China, 3Zunyi Medical University, Zhunyi, China
P-349 THE IMPACT OF BOTULINUM TOXIN A (BOTA) TREATMENT ON ENDOMETRIAL BLOOD FLOW. Youn-Jung Kang, PhD1, Sooyeon Kim, MD2, Siwon Lee, MD2, Hwang Kwon, M.D, Ph.D.4, Jung-Jae Ko, PhD1, Kyung-A Lee, PhD1 and Hwa Seon Woo, MD4, 1CHA University, Seongnamsi, Korea, Republic of (South), 2CHA Bundang Medical center, Seongnamsi, Korea, Republic of (South), 3Department of obstetrics and gynecology, Mound Sinai Medical Center, Miami Beach, FL, 4Fertility Center, Seongnamsi, Gyeonggi-do, Korea, Republic of (South)

P-350 WITHDRAWN

P-351 HORMONE SECRETION IN A MICROFLUIDIC OVARY-ON-A-CHIP PLATFORM USING ENGINEERED FOLLICLES. Young Bin Won, M.D.1, Inha Lee, M.D.1, Jae Hoon Lee, M.D.1, SiHyun Cho, M.D., Ph.D.2, Hee Dong Chae, M.D., Ph.D.3, Byung Seok Lee, M.D., Ph.D.1 and Young Suk Choi, M.D., Ph.D.1, 1Yonsei University College of Medicine, Severance hospital, Seoul, Korea, Republic of (South), 2Yonsei University College of Medicine, Gangnam Severance Hospital, Seoul, Korea, Republic of (South), 3Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, Republic of (South)

P-352 LOW MOLECULAR WEIGHT HYALURONAN INDUCES INFLAMMATORY GENE EXPRESSION IN OVARIAN STROMAL CELLS AND IMPAIRS GAMETE DEVELOPMENT IN VITRO. Jennifer E Rowley, MS1, Farmers Amargant Riera, PhD2, Michele T. Pritchard, PhD2 and Francesca E Duncan, PhD2, 1Center for Reproductive Science, Northwestern University, Chicago, IL, 2Department of Pharmacology, Toxicology, & Therapeutics, Kansas University Medical Center, Kansas City, KS

P-353 THE IMPACT OF MULTIPLE-DOSE PACLITAXEL ON FERTILITY IN MICE AND THE PROTECTIVE EFFECT OF GONADOTROPIN RELEASING HORMONE-AGONIST. Mengge Cui, Master, Department of gynecological oncology, Tongji Hospital, Wuhan, China

P-354 ESTABLISHMENT OF DECREASED OVARIAN RESERVE MOUSE MODEL BY CONSECUTIVE SUPEROVULATION. Xiaowei Nie, M.D and Daorong Hou, Ph.D, Embryologist, NANJING, China

P-355 CHARACTERIZING MEIOTIC AND MITOTIC ERRORS IN THE INNER CELL MASS AND TROPHECTODERM OF POOR QUALITY PREIMPLANTATION EMBRYOS. Christine Briton-Jones, PhD, HCLD1, Lucky Sekhon, MD1, Ethan Ellis, BS2, Joseph A. Lee, BA1, Eric E Schadt, PhD2, Robert P. Sebra, PhD3 and Alan B Copperman, MD2, 1Reproductive Medicine Associates of New York, New York, NY, 2icahn School of Medicine at Mount Sinai, New York, NY, 3Sema4, a Mount Sinai Venture, Stamford, CT

P-356 3D MODELING REVEALS CHROMOSOMES EXHIBIT NONRANDOM SEGMENTAL RADIAL ORGANIZATION AND UNIQUE HAIRPIN-LOOP CONFIGURATIONS IN SPERM NUCLEI. Helen G Tempest, PhD1 and Dimitrios Ioannou, PhD2, 1Florida International University, Miami, FL, 2Embryologist, Miami

P-357 THE UBQUITON MITOCHONDRIA-TARGETED ANTIOXIDANT AMENDS THE EFFECT OF MATERNAL AGE ON OOCYTE SPINDLE FORMATION AND DEVELOPMENTAL COMPETENCE. Usama I AL-Zubaidi, PhD student1, Ozgur Cinar, Prof2, Deepak Adhikari, PhD2, Rebecca Robker, Prof3 and John Carroll, Prof4, 1Development and Stem Cell Program, Department of Anatomy and Developmental Biology, Melbourne, VIC, Australia, 2Department of Histology and Embryology, School of Medicine, Ankara, Turkey, 3The Robinson Research Institute, School of Medicine, Adelaide, SA, Australia

P-358 LOSS OF MITOCHONDRIAL FUSION PROTEIN MFN2 RESULTS IN A REPRODUCTIVE AGING PHENOTYPE WITH TELOMERE SHORTENING, REDUCED FERTILITY, AND ACCELERATED DEPLETION OF FOLLICULAR POOL. Man Zhang, M.D, Ph.D1, Muhammed Burak Bener, B.S1, Zongliang Jiang, Ph.D2, Tianren Wang, M.D., Ph.D.3, Ecem Esencan, M.D.1, Richard Scott III, B.S1 and Emre Seli, M.D.1, 1Yale School of Medicine, New Haven, CT, 2Louisiana State University, Baton Rouge, LA, 3Foundation for Embryonic Competence, Basking Ridge, NJ, 4Foundation of Embryo Competence, Basking Ridge, NJ

P-359 THE ROLE OF AKA13 INHIBITORS AND ACTIVATORS AND MATRIX STIFFNESS IN HIPPO PATHWAY SIGNALING FOR PRIMORDIAL FOLLICLE ACTIVATION. Jacqueline Yano
Maher, MD, MA, Md Soriful Islam, PhD, Szu-Chi Su, MS and James Segars, MD, Johns Hopkins University, School of Medicine, Baltimore, MD

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**CULTURE MEDIA WITH AND WITHOUT EXPOSURE TO HUMAN PREIMPLANTATION EMBRYOS CONTAIN EXTRACELLULAR VESICLES OF COMPARABLE SIZE.** Diego Marin, M.S., Emre Selli, M.D. and Richard Thomas Scott Jr., MD, IVI-RMA New Jersey, Basking Ridge, NJ

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**EFFECTIVENESS OF PLATELET RICH PLASMA ON PREVENTION OF CHLAMYDIA INDUCED HYDROSALPINX IN A MURINE MODEL.** Sheena M Rippentrop, MD, PhD, Chet Schwab, MD, Randal D Robinson, MD and Guangming Zhong, MD, PhD, 1University of Texas Health Science Center San Antonio, San Antonio, TX, 2Chinese Society for Immunology, San Antonio, TX, 3San Antonio, TX, 4UT Health San Antonio, San Antonio, TX, 5Univ of Texas Health Science Center San Antonio, San Antonio, TX

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**WITHDRAWN**

**P-363**

**THE REGULATION OF ENDOPLASMIC RETICULUM STRESS IMPROVES THE DEVELOPMENT OF POST-OVULATORY AGED MOUSE OOCYTES.** Isao Takehara, M.D., Hideki Igaramishi, M.D., Ph.D., Kyoko Takahashi, M.D., Michi Nishi, M.D., Koki Matsuo, M.D., Jun Kawagoe, M.D., Ph.D. and Satoru Nagase, M.D., PhD, 1Yamagata University, Yamagata, Japan, 2Kyono ART Clinic Takanawa, Tokyo, Japan

**P-364**

**ABNORMAL PHOTOPERIOD EXPOSURE BEFORE PREGNANCY AFFECTS OFFSPRING LIPID METABOLISM IN SD RATS.** Yanyun Ying, B.S.Med, Dan Zhang, MD, PhD, Juan Liu, Doctor and Mixue Tu, Doctor, Women’s Hospital, Zhejiang University School of Medicine, Hangzhou, China

**P-365**

**CYTOKINE PROFILING REVEALS A UNIQUE INFILTRATING SIGNATURE IN HUMAN FOLLICULAR FLUID AND THE OVARY.** Jordan H Machlin, MS, Seth J Barishansky, MS, Sharron LaChelle Manuel, MD, PhD, MS, Jian-Jun Wei, MD, John Zhang, PhD, Mary Ellen Pavone, MD, MSCI and Francesca E Duncan, PhD, 1Northwestern University, Chicago, IL, 2Northwestern University Professor of Pathology and Obstetrics and Gynecology, Chicago, IL, 3Northwestern Medicine, Chicago, IL

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**WITHDRAWN**

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**WITHDRAWN**

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**WITHDRAWN**

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**COLLAGEN AND HYALURONAN MATRICES UNDERGO AGE-RELATED CHANGES IN THE HUMAN OVARY.** Sharron L Manuel, MD, PhD, MS, Elena Antonova, PhD, Jessica E Hornick, PhD, Farners Amargant Riera, PhD, Jian-Jun Wei, MD, Mary Ellen Pavone, MD, MSCI, Michele T. Pritchard, PhD and Francesca E Duncan, PhD, 1Northwestern University, Chicago, IL, 2Biological Imaging Facility Northwestern University, Evanston, IL, 3Research Associate Professor, Dept Molecular Biosciences Northwestern University, Evanston, IL, 4Center for Reproductive Science, Northwestern University, Chicago, IL, 5Northwestern University Department of Pathology, Chicago, IL, 6Department of Pharmacology, Toxicology, & Therapeutics, Kansas University Medical Center, Kansas City, KS

**P-370**

**THE EFFECT OF AUTOPHAGY AFTER MOUSE OOCYTE ACTIVATION TEST.** Atsushi Yamamoto, MD, PhD, Naoki Yoshikawa, Bachelor of Medicine, Soe Onoza, Bachelor of Agriculture, Akiyoshi Osaka, Bachelor of Medicine, Shin Oono, Bachelor of Medicine, Toshiyuki Iwahata, MD, PhD, Yoshitomo Kobori, MD, PhD, Kouhei Sugimoto, MD, PhD and Hiroshi Okada, MD, PhD, Dokkyo Medical University Saitama Medical Center, Koshigaya, Japan

**P-371**

**FUNCTIONAL ACTIVITY OF MITOCHONDRIA IN AGED OOCYTES IS ASSOCIATED WITH CYTOSKELETON STABILITY IN MICE.** Jae Ho Lee, PhD, Hye Ran Lee, Ph.D, Myung Joo Kim, M.D., Kyoung Hee Choi, Ph.D. candidate, Ji Hyang Kim, MD, Hannah Kim, MD, Chanhong Park, M.D., Soo Yeon Kim, MD, Mi Kyoun Koong, MD, PhD, Tae Ki Yoon, M.D, Ph.D and Sang Jin Lee, Ph.D, 1CHA Fertility Center, Seoul, Korea, Republic of (South), 2CHA University, Seoul, Korea, Republic of (South), 3CHA Fertility Center Seoul, Seoul, Korea, Republic of (South), 4Fertility Center, CHA Bundang Medical Center, CHA University, Seongnam-si, Gyeonggi-do, Korea, Republic of (South), 5CHA Fertility Center Gangnam Medical Center, Seoul, Korea, Republic of (South), 6CHA Bundang Medical Center,
POSTER PRESENTATIONS AND ABSTRACTS

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P-376 THE MATRIX METALLOPROTEINASE-9 (MMP9) P.Gln279Arg POLYMORPHISM IS ASSOCIATED WITH OVARIAN RESERVE AND OVARIAN RESPONSE DURING IVF/ICSI TREATMENT. Laura D Vagnini, B.Sc.1, Claudia G Petersen, Ph.D.2, Ana Lucia Mauri, B.Sc.2, Adriana Renzi, Ph.D.1, Bruna Petersen, B.Sc.2, Mariana Mattila, B.Sc.2, Julia Ricci, R.N.3, Felipe Dieamant, M.D.2, Joao Batista A Oliveira, M.D., Ph.D.2, Ricardo L R Baruffi, M.D.2 and Jose G Franco Jr., M.D., Ph.D.2, 1Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 2Center for Human Reproduction Prof. Franco Jr/ Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 3Center for Human Reproduction Prof. Franco Jr, Ribeirao Preto, Brazil

P-377 TOWARDS PERSONALISED REPRODUCTIVE MEDICINE: SCREENING FOR GENETIC VARIANTS AND ITS INFLUENCE IN CONTROLLED OVARIAN STIMULATION. Belen Lledo, PhD, Laura Blanco, MSc, Jose A Ortiz, PhD, Ruth Morales, PhD, Jaime Guerrero, MSc, Ana Fabregat, PhD, Joaquin Llacer, PhD and Rafael Bernabeu, Ph D M D, Instituto Bernabeu, Alicante, Spain

P-378 WHERE DOES EXTRA X IN KLINEFELTER SYNDROME COME FROM? Atsushi Tanaka, M.D., Ph.D.1, Motoi Nagayoshi, M.D.1, Izumi Tanaka, Phar.B.1, Takashi Yamaguchi, M.D., Ph.D.1, Motoharu Ohno, M.D.1 and Seiji Watanabe, Ph.D.2, 1Saint Mother Hospital, Kitakyushu, Japan, 2University of Tokyo Graduate school of Medicine, Tokyo, Japan

P-379 BREAKPOINT MAPPING UNCOVERING ABOUT 1.32% OF APPARENT BALANCED RECURRENT TRANSLOCATION (ABRT) CARRIERS EXISTING CRYPTIC COMPLEX CHROMOSOMAL STRUCTURAL VARIATIONS IN PREIMPLANTATION GENETIC TESTING (PGT) Shimin Yuan, Master and Yue-qi Tan, Doctor, Reproductive and Genetic Hospital of Citic-Xiangya, Changsha, China

REPRODUCTIVE GENETICS

P-374 THE TP73 GENE (rs3765730) G>A POLYMORPHISM IS ASSOCIATED WITH OVARIAN RESPONSE DURING IVF/ICSI TREATMENT. Laura D Vagnini, B.Sc.1, Claudia G Petersen, Ph.D.2, Ana Lucia Mauri, B.Sc.2, Adriana Renzi, Ph.D.1, Bruna Petersen, B.Sc.2, Mariana Mattila, B.Sc.2, Andreia Nicoletti, R.N.3, Felipe Dieamant, M.D.2, Joao Batista A Oliveira, M.D., Ph.D.2, Ricardo L R Baruffi, M.D.2 and Jose G Franco Jr., M.D., Ph.D.2, 1Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 2Center for Human Reproduction Prof. Franco Jr/ Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 3Center for Human Reproduction Prof. Franco Jr, Ribeirao Preto, Brazil

Heertum, MD1, Lisa Lam, BS2, Michael J Cartwright, MS2, Brian Richardson, BS2, Mark Cameron, PhD2, Sam Mesiano, PhD2 and Rachel S Weinerman, MD1, 1University Hospitals Fertility Center/Case Western Reserve University, Beachwood, OH, 2Affiliation not provided

P-379 SEQUENTIAL CLINICAL MANIPULATIONS OF EMBRYOS RESULTS IN ALTERATIONS IN EXPRESSION OF GENES INVOLVED IN INNATE IMMUNITY, APOPTOSIS, AND MITOCHONDRIAL FUNCTION. Kristin Van

P-376 THE MATRIX METALLOPROTEINASE-9 (MMP9) P.Gln279Arg POLYMORPHISM IS ASSOCIATED WITH OVARIAN RESERVE AND OVARIAN RESPONSE DURING IVF/ICSI TREATMENT. Laura D Vagnini, B.Sc.1, Claudia G Petersen, Ph.D.2, Ana Lucia Mauri, B.Sc.2, Adriana Renzi, Ph.D.1, Bruna Petersen, B.Sc.2, Mariana Mattila, B.Sc.2, Juliana Ricci, R.N.3, Felipe Dieamant, M.D.2, Joao Batista A Oliveira, M.D., Ph.D.2, Ricardo L R Baruffi, M.D.2 and Jose G Franco Jr., M.D., Ph.D.2, 1Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 2Center for Human Reproduction Prof. Franco Jr/ Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 3Center for Human Reproduction Prof. Franco Jr, Ribeirao Preto, Brazil

P-377 TOWARDS PERSONALISED REPRODUCTIVE MEDICINE: SCREENING FOR GENETIC VARIANTS AND ITS INFLUENCE IN CONTROLLED OVARIAN STIMULATION. Belen Lledo, PhD, Laura Blanco, MSc, Jose A Ortiz, PhD, Ruth Morales, PhD, Jaime Guerrero, MSc, Ana Fabregat, PhD, Joaquin Llacer, PhD and Rafael Bernabeu, Ph D M D, Instituto Bernabeu, Alicante, Spain

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P-379 BREAKPOINT MAPPING UNCOVERING ABOUT 1.32% OF APPARENT BALANCED RECURRENT TRANSLOCATION (ABRT) CARRIERS EXISTING CRYPTIC COMPLEX CHROMOSOMAL STRUCTURAL VARIATIONS IN PREIMPLANTATION GENETIC TESTING (PGT) Shimin Yuan, Master and Yue-qi Tan, Doctor, Reproductive and Genetic Hospital of Citic-Xiangya, Changsha, China

Heertum, MD1, Lisa Lam, BS2, Michael J Cartwright, MS2, Brian Richardson, BS2, Mark Cameron, PhD2, Sam Mesiano, PhD2 and Rachel S Weinerman, MD1, 1University Hospitals Fertility Center/Case Western Reserve University, Beachwood, OH, 2Affiliation not provided
P-380 SINGLE CELL GENE EXPRESSION OF HUMAN PUBERTAL TESTIS DEVELOPMENT. Jingtao Guo, PhD1, Xichen Nie, BS2, Douglas T Carrell, PhD3, James Hotaling, MD2 and Bradley R Cairns, PhD4, 1University of Utah School of Medicine, Andrology and IVF Laboratories, Salt Lake City, UT, 2Huntsman Cancer Institute, Salt Lake City, UT, 3University of Utah School of Medicine, Andrology and IVF Laboratories, Salt Lake City, UT, 4Howard Hughes Medical Institute, Department of Oncological Sciences and Huntsman Cancer Institute, University of Utah School of Medicine, Salt Lake City, UT.

P-381 PRE-SURROGACY OBSTETRICAL RISK ASSESSMENT FOR POTENTIAL GESTATIONAL CARRIERS. Georges Sylvestre-Margolis, MD CM1, Susanna Park, MD2, and Said Daneshmand, MD2, 1Elmhurst Hospital Medical Center / Mount Sinai School of Medicine, New York, NY, 2San Diego Fertility Center, San Diego, CA.

P-382 LUTEAL PHASE-DERIVED OOCYTE-CUMULUS COMPLEXES: GENE EXPRESSION AND MITOCHONDRIAL DNA COPY NUMBER. Bella Martazanova, PhD1, Nona Mishieva, PhD1, Anna Korolkova, PhD1, Khava Bogatyreva, PhD1, Maria Veykova, PhD2, Anastasia Kirillova, PhD2, Olga Burmenskaya, PhD2 and Aydar Abubakirov, PhD1, 1Reproductive endocrinology, Moscow, Russian Federation, 2Embriologist, Moscow, Russian Federation, 3Genetic, biology, Moscow, Russian Federation.

P-383 PREVALENCE OF GENETIC DISEASE CARRIERS AMONG PATIENTS SEEKING FERTILITY TREATMENT. Jennifer C Luque, MS1, Catherine Terhaar, MS1, Emad Bahrami-Samani, PhD2, Philip James Uren, PhD1, Ramsey Johnson, MBA1 and Lisa D McDaniell, PhD, FACMG1, 1Progenity, Ann Arbor, MI, 2Progenity, San Diego, CA.

P-384 A “TANDEM-REFLEX” STRATEGY MINIMIZES RESULTS DELIVERY TIME FOR COUPLES UNDERGOING CARRIER SCREENING. Aishwarya Arjunan, MS, MPH, Kristjan Eerik Kaseniit, MEng, Brandon Lee, BA, Jeff Wootton, PhD, Kenny Wong, MS and Katie Johansen Taber, PhD, Myriad Women’s Health, South San Francisco, CA.

P-385 CARRIER SCREENING IN 2019: IS SCREENING FOR MORE GENES THE NEW STANDARD OF CARE? Dana Neitzel, MS, CGC, Jocelyn Leahey, MS, CGC, Susan Glass, MS and Nicole Faulkner, PhD, Invitae, San Francisco, CA.

P-386 THE PROLONGED DISEASE STATE OF INFERTILITY IS ASSOCIATED WITH BLASTOCYST IMPRINTED EPIGENETIC DYSREGULATION. Michelle M Denomme Tignaneli, PhD, William B Schoolcraft, MD and Mandy G Katz-Jaffe, Ph.D., Colorado Center for Reproductive Medicine, Lone Tree, CO.

P-387 ARE THERE ANY SIMILARITIES IN GENE EXPRESSION BETWEEN EUPLOID EMBRYOS AND ANEUPLOID EMBRYOS COMPATIBLE WITH LIFE? Allison C Kranyak, B.S.1, Alyssa Barré, B.S.1, Deepthi M Athavale, B.S.1, Arnav Lal, na1, Jonathan L Blalock, BS,1, Shawn Zimmerman, PhD, HCLD2, T. Arthur Chang, PhD, HCLD, ELD3, Randal D Robinson, MD4, J. David Wininge, PhD, HCLD5, William E. Roudebush, PhD and Renee J. Chosed, PhD1, 1University of South Carolina School of Medicine Greenville, Greenville, SC, 2Vios Fertility Institute, Swansea, IL, 1University of Texas Health Science Center, San Antonio, TX, 4UT Health San Antonio, San Antonio, TX, 5Atlantic Reproductive Medicine Specialists, Raleigh, NC.

P-388 DEFINING A CLINICAL VALIDITY FRAMEWORK FOR PHARMACOGENOMIC BIOMARKERS OF IVF TREATMENT RESPONSE AND OUTCOMES. David-Emlyn Parfitt, PhD, Caterina Clementi, PhD, Karen Hunter Cohn, PhD, Lili Mohebbi, MS, Frank S Augello, MS and Piraye Yurttas Beim, PhD, Celmatix, NEW YORK, NY.

P-389 ZP1 PATHOGENIC VARIANTS CAUSE ‘GENUINE’ EMPTY FOLLICLE SYNDROME: EVIDENCE FOR THE EXISTENCE OF AN INTACT OOCYTE AND A ZONA PELLUCIDA IN FOLLICLES UP TO EARLY ANTRAL STAGE. Can Dai, Ph.D.1, Yongzhe Chen, Ph.D.2 and Ge Lin, M.D., Ph.D.3, 1Reproductive and Genetic Hospital of CITIC-Xiangya, Changsha, China, 2Central South University, Changsha, China, 1Reproductive and Genetic hospital of CITIC-Xiangya, Changsha, China.

P-390 ANALYSIS OF ACCESSIBLE CHROMATIN LANDSCAPE IN THE INNER CELL MASS AND TROPHECTODERM OF HUMAN BLASTOCYSTS USING ATAC-SEQ. Min Yang, PHD1, Xin Tao, Ph.D2, Tianhua Zhao, MD3, Richard
POSTER PRESENTATIONS AND ABSTRACTS

P-391 AN OVARIAN COMPONENT INVOLVED IN SUBFERTILITY OF THE NSMF KO MOUSE. Erica Louden, M.D. Ph.D., Lynn Chorich, B.S., M.S. and Lawrence Layman, M.D., Augusta University, Augusta, GA

P-392 PRO-APOPTOTIC GENE EXPRESSION IN BLASTOCOEFL FLUID FROM EUPLOID DAY-5 EMBRYOS IS ASSOCIATED WITH NEGATIVE PREGNANCY OUTCOMES. Deepti M Athavale, B.S.1, Alyssa Barrê, B.S.1, Allison C Kran yak, B.S.1, Arnav Lal, na1, Jonathan L Blalock, BS1, Shawn Zimmerman, PhD, HCLD2, T. Arthur Chang, PhD, HCLD, ELD3, Randall D Robinson, MD1, J. David Wininger, PhD, HCLD2, William E. Roudebush, PhD1 and Renee J. Chosed, PhD1, 1University of South Carolina School of Medicine Greenville, Greenville, SC, 2Vios Fertility Institute, Swansea, IL, 3University of Texas Health Science Center, San Antonio, TX, 4UT Health San Antonio, San Antonio, TX, 5Atlantic Reproductive Medicine Specialists, Raleigh, NC

P-393 FRAGILE X CARRIER SCREENING ACCOMPANIED BY GENETIC CONSULTATION HAS CLINICAL UTILITY IN POPULATIONS BEYOND THOSE RECOMMENDED BY GUIDELINES. Katie Johansen Taber, PhD1, Jeraldine Lim-Harashima, MS, CGC2, Harris Naemi, BS3 and Jim Goldberg, MD4, 1Myriad Women’s Health, South San Francisco, CA, 2Myriad Genetics, Salt Lake City, CA, 3Myriad Genetics, Salt Lake City, UT

P-394 THE EXPRESSION OF HUMAN ENDOGENOUS RETROVIRUS SYNCYTIN IN HUMAN ANEUPLOIDY ARE INSUFFICIENT COMPARED TO EUPLOIDY. Danxia Luo, MD1, Fang Wang, PhD1, Isaac J. Chamani, B.A.2, David H. McCullough, Ph.D.3, Caroline McCaffrey, Ph.D.4 and David L. Keefe, M.D.4, 1New York University School of Medicine, Department of Obstetrics and Gynecology, New York, NY, 2New York University School of Medicine, New York, New York, 3NYU Langone Health, New York, NY, 4New York Langone Health, NYU Fertility Center, New York, NY


SPERM PHYSIOLOGY

P-396 THE EXTRACELLULAR CUMULUS MATRIX DOUBLES THE SPERM ZONA-ADHESION IN NORMOZOOSPERMIC PATIENTS. Rumiana Geneva, MSc, Dimitar Parvanov, PhD, Kristina Nikolova, MSc, Magdalena Vasileva, MSc, Ferihan Shaban, MSc and Georgi Stamenov Stamenov, MD/PhD, Nadezhda Women’s Health Hospital, Sofia, Bulgaria

P-397 VARICOCELE DIMINISHES SPERM CAPACITATION FUNCTION AND THE CHANCES OF GENERATING A PREGNANCY. Philip Xie, B.S.1, Alessandra Parrella, M.Sc.1, Alexander J Travis, VMD, PhD2, Zev Rosenwaks, M.D.1, James A. Kashanian, MD3 and Gianpiero D. Palermo, M.D., Ph.D.1, 1The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY, 2Cornell University, Ithaca, NY, 3Weill Cornell Medicine, Department of Urology, New York, NY

P-398 IMPACTS OF TEST (TES AND TRIS) YOLK BUFFER AND COOLING ON THE ABILITY OF HUMAN SPERM TO CAPACITIZE. G Charles Ostermeier, PhD1, Cristina Cardona, PhD1, Melissa A Moody, MS1, Alana J Simpson, BS1, Romeo Mendoza, MT1 and Alexander J Travis, VMD, PhD2, 1Androvia LifeSciences, Mountainside, NJ, 2Cornell University, Ithaca, NY

P-399 RELATIONSHIP AMONG INTRACELLULAR SUPEROXIDE DISMUTASE ACTIVITY, GLUTATHIONE Peroxidase ACTIVITY, MOTILITY AND MORPHOLOGY IN HUMAN SEMEN. Luchezar Vasilev Jelezarski, PhD, Dimitar Parvanov, PhD, Vilyana Georgieva, MSc, Rumiana Geneva, MSc and Georgi Stamenov Stamenov, MD/PhD, Nadezhda Women’s Health Hospital, Sofia, Bulgaria
P-400 VARIATION IN THE PERCENTAGES OF Y-CHROMOSOME BEARING SPERM IN EJACULATES. Seth Levrant, MD, Jared Graham, BS, Morry B Fidler, Ph.D, Saranya Thamakulasingam, MD and Rajasingam Jeyendran, Ph.D, HCLD, Partners in Reproductive Health, Tinley Park, IL, Insight Medical Genetics, Chicago, IL, Androlab Inc, Chicago, IL

P-401 DURAMYCIN DISRUPTS SPERM MOTILITY AND IN VITRO FERTILIZATION (IVF). Devang Sharma, MD, Claudia M Rival, PhD, Sarah C Kzastek, MD, Jeffrey J Lysiak, PhD, Ryan P Smith, MD and NICHD’s Reproductive Medicine Network, University of Virginia, Charlottesville, VA

P-402 THE EFFICACY OF OXIDATION REDUCTION POTENTIAL (ORP) IN MALE INFERTILITY AND ITS relationship with seminal LEUKOCYTE CONCENTRATION. Shinnosuke Kuroda, M.D, Teppei Takeshima, M.D and Yasushi Yumura, Ph.D, Yokohama City University, Medical Center, Yokohama, Japan

P-403 MIR-297 REpresses the EXPRESSION of PROGESTERONE RECEPTOR and DECIDUALIZATION in eUtopic ENDOMETRIUM in infertile WOMEN with ENDOMETRIOSIS. Wei Huang, Ph.D, M.D. and Tingting Liu, M.D, West China Second University Hospital of Sichuan University, Chengdu, China

P-404 INHIBITION OF BOTH DNA METHYLTRANSFERASES and HEDGEHOG SIGNALING SUPPRESSES THE PHENOTYPE OF HUMAN UTERINE LEIOMYOSARCOMA CELLS. Natalia Garcia, MSc, Ayman Al-Hendy, MD, PhD, Leonardo Tomiatti da Costa, MSc, Kácia Candido Carvalho, PhD and Qiwei Yang, PhD, University of Illinois at Chicago, Chicago, IL, University of Sao Paulo, Sao Paulo, Brazil

P-407 OOCYTE DISPOSITION PREFERENCES: PLANNING FOR THE FUTURE. Anne Hutchinson, M.D., Rafael Confino, BS, John Zhang, PhD, Angela K. Lawson, Ph.D. and Mary Ellen Pavone, MD, MSCI, Northwestern University, Chicago, IL

P-805 WHAT IS FERTILITY FRAUD, WHAT ARE COURTS AND LEGISLATURES DOING ABOUT IT, AND HOW MIGHT IT IMPACT REPRODUCTIVE MEDICINE? Jody L Madeira, Ph.D., J.D. and Susan Crockin, J.D., Professor of Law, Bloomington, IN, Senior Scholar, Adjunct Professor of Law, Washington, DC

P-806 WITHDRAWN


P-808 DETECTION OF THE FERTILE WINDOW USING A WEARABLE MEDICAL DEVICE AND THE CALENDAR METHOD: A COMPARATIVE STUDY. Evangelia Mouriki, MSc, Aljosha Bilic, MSc, Brianna M Goodale, PhD, Gyorgyi Hamvas, MSc, Catrin Argyle, BSc, MSc, Mohamed Shilaih, PhD and Brigitte Leeners, Prof. Dr., Avan AG, Zurich, Switzerland, University Hospital Zurich, Zurich, Switzerland
POSTER PRESENTATIONS AND ABSTRACTS

CRYO TANK ISSUES

**P-810**  CRYO TANK QUALITY CONTROL: HOW TO DETECT A TANK THAT IS ‘FAILING’. James R Graham, MS ELD, Cristina L Applegate, MS, Seamus R Graham, HSDG and Michael J Tucker, PhD, 1SG Fertility, Rockville, MD, 2Shady Grove Fertility, Rockville, MD, 3Student, North Potomac, MD

**P-811**  THE ANATOMY OF LIQUID NITROGEN (LN2) CRYO DEWAR TANK FAILURES. Mitchel C. Schiewe, MS, PhD, Shane Zozula, B.S., T.S. (ABB), Erica J Behnke, PhD, Jason Cowles, BA, Rob Manchise, BS and John B. Whitney, BS, 1Ovation Fertility, Newport Beach, CA, 2Ovation Fertility, Cincinnati, OH, 3Trust Gnosis, Brea, CA

**P-812**  USEFULNESS OF REMOTE, CONTINUOUS WEIGHT DETERMINATION FOR THE ROUTINE QUALITY MANAGEMENT OF CRYO DEWAR TANKS. Mitchel C. Schiewe, MS, PhD, Shane Zozula, B.S., T.S. (ABB), Tannia Ochoa, BA, Jason Cowles, BA, Rob Manchise, BS and John B. Whitney, BS, 1Ovation Fertility, Newport Beach, CA, 2Trust Gnosis, Brea, CA
ART LAB - EMBRYO CULTURE
ART LAB - EMBRYO SELECTION
ART LAB - EMBRYOS
ART LAB - ICSI
ART LAB - SPERM
ART LAB - TECHNOLOGY
ART OFFSPRING
ART PREGNANCY RISKS
CONTRACEPTION/FAMILY PLANNING
EARLY PREGNANCY
ENDOMETRIAL PHYSIOLOGY
ENDOMETRIOSIS
ENDOMETRIOSIS - BASIC
ENDOMETRIUM
ENVIRONMENT AND REPRODUCTION
FIBROID
FIBROIDS - BASIC
GENETIC COUNSELING
HEALTH DISPARITIES
IMAGING
INTRAUTERINE INSEMINATION
LGBTQ REPRODUCTIVE ISSUES
MALE REPRODUCTION AND UROLOGY
MALE REPRODUCTION AND UROLOGY - BASIC
MENTAL HEALTH
NUTRITION
OVARIAN RESERVE
PCOS/ANDROGEN EXCESS
PRACTICE MANAGEMENT
PREGNANCY LOSS
PROFESSIONAL DEVELOPMENT
REPRODUCTIVE IMMUNOLOGY
REPRODUCTIVE SURGERY
THE WEB
IVF OUTCOME PREDICTORS
REPRODUCTIVE GENETICS

ART LAB - EMBRYO CULTURE

P-403 INFLUENCE OF COMMERCIAL EMBRYO CULTURE MEDIA ON IN VITRO DEVELOPMENT, PREGNANCY, AND PERINATAL OUTCOMES AFTER IVF: A SINGLE-CENTER RCT. Masao Murakami, PhD, Keiko Tanaka, MS, Hitomi Otsubo, BS, Shigetoshi Mizumoto, Ph.D., Yozo Nagao, MS and Takeshi Kuramoto, M.D., Ph.D., Kuramoto Women’s Clinic, Fukuoka, Japan

P-404 EXPLORING NEW COMPLEX PROTEIN SUPPLEMENT SOLUTIONS FOR CLINICAL EMBRYO CULTURE MEDIA. John Becker, BS¹, Benjamin B Goheen, BS¹, Deirdre M Logsdon, MS³, Sandeep K Rajput, PhD¹, Courtney K Grimm, MS¹, William B Schoolcraft, MD¹ and Rebecca L. Krisher, PhD², ¹Colorado Center for Reproductive Medicine, Lone Tree, CO, ²CCRM, Lone Tree, CO

P-405 COMPARISON OF HUMIDIFIED VERSUS NON-HUMIDIFIED INCUBATION WITH SEQUENTIAL CULTURE MEDIA IN A TIME-LAPSE INCUBATOR USING SIBLING OOCYTE SPLITS. Rebecca Holmes, PhD¹, Jaime Weinberg, BS², Laurie Kalaghan, BS³, Brett Goode, BS², William B Schoolcraft, MD³ and Jason E Swain, PhD⁴, ¹CCRM Boston, Chestnut Hill, MA, ²CCRM Boston, Boston, MA, ³Colorado Center for Reproductive Medicine, Lone Tree, CO, ⁴CCRM Fertility Network, Lone Tree, CO

P-406 EFFECT OF ULTRA-LOW OXYGEN (2%) ENVIRONMENT ON MOUSE EMBRYO MORPHOKINETICS AND BLASTOCYST DEVELOPMENT. Khaled Kaskar, MS⁵, Richard Cochran, PhD⁶, Daneeka P Hamilton, MPH², Amanda David, BS², Ralf Henkel, PhD³, William Gibbons, MD¹, Chellakkann Selvanesan Blesson, PhD¹ and Kaskar group, ¹Baylor College of Medicine, Houston, TX, ²Texas Children’s Hospital, Houston, TX, ³University of the Western Cape, Bellville, South Africa

P-407 DOES SUPPLEMENTATION OF MEDIA WITH INSULIN OR INSULIN-LIKE GROWTH FACTOR 1 (IGF-1) ENHANCE MORPHOKINETICS OF MOUSE EMBRYO DEVELOPMENT? Khaled
ART LAB - EMBRYO SELECTION

P-408 INCREASING THE EFFICACY OF MOUSE EMBRYO ASSAYS FOR QUALITY CONTROL IN THE IVF LABORATORY. Khalied Kaskar, MS1, Richard Cochran, PhD1, Daneeka P Hamilton, MPH2, Amanda David, BS2, Ralf Henkel, PhD3, William Gibbons, MD1 and Chellakkan Selvanesan Blesson, PhD1, 1Baylor College of Medicine, Houston, TX, 2Texas Children’s Hospital, Houston, TX, 3University of the Western Cape, Bellville, South Africa

P-409 DEEP CONVOLUTIONAL NEURAL NETWORKS (CNN) FOR ASSESSMENT AND SELECTION OF NORMALLY FERTILIZED HUMAN EMBRYOS. Irene Dimitriadis, MD1, Charles L Bormann, PhD1, Manoj Kumar Kanakasabapathy, MS2, Prudhvi Thriramalaraju, BS3, Raghav Gupta, BTech4, Rohan Pooniwala, BTech4, Irene Souter, MD3, Sarah T Rice, MS3, Pragati Bhowmick, MD3 and Hadi Shafiee, PhD3, 1Massachusetts General Hospital, Cancer Center, Boston, MA, 2Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, 3MGH Fertility Center and Endocrine and Infertility, Boston, MA, 4Artificial Intelligence, Imperial College London, London, UK

P-410 DEEP LEARNING CAN IMPROVE DAY 5 EMBRYO SCORING AND DECISION MAKING IN AN EMBRYOLOGY LABORATORY. Eduardo Hariton, MD, MBA1, Prudhvi Thriramalaraju, BS2, Manoj Kumar Kanakasabapathy, MS3, Raghav Gupta, BTech4, Rohan Pooniwala, BTech4, Irene Souter, MD1, Irene Dimitriadis, MD1, Christine Veiga, BS1, Pietro Bortoletto, MD1, Charles L Bormann, PhD1 and Hadi Shafiee, PhD3, 1Massachusetts General Hospital, Cancer Center, Boston, MA, 2Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, 3MGH Fertility Center and Endocrine and Infertility, Boston, MA, 4Artificial Intelligence, Imperial College London, London, UK

P-411 PREDICTING BLASTOCYST FORMATION OF DAY 3 EMBRYOS USING A CONVOLUTIONAL NEURAL NETWORK (CNN): A MACHINE LEARNING APPROACH. Pietro Bortoletto, MD1, Manoj Kumar Kanakasabapathy, MS2, Prudhvi Thriramalaraju, BS3, Raghav Gupta, BTech4, Rohan Pooniwala, BTech4, Irene Souter, MD4, Irene Dimitriadis, MD5, Kristy Dickinson, BS, TS1, Eduardo Hariton, MD, MBA1, Charles L Bormann, PhD6 and Hadi Shafiee, PhD3, 1Division of Reproductive Endocrinology and Infertility, Boston, MA, 2Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, 3Division of Engineering in Medicine, Cambridge, MA, 4Massachusetts General Hospital, Harvard Medical School, Boston, MA, 5Massachusetts General Hospital, Boston, MA

P-412 THE APPLICATION OF MACHINE LEARNING METHODS TO EVALUATE PREDICTORS OF LIVE BIRTH IN PROGRAMMED THAW CYCLES. Denis Vaughan, MD, MRCPI1, Weiwei Pan, PhD2, Yaniv Yacoby, BA3, Emily A Seidler, MD1, Angela Q Leung, MD4, Finale Doshi-Velez, PhD5 and Denny Sakkas, PhD6, 1Beth Israel Deaconess Medical Center, Boston, MA, 2Harvard Institute for Applied Computer Science, Cambridge, MA, 3Harvard University, Cambridge, MA, 4Boston IVF, Waltham, MA

P-413 DEEP LEARNING FOR AUTOMATIC DETERMINATION OF BLASTOCYST EMBRYO DEVELOPMENT STAGE. Alejandro Chavez-Bodiola, MD1, Gerardo Mendizabal-Ruiz, PhD2, Vladimir Ocegueda-Hernandez, MSc3, Adolfo Flores-Saiffe Farias, MSc, PhD3 and Andrew J Drakeley, MD FRCOG4, 1Darwin Technologies LTD, Maghull, United Kingdom, 2Departamento de Ciencias Computacionales, Universidad de Guadalajara, Guadalajara, JA, Mexico, 3New Hope Fertility Center, Guadalajara, JA, Mexico, 4Hewitt Centre for Reproductive Medicine, Liverpool Women’s Hospital, Liverpool, United Kingdom

P-414 ARTIFICIAL NEURAL-NETWORK ANALYSIS COMBINED WITH TIME-LAPSE IMAGING PREDICTS EMBRYO ABILITY TO DEVELOP TO THE BLASTOCYST STAGE. Giovanni Coticchio, Ph.D.1, Raffaella Sciaino, B.Sc.1, Giulia Fiorentino, B.Sc.2, Federica Cavalera, Ph.D.2, Giovanna Nicora, B.Sc.3, Riccardo Bellazzi, Ph.D.3, Andrea Borini, M.D.1, Silvia Garagna, Ph.D.2 and Maurizio Zuccotti, Ph.D.2, 19.Baby
ART LAB - EMBRYOS

P-415 A MASSIVE EMBRYO MORPHOKINETICS COMPARISON SYSTEM IS ABLE TO SELECT EMBRYOS WITH HIGH IMPLANTATION POTENTIAL ENHANCING SINGLE EMBRYO TRANSFER POLICY. Lucia Alegre, PhD¹, Raquel Del Gallego, PhD², Lorena Bor Arnal, PhD, Manuel Muñoz, MD³, Antonio Pellicer, M.D., Ph.D.³ and Marcos Meseguer, PhD¹, IVIRMA Global, Valencia, Spain, IVIRMA ALICANTE, Alicante, Spain, IVI-RMA Valencia, Valencia, Spain, IVIRMA Global, Valencia, Spain, Tel Aviv, Israel

P-416 EFFECTS OF MEIOTIC SPINDLE IMAGING IN HUMAN OOCYTES FOLLOWING PIEZO-ICSI ON OOCYTE FERTILIZATION AND EMBRYO DEVELOPMENT. Kenichiro Hiraoka, Ph.D¹, Takayuki Tatsumi, M.D., Ph. D.², Makiko Tajima, M.D.³, Tomonori Ishikawa, M.D.４ and Kiyotaka Kawai, M.D.Ph.D.⁵, Kameda IVF Clinic Makuhari, Chiba, Japan, Kamed IV Clinic Makuhari, Department of Reproductive Medicine, Tokyo, Japan, Kameda IVF clinic Makuhari, Tokyo Medical and Dental University, Tokyo, Japan, Kamed Medical Center, Chiba, Japan

P-417 EFFECT OF DIFFERENT 6-DIMETHYLAMINOPURINE (6-DMAP) TREATMENTS ON REVERSIBLE ARRESTING OF MONO- AND TRIPRONUCLEAR EMBRYOS AT THE PRONUCLEAR STAGE. Noelia Grau, PhD¹, Ana González-Picazo, MSc², Nuria Soler, MSc³, Maria José Escrivá, PhD⁴, Xavier Vendrell, PhD⁵ and Thamara Viloria, PhD⁶, IVIRMA Valencia, Valencia, Spain, IVI-RMA Valencia, Valencia, Spain, IVIRMA Global, Valencia, Spain

P-418 DEEP LEARNING-ENABLED PREDICTION OF FERTILIZATION BASED ON OOCYTE MORPHOLOGICAL QUALITY. Prudhvi Thirumalaraju, BS¹, Charles L Bormann, PhD², Manoj Kumar Kanakasabapathy, MS¹, Hemanth Kandula, BS¹ and Hadi Shafiee, PhD³, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, Massachusetts General Hospital, Harvard Medical School, Boston, MA

P-419 USE OF A SPECIFIC GRAVITY DEVICE TO PREDICT BLASTOCYST SEX. Alex L Schaubhut, B.S.¹, Cara Wessels, PhD¹, Samuel D Prien, PhD² and Lindsay L Penrose, PhD², Texas Tech University, Lubbock, TX, Texas Tech University Health Sciences Center, Lubbock, TX

P-420 A CLINICAL MODEL PREDICTING SUPERNUMERARY EMBRYOS IN WOMEN UNDERGOING FREEZE-ALL CYCLES UTILIZING SART CORS DATA. Yetunde O. Ibrahim, MD¹, Greg Stoddard, MS² and Erica Johnstone, MD³, Utah Center for Reproductive Medicine, Salt Lake City, UT, Affiliation not provided

P-421 BLASTOCYST AND EMBRYO SCREENING SELECTION TOOL (BESST): AN ULTRAFAST NON-INVASIVE EMBRYO SELECTION TEST FOR USE IMMEDIATELY PRIOR TO EMBRYO TRANSFER. Raminta Zmuidinaite, MSc¹, Ricardo J Pais, PhD¹, Ray K Iles, PhD², Fady I Sharara, M.D.³, Christian Jardine, BEng⁴ and Stephen A Butler, PhD³, ¹MAP Sciences Ltd, Bedford, United Kingdom, ²MAPSciences Ltd, Bedford, United Kingdom, ³Virginia Center for Reproductive Medicine, Reston, VA, ¹Trainee software engineer, Bedford, United Kingdom, ²MAP Sciences, Bedford, United Kingdom

P-422 QUALITY EVALUATION OF DIRECT CLEAVAGE EMBRYOS AT THE FIRST DIVISION USING A COMBINED EARLY CLEAVAGE WITH AN EMBRYO MORPHOLOGICAL GRADING METHOD. Yumi Nagata, M.D., Ph.D.¹, Hiroyuki Tomari, Ph.D. ¹, Saki Gondo, M.D.², Kensuke Saito, M.D.² and Kou Honjo, M.D.², ¹IVF Nagata Clinic, Fukuoka, Japan, ²Affiliation not provided
ART LAB - ICSI


P-424  SPERM DNA FRAGMENTATION REDUCES EMBRYO DEVELOPMENT AND ONGOING PREGNANCY IN COUPLES WITH NON-MALE FACTOR INFERTILITY UNDERGOING INTRACYTOPLASMIC SPERM INJECTION CYCLES. Matheus de Castro Azevedo, BSc, Bianca Ferrari Zanetti, PhD, Daniela Paes de Almeida Ferreira Braga, PhD, Amanda Souza Setti, MSc, Assumpto Iaconelli Jr., MD and Edson Borges Jr., PhD, 1Fertility Medical Group, Sao Paulo, Brazil, 2Sapientiae Institute, Sao Paulo, Brazil, 3Fertility Medical Group / Sapientiae Institute, Sao Paulo, Brazil

P-425  EFFECT OF SPERM SELECTION TECHNIQUES ON HUMAN NEONATAL GENDER RATIO IN PATIENTS UNDERGOING ICSI. Khaled Mohamed Elqusi, BSc1, Eman Mohamed Hassanen, BSc1, Hanaa Ahmed Alkhader, MBBC2, Hosam Zaki, MBBC, Msc, FRCOG1, Ralf Henkel, PhD3 and Ashok Agarwal, PhD, 1Ganin Fertility Center, Cairo, Egypt, 2Ganin IVF lab Director, Cairo, Egypt, 3University of the Western Cape, Bellville, South Africa, 4Cleveland Clinic, CLEVELAND, OH

P-426  CERTAIN MORPHOLOGICAL CHARACTERISTICS OF THE SPERMATOZOOON USED FOR INTRACYTOPLASMIC SPERM INJECTION (ICSI) ARE ASSOCIATED WITH A HIGHER LIKELIHOOD OF DEVELOPMENTAL ARREST AND EMBRYO DEGENERATION. Magdalena Vasileva, MSc, Dimitar Parvanov, PhD, Kristina Nikolova, MSc, Rumiana Gameva, MSc and Georgi Stamenov Stamenov, MD/PhD, Nadezhda Women’s Health Hospital, Sofia, Bulgaria

P-427  DAY 2 ICSI DOES RESULT IN GOOD QUALITY BLASTOCYST DEVELOPMENT AND PREGNANCY. Rebecca Kile, MS1, Haleigh Siz, MS1, Sue McCormick, BS1, William B Schoolcraft, MD1 and Rebecca L. Krisher, PhD2, 1Colorado Center for Reproductive Medicine, Lone Tree, CO, 2CCRM, Lone Tree, CO

P-428  DO DIFFERENT SPERM SELECTION TECHNIQUES HAVE AN IMPACT ON EMBRYOLOGICAL FINDINGS AND CLINICAL OUTCOMES OF ABNORMAL SPERM DNA FRAGMENTATION PATIENTS COMPARED TO NORMAL ONES; A RETROSPECTIVE COHORT STUDY. Manar Mohamed Hozyen, MSc, Eman Mohamed Hassanen, BSc, Yasmine sayed Azzouz, BSc, Hanaa Ahmed Alkhader, MBBC and Hosam Zaki, MBBC, Msc, FRCOG, Ganin Fertility Center, Cairo, Egypt

P-429  IDENTIFICATION OF THE OPTIMAL PUNCTURE POSITION IN PIEZO-ICSI USING IMAGE ANALYSIS: A PILOT STUDY. Tomohiro Maekawa, M.MS., 1Shimpei Mizuta, M.HS., 2Yuya Kinishi, B.E., 3Chie Takahashi, MBBS1, Hidehiko Matsuabayashi, MD, 2Kotaro Kitaya, MD, 2Takumi Takeuchi, MD, PhD1, Yutaka Hata, Ph.D. and Tomomoto Ishikawa, MD, 2Reproduction Clinic Tokyo, Tokyo, Japan, 2Reproduction Clinic Osaka, Osaka, Japan, 2Graduate School of Simulation Studies, Kobe, Japan

P-430  HIGHER PREGNANCY RATES AFTER ZONA PELLUCIDA SPERM SELECTION. Rumiana Gameva, MSc, Dimitar Parvanov, PhD, Magdalena Vasileva, MSc, Kristina Nikolova, MSc and Georgi Stamenov Stamenov, MD/PhD, Nadezhda Women’s Health Hospital, Sofia, Bulgaria

P-431  IMPACT OF A MODIFIED ICSI INJECTION PROCEDURE IN ART OUTCOMES: PRELIMINARY FINDINGS. Claudia G Petersen, Ph.D., 1Ana Lucia Mauri, B.Sc., 1Mariana Matilha, B.Sc., 2Laura D Vagnini, B.Sc., 3Adriana Renzi, Ph.D., 3Bruna Petersen, B.Sc., 1Andrea Nicoletti, R.N., 2Felipe Dieamant, M.D., 1Joao Batista A Oliveira, M.D., Ph.D., 2Ricardo L R Baruffi, M.D., 1 and Jose G Franco Jr., M.D., Ph.D., 1Center for Human Reproduction Prof. Franco Jr/ Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil, 2Center for Human Reproduction Prof. Franco Jr, Ribeirao Preto, Brazil, 2Paulista Center for Diagnosis, Research and Training, Ribeirao Preto, Brazil
CONSIDERATION OF LOW-INVASIVE ICSI (NBP-ICSI) USING A NON BEVEL PIPET.
Satoshi Akimoto, Bachelor, Ayumi Hamaki, Bachelor, Wakana Bekku, MD, Jun Matsukawa, MD, Miwa Sato, MD, Shuichiro Hara, MD, PHD, Hiroto Tajima, MD, PHD and Hironori Asada, MD, Shinyurigaoka general hospital, Kawasaki-city, Kanagawa, Japan

WHAT IS THE BEST SPERM SOURCE AND METHOD OF SPERM SELECTION IN CASES WITH ABNORMAL SEMINAL OXIDATION-REDUCTION POTENTIAL (ORP) LEVELS ON THE DAY OF ICSI?
Eman Mohamed Hassanen, BS,1 Khaled Mohamed Elqusi, BS,1 Yasmine sayed Azzouz, BS,1 Hanaa Ahmed Alkhader, MBChB1, Hosam Zaki, MBChB, Msc, FRCOG1, Ralf Henkel, PhD2 and Ashok Agarwal, PhD3, 1Ganin Fertility Center, Cairo, Egypt, 2University of the Western Cape, Bellville, South Africa, 3Cleveland Clinic, CLEVELAND, OH

INVESTIGATION OF DEEP LEARNING BASED DETECTION OF SPERM MORPHOLOGICAL DEFECTS.
Hidetoshi Yamashita, M.S.,1 Nobuko Yasui, M.S.,2 Nozomi Uchida, M.S.,2 Yuri Sukenobe, M.S.,2 Megumi Ibayashi, B.S.,2 Masato Salto, B.S.,3 Kenichiro Hiroya, Ph.D4 and Kiyotaka Kawai, M.D,Ph.D3, 1Miraca Research Institute G.K., Hachioji, Japan, 2Kamedia IVF Clinik Mukuhari, Chiba, Japan, 3Kamedia Medical Center, Kamogawa, Japan

DEFECTS IN SPERM CAPACITATION AND FERTILIZING ABILITY ARE HIGHLY PREVALENT IN MEN UNDERGOING FERTILITY WORKUPS, EVEN IF NORMOSPERMIC.
Cristina Cardona, PhD1, G Charles Ostermeier, PhD1, Natan Bar-Chama, MD2, Joshua Alan Bodie, MD2, Michael J. Buccher, DO3, Christopher De Jonge, PHD, HCLD3, Bryan Kloos, PhD, HCLD, Randy S Morris, MD4, John E Nichols Jr., MD4, Gianpiero D. Palemo, M.D., Ph.D5, Zev Rosenwaks, M.D., Jay S Schinfeld, MD, FACOG9, Eric K Seaman, MD10, Fady I Sharara, M.D.11 and Alexander J Travis, VMD, PhD12, 1Androvia LifeSciences, Mountainside, NJ, 2Icahn School of Medicine at Mount Sinai, New York, NY, 3University of Minnesota, Minneapolis, MN, 4Park Nicollet Clinic, Minneapolis, MN, 5Androvia Lifesciences, Mountainside, NJ, 6IVF1, Naperville, IL, 7Piedmont Reproductive Endocrinology Group, Greenville, SC, 8the Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY, 9Abington Reproductive Medicine, Abington, PA, 10New Jersey Urology, Short Hills, NJ, 11Virginia Center for Reproductive Medicine, Reston, VA, 12Cornell University, Ithaca, NY

DOES THE USE OF MICROFLUIDIC SPERM SORTING FOR THE SPERM SELECTION IMPROVE IVF SUCCESS RATES IN MALE FACTOR INFERTILITY?
Pinar Ozcan, MD, Assoc. Prof.,1 Taha Takmaz, MD1, Melis Gokce Kocer Yazici, MD2, Oya Akcin Alagoz, MD, Assoc. Prof.,3 Mert Yesilada1, MD2, Cem Neset Fiçicioğlu, MD, PhD, Prof.2 and Osman Sevket, MD, Assoc. Prof.1, 1Bezmialem University, Fatih, Turkey, 2Yeditepe University, Ataşehir, Turkey, 3Yeditepe University, Istanbul, Turkey

WHICH IS THE BETTER CHOICE FOR THE AZOOSPERMIC PATIENTS WITH AZFc MICRODELETIONS, TESTICULAR SPERM OR DONOR SEMEN (AID) SPERM?
Li Zhang, Ph.D1, Jiaming Mao, MD, Bing Liu, MD, PhD1 and Jie Qiao, MD, PhD1, 1Peking University Third Hospital, Beijing, China, 2Peking University Third Hospital, Beijing, China, 3Peking University Third Hospital, Beijing, China

SPERM SELECTION WITH HYALURONIC ACID (PICSI) IMPROVES EFFICIENCY OF IVF CYCLES.
Licia Alegre, PhD1, Irene Hervas, PhD student2, Lorena Bori Amal, PhD1, Alberto Tejera Sr., PhD3, Thamar Viñolas, PhD1, Jose Alejandro Remohi, MD, PhD1 and Marcos Meseguer, PhD, 1IVIRMA Global, Valencia, Spain, 2Affiliation not provided, 3Embryologist, Valencia, Spain, 4IVIRMA Valencia, Valencia, Spain, 5IVIRMA Global, Valencia, Spain, Tel Aviv, Israel
P-440 SELECTING SPERMATOZOA WITH INTACT CHROMATIN MAY REDUCE EMBRYO ANEUPLOIDY. Alessandra Parrella, M.Sc., Zev Rosenwaks, M.D. and Gianpiero D. Palermo, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

P-441 ASSESSING AND RESTORING GEMETE FERTILIZING ABILITY. Stephanie Cheung, B.S., Alessandra Parrella, M.Sc., Derek Keating, B.A., Philip Xie, B.S., Zev Rosenwaks, M.D., Rony Elias, M.D. and Gianpiero D. Palermo, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

P-442 SECOND EJACULATION: A SIMPLE, COST FREE MECHANISM TO DEAL WITH HIGH SPERM DNA FRAGMENTATION. Michael H. Dahan, MD1, Rabea Youcef Khoudja, MD, PhD2, Abbie Gagnon, M.Sc.2, Grace Tan, D Phil2 and Seang Lin Tan, MD, MBA2, 1Division of REI, McGill University and OrigineElle Fertility Clinic and Women’s Health Centre, Montreal, QC, Canada, 2Originele Fertility Center, Montreal, QC, Canada

P-443 SPERM-BORNE mRNAs AS A BIOMARKER FOR HUMAN SPERM QUALITY. Yung Tang, Master degree1, Ying Zhang, MD, PhD2, Wenzhong Zhao, PhD2, Xinzong Zhang, MD, PhD2, Weibing Qin, MD, PhD2, Shunmei Deng, MD2, Jiabao Wu, BSc2, Mengyuan Zhang, PhD2 and Wei Yan, M.D., Ph.D.1, 1Family Planning Research Institute of Guangdong Province, Guangzhou, China, 2Affiliation not provided, 1University of Nevada, Reno School of Medicine, Reno, NV

P-444 DEEP LEARNING-ENABLED SMARTPHONE-BASED SYSTEM FOR AUTOMATED EMBRYO ASSESSMENTS AND EVALUATION. Manoj Kumar Kanakasabapathy, MSc, Prudhvi Thirumalaraju, BSc1, Charles L Bormann, PhD2, Hemanth Kandula, BSc1, Sandeep Kota Sai Pavan, BSc1, Divyank Yarravarapu, BSc1 and Hadi Shaﬁee, PhD1, 1Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, 2Massachusetts General Hospital, Harvard Medical School, Boston, MA


P-446 173 BABIES BORN AFTER ROUND SPERMATID INJECTION INTO OOCYTES: SURVEY OF THEIR DEVELOPMENT FROM FERTILIZATION UP TO 2 YEARS OLD. Atsushi Tanaka, M.D., Ph.D., Motoi Nagayoshi, M.D., Izumi Tanaka, Phar.B., Takashi Yamaguchi, M.D., Ph.D. and Motoharu Ohno, M.D., Saint Mother Hospital, Kitakyushu, Japan

P-447 A NEW SPERM PREPARATION SOLUTION IMPROVES THE OUTCOME OF HUMAN CONVENTIONAL IN VITRO FERTILIZATION WITH HYPERACTIVATED SPERMATOZOA. Hiroyuki Tomari, Ph.D.1, Kou Honjo, M.D.2, Saki Gondo, M.D.2, Kensuke Saito, M.D.2 and Yumi Nagata, M.D., Ph.D.1, 1IVF Nagata Clinic, Fukuoka, Japan, 2Affiliation not provided

P-448 YOUNGER FEMALE AGE MAY COMPENSATE THE HIGH SPERM DNA FRAGMENTATION IN THE ART PROGRAMS. Anastasia Kirillova, PhD1, Irina Vjacheslavovna Ushakova, PhD1, Maria Farmakovskaya, PhD2, Yulia Kiseleva, PhD2, Olga Golubeva, PhD2, Tatiana Volodjaeva, MSC3, Nona Mishieva, PhD4 and Aydar Abubakirov, PhD4, 1Embriologist, Moscow, Russian Federation, 2National Medical Research Center for Obstetrics, Gynecology and Perinatology named after Academician V.I.Kulakov of Ministry of Healthcare of Russian Federation, Moscow, Russian Federation, 3Embryologist, Moscow, Russian Federation, 4Reproductive endocrinology, Moscow, Russian Federation

P-449 ICSI OUTCOMES USING SPERMATOZOA WITH OPTIMAL GENOME CHARACTERISTICS. Alessandra Parrella, M.Sc., Philip Xie, B.S., Aysha Trout, B.A., Zev Rosenwaks, M.D. and Gianpiero D. Palermo, M.D., Ph.D., The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

P-450 FROM FERTILIZATION TO BLASTOCYST: A COMPARATIVE STUDY OF TESTICULAR TO JACULATED SPERM IN INTRACYTOPLASMIC SPERM INJECTION (ICSI) TREATMENT CYCLES. Sophie M LaBarre, BA1, Shunping Wang,
PHD, HCLD², Richard Hackett, MS² and Carol Wheeler, MD¹, ¹Warren Alpert Medical School of Brown University, Providence, RI, ²Department of Obstetrics and Gynecology, Warren Alpert Medical School of Brown University; Women & Infants Hospital, Providence, RI

**P-451 SPERM RETRIEVAL RATES AND CLINICAL OUTCOMES WITH TESTICULAR SPERM EXTRACTION IN RELATION TO THE ETOLOGY OF AZOOSPERMIA.** Tomomoto Ishikawa, MD¹, Shimpei Mizuta, M.HS.², Kohei Yamaguchi, MD¹, Hidehiko Matsuhashi, MD², Kataro Kitaya, MD¹ and Takumi Takeuchi, MD, PhD², ¹Reproduction Clinic Osaka, Osaka, Japan, ²Reproduction Clinic Tokyo, Tokyo, Japan

**P-452 FACTORS WHICH PREDICT IMPROVEMENT IN DNA FRAGMENTATION ON A SECOND SEMEN SPECIMEN 3 HOURS AFTER THE FIRST.** Michael H. Dahan, MD¹, Rabea Youcef Khoudja, MD, PhD², Abbie Gagnon, M.Sc.³, Grace Tan, D Phil² and Seang Lin Tan, MD, MBA², ¹Division of REI, McGill University and OrigineElle Fertility Clinic and Women’s Health Centre, Montreal, QC, Canada, ²Originalle Fertility Center, Montreal, QC, Canada

**P-453 SPERM DNA FRAGMENTATION INDEX IS NOT ASSOCIATED WITH RECURRENT IVF/ICSI FAILURE.** Jordan Best, B.S.¹, Premal Patel, MD², Taylor P Kohn, MD, MPhil³, Elaine de Quadros, D.H.Sc⁴ and Ranjith Ramasamy, M.D.², ¹University of Miami, MIAMI, FL, ²University of Miami Miller School of Medicine, Miami, FL, ³Johns Hopkins University School of Medicine, Baltimore, MD, ⁴Fertility & IVF Center of Miami, Miami, FL

**P-454 WITHDRAWN**

**P-455 MULTI-SITE, BLIND PROSPECTIVE TRIAL ASSESSING WHETHER SEMEN OXIDATION REDUCTION POTENTIAL (SORP) ASSESSMENT CAN BE USED TO PREDICT LOW FERTILISATION WITH CONVENTIONAL IVF: INTERIM ANALYSIS.** Georgie Pool, MSc¹, Shaun Rogers, BSc¹, Anastasia Mania, MSc², Georgia Everett, MSc², Alpesh Mahesh Doshi, M.Sc³, Sri Srikantharajah, BVSc⁴, Hasmukh N Joshi, BSc⁵, Martin Wilding, Ph.D.⁶, Samuel Bishop, MSc⁶, Lourdes Muriel, BSc⁷, Walid Maalouf, PhD⁸ and Cristina Hickman, PhD⁹, ¹City Fertility, London, United Kingdom, ²Kings Fertility, London, United Kingdom, ³IVF London, London, United Kingdom, ⁴Homerton NHS Hospital, London, United Kingdom, ⁵Homerton Hospital, London, United Kingdom, ⁶Create Fertility, London, United Kingdom, ⁷IVI, London, United Kingdom, ⁸Nottingham University, Nottingham, United Kingdom, ⁹Imperial College London, London, United Kingdom

**THE EVALUATION OF SEMINAL OXIDATION REDUCTION POTENTIAL CAN PREDICT NORMAL SPERM PARAMETERS.** Mariem BEN Khelifa, PhD¹, Sonia Mnallah, Dr¹, Mohamed Khrouf, Dr², Khaled Mahmoud, Dr¹, MED Habib BEN Aribia, Dr², Hanen Elloumi, Dr¹, Fathi Zhioua, Dr¹ and Khaled Terras, Dr¹, ¹clinique la rose, centre FERTILLIA, Tunis, Tunisia, ²clinique La Rose, Centre FERTILLIA, jardins du lac 2, Tunisia

**USEFULNESS OF A NEW SPERM TRANSPORT CONTAINER “TRANSPORTER-S” FOR INFERTILITY TREATMENT.** Toshiyuki Iwahata, MD, PhD¹, Takashi Tanaka, BSc¹, Akiyoshi Osaka, Bachelor of Medicine¹, Atsushi Yamamoto, MD, PhD², Yoshitomo Kobori, MD, PhD¹, Kouhei Sugimoto, MD, PhD¹ and Hiroshi Okada, MD, PhD¹, ¹Dokkyo Medical University Saitama Medical Center, Koshigaya, Japan, ²Dokkyo Medical University Saitama Medical Center, Saitama-prefecture Koshigaya-city, Japan

**THE TIME-COURSE FROM GERMINAL-VESICLE BREAK DOWN (GVBD) TO FIRST POLAR BODY EXTRACTION (PBE) IN RESCUED IN VITRO MATURATION (R-IVM), A PROSPECTIVE STUDY ON TIME LAPSE IMAGING.** Mingpeng Zhao, PhD Candidate, Tin Chiu Li, MD and David Yiu Leung Chan, PhD, Assisted Reproductive Technology Unit, Department of Obstetrics and Gynecology, Faculty of Medicine, The Chinese University of Hong Kong, Shatin, Hong Kong

**A NOVEL TECHNIQUE OF USING MECHANICAL GRIPPERS TO IMMOBILIZE EMBRYO DURING BIOPSY.** Santosh Bhargav, PhD¹, Ramanth T J Babu, PhD¹, Shubham Chandakar, MTech¹, Ritesh Aggarwal, MSc (CE)², Vivek Dave, MS² and Hemant
**P-460** DAY 2 LASER ASSISTED HATCHING (AH) SIGNIFICANTLY IMPROVES IMPLANTATION RATES IN FRESH BLASTOCYST TRANSFERS.
Sarah H Bjorkman, MD, Stephanie M Nichols-Burns, PhD, Jonathan Lo, MSc, Nuri Kodaman, PhD, Pinar Kodaman, MD/PhD and Dawn A Kelk, Ph.D., HCLD, New York University School of Medicine, New York, NY

**P-461** INNOVATIVE HIGH THROUGHPUT SCREEN IN EMBRYONIC STEM CELLS REPORTS STRESS-FORCED IMBALANCED DIFFERENTIATION, IMPORTANT TO ANALYZE STRESS IN IVF AND DRUG DEVELOPMENT; ANALYSES USING BULK AND SINGLE CELL RNA-SEQ.
Elizabeth E Puscheck, MD, MS, MBA1, Sudipta Dutta, Ph.D.1, Mohammed Abdulkareem Abdulhasan, Ph.D.1, Katherine Gurdziel, Ph.D.1, Douglas Ruden, Ph.D.1 and Daniel Rappolee, Ph.D.1
Wayne State University, Detroit, MI, 2Reproductive Stress 3M, Inc., 3Wayne State University, Detroit, MI

**P-462** AUTOMATED COMPUTER ANALYSIS OF HUMAN BLASTOCYST EXPANSION FROM EMBRYOSCOPE TIME-LAPSE IMAGE FILES.
Thomas TF Huang, PhD1, Brienne C Walker, MS2, M Y Harun, BS3, Aaron T Ohta, PhD4, M A Rahman, PhD5, Joshua Mellinger, BS3 and Willy Chang, BS1
University of Hawaii John A Burns School of Medicine, Honolulu, HI, 2Pacific In Vitro Fertilization Institute, Honolulu, HI, 3Department of Electrical Engineering, University of Hawaii at Manoa, Honolulu, HI

**P-463** NEONATAL OUTCOMES OF SINGLETON LIVE BIRTHS WITH VANISHING TWIN SYNDROME FOLLOWING TRANSFER OF DOUBLE EMBRYOS IN ASSISTED REPRODUCTIVE TECHNOLOGY: A RETROSPECTIVE COHORT STUDY.
Junfang Yan, Master, The Third Affiliated Hospital of Zhengzhou University, Zhengzhou, China

**P-464** REPRODUCTIVE AND PERINATAL OUTCOMES USING CRYOPRESERVED OOCYTES: AN ANALYSIS OF NATIONAL DATABASE.

**P-465** DOES BODY MASS INDEX INFLUENCE THE ODDS OF A GOOD PERINATAL OUTCOME FOLLOWING FRESH AUTOLOGOUS IN VITRO FERTILIZATION CYCLES AMONG PATIENTS WITH POLYCYSTIC OVARY SYNDROME? A NATIONAL STUDY.
Jenna S Hynes, MD1, Jeremy M. Weber, MS2, Tracy Truong, MS2, Kelly S. Acharya, MD1 and Jennifer L. Eaton, MD, MSC1
Division of Reproductive Endocrinology and Infertility, Duke University Medical Center, Durham, NC, 2Department of Biostatistics & Bioinformatics, Duke University Medical Center, Durham, NC

**P-466** EFFECT OF IN VITRO FERTILIZATION AND FRESH TRANSFER CONCEPTION ON BIRTHWEIGHT FOR GESTATIONAL AGE : A 2013-2016 FRENCH OBSERVATIONAL COHORT OF 49 224 NEONATES.
Sylvie Epelboin Sr., MD1, Morgane Valentin, MD2, Rachel Levy Sr., MD PhD3, Marianne Bergere Sr., MD4 and Fabienne Pessione Sr., Dr4, Hôpital Bichat-Claude Bernard, Assistance Publique Hôpitaux de Paris, Paris 7 Diderot University, Paris, France, 3Hôpital bichat, Paris, France, 4Hôpital Tenon Assistance Publique Hôpitaux de Paris Sorbonne University, Paris, France, 5Agence de la Biomédecine, Saint-Denis, France

**P-467** OBSTETRIC, NEONATAL AND LONG-TERM OUTCOMES OF CHILDREN CONCEIVED FROM IN VITRO MATURER OOCYTES.
Eun Jeong Yu, MD1, Tae Ki Yoon, M.D, Ph.D.2, Woo Sik Lee, M.D, Ph.D.3, Hannah Kim, MD4, Chanhong Park, M.D.1, Eun A Park, MS2 and Jayeon Kim, MD, MPH3
CHA Seoul Fertility Center, O&B, Gy, Seoul, Korea, Republic of (South), 2CHA Seoul Fertility Center, Seoul, Korea, Republic of (South), 3Fertility Center of CHA Gangnam Medical Center, Seoul, Korea, Republic of (South), 4Fertility Center of CHA Gangnam Medical Center, SEOUL, Korea, Republic of (South)
P-468 COMPARISON OF BIRTHWEIGHT AND GESTATIONAL AGE AT DELIVERY IN SINGLE FROZEN EMBRYO TRANSFERS (FET) WITH AND WITHOUT PGT-A. Laura Perez Soriano, BA1, Joshua Stewart, M.D.2, Steven Spandorfer, M.D.2 and Zev Rosenwaks, M.D.2, 1Weill Cornell Medical College, New York, NY, 2The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

P-469 ASSOCIATION BETWEEN EMBRYO QUALITY AND BIRTHWEIGHT AMONG SINGLETONS AND TWINS CONCEIVED THROUGH AUTOLOGOUS FRESH IVF CYCLES. Mengmeng Li, MSPH MBBS1 and Valerie L Baker, MD2, 1Johns Hopkins Bloomberg School of Public Health, Department of Population, Family and Reproductive Health, Baltimore, MD, 2Johns Hopkins University School of Medicine, Division of Reproductive Endocrinology and Infertility, Lutherville, OR

P-470 IMPACT OF MODE OF CONCEPTION ON EARLY PREGNANCY HUMAN CHORIONIC GONADOTROPIN RISE AND BIRTHWEIGHT. Hayley M Richardson, MS1, Charikleia Kalliara, MD2, Monica Mainigi, MD3, Christos Coutifaris, MD, PhD3, Mary D Sammel, ScD1 and Suneeeta Senapati, M.D., Johns Hopkins Bloomberg School of Public Health, Department of Population, Family and Reproductive Health, Baltimore, MD, 2Johns Hopkins University School of Medicine, Division of Reproductive Endocrinology and Infertility, Lutherville, OR

P-471 FIRST TRimestER VAGINAL BLEEDING Does NOT PREDICT SMALL FOR GESTATIONAL AGE NEWBORNs FOLLOWING SINGLE EUPLOID FROZEN EMBRYO TRANSFER. Sydney Chang, MD1, Sass Wodoslawsky, BA2, Lily Ottensoser, BA2, Taranee Gharib Nazem, MD1, Dmitry Gounko, MA2, Joseph A. Lee, BA2 and Alan B Copperman, MD1, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Reproductive Medicine Associates of New York, New York, NY

P-472 DELAYED BLASTULATION HAS NO IMPACT ON NEONATAL OUTCOMES IN FROZEN-THAWED SINGLE BLASTOCYST TRANSFER CYCLES. Aya Yamato, B.S.1, Nanako Isshiki, M.S.2, Yuka Miyazaki, M.S.2, Hiroshi Matsumoto, M.S.2, Satoshi Mizuno, Ph.D.2, Ryoko Minekawa, Dr.2, Aisaku Fukuda, Dr.3 and Yoshiharu Morimoto, MD, PhD4, 1IVF Osaka Clinic, Osaka, Japan, 2Affiliation not provided, 3IVF Osaka Clinic, 4HORAC Grand Front Osaka clinic, Osaka, Japan

P-473 IS LOW BIRTH WEIGHT RELATED TO HIGH OOCYTE YIELD DURING FRESH TRANSFER ART CYCLES? RETROSPECTIVE ANALYSIS FROM HOMOLOGOUS CYCLES. Edelmiro Garza-Padilla, M.D.1, Julio C. Rosales, M.D.1, S. Alberto Dávila-Garza, M.D.1, Karla A. Cantú, M.Sc.1, Pasquale Patrizio, M.D.2 and Mario A. Patrón-Vázquez, M.D.1, 1IECH, Monterrey, NL, Mexico, 2Yale Fertility Center, New Haven, CT

P-474 INCIDENCE OF PRE-TERM BIRTH (PTB), LOW BIRTH WEIGHT (LBW), VERY LOW BIRTH WEIGHT (VLBW), AND MACROSOMIA IN GESTATIONAL CARRIER (GC) PREGNANCIES. Meghan B Smith, MD1, Rachel S Mandelbaum, MD1, Jacqueline Ho, MD MS1, Richard J Paulson, MD, MS1 and Kristin Bendikson, M.D.2, 1University of Southern California, Los Angeles, CA, 2USC Fertility, Pacific palisades, CA

P-475 PERINATAL OUTCOMES AFTER FRESH VERSUS FROZEN-THAWED EMBRYO TRANSFERS. Mariangela Badalotti, MD, MSc, PhD1, Shana Flach, BS2, Marta RIBEIRO Hentschke, BS2, Fabiana Wingert, Msc2, Ricardo Azambuja, PhD2, Vanessa Devens Trindade, MD2, Lilian Okada, BS2, Alice Tagliani-Ribeiro, MSc2, Letícia Auler Proença, BS2, Bibiana Cunegatto, BS2 and Alvaro Petracco, MD, PhD2, 1Fertilidad-Centro de Medicina Reproductiva, Porto Alegre, Brazil, 2Fertilidad-Centro de Medicina Reproductiva, PORTO ALEGRE, Brazil

P-476 RISK OF ADVERSE PERINATAL OUTCOMES AFTER OOCYTE DONATION: A SYSTEMATIC REVIEW AND META-ANALYSIS. Jose Antonio Moreno, MD1 and Checa Angel Miguel, MD, PhD2, 1Clínica de la Mujer - Medicina Reproductiva, vina del mar, Chile, 2FERTTY, Barcelona, Spain

ART PREGNANCY RISKS

P-477 OVERVIEW OF 2016 U.S. ASSISTED REPRODUCTIVE TECHNOLOGY (ART) TREATMENT OUTCOMES AND CONTRIBUTION OF ART TO MULTIPLE-BIRTH AND PRETERM INFANTS IN THE UNITED STATES Saswati Sunderam,
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P-478 IN VITRO FERTILIZATION AND GESTATIONAL HYPERTENSION/PREECLAMPSIA RISK: EFFECT OF DIAGNOSIS VERSUS TREATMENT PARAMETERS. Barbara Luke, ScD, MPH, Morton B Brown, PhD, Michael L Eisenberg, M.D., Caetrona M Callan, MBBChir, Beverly Jayne Botting, PhD, Allan Pacey, BSc, PhD, Alastair G Sutcliffe, MD, Jayne Botting, PhD, Morton B Brown, PhD, Parameswaran Suresh, MD, PhD, and Richard Thomas Scott Jr., MD, IVI-RMA New Jersey, Basking Ridge, NJ, Yale University - Bridgeport Hospital, Bridgeport, CT

P-479 OBSERVATIONAL 4-YEARS STUDY OF OBSTETRIC COMPLICATIONS AFTER IN VITRO FERTILIZATION (IVF) AND FRESH EMBRYO TRANSFER IN A FRENCH NATIONAL COHORT OF 43,084 DELIVERIES. Sylvie Epelboin Sr., MD, Morgane Valentin, MD, Rachel Levy Sr., MD PhD, Marianne Bergere Sr., MD and Fabienne Pessione Sr., Dr, 1Hôpital Bichat-Claude Bernard, Assistance Publique Hôpitaux de Paris, Paris 7 Diderot University, Paris, France, 2Hôpital bichat, Paris, France, 3Hôpital Tenon Assistance Publique Hôpitaux de Paris Sorbonne University, Paris, France, 4Agence de la Biomédecine, Saint-Denis, France

P-480 MODE OF DELIVERY IN GESTATIONAL CARRIER (GC) PREGNANCIES IN WOMEN WITH AND WITHOUT A HISTORY OF CESAREAN SECTION (CS). Meggie B Smith, MD, Rachel S Mandelbaum, MD, Jacqueline Ho, MD MS, Kristin Bendikson, M.D. and Richard J Paulson, MD, MS, 1University of Southern California, Los Angeles, CA, 2USC Fertility, Pacific palisades, CA

P-481 THE IMPACT OF IVF ON NEONATAL BIRTHWEIGHT FROM 2000 TO 2017: A DRAMATIC REDUCTION OF LOW BIRTHWEIGHT INFANTS. Julia G Kim, MD, MPH, Brent M Hanson, MD, Andres Reig, M.D., Shelby A Neal, MD, Ashley W Tiegs, MD, Emily K Osman, MD, Paul A Bergh, MD, Emre Seli, M.D. and Richard Thomas Scott Jr., MD, IVI-RMA New Jersey, Basking Ridge, NJ, Yale University - Bridgeport Hospital, Bridgeport, CT

P-482 TWIN PREGNANCY OUTCOMES OF WOMEN WITH A DIDELPHUS UTERUS AFTER IN VITRO FERTILIZATION-EMBRYO TRANSFER. Pei Cai, Master1, Xihong Li, MD./Ph.D, Yan Ouyang, MD./Ph.D and Qingqing Wu, Bachelor’s degree, 1Central South University, Changsha, China, 2Reproductive and Genetic hospital of Citic-Xiangya, Changsha, China

P-483 PRECONCEPTION AND VERY EARLY PREGNANCY BLOOD PRESSURE AND DEVELOPMENT OF PRETERM PREECLAMPSIA, TERM PREECLAMPSIA AND GESTATIONAL HYPERTENSION. Carrie J Nobles, PhD1, Pauline Mendola, PhD2, Sunnii L Mumford, PhD3, Robert M Silver, MD4, Keewan Kim, PhD1, Victoria C Andriessen, BS1, Lindsey A Sjaarda, PhD2, Neil J Perkins, PhD1 and Enrique F Schisterman, PhD1, 1NICHHD, Bethesda, MD, 2National Institutes of Child Health and Human Development, Bethesda, MD, 3National Institute of Child Health and Human Development, Bethesda, MD, 4University of Utah, Salt Lake City, UT, 5Epidemiology Branch, DIPHR, NICHD, NIH, Bethesda, MD

P-484 PERCEPTIONS OF MULTIFETAL GESTATION AMONGST PATIENTS BEING TREATED FOR INFERTILITY. Anne Hutchinson, M.D., Seth J Barishansky, MS, Rafael Confino, BS, Angela K. Lawson, Ph.D. and Mary Ellen Pavone, MD, MSC, Northwestern University, Chicago, IL

P-485 RISK OF ECTOPIC PREGNANCY AFTER DIFFERENT OVARIAN STIMULATION PROTOCOLS IN FRESH SINGLE EMBRYO TRANSFER: ANALYSIS OF 71,831 CYCLES FROM THE JAPANESE ART REGISTRY. Seung Chik Jwa, M.D., Ph.D., M.P.H.1, Sachie Seto, M.D., Ph.D.1, Masashi Takamura, M.D., Ph.D1, Akira Kuwahara, M.D., Ph.D.2, Takeki Kajihara, M.D., Ph.D.1 and Osamu Ishihara, M.D., Ph.D.1, M.A PhD, Dmitry Kissin, MD, MPH, Yujia Zhang, PhD, Sheree Boulet, Dr.PH, Suzanne G Folger, PhD, Lee Warner, PhD and Wanda D Barfield, MD, 1Centers for Disease Control and Prevention, Chamblee, GA, 2Centers for Disease Control and Prevention (CDC), Atlanta, GA, 3Centers for Disease Control and Prevention, Atlanta, 4Emory University School of Medicine, Atlanta, GA, 5Centers for Disease Control and Prevention, Chamblee, GA.
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<td>Obstetric and Neonatal Risks in Term-Singleton Assisted Reproductive Technology (ART) Pregnancies: A Single-Center Report in a Period of 9 Years</td>
<td>Satoshi Furuya, MD, Kiyoshi Kubonoya, MD and Ken Kubonoya, MD, Kubonoya Ob/Gyn Clinic, Kashiwa City Chiba Prefecture, Japan</td>
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<td>Does Offering a Financial Incentive for Elective Single Embryo Transfer Decrease Rate of Multiple Gestation?</td>
<td>Channing Burks, MD, Mabel Lee, MD, Valerie Libby, MD, James Goldfarb, MD, MBA and Rachel S Weinerman, MD, University Hospitals Fertility Center/Case Western Reserve University, Beachwood, OH</td>
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<td>Among Women with Congenital Uterine Anomalies, Is a Short Cervix Predictive of Preterm Birth?</td>
<td>Amanda Rae Schwartz, MD and Sarah K Dotters-Katz, MD, Duke University Medical Center, Durham, NC</td>
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<td>Effect of Self-Administered Lidocaine In-Situ Gel on Intrauterine Device Insertion Pain: A Randomized Controlled Trial</td>
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<td>Treatment of Unfavorable Bleeding Patterns in Contraceptive Implant Users</td>
<td>Katharine Simmons, MD, MPH, Bliss Kaneshiro, MD, MPH, Jennifer Hauschildt, CPH, Kise Bond, BS, PSM, Jeffrey T Jensen, MD, MPH and Alison Edelman, MD, MPH, 1The Permanente Medical Group, San Leandro, CA, 2University of Hawaii, Honolulu, HI, 3OHSU, Portland, OR, 4Oregon Health &amp; Science University, Portland, OR</td>
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<td>Polidocanol/Doxycline Foam for Non-surgical Permanent Female Contraception: 6 Month Data Baboon Contraception Study</td>
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<td>P-495</td>
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<td>Michael A. Thomas, MD, Gretchen S Stuart, MD, MPH, Carolyn L Westhoff, MD, MSc, David L Eisenberg, MD, MPH, Andrea I Olariu, Krista Maye Symosko, PhD, Kise Bond, BS, PSM, Daniel E. Rose, MD, E. Rose Lawson, B.S., In Ki Cho, Ph.D., M.S., Slayden, PhD, Emily Mishler, MS, Daniel Chai, DVM, Jeffrey T. Jensen, MPH, St. Anthony Chan, DVM, Charles A. Easley IV, Ph.D., M.S., Jeffrey T Jensen, MPH, and Ov D Shlaien, PhD, 1Oregon National Primate Research Center, Beaverton, OR, 2Oregon National Primate Research Center, Beaverton, OR, 3Affiliation not provided, 4Department of Reproductive Health and Biology, Institute of Primate Research, Nairobi, Kenya, 5Professor, Portland, OR</td>
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P-496 SELF-ADMINISTERED VAGINAL LIDOCAINE IN-SITU GEL PRIOR TO INTRAUTERINE DEVICE INSERTION IS AN EFFECTIVE ANALGESIC IN WOMEN WITH NO PREVIOUS VAGINAL DELIVERY. Ahmed M Abbas, MD1, Noura H Abd Ellah, PhD2, Meret Ayad, MSc1 and Mohamed Abdellah, MD1, 1Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt, 2Department of Pharmaceutics, Faculty of Pharmacy, Assiut University, Assiut, Egypt.

P-497 WOMEN’S SATISFACTION WITH THE MULTIPURPOSE VAGINAL pH-REGULATOR (MVP-R; AMPHORA): RESULTS FROM THE PHASE 3 AMPOWER TRIAL. Michael A. Thomas, MD1, Kelly R. Culwell, MD, MPH2, Clint Dart, MS3 and Brandi Howard, PhD2, 1University of Cincinnati, Cincinnati, OH, 2Evofem, Inc., San Diego, CA, 3Health Decisions, Durham, NC

P-498 REPRODUCTIVE AGE WOMEN ARE INTERESTED IN SELF-ADMINISTERED VAGINAL CONTRACEPTIVES THAT PREVENT SEXUALLY TRANSMITTED INFECTIONS. Emily G. Hurley, MD1, Giovanni Pauletti, PhD2 and Michael A. Thomas, MD1, 1University of Cincinnati, West Chester, OH, 2University of Cincinnati, Cincinnati, OH.

P-499 THE EFFECT OF DIFFERENT PROGESTOGEN ONLY CONTRACEPTIVE METHODS ON FEMALE SEXUAL FUNCTION IN THE FIRST-TIME USERS: A CROSS SECTIONAL STUDY. Mohammed Khairy Ali, MD, Ahmed M Abbas, MD, Ali Shourman, MBCh, Ahmed M. Abdelmagied, MD, Alaa A Makhlouf, MSc, Mostafa Nasr Ibrahim, MD and Ahmed Makhlouf, MD, Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt.

P-500 CHINA FEMALE CONDOM(FCC) FUNCTIONALITY STUDY AGAINST AN EQUIVALENT MARKETED FEMALE CONDOM(FCC2). Yimin Cheng Sr., M.D., National Research Institute for Family Planning, Beijing, China.

P-501 RISK FACTORS FOR NON-COMPLIANCE IN POST VASECTOMY FOLLOW UP. Johnathan Doolittle, MD, Peter N Dietrich, MD, Pranav Dadhich, MD, Sarah M Brink, BS, Daniel Roadman, BS, Kayvon Kiani, BA, G Luke Machen, MD and Jay I Sandlow, MD, Medical College of Wisconsin, Milwaukee, WI.

P-502 RETURN TO FERTILITY AFTER 1-YEAR USE OF A SEGESTERONE ACETATE/ETHINYL ESTRADIOL CONTRACEPTIVE VAGINAL SYSTEM USE. Ginger Constantine, MD1, Kurt T Barnhart, MD, MSCE2, Anne E Burke, MD, MPH3, Ruth B Merkatz, PhD4, Shelli Graham, PhD5, Brian Bernick, MD5 and Sebastian Mirkin, MD5, 1EndoRheum Consultants, LLC, Malvern, PA, 2University of Pennsylvania, Perelman School Of Medicine, Philadelphia, PA, 3Johns Hopkins School of Medicine, Baltimore, MD, 4Population Council, New York, NY, 5TheapeuticsMD, Boca Raton, FL

P-503 DECLINE IN FERTILITY WITH AGE: AN OVERLOOKED AND UNDER ADDRESSED TOPIC IN WOMEN’S HEALTH VISITS. Molly Siegel, MD1, Sylvia Moses, MD2, Maureen Baldwin, MD MPH3 and Maria Rodriguez, MD MPH1, 1Oregon Health & Science University, Portland, OR, 2Affiliation not provided, 3Oregon Health and Science University, Portland, OR.

EARLY PREGNANCY

P-504 ART CONCEPTIONS ARE NOT A HIGH-RISK POPULATION FOR CELL-FREE FETAL DNA TESTING. Emilia Mateu-Brull, PhD1, Miguel Milan, PhD2, Lucia Marin, MSc3 and Carlos Simon, MD, PhD4, 1Igenomix, Paterna, Spain, 2NIPT Manager, Paterna/VALENCIA, Spain, 3Igenomix, Valencia, Spain, 4University of Valencia; Igenomix Foundation-INCLIVA, Valencia, Spain

P-505 IDENTIFICATION OF EARLY PLACENTAL HORMONE PRODUCTION IN PROGRAMMED EMBRYO TRANSFER CYCLES. Robert Setton, MD1, Kelly McCarter, MD2, Lilli D Zimmerman, MD1, Zev Rosenwaks, M.D.1 and Steven Spandorfer, M.D.1, 1The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY, 2Weill Cornell Medicine, New York, NY.
P-506 Does the hyperestrogenic milieu in fresh in vitro fertilization cycles impact early embryonic growth? Nigel Pereira, MD¹, Niral J Shah, MD², Isaac Kligman, M.D.¹ and Zev Rosenwaks, M.D.³, 1Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, New York, NY, 2Weill Cornell Medicine, New York, NY, 3The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY

P-507 Challenging current views: A prospective series of angular pregnancies managed expectantly. Kassie Jean Bollig, MD¹, Danny J Schust, MD², Shvetha M Zarek, MD³ and Albert L Hsu, MD⁴, 1Resident Physician, Columbia, MO, 2University of Missouri School of Medicine, Columbia, MO, 3Department of Reproductive Endocrinology and Infertility, Columbia, MO, 4Department of Reproductive Endocrinology and Infertility; University of Missouri, Columbia, MO

P-508 Influence of assisted reproductive technology (ART) on early fetal growth kinetics. Audrey M Marsidi, MD¹, Caroline Violette, Bachelor of Science², Victoria S Jiang, MD¹, Audrey J Gaskins, ScD³, Jessica B Spencer, MD, MSc¹ and Carolyn Drews-Botsch, Ph.D, MPH⁴, 1Emory University School of Medicine, Department of Gynecology and Obstetrics, Atlanta, GA, 2Emory University School of Medicine, Atlanta, GA, 3Emory University, Rollins School of Public Health, Atlanta, GA

P-509 Early placental gene expression discriminates between non-visualized intrauterine pregnancies versus tubal ectopic pregnancy in uterine aspirates. Maureen Baldwin, MD MPH¹ and Jon D Hennebold, PhD², 1Oregon Health and Science University, Portland, OR, 2Oregon National Primate Research Center, Division of Reproductive & Developmental Sciences, Beaverton, OR

P-510 Prediction of pregnancy outcome in women with first trimester bleeding by the detection of alpha-fetoprotein (AFP) in vaginal blood. Amir Mor, MD PhD¹, Karen Jubanyik, MD¹, Mursal Gardezi, BSc¹, Stephanie M Nichols-Burns, PhD¹, Man Zhang, MD PhD¹, Ecem Esencan, M.D.¹, Burcin Simsek, Ph.D.², David B. Seifer, MD³ and Hugh S. Taylor, M.D.⁴, 1Yale School of Medicine, New Haven, CT, 2University of Pittsburgh, Pittsburgh, PA, 3Yale University, New Haven, CT, 4Yale University School of Medicine, New Haven, CT

P-511 Early multifetal pregnancy reduction outcomes: non-chemical-based method yield improved pregnancy rates and minimize risks. Ivan Madrazo, MD¹, Ginna Milena Ortiz, MD¹, Karla Y Santiago, MD², Yolanda Piña, MD³, Milton D Flores, MD³ and Esther López-Boyghen, PhD⁴, 1Ingenes Mexico, Mexico City, DF, Mexico, 2Ingenes México, Mexico City, DF, Mexico, 3Affiliation not provided, 4Centro de Investigación y Estudios Avanzados IPN, México, EM, Mexico

P-512 Luteinizing hormone (LH) surge should replace last menstrual period (LMP) for improved accuracy of pregnancy dating. James J Morong, MBBS, MPhil¹, Dana B. McQueen, M.D., M.A.S.² and Mary D Stephenson, M.D., M.Sc.¹, 1University of Illinois at Chicago, Chicago, IL, 2Northwestern University, Chicago, IL

P-513 Subchorionic hematoma in the infertile population: prevalence and outcomes. Erin Inman, MD¹, Micaela J Stevenson, BS², Emily K Kobernik, MPH¹, Molly B Moravek, MD, MPH¹ and Samantha B Schon, MD, MTR¹, 1University of Michigan, Ann Arbor, MI, 2University of Michigan Medical School, Ann Arbor, MI

P-514 Characterizing tissue proteome changes in the decidua and trophoblast associated with viability and location of pregnancy. Lynn A Beer, B.S.¹, Kurt T Barnhart, MD, MSCE², Mary D Sammel, ScD³, Suneeta Senapati, MD, MSCE², Courtney A. Schreiber, MD, MPH² and David W. Speicher, Ph.D.¹, 1The Wistar Institute, Philadelphia, PA, 2Department of Obstetrics and Gynecology, University of Pennsylvania, Philadelphia, PA, 3Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania, Philadelphia, PA
ENDOMETRIAL PHYSIOLOGY

P-515 ISOLATION AND PROFILING OF EXTRACELLULAR VESICLES IN UTERINE FLUID TO DETERMINE NOVEL MARKERS OF ENDOMETRIAL RECEPTIVITY. Tiantian Li, PhD1, Ellen Greenblatt, MD2 and Crystal Chan, MD, MSc2, 1Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Toronto, ON, Canada, 2Mount Sinai Fertility, Sinai Health System, Toronto, ON, Canada

P-516 EMBRYO ATP PRODUCTION CAN BE MODULATED BY MATERNAL MITOCHONDRIAL DNA SECRETED FROM THE HUMAN ENDOMETRIUM IN EXTRACELLULAR VESICLES. David Bolumar, MSc1, Alicia Amadoz, PhD2, Inmaculada Moreno, PhD3, Carlos Simon, MD, PhD4 and Felipe Vililla, PhD5, 1Igenomix Foundation/University of Valencia, Paterna, Spain, 2Igenomix, Paterna, Spain, 3Igenomix Foundation/INCLIVA, Valencia, Spain, 4Igenomix Foundation-INCLIVA, Valencia, Spain, 5Igenomix Foundation/INCLIVA, Paterna, Spain

P-517 ENDOMETRIAL EPITHELIAL FOXO1 DIRECTLY MODULATES SIGNALING PATHWAYS NECESSARY FOR UTERINE RECEPTIVITY. Sarah M Moustafa, MD1, Steven L Young, M.D., Ph.D.1, Tianyuan Wang, Ph.D2, Steve Wu, Ph.D2, Rong Li, Ph.D2, Xiaojun Wang, Ph.D3, Tom Spencer, Ph.D4 and Francesco Demayo, PhD5, 1UNC School of Medicine, Chapel Hill, NC, 2National Institute of Environmental Health Sciences, Research Triangle Park, NC, 3North Carolina State University, Raleigh, NC, 4Affiliation not provided

P-518 PRESENCE OF p16-POSITIVE SENESCENT CELLS IN HUMAN ENDOMETRIUM DURING THE MID-LUTEAL PHASE OF THE MENSTRUAL CYCLE. Dimitar Parvanov, PhD1, Dragomira Nikolova, PhD2, Rumiana Ganeva, MSc1, Nina Vidolova, MSc1 and Georgi Stamov-Stamenov, MD/PhD1, 1Nadezhda Women’s Health Hospital, Sofia, Bulgaria, 2Department of Medical Genetics, Medical Faculty, Medical University – Sofia, Sofia, Bulgaria

P-519 THE ENDOMETRIAL MICROBIOME OF CLINICAL MISCARRIAGE, ECTOPIC PREGNANCY AND DURING EARLY PREGNANCY IN A SUCCESSFUL LIVE-BIRTH. Iolanda Garcia Grau, MS1, Inmaculada Moreno, PhD2, David Perez-Villarroya, MS3, Davide Bau, PhD3, Marta Gonzalez-Monfort, BS2, Felipe Vililla, PhD4 and Carlos Simon, MD, PhD1, 1University of Valencia; Igenomix Foundation-INCLIVA, Valencia, Spain, 2Igenomix Foundation/INCLIVA, Paterna, Spain, 3Igenomix Foundation/INCLIVA, Valencia, Spain

ENDOMETRIOSIS

P-520 CHANGES IN ANTI-MÜLLERIAN HORMONE AND AMOUNT OF ETHANOL USED DURING ULTRASOUND GUIDED ASPIRATION OF OVARIAN CYST. Lulu Huang, MD1, Ming-Yang Chang, MD2 and Yu-Cheng Liu, MD3, 1Chang Gung Memorial Hospital Linkou Medical Center, Taipei, Taiwan, 2199 Tun-Hua North Road, 12F Taipei, Taiwan, Taipei, Taiwan, 3Affiliation not provided

P-521 DOES ENDOMETRIOSIS IMPACT ON THE EMBRYONIC ANEUPLODY RISK? Verónica Legidos, MD1, Purificación Hernández-Vargas, PhD1, Blanca Gadea, BsC1, Victor Lozoya, BsC2 and Manuel Muñoz, MD1, 1IVIRMA ALICANTE, Alicante, Spain, 2IVIRMA Foundation, Valencia, Spain

P-522 PREOPERATIVE SERUM ANTI-MULLERIAN HORMONE LEVELS IN WOMEN WITH OVARIAN ENDOMETRIOSIS COMPARED TO WOMEN WITH PERITONEAL ENDOMETRIOSIS. Serin I Seckin, MD1, Tamer A Seckin, MD2 and Karli Provost Goldstein, DO2, 1Icahn School of Medicine at Mount Sinai West/St. Luke’s, New York, NY, 2Lenox Hill Hospital/ Northwell Health System, New York, NY

P-523 DIENOGEST FOR PAIN AND INTESTINAL SYMPTOMS CAUSED BY RECTOSIGMOID ENDOMETRIOSIS: PROSPECTIVE COHORT STUDY. Simone Ferrero, MD, PhD1, Carolina Scala, MD2, Valerio Gaetano Vellone, MD, PhD3, Umberto Leone Roberto Maggiore, MD, PhD4, Ennio Biscaldi, MD2 and Fabio Barra, MD1, 1DINOGM, University of Genova, Genova, Italy, 2Istituto G. Gaslini, Genova, Italy, 3DISC, University of Genova, Genova, Italy, 4Department of Gynecologic Oncology, IRCCS National Cancer Institute, Milan, Italy, 5Department of Radiology, Galliera Hospital, Genova, Italy
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P-712 BROWN ADIPOSE TISSUE IN WOMEN WITH POLYCYSTIC OVARY SYNDROME: RELATIONSHIP WITH BODY MEASURES, PLASMA IRISIN LEVELS AND THE USE OF METFORMIN. Flavia R Oliveira, MD, PhD1, Marcelo Mamede, MD, DMSc2, Mariana F Bizzi, M.Sc.2, Ana Luiza L Rocha, MD, PhD2, Claudia N Ferreira, PhD2, Karina B Gomes, PhD2, Ana L Candido, MD, PhD2 and Fernando M Reis, MD, PhD1, 1Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, 2Affiliation not provided, 3UFMG, Belo Horizonte, Brazil

P-713 WOMEN WITH POLYCYSTIC OVARIAN SYNDROME AND ELEVATED LEVELS OF INSULIN RESISTANCE ARE MORE PRONE TO BENEFIT FROM DIETS TO IMPROVE INSULIN SENSITIVITY: A META-ANALYSIS. Esther López-Bayghen, PhD, Samantha García-Hernandez, MD, M. Elba Gonzalez-Mejia, MD, PhD and Leonardo M Porchia, PhD, Centro de Investigación y Estudios Avanzados IPN, México, EM, Mexico

P-714 PREVALENCE AND PREDICTORS OF ADEQUATE PHYSICAL ACTIVITY IN A MULTIETHNIC POLYCYSTIC OVARY SYNDROME PATIENT POPULATION. David Huang, MD1, Eleni A Greenwood, MD, MSc1, Chia-Ning Kao, MS1, Molly Quinn, MD2, Marcelle I Cedars, MD1 and Heather G. Huddleston, MD1, 1University of California San Francisco, San Francisco, CA, 2University of California Los Angeles, Los Angeles, CA

P-715 DECREASED LIFETIME FECUNDITY IN WOMEN WITH PCOS: FINDINGS FROM A HIGH FECUNDITY POPULATION. Erica Johnstone, MD, Meredith Humphreys, MD, C Matthew Peterson, MD, Lisa Cannon-Albright, Ph.D. and Kristina Allen-Brady, Ph.D., MSPH, University of Utah, Salt Lake City, UT

P-716 IS HIRSUTISM A MARKER OF METABOLIC DYSFUNCTION? Sahar Wertheimer, MD1, Jessica L Chan, MD, MSCE1, Erica T Wang, MD, MAS1, Ricardo Aziz, MD, MPH2 and Margareta D. Pisarska, MD1, 1 Cedars-Sinai Medical Center, Los Angeles, CA, 2University at Albany, SUNY, Albany, NY

P-717 BONE MORPHOGENETIC PROTEIN SUPPRESSES THE ANDROGEN PRODUCTION IN PCOS THECA IN-VITRO CELL MODEL. Rishi Man Chugh, PhD1, Hang-Soo Park, PhD1, Amro Elsharoud, MD1, Mara Ulin, MD1, Hajira Takala, MD., MPH1 and Ayman Al-Hendy, MD PhD2, 1The University of Illinois College of Medicine, Chicago, IL, 2University of Illinois College of Medicine, Chicago, IL

P-718 DECREASE IN PERIPHERAL 8-HYDROXYDEOXYGUANOSINE LEVELS AND MITOCHONDRIAL DNA COPY NUMBER FOLLOWING METFORMIN TREATMENT IN WOMEN WITH POLYCYSTIC OVARY SYNDROME. Po-Kai Yang, MD1, Hong-Nerm Ho, MD, PhD2 and Mei-Jou Chen, MD, PhD3, 1National Taiwan University, Taipei City, Taiwan, 2Department of Obstetrics and Gynecology, National Taiwan University Hospital; Taipei Medical University, Department of Obstetrics and Gynecology, Taiwan, Taipei, Taiwan, 3Department of Obstetrics and Gynecology, National Taiwan University Hospital; National Taiwan University Livia Shangyu Wan Scholar, Taiwan, Taipei, Taiwan

P-719 ANDROGEN ALTERS SENP3 EXPRESSION AND INDUCES AUTOPHAGY IN GRANULOSA CELLS: A NOVEL MECHANISM INVOLVED IN POLYCYSTIC OVARY SYNDROME. Dongmei Sun, master and Wei Ran Chai, Doctor, Shanghai Ninth People’s Hospital, Shanghai, China

P-720 ESTABLISHING AN ANTI-MÜLLERIAN HORMONE (AMH) CUT-OFF TO DETERMINE POLYCYSTIC OVARIAN MORPHOLOGY (PCOM)
**P-721** PROBIOTICS AND SYNBIONS FOR POLYCYSTIC OVARIAN SYNDROME: A SYSTEMATIC REVIEW AND META-ANALYSIS. Mauro Cazzolino, MD, and Amerigo Vitagliano, MD, 1Fundación IVI, Valencia, Spain, 2University of Padua, Padua, Italy.

**P-722** CAN ANTI-MULLERIAN HORMONE (AMH) LEVELS PREDICT RESPONSE TO OVULATION INDUCTION TREATMENTS IN WOMEN WITH POLYCYSTIC OVARIAN SYNDROME (PCOS)? Stylianos Vagios, MD, 1Caitlin R Sacha, MD, 1Jennifer Y Hsu, MD, 2Irene Dimitriadis, MD, 1Charles L Bormann, PhD, 1Kaitlyn E James, PhD, and Irene Souter, MD, 1Massachusetts General Hospital, Boston, MA, 2Massachusetts General Hospital, Harvard Medical School, Boston, MA.

**P-723** ELEVATED ANTIMULLERIAN HORMONE IS DUE TO INCREASED FOLLICLE NUMBER IN POLYCYSTIC OVARY SYNDROME COMPARED TO CONTROLS. Viji Sundaram, MD, 1Chia-Ning Kao, MS, 1Heather G. Huddleston, MD, 1Marcelle I Cedars, MD, 1University of California, San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA, 2University of California San Francisco, San Francisco, CA, 3University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA.

**P-724** POLYCYSTIC OVARY SYNDROME IS ASSOCIATED WITH A SLOWER DECLINE IN ANTIMULLERIAN HORMONE PER ANTRAL FOLLICLE WITH INCREASING AGE. Viji Sundaram, MD, 1Chia-Ning Kao, MS, 1Heather G. Huddleston, MD, 1Marcelle I Cedars, MD, 1University of California, San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA, 2University of California San Francisco, San Francisco, CA, 3University of California San Francisco, Department of Obstetrics and Gynecology, San Francisco, CA.

**P-725** DIVERGENT INFLAMMATORY PATHWAYS MODULATE KEY ANDROGENIC GENE EXPRESSION IN OVARIAN THECA-INTERSTITIAL CELLS. Chelsea Webb Fox, M.D., 1Zhang Lingzhi, Ph.D., 1Benjamin C Moeller, Ph.D., 1and Antoni Duleba, M.D., 1University of California San Diego, La Jolla, CA, 2University of California Davis, Davis, CA.

**P-726** SERUM OF POLYCYSTIC OVARY SYNDROME PATIENTS FROM THE PPCOSII TRIAL HAS HIGHER GONADOTROPIN RELEASING HORMONE RECEPTOR AUTOANTIBODY ACTIVITY THAN UNEXPLAINED INFERTILE CONTROLS FROM THE AMIGOS TRIAL. Elizabeth A Weedin, DO, 1Heather R Burks, MD, 1Xichun Yu, MD, 1Hong Liang Li, MD, PhD, 1Christopher E Aston, PhD, 1David C Kem, MD, 1and LaTasha B Craig, MD, 1University of Oklahoma Health Sciences Center, Department of Obstetrics and Gynecology, Oklahoma City, OK, 2University of Oklahoma Health Sciences Center, Department of Internal Medicine, Oklahoma City, OK, 3University of Oklahoma Health Sciences Center, Department of Pediatrics, Oklahoma City, OK.

**P-727** PREGNANCY OUTCOMES WITHIN A PROSPECTIVE COHORT OF WOMEN WITH POLYCYSTIC OVARY SYNDROME (PCOS). Avanthi S Aljarapu, BA, 1Karen M Summers, MPH CHES, 1Bradley J Van Voorhis, MD, 1 and Rachel Mejia, D.O., 1University of Iowa, Iowa City, IA, 2University of Iowa, Iowa City, OR.

**P-728** INFLUENCE OF OBESITY ON CLINICAL OUTCOME IN PATIENTS WITH POLYCYSTIC OVARY SYNDROME. Run-Xin Gan, M.S, 1Fei Gong, PhD, 1Reproductive and Genetic Hospital of CITIC-Xiangya, Changsha, China, 2Reproductive and Genetic Hospital of CITIC-Xiangya, Changsha, Hunan, China.

**P-729** ASSESSMENT OF PSYCHOLOGICAL DISTRESS IN POLYCYSTIC OVARIAN SYNDROME INFERTILE PATIENTS AT A TERTIARY LEVEL INFERTILITY CARE CENTRE IN INDIA. Kanad Dev Nayar, M.D., 1DGO., 1FICOG, 1Poonam Nayar, Ph.D, 1Shweta Gupta, MD, 2MRCOG, Minal Singh, DGO, 1DNB, Monica Gupta, MD, 1FRM, 1Rahul Gahlot, M.D., 1Dip.Clinical Embryology and Kapil Dev Nayar, MBBS, Akanksha IVF Centre, Delhi, India.
P-730  
HOMOZYGOUS ANTIMULLERIAN HORMONE (AMH) GENE MUTATION rs10417628 IN A POLYCYSTIC OVARY SYNDROME (PCOS) WOMAN WITH EXAGGERATED HYPERANDROGENISM. Luis R. Hoyos, M.D.¹, Jenny A. Visser, Ph.D.², Anike McLuskey, B.A.S¹, Gregorio Chazenbalk, Ph.D.¹, Tristan R. Grogan, M.S.¹ and Daniel A. Dumesic, M.D.¹, ¹UCLA, Los Angeles, CA. °Affiliation not provided

P-731  
EXPRESSION PROFILES OF miRNA -369-5p AND miRNA-671-3p IN THE PLASMA OF PREGNANT WOMEN WITH POLYCYSTIC OVARY SYNDROME versus NORMAL PREGNANCIES. Meryem Hocaoglu, M.D.¹, Selin Demirer, Specialist², Esra Kaynak, Student³, Erkut Attar, M.D.², Sibel Bulgurcuoglu Kuran, Ph.D.², Ayse Altun, specialist³, Abdulkadir Turgut, M.D., Ph.D.¹ and Evrim Komurcu Bayrak, Ph.D.³, ¹Obstetrics and Gynecology, Goztepe Training and Research Hospital, Istanbul Medeniyet University, Istanbul, Turkey, ²Obstetrics and Gynecology, Reproductive Endocrinology and Infertility, Istanbul Medical Faculty, Istanbul University, Istanbul, Turkey, ³Obstetrics and Gynecology, Reproductive Endocrinology and Infertility, Istanbul University, Istanbul, Turkey

P-732  
THE IMPACT OF A BRIEF INTERVENTION ON RETENTION RATES WITH PATIENTS WHO DID NOT RETURN TO CARE AFTER AN INITIAL PHYSICIAN VISIT. Alice D. Domar, Ph.D., Kristin L Rooney, BA, Dan W Duvall Jr., BA and Denny Sakkas, PhD, Boston IVF, Waltham, MA

P-733  
EFFECT OF MANDATED COVERAGE FOR FERTILITY PRESERVATION ON CONVERSION RATE TO TREATMENT. Eric Han, MD¹, Amanda Nicole Kallen, MD² and Pasquale Patrizio, M.D.³, ¹Yale School of Medicine, New Haven, CT, ²Yale University, New Haven, CT, ³Yale Fertility Center, New Haven, CT

P-734  
INFERTILITY PATIENT CLINICAL JOURNEY OUTCOME DEPENDS ON INITIAL TREATMENT, STARTING WITH OVULATION INDUCTION (OI) VS IN VITRO FERTILIZATION (IVF): RESULTS FROM A LARGE REAL-WORLD DATABASE. Mary Mahony, PhD¹, Gilbert L Mottla, MD², Kevin S Richter, PhD³, G. David Ball, PhD⁴, Soudem Ansari, PhD⁵ and Brooke Hayward, SM, MBA⁶, ¹US Medical Affairs, EMD Serono, Inc., Rockland, MA, ²Shady Grove Fertility Center, Annapolis, MD, ³Fertility Science Consulting, Silver Spring, MD, ⁴Seattle Reproductive Medicine Center, Seattle, WA, ⁵Prometrika LLC, Cambridge, MA, ⁶EMD Serono, Inc., Rockland, MA

P-735  
THE FREQUENCY AND IMPLICATIONS OF “CLINIC SWITCHING” AMONGST US IVF PATIENTS. Deborah Anderson, JD, FertilityIQ, San Francisco, CA

P-736  
RECONSIDERING THE WEEKEND FREE IN-VITRO FERTILIZATION TREATMENT. ARE RESULTS COMPROMISED BY A FIVE-DAY WORKWEEK? Amir Weiss, MD¹, Shira Baram, MD², Simon Nothman, MD³ and Yoel Geslevich, MD³, ¹Rappaport School of Medicine, Technion Israel, Haifa, Israel, ²CReATe Fertility Centre, Toronto, ON, Canada, ³Emek Medical Center, Afula, Israel

P-737  
INSIGHTS INTO INFERTILITY PATIENT DISCONTINUATION OF CARE: RESULTS OF A NATIONWIDE SURVEY. Barbara Collura, MA¹, Brooke Hayward, SM, MBA², Krysten Modrzejewski, PharmD³, Gilbert L Mottla, MD³, Kevin S Richter, PhD⁴ and Allison B Catherino, PhD⁴, ¹RESOLVE: The National Infertility Association, McLean, VA, ²EMD Serono, Inc., Rockland, MA, ³Shady Grove Fertility Center, Annapolis, MD, ⁴Fertility Science Consulting, Silver Spring, MD

P-738  
DETERMINING THE REASONS WHY INSURED WOMEN DROP OUT OF IVF TREATMENT AFTER ONE UNSUCCESSFUL CYCLE. Alice D. Domar, Ph.D.¹, Kristin L Rooney, BA¹ and Laura E Dodge, ScD, MPH², ¹Boston IVF, Waltham, MA, ²Harvard Medical School, Boston, MA

P-739  
DOES IN VITRO FERTILIZATION (IVF) INSURANCE COVERAGE CHANGE PRACTICE PATTERNS? Jenny S George, MD¹, Micaela J Stevenson, BS², Samantha B Schon, MD, MTR¹, Michael Lanham, MD¹, Jim M Dupree IV, MD, MPH¹ and Molly B Moravek, MD, MPH³, ¹University of Michigan, Ann Arbor, MI, ²University of Michigan Medical School, Ann Arbor, MI, ³Michigan Medicine, Ann Arbor, MI
POSTER PRESENTATIONS AND ABSTRACTS

P-740 DECREASING THE BURDEN OF PROGRAMMED FET CYCLES. Kathleen M Doody, MD, Martin Langley, MS and Kevin J. Doody, MD. 1, 1CARE Fertility, Bedford, TX, 2Center for Assisted Reproduction, Bedford, TX

P-741 IMPACT OF INSURANCE COVERAGE FOR FERTILITY TREATMENT ON PATIENT PREFERENCE FOR SINGLETON GESTATION. Seth J Barishansky, MS, Anne Hutchinson, M.D., Dana B McQueen, MD, MAS, Rafael Confino, BS, Angela K. Lawson, Ph.D. and Mary Ellen Pavone, MD, MSCI. 1Northwestern University, Chicago, IL, 2Northwestern University Feinberg School of Medicine

P-742 CUTTING THE COST OF PARENTHOOD: THE EFFICACY AND COST SAVINGS OF COMPOUNDED FOLLICLE STIMULATING HORMONE. Alexander J Tatem, MD, J Abram McBride, MD, Joie Guner, MD, MSc, Jonathan A Beilan, MD, Jabez Gondokusumo, B.S., Amy K Schutt, MD, Paul Zarutksie, MD, William Gibbons, MD and Larry I. Lipshultz, M.D. 1Men’s Health Center, Indianapolis, IN, 2Urological Associates, Colorado Springs, CO, 3Baylor College of Medicine, Houston, TX

P-743 FACTORS ASSOCIATED WITH A PATIENT’S DECISION TO DISCONTINUE FERTILITY TREATMENT BEFORE ACHIEVING PREGNANCY. Barbara Collura, MA, Brooke Hayward, SM, MBA, Krysten Modrzejewski, PharmD, Gilbert L Mottla, MD, Kevin S Richter, PhD and Allison B Catherino, PhD. 1RESOLVE: The National Infertility Association, McLean, VA, 2EMD Serono, Inc., Rockland, MA, 3Shady Grove Fertility Center, Annapolis, MD, 4Fertility Science Consulting, Silver Spring, MD

P-744 PROTEOMIC SIGNATURES OF EPIGENETIC TRANSCRIPTION REGULATORS ARE PIVOTAL IN CONTROLLING PATERNAL FACTORS IN RECURRENT PREGNANCY LOSS. Gayatri Mohanty, PhD, Soumya Ranjan Jena, M.Phil, Jasmine Nayak, M.Phil, Sujata Kar, MBBS MD DNB and Luna Samanta, PhD. 1Redox Biology Laboratory, Department of Zoology, Center of Excellence in Environment and Public Health, Ravenshaw University, Cuttack, Odisha, India, 2A-32, Unit-4, Kharvel Nagar, Bhubaneswar, India

P-745 PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY (PGT-A) REDUCES MISCARRIAGE AND IMPROVES LIVE BIRTH RATES IN RECURRENT PREGNANCY LOSS PATIENTS. Julia G Kim, MD, MPH, Gayathree Murugappan, MD, Ruth B Lathi, MD, Jonathan D Kort, MD, Brent M Hanson, MD, Ashley W Tieg, MD, Emily K Osman, MD, Shelby A Neal, MD and Richard Thomas Scott Jr., MD. 1IVIR-MA New Jersey, Basking Ridge, NJ, 2Stanford University Medical Center, Sunnyvale, CA, 3Stanford Fertility and Reproductive Medicine Center, Sunnyvale, CA, 4IVI/Reproductive Medicine Associates of Northern California, San Francisco, CA, 5Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA

P-746 HIGH ODDS OF ANEUPLOIDY IN RECURRENT PREGNANCY LOSS POPULATION IRRESPECTIVE OF FINDINGS ON TRADITIONAL EVALUATIONS. Ann Korkidakis, MD, MPH, Arianny Y K Albert, PhD and Mohamed Ali Bedaiwy, M.D., Ph.D. 1University Of British Columbia, Vancouver, BC, Canada, 2Women’s Health Research Institute, Vancouver, BC, Canada, 3University of British Columbia, Vancouver, BC, Canada


P-748 CHRONIC INTERVILLOSITIS OF UNKNOWN ETIOLOGY (CIUE): A CAUSE FOR REPRODUCTIVE FAILURE. Natasha K Simula, M.D., Jefferson Terry, M.D. Ph.D, Nancy Elizabeth Kent, M.D., Julie Robertson, M.D., Susan Purkiss, M.D. and Mohamed Ali Bedaiwy, M.D., Ph.D. 1University of British
Columbia, Department of Obstetrics and Gynecology, Vancouver, BC, Canada, 1University of British Columbia, Department of Pathology and Laboratory Medicine, Vancouver, BC, Canada, 2University of British Columbia, Department of General Internal Medicine, Vancouver, BC, Canada

P-749 IS ANTIMULLERIAN HORMONE PREDICTIVE OF OUTCOMES AFTER PGT-A IN PATIENTS WITH RECURRENT PREGNANCY LOSS? Gayathree Murugappan, MD,1 Lora K Shahine, MD2 and Ruth B Lathi, MD3, 1Stanford University Medical Center, Sunnyvale, CA, 2Pacific Northwest Fertility and IFV Specialists, Seattle, WA, 3Stanford University Medical Center, SUNNYVALE, CA

P-750 MANAGEMENT OF EARLY PREGNANCY LOSS WITH MIFEPRISTONE AND MISOPROSTOL: CLINICAL PREDICTORS OF SUCCESS FROM A RANDOMIZED TRIAL. Sarita Sonalkar, MD MPH1, Nathanael C Koeper, MPH1, Mitchell D Creinin, MD2, Jessica M. Atrio, MD, MSc3, Mary D Sammel, ScD1 and Courtney A. Schreiber, MD, MPH1, 1University of Pennsylvania, Philadelphia, PA, 2University of California - Davis, Sacramento, CA, 3Montefiore Hospital & Albert Einstein College of Medicine, Bronx, NY

P-751 THE CELLULAR ROLES OF RPL-PROTEASE A IN THE RECURRENT PREGNANCY LOSS. Chang-Zhu Pei, MD1, Jun-Hyeok Park, MS1, Bum Chae Choi, MD, PhD2, InKyung Oh, MD2, Hyo Young Park, PhD2 and Kwang-Hyun Baek, PhD1, 1CHA University, Seongnam-Si Gyeonggi-Do, Korea, Republic of (South), 2Creation and Love Women’s Hospital, Gwang-ju, Korea, Republic of (South)

P-752 ANTI-MULLERIAN HORMONE (AMH) AND SPONTANEOUS ABORTION (SAB): IS AMH AN INDEPENDENT RISK FACTOR FOR SAB IN GONADOTROPIN-IUI CYCLES? Jennifer Y Hsu, MD1, Kaitlyn E James, PhD1, Irene Dimitriadis, MD1, Georgios Christou, MD2, Stylianos Vagios, MD1, Charles L Bormann, PhD1 and Irene Souter, MD1, 1Massachusetts General Hospital, Harvard Medical School, Boston, MA, 2Albert Einstein College of Medicine, Bronx, NY

P-753 CHARACTERISTICS OF FIRST TRIMESTER MISCARRIAGES ASSESSED BY CHROMOSOMAL ANALYSIS OF PRODUCTS

OF CONCEPTION WITH NEXT GENERATION SEQUENCING. Takumi Takeuchi, MD, PhD, 1Masakazu Doshida, MD, 1Yukiko Takaya, MD, 2Kohei Yamaguchi, MD, 2Hidehiko Matsubayashi, MD, 1Kotaro Kitaya, MD, 2Yasuhisa Araki, PhD3 and Tomomoto Ishikawa, MD1, 1Reproduction Clinic Tokyo, Tokyo, Japan, 2Reproduction Clinic Osaka, Osaka, Japan, 3Nippon Reprogenetics Inc, Maebashi, Japan

P-754 VITAMIN D INSUFFICIENCY IS THE RISK FACTOR FOR HYPERHOMOCYSTEINEMIA DERIVED FROM MTHFR C677T GENE POLYMORPHISM IN WOMEN WITH RECURRENT PREGNANCY LOSSES. Kuniaki Ota, M.D., 1Toshifumi Takahashi, M.D. 1and Joanne Kwak-Kim, MD, MPH2, 1Fukushima Medical University, Fukushima, Japan, 2Chicago Medical School, Rosalind Franklin University of Medicine and Science, North Chicago, IL, Vemon Hills, IL

PROFESSIONAL DEVELOPMENT

P-755 SURGICAL SIMULATION SUPPLEMENTS REI FELLOWSHIP TRAINING. Tess E Chase, MD, 1Stephanie J Estes, MD, 2Divya Kelath Shah, MD, MME3, Preston Parry, MD4, Balasubramanian Bhagavath, M.B.B.S., 5Steven R. Lindheim, M.D. 5and Samantha Pfeifer, M.D. 5, 1Penn State Milton S Hershey Medical Center, Harrisburg, PA, 2Penn State Milton S. Hershey Medical Center, Hershey, PA, 3University of Pennsylvania, Philadelphia, PA, 4Parryscope Fertility, Madison, MS, MS, 5University of Rochester Medical Center, Rochester, NY, 6Wright State University, Dayton, OH, 7Massachusetts General Hospital Fertility Center, Boston, MA, 8Weill Medical College of Cornell University, New York, NY

P-756 CLINICAL EXPOSURE IN OB/GYN RESIDENT TRAINING PROGRAMS IN THE UNITED STATES TO INFERTILITY CARE FOR LOW RESOURCE AND UNDERSERVED COMMUNITIES. Holly Mehr, MD MSEd6, Tia Jackson-Bey, MD MPH, 1Jacqueline Ho, MD MS, Lusine Aghajanova, MD PhD4, Molly M Quinn, MD1, Jacqelyn Rose Hoffman, BA5 and Christopher N Herndon, MD6, 1University of California, Los Angeles, Los Angeles, CA, 2University of Illinois at Chicago, College
of Medicine, Chicago, IL, 2University of Southern California, Los Angeles, CA, 3Stanford University School of Medicine, Stanford, CA, 4University of Arizona College of Medicine - Tucson, Tucson, AZ, 5University of Washington, Seattle, WA, 6University of Arizona College of Medicine - Tucson, Tucson, AZ, 7University of Arizona College of Medicine - Tucson, Tucson, AZ, 8University of Arizona College of Medicine - Tucson, Tucson, AZ

P-757 CURRENT ONCOLOGY TRAINING PROGRAMS LACK ADEQUATE EDUCATION IN FERTILITY PRESERVATION COUNSELING. Elizabeth Brackett, MD1, Vicky Moy, MD2, Abhinav Hasija, BS, MS3, Michael A. Thomas, MD4, Julie Soga Rios, MD5 and Suruchi Thakore, MD2, 1University of Cincinnati Medical Center, Cincinnati, OH, 2University of Cincinnati Medical Center, West Chester, OH, 3The Ohio State University- Fisher College of Business, Columbus, OH, 4University of Cincinnati, Cincinnati, OH, 5University of Cincinnati and Cincinnati Children’s Hospital Medical Center, Cincinnati, OH

P-758 FERTILITY AWARENESS AND ATTITUDES AMONG RESIDENT PHYSICIANS ACROSS DIFFERENT SPECIALTIES. Shelun Tsai, MD1, Tracy Truong, MS2, Carl F. Pieper, DrPH2 and Jennifer L. Eaton, MD, MSC11, 1Division of Reproductive Endocrinology and Infertility, Duke University Medical Center, Durham, NC, 2Department of Biostatistics & Bioinformatics, Duke University Medical Center, Durham, NC

P-759 THE EFFECT OF RESIDENT PHYSICIAN INVOLVEMENT ON SURGICAL OUTCOMES AND COMPLICATIONS OF FERTILITY SURGICAL. Wesley Yip, MD1, Sarah C. Vij, MD2, Jianbo Li, PhD2, Lauren Beeder, BS1 and Mary Katherine Samplaski, MD2, 1University of Southern California, Los Angeles, CA, 2Cleveland Clinic Foundation, Cleveland, OH, 3Keck School of Medicine, University of Southern California, Los Angeles, CA

P-760 INFERTILITY, FERTILITY PRESERVATION, AND ACCESS TO CARE DURING TRAINING: A NATIONWIDE MULTI-SPECIALTY SURVEY OF UNITED STATES RESIDENTS AND FELLOWS. Ange Wang, MD1, Christopher N Hemdon, MD2, Evelyn Mok-Lin, MD3 and Lusine Aghajanova, MD PhD4, 1Stanford University School of Medicine, Stanford, CA, 2University of Washington, Seattle, WA, 3REI UCSF, Center for Reproductive Health, San Francisco, CA

P-761 UTILIZING A NOVEL RESIDENT EDUCATION INITIATIVE TO PROVIDE REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY CARE FOR UNDERINSURED WOMEN. Elizabeth S Rubin, MD, Anat Chemennski, MD, Samantha Butts, MD and Catherine R Salva, MD, University of Pennsylvania, Philadelphia, PA

P-762 DOES LONGER EDUCATION MEAN POSTPONED PREGNANCY? Ecem Esencan, M.D.1, Burcin Simsek, Ph.D.2 and Emre Seli, M.D.1, 1Yale School of Medicine, New Haven, CT, 2University of Pittsburgh, Pittsburgh, PA

P-763 MEDICAL STUDENTS’ KNOWLEDGE ABOUT THIRD-PARTY REPRODUCTION. Kajal Khodamoradi, phd student1, Fardin Amidi, phd2, Zahra Khosravizadeh, phd student3, Ali Talebi, phd4, Zahra Rashidi, phd student3, Mohammad Hossein Ayati, MD, PhD2 and Parva Namiranian, MD3, 1School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, miami, FL, 2School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, Tehran, FL, Iran (Islamic Republic of), 3School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, Tehran, FL, Iran (Islamic Republic of), 4School of Medicine, Shahroud University of Medical Sciences, Shahroud, Iran, Shahroud, FL, Iran (Islamic Republic of), 5School of Traditional Medicine, Tehran University of Medical Sciences, Tehran, Iran, Tehran, Iran (Islamic Republic of), 6Department of Persian Medicine, School of Persian Medicine, Tehran University of Medical Sciences, Tehran, Iran, tehran, Iran (Islamic Republic of)

P-764 IL-1β IS ASSOCIATED WITH DECREASED EXPRESSION OF GREM1 IN OBESE WOMEN UNDERGOING IN VITRO FERTILIZATION WITH INTRACYTOPLASMIC SPERM INJECTION (IVF-ICS). Tana Kim, MD1, Yulian Zhao, PhD2 and Elizabeth Ann Enninga, PhD2, 1Division of Reproductive Endocrinology and Infertility, Rochester, MN, 2Department of Obstetrics and Gynecology, Mayo Clinic, Rochester, MN

P-765 IMPACT OF YOGA BASED LIFESTYLE INTERVENTION ON QUALITY OF LIFE, DEPRESSION AND SPERM OXIDATIVE DNA DAMAGE: A RANDOMIZED CONTROLLED
P-769  WEEKEND PRESENTATION IMPACTS TIMING OF ECTOPIC PREGNANCY SURGICAL MANAGEMENT AND OUTCOMES. Jessica Selter, MD, Timothy Wen, MD, MPH, Jenna M Turcoy, MD, Eric J. Forman, MD, Samuel Zev Williams, M.D., Ph.D. and Alexander Friedman, MD, MPH, Columbia University Medical Center, New York, NY

P-770  NORMAL SALINE SOLUTION IS AS EFFECTIVE AS POVIDONE IODINE IN PREOPERATIVE VAGINAL CLEANSING BEFORE SHORT DURATION GYNECOLOGICAL LAPAROSCOPY. Ahmed M Abbas, MD, Mohammed Khairy Ali, MD, Ahmed M. Abdelmagied, MD, Osama S Abdalmageed, MD and Esraa Badran, MD, Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt

P-771  FLUID DEFICIT CALCULATION AT HYSTEROSCOPY IN PATIENTS WITH AND WITHOUT TUBAL OCCLUSION: COULD CHANGE SAFETY LIMITS? Irene Peregrin-Alvarez, MD, Robert Roman, MD, Mary Emily Christiansen, MD, Joshua Morris, MD and Laura Detti, MD, University of Tennessee Health Science Center, Memphis, TN

P-772  SEVERE HAEMATOMPERITONEUM AFTER TRANSVAGINAL OOCYTE RETRIEVAL RELATED OVARIAN BLEEDING COULD BE MOSTLY MANAGED BY CONSERVATIVE TREATMENT: 8332 CASES OF ONE CLINICIAN’S EXPERIENCE IN 5 YEARS. Melih Aygun, M.D.1, Caroline Pirkevi Cetinkaya, PhD2, Murat Cetinkaya, M.D., PhD3 and Semra Kahraman, Prof.2, 1Infertility specialist, ISTANBUL, Turkey, 2Istanbul Memorial Hospital, Istanbul, Turkey

P-766  DECREASED EXPRESSION OF PD1 IN PERIPHERAL BLOOD Th17 CELLS IN WOMEN WITH UNEXPLAINED RECURRENT PREGNANCY LOSS. Wenjuan Wang, MD, PhD1, Maria Dinaroh Salazar Garcia, MD2, Xiuhua Yang, PhD, MD1, Qiaohua He, PhD, MD1, Giovanni Jubiz, MD, PhD1, Svetlana Dambaeva, Ph.D.3, Alice Gilman-Sachs, PhD4, Kenneth Beaman, PhD5 and Joanne Kwak-Kim, MD, MPH1, 1Reproductive Medicine and Immunology, Chicago Medical School, Rosalind Franklin University of Medicine and Science, North Chicago, IL, 2Mount Sinai Hospital, Chicago, IL, 3Clinical Immunology Lab, Department of Microbiology and Immunology, Chicago Medical School, Rosalind Franklin University of Medicine and Science, North Chicago, IL, 4Rosalind Franklin University of Medicine and Science, Vernon Hills, IL, 5University of Iowa, Iowa City, IA

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Xiao, Master\textsuperscript{2} and Qingqing Wu, Bachelor’s degree\textsuperscript{2}, \textsuperscript{1}Reproductive and Genetic hospital of CITIC-Xiangya, Changsha, China, \textsuperscript{2}Reproductive and Genetic hospital of CITIC-Xiangya, Changsha, China

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Francisco, CA, 2UCSF, San Francisco, CA

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Culwell, K. R. EvoFem Biosciences1

Daftary, G. S. Ferring Pharmaceuticals Inc.1

Dang, V. Q. MSD (Merck Sharp and Dohme)4

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Diamond, M. P. Advanced Reproductive Care2,8 (Board of Directors); Bayer, ObsEva, AbbVie8 (Institutional Contract); Seikagaku, AEGEA, ARC Medical Devices6

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Dietz, A. C. bluebird bio, Inc.2,3

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Dodge, L. E. FertiStrong6

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Douglas, N. C. Extend Fertility8 (Part-Time Employee); Modern Fertility6

Drakeley, A. J. Liverpool Women’s NHS Foundation Trust, UK6,8 (received meeting attendance support from Ferring, Merck, Pharmasure and Gideon-Richter. Honoraria from Ferring. None concerning abstract submission)

Dreyer, K. Guerbet6

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<td>Fertility Nutraceuticals, LLC; OvaNova, LLC (Co-owner); US patents (Listed as co-inventors on a number of US patents); Various pharma and medical device companies (Received research support, travel funding and lecture fees)</td>
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Kudesia, R.  Progyny⁶; Simple Health⁶

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Lamb, D. J.  2019 5th PuJiang Reproductive Medicine Forum⁸ (Travel costs); Celmatix⁸ (Scientific Advisory Board- No financial compensation); Ferring⁶; Hanzhou first hospital of Zhejiang University⁶ (Travel Costs); Shanghai General Hospital and Shanghai Andrology Society⁵,⁸ (Travel costs); Suzhou University IVF and fertility center⁶ (Travel costs)

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Lee, H.  NYU LM fertility Center³

Lee, M. S.  OssoVR²⁹; Postcript.us²⁹

Leeners, B.  Ava⁸ (Member of advisory board)

Legro, R. S.  AbbVie⁶; Bayer⁴; Ferring⁴; Fractyl⁴; Guerbet⁴

Leppert, P.  Duke University⁸ (I am listed on a patent for CCH and the treatment of fibroids. It is signed over to Duke University)

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Shukla, K. S.  AIIMS, Jodhpur, India
Sillman, J.  Roche Diagnostics International Ltd, Rotkreuz, Switzerland
Silverberg, K.  Abbvie; Ovation Fertility (Director); Seikagaku
Simmons, K.  Merck (Nexplanon trainer)
Simon, C.  Ferring; Igenomix (Head of the Scientific Advisory Board); Merck; TEVA
Simpson, A. J.  Androvia LifeSciences
Sinha, A.  Ferring Pharmaceuticals Inc
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Soma, J.  Advance Biofactures Corporation
Sommer, G.  Sandstone Diagnostics
Stewart, E. A.  Bayer; Myovant (Steering Committe Member with renumeration); Peer View; UpTo Date
Stratton, P.  Allergan (Toxin and funds for study monitoring are provided by Allergan through a clinical trials agreement with NIH)
Stuart, G. S.  Medicines 360
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Sufen, C.  DIAsource ImmunoAssays S.A.(Belgium) (The company provides vitamin D monitoring kits)
Suimin, Z.  DIAsource ImmunoAssays S.A. (The company provides vitamin D monitoring kits)
Sutcliffe, A. G.  Zogeniz Inc (member of IDMSC)
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Wessiepe, D.  Bayer^8 (Employee of a company that provides statistical services to the organization.)
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Weyand, A. C.  Aptevo^6; Bayer^6; Kedrion^6; Novo Nordisk^6; Portola^2b
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Wright, J. D.  Clovis Oncology^5; Tesaro^5
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Yamashita, H.  Miraca Research Institute G.K.^3
Yang, H.  Analysis Group^4 (Analysis Group received funding from AbbVie for the conduct of this study.)
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*Ruby level supporter
*Platinum level supporter
*Silver level supporter
*Bronze level supporter
*Passport game code locations

Exhibitors as of 9/11/2019
Morning Poster Sessions

Poster Sessions will be held on Tuesday and Wednesday mornings from 7:00 a.m. until 8:45 a.m. Complimentary continental breakfast will be available. No reservations are required.

Certificate Of Attendance

Proof of attendance is available on request from J Spargo at the registration desk. Continuing Education Credit information is located in the front of the Pre-Congress Course syllabi, and the Congress Program and online.

Admission Badges

Name badges will be issued for the Pre-Congress and Scientific Programs and are required for admission. Spouse/guest badges will be issued and are required for admission to spouse/guest activities and the Expo Hall.

Photo/Audio/Video Recording

Photographing or audio/video recording of any session for personal or commercial purposes without permission is prohibited.

For safety reasons and in order to maintain the scientific nature of the display, no children under the age of 16 (except infants under 6 months of age carried in arms at all times) will be allowed in the Expo Hall. Strollers and infants in backpacks are not permitted in the Expo Hall or Poster Hall at anytime.
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2850 Centerville Road Wilmington, DE 19808
www.agilent.com

3 Tests. One Workflow. Complete IVF Insights. Visit us at Booth 1938 and learn about a new comprehensive solution for PGT. Agilent OnePGT is the only genome-wide NGS-based solution that integrates Preimplantation Genetic Testing (PGT) for single gene disorders (PGT-M), translocations (PGT-SR) and aneuploidies (PGT-A) in a single workflow with verified automated calling. Visit us, tell us about your PGT requirements, get a cool gift+ and enter a drawing for a best-selling book.

67% of people cited cost and lack of insurance as the biggest barriers to receiving infertility treatment.

Discover how the majority of clinics nationwide break through these barriers with patient financing options offered though LendingClub Patient Solutions.

Don’t miss out! Visit our booth to learn about an exciting registration offer available only at ASRM 2019.

Booth #815

Visit lendingclub.com/fertility
Call 800-630-1663

EXHIBIT COMPANY LISTING

Allwin Medical Devices Inc. – Booth: 631
3305 E Miraloma Ave, Ste 176 Anaheim, CA 92806-1935
allwinmedical.com
Allwin Medical Devices is based out of Orange County, California, USA. We are CE and ISO certified. Our vast range of Women’s health products includes Single & Double Lumen Ovum Pick Up Needles with or without Flushing, Embryo Transfer Catheters, Intra Uterine Insemination Catheters, Fallopian Tube Recanalization Catheters, Hystero Salpingography Catheters, Endometrial Biopsy Sampling Systems, Aspiration Needles, and Vitrification Straws including open and closed systems. Visit us at booth #631.

Alto Pharmacy – Booth: 618
1400 Tennessee Street, Unit 2 San Francisco, CA 94107
www.alto.com
Alto is a full-service pharmacy without the brick and mortar. We’ve served more than 15,000 fertility patients, and we deliver prescriptions to your door for free, seven days a week. We work with your doctor and insurance to always get you the best price, and pharmacists are available via phone, text, email and app to answer questions. Deliveries are always discreet to protect your privacy.

America Egg Donor Bank – Booth: 2020
1625 Bridgeport West Covina, CA 91791-4115
americaeggdonorbank.com
American Egg Donor Bank is a third party assisted reproductive fertility company based in Southern California. Our team specializes in egg donation related services. We work with many IVF clinics and surrogacy companies. Our staff members have many years of hands-on experiences, recruiting only high-quality egg donors with a diverse selection. We believe that having a baby should be a wonderful experience. Please let us be with you every step of your new journey.

America Medic & Science
Booth: 1141
8321 219th St. SE
Woodinville, WA 98072-8019
americamedic.com
America Medic & Science AMS is an American nutraceutical company established in 2007 and headquartered in Seattle, Washington. We manufacture and distribute high quality, organic natural products and dietary supplements for all individuals and age groups. The leadership of our management team, which has a combined 3 decades of experience in pharmaceuticals, has led us to become known pioneers in the industry.

American Association of Bioanalysts – Booth: 2001
906 Olive St Ste 1200 Saint Louis, MO 63101-1448
www.aab.org
AAB’s College of Reproductive Biology(CRB) represents embryologists and andrologists. The American Board of Bioanalysis(ABB) is the only CLIA-approved board that certifies embryologists and andrologists. AAB’s CLIA-approved Proficiency Testing Service surveys Antisperm Antibodies, Sperm Count/Motility/Morphology/Viability, Embryology, Fertility Endocrinology, and PGS. The AAB Board of Registry also certifies embryology and andrology technologists.

American College of Obstetricians and Gynecologists (ACOG) – Booth: 2014
409 12th Street SW Washington, DC 20024
www.acog.org

Androvia LifeSciences – Booth: 1813
187 Mill Lane Mountainside, NJ 07092
Cap-Score evaluates a man’s level of fertility by quantifying the number of sperm capable of generating a pregnancy. It measures the fundamental biological process that controls fertility & does so by proprietary technology that assesses sperm’s capacity to fertilize an egg. The revolutionary Cap-Score analyzes sperm on the molecular level. It calculates the percent of sperm capable of fertilizing the egg. Cap-Score is the only test that can predict the man’s ability to generate a pregnancy.
Ansh Labs, LLC – Booth: 1241
445 Medical Center Blvd. Webster, TX 77598
www.anshlabs.com
Ansh Labs is a pioneer in diagnostics for women’s health. Our AMH, picoAMH, Dried Blood Spot AMH, BMP-15 and GDF-9 immunoassays are used for ranging from preclinical biomarker studies to translational research to clinical diagnostics. We will feature MenoCheck, the first ever FDA cleared, clinically validated blood test to help physicians assess a woman’s menopausal status. The test provides estimates of the time to final menstrual period, thus facilitating better preventive care.

ARC Fertility – Booth: 1308
20195 Stevens Crk Blvd Ste 100 Cupertino, CA 95014-2380
www.arcfertility.com
ARC® Fertility is a nationwide network of top fertility clinics offering discounted treatment packages and financing for patients, as well as tools and technology to help manage your practice. Founded by physicians in 1997, ARC is the established leader in providing resources and services to patients; the ARC Success Program, ARC Pharmacy Plan and the ARC Employer Program, and also offers ARCIS a powerful PM and EHR system built for fertility clinics.

Artisan Medical Solutions – Booth: 907
35 Casa Street, Suite 260 San Luis Obispo, CA 93405-1890
www.artisanfertility.com
The Artisan EMR is the complete cloud-based electronic medical records, laboratory management and practice management system, specialized for the fertility practice.

Asian Egg Bank – Booth: 1048
4910 Directors Place, Suite 320 San Diego, CA 92121
www.asianeggbank.com
Asian Egg Bank is dedicated to recruiting egg donors of Asian ancestry. Our donor database is comprised of hundreds of donor profiles, and we constantly recruit and cycle egg donors with exceptional qualities. In our quest to build the largest frozen egg bank inventory of Asian egg donors, we have the greatest selection of donors with East Asian heritage: Chinese, Japanese, Korean, Vietnamese, Filipino, etc. Our donors are also available for an exclusive, matched fresh cycle.

ASRM – Booth: 1327
1209 Montgomery Highway Birmingham, AL 35216-2809
www.asrm.org
ASRM is a multidisciplinary organization dedicated to the advancement of the science and practice of reproductive medicine. The Society accomplishes its mission through the pursuit of excellence in education and research and through advocacy on behalf of patients, physicians, and affiliated healthcare providers. The Society is committed to facilitating and sponsoring educational activities for the lay public and continuing medical education activities for professionals who are engaged in the practice of and research in reproductive medicine.

ASTEC Co. Ltd – Booth: 934
4-6-15 Minamizato Kasuya, Fukuoka 811-2207
www.astec-bio.com/global
Incubator manufacturer. If you are looking for incubators with the best quality, this is where to shop!

Ava Science, Inc. – Booth: 744
77 Geary Street, 5th Floor San Francisco, CA 94108
avawomen.com
Ava specializes in new developments in the field of medical technology related to female reproductive health by bringing together artificial intelligence and clinical research. The Ava bracelet is the firm’s first product for the consumer market and uses state-of-the-art sensor technology together with clinically proven methods to pinpoint a woman’s fertile days in real time. Ava has received USD 42.6 million of funding to date and is based in Zürich, San Francisco, Belgrade and Makati.

Axis Global Logistics – Booth: 1940
5901 West Side Avenue, Suite 503 North Bergen, NJ 07047
www.axisg.com
Axis Global Systems, LLC, a privately held supply chain solutions provides since 1997, creates fully integrated supply chain and critical transport solutions that are specifically tailored in every detail to address the complex needs of the many sectors of the life sciences community. Our customized solutions optimize costs and efficiencies while ensuring the highest level of quality and providing clients with real-time information at every step via industry-leading web-based technology.
Aytu Bio Science  – Booth: 1040
373 Inverness Parkway, Suite 206
Englewood, CO 80112-5898
www.aytubio.com

MiOXSYS (the Male Infertility Oxidative System) is a rapid in vitro diagnostic semen quality test that accurately measures oxidative stress. MiOXSYS is CE Marked and available in many countries outside the U.S. as an aid in the diagnosis of male infertility. MiOXSYS is currently undergoing clinical study in the U.S. in pursuit of a 510k de novo clearance.

BabySentry  – Booth: 1734
1121 S Meyler Street
San Pedro, CA 90731-3534
310-832-2223 | info@babysentry.com
www.babysentry.com

BabySentry is the leading Management System designed for the Assisted Reproduction Technology workplace. The software is composed of a central database Electronic Medical Record (EMR) with multiple interfaces and connections to analyzers, third-party software, web portals, smart phone apps, referral labs and national registries. Modules are structured to cover all functionalities of ART and affiliated practices.

BabyTree Surrogacy  – Booth 950
www.babytreesurrogacy.com

Basepair  – Booth: 912
415 Madison Ave Fl 4 New York, NY 10017-7945
www.basepairtech.com

Basepair develops an enterprise NGS analysis software solution, with a special focus in reproductive medicine. Our platform can scale to 1000s of analysis in an hour, run custom pipelines and generate data and reports in multiple formats. The entire software is API driven and integrates with any existing IT system. We have influential paying customers in research (Harvard Medical School, Stanford, NYU, etc), biotech and a molecular diagnostic companies.

Bayer  – Booth: 1843
100 Bayer Blvd, PO Box 915 Whippany, NJ 07981
www.bayerus.com

Bayer is a global Life Sciences leader in cardiopulmonology, hematology, neurology, oncology and women’s health. Building on a 150-year legacy in healthcare, Bayer is committed to improving patient lives by developing innovative therapies and delivering first-in-class educational and support programs to meet their needs. For more information, visit www.bayer.us.

BioMatrix Specialty Pharmacy  – Booth: 2013
210 Rock Road Glen Rock, NJ 07452
www.biomatrixsprx.com

BioMatrix Specialty Pharmacy offers comprehensive, nationwide specialty pharmacy services and digital health technology solutions for patients with chronic, difficult to treat conditions. Our growing family of companies unites leaders in the specialty pharmacy industry to improve health and empower patients to experience a higher quality of life.

BONRAYBIO CO., LTD.  – Booth: 743
4F., No118, Gongye 9th., Dali Dist., Taichung
www.bonraybio.com

By leveraging our optical technology development expertise and extensive intellectual property, Bonraybio has developed a fully automated and user-friendly microscopic Semen Quality Analyzer that can easily determine all of the critical semen quality parameters such as pH, sperm concentration, motility and morphology. We believe our LensHooke Semen Quality Analyzer will benefit physicians in identifying and treating the infertility problems of their patients.

Brown & Brown Lone Star Insurance Service Inc.
Booth: 1739
1717 N. Sam Houston Pkwy. #115 Houston, TX 77038

Brown & Brown, unlike most other large insurance brokers, specializes in serving those involved with the reproductive medical and infertility treatment process. Our company’s Fertility Insurance Program® is the leading provider of such insurance to physicians, clinics, and agencies participating in the human egg donation, gestational carrier (surrogate mother), and in-vitro fertilization process.
**EXHIBIT COMPANY LISTING**

**California Cryobank** – Booth: 1717  
11915 La Grange Avenue  
Los Angeles, CA 90025  
www.cryobank.com
California Cryobank Life Sciences has helped create over 65,000 families around the world. California Cryobank offers private reproductive tissue storage and cord blood banking via CBR. Stringent quality controls and a diverse catalog of highly-screened sperm and egg donors have earned us the confidence of physicians worldwide.

**Cambridge University Press** – Booth: 2028  
1 Liberty Plaza - 20th floor New York, NY 10006  
www.cambridge.org/us/academic
Cambridge University Press is a not-for-profit publisher that dates from 1534. We are part of the University of Cambridge and our mission is to unlock people’s potential with the best learning and research solutions. Visit our stand to discuss publishing with us, browse our publications and get a 20% discount.

**Capital One** – Booth: 1726  
15000 Capital One Drive Richmond, VA 23238  
www.capitalone.com
If you’re not earning rewards on your business credit card, you’re leaving money on the table. Capital One Spark Business cardholders earn unlimited 2% cash back on all products to fuel their business growth. Apply today at booth 1726 to qualify for a $500 one-time spend bonus. Credit approval required.

**Carle Physician Group** – Booth: 1657  
611 W. Park St Urbana, IL 61801  
carleconnect.com
Carle is a vertically-integrated health system serving more than 1.4 million people in 14 communities across east central Illinois. Named one of America’s 50 Best Hospitals in 2019 by Healthgrades, Carle Foundation Hospital is a 433-bed regional hospital and is home to the area’s only Level I Trauma Center and Level III Perinatal Services. Carle Physician Group is physician-led and includes 500+ physicians in 80 specialties and subspecialties providing patient-focused, world-class care.

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**ASRM 2019 Corporate Member Council**

**Industry-sponsored**

**Luncheon Symposium**

**Tuesday, October 15, 2019**

12:15 pm – 1:15 pm • Room PCC 204A

Making the Choice to Connect: Your Work Matters. Tell People Why

Brenda MacArthur, Ph.D.
Alan Alda Center for Communicating Science

Learn to communicate complex topics in clear, vivid and engaging ways. You are invited to participate in an introductory session and explore the Alda Center’s dynamic and interactive approach to communication. The high energy facilitator will show you new possibilities for sharing your science and your knowledge.
Carrot Fertility – Booth: 737
47 Lusk Street San Francisco, CA 94107
www.get-carrot.com
Carrot Fertility is providing a novel approach for access to care in the USA and in over 30 countries. Multinational companies are enabled and supported through Carrot to provide their employees with access to employer-sponsored funds that assist to cover their fertility care and infertility-related expenses, including adoption and gestational carrier services. Carrot navigators assist employees to personally decide on their best options when attempting to reach their family-forming goals.

Catalyst Healthcare Marketing – Booth: 635
4203 Jubilee Drive Flower Mound, TX 75028-3033
www.catalysthcm.com
Need a marketing strategy that sparks growth? Let us be the catalyst that boosts your visibility and increases your patient load. At Catalyst Healthcare Marketing, we help practices achieve their business goals. Our cohesive marketing services set you apart from your competitors, build brand recognition and keep your business moving forward. Our experienced team can serve as your virtual marketing department or seamlessly integrate with your existing marketing team.

Celloxess, LLC – Booth: 613
830 Bear Tavern Rd Ewing, NJ 08628
In the crowded space of nutritional and antioxidant therapies, CellOxess revolutionized the field with its signature, science-driven, personalized nutraceutical formulations to optimize male fertility. The resolution of oxidative stress in both genders is critical prior to a successful conception and pregnancy. The company’s flagship products, Fertilix®, will be showcased; with “state of the science” male & female preconceptual/prenatal formulations, personalized for optimum safety and efficacy.

Center for Surrogate Parenting, Inc. – Booth: 614
125 West Street Suite # 302 Annapolis, MD 21401
www.creatingfamilies.com
CSP is a world-renowned agency specializing in creating families through surrogacy for almost 40 years; working with the very best fertility doctors, attorneys and mental health professionals to welcome more than 2,600 babies. With offices in California and Maryland, CSP supports couples and individuals worldwide to help them realize their dream of being parents. CSP’s commitment, expertise and professionalism is recognized and respected throughout the fields of surrogacy and infertility.

Centers for Disease Control and Prevention - Division of Reproductive Health – Booth: 2011
4770 Buford Hwy NE, F-74 Atlanta, GA 30341
www.cdc.gov/ART
U.S. Centers for Disease Control and Prevention’s (CDC) Division of Reproductive Health has a long history of public health surveillance and research in women’s health and fertility, adolescent reproductive health, and safe motherhood. Since 1995, Division’s Assisted Reproductive Technology (ART) Surveillance and Research Team maintains National ART Surveillance System (NASS), which collects detailed information on in vitro fertilization treatments from all clinics in the United States.

Chart MVE – Booth: 945
3055 Torrington Drive Ball Ground, GA 30107-4686
www.chartbiomed.com
The MVE 816P-2T-190 High Efficiency Freezer is designed with the fertility market in mind. This unique inventory system incorporates a two-tier storage tray that utilizes an access portal to allow removal of product stored on the lower level. Also ask about Chart MVE’s complete Straw-Visotube Inventory System and special SUC Racks.

CiceroDx, Inc. – Booth: 1839
5075 Warner Ave Ste 202
Huntington Beach, CA 92649-4059
www.receptivadx.com
CiceroDx, Inc. is the exclusive provider of ReceptivaDx (BCL6) testing for failed IVF, unexplained infertility and recurrent pregnancy loss. Working with over 300 fertility centers in the US and around the world, Our BCL6 marker provides answers for your most challenging cases, even in situations where PGS tested embryos and optimized transfer windows have failed to yield a pregnancy. Stop by to review the latest published clinical data and ongoing research via our NIH commercial grant.
Coast Science – Booth: 1649
4653 Carmel Mountain Road, Suite 308-123
San Diego, CA 92130-6650
www.coastscience.com

Coast Science® is a leader in the science & manufacturing of top-quality, nutraceuticals. We are the proud maker of premium Fertility Supplements since 2001. Our all in one Preconception Formulas: MFSg5 – The Male Prenatal™, Fertile One® PC 600 & Fertile One® PCOS 600 provide advanced nutrition based on science to optimize sperm or egg quality. Coast Science® is committed to optimizing fertility health & success for all fertility patients. Now Introducing she-ology™ for Women. Three new daily vitamin, antioxidant & herbal blends to relieve symptoms of Menopause, Peri-Menopause & PMS. Our newest line she-ology™ allows women to have the most advanced dietary supplements for natural health & hormonal balance throughout their cycles. Trusted & recommended by over 1500 Physicians worldwide in over 50 countries, for their couples who are trying to conceive. All Coast Science® products are scientifically based & made in the USA, with the highest quality manufacturing & ingredients.

ColdStash – Booth: 1745
879 Hopkins Hill Road West Greenwich, RI 02817
www.coldstash.com

ColdStash is a global business providing market-leading LN2 storage solutions. We help our clients to operate more efficiently, saving space and costs, with products such as the VitroStash and VitroStash MAX. The MAX is a dewar and canister system that increases storage capacity by 500% with only 25% footprint increase, significantly reducing cost per patient. In addition to the MAX, ColdStash is excited to unveil new offerings in addition to the suite of Cryogenic products already available.

Cook Medical Incorporated – Booth: 1227
750 Daniels Way
Bloomington, IN 47402
www.CookMedical.com/rh

Cook Medical has been collaborating with physicians and researchers for over 50 years to create minimally invasive medical devices. And for over 30 years, Cook’s Reproductive Health division has brought that collaboration and experience to reproductive medicine. Cook Reproductive Health offers products for diagnostic imaging, assisted reproduction, maternal-fetal medicine, obstetrics, and gynecology. In addition to creating medical devices, Cook Reproductive Health is committed to advancing education, research, and collaboration with physicians in order to enhance patient care for women and men throughout their reproductive lives—from diagnosis to delivery and beyond. Visit www.cookmedical.com/web/reproductive-health to learn more about Cook Reproductive Health.

Cooper Surgical – Booth: 1301
95 Corporate Dr
Trumbull, CT 06611-1350
www.coopersurgical.com

Bringing Knowledge to Life Around the world clinics are working to improve outcomes for their patients. At CooperSurgical, we create lasting partnerships based on individual challenges, demanding customized solutions tailored to optimize chances of success. We support and advance clinics by offering evidence-based training and solutions, designed to improve clinical performance and efficiency across the entire spectrum of ART. At CooperSurgical, we offer a unique approach within the fertility and genomics industry. Visit our websites to find out more at fertility.coopersurgical.com or contact us at Telephone 1-800-648-1151.

Coppe Laboratories – Booth: 842
229N1870 Westwood Dr. Waukesha, WI 53186-1302
www.coppelabs.com

Coppe Laboratories’ TRAc-6 Immunohistochemistry test is the only commercially available test able to identify active Human Herpesvirus-6 (HHV-6) in endometrial tissue. HHV-6 has been associated with > 40% of unexplained infertility and other gestational problems. Our strong reputation for providing specialized HHV-6 testing has made us a preferred reference laboratory for Transplant Centers and Children’s Hospitals across the country.
CRC Press / Taylor & Francis Group LLC — Booth: 626
6000 Broken Sound Parkway NW, Suite 300
Boca Raton, FL 33487-2713
www.crcpress.com
CRC Press is a premier global publisher of medical textbooks, professional books and journals. Stop by our booth for a 20% discount & free global shipping.

Crown Fertility — Booth: 1113
524 West 4th Street, Suite C, Perris, CA 92570
crownfertility.com
Crown Fertility is grounded in science with evidence-based ingredients, FDA certified and inspired by nature to impact the foundation of the fertility journey to build more families naturally together with trusted healthcare professionals. Putting back control in the hands of individuals by providing essential supplements that aid in building your long-term vision for your family’s future. We envision the future of real health problems to be conquered by easily accessible and natural solutions.

Cryoport Systems — Booth: 1906
17305 Daimler Street Irvine, CA 92614
www.cryoport.com
Cryoport is proud to provide your patients our CryoStork® shipping solutions to ensure their precious reproductive materials are handled with care from clinic to clinic. Our CryoStork® services are the fastest and most reliable solutions on the market through our scientifically-enhanced technology and unparalleled logistics expertise. When successful IVF outcomes depend on safe transportation, Cryoport is the partner you can trust.

Cryos International - USA — Booth: 1127
2200 N Alafaya Trl Ste 550 Orlando, FL 32826-3995
usa.cryosinternational.com
Cryos International Sperm and Egg Bank aims to ensure a wide selection of high-quality, extensively screened frozen donor sperm and frozen donor eggs from all races, ethnicities and phenotypes. Cryos is the world’s largest sperm bank and first free-standing, independent egg bank in the United States. Through partnerships and research, Cryos continues to improve and expand its global services of helping to provide the gift of family.

Cryotherm, Inc — Booth: 1939
5126 South Royal Atlanta Dr
Tucker, GA 30084

Dadi — Booth: 955
55 N 5TH ST BROOKLYN, NY 11249-3298
www.dadikit.com
Dadi is a men’s health company that’s reinventing the fertility industry. With its FDA-licensed, at-home male fertility test and sperm storage kit, the company provides a secure solution that is 10x cheaper and easier than traditional clinics. By creating a simple and accessible way for men to learn about their reproductive health, Dadi ensures that couples can use healthy, younger sperm when they’re ready to start a family — putting them in charge of their own futures.

Dancing Eggs, Inc. — Booth: 954
2231 Kelmscott Court Westlake Village
Westlake Village, CA 91361
www.dancingeggs.com
Dancing Eggs is a young and enthusiastic company based in Shanghai, China. Our main purpose is to help professional Chinese women who seek for egg freezing and other fertility treatments in the U.S.. We offer medical consultation, bilingual services and transparent prices to make egg freezing approachable for our clients.

Del Rey Medical
Booth: 620
6657 Vista del Mar Los Angeles, CA 90293
www.delreymedical.com

Digital Instruments, Inc. — Booth: 2027
580 Ensminger Rd
Tonawanda, NY 14150
digitalinstruments.com/products/digtempmon.html
Digital Instruments specializes in temperature monitors and control systems. Since 1977, customers have turned to Digital Instruments’ proven solutions when accuracy is critical. Our Partners- Leo McNamara of Legendary Efforts with 40+ yrs experience in medical/IVF Sales and Service Esco Technologies Inc. laboratory, medical and pharmaceutical equipment Digi TempAlert wireless temperature monitoring/alarming systems CryoSave 2.0 and CryoSave XM advanced cryogenics temperature monitors/alarms.
DotLab – Booth: 1042
655 Montgomery St, Floor 7 San Francisco, CA 94111
dotlab.com
Endometriosis is a complex, heterogeneous disease that may present inconsistently across patients. By measuring disease-specific biomarkers and applying machine learning, DotEndo provides the information you need to attribute her symptoms.

DxNow, Inc. – Booth: 717
401 Professional Drive, Suite 130
Gaithersburg, MD 20879
zymotfertility.com
The future of fertility has arrived. ZyMōt™ Sperm Separation Devices are innovative lab tools that efficiently isolate the healthiest, rapidly progressive sperm, to help achieve the best possible outcomes. Easy to adopt, simple to use, ZyMōt devices are the first of their kind and FDA-approved. Learn more at zymotfertility.com.

Eastern Virginia Medical School – Booth: 839
651 Colley Ave. Norfolk, VA 23507-1627
www.evms.edu
EVMS online M.S. and Ph.D. in Reproductive Clinical Science programs for those involved in the practice of assisted reproductive technology laboratory, seeking advanced degrees. Providing multidisciplinary graduate level education through online and hands-on training designed to meet the ever-changing demands of clinical and research aspects of assisted reproductive laboratory medicine.

Egg Bank America/Egg Donor America – Booth: 1942
4316 Evergreen Lane Annandale, VA 22003
eggdonoramerica.com
Egg Bank America and Egg Donor America are fortunate to have one of the largest, most diverse pools of Donors. We have batches of frozen eggs ready for immediate shipment, as well as over 600 Donors available for a fresh or frozen cycle. We will ship eggs to your fertility center at no additional charge. We also guarantee at least 1 embryo to transfer. Egg Donor America and Egg Bank America have helped thousands of people worldwide build their families over the past 20 years!

Eggschain – Booth: 2005
1221 S. Congress Avenue #432 Austin, TX 78704
eggschain.com
Eggschain provides the fertility industry a doctor-approved online database of donor gametes/embryos/sperm, to simplify the process for patients attempting to find the optimal match. It saves you and your staff time, and provides the patients a better matching experience. Chain of custody and other solutions forthcoming! We exist to preserve the hopes of life. Come to talk us at Booth number 2005, at ASRM. Visit our website at www.eggschain.com and call us at 512-630-7833 for more information.

eIVF/PracticeHWY.com – Booth: 726
1212 Corporate Drive, Suite 200
Irving, TX 75038
www.eivf.org
PracticeHWy.com is an international leader in healthcare software which serves approximately 130 practices and clinics worldwide. In 2002, they launched eIVF, one of the first electronic medical record (EMR) products focused on Reproductive Endocrinology and Infertility (REI) practices. Since then, eIVF has been utilized for one million cycles. It was, and still continues to be, the only web-enabled, fully customizable software system dedicated to REI practices. Known for its pursuit of excellence in the fertility industry, PracticeHWy.com has seen trajectory growth throughout the years by continuously developing new software solutions which support all aspects of a fertility clinic and laboratory’s workflow and operations.

Elsevier – Booth: 1340
Radarweg 29 Amsterdam, North Holland 1043NX
www.elsevier.com
Elsevier is a global information analytics business that helps scientists and clinicians to find new answers, reshape human knowledge, and tackle the most urgent human crises. For 140 years, we have partnered with the research world to curate and verify scientific knowledge. Today, we’re committed to bringing that rigor to a new generation of Elsevier platforms.

Embryo Donation International – Booth: 1743
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Fort Myers, FL 33907-3990
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1 Volume per year
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Language: English
ISSN: 0378–7346 (print)
e-ISSN: 1423–002X (online)
www.karger.com/goi

Fetal Diagnosis and Therapy
Editor-in-Chief
E. Gratacós, Barcelona
2 Volumes per year
6 issues per volume
Language: English
ISSN: 1015–3837 (print)
e-ISSN: 1421–9964 (online)
www.karger.com/fdt

Listed in bibliographic services, including:
PubMed/MEDLINE, Web of Science,
Google Scholar, Scopus, Embase

S. Karger AG, P.O. Box,
CH–4009 Basel (Switzerland)
E-Mail: orders@karger.com
EXHIBIT COMPANY LISTING

Embryo Options – Booth: 911
211 W. Jefferson Ave. Naperville, IL 60540
www.embryooptions.com

Embryo Options is a web based application that automates cryo-billing, and streamlines the disposition process for embryos, eggs, and sperm. Embryo Options is designed to increase cryo-billing collections rates, reduce specimen abandonment, and provide patients easier access to donate embryos back to the practice to help other couples achieve a pregnancy.

Embryodirector.Com – Booth: 1900
19296 Stone Oak Parkway San Antonio, TX 78258
www.embryodirector.com

Making embryologists, andrologists, and nursing great with the worlds only One on One Hands On Training alongside a working IVF laboratory. Now offering online training with technique demonstrations. Each in person and online module is complete with certifications. Now partnering with ART Compass, an essential tool for; evaluating the technique, competency and process in the IVF Lab through a mobile app at your fingertips. https://www.linkedin.com/company/art-compass/about/

Embryotech Laboratories, Inc. – Booth: 1709
140 Hale Street Haverhill, MA 01830-3985

An ISO-17025 Accredited contract test laboratory catering to the human reproductive industry, Embryotech™ continues to provide the latest quality control assays including Mouse Embryo Assay, Endotoxin (Gel-Clot & Kinetic), an array of Human Sperm Assays. Embryotech™ is also the leader in providing all stages of fresh and cryopreserved mouse embryos, hamster ova to clinics and universities around the world aiding in technician training and proficiency testing.

EMD Serono – Booth: 1512
One Technology Place
Rockland, MA 02127
www.emdserono.com/en

A LEADER IN SCIENTIFIC INNOVATION, EMD Serono- the North America biopharmaceutical business of the science and technology leader, Merck KGaA, Darmstadt, Germany- offers therapies and patient support services for specialty conditions, like infertility, multiple sclerosis (MS), HIV-associated wasting and growth disorders. Our support for the patients we serve goes well beyond the medications we manufacture.

Empower Pharmacy – Booth: 1249
5980 W Sam Houston Pkwy N, Ste 300 Houston, TX 77041
www.empowerpharmacy.com

Empower Pharmacy provides healthcare practitioners and patients with high-quality formulations and outstanding customer service. Our experienced pharmacists collaborate with patients and healthcare practitioners to provide innovative solutions for health and wellness. With state-of-the-art facilities that tout the latest cGMP equipment, cleanrooms, environmental controls, and professional staff we are proud to be a leader in the compounding pharmacy industry.

ENCI Eggbank – Booth: 1456
2428 Santa Monica Blvd Ste 301
Santa Monica, CA 90404-2046

ENCI not only offers the widest selection of Asian donors available in the market but is committed to building the most professional egg bank for egg freezing and storage. Our mission is to blend the most advanced assisted reproductive technology with personalized and compassionate care to help women preserve fertility and guardian their family dream.

Encompass Rx – Booth: 1148
2700 Northeast Expressway NE, Suite B800
Atlanta, GA 30345
encompassrx.com

Encompass Fertility specializes in navigating fertility benefits to offer a comprehensive solution to manage specialty drug costs that maximize the medical and prescription benefit, lowering the overall cost of treatment for the patient. We strive to supply every provider and patient with the confidence, ability, knowledge, and a dedicated team they need to feel empowered and comfortable throughout their fertility journey.

Endometriosis Association – Booth: 2033
8585 N 76th Pl. Milwaukee, WI 53223-2633
EndometriosisAssn.org

The Endometriosis Association is an international nonprofit organization, founded in 1980, that supports and educates patients, the public, and professionals, and conducts seminal research which has changed understanding of the disease. Research has included collaboration with NIH and a long-term partnership with Vanderbilt. Association President Mary Lou Ballweg and the Association have authored numerous publications including four books, scientific articles, brochures in 31 languages.
EngagedMD – Booth: 1909
1875 Connecticut Avenue NW Washington, DC 20009
engaged-md.com
We help fertility practices and networks improve the patient and practice experience. Our simple web application provides a remotely guided experience for education and consent. Practices struggle to deliver a consistent patient experience. Long consultations, phone calls to staff, in-clinic classes and paper documentation are all barriers and burdens to both practitioners and patients. Our learning and consent management systems are designed specifically for fertility clinic’s unique workflows.

Esco Technologies Inc. – Booth: 1727
903 Sheehy Drive, Suite F
Horsham, PA 19044
www.escomedicalgroup.com
Esco Medical is a leading manufacturer and innovator of high-quality equipment such as benchtop incubators, ART workstations, and time-lapse incubators. We are continuously developing advanced technologies to meet the increasing demand of the IVF industry. Products are designed using the Silent Embryo Hypothesis as a guiding principle; the less disturbed an embryo can remain, the better its developmental potential will be. Most products are designed in Denmark and made in the EU.

European Society of Human Reproduction and Embryology (ESHRE) – Booth: 1639
Meerstraat 60 Grimbergen, 1852
www.eshre.eu
The European Society of Human Reproduction and Embryology (ESHRE) is an international non-profit organization of 8000 members, whose main objective is to promote the study of human reproduction. ESHRE organizes the world’s major event in reproductive science and medicine each year, publishes leading journals and guidelines, organizes lifelong learning programs and certification schemes, and monitors European IVF data.

Exeltis USA, Inc. – Booth: 2018
180 Park Avenue Suite 101
Florham Park, NJ 07932
www.exeltisusa.com

Fairfax Cryobank & Fairfax EggBank – Booth: 927
3015 Williams Dr Suite 102 Fairfax, VA 22031-4623
www.fairfaxeggbank.com
Fairfax Cryobank and Fairfax EggBank are the trusted choice for premier donor sperm and donor eggs around the world. We are dedicated to providing gamete donors of superior quality. Our in-house experts have more than 30 years of experience in safe and successful reproductive tissue banking. We are committed to exceptional quality control, advanced screening protocols, and excellent customer service. For more information on Fairfax Cryobank, visit www.FairfaxCryobank.com or call 703-698-3976.

Fairhaven Fertility Health – Booth: 1010
1410 11th St. Bellingham, WA 98225-7309
www.fairhavenhealth.com
The #1 brand of scientifically validated products to support ART protocols and help couples conceive. Our FH PRO antioxidant-based fertility supplements are the most comprehensive formulas available with over 25 ingredients at actual therapeutic dosages. FH PRO for Men was shown in a recent clinical study to improve progressive motility by 122%, count by 33% and reduce DNA fragmentation by 20%. And our BabyDance Fertility Lubricant is the only sperm-friendly lubricant made without parabens.

Family Source Consultants – Booth: 712
200 W. Madison, Suite 2100
Chicago, IL 60606
www.familysourcesurrogacy.com
Family Source Consultants is a leader in the world of third party reproduction as a comprehensive egg donation and gestational surrogacy agency. Currently headquartered in the surrogacy friendly city of Chicago, IL – the agency has 25 employees and additional offices across the United States in Miami, Florida; Dallas, Texas; and Manhattan Beach, California. Family Source opened its doors in January of 2007, and from day one the agency’s focus has always been on empathy and compassion for individuals walking this alternative path to parenthood, with the goal of providing each client with quality, individualized, heart-based service. With over twelve years of work as a comprehensive agency, Family Source is connected with other leaders in the field – working closely with many world-renowned clinics and attorneys on a regular basis. Family Source recognizes and adapts to the ever-evolving medical, political, legal, and ethical environments surrounding third party reproduction.
Femasys Inc. — Booth: 1738
3950 Johns Creek Court, Suite 100 Suwanee, GA 30024
www.femasys.com
Femasys Inc. is a privately held medical technology company transforming women’s healthcare worldwide by developing a platform of innovative, in-office gynecological solutions. Femasys’ reproductive health portfolio includes FemVue®, a device that introduces a mixture of saline and air contrast “bubbles” that are highly visible under ultrasound allowing physicians to accurately evaluate the fallopian tubes in the convenience of their office. For more information, please visit www.femvue.com.

Ferring Pharmaceuticals
Booth: 1313 and 1316
100 Interpace Parkway Parsippany, NJ 07054
www.ferringusa.com
Ferring Pharmaceuticals is a research-driven, specialty biopharmaceutical group committed to helping people around the world build families and live better lives. With global headquarters in Saint-Prex, Switzerland and its US Operations Center in Parsippany, NJ, Ferring is a leader in reproductive medicine and women’s health, and in specialty areas within gastroenterology and urology. Ferring provides a range of therapies to help women along every step of their fertility journeys from conception to birth. Founded in 1950, privately-owned Ferring now employs approximately 6,500 people worldwide, has its own operating subsidiaries in nearly 60 countries and markets its products in 110 countries. For more information, call 1-888-FERRING (1-888-337-7464); visit www.FerringUSA.com

FertileWell, LLC — Booth: 2032
One Boston Place Suite 2600 Boston, MA 02108
www.fertilewell.com
FertileWell is a trusted leader in fertility and reproductive health, with years of specialized scientific research into fertility health and nutrition with the aim of helping families try to conceive. All FertileWell fertility products are manufactured in a FDA certified, GMP Certified Facility here in the United States. Our mission is to develop high quality natural fertility products designed to safely promote fertility & reproductive health, and healthy pregnancy.

Fertility Booking Pty Ltd — Booth: 2038
Level 19, 10 Eagle Street Brisbane, QLD 4000
fertilitybooking.com
Fertility Booking enables patients to book appointment with Fertility Specialist in real time using web and mobile applications. Using Advanced Digital Marketing we will promote our partner clinics and advertise to patients of all over the world. If you need more patients, then fertilitybooking.com is simple solution.

Fertility Dynamics — Booth 2014
www.fertilitydynamics.com

Fertility Pharmacy of America — Booth: 2003
1911 Church Street Nashville, TN 37203
Fertility Pharmacy of America is a boutique fertility pharmacy created to provide patients with better service and value while giving Reproductive Endocrinologists more control over how the pharmacy operates.

Fertility Pro — Booth: 734
482 S. Arroyo Pwky., Suite #404 Pasadena, CA 91105
www.fertilitypro.com
Fertility Pro is a software company that works collaboratively with clinics, labs, and scientific companies worldwide to design applications for managing and promoting growth in the fertility industry. With modules designed specifically for every aspect of fertility management, Fertility Pro enables users to capture essential data and meet legal obligations, regulatory requirements such as SART & CDC, and create their own standards of excellence.

Fertility Technology Resources, Inc. — Booth: 1907
1539 Jackson Avenue, Suite 410 New Orleans, LA 70130
Providing products for the fertility market since 1987. Specializing in the Andrology Lab, our premiere line includes: CellVision Counting Chambers, Sperm Class Analyzer, BioScreen andrology tests, cryogenic supplies, plasticware and disposables for the fertility lab including MVE, Falcon and Nunc.
First Egg Bank — Booth: 1055
102, Antonovycha str. Lviv, 79057
www.first-egg-bank.com/en
USA fertility patients, who are looking for frozen donor eggs or sperm from abroad may select them through First Egg Bank. First Egg Bank is Ukrainian egg donor bank that belongs to the human cell and tissue establishments of FDA, which are allowed to import human reproductive cells (oocyte, sperm, embryos) to USA. First Egg Bank offers: • Batches of 6, 8 and 12 frozen donor eggs • Sperm samples in straws and vials • Embryo creation • Cryoshipping to USA Contacts +1 929 999 2034 www.first-egg-bank.com

Freedom Fertility Pharmacy
Booth: 1119
12 Kent Way Byfield, MA 01922-1221
www.freedomfertility.com
Our mission is to help people through a very complex process during one of their most vulnerable and emotional times in life. Our patients count on us to give compassion, empathy, and peace of mind along with an expertise in providing what they need to be successful in their fertility journey.

FUJIFILM Irvine Scientific
Booth: 1201
1830 E. Warner Ave.
Santa Ana, CA 92705-5533
www.irvinesci.com
As a cell culture media pioneer, we leverage decades of industry insight to deliver advanced cell culture media solutions for use in reproductive medicine, medical and translational research, biopharmaceuticals, regenerative medicine, and clinical diagnostics. Our innovative products and services enable scientists to fulfill the potential of emerging therapies and help clinicians achieve successful outcomes for their patients. FUJIFILM Irvine Scientific was acquired by Fujifilm in 2018. As one of the Fujifilm Healthcare companies, we utilize their expertise in engineering and manufacturing to accelerate the innovation of media and technologies for assisted reproduction and deliver inventive products and workflows aimed to meet the evolving needs of the reproductive medicine community and help patients successfully achieve their dreams of a family.

Future Family — Booth: 1041
655 Montgomery St., 7th Fl
San Francisco, CA 94111
www.futurefamily.com
Future Family; The complete solution for your IVF and egg freezing journey.

GA International — Booth: 628
3208 Jacques-Bureau Ave. Laval, QC H7P 0A9
GA International provides labeling solutions for the assisted reproductive technology industry. Our products conform to the highest standards of quality, with labels that are tested in-house for VOCs. For samples, please visit our booth 628. Our labels meet the most stringent specifications, such as resistance to cryogenic storage and exposure to harsh solvents. We provide sample-tracking and identification equipment as well as custom manufacturing services to meet all our clients’ needs.

Galen US, Inc. — Booth: 1811
25 Fretz Road Souderton, PA 18964
www.galen.co.uk
Galen is a recognized Specialty Pharmaceutical Company marketing products throughout the UK, Ireland, Europe and the US in therapy areas such as gastroenterology, psychiatry, female health and pain management. By combining innovation in product development with competitive pricing, Galen aims to work in partnership with healthcare professionals and patients to create real, long-term value, a major factor in the company’s success to date.

Gateway Genomics — Booth: 1756
7590 Fay Ave, Suite 200 La Jolla, CA 92037
gatewaygenomics.org
Gateway Genomics is dedicated to developing leading-edge fetal and infant DNA technology, to give families everywhere a ‘sneakpeek’ into the health and development of their future child. The initial offering is SneakPeek Clinical, a cell-free fetal DNA test for sex determination at 9 weeks or later gestation. Key features include, a 1ml blood draw, direct result to patient via email, patient cash pay test $129, no insurance billed. Preserving NIPT/Genetic testing for later in the timeline.
GE Healthcare — Booth: 1101
9900 W Innovation Drive Wauwatosa, WI 53226
GE Healthcare is a leading provider of medical imaging, monitoring, and life science technologies. GE Healthcare enables precision health in diagnostics, therapeutics and monitoring through intelligent devices, data analytics, applications and services to help providers, researchers and life sciences companies in their mission to improve outcomes for patients around the world.

Genea Biomedx — Booth: 707
321 Kent Street, Level 3 Sydney, NSW 2000
www.Geneabimedx.com
Genea Biomedx is a manufacturer of IVF devices, developing fertility technologies that automate and standardize lab workflow. Our main focus is to make a big impact on the way fertility treatment is undertaken by transforming our immense wealth of expertise into practical, accessible, precise technology that aims to significantly improve lab and ultimately patient outcomes.

GeneMatters — Booth: 1945
807 Broadway St NE Suite #350 Minneapolis, MN 55413
www.gene-matters.com
We offer expert genetic counseling through telehealth. As your partner in reproductive medicine, we’ll provide timely access to highly experienced, board-certified genetic counselors with coverage in all 50 states and Canada. We provide temporary or long-term support as you build or expand your genetic counseling offering. We connect to you through our telegenetics platform to easily schedule, manage patients and share records. We’re excited to meet you to learn how we can partner!

Genome Medical — Booth: 735
701 Gateway Blvd., Suite 380
South San Francisco, CA 94080
www.genomemedical.com
Genome Medical is a leading telegenomics technology and services company. We provide comprehensive clinical genetics services and facilitate access to genetic testing through telehealth consultations and a genomic care delivery platform. Our nationwide network of genetic specialists can help practices more efficiently integrate reproductive health genetics – including patient education and informed consent; selection and ordering of tests; and interpretation of and counseling on results.

Genomic Prediction — Booth: 1908
675 Us Highway 1 Ste 126, North Brunswick, NJ 08902-3378
www.genomicprediction.com
Genomic Prediction is the first laboratory in the country to offer PGT for polygenic conditions (PGT-P) such as cancer, heart disease and diabetes. Our methods allow for simultaneous detection of aneuploidy, single gene disorders and chromosome rearrangements, with the capacity to differentiate between balanced and normal karyotypes. We have also developed an innovative testing platform for PGT-A, Seq. A one step library prep makes testing safer, faster and more affordable.

Global Fertility and Genetics
Booth: 1057
115 E 57th St, Ste 420-430, New York City, NY 10022
globalfertility.net
The fertility specialist at Global Fertility & Genetics assist couples and individuals who wish of becoming parents and extending their families. With decades of experience, a state of the art laboratory facility and personal care we make your parenthood dreams come true. Fertility solutions aren’t the only thing you gain once introduced to our staff, you also become a part of the Global Fertility family.

Global Q — Booth: 2026
Workers Stadium North
No. 4 Building 77, Second Floor
Beijing, Chaoyang District 100001
www.quanqiuyi.cn
GlobalQ, as a third-party global aggregation platform for medical comment, with multi-site global medical information display and a large number of real users’ medical comments, can let Chinese users directly and quickly understand the global doctors/hospitals and service institutions, and affect users to accurately make international medical decisions. 1. The doctors/hospitals of GlobalQ: The purpose of GlobalQ is let you connect with more global doctors quickly. And as for the select of doctors, GlobalQ can guarantee the variety, reality and profession of doctors. 2. The evaluation of doctors in GlobalQ: In GlobalQ, you can see lots of IVF baby users to share their real experience. And these evaluations are based on real medical records of users to make sure reality and reference. GlobalQ lets you connect with global doctors at anytime and anywhere and let you see more real experience of foreign treatment.
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Featuring timely research covering the entire scope of andrology, *Asian Journal of Andrology* continues to be an excellent resource in the fields of male reproductive health, cellular and molecular mechanisms of sperm biology, male infertility, prostate diseases, and many more whilst providing authors with a superior publishing experience.

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**Guerbet LLC – Booth: 619**
821 Alexander Road, Suite 204 Princeton, NJ 08540  
www.guerbet-us.com

With 90 years’ experience, Guerbet is a pioneer in the contrast agent field and the global specialist of the medical imaging market. Offering a comprehensive range of X-Ray, MRI and IR products, along with a range of injectors and related medical devices to improve the diagnosis and treatment of patients.

**Gynex – Booth: 1155**
14603 NE 87th St. Redmond, WA 98052-6552  
www.gynexcorporation.com

Gynex is a provider of quality medical devices of obstetrics and gynecology for over 20 years.

**Hamilton Thorne, Inc.**
**Booth: 1027**
100 Cummings Ctr Ste 465E
Beverly, MA 01915-6143

Hamilton Thorne is a leading provider of precision instruments, consumables, software and services. We are showcasing our LYKOS laser, IVOS and CEROS CASA systems, ZANDAIR air purification units, VibeX antivibration platforms, Gynemed micropipettes, Planer incubators and monitoring system, and a range of distributed equipment and consumables for the IVF laboratory. Hamilton Thorne also offers complete lab build-out solutions. Stop by and learn what we can offer.

**Hawaiian Moon – Booth: 733**
321 South Missouri Avenue Clearwater, FL 33756  
www.aloecream.biz

Say Goodbye to Dry Skin with Hawaiian Moon Organic Aloe Cream! It is free of dyes, fragrance, parabens, sulfates, mineral oil, and any other harsh chemicals, including petroleum. Our cream penetrates the skin up to 7 layers deep, and absorbs into the skin instantly.

**Health Credit Services – Booth: 630**
1401 W Morehead St Ste 200 Charlotte, NC 28208-5600  
www.hcsloans.com

Health Credit Services (HCS) is a technology driven, patient financing company. HCS helps providers drive efficiencies while transforming paying into a positive experience. From practices delivering more care to patients successfully managing their health, HCS takes pride in empowering and equipping customers to take charge of their physical and financial well-being.

**Health Decisions, Inc. – Booth: 640**
2510 Meridian Parkway Durham, NC 27713-2260

Health Decisions is a full-service contract research organization offering therapeutic, operational and regulatory excellence for the clinical development of drugs, diagnostics, medical devices and combination drug/devices in all areas of women’s health. Since it’s inception more than 29 years ago, Health Decisions has supported over 300 clinical trials, including 140 in women’s health indications.

**HiLin Life Products, Inc. – Booth: 1843**
One Gateway Suite 2600 Newark, NJ 07102  
www.knowhen.com/en

**ICCBBA – Booth: 1836**
1200 California St, Suite 106 Redlands, CA 92374-2946  
www.iccbba.org

ICCBBA provides the ISBT 128 standard for terminology, identification, coding and labeling of medical products of human origin. The standard ensures the highest levels of accuracy, safety, and efficiency for the benefit of donors and patients worldwide. ICCBBA is an NGO in official relations with the World Health Organization.

**International Federation of Fertility Societies (IFFS)**
**Booth: 2029**
19 Mantua Rd. Mount Royal, NJ 08061-1006  
www.iffs-reproduction.org

IFFS - International Federation of Fertility Societies creates global programs & initiatives to advance fertility care and education so that all women & men have access to quality fertility and reproductive health care. Events: IFFS/FERSOG Workshop: Management of Infertility and Assisted Conception, 18 - 20 September 2019, Accra, Ghana; IFFS Course at Argentine Congress SAMer 2020, 2 September 2020, Rosario, Argentina; IFFS World Congress, 2 - 6 April 2022, Athens, Greece www.iffs-reproduction.org
EXHIBIT COMPANY LISTING

Igenomix – Booth: 727
7955 NW 12th St Suite 415 Miami, FL 33126-1823
www.igenomix.us
IGENOMIX is a biotechnology company that provides advanced services in Reproductive Genetics. Our experience and advanced research capabilities have made this company one of the world leaders in its field, enabling it to provide effective solutions tailored to different infertility problems. IGENOMIX has lab operations in Miami, Los Angeles and New York, and 21 other laboratory affiliates around the world.

Imagine Fertility – Booth: 1913
18911 Hardy Oak Blvd, Ste 3 San Antonio, TX 78258
Imagine Fertility features the ImaginePRM - A fertility specific patient relationship management and workflow tool. Help drive patient engagement and retention by making sure your patients receive the attention they need, and de-mystify the IVF financial process.

Indian Egg Donors – Booth: 1844
Surrogacy4All, 1148 5th Ave Ste 1B New York, NY 10128
www.IndianEggDonors.com
Www.IndianEggDonors.com is the premier resource in New York City and across the United States for those who are looking for egg donors and surrogates. We have over 1,000 egg donors and surrogates in our database and work with top fertility clinics and clients world-wide. Through our affiliated site, www. Surrogacy4All.com we provide low cost overseas surrogate mothers for $39,000 at an FDA standard IVF Center. We also provide US Surrogates for $105,000 per surrogate mother.

InteGen LLC – Booth: 1054
8865 Commodity Circle, Suite 2 Orlando, FL 32819
InteGen develops innovative, clinically useful, and cost-effective DNA FISH probes for the cytogenetics community. We offer multi-color metaphase and interphase chromosome profiling, including our Rapid FISH with 15-minute hybridization. InteGen FISH probes 1) detect balanced, unbalanced, and Robertsonian translocations, 2) provide high-resolution breakpoint assignment, 3) characterize marker and add chromosomes, and 4) detect balanced and unbalanced sub-telomere rearrangements. Our multiplex rehybridization protocol makes complete molecular profiling on a single circulating tumor cell possible. While our rapid hybridization allows same-day results, permitting fresh embryo transfer for IVF patients. With multiple-sequential hybridizations and a simple two dual filter detection system, you will be able to achieve comprehensive genome coverage/profiling with our probes on as few as a single cell.

IntegraMed Fertility – Booth: 1501
2 Manhattanville Rd. Purchase, NY 10577-2113
www.integramed.com
IntegraMed® Fertility is the leading network of fertility providers in North America providing partners with a wide range of services including clinical and business information systems, marketing, operations management, finance, legal, risk management, quality assurance, and more. Through proprietary programs, tools and expertise, IntegraMed Fertility helps to drive new patient growth by supporting clinical and market leadership in delivering best-in-class patient experiences.

Invitae Corporation – Booth: 1507
1400 16th Street San Francisco, CA 94103
invitae.com
Invitae’s mission is to bring comprehensive genetic information into mainstream medical practice to improve the quality of healthcare for billions of people. Our goal is to aggregate most of the world’s genetic tests into a single service with higher quality, faster turnaround time and lower prices. Visit www.invitae.com.
Invitrocare, Inc. – Booth: 1915
8415 Progress Dr Unit F, Frederick, MD 21701-4762
InVitroCare Inc provides a full range of ART products, including products for both gamete and embryo preparation and freezing. Our IVC Media Series is designed to support embryo growth at each stage of development. Additional products include double-washed Mineral Oil, ICSI reagents and a complete line of IUI products and equipment specifically designed for the doctor’s office. Our products are manufactured in FDA registered facilities in full compliance with cGMP and ISO 9001 standards.

INVO Bioscience – Booth: 1807
5582 Broadcast Court
Sarasota, FL 34240
invobioscience.com
The INVO Bioscience® mission is to increase access to care and expand fertility treatment and a patient care across the globe. For many couples struggling with infertility, access to treatment is often not possible. Financial challenges, limited availability of specialized medical care, religious, social or cultural roadblocks can prevent these hopeful parents from realizing their dream to have a baby. INVOcell® is the first Intravaginal Culture (IVC) system granted FDA clearance in the United States, providing millions of infertile couples across the country access to this revolutionary infertility treatment. This novel device utilizes the women’s vagina as an incubator to support a more natural fertilization and embryo development environment. The INVOcell device and INVO® Procedure will provide couples the opportunity to have an additional option other than the thirty-year-old traditional treatments, Intrauterine Insemination (IUI) and In Vitro Fertilization (IVF).

IQ-Medical Ventures BV – Booth: 605
World Trade Center Rotterdam - Beursplein 37 - Suite 1960
Rotterdam, 3011 AA
ExEm® Foam, a first-line investigation to diagnose Tubal Patency using Ultrasound. Experience the performance and accuracy as compared to HSG and Saline. Worldwide 400.000+ procedures have been performed, 20+ Publications are available in respected magazines. ExEm® Foam will be introduced to the United States during the ASRM convention in Philadelphia. Workshops and Videos are available, enabling you to experience the latest innovation in Tubal patency. You are invited to visit us at booth 605.

IVF Store – Booth: 1349
5975 Shiloh Road, Suite 101
ALPHARETTA, GA 30005
IVF STORE is a full service, online store representing the finest IVF products supported with traditional and exceptional customer service. For maximum convenience to customers, our easy to use and functional website is fully responsive, allowing IVF orders to be taken with a computer or mobile device. Our one-stop-shop for “Everything IVF” makes ordering easier than traditional channels through multiple vendors and allows us to serve you with focus and efficiency.

IVF USA, Ltd – Booth: 1933
Room A1510, Pacific Century, No.2 North Worker Stadium, Chaoyang District
Beijing,
IVF USA is a top counseling service company in China, providing fertility service for Chinese. IVF USA is committed to combining excellent medical care with an individualized, warm and compassionate approach. The facilities are world class and feature the advanced technological equipment available. We will do everything we can to help you conceive a child.

IVFCryo, LLC – Booth: 851
5216 Marburn Avenue Los Angeles, CA 90043
www.ivfcryo.com
IVFCryo mission is to help fertility clinics follow best practices in cryogenic storage by performing comprehensive risk assessments of the their cryogenic storage functions, making recommendations to bridge the observed gaps, and helping to implement the recommendations by developing policies and procedures, and training the staff to perform the processes properly. When appropriate, IVFCryo can also design a dedicated cryogenic storage facility for the clinic, and help manage the buildout.
EXHIBIT COMPANY LISTING

**IVFqc**
Booth: 1801
1185 Avenue of the Americas
New York, NY 10036
www.ivfqc.com

Founded in 2013 by experts in assisted reproductive technology, IVFqc provides secure cloud-based services that promote efficiency, effectiveness, data analysis, and reporting capabilities for any lab or clinic. Our applications adapt to any workflow and feature individual user accounts, two-factor authentication, HIPAA-compliance, intuitive self-customizable functionality, and universal accessibility with any internet-connected device. Used individually or in combination with each other, Reflections, Generations, Diro, SquareOne, and Kaleasy enable specialists to assess key performance indicators over time, monitor instrument quality control, and develop insights into operational processes in order to improve decision-making and patient-care outcomes. They propel analytics, research, and discovery, and empower comprehensive data, resource, time, and practice management. For more information, please visit ivfqc.com.

**JOG, Taiwan Egg Donors**
Booth: 849
No. 125 Minzu Road East District Hsinchu City, 30043
ivf.com.tw

Hi Dr, Together we can make something amazingly sweet and beautiful. We are JOG, Taiwan Egg Donors. Best, Jeng-Jier Jiang, M.D. 2019.10.12.

**Karf Sterz Endoscopy-America**
Booth: 1204
2151 E. Grand Ave.
El Segundo, CA 90245
www.karlstorz.com

KARL STORZ is a global provider of advanced endoscopic instruments and related technologies. With longstanding expertise in gynecology and reproductive medicine, KARL STORZ offers a comprehensive suite of minimally invasive devices, including various types of hysteroscopes and resection systems. KARL STORZ is dedicated to providing quality instruments that enhance the treatment of women in diverse clinical settings without losing sight of the need to control costs.

**KENECT**
Booth: 1356
2100 W Pleasant Grove Blvd #380
Pleasant Grove, UT 84062
www.kenect.com

Kenect is a business texting and reputation management platform built specifically for the fertility industry. The platform allows your clinic to convert your existing business phone line so it is text-enabled, making text messaging a more efficient way to communicate with patients and families. Kenect specifically will help you save time, easily capture and convert inbound leads, send out appointment reminders, collect on outstanding balances, and generate 5-star reviews on Google & Facebook.

**Kindbody**
Booth: 600
1140 Broadway, 11th Floor New York, NY 10001
www.kindbody.com

In boutique, modern, tech-enabled clinics, we provide fertility services, gynecologic care, and wellness support - offering the first one-stop-shop for all women’s health and fertility needs. Our best-in-class clinical team serves the modern day women in retail and mobile locations across the country, delivering a new generation of care - elevated, seamless, and accessible. By women, for all of us.

**KITAZATO**
Booth: 1613
81 Nakajima
Fuji, Shizuoka 416-0907

Kitazato is a Japanese development-oriented company which assists total fertility treatment with our wide range of products for IUI, IVF, Cryo and PGD. Our highest survival rate of Cryotop® method, as well as our quality catheters and needles ensures the most ideal treatment to all professional doctors and embryologists.

**LabCorp**
Booth: 1713
3400 Computer Drive
Westborough, MA 01581
www.labcorp.com

LabCorp provides leading-edge diagnostic tests and services through a national network of primary clinical laboratories and its specialty testing group. With scientific expertise in esoteric testing, genomics, clinical and anatomic pathology, and a commitment to comprehensive and high quality laboratory services, LabCorp delivers timely, accurate results for improved patient care.

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Labotect GmbH – Booth: 739
Kampweg 12 37124 Rosdorf, DE
labotect.com
Expertise from the beginning in the field of Assisted Reproduction! Located in Germany Labotect produces a wide range of products; among our products you’ll find e.g. CO2 incubators, embryo transfer catheters, devices and disposables for aspiration. The company is represented by a strong network of reliable and well-trained distributors in over 60 countries. Whatever it is you are looking for in an IVF laboratory, Labotect is the right and ISO 13485 certified partner. Quality – Made in Germany!

Lara International – Booth 948

LendingClub Patient Solutions – Booth: 815
1700 West Park Drive, Suite 310
Westborough, MA 01581
Don’t let cost be a barrier to your dreams of parenthood. Discover a more affordable way to pay for your fertility treatment and related care with payment plans offered through LendingClub Patient Solutions.

Lenus Pharma – Booth: 1607
Seebockgasse 59A-1160 Vienna, Vienna 1160
www.profertil.us
PROfertil® by Lenus Pharma is a US-patented & clinically-proven solution for the dietary management of fertility disorders in men. 6 clinical studies on the patented formulation w. 1000+ patients verify the formulation’s impact on improving semen quality (incl. reduced DNA fragmentation), & achieving an average pregnancy rate of 26% among infertile couples. PROfertil® products are recommended by leading fertility experts worldwide, marketed in over 70 countries & are now available in the US.

LifeAire Systems LLC – Booth: 906
1275 Glenlivet Drive Allentown, PA 17520
www.lifeaire.com
Formulated by 26 patents, the LifeAire technology specifically targets the cytotoxic levels of volatile organic compounds (VOCs), viable and nonviable particulates in air to bring levels within optimal ranges to protect the human embryo. Cells cultured in LifeAire-purified air have demonstrated statistically significant increases cellular metrics and clinical outcomes beyond any other technology in the market.

Lina Medical – Booth: 627
1856 Corporate Drive, Suite 135 Norcross, GA 30093
LiNA Medical® develops innovative, simple to use devices for minimally invasive gynecology that are designed to improve patient care. LiNA’s latest innovation, the LiNA OperåScope™, is the first and only fully disposable, operative hysteroscopy system. Designed specifically for the office, the convenient single-use design is ready for use out of the box without the cost and complexity of traditional hysteroscopy.

Mandell’s Clinical Pharmacy – Booth: 612
7 Cedar Grove Ln Ste 24 Somerset, NJ 08873-1331
MandellsPharmacy.com
Mandell’s Clinical Pharmacy is an independently-owned specialty pharmacy with an exclusive focus on meeting the needs of fertility patients. As former IVF patients, owners Terry and Eddie Malanda began working with the infertility community over 25 years ago. With experience, expertise and personalized service, Mandell’s team works directly with patients and providers throughout the treatment process, creating a new standard of excellence that should be expected from a pharmacy.

Marina Medical Instruments, Inc. – Booth: 1254
8190 West State Road 84 Davie, FL 33324
www.marinamedical.com
MarinaMedical designs, develops and delivers surgeon-focused solutions for Gynecology, UroGynecology and Pelvic Reconstruction fields of surgery. Stop by our booth to see the latest instrumentation innovation designed by your colleagues. Se habla español. Falamos Português.

MDArtistry – Booth: 645
10817 Melvin Grove Ct. Kensington, MD 20895
etsy.com/shop/MDArtistryOnline
Original watercolor art by Alicia Christy M.D. Reasonably priced commission artwork is also available, as well as watercolor prints. My watercolor art was featured at the National Medical Association Marketplace. My work has been published in Academic Medicine, Seminars in Reproductive Medicine, and Obstetrics and Gynecology Clinics of North America. I can be contacted by email at ayba@alumni.princeton.edu, or by cell phone 301-633-5112.
**Exhibit Company Listing**

**MDocHaus** — Booth: 2012  
485 Massachusetts Ave  Cambridge, MA 02139  
www.mdochaus.com

**MDR Fertility Pharmacy** — Booth: 1006  
17071 Ventura Blvd Ste 100  Encino, CA 91316-4117  
www.mdrusa.com

MDR is not your everyday pharmacy. Helping fertility patients become parents has been our passion for over 30 years. MDR’s patient care team works hand in hand with our partner clinics to ensure a stress-free experience from start to finish. For our patient’s convenience, we also offer free next day shipping to all 50 states and injection supplies at no extra charge. For more information about MDR, call 1-800-515-3784 or visit www.mdrusa.com.

**Medanswers** — Booth: 1901  
222 W 6th Street, Suite 400  
San Pedro, CA 90731  
www.medanswers.com

MedAnswers is a health tech, venture-backed startup with the first social media platform for fertility. The company connects patients directly to fertility experts who answer their anonymous questions and provide telehealth consults. Experts also can post original social media content in which users can like or comment on to ensure only clinically and scientifically validated information is shared with the community. The company also matches users to diagnostics, products, solutions and clinical trials based on their self-reported health data with the mission of speeding their path to pregnancy. To date the company has over 200 experts participating in network and adds more than 2,000 users per week.

**Medical Electronic Systems, LLC**  
Booth: 836  
5757 West Century Boulevard, Suite 805  
Los Angeles, CA 90045  
www.mes-global.com

Remember, it ALL Started with a Sperm! Medical Electronic Systems is a Los Angeles based technology company specializing in rapid, automated semen analysis for the laboratory and home. The MES line of CE and FDA approved Sperm Quality Analyzers, YO Home Sperm Test Kits, and complimentary testing supplies are sold through an extensive network of international distributors. MES is ISO certified as a medical manufacturer and has distribution offices in America, Europe, Asia and Israel. The company began selling it’s line of laboratory grade products in the year 2000 and is considered the world leader with over 3,500 systems sold globally. In 2017, the company launched an at-home solution for couples interested in a semen analysis screening in the comfort of home. YO Home Sperm Test is FDA cleared as an over the counter product and available through the companies website (www.yospermtest.com), Amazon, and eBay. Please swing by our booth and Remember, it ALL Started with a Sperm!

**Meditab Software Inc.**  
Booth: 1035  
1420 River Park Drive, Suite 120  
Sacramento, CA 95815  
www.fertilityehr.com

Introducing FertilityEHR — the top all-in-one EHR, practice management, and billing platform specially designed for reproductive endocrinologists, obstetrician-gynecologists, andrologists, embryologists, reproductive immunologists, fertility lab technicians, and reproductive surgeons. Our innovative system provides everything from centralized dashboards for quickly managing patient cycles to an integrated ultrasound interface that automatically records ultrasound measurements.

**MedTech For Solutions, Inc.** — Booth: 1451  
475 Park Avenue South New York, NY 10016  
www.medtech4solutions.com

Innovative solutions and technologies optimize laboratory development, operation and success. No cost GPO saves 10-50 percent on equipment and supplies. Practice start-up and relocation turn-key solutions. Staff recruitment and human resources. Temporary lab staffing and off-site directors. Ova Tools Andrology and Embryology Institute provides technical hands-on training for laboratory staff.
Mellowood Medical-Ideas
Booth: 812
45 Mellowood Drive, Ste. 1B Toronto, ON M2L 2E4
www.mellowoodmedical.com

IDEAS EMR: ‘State of the ART’ fertility clinic management software at leading academic (including Nobel Prize-winning) and private centres – 20 + Years of IVF Sector Experience. SART,HFEA+Compatible WHY IDEAS? Holistic view of Your entire fertility practice via IDEAS Ecosystem of connectivity – of machines and process, saving time and money while reducing errors Partnerships with industry leading labs and machines – for timely and accurate renderings of PGT/DICOM/immunoassay results Robust audit trails and access rights for compliance to HIPAA/PIPEDA/JCI and other bodies Experienced ‘round the clock’ support wherever Your clinic(s) Cerner/EPIC/IDX and other integrations at major global institutions (including the largest pediatric facilities in Americas, Europe and Middle East) We can convert your legacy database/EMR/cryostorage (Excel/Filemaker) into modern, enterprise-class software You Own the Data – no Shenanigans of ‘behind your back’ privacy-sensitive information taking!

Men Having Babies, Inc. – Booth: 1454
4441 Dundee Road Riverside, CA 92503
The nonprofit Men Having Babies (MHB) provides educational and financial support for prospective gay surrogacy parents worldwide. MHB runs annual conferences in NY, Chicago, Brussels, San Francisco, Texas, Florida, Taipei and Tel Aviv. Our Gay Parenting Assistance Program (GPAP) provides cash grants, discounts, and free services from leading surrogacy providers. www.menhavingbabies.org

Merck & Co., Inc. – Booth: 827
2000 Galloping Hill Road Kenilworth, NJ 07033
www.merck.com
For more than a century, Merck has been inventing for life, bringing forward medicines and vaccines for many of the world’s most challenging diseases. Today, Merck continues to be at the forefront of research to deliver innovative health solutions and advance the prevention and treatment of diseases that threaten people and animals around the world.

Metro Integrative Pharmacy – Booth: 1914
931 Lexington Avenue New York, NY 10065-5771
metrointegrative.com
Metro Integrative Pharmacy is a full service fertility pharmacy providing services throughout the US. Pharmacy staff are available 24/7 to answer medication questions. In addition to low prices we automatically apply all available discounts and offer a variety of patient assistance programs to help you achieve your dream.

MicroData Instrument Inc. – Booth: 745
1207 Hogan Dr. South Plainfield, NJ 07080-2474
www.microdatamdi.com
25+ Years design and manufacture of assisted reproductive instruments and tools ranging from Micropipettes, Micropipette Holders, Programmable Microinjectors and Microinjection Systems, series of Pipette Pullers, Microforge, Pipette Beveller, manual microinjectors, manual micromanipulators and hydraulic joystick 3D Micromanipulators, Inverted Microscopes.

Mindray North America – Booth: 738
800 MacArthur Boulevard Mahwah, NJ 07430
www.mindraynorthamerica.com
Mindray provides a broad range of ultrasound solutions based on Living Technology architectures. Using next generation technologies, advanced signal processing and newly designed algorithms offer end users highly-featured systems with premium image quality. The powerful system performances deliver deeper penetration and higher resolution, which can assist with bringing clinical certainty within reach. Systems, DC-70 and DC-40, offer clinicians many options for a wide variety of imaging needs.

Monarch Medical Products, Inc. – Booth: 610
5425 Hedgewick Way Cumming, GA 30040-1203
www.monarchmedicalproducts.com
Monarch Medical specializes in women’s healthcare products for Infertility and OB/GYN. Our products range from HSG/Sono-Catheters, IUI Catheters, Embryo Transfer Catheters as well as high quality German Stainless Steel surgical instruments.
My Egg Bank — Booth: 1200
1100 Johnson Ferry Rd N.E., Suite 460  Atlanta, GA 30342
www.myeggbank.com
My Egg Bank is one of the largest frozen donor Egg Banks in North America. Currently there are nine internationally recognized production centers that provide frozen donor eggs to over 130 affiliated centers. We have helped thousands of people grow their families with our innovative technology, extensive selections of donors and compassionate care.

Myovant Sciences, Inc. — Booth: 601
2000 Sierra Point Pkwy., 9th Floor  Brisbane, CA 94005
www.myovant.com
Myovant Sciences is focused on women’s health because when she moves forward, we all move forward. Relugolix combination therapy, an oral, once-daily GnRH receptor antagonist plus low-dose estradiol and norethindrone acetate, is in clinical development for uterine fibroids with recent completion of two replicate Phase 3 studies (LIBERTY 1 and LIBERTY 2). Relugolix combination therapy is also in clinical development for endometriosis-associated pain with two ongoing Phase 3 studies (SPIRIT 1 and SPIRIT 2). MVT-602, an oligopeptide kisspeptin-1 receptor agonist, is in clinical development for female infertility with recent completion of a Phase 2a study.

Myriad Genetic Laboratories — Booth: 1819
320 Wakara Way  Salt Lake City, UT 84108
www.myriad.com
Myriad Genetics is a personalized medicine company dedicated to being a trusted advisor and transforming patient lives worldwide with molecular diagnostics. Myriad discovers and commercializes diagnostic tests that determine the risk of developing disease, accurately diagnose disease, assess the risk of disease progression, and guide treatment decisions where molecular diagnostics can significantly improve patient care and lower healthcare costs. For more info, please visit: www.myriad.com.

Nableivf — Booth: 616
1235 North Loop W Ste 502  Houston, TX 77008-4704
www.nAbleIVF.com
nAbleIVF is a comprehensive cloud-based IVF EMR/PM system designed for efficient workflow, paperless environment, and better patient communication. Affordably priced, nAbleIVF offers the best value in the market and sets a new standard of quality, support and reliability. nAbleIVF is ideal for modern IVF practices and is customized to your needs and style of practice. With no long-term contract, data lock-in, or platform restrictions, nAbleIVF is the choice of a growing number of IVF clinics.

Narishige International USA, Inc.
Booth: 807
415 Bayview Ave  Amityville, NY 11701-2838
With over 60 years’ experience in micromanipulation technology, NARISHIGE offers the most reliable and latest technology in a wide range of products including both in vivo and in vitro experiments such as isolation stages, motorized and manual manipulators, pullers, microforges, patch clamp systems, perfusion systems, and stereotaxic instruments. Any requests and opinion are welcome. Narishige also specializes in customized products to help accommodate the researcher’s needs, allowing us to be the “CRAFTSMAN FOR YOUR SOLUTIONS”.

Natera — Booth: 1209
201 Industrial Rd Ste 410  San Carlos, CA 94070-2396
www.natera.com
Natera is a global leader in cell-free DNA testing. The mission of the company is to change the management of disease worldwide by harnessing the power of DNA from a single blood sample to improve the management of reproductive health, oncology, and organ transplantation. Natera® is driven by a passion for improving the path to parenthood with a suite of high-quality reproductive health genetic tests that support families in their journey from preconception, to pregnancy, and birth.
The Embryo Transfer Certificate Course is an intensive curriculum-based program consisting of online coursework and hands-on simulation training in the basic principles and techniques of human embryo transfer and requires completing a minimum of 60 simulated transfers.

2020 REGIONAL WORKSHOPS

New England Regional Workshop
February 2020 • Boston, MA

West Coast Regional Workshop
May 2020 • Los Angeles, CA

Mid Atlantic Regional Workshop
September 2020 • Baltimore, MD

Southeast Regional Workshop
November 2020 • ASRM Office, Birmingham, AL

A six-week Embryo Transfer Simulator Loan Program is available to fellowship programs and IVF practices.

For more information, stop by the Simulation Pavilion on the Expo floor, or email Keith Ray at kray@asrm.org.
EXHIBIT COMPANY LISTING

National Embryo Donation Center – Booth: 1912
11126 Kingston Pike
Knoxville, TN 37934-2806
www.embryodonation.org
Since 2003, the National Embryo Donation Center (NEDC) has been the country’s leading comprehensive non-profit embryo donation program. Our mission is to protect the lives and dignity of human embryos. We do that by promoting, facilitating and educating about embryo donation. We’re also the only clinic-based organization that works with families of all races, faiths and ethnic backgrounds. Our office is in Knoxville, TN.

National Fertility Support Center – Booth: 2031
2180 44th Street SE Suite 108 Kentwood, MI 49508
www.fertilitysupportcenter.org

NextGen LifeLabs – Booth: 935
384 Nina Way
Warminster, PA 18974
www.nextgenlifelabs.com
Established in 2012, NextGen LifeLabs is your premier supplier of complete solutions for the modern IVF (A.R.T.) laboratory. Our team is dedicated to providing your IVF program with the most cutting-edge laboratory equipment, consumables, and industry leading service and support. We offer an extensive catalog of services including skilled installation of a wide range of equipment, laboratory design, planning, and implementation, as well as laboratory expansion and relocation consultation.

Nikon Instruments Inc. – Booth: 1001
1300 Walt Whitman Road Melville, NY 11747
www.nikoninstruments.com
Nikon instruments will exhibit Ts2R inverted microscope with Emboss Contrast and Ti2-U inverted microscope with NAMC optics. Both microscopes featuring newest Narishige micromanipulator systems. Also being exhibited is SMZ1270 StereoZoom microscope and Ci-L microscope with phase contrast optics for sperm analysis. All microscopes will feature Nikon’s newest digital imaging solutions.

NouricheLife, LLC – Booth: 2034
455 W 200 N #306 Salt Lake City, UT 84103
www.nourichefertility.com

NxGen MDx – Booth: 813
801 Broadway Avenue NW, Suite 203
Grand Rapids, MI 49504
nxgenmdx.com
NxGen MDx is a women’s health care company that provides precise genetic screening combined with best-in-class science, unrivaled accuracy, and personal genetic counselors to help you make informed decisions when planning to get pregnant or expecting a baby. For more information, visit www.nxgenmdx.com.

ObsEva S.A. – Booth: 1005
Chemin des Aulx 12
Plan-les-Ouates, Geneva 1228
www.obseva.com
ObsEva is a clinical-stage biopharmaceutical company dedicated to women’s health. We are passionately focused on innovation to address serious, quality-of-life impacting conditions and reproductive challenges faced by women worldwide. Our lead compound is nolasiban, an oral oxytocin receptor antagonist, potentially first-in-class, delivering more IVF babies by improving embryo implantation. Our second product, linzagolix, an oral gonadotropin releasing hormone (GnRH) receptor antagonist, is potentially the best-in-class in treating uterine fibroids and endometriosis thanks to the option to treat with or without hormone replacement therapy. Finally, OBE022, an oral and selective prostaglandin F2alpha receptor antagonist, has the potential to save newborn lives by avoiding preterm delivery.

Okolab SRL – Booth: 837
Via G. Di Prisco, 152 Ottaviano, 80044
oko-lab.com
Okolab manufactures - Tri-Gas Mixers for mini-incubators that eliminate the need for expensive premixed cylinders - LEO meter (meter for CO2, Oxygen, Temperature, Humidity, pH and VOC) - Transparent glass heated stage inserts & tables that accurately keep the specimen in temperature and allow at the same time an easy handling of micromanipulation equipment. Unique DUAL controllers with autocalibration routines allow to save money and have unbeatable performance. Models for any ICSI and IMSI set-up.
EXHIBIT COMPANY LISTING

Olympus America Inc. — Booth: 1932
3500 Corporate Parkway Center Valley, PA 18034
www.olympusamerica.com

Our Medical Business works with health care professionals to combine our innovative capabilities in medical technology, therapeutic intervention, and precision manufacturing with their skills to deliver diagnostic, therapeutic and minimally invasive procedures to improve clinical outcomes, reduce overall costs and enhance quality of life for patients. Visit medical.olympusamerica.com and truetolife.com.

Ovation Fertility — Booth: 604
15821 Ventura Blvd Ste 550
Encino, CA 91436-4793
www.ovationfertility.com

Ovation Fertility empowers hope for families by applying the latest advances in reproductive science through a unique collaboration of compassionate clinicians and scientists driven to exceed patients’ expectations of outcomes and value.

PacGenomics — Booth: 1927
28222 Agoura Rd Ste 200 Agoura Hills, CA 91301-2412

PacGenomics is committed to improving patient outcomes through optimized reproductive genetic testing. As pioneers in PGT, PacGenomics is currently the only US lab to offer testing that can distinguish between normal and balanced translocation carrier embryos in translocation cases. Offering a comprehensive array of services including PGT-A, PGT-SR, Carrier Screening, POC, and DNA Identity Testing, PacGenomics helps make dreams of a healthy family a reality.

Pacific Coast Reproductive Society — Booth: 2015
2150 N 107th Street Ste 205 Seattle, WA 98133
www.pcrsonline.org

The Pacific Coast Reproductive Society’s global commitment to exceptional patient care is embodied in the continuing medical education of physicians, their teams, and allied professionals. Promoting the highest standards of clinical practice, patient safety, and improved patient outcomes, related to the treatment of infertility, is consistent with the principles and goals of PCRS.

Pearl Fertility — Booth: 643
Colorimetrix, Inc. 2093 Philadelphia Pike, Suite #3003
Claymont, DE 19703
www.pearlfertility.com

The Pearl Fertility System helps couples and physicians monitor key fertility hormones at home. Measure the levels of FSH essential for follicle preparation, measure LH levels at home essential for ovulation to happen. Pearl Kit includes tests for FSH and LH and a mobile app to read and interpret them. • Accurate ovulation tracking (Pearl Kit) • Daily hormone charting at home (Pearl App) • The true Fertile Days at your fingertips (Pearl System)

PerkinElmer Inc. — Booth: 901
940 Winter Street Waltham, MA 02451
www.perkinelmer.com

PerkinElmer, Inc. offers automated solutions which improve the efficiency of genomic and proteomics workflows. With our nucleic acid isolation technology, liquid handlers, library preparation kits, automated nucleic acid and protein analysis systems, and solutions for single cell genetic analysis, PerkinElmer is eliminating the challenges associated with genomic and proteomic analysis.

Physician’s Surrogacy — Booth: 1357
3661 Valley Centre Drive, Ste. 150
San Diego, CA 92130
www.physicianssurrogacy.com

Over last 40 years, there have been many advances made in the science and technology of IVF. Unfortunately, the evolution of the 3rd party reproduction agency model has not paralleled those advances. At Physician’s Surrogacy, our physician-managed staff of service-oriented professionals, provide distinct advantages over the traditional agency model. Most importantly, we provide the unparalleled advantage of a dedicated, physician-guided, third-party reproduction journey.

Predictive Laboratories — Booth: 1354
2749 E. Parleys Way, Suite 100
Salt Lake City, UT 84109
www.predictivelabs.com

Predictive Laboratories, Inc., a Salt Lake City, UT biotechnology company formed in 2017, is a molecular laboratory focusing on human infertility, women’s health, and childhood diseases and performs genetic testing using state-of-the-art instrumentation.
Prima-Temp – Booth: 1154
3100 Arapahoe Ave Boulder, CO 80301
PRIYA PERSONAL FERTILITY SENSOR by Prima-Temp
Priya has developed as an intravaginal sensor to help you and your patients effortlessly manage their fertility. Priya has been designed to wirelessly capture continuous core body temperature (CCBT) detecting temperature patterns occurring PRIOR to ovulation. This is not BBT or a diary. With Priya, you can confidently offer a scientific solution that helps pinpoint the fertile window for intercourse or IUI. Contact Kevin O’Connor at 303-552-7354

Professional Transition Strategies – Booth: 844
9 Sierra Vista Drive Colorado Springs, CO 80906

Progenity – Booth: 1919
4330 La Jolla Village Dr Ste 200 San Diego, CA 92122-6206
progenity.com
Progenity offers genetic testing that can help your patients grow healthy families, including the Preparent® • Carrier Test and the Innatal® Prenatal Screen. Our team of genetic counselors partner with you to provide test result support for patients. Visit us at Booth #1919 to learn or visit progenity.com.

Progeny – Booth: 914
245 5th Avenue, 4th Floor New York, NY 10010
Progeny is a leading fertility benefits management company that combines clinical and emotional guidance and support, science, technology, and data to provide comprehensive, inclusive, and effective value-based fertility solutions for self-insured employers. Progeny’s benefits solutions are designed to improve outcomes, shorten time to pregnancy and reduce total fertility-related costs. Progeny is privately held and is headquartered in New York, NY. Please visit www.progeny.com.

Quark BioSciences, Inc. – Booth: 949
6-2 Shengyi Rd., Sec. 2, 4F-1 Zhubei, Hsinchu, 30261
www.quarkbiosciences.com
By partnering with doctors and researchers worldwide, QuarkBio focuses on developing innovative fertility treatment solutions to be used alongside clinical examinations, improving patients’ quality of treatment without the financial burdens. QuarkBio develops innovative tests based on the domain knowledge of our scientists or outside collaborators. QuarkBio assists partners with the co-development of tests on PanelChip® Analysis System, creating ready-to-use products to end-users.

Quick Specialized Healthcare Logistics – Booth: 1656
175-28 148th Avenue Jamaica, NY 11434
Quick’s specially trained experts provide customized logistics solutions for your reproductive medicine care. 24/7 pickup and delivery with door-to-door route planning for the fastest and safest transit. Consultation and procurement of appropriate active or passive packaging systems. Temperature-controlled protocols for all temperature ranges, including provision and replenishment of refrigerant as needed. www.quickhealthcare.aero

Rectangle Health – Booth: 1845
115 E Stevens Avenue Valhalla, NY 10595
https://www.rectanglehealth.com
Rees Scientific Corp — Booth: 1737
1007 Whitehead Road Ext Ewing, NJ 08638-2405
www.reesscientific.com
As an ISO 9001 certified organization, Rees Scientific is the industry standard for automated temperature monitoring. Our system is designed to be a complete solution for blood banks, pharmacies, and hospitals. We are also an ISO 17025 accredited company that can help meet regulatory requirements for AABB, FDA and Joint Commission.

Reproductive Genetic Innovations — Booth: 1812
2910 Macarthur Boulevard Northbrook, IL 60062-2005
www.rgipgd.com
RGI - Reproductive Genetic Innovations is a recognized global pioneer in the field of preimplantation genetic testing. We have performed PGT testing for thousands of families worldwide.

Reproductive Possibilities LLC — Booth: 1841
1 Paragon Drive, Suite 160 Montvale, NJ 07645
www.reproductivepossibilities.com
We are a Surrogate Agency with the experience and dedicated staff necessary to guide intended parents down the pathway to parenthood. We match intended parents with a gestational carrier and take you step by step on this amazing journey. Our company practices are designed to help you manage your expenses throughout a process which is very expensive. We have successfully helped our clients have over 2000 babies & we would love to add your child/ren to that list. Let us make your dreams come true.

Reproductive Scientist Development Program (RSDP) Booth: 634
500 North Keene, Suite 203 Columbia, MO 65201
www.RDSProgram.org
The Reproductive Scientist Development Program (RSDP) provides career development support for obstetricians and gynecologists who are committed to a basic science career in academic medicine and research. The areas of interests covered by the program are broadly defined, with emphasis in cell and molecular biology as applied to problems in reproductive endocrinology, genetics, maternal-fetal medicine, oncology, infectious disease, or other aspects of reproduction.

ReproSource Fertility Diagnostics — Booth: 1635
300 Trade Center, Suite 6540 Boston, MA 01801
reprosource.com
ReproSource is a CLIA certified and CAP accredited reference laboratory focused solely on fertility and reproductive health testing. ReproSource diagnostic solutions include the Ovarian Assessment Report (OAR), sperm DNA fragmentation testing, comprehensive RPL panels, and the new @ Home Semen Collection system that allows for a comprehensive and accurate semen analysis the day after specimen collection.

Re protech, Ltd — Booth: 832
33 Fifth Avenue NW, Suite 900 St. Paul, MN 55112
www.reprotech.com
ReproTech, Ltd. specializes in long-term cryostorage and transportation of reproductive tissues. Our 4 facilities provide safe and secure storage managed by experienced staff. ReproTech’s proven protocols, 24/7 tank monitoring with data analysis, and disaster safe rooms offer peace of mind to patients. ReproTech’s Auto Transfer Management Program enables IVF centers to automatically transfer specimens to a storage center by pre-consenting all patients, thus eliminating abandoned specimens.

7918 Jones Branch Drive Suite 300 McLean, VA 22102-4306
www.resolve.org
RESOLVE: The National Infertility Association, established in 1974, is dedicated to ensuring that all people challenged in their family building journey reach resolution through being empowered by knowledge, supported by community, united by advocacy, and inspired to act. RESOLVE exists to provide: ◊ Access to Care ◊ Advocacy for Coverage ◊ Access to Support & Community ◊ Access to Education ◊ Awareness of All Family Building Options

Reunite RX — Booth: 941
2290 Springlake Road, Suite 100 Farmers Branch, TX 75234
Richard Wolf Medical Instruments — Booth: 701
353 Corporate Woods Pkwy Vernon Hills, IL 60061
www.richardwolfusa.com

Richard Wolf Medical Instruments is dedicated to improving patient outcomes through innovation in endoscopy. For over 100 years, Richard Wolf has pursued endoscopic solutions focused on improving surgical results while reducing patients’ trauma. In the pursuit of the spirit of excellence, Richard Wolf prides itself on quality and innovation.

Rite Options — Booth: 1255
1800 JFK Blvd, St. 300
Philadelphia, PA 19103
www.riteoptions.com

Rite Options is a global egg donor & surrogacy agency. Our mission is to assist aspiring parents to grow their family by providing guidance & support throughout their journey, hand in hand with their own medical team. We offer an extensive selection of egg donors & surrogates, who are chosen by our team to meet the high standards on health, education, commitment & personal appeal. We possess solid knowledge of the industry and steadfastly maintain compliance with all regulations & adhere to the standards and guidelines of ASRM. Our team is highly respected in the fertility industry & we have strong relationships with IVF clinics throughout the US, as well as attorneys, psychologists & insurance providers, to make the experience for intended parents more efficient. We service US & International clients of all backgrounds & lifestyles & our services include concierge travel arrangements & alliances with attorneys, translation & newborn insurance agencies to ensure proper logistics.

Roche Diagnostics — Booth: 1314
9115 Hague Road
Indianapolis, IN 46256
diagnostics.roche.com/us/en/home.html

Roche is a global leader in pharmaceuticals and diagnostics, focused on advancing science to improve people's lives. The combined strengths in these areas have made Roche the leader in personalized healthcare. Roche is a leading supplier of solutions focused on increasing medical value and testing efficiency. These solutions include integrated clinical chemistry and immunoassay analyzers with the broadest test menu on one platform for early detection, screening, and monitoring of disease.

Rocket Medical PLC — Booth: 1105
150 Recreation Park Dr Ste 1
Hingham, NC 02043-4227
Rocketmedical.com

Rocket Medical has been a worldwide innovator in medical devices for invitro fertilization since 1963. We continue to strive for excellence and continue to strengthen our IVF line as well as our alliances with IVF centers. Our strengths are our Embryon line of embryo transfer catheters and oocyte retrieval needles. Rocket aspiration pumps continue to be the “gold” standard.

RTD Reproductive Technology and Design — Booth: 1556
65 Lancaster Drive
Beacon Falls, CT 06403
rtdeng.com

Reproductive Technology and Design is a Design Engineering, IVF Equipment Service, Repair and Manufacturing company in the IVF equipment market segment. Products include Electr-O-Vit for cryopreservation and Electr-O-Cryo for cryosurgical applications. Design Engineering using Solidworks and PDM to support product development as well as sustaining engineering. IVF equipment field service including, maintenance contracts as well as equipment repair. Electricity made its way to Vitrification!

Ruibai Medical USA — Booth: 1827
New York, NY 11355
IVF Products

Salve — Booth: 632
219 St. John Street
London, EC1V 4LY
www.salveapp.co.uk

75% of patients are between 23-38, the mobile-first generation. Salve is a mobile-first patient engagement platform working with some of the biggest and best clinics in the world. Through our intelligent delivery engine patients are automatically delivered personalised information to their phones. They receive notifications on their meds, appointments and prompts to ensure they’re compliant every step of the way. It also includes secure messaging, payments and results delivery. We’re at Booth 632.
Samsung — Booth: 1448
14 Electronics Ave. Danvers, MA 01923
www.samsunghealthcare.com

Samsung NeuroLogica, the healthcare subsidiary of Samsung Electronics America, Inc., develops, manufactures and markets innovative imaging technologies and is committed to delivering fast, easy and accurate diagnostic solutions to healthcare providers. NeuroLogica, the global corporate headquarters and manufacturer of Samsung computed tomography, is also the US headquarters for sales, marketing and distribution of all Samsung digital radiography and ultrasound systems.

SCSA Diagnostics — Booth: 1815
302 W 6th St Ste B Brookings, SD 57006-1160
www.scsatest.com

The SCSA remains the most robust test and is the only test of sperm DNA/chromatin for which validated clinical interpretation criteria exist, and these are based on many thousands of tests and hundreds of clinical treatment cycles. Basic Laboratory Andrology, Cambridge Press; 2001. Bjorndahl L, Mortimer D, Barratt C, et.

Seattle Sperm Bank — Booth: 800
4915 25th Avenue NE, Suite 204 Seattle, WA 98105
www.seattlespermbank.com

Seattle Sperm Bank is an industry-leading sperm bank, offering the most comprehensive genetic testing and screening practices with a focus on high quality, Open ID vials with exceptional customer service. Our focus is about combining a personal, compassionate approach with uncompromising medical expertise and the very best in donor selection.

Sema4 — Booth: 1701
333 Ludlow Street, South Building, 3rd Floor
Stamford, CT 06902
www.sema4.com

Sema4 is a patient-centered predictive health company founded on the idea that more information, deeper analysis, & increased engagement will improve the diagnosis, treatment, & prevention of disease. Sema4 is dedicated to transforming healthcare by building more dynamic models of human health & defining optimal, individualized health trajectories, starting with reproductive health & oncology. Sema4 believes patients should be treated as partners, & data should be shared for the benefit of all.

Sensitive Matters — Booth: 1631
85 Studdridge St. London, SW6 3TD
www.sensivematters.net

Sensitive Matters helps find the right words for tricky subjects. The ASRM strongly encourages early openness with donor conceived children about the use of donor gametes or embryos in their conception. THE MAGIC OF YOU helps parents achieve this for toddlers. These customizable books allow parents to create avatars for the characters in their own story and edit all text. The books are beautifully illustrated, printed on fine paper, with a hardback cover and section to add cherished photos.

shiftMD, LLC — Booth: 855
5000 SW 75th Avenue, Suite 113 Miami, FL 33155
www.shiftMD.com

shiftMD is a mobile-based, proprietary platform which OB/Gyns can download to gain access to a curated marketplace of best-in-class, women’s health, non-prescription products they easily dispense to their patients through a simple text message.

Shivani Scientific Industries (P) LTD
Booth: 1355
26/A, Raju Indl. Estate, Penkar Pada Road, Mira Mumbai, Maharashtra 401104
www.shivaniivf.com

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www.ssr.org

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The VFP Group – Booth 1808

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