

**The American Society of Andrology 45<sup>th</sup> Annual Conference**  
**“Personalized Reproductive Medicine for the Male: From Bench to Bedside”**

April 25-28, 2020 ~ The Loews Philadelphia Hotel ~ Philadelphia, PA

Program Chairs: Polina V. Lishko, PhD & James Smith, MD, MS

**Preliminary Agenda**

<b>FRIDAY, APRIL 24, 2020</b>	
<b>2:00 pm – 6:00 pm</b>	<b>Registration/Information Desk Open</b>
<b>SATURDAY, APRIL 25, 2020</b>	
<b>7:00 am – 7:00 pm</b>	<b>Registration/Information Desk Open</b>
<b>4:00 pm – 9:00 pm</b>	<b>Exhibits Open</b>
<b>8:30 am – 5:30 pm</b>	<b>Andrology Lab Workshop</b> <b>“Improving the Prognostic Value of Semen Analysis for Assisted Reproduction”</b> <i>*ABB Lab Accredited</i>
8:30 am	<b>Continental Breakfast &amp; Check-in</b>
8:45 am	<b>Prognostic Value of Semen Analysis in a Male Infertility Work-up</b> Erma Drobnis, PhD, HCLD <i>University of Missouri School of Medicine</i>
9:15 am	<b>EXERCISE 1: Troubleshooting CLIA Semen Analysis QC</b>
9:45 am	<b>CLIA Requirements for Semen Analysis QC</b> Suresh Sikka, PhD, HCLD <i>Tulane University</i>
<b>10:15 am – 10:30 am</b>	<b>BREAK</b>
10:30 am	<b>EXERCISE 2: Troubleshooting Sources of Error</b>
10:45 am	<b>Sources of Error in Determining Sperm Count and Motility</b> Erma Drobnis, PhD, HCLD <i>University of Missouri School of Medicine</i>
11:30 am	<b>Prognostic Value of Sperm Morphology</b> Susan Rothmann, PhD, HCLD <i>Fertility Solutions, Inc.</i>
<b>12:00 pm</b>	<b>Lunch and Networking on your own</b>
<b>1:00 pm – 3:30 pm</b>	<b>SPERM MORPHOLOGY WORKSHOP</b>
1:00 pm	<b>EXERCISE 3: Morphology Classification Interactive Pre-Test</b>
1:20 pm	<b>Need for An Improved Morphology Algorithm</b> Susan Rothmann, PhD, HCLD <i>Fertility Solutions, Inc.</i>
1:50 pm	<b>Demonstration – Sperm Morphology Algorithm 101</b> Anna Bort, MLT (ASPC)CME <i>Fertility Solutions, Inc.</i>
2:30 pm	<b>EXERCISE 4: Group Worked Examples</b>
2:50 pm	<b>EXERCISE 5: Morphology Post-Teaching Test</b>
<b>3:30 pm – 3:45 pm</b>	<b>BREAK</b>
3:45 pm	<b>EXERCISE 6: Cryopreserved Sperm – No Recovery, No Sperm, Handling the Vial at Various Temperatures</b>

4:00 pm	<b>Sperm Cryopreservation: Critical Temperatures During Cryopreservation Storage and Thawing</b> Gail Prins, PhD <i>University of Illinois at Chicago</i> Erma Drobnis, PhD, HCLD <i>University of Missouri School of Medicine</i>
4:30 pm	<b>Challenges of Routine DNA Fragmentation Testing in the Andrology Laboratory</b> Charles Muller, PhD, HCLD <i>University of Washington</i>
5:00 pm	<b>ADJOURN</b>
8:30 pm – 4:30 pm	<b>ASA Translational Symposium</b> <b>“Advances in Clinical and Laboratory Techniques for Obstructive and Non-Obstructive Azoospermia Patients”</b> Moderator: James Smith, MD, MS
8:30 am – 9:45 am	<b><u>OBSTRUCTIVE AZOOSPERMIA</u></b>
8:30 am	<b>Sperm Retrieval Techniques for Obstructive Azoospermia</b> R. Matt Coward, MD <i>University of North Carolina</i>
8:50 am	<b>How, Why, and When to Perform Vasoepididymostomy</b> James Kashanian, MD <i>Weill Cornell Medicine-Urology</i>
9:10 am	<b>Tips and Tricks to Identify High Quality Sperm from the Obstructive Azoospermia Patient</b> Ki Aston, PhD <i>University of Utah</i>
9:30 am	<b>Discussion</b>
9:45 am – 10:00 am	<b>BREAK</b>
10:00 am – 12:00 pm	<b><u>ADVANCES IN ENGINEERING, SPERM MANIPULATION, AND SPERM METABOLISM. EMERGING TECHNOLOGIES IN MALE REPRODUCTIVE TRACT</u></b>
10:00 am	<b>On the Use of Optical Tweezers to Separate Sperm: A Forensics Application</b> Joseph Reiner, PhD <i>Virginia Commonwealth University</i>
10:25 am	<b>From Glowing Penis to Oocyte-Producing Testis: The Power of Mouse Genetics on Andrology</b> Humphrey Yao, PhD <i>National Institute of Environmental Health Sciences (NIEHS/NIH)</i>
10:50 am	<b>Novel Advances in Testicular Imaging – Shedding Light on Spermatogenesis</b> Marc Spehr, PhD <i>RWTH Aachen University</i>
11:15 am	<b>Healthy Sperm Selection with Magnetic Nanoparticles</b> Jean M. Feugang, PhD <i>Mississippi State University</i>
11:40 am	<b>Discussion</b>
12:00 am – 1:00 pm	<b>LUNCH ON YOUR OWN</b>
1:00 pm – 3:35 pm	<b><u>NON-OBSTRUCIVE AZOOSPERMIA</u></b>
1:00 pm	<b>Clinical and Surgical Problems of Non-Obstructive Azoospermia</b> Keith Jarvi, MD <i>Mount Sinai Hospital</i>
1:25 pm	<b>Advances in Laboratory Techniques to Identify Sperm from Non-Obstructive Azoospermia Patients</b>

	Tim Jenkins, PhD <i>University of Utah</i>
1:50 pm	<b>Advances in Preoperative Planning Techniques to Identify High Quality Sperm</b> Christopher Deibert, MD <i>University of Nebraska</i>
2:15 pm	<b>Laboratory and Clinical Advances in Identification of Healthy Sperm</b> James Hotaling, MD <i>University of Utah</i>
2:40 pm	<b>High-Throughput Mouse Genome Editing Using CRISPR-EZ and CRISPR-READI</b> Sean Chen, PhD <i>University of California, Berkeley</i>
3:05 pm	<b>Discussion</b>
<b>3:35 pm – 4:00 pm</b>	<b>BREAK</b>
<b>4:00 pm – 5:30 pm</b>	<b>PANEL DISCUSSION AND MINI-SYMPOSIUM: SCIENCE, ETHICS, LAW AND RELIGIOUS BELIEFS</b>
	Panelists: Robin Lovell-Badge, PhD – <i>The Francis Crick Institute, UK</i> Kyle Orwig, PhD – <i>University of Pittsburgh</i> Keith Jarvi, MD – <i>Mount Sinai Hospital</i> TBD
<b>5:30 pm</b>	<b>Translational Symposium Adjourns</b>
<b>6:00 pm – 6:20 pm</b>	<b>ASA President’s Welcome and Opening Remarks</b> George L. Gerton, PhD <i>ASA President</i>
<b>6:20 pm – 7:30 pm</b>	<b>EMIL STEINBERGER MEMORIAL LECTURE: The Regulation of Sox9 Expression in the Initiation and Maintenance of Gonadal Fate</b> <i>Sponsored by the Emil Steinberger Endowment Fund</i> Introducer: George L. Gerton, PhD <i>University of Pennsylvania</i> Speaker: Robin Lovell-Badge, PhD <i>The Francis Crick Institute, UK</i>
<b>7:30 pm – 9:00 pm</b>	<b>ASA Welcome Reception</b>
<b>SUNDAY, APRIL 26, 2020</b>	
<b>6:30 am – 8:00 am</b>	<b>Past President’s Breakfast</b>
<b>6:30 am – 6:30 pm</b>	<b>Registration/Information Desk Open</b>
<b>7:00 am – 4:00 pm</b>	<b>Exhibits Open</b>
<b>7:00 am – 8:00 am</b>	<b>Continental Breakfast in Exhibit Hall</b>
<b>8:00 am – 8:10 am</b>	<b>ASA Distinguished Andrologist Award</b> <i>Sponsored by the Eugenia Rosemberg Endowment Fund</i> <i>*Not CME Accredited</i> Introducer: Barry Zirkin, PhD <i>Johns Hopkins University</i> Recipient: Vassilios Papadopoulos PharmD, PhD <i>University of Southern California School of Pharmacy</i>
<b>8:10 am – 8:20 am</b>	<b>ASA Distinguished Service Award</b> <i>Sponsored by the ASA Past Presidents Endowment Fund</i> <i>*Not CME Accredited</i> Introducer: Rex Hess, PhD

	<p><i>University of Illinois</i>  Recipient: Douglas Carrell, PhD HCLD  <i>University of Utah School of Medicine</i></p>
<b>8:20 am – 8:30 am</b>	<p><b>Trainee Travel Awards</b>  <i>*Not CME Accredited</i></p>
<b>8:30 am – 9:40 am</b>	<p><b>DIVERSITY LECTURE: Impacting eXtraordinary: Klinefelter Syndrome at the Intersection of Research, Clinical Care and Community</b>  <i>Sponsored by the ASA Educational Endowment Fund</i>  Introducer: Carol Meerschaert  <i>Executive Director of AXYS</i>  Speaker: Susan Howell, MS, CGC, MBA  <i>Children’s Hospital Colorado</i></p>
<b>9:40 am – 11:00 am</b>	<p><b>Poster Session I</b>  <i>*Not CME Accredited</i>  Location: XXXXX</p>
<b>11:00 am – 1:00 pm</b>	<p><b><u>SYMPOSIUM I: Testis Biology, Spermatogenesis, Steroidogenesis</u></b>  Moderator: TBD</p>
11:00 am	<p><b>Age-Dependent Alterations in Meiotic Recombination Underlie Sperm Aneuploidies in Mice and Men</b>  Francesca Cole, PhD  <i>University of Texas MD Anderson Cancer Center</i></p>
11:30 am	<p><b>Probing Testis-Specific Gene Expression Through the Generation of Single Regulatory Element-Specific Mutations in the Mouse</b>  Robert S. Viger, PhD  <i>Laval University</i></p>
12:00 pm	<p><b>In Vitro Spermatogenesis, Bench to Bedside</b>  Nam D. Tran, MD, PhD, HCLD  <i>Spring Fertility</i></p>
12:30 pm	<p><b>The Immune Environment of the Testis and Epididymis: From Bed to Bench and Back</b>  Andreas Meinhardt, PhD  <i>Justus-Liebig-University Giessen, Germany</i></p>
<b>1:00 pm – 2:00 pm</b>	<p><b>Lunch on Own</b></p>
<b>1:00 pm – 2:00 pm</b>	<p><b>MENTORING LUNCHEON: TBD</b>  <i>Sponsored by the Diversity and Trainee Affairs Committees</i>  TBD</p>
<b>1:00 pm – 2:00 pm</b>	<p><b>Editorial Board Luncheon</b></p>
<b>2:00 pm – 4:00 pm</b>	<p><b><u>SYMPOSIUM II: Contributions of Epididymis and Seminal Plasma to Fertility</u></b>  Moderators: TBD</p>
2:00 pm	<p><b>The Pleiotropic Effects of Seminal Plasma</b>  Nadia Roan, PhD  <i>University of California at San Francisco</i></p>
2:30 pm	<p><b>Novel Role for Epididymal Clear Cells in Sperm Maturation and Mucosal Immunity</b>  Sylvie Breton, PhD  <i>Massachusetts General Hospital / Harvard Medical School</i></p>
3:00 pm	<p><b>Does Sperm Retrieval from Epididymis Negatively or Positively Affect IVF/ICSI Outcomes?</b>  James Kashanian, MD  <i>Weill Cornell Medicine-Urology</i></p>
3:30 pm	<p><b>Sperm MicroRNAs Acquired During Epididymal Passage Transmit Epigenetic Information to Offspring</b>  Colin Conine, PhD  <i>University of Massachusetts Medical School</i></p>

4:00 pm – 4:20 pm	<b>BREAK</b>
4:20 pm – 6:50 pm	<b>SYMPOSIUM III: New Insights into Sperm Molecular Architecture and Function. What Makes a Fertile Sperm?</b> Moderators: Polina Lishko, PhD – <i>University of California, Berkeley</i> Jae Hwang, PhD – <i>Yale School of Medicine</i>
4:20 pm	<b>Sperm Ca<sup>2+</sup> Signaling Nanodomains</b> Jean-Ju Chung, PhD <i>Yale School of Medicine</i>
4:50 pm	<b>Genetic Defects in Sperm Flagella Beat Generation and Regulation</b> Heymut Omran, MD <i>Münster University Hospital, Germany</i>
5:20 pm	<b>Chloride Channels in Sperm Physiology</b> Alberto Darszon, PhD <i>Universidad Nacional Autonoma de Mexico</i>
5:50 pm	<b>Capacitated Sperm Develop Hyperactivated Motility and Undergo Acrosomal Exocytosis. And Then What?</b> Mariano Buffone, PhD <i>Instituto de Biología y Medicina Experimental, Argentina</i>
6:20 pm	Oral Presentation
6:35 pm	Oral Presentation
7:00 pm – 9:00 pm	<b>Clinical/Basic/Trainee Mixer</b> <i>Sponsored by Program Committee &amp; Trainee Affairs Committee</i>
<b>MONDAY, APRIL 27, 2020</b>	
6:30 am – 6:00 pm	<b>Registration/Information Desk Open</b>
7:00 am – 3:30 pm	<b>Exhibits Open</b>
7:00 am – 8:00 am	<b>Continental Breakfast in Exhibit Hall</b>
8:00 am – 9:00 am	<b>WOMEN IN ANDROLOGY LECTURE: Fundamentals of Cell Signaling Down Under</b> <i>Sponsored by the Women in Andrology Endowment Fund</i> Introducer: WIA Chair, Martine Culty, PhD <i>University of Southern California</i> Speaker: Kate Loveland, PhD <i>Monash University and Hudson Institute of Medical Research, Australia</i>
9:00 am – 9:15 am	<b>BREAK</b>
9:15 am – 9:30 am	<b>Matthew P. Hardy Young Andrologist Award</b> <i>Sponsored by the Matthew P. Hardy Endowment Fund</i> <i>*Not CME Accredited</i> Introducer: Craig Niederberger, MD <i>University of Illinois at Chicago</i> Recipient: James Hotaling, MD <i>University of Utah</i>
9:30 am – 9:40 am	<b>Outstanding Trainee Investigator and Trainee Awards</b> <i>*Not CME Accredited</i>
9:40 am – 10:40 am	<b>INTERNATIONAL LECTURE: CRISPR/Cas9 Genome Editing and its Application in the Study of Fertilization</b> <i>Sponsored by the ASA General Endowment Fund</i> Introducer: Patricia Cuasnicu, PhD <i>Instituto de Biología y Medicina Experimental</i> Speaker: Masahito Ikawa, PhD <i>Osaka University, Japan</i>
10:40 am – 12:00 pm	<b>Poster Session II</b>

	<i>*Not CME Accredited</i>
<b>12:00 pm – 1:30 pm</b>	<b>Lunch on your own</b>
<b>12:00 pm – 1:30 pm</b>	<b>WOMEN IN ANDROLOGY LUNCHEON</b> <i>Sponsored by the Women in Andrology Committee</i> <i>*Not CME Accredited</i> Host: <i>TBD</i>
<b>1:30 pm – 3:00 pm</b>	<b><u>SYMPOSIUM IV: Emotional Health and Male Infertility</u></b> Moderators: TBD
1:30 pm	<b>A 200 Pound Weight': Emotions and Men's Experiences of Infertility</b> Ann V. Bell, PhD <i>University of Delaware</i>
1:50 pm	<b>Complexities and Caveats in Men's Health Help-seeking</b> John Oliffe, PhD, RN <i>University of British Columbia</i>
2:20 pm	<b>Upstream Determinants, Self-Care, and Infertility: Possible Links</b> Michael Rovito, PhD, CHES, FMHI <i>University of Central Florida</i>
2:50 pm	<b>Panel Discussion</b>
<b>3:00 pm – 3:20 pm</b>	<b>BREAK</b>
<b>3:20 pm – 5:20 pm</b>	<b><u>SYMPOSIUM V: Addressing the Challenges in Male Fertility</u></b> Moderators: TBD
3:20 pm	<b>Sperm in ART and Science</b> Pablo Visconti, PhD <i>University of Massachusetts</i>
3:50 pm	<b>Understanding the Sperm Redox Regulation to Tackle Male Infertility</b> Cristian O'Flaherty, DVM, PhD <i>McGill University, Canada</i>
4:20 pm	<b>Testicular Dysgenesis Syndrome, Germ Cell Cancer and Environment</b> Niels Erik Skakkebaek, MD, PhD <i>University of Copenhagen, Denmark</i>
4:50 pm	<b>Oral Presentation</b>
5:05 pm	<b>Oral Presentation</b>
<b>5:20 pm – 7:00 pm</b>	<b>ASA Annual Business Meeting</b>
<b>7:30 pm – 12:00 am</b>	<b>ASA Annual Banquet</b>
<b>TUESDAY, APRIL 28, 2020</b>	
<b>7:00 am – 8:00 am</b>	<b>2021 Program Committee Meeting</b>
<b>7:00 am – 12:30 pm</b>	<b>Registration/Information Desk Open</b>
<b>7:00 am – 8:00 am</b>	<b>Continental Breakfast</b>
<b>8:00 am – 9:00 am</b>	<b>AUA LECTURE: Bringing it All Together: Precision Medicine in Male Infertility</b> <i>Sponsored by the AUA Educational Grant</i> Introducer: James Smith, MD, MS <i>University of California, San Francisco</i> Speaker: Kathleen Hwang, MD <i>University of Pittsburgh School of Medicine</i>
<b>9:00 am – 9:15 am</b>	<b>Poster Awards</b> <i>*Not CME Accredited</i>
<b>9:15 am – 9:30 am</b>	<b>BREAK</b>
<b>9:30 am – 12:00 pm</b>	<b><u>SYMPOSIUM VI: Male Contraception Landscape - New Targets and Approaches</u></b> Moderators: TBD

9:30 am	<b>Funding and Commercialization Panel</b> Daniel Johnston, PhD - <i>National Institutes of Health</i> Logan Nickels - <i>Male Contraception Initiative</i> Heather Vahdat - <i>Male Contraception Initiative</i>
10:15 am	<b>Recent Progress in the Discovery and Development of Non-Hormonal Male Contraceptive Agents</b> Gunda Georg, PhD <i>University of Minnesota</i>
10:45 am	<b>Vasectomies and Vasectomy Reversals</b> Mary Samplaski, MD <i>University of Southern California</i>
11:15 am	<b>SLO3 Potassium Channel: A Novel Contraceptive Target</b> Celia M Santi, MD, PhD <i>Washington University School of Medicine</i>
11:45 am	<b>Oral Presentation</b>
<b>12:00 pm – 12:15 pm</b>	<b>Closing Remarks / 46<sup>th</sup> ASA Meeting 2021 Highlights</b> Moderators: George Gerton, PhD, Polina Lishko, PhD, James Smith, MD MS