

# AGENDA

ASA 49TH ANNUAL CONFERENCE  
APRIL 29 - MAY 2, 2024



EMBASSY SUITES DENVER DOWNTOWN  
DENVER, COLORADO

## OMICS, MACHINE LEARNING, AND EPIDEMIOLOGY: LEVERAGING 50 YEARS OF DISCOVERY TO INFORM THE FUTURE OF ANDROLOGY

Program Chairs: Akanksha Mehta, MD, MS and Tim Jenkins, PhD

All sessions will be located in the Crystal Ballroom (3rd Floor) unless otherwise noted.

### MONDAY, APRIL 29, 2024

7:00 am – 5:00 pm	Registration/Information Desk Open <i>Crystal Foyer</i>
4:00 pm – 9:00 pm	Exhibits Open <i>Crestone Foyer</i>
4:00 pm – 5:30 pm	<b>Trainee Affairs Committee Networking and Flash Talks</b>
6:00 pm – 6:15 pm	<b>ASA President's Welcome and Opening Remarks</b>
6:00 pm	<b>ASA President:</b> <i>Kate Loveland, PhD - Monash University - Clayton, Australia</i>
6:10 pm	<b>Program Chairs:</b> <i>Akanksha Mehta, MD - Emory University - Atlanta, GA</i> <i>Tim Jenkins, PhD - Bringham Young University - Provo, UT</i>
6:15 pm – 7:15 pm	<b>EMIL STEINBERGER MEMORIAL LECTURE: Computational Paradigms Shaping Andrology: Genetics, Pathology, and Collaboration</b> <i>Supported by the Emil Steinberger Endowment Fund</i> <b>Introducer:</b> <i>Tim Jenkins, PhD - Bringham Young University - Provo, UT</i> <b>Speaker:</b> <i>Donald Conrad, MS, PhD - Oregon Health &amp; Science University - Portland, OR</i>
7:15 pm – 9:00 pm	<b>ASA Welcome Reception</b> <i>Crestone Foyer</i>

### TUESDAY, APRIL 30, 2024

6:30 am – 8:00 am	Past President's Breakfast <i>Cripple Creek 2</i>
6:30 am – 5:30 pm	Registration/Information Desk Open <i>Crystal Foyer</i>
7:00 am – 3:30 pm	Exhibits Open <i>Crestone Foyer</i>
8:00 am – 8:15 am	<b>ASA Distinguished Andrologist Award</b> <i>Supported by the Eugenia Rosemberg Endowment Fund</i> <i>*Not CME Accredited</i> <b>Introducer:</b> <i>Martine Culty, PhD - University of Southern California - Los Angeles, CA</i> <b>Recipient:</b> <i>Marie-Claude Hofmann, PhD - MD Anderson Cancer Center - Houston, TX</i>
8:15 am – 8:30 am	<b>ASA Distinguished Service Award</b> <i>Supported by the ASA Past Presidents Endowment Fund</i> <i>*Not CME Accredited</i> <b>Introducer:</b> <i>Patricia Cuasnicu, PhD - Instituto de Biologia y Medicina Experimental - Buenos Aires, Argentina</i> <b>Recipient:</b> <i>Gail Cornwall, PhD - Texas Tech University Health Sciences Center - Lubbock, TX</i>
8:30 am – 10:00 am	<b>SYMPOSIUM I: The Environment and Infertility</b> <b>Moderators:</b> <i>Jesse Mills, MD - UCLA - Los Angeles, CA</i> <i>Ralph Meyer, PhD - Utah State University - Logan, UT</i> <i>Georgia Rae Atkins - University of Pittsburgh - Pittsburgh, PA</i>
8:30 am	Models of Wildfire Smoke Exposure and Ambient Air Pollution: Impacts on Sperm and the Offspring <i>Luke Montrose, PhD - Colorado State University - Fort Collins, CO</i>
8:50 am	Impact of THC on the HPG Axis <i>Jasper Bash, MD - University of California, Los Angeles, CA</i>
9:10 am	Paternal Alcohol Exposures, Epididymal Maturation, and Epigenetic Programming of Sperm <i>Michael Golding, PhD - Texas A&amp;M University - College Station, TX</i>

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### TUESDAY, APRIL 30, 2024 (continued)

9:30 am	Oral Abstract #1: Men with Impaired Sperm Motility Show Alterations in Semen and Urine Microbiome Predicted Functional Profiles <i>Vadim Osadchiy, MD - University of California, Los Angeles, CA</i>
9:35 am	Oral Abstract #2: Autologous Testicular Grafting in Rhesus Monkeys - A Fertility Preservation Strategy for Prepubertal Males Undergoing Cancer Therapy <i>Gunapala Shetty, PhD - University of Texas MD Anderson Cancer Center - Houston, TX</i>
9:40 am	Oral Abstract #3: Sperm Quality Prognosis Following Effect of Laparoscopic Varicocelectomy in Patients Of Grade II And III Varicocele <i>Maciej Kurpisz, MD, PhD - Institute of Human Genetics, Polish Academy of Sciences, Poznan, Poland</i>
9:45 am	Q&A
10:00 am – 10:30 am	Break <i>Crestone Foyer</i>
10:30 am – 11:00 am	<b>DIVERSITY LECTURE: Racism Doesn't Exist, So Why Are You Talking About It: Patient, Physician and Trainee Considerations</b> <i>Supported by the ASA Educational Endowment Fund</i> <b>Introducer:</b> <i>Carolina Jorgez, PhD - Baylor College of Medicine - Houston, TX</i> <b>Speaker:</b> <i>Kelvin Moses, MD - Vanderbilt University Medical Center - Nashville, TN</i>
11:00 am – 12:00 pm	<b>Poster Session I</b> *Not CME Accredited <i>Crestone Ballroom</i>
12:00 pm – 1:30 pm	Editorial Board Luncheon <i>Cripple Creek 1</i>
12:00 pm – 1:30 pm	Lunch on your own
1:30 pm – 3:00 pm	<b>SYMPOSIUM II: Panel Discussion: Developing Effective, International Collaborations Across Diverse Areas of Expertise</b> <b>Moderators:</b> <i>Scott Lundy, MD, PhD - Cleveland Clinic - Cleveland, OH</i> <i>Martin Miner, MD - Brown University - Providence, RI</i> <b>Panelists:</b> <i>Ki Aston, PhD, HCLD - University of Utah - Salt Lake City, UT</i> <i>James Smith, MD, MS - University of California, San Francisco, CA</i> <i>Andreas Meinhardt, PhD - Justus Liebig University - Giessen, Germany</i> <i>Kristian Almstrup, MSc, PhD - University of Copenhagen, Denmark</i>
2:30 pm	Oral Abstract #4: The Dual Nature of Micronutrients on Fertility: Too Much of A Good Thing? <i>Aron Moazamian, BS - CellOxess Biotechnology, Ewing, NJ</i>
2:35 pm	Oral Abstract #5: Regulation of Mononuclear Phagocyte Populations by Activin A in the Mouse Epididymis and Effects of Sexual Maturation <i>Mark Hedger, PhD - Centre for Reproductive Health, Hudson Institute of Medical Research, Melbourne, Australia</i>
2:40 pm	Oral Abstract #6: Differential Response of Epididymal Regions to SARS-CoV-2 Infection, and TNF- $\alpha$ Expression by Clear Cells <i>André Acácio Souza da Silva, MS - Federal University of São Paulo, Brazil</i>
2:45 pm	Q&A
3:00 pm – 3:30 pm	Break <i>Crestone Foyer</i>

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### TUESDAY, APRIL 30, 2024 (continued)

3:30 pm – 5:00 pm	<b>SYMPOSIUM III: Big Data and Omics: Leveraging Data to Build the Future in Andrology</b> Moderators: Amin Herati, MD - The Brady Urological Institute - Baltimore, MD Dolores Lamb, PhD, HCLD - Weill Cornell Medicine - New York, NY Christopher Pombar - University of Pittsburgh - Pittsburgh, PA
3:30 pm	Novel Applications of Oxford Nanopore Technology to Study Spermatogenesis in the Sponge Jonathon Hill, PhD - Brigham Young University - Provo, UT
3:55 pm	Leveraging Data from Preconception Cohort Studies to Advance Male Reproductive Health: Pregnancy Study Online (PRESTO) Lauren Wise - Boston University - Boston, MA
4:20 pm	Oral Abstract #7: Stem Cell Based Fertility Restoration and Gene Editing for Sickle Cell Disease Mitchell Harancher, BS - Magee-Womens Research Institute, University of Pittsburgh, PA
4:25 pm	Oral Abstract #8: Cannabinoid Effects on Male Reproductive Function: A Comparative Analysis of 2D Cell Culture and 3D Human Testis Organoid Models Megan Escott, MD, MS - Wake Forest Institute of Regenerative Medicine, Winston-Salem, NC
4:30 pm	Oral Abstract #9: Associations Between Sperm Epigenetic Age and Semen Parameters Savni Sawant, BS, MS - Wayne State University, Detroit, MI
4:35 pm	Oral Abstract #10: Calcium is Necessary for Activation of GSK3 Alpha in Sperm During Capacitation Gayatri Mohanty, PhD - University of Massachusetts, Amherst, MA
4:40 pm	Oral Abstract #11: Identification of Activin a Target Genes in Testicular Germ Cell Tumours Sarah Moody, PhD - Centre for Reproductive Health, Hudson Institute of Medical Research, Melbourne, Australia
4:45 pm	Q&A
5:00 pm – 6:00 pm	<b>Trainee Mixer</b> <i>Atrium Alcove</i> Sponsored by Program Committee & Trainee Affairs Committee

### WEDNESDAY, MAY 1, 2024

7:00 am – 5:30 pm	Registration/Information Desk Open <i>Crystal Foyer</i>
7:00 am – 3:30 pm	Exhibits Open <i>Crestone Foyer</i>
7:00 am – 8:00 am	<b>MENTORING BREAKFAST</b> <i>Cripple Creek 2</i> Sponsored by the Diversity and Trainee Affairs Committees *Not CME Accredited
8:00 am – 8:30 am	<b>WOMEN IN ANDROLOGY LECTURE: Fertility and Contraception: SLO3 K Channel Takes Charge in Sperm</b> Supported by the Women in Andrology Endowment Fund Introducer: WIA Chair, Marella Meyer-Ficca, PhD - Utah State University - Logan, UT Speaker: Celia Santi MD, PhD - Washington University School of Medicine - St. Louis, MO

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### WEDNESDAY, MAY 1, 2024 (continued)

8:30 am – 10:00 am	<b>SYMPOSIUM IV: Cutting Edge Data with Translational Potential</b> Moderators: Alexander W. Pastuszak MD, PhD - University of Utah - Salt Lake City, UT Karolina Nowak - Wayne State University - Detroit, MI
8:30 am	Sperm RNA-mediated Epigenetic Inheritance in Mammals: Challenges and Opportunities Qi Chen, MD, PhD - University of California, Riverside, CA
8:50 am	Diverse Genetic Etiologies of Male Infertility and Linked Comorbidities Maris Laan, PhD - University of Tartu, Estonia
9:10 am	Genomic Sequencing, De Novo Mutations in Male Infertility Miguel Xavier, PhD - Newcastle University, United Kingdom
9:30 am	Oral Abstract #12: Single-cell Multiomic Analysis of Mouse and Rat Germ Cells Reveals Conserved Gene Regulatory Networks Eoin Whelan, BS, PhD - University of Pennsylvania - Philadelphia, PA
9:35 am	Oral Abstract #13: Lipid Rafts and Sphingolipids Promote Nitric Oxide Production and Capacitation in Human Spermatozoa Steven Serafini, BS - McGill University - Montreal, Canada
9:40 am	Oral Abstract #14: RhoGDI, a Key Regulator of CDC42, Relocates During Mammalian Sperm Capacitation Arturo Matamoros Volante, PhD - Colorado State University - Fort Collins, CO
9:45 am	Q&A
10:00 am – 10:30 am	Break <b>Crestone Foyer</b>
10:30 am – 11:00 am	<b>INTERNATIONAL LECTURE: Sperm-like Stem Cell-Mediated Semi-Cloning Technology: Establishment and Applications</b> Supported by the ASA General Endowment Fund Introducer: Patricia Cuasnicu, PhD - Instituto de Biología y Medicina Experimental - Buenos Aires, Argentina Speaker: Jinsong Li, PhD - Shanghai Institute of Biochemistry and Cell Biology, China
11:00 am – 12:00 pm	<b>Poster Session II</b> *Not CME Accredited <b>Crestone Ballroom</b>
12:00 pm – 1:30 pm	<b>WOMEN IN ANDROLOGY LUNCHEON</b> <b>Cripple Creek 2</b> Sponsored by the Women in Andrology Committee *Not CME Accredited Hosts: Maria Agustina Battistone, PhD, Mirella Meyer-Ficca, PhD Speaker: Tracy Bale, PhD - University of Colorado - Aurora, CO
12:00 pm – 1:30 pm	Lunch on your own
1:30 pm – 3:00 pm	<b>SYMPOSIUM V: Epigenetics as a Biomarker of Infertility</b> Moderators: Rick Pilsner, PhD, MPH - Wayne State University - Detroit, MI Penny Whiley - Hudson Institute for Medical Research - Clayton, Australia
1:30 pm	Sperm DNA Methylation as a Biomarker of Advanced Paternal Age Jaquetta Trasler, MD, PhD - McGill University Health Centre - Montreal, Canada
1:50 pm	Sperm RNAs Potential to Impact Development Stephen Krawetz, PhD - Wayne State University - Detroit, MI

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2:10 pm	Leveraging Artificial Intelligence to Mine the Sperm Epigenome for Signatures Predictive of Health, Environmental Factors and Fertility Potential <i>Sarah Kimmins, BSC, MSC, PhD - McGill University Health Centre - Montreal, Canada</i>
2:30 pm	Oral Abstract #15: Exploring the Role of De Novo Mutagenesis in Male Subfertility <i>Jason Kunisaki, BS - University of Utah - Salt Lake City, UT</i>
2:35 pm	Oral Abstract #16: Arginine Attenuates Cisplatin-Induced Sexual Dysfunction and Penile Injury by Upregulating Circulating Testosterone and Suppressing Xanthine Oxidase/Uric Acid Signaling in Wistar Rats <i>Tunmise Akhigbe, MS - Osun State University - Osogbo, Nigeria</i>
2:40 pm	Oral Abstract #17: Intra-individual Variability of Semen Quality, Proteome, and sncRNA Profiles in a Healthy Cohort of Young Adults: Promising Candidate Biomarkers of Male Fertility and Reproductive Health <i>Alexander Suvorov, PhD - University of Massachusetts - Amherst, MA</i>
2:45 pm	Q&A
3:00 pm – 3:30 pm	Break <i>Crestone Foyer</i>
3:30 pm – 4:00 pm	<b>EAA LECTURE: Molecular Evolution of Spermatogenesis and its Possible Implications for Human Semen Quality</b> Introducer: <i>Maris Laan, PhD - University of Tartu, Estonia</i> Speaker: <i>Kristian Almstrup, MSc, PhD, University of Copenhagen - Denmark</i>
4:00 pm – 4:30 pm	<b>National Institute of Health Updates</b>
4:00 pm	NICHHD Update <i>Travis Kent, PhD - National Institute of Child Health and Human Development - Bethesda, MD</i>
4:15 pm	NIEHS Update <i>Thaddeus Schug, PhD - National Institute of Environmental Health Sciences - Bethesda, MD</i>
4:30 pm – 5:30 pm	<b>Annual Business Meeting</b>
7:00 pm – 10:00 pm	<b>ASA Banquet</b> <i>West Saloon &amp; Kitchen</i>

### THURSDAY, MAY 2, 2024

7:30 am – 12:15 pm	Registration/Information Desk Open <i>Crystal Foyer</i>
7:30 am – 10:30 am	Exhibits Open <i>Crestone Foyer</i>
8:00 am – 8:15 am	<b>Matthew P. Hardy Young Andrologist Award</b> <i>Supported by the Matthew P. Hardy Endowment Fund</i> <i>*Not CME Accredited</i> Introducer: <i>Pablo Visconti, PhD - University of Massachusetts - Amherst, MA</i> Recipient: <i>Maria Agustina Battistone, PhD - Massachusetts General Hospital/Harvard Medical School - Boston, MA</i>
8:15 am – 8:30 am	<b>Trainee Merit Awards</b> <i>*Not CME Accredited</i>



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### THURSDAY, MAY 2, 2024 (continued)

8:30 am – 9:30 am	<b>ASA PAST-PRESIDENTS LECTURE: Lifestyle, Environment, and Male Reproductive Health: A Review of the Epidemiologic Evidence</b> <i>Supported by the ASA Past-Presidents Endowment Fund</i> Introducer: Tim Jenkins, PhD - Brigham Young University - Provo, UT Speaker: Audrey Gaskins, ScD - Emory University - Atlanta, GA
9:30 am – 10:00 am	<b>RICHARD D. AMELAR LECTURE: Current Research and Future Uses of Artificial Sperm in Reproductive Medicine</b> <i>Supported by the Richard D. Amelar Endowment Fund</i> Introducer: Hooman Sadri-Ardekani, MD, PhD - Atrium Health Wake Forest Baptist - Winston-Salem, NC Speaker: Charles Easley, PhD, MS - University of Georgia - Athens, GA
10:00 am – 10:30 am	Break
10:30 am – 12:00 pm	<b>SYMPOSIUM VI: Novel Developments in Male Contraceptives</b> Moderators: Marella Meyer-Ficca, PhD - Utah State University - Logan, UT Amanda Paskavitz - Wayne State University - Detroit, MI
10:30 am	sAC Inhibitors as Potential On-demand Male Contraceptives Jochen Buck, MD, PhD - Weill Cornell Medicine - New York, NY
10:50 am	Testosterone: Lessons Learned from TRAVERSE 2023-24 Martin Miner, MD - Brown University - Providence, RI
11:10 am	Hormonal Male Contraception: Updates on Progress Toward a Product Diana Blithe, PhD - National Institute of Health - Bethesda, MD
11:30 am	Oral Abstract #18: Daflon-Mediated Inhibition of TLR4/NFkB and Activation of Nrf2/HO-1 Signaling Protects Against Cisplatin-Induced Testicular Injury in Wistar Rats Roland Akhigbe, MD - Ladoke Akintola University of Technology - Ogbomoso, Nigeria
11:35 am	Oral Abstract #19: A Non-Invasive, Epigenetic-Based Semen Test to Predict the Success of Testicular Sperm Extraction Procedures Kristin Brogaard, PhD - Inherent Biosciences - Salt Lake City, UT
11:40 am	Oral Abstract #20: The Sodium-Proton Exchangers sNHE and NHE1 Control Mouse Sperm Plasma Membrane Hyperpolarization During Capacitation Analia Novero, BS - Instituto de Biología Molecular y Celular de Rosario, Argentina
11:45 am	Q&A
12:00 pm – 12:05 pm	<b>Closing Remarks/50th ASA Meeting 2025 Highlights</b> Kate Loveland, PhD

