ASA 2025 Basic Science Workshop: "Expand your research and network horizons"

Washington D.C., March 29, 2025

8:30 – 11:00 SECTION 1: METHODS FOR MODELING AND SAFEGUARDING MALE FERTILITY

Chairs: **Eoin Whelan**, University of Pennsylvania, PA, USA, **Mariana Ianello Giassetti**, Baylor University, TX, USA, and **Maria Camila Hoyos Sanchez**, Texas Tech University, TX, USA

- 8:30 8:35 Chairs Introduction to the session
- 8:35 8:50 Chris Geyer, East Carolina University, NC, USA Big Picture and Urgent Questions: From Stem Cells to Sperm and Embryo

INVITED SPEAKERS

- 8:55 9:15 Pierre Comizzoli, Smithsonian's National Zoo and Conservation Biology Institute, DC, USA Safeguarding Endangered Species: Advances in Cryopreservation and Germplasm Storage
- 9:15 9:35 **Kyle Orwig**, Magee-Womens Research Institute, Pittsburg, PA, USA

Stem cell approaches to preserve and restore male fertility.

SELECTED SHORT TALKS FROM APPLICANTS

- 9:40 9:55 Selected Abstract 1
- 9:55 10:10 Selected Abstract 2
- 10:10 10:25 Selected Abstract 3
- 10:25 10:55 DISCUSSION PANEL Session 1 speakers
- 11:15 12:00 LUNCH AND AN HONORARY SPEAKER HISTORICAL OVERVIEW OF THE BSW George Gerton, PhD, University of Pennsylvania, Philadelphia, PA, USA ASA, Past President
- 12:00 2:30 SESSION 2: STATE-OF-THE ART TECHNIQUES TO ENSURE OPTIMAL SPERM QUALITY AND OFFSPRING POTENTIAL

Chairs: Victor Ruthig, University of Colorado, CO, USA, Morgan Feuz, Utah State University, UT, USA, and Ana Lima, Oregon Health and Science University, OR, USA

- 12:00 12:05 Chairs Introduction to the session
- 12:05 12:20 Cristian O'Flaherty, McGill University, Montreal, CA

Big Picture and Urgent Questions

INVITED SPEAKERS

Opening Talk

12:25 - 12:45 Pablo Visconti, University of Massachusetts Amherst, MA, USA

Advances in Sperm Metabolism and Sperm Capacitation

Invited Short Talks

- 12:45 1:00Melanie Balbach, Michigan State University, MI, USAStable isotope labeling analysis of capacitating mammalian sperm
- 1:00 1:15Ciro Amato, University of Missouri, Columbia, MO, USAIntegrating single cell mRNA sequencing and ex-vivo slice culture to unravel the
complexities of penile birth defects.

SELECTED SHORT TALKS FROM APPLICANTS

- 1:15 1:30 Selected Abstract 1
- 1:30 1:45 Selected Abstract 2
- 1:45 2:00 Selected Abstract 3
- 2:00 2:30 DISCUSSION PANEL Session 2 speakers
- 2:30 Final remarks and Conclusion