

SSR

Society for
the Study of
Reproduction

San Jose Convention Center
San Jose, CA

July 18-21, 2019

52nd ANNUAL CONFERENCE

Beyond Possible:
Remarkable Transformation of Reproductive Biology

Schedule At-A-Glance

Thursday, July 18, 2019

Pre-Meeting NICHD Workshop - Time TBD

Trainee Forum - 12:00PM - 1:30PM

“Careers in The Sciences: What You Can Do with A PhD”

Opening Ceremonies - 3:30PM - 5:15PM

BOR Awards

SSR New Investigator Award

Keynote Lecture:

Diana Bianchi, MD

Director

Eunice Kennedy Shriver National Institute of Child Health and Human Development, USA

“Found in Translation: Insights Regarding Fetal, Maternal and Placental Biology from Clinical Implementation of Cell-Free DNA Sequencing”

Opening Reception – 5:30PM -7:30PM

Friday, July 19, 2019

Poster Session A – 8:00 AM – 10:00 AM

Flash Talks A – 8:00AM-8:30AM

Break - 10:00AM – 10:30AM

Focus Sessions - 10:30-12:00

Session 1 - Maladaptive Responses to Environmental Exposures

Senior Co-Chair: Krista McCoy, PhD, East Carolina University, USA

Friday, July 19 (Cont.)

Frank (Skip) Bartol, PhD
Auburn University, USA

"The Maternal Lactocrine Continuum Programming Uterine Capacity"

Almudena Veiga Lopez, PhD
Michigan State University, USA

"Maternal programming of fetal development via endocrine disruptors"

Session 2 - William Hansel Ovarian Biology Symposium: New Models of PCOS

Senior Co-Chair: Hugh Clarke, PhD, McGill University Health Centre, Canada

Teresa Woodruff, PhD - ASRM-SSR Exchange Lecture
Northwestern University, USA

Annie Newell-Fugate, PhD
Texas A&M University, USA

Session 3- Advances in Regenerative Medicine

Senior Co-Chair: Amander Clark, PhD, University of California Los Angeles, USA

Alessandro Prigione, PhD
Max Delbruck Berlin, Germany
"iPSCs in Mitochondrial Medicine"

Diana Laird, PhD
University of California San Francisco, USA
"Lineage and Heterogeneity in Primordial Germ Cells"

Session 4 - Making Good Sperm

Senior Co-Chair: Rich Cardullo, PhD, University of California Riverside, USA

Tomer Avidor-Reiss, PhD
University of Toledo, USA
"The Atypical Centriole of the Sperm"

Heidi Fisher, PhD
University of Maryland, USA
"The Evolution of Cooperative Sperm in Peromyscus Mice"

Session 5- Programming Reproductive Organ Development

Senior Co-Chair: Tony DeFalco, PhD, Cincinnati Children's Hospital Medical Center, USA

Dagmar Wilhelm, PhD
The University of Melbourne, Australia
"New Insights into Ovarian Development and Function"

Friday, July 19 (Cont.)

Blanche Capel, PhD
Duke University Medical Center, USA
"The Battle of The Sexes: Setting the Gonad on The Male Trajectory"

Break - 12:00PM-1:30PM

Diversity Symposium Lunch – 12:15-1:15

Keynote Speaker:
Renee Reijo Pera, PhD
Vice President of Research and Economic Development
Montana State University, USA

Trainee Research Award Platform Competition – 1:30PM – 3:00PM

Break 3:00PM-3:30PM

Dr. Kwang Yul Cha Symposium on Regenerative Medicine Session – 3:30-5:30PM

Keynote Lecture:
Alejandro Sanchez-Alvarado, PhD
Stowers Institute, USA
"Understanding the Source of Reproductive Plasticity in Planarians"

Carl G. Hartman Award

Keynote Lecture:
Matthew Porteus, MD
Stanford University, USA
"Genome Editing in Humans: Where Are We and Should There Be Limits?"

Saturday, July 20, 2019

WinRS Breakfast/Subcommittee Meeting – 7:00AM-8:00AM

Poster Session B – 8:00AM-10:00AM

Flash Talks B – 8:00AM -8:30AM

Break – 10:00AM – 10:30AM

Focus Sessions - 10:30AM-12:00PM

Session 6 - Placental Adaptations to Adversity
Senior Co-Chair: Alina Maloyan, PhD Oregon Health Sciences University, USA

Saturday, July 20 (Cont.)

Michael Satterfield, PhD
Texas A&M University, USA

Tu'uhevah Kaitu'u-Lino, PhD - SRB – SSR Exchange Lecture
The University of Melbourne, Australia
“New Diagnostics for Pregnancy Complications”

Session 7 - Reproductive Aging

Senior Co-Chair: Francesca Duncan, PhD, Northwestern University, USA

Ned Place, PhD, MD
Cornell University, USA

Michele Pritchard, PhD
University of Kansas Medical Center, USA

Session 8 - Editing the Germ Line and Genome

Senior Co-Chair: Joao Ramalho-Santos, PhD, University of Coimbra, Portugal

Kimberly Cooper, PhD
University of California San Diego, USA
“How CRISPR/Cas9 'Gene Drive' Technology in Laboratory Mice Could Make the Impossible Possible”

Erika Sasaki, PhD
Keio University School of Medicine, Japan

Session 9 - Becoming Haploid

Senior Co-Chair: Andy Childs, PhD, Imperial College London, UK

Takashi Akera, PhD
University of Pennsylvania, USA
“Molecular and Evolutionary Strategies of Meiotic Cheating by Selfish Elements”

Ewelina Bolcun-Filas, PhD – Anita Payne Lecture
Jackson Laboratory, USA
“Phenotypic Variation in Female Reproductive Parameters in Genetically Diverse Mice: A Window to Understand Human Infertility”

Session 10 - The Virendra B. Mahesh Neuroendocrine Session: Neuroendocrine Control of Metabolism

Senior Co-Chair: Djurdjica Coss, PhD, University of California Riverside, USA

Jennifer Hill, PhD
University of Toledo, USA
“Conflicting Desires: A POMC Switch for Breeding and Feeding”

Saturday, July 20 (Cont.)

Rebecca Campbell, PhD
University of Otago, New Zealand

Break – 12:00PM-1:30PM

Trainee Mentor Lunch - 12:15PM-1:15PM

Focus Session PM - 1:30PM-3:00PM

Session 11 - Signals Regulating Implantation

Senior Co-Chair: Indrani Bagchi, PhD, University of Illinois Urbana-Champaign, USA

Tom Spencer, PhD
University of Missouri, USA

“Comparative Insights into How Uterine Glands Function in Pregnancy Establishment”

Pat Lonergan, PhD
University College Dublin, Ireland

“Embryo-Maternal Interaction Prior To Implantation in Cattle”

Session 12 - The John J. Eppig Session: Modulation of Oocyte Growth

Senior Co-Chair: Richard Schultz, PhD, University of California Davis, USA

Stephanie Pangas, PhD
Baylor College, USA

“Wrestling with Reproduction: The Critical Roles of Protein Sumoylation In Oocyte Development”

Guang Hu, PhD
National Institute of Environmental Health Sciences, USA
“Post-Transcriptional Regulation of Germ Cell Development”

Session 13 - Genomic Insights into Reproductive Success

Senior Co-Chair: Mary Ann Handel, PhD, Jackson Laboratories, USA

Pierre Ray, PhD
CHU-Grenoble Alpes, France

“Genomic Insights into Reproductive Success”

Rima Slim, PhD
McGill University, Canada

“Genes and Mechanism of Androgenetic Hydatidiform Moles: An Answer to A 40-Year Old Question”

Session 14 - In and Out of the Testis Through the Blood-Testis Barrier

Senior Co-Chair: Jannette Dufour, PhD, Texas Tech University Health Science Center, USA

Saturday, July 20 (Cont.)

Kenneth Tung, PhD

University of Virginia, USA

"Sperm and Cancer/Testis Antigens Egress Mouse Testes To Maintain Immune Protection"

C. Yan Cheng, PhD

Population Council, USA

"Use of Endogenously Produced BTB Modifiers to Enhance Efficacy of Non-Hormonal Male Contraceptives"

Session 15 - Alternative Instructions: Rewiring Reproductive Cancers

Senior Co-Chair: Kanako Hayashi, PhD, Southern Illinois University School of Medicine, USA

Ken Nephew, PhD

Indiana University, USA

"Epigenetic Rewiring of Ovarian Cancer for Cancer Therapy"

Julie Kim, PhD

Northwestern University, USA

"Tackling Endometrial Cancer: A New Frontier"

Break – 3:00PM – 3:30PM

Plenary Session – 3:30PM-5:30PM

Keynote Speaker:

Gavin Kelsey, PhD

The Babraham Institute, UK

"Single-Cell Sequencing Reveals Genetic and Dietary Influences On The Oocyte Epigenome"

SSR Research Award

Jansen SSR Distinguish Service Award

Keynote Speaker:

Kathy Niakan, PhD

The Francis Crick Institute, UK

"Regulation of Differentiation During Human Preimplantation Embryo Development"

Sunday, July 21, 2019

Fun Run – 6:00AM-8:00AM

Poster Session C – 8:00AM – 10:00AM

Break – 10:00AM-10:30AM

Focus Sessions – 10:30AM-12:00PM

Session 16 - SRI-SSR Exchange Lectures: Novel Mechanisms Regulating Parturition

Senior Co-Chair: Sarah Robertson, PhD, University of Adelaide, Australia

Sunday, July 21 (Cont.)

Jerry Strauss, PhD
Virginia Commonwealth University, USA
"Gene x Environment Interactions and Preterm Birth"

Mark Phillippe, PhD
Harvard University, USA
"Pregnancy Length, Parturition and the Telomere Gestational Clock"

Session 17 - Impact of Climate Change on Reproduction
Senior Co-Chair: Janice Bailey, PhD, Université Laval, Canada

Peter Dutton, PhD
National Marine Fisheries Service, USA

Jason Ross, PhD
Iowa State University, USA
"Physiological Mechanisms Through Which Heat Stress Compromises Reproduction in Pigs"

Session 18 - RNA Modifications in Reproduction
Senior Co-Chair: Sue Hammoud, PhD, University of Michigan, USA

Qi Chen, PhD
University of Nevada, Reno
"Sperm RNA Code: How Many More Secrets?"

Marcos Morgan, PhD
University of Edinburgh, UK
"Role of RNA Uridylation In Germ Line Differentiation"

Session 19 - Reproductive Tract Modulation of Sperm Function
Senior Co-Chair: Rebecca Krisher, PhD, Colorado Center for Reproductive Medicine, USA

Wipawee Winuthayanon, PhD
Washington State University, USA
"Disruption of Semen Liquefaction in the Female Reproductive Tract: A Potential Novel Contraceptive"

Patricia Martin-DeLeon, PhD
University of Delaware
"The Role of Extracellular Vesicles in the Female Reproductive Tract"

Session 20 - Mechanisms of Early Embryo Development
Senior Co-Chair: Pete Hansen, PhD, University of Florida, USA

Sunday, July 21 (Cont.)

Pablo J Ross, PhD

University of California Davis, USA

“Transcriptional and Epigenetic Reprogramming During Bovine Preimplantation Development”

Shawn Chavez, PhD

Oregon Health & Science University, USA

“Investigating Embryonic Chromosomal Instability in Preimplantation Development”

Break 12:00PM – 1:30PM

Heritage Lunch – 12:15PM-1:15PM

Speaker: Kelly Mayo, PhD, Northwestern University, USA

The Heritage Lunch will honor the life and achievements of Dr. Neena Schwartz

Focus Sessions – 1:30PM – 3:00PM

Session 21 - Metabolic Drivers of Heritable Phenotypes

Senior Co-Chair: Justin St. John, PhD, Hudson Institute of Medical Research, Australia (tentative)

Deborah Sloboda, PhD - Canadian Fertility & Andrology Society Exchange Lecture

McMaster University, Canada

“Maternal Microbial and Metabolic Impacts on Fetal and Placental Development”

Roger Sturmey, PhD

The Hull York Medical School, UK

Session 22 - Ovarian Conversations

Senior Co-Chair: Claude Robert, PhD, Université Laval, Canada

Jon Hennebold, PhD

Oregon Health & Science University, USA

“Progesterone Receptor Action in the Primate Ovulatory Follicle”

Kelly Young, PhD

California State University – Long Branch, UAS

“Photostimulated Ovarian Recrudescence: The Role of Gonadotropins”

Session 23 - CHA Health Systems Symposium on Epigenetic Modulation of Pluripotency

Senior Co-Chair: Marisa Bartolomei, PhD, University of Pennsylvania, USA

Wei Xie, PhD

Tsinghua University, China

Thorold Theunissen, PhD

Washington University, USA

“Understanding Human Pluripotent States and Their Applications”

Session 24 - Sperm-Egg Conversations

Senior Co-Chair: Rafael Fissore, PhD, University of Massachusetts Amherst, USA

Sunday, July 21 (Cont.)

Pablo Visconti, PhD
University of Massachusetts – Amherst, USA
“Sperm Signaling in ART and Science”

Andrea Pauli, PhD
Research Institute of Molecular Pathology, Austria
“Bouncer and SPACA4 – Small Proteins with Big Roles in Fertilization”

Session 25 - Mixed Signals: Unraveling Pathways in Diseases of The Female Reproductive Tract
Senior Co-Chair: Shannon Hawkins, PhD, Indiana University, USA

Jackie Maybin, PhD - SRF-SSR Exchange Lecture
University of Edinburgh, UK
“Understanding the Role of Endometrial Hypoxia to Improve Management of Heavy Menstrual Bleeding”

Linda Giudice, PhD
University of California San Francisco, USA

Break – 3:00PM – 3:30PM

Plenary Session - 3:30PM – 5:30PM

Keynote Speaker:
Janet Rossant, PhD
The Hospital for Sick Children, USA
“Embryos, Stem Cells and Ethical Concerns”

Janice Bahr Junior Scientist Travel Fund

Fuller W. Bazer SSR International Scientist Award Fund

SSR Trainee Mentor Award

Keynote Speaker:
Jeffrey F. Peipert, MD, PhD
Indiana University School of Medicine, USA
“Impact of Long-Acting Reversible Contraception on Public Health Outcomes”

Closing Ceremonies – 5:30PM-6:15PM
Trainee Merit Awards

Best International Abstracts

Burroughs Welcome Fellows

SSR Business Meeting

Closing Reception - 7:00PM-11:00PM

Monday, July 22, 2019

Post-Meeting Workshop – Time TBD
Science Communication and Knowledge Translation