SSR
Society for the Study of Reproduction

SSR 57th Annual Meeting Program Guide

July 15–19, 2024

Convention Centre Dublin
Dublin, Ireland

Evolution of Reproductive Sciences

Where Should We Go?

TABLE OF CONTENTS

SSR
Society for the Study of Reproduction

Thank You to Our Sponsors & Exhibitors

SUPPORTER SPONSORS

EmbryoCloud
minitube
nasci biologie médicale
RQR Réseau Québécois en reproduction

FRIEND SPONSOR

CCRM FERTILITY

DADE SYMPOSIUM BRONZE SPONSORS

Fonds de recherche Nature et technologies Québec
illumina

DADE SYMPOSIUM SUPPORTER SPONSORS

Centre de recherche en reproduction, développement et santé intergénérationnelle
Genus RESEARCH & DEVELOPMENT

CONTRIBUTOR SPONSORS

Cosmo Bio USA Great Reagents Drive Great Research
eLife

EXHIBITORS

ARTSMedia Denmark
bioscientifica
EGGTECH
EmbryoCloud
illumina
ivf BIOSCIENCE
The Journal of Reproduction and Development SRD

WELCOME FROM THE 2024 PROGRAM COMMITTEE CO-CHAIRS

Welcome to Dublin for the 57th Annual SSR Meeting "Evolution of Reproductive Sciences": On behalf of SSR, it is our great pleasure to welcome you to the 57th Annual Meeting of the Society of the Study of Reproduction. This year's meeting, in Dublin, Ireland, is the first meeting in SSR's history to be held outside North America. Doing so represents a commitment by the society to the globalization of reproductive biology research. Our field will thrive best when we all work together regardless of geographical location, gender, or ethnic background.

The theme of the meeting is "Evolution of Reproductive Sciences: Where Do We Go?". It was chosen to represent our focus on both the evolutionary forces that have resulted in the extraordinary diversity in reproductive patterns in vertebrate species that exist today and on the evolving nature of our understanding of the processes controlling reproduction.

We hope you enjoy the meeting and come away with renewed enthusiasm for our scientific discipline.

2024 SSR Program Co-Chairs

Peter J. Hansen
SSR Past President
2022–2023

Monika Ward

Marc-André Sirard

WELCOME FROM THE 2024 LOCAL ARRANGEMENT COMMITTEE

Welcome!

On behalf of the local arrangements committee, it is my pleasure to welcome you to the 57th Annual Meeting of the Society for the Study of Reproduction (SSR) which will take place at the iconic Convention Centre Dublin (CCD) from July 15–19th this year. This is a truly exciting event as it represents the first time the meeting has been held outside of North America and we are delighted that SSR chose Dublin for its first foray abroad!

Revolving around 4 intensive days of exciting scientific sessions, the conference will also include an exciting social programme with a unique Irish/Gaelic flavour. In addition, the pre-conference Ovarian Workshop and Domestic Animal DOHaD & Epigenetics (DADE) workshop which take place at the same venue on July 15th and 16th promise to be a great warm up prior to the kickoff of the main meeting.

The Opening Reception will be held in the EPIC Irish Immigration Museum, a stone's throw from the CCD, where you will discover what it means to be Irish through the stories of Irish emigrants who became scientists, politicians, poets, artists and even outlaws all over the world. The closing party takes place in the CCD where we will be entertained by 'Spring Break', Europe's premier goodtime supergroup! Of course, you will also be free to explore the many landmark pubs and restaurants of Dublin at your leisure.

As with any conference, financial support, through delegate registrations as well as sponsorship is crucial to its success. We thank all of the sponsors for their generous support.

We look forward to welcoming everyone to Dublin and hope you have an enjoyable stay.

Sláinte!

Pat Lonergan

Chair, Local Arrangements Committee

COMMITTEES

2024 PROGRAM COMMITTEE

Marc-André Sirard, Université of Laval (Co-Chair)

Monika Ward, University of Hawaii (Co-Chair)

Peter J. Hansen, Past President 2022–2023, University of Florida

Blanche Capel, Duke University

Geraldine Delbes, Université of Laval

Mackenzie Dickson, Zoetis Inc.

Bart Gadella, Ultrecht University

Ann Goriely, Oxford University

Aileen Keating, Iowa State University

Julie Kim, Northwestern University

Alberto Luciano, Università Degli Studi di Milano

Casey Nestor, North Carolina State University

Stephanie Pangas, Baylor University

Melissa Pepling, Syracuse University

Karen Schindler, Rutgers University

Dariusz Skarzynski, Polish Academy of Sciences

Michael Soares, University of Kansas Medical Center

Savannah L. Speckhart, University of Kansas Medical Center

Roger Sturmey, Hull York Medical School

Rachel West, Auburn University

LOCAL ARRANGEMENTS COMMITTEE

Pat Lonergan, University College Dublin (Chair)

Alex Evans, University College Dublin

Mark Crowe, University College Dublin

Trudee Fair, University College Dublin

Niamh Forde, University of Leeds

Aileen Keating, Iowa State University

EXECUTIVE COUNCIL

PRESIDENT
Blanche Capel
Duke University Medical Center
Chapel Hill, N. Carolina

PAST PRESIDENT
Peter Hansen
University of Florida
Gainesville, Florida

VICE PRESIDENT
Jennifer Wood
University of Nebraska-Lincoln
Lincoln, Nebraska

VICE PRESIDENT-ELECT
Mellissa Mann
University of Pittsburgh
Pittsburgh, Pennsylvania

SECRETARY
Jodi Flaws
University of Illinois
Urbana, Illinois

TREASURER
Lane Christenson
University of Kansas Medical Center
Kansas City, Kansas

DIRECTORS

Humphrey Yao
NIEHS/NIH
Research Triangle Park, N. Carolina

Rebecca Krisher
Genus
Deforest, Wisconsin

Julie Kim
Northwestern University
Chicago, Illinois

T. Rajendra Kumar
University of Colorado Denver
Aurora, Colorado

Francesca Duncan
Northwestern University
Chicago, Illinois

Rocío Rivera
University of Missouri
Columbia, Missouri

EARLY CAREER INVESTIGATOR
Diana Monsivais
Baylor College of Medicine
Houston, Texas

TRAINEE REPRESENTATIVES

Jacinta Martin
University of Newcastle
Newcastle, Australia

Alison Ermisch
University of Nebraska-Lincoln
Lincoln, Nebraska

EDITORS-IN-CHIEF (EX OFFICIO)
Mary Zelinski
Oregon National Primate Research Center Beaverton, Oregon

Romana Nowak
University of Illinois
Urbana, Illinois

EXECUTIVE DIRECTOR (EX OFFICIO)
Ashley Carey
Society for the Study of Reproduction
Wakefield, Massachusetts

GENERAL ATTENDEE INFORMATION

Registration

Please be sure to visit the SSR Registration Desk on **ground level** of the convention centre, located in the **Main Foyer**, to pick up your name badge and event materials.

REGISTRATION DESK HOURS:

Monday, July 15	11:30 AM–5:00 PM
Tuesday, July 16	7:00 AM–6:00 PM
Wednesday, July 17	7:00 AM–6:00 PM
Thursday, July 18	7:00 AM–6:00 PM
Friday, July 19	7:00 AM–3:00 PM

REGISTRATION FEES

Payment of registration fees is required to participate in the meeting. Registration covers attendance at all main conference and scientific sessions, a light breakfast, afternoon coffee and snacks, and opening and closing receptions.

Spouses and guests wishing to attend the optional events must purchase a ticket. Optional event tickets are nonrefundable. An SSR Annual Meeting 2024 badge is required for admission to all scientific sessions and for access to food functions. Registration fees are discounted for SSR members.

Photos & Videos

No Taking Pictures/Videos of Presentations. SSR supports learning and collaboration through presentation and discussion of science. If you like what you see, talk to the presenter: you will have a better, more long-term experience and relationship than just a photo. Respect the research.

Consent to Use of Photographic/Video Images

Registration and attendance at, or participation in, the SSR Annual Meeting and related special events constitutes an agreement by the attendee to allow the SSR free use and distribution of the attendee's image or voice in various media forms, including but not limited to photographs, videotapes, and electronic reproductions, in print or electronic format.

Social Media

#SSR2024 and @SSRRepro — Follow and like SSR!

You may share photos of yourself at the meeting on SSR's social media outlets (which will be monitored throughout the meeting), but you should obtain consent before posting photos of others at the meeting. **Be nice.**

Internet Access

Wi-Fi Network: **SSR2024**

Wi-Fi Password: **annualmeeting**

Mobile App

Please download the Mobile App and pre-print any handouts you may want onsite. Additionally, you can use the mobile app to customize your on-site schedule, explore authors, view abstracts, network with exhibitors and attendees, and more!

HOW TO: DOWNLOAD THE MOBILE APP

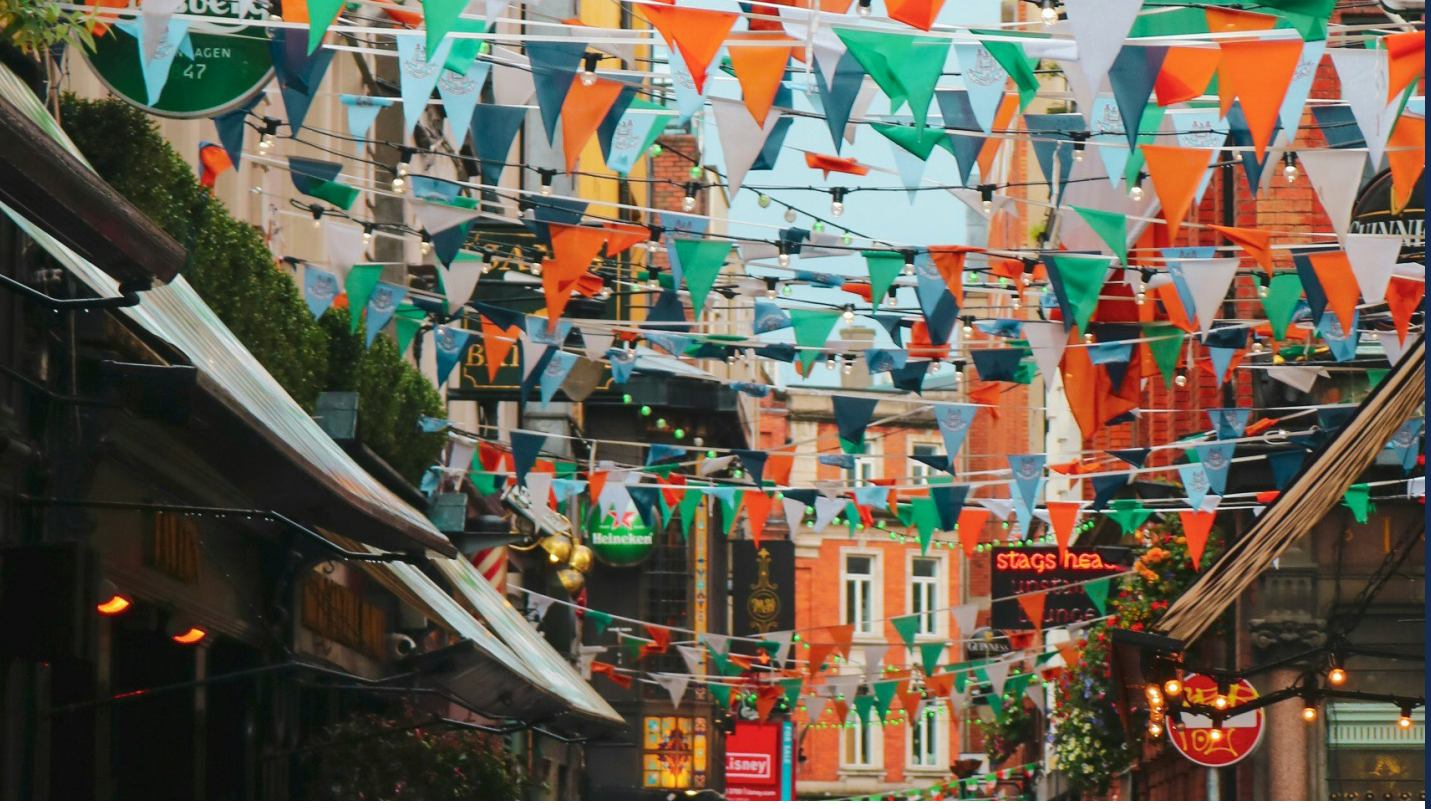
1. Visit the app store on your mobile device OR scan the QR code below
2. Download the eventScribe app
3. Search **"SSR 2024 Annual Meeting"**
4. Enter your mobile personal login username and password provided via email from eventScribe
   **If you did not receive this email, please visit the registration desk or email meetings@ssr.org*

Apple Store

Google Play

SSR CODE OF CONDUCT/ANTI-HARASSMENT POLICY

Please refer to the Conference Website and Mobile App for the most up-to-date information.



WELCOME TO DUBLIN!

About Dublin

As Ireland's capital, Dublin is the perfect place to experience some of the country's best attractions, celebrations and flavors in one welcoming city. With its unique blend of urban and rural beauty, year-round outdoor activities, and vibrant neighborhoods, the Dublin region is best explored over three days or more.

For more information on Dublin, feel free to visit the Dublin Tourist Information Centre, Barnardo Square next to Dublin City Hall.

TEMPERATURE

Dublin in July tends to be warm, but overcast with temperatures ranging from a low of 52°F and a high of 68° F. A sweater or jacket is recommended if you tend to get chilly in the convention centre meeting rooms.

TIME ZONE

Dublin operates in Irish Standard Time (IST)

On the Ground in Dublin!

Scan the QR Codes below for recommendations to experience local Dublin eateries, coffee shops and other necessities!

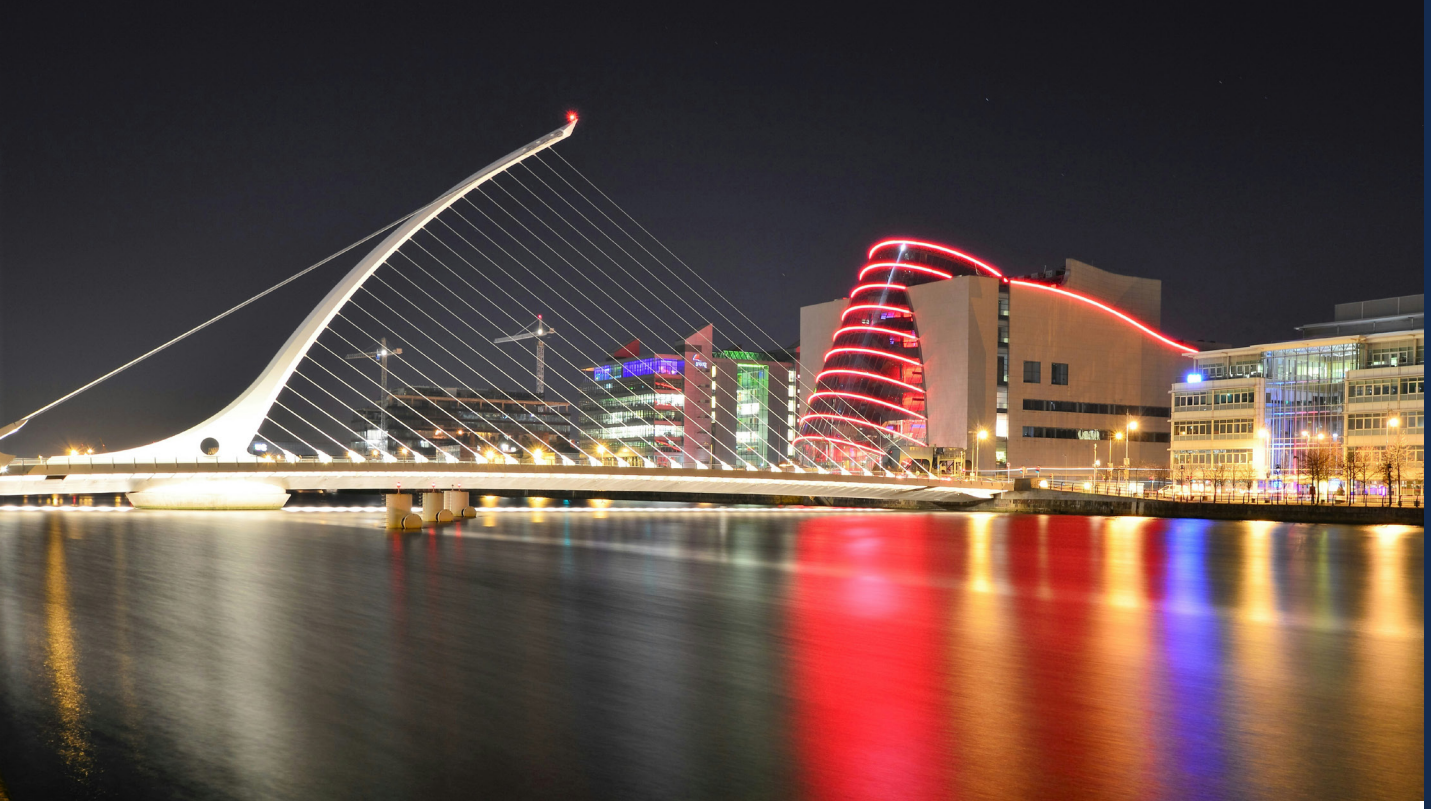
Restaurants

Pharmacies

Coffee Shops

Convenience Stores

Please visit https://www.cntraveler.com/story/best-dublin-restaurants for more information on Dublin's restaurants!



ANNUAL MEETING VENUE

The Convention Centre Dublin
Spencer Dock, North Wall Quay, Dublin 1 D01 T1W6, Ireland

DISTANCE FROM AIRPORT

From Dublin International Airport, it is approximately a **14 minute/8-mile drive** to the Convention Centre. Taxis and ride sharing are available at the airport.

Standard Taxi Fare Cost: €31–40 to Dublin International Airport

The app **'Free Now'** is the **"Uber"** of Ireland–download at the app store today!
Learn more about the app here!

PUBLIC TRANSIT

There are three types of commuter rail services in Dublin available:

- **DART trains:**
  DART trains run very frequently along Dublin Bay, serving Central Dublin and suburbs along the coast (up to every 10 minutes, Monday–Friday).
- **Commuter trains:**
  Commuter services serve suburbs in the north, west and south of the city. They are usually frequent at rush hour, but less so during off-peak times.
- **Luas trams — a light rail service:**
  Luas trams serve many areas of Central Dublin plus some residential areas, most of which are not too far from the centre. Services are very frequent (every 4–6 minutes during peak times).

You can view all the lines on our Dublin rail map.

We hope you get the chance to explore Dublin while you are here!

PRESENTER INFORMATION

Invited Speakers, Oral Talks & Poster Flash Presenters

Upon arrival at the Dublin Convention Centre, please pick up your registration materials and proceed to the Speaker Ready Room (Liffey Room 4), where all invited speakers and presenters of oral talks are required to check in and review their presentations. This room will have computers and trained personnel available for assistance should technical difficulties arise. Speakers may modify their presentation up to 24 hours prior to their scheduled session. A timed rehearsal is recommended.

The slide preview room will be open during the following hours:

SPEAKER READY ROOM (LIFFEY ROOM 4):

Tuesday, July 16	12:30 PM–5:00 PM
Wednesday, July 17	7:30 AM–3:00 PM
Thursday, July 18	7:30 AM–3:00 PM
Friday, July 19	7:30 AM–3:00 PM

Oral Presenters must upload their presentation slide deck in the speaker ready room, located on the first floor in room Liffey 4, no later than one day before the scheduled presentation time.

Poster Presentations

Poster sessions will be held at the **Convention Centre Dublin: THE FORUM**. Poster numbers will be indicated on the poster boards, and two posters will be positioned on each side of the poster boards.

All posters will be on display for the duration of the meeting and will be presented at the following times:

Poster Session A & Trainee Poster Competition:	Wednesday, July 17	8:00 AM–9:45 PM
Poster Session B:	Thursday, July 18	8:00 AM–9:45 PM
Poster Session C:	Friday, July 19	8:00 AM–9:45 PM

Please use the meeting app to find corresponding poster presentations.

Posters with a ⚡ indicates the poster is also presented as a Flash Talk.
Note: Flash Talks are only presented during the Ovarian Workshop this year, not during the main meeting poster sessions.

Posters with a 🎗 indicates the poster is also a Trainee Research Award Poster Finalist.
The Trainee Poster Competition takes place during Poster Session A on Wednesday, July 17th.

As a reminder, you are required to present during the session time indicated in your presentation notification. ***All main meeting posters must be mounted by Tuesday, July 16th between 8:30 AM and 12:30 PM***, and must remain in place through 9:45 AM on Friday, July 19th. When pinning posters on boards, please do not rearrange the poster numbers. If you need assistance fitting your poster on the board, please visit the registration desk for help. Please remove your posters at the conclusion of Poster Session C. **Posters still in place by 11:00 AM on Friday will be discarded**.

**If you are a Workshop Poster Presenter, please refer to your individual workshop poster guidelines for specific set-up hours. Tear down remains the same.*

AWARDS COMMITTEE AND AWARDEE CITATIONS

Chair Welcome Message

The Awards Committee would like to extend our sincere congratulations to this year's SSR Awardees who represent the best of our society. This talented group of scientists are truly exceptional in their research, service, and mentoring in the field of reproductive biology. We are honored to call them our colleagues and friends and pleased that their outstanding contributions have been recognized by their peers. The members of the Awards Committee also thank the SSR membership for their hard work preparing nominations and encourage you to nominate deserving colleagues for SSR awards next year. A description of the awards, application process, and application deadlines can be found on the SSR Awards website.

Patrick Hannon (Chair) James MacLean (Associate Chair)

2024 AWARDS COMMITTEE MEMBERS

Patrick Hannon
James MacLean
Randy Armant
Kahina Boukherroub
Michelle Denomme Tignanelli
Alan Ealy
Sarah Moorey
Warren Nothnick
Melissa Pepling
Peggy Petroff
Emilia Przygrodzka
Stephen Renaud
Ken Roberts
Constantine Simintiras
Yuan Wang
Matthew Wheeler

2024 Carl G. Hartman Award

Francesco DeMayo, PhD
Nominated by Carmen Williams, PhD

Francesco DeMayo, Ph.D., serves as the Chief and Senior Investigator in the Reproduction and Developmental Biology Laboratory at the National Institute for Environmental Health Science. Originally from Staten Island, New York, he obtained his B.S. from Cornell University (Ithaca, New York), followed by M.S. and Ph.D. degrees from Michigan State University (East Lansing, Michigan). Dr. DeMayo underwent postdoctoral training under Dr. David Bullock in the Department of Cell Biology at Baylor College of Medicine (BCM). Subsequently, he joined the faculty at BCM, he established the Genetically Mouse Core and achieved the position of full Professor. During his tenure at BCM, he held the prestigious Cullen-Duncan-McAshan Endowed Chair in Cancer Research. In 2015, Dr. DeMayo transitioned to the National Institute of Environmental Health Science, assuming the role of Chief of the Reproductive and Developmental Biology Laboratory, where he leads the Pregnancy and Female Reproduction Group.

Dr. DeMayo's research focuses on elucidating the molecular mechanisms underlying normal uterine physiology and pregnancy, with a specific emphasis on the roles of the sex steroids progesterone and estrogen. Collaborating with the Lydon laboratory, his team has developed a series of genetically engineered mouse models and employed biochemical and molecular strategies to uncover progesterone-driven mechanisms facilitating pregnancy and parturition. Their work has provided critical insights into the role of nuclear receptors and transcription factors governing the differentiation of mouse and human endometrial stromal cells supporting pregnancy. His research endeavors have received funding from prestigious organizations such as the NICHD, NIEHS, Burroughs Welcome, and March of Dimes.

Dr. DeMayo has made significant contributions to the scientific community beyond his research. He has served co-Editor-in-Chief of Biology of Reproduction, in the executive chain of the Society for the Study of Reproduction (SSR) from 2018 to 2022. He contributed to the National Institutes of Health (NIH) as a regular member of study sections such as Human Embryology and Development 1 (HED-1) and Integrated Cellular Endocrinology and Metabolism (ICER) in 2018. Furthermore, he co-founded and chaired the Mammalian Reproduction Gordon Research Conference in 2018 and served as instructor and section coordinator for the Frontiers in Reproduction (FIR) course at the MBL in Woods Hole, Massachusetts. Dr DeMayo established the Uterine Focus group, providing a platform for trainees and junior faculty nationwide to engage in scientific discourse. As a mentor, faculty member at BCM, Senior Investigator at NIEHS, and SSR leadership, he has been dedicated to promoting Diversity, Equity, Inclusion, and Accessibility in the scientific community.

Throughout his career, Dr. DeMayo has received numerous accolades, including the Michael E. DeBakey, MD Excellence in Research Award at Baylor College of Medicine, the SSR Research Award, the Frontiers in Reproduction Beacon Award, and the Distinguished Alumnus Class of 1979 at Cornell University. Additionally, he was honored with The Campion Fund Outstanding Senior Scientist Award and The Society for Reproductive Investigation Distinguished Scientist Award. He was elected a Fellow of the American Association for the Advancement of Science (AAAS) and recognized as a Distinguished Fellow of the Society for the Study of Reproduction in 2023.

2024 SSR Research Award

John Davis, PhD
Nominated by Andrea S Cupp, PhD

John S. Davis is Professor and Director of Research and Development at the Olson Center for Women's Health in the Department of Obstetrics and Gynecology, University of Nebraska Medical Center, Omaha, Nebraska. He was awarded the MS and PhD in Physiology and Pharmacology from the University of North Dakota. He has served in his current position at the University of Nebraska Medical Center (UNMC) since 2001. He is also a Research Physiologist for the Department of Veterans Affairs and received the Senior VA Research Career Scientist designation in 2014. He provides leadership for the training and research programs at the UNMC and VA Hospital. He is the inaugural director of the Nebraska Center for Women's Health Research. His research in ovarian physiology, particularly on molecular and cellular signaling mechanisms, has provided new information on the mechanisms of action of the gonadotropins LH and FSH, prostaglandins and growth factors involved in follicular development and the formation and regression of the corpus luteum. His research also explores mechanisms regulating tumors of the ovary and uterus. His research program utilizes human, large domestic animal, and rodent models.

Dr. Davis is a strong supporter of collaborative research and mentoring students, postdocs, and junior investigators. His research has been supported by the National Institutes of Health, the Department of Veterans Affairs and the National Institute for Food and Agriculture (USDA), as well as local and private sources. He has chaired or served on NIH, USDA, VA, ACS, and NSF review panels.

He has devoted much of his career to service for the Society for the Study of Reproduction (SSR) and has served on or chaired many key SSR committees. Dr. Davis served as SSR President for the 2018 annual meeting in New Orleans and was appointed a Fellow of the SSR in 2021. He has trained dozens graduate students, postdoctoral fellows, and junior faculty. Dr. Davis received the 2013 Research Leadership Award from UNMC in 2023. He is the author of more than 190 scientific publications. Dr. Davis is most proud and grateful to receive this award and he dedicates it to the many students, postdocs and colleagues and to members of his family who made it possible.

2024 SSR Jansen Distinguished Leadership and Service Award

Katherine Loveland, PhD
Nominated by Karen Schindler, PhD

Kate Loveland is a Professor at Monash University, in the SubFaculty of Clinical and Molecular Medicine (formerly the School of Clinical Sciences). In the Hudson Institute for Medical Research in Melbourne, Australia, she leads the Testis Development and Germ Cell Biology Group and was Director of the Centre for Reproductive Health for 5 years (2017-2023).

She obtained a PhD in Cell Biology from Duke University in 1987 for investigations of fertilization mechanisms under the supervision of Professor Patricia Saling. Her postdoctoral training, under Professors Joe Sambrook and Mary Jane Gething at the Howard Hughes Medical Centre at UT Southwestern, provided technical skills in intracellular protein transport and experience working with the tools emerging for molecular biology analyses. Upon moving to Melbourne, Australia, in 1989, she received further training in Reproductive Biology with Professors Alan Trounson and David de Kretser, beginning her career-long fascination with how cell-cell signaling enables formation of a fertile testis. Her independent research team was established in 2000 upon award of a 5 year Research Fellowship from the National Health and Medical Research Council of Australia (renewed through 2020).

Her research focus has been to reveal the mechanistic underpinnings of testicular pathologies, especially testicular germ cell tumours and those of developmental origins. Reflecting her training in cell biology, her quest is to understand the dialogue between cell types within the testis and that facilitates signalling and specialized cellular functions. Current projects are investigating key switches that regulate germline development and testis function These focus on elucidating the impact of activin and TGF-superfamily protein actions on immune cells and steroid production, and how they are controlled. Other work is defining how proteins involved in regulated protein nucleocytoplasmic transport affect developmental switches. She has supervised to completion 22 Honours, 11 Masters and 31 PhD students.

In her role as Head of Graduate Research for the Monash Sub-Faculty of Molecular and Clinical Medicine (2015- ongoing), she is responsible for oversight of approximately 280 PhD and Masters students. She was previously the Australian co-leader (with Professor Andreas Meinhardt, JLU, Germany) of an International Research Training Group for PhD students (2013-2022) in the Molecular Pathogenesis of Male Reproduction joint between Monash University and Justus-Liebig University (Germany); this resulted in over 30 PhD completions (20 joint-badged) and more than 70 jointly authored publications for the team. She served

as Deputy Director (under Professor John Aitken) of the Australian Research Council Centre of Excellence in Biotechnology and Development (2003-2010). Prof Loveland has held leadership roles in the Society for Reproductive Biology (Australia/New Zealand) and the Society for the Study of Reproduction. She is the 2023-2024 President of the American Society for Andrology and Chair of the 2024 North American Testis Workshop. She received the Young Andrologist Award from the American Society for Andrology in 2004, the Monash University Vice Chancellor's Award for Excellence in Postgraduate Supervision in 2010, the Justus-Liebig Professorship (2014-2021), and the Society for the Study of Reproduction Fuller Bazer Award for International Scientist in 2018.

2024 SSR Virendra B. Mahesh New Investigator Award

Shuo Xiao, PhD
Nominated by Jodi Flaws, PhD

Dr. Shuo Xiao is an Assistant Professor from the Department of Pharmacology and Toxicology at Rutgers University School of Pharmacy. He earned his MBBS and MS degrees in Preventive Medicine from Peking University Health Science Center, followed by a PhD in Female Reproductive Biology and Toxicology from Dr. Xiaoqin Ye's lab at the University of Georgia. He completed the Postdoctoral Training under the supervision of Dr. Teresa Woodruff at Northwestern University and focused on Ovarian Biology, Oncofertility, and organ-on-a-chip. Currently, Dr. Xiao's research is dedicated to advancing women's reproductive health, including (1) investigating ovarian disrupting effects and mechanisms of environmental contaminants and clinical drugs; (2) developing non-hormonal female contraception, and (3) engineering female reproduction-on-a-chip. These research projects are funded by NIH, DOD, NSF, and Bill & Melinda Gates Foundation. So far, he has published > 60 peer-reviewed papers in high impact journals. Dr. Xiao has been a SSR member since 2009. He is now a member of SSR Virtual Committee (2022-present), and he used to serve on the SSR Award Committee (2019-2022) and as a SSR Trainee Affairs Mentor (2017-2019).

2024 SSR Trainee Mentoring Award

Paula Cohen, PhD
Nominated by Andrew Modzelewski, PhD

Dr. Paula Cohen obtained her PhD in reproductive physiology at the University of London, England, where she studied the endocrine regulation of implantation. She moved to the US in 1993, taking a Postdoctoral position at the Albert Einstein College of Medicine in New York City, where she focused on regulation of gonadal function in males and females, and in maturation of the hypothalamic-pituitary-gonadal axis. During this time, she became interested in germ cell biology and genome integrity, and transitioned into this area to study the roles of DNA repair proteins in mammalian meiosis. She joined the faculty of the Department of Genetics at Albert Einstein College in 2000, and then in 2004 was recruited to Cornell University, within the Department of Biomedical Sciences. There, she rose through the ranks to full Professor in 2013. In 2018, she became Associate Vice Provost for Life Sciences, a role that she will vacate in June 2024. In February 2024, she accepted the position of Associate Dean for Research and Graduate Education in the College of Veterinary Medicine at Cornell University. While at Cornell, she has received numerous merit awards for her research and scholarly contributions, the Cornell Provost's award for Distinguished Scholarship (2009), and the SUNY Chancellor's award for Academic Excellence (2017). Most recently, in January 2022, she was elected as a fellow of the American Association for the Advancement of Science (AAAS).

Since starting her own lab, she has received continuous funding from NIH, the March of Dimes, the National Down Syndrome Society, the Hereditary Diseases Foundation, and the Bill and Melinda Gates Foundation. In 2006, Dr. Cohen established the Cornell Reproductive Sciences Center (CoRe), the first Cornell-wide center encompassing clinicians and scientists from the College of Veterinary Medicine and from the Weill-Cornell Medical College, as well as participants from other colleges within Cornell University. She also started "Tri-Repro" an annual trainee-focused symposium in reproductive sciences shared with the Universities of Pennsylvania and Pittsburgh.

Dr. Cohen has co-authored over 80 papers, served as a regular and ad hoc member on several different NIH Study Sections and numerous international funding agencies. She chaired the 2020 (2022) Gordon Research Conference on Meiosis and is set to vice-chair the 2025 Gordon Research Conference in Germinal Stem Cell Biology. In her own lab, Dr. Cohen has mentored 17 graduate students, 13 Postdoctoral fellows, and dozens of undergraduate and high school students. She was a participant lecturer and lab head at the Frontiers in Reproduction Course at Woods Hole for 13 years where she was also awarded the Jerry Strauss Beacon Award for Mentorship in the Reproductive Sciences in 2022.

2024 Fuller W. Bazer SSR International Scientist Award

Islam Saadeldin, DVM, MVS, PhD
Nominated by Niamh Forde, PhD

Professor Islam M. Saadeldin is a distinguished scholar with a rich academic background and a notable trajectory in the field of veterinary medicine. He earned his Doctor of Veterinary Medicine (DVM) and master's degree from Zagazig University, Egypt.

Driven by a passion for advanced research, he furthered his education by pursuing a Ph.D. degree at Seoul National University, South Korea, where he later contributed as a postdoctoral researcher.

Dr. Saadeldin has held key positions at renowned institutions globally. He is currently serving as a Senior Scientist at King Faisal Specialist Hospital and Research Center in Riyadh, Saudi Arabia. Additionally, he holds the position of Professor of Physiology at Zagazig University in Zagazig, Egypt. Prior to this, he was a Research Professor of Theriogenology at the College of Veterinary Medicine, Chungnam National University in South Korea. He also worked as an Associate Professor of Physiology at Zagazig University. Moreover, he has experience as an Adjunct Scientist in Comparative Medicine at King Faisal Specialist Hospital & Research Centre and a Visiting Professor at Seoul National University.

Dr. Saadeldin's exceptional contributions to the field are exemplified by his diverse research endeavors and prolific publication record. His work, comprising two edited books, more than 200 scholarly publications encompassing research papers, reviews, conference proceedings, and book chapters, significantly contributes to the domain of advanced reproductive biotechnology. Notably, he secured a patent of invention from The Korean Intellectual Property Office for his innovative approach to bovine embryo transgenesis using PiggyBac transposons.

His research extends across various facets of reproductive biotechnology, including somatic cell nuclear transfer (SCNT), transgenesis, endometrial organoids, adult, and embryonic stem cells. Dr. Saadeldin's scholarly pursuits delve into the intricate roles played by extracellular vesicles in embryo communication and modeling the dynamic interactions between embryonic and maternal compartments.

One of his notable research directions involves studying comparative cellular defense mechanisms against extreme hyperthermia, exploring correlations with cellular anastasis and resilience. Currently, his research trajectory is centered around the development of CRISPR/Cas9-engineered extracellular vesicles, with the overarching goal of enhancing embryo implantation and improving pregnancy outcomes in the realm of cloned and transgenic animals.

In recognition of his outstanding contributions, Dr. Saadeldin has received numerous prestigious accolades at both national and international levels. These include the Egyptian State Prize, Shoman Prize (Jordan), Almarai Prize (Saudi Arabia), Misr Elkheir Prize (Egypt), The Interstellar Initiative for Young Investigators (USA-Japan), the IETS Early Career Achievement Award (USA), and the Asian Universities Alliance Scholar Award (China).

As a Principal Investigator, he has obtained funding from several organizations in Korea and Saudi Arabia. His commitment to education is evident through his role as a university educator and his endeavors in science communication. Dr. Saadeldin's comprehensive contributions underscore his dedication to advancing veterinary medicine and reproductive biotechnology on a global scale.

2024 Janice Bahr Junior Scientist Travel Fund

Xiaoqiu (Churchill) Wang, PhD

Dr. Xiaoqiu (Churchill) Wang is an Assistant Professor in the Department of Animal Science at North Carolina State University (NCSU), where his research delves into blastocyst implantation and endometrial function during pregnancy and diseases states. Dr. Wang received both R01 and R03 Awards from the NICHD to study the genetic and epigenetic regulation of endometrial functions in female reproductive health, pregnancy, and aging. He completed his B.Sc. and first Ph.D. in the field of Nutrition at China Agriculture University. There, he explored gut developmental defects stemming from fetal programming in response to intrauterine growth restriction (IUGR). His pursuit of the concept of fetal origin of adult disease (FOAD) led him to a second Ph.D. training under the guidance of Drs. Fuller W. Bazer and Guoyao Wu at Texas A&M University. During this period, Dr. Wang focused on uterine capacity and the impact of histotroph on the growth and development of peri-implantation conceptus trophectoderm, as well as pregnancy recognition signaling in sheep and pigs. Continuing his academic journey, Dr. Wang pursued an IRTA postdoctoral fellowship in mouse genetics, at the National Institute of environmental health sciences (NIEHS), under the mentorship of Dr. Francesco J. DeMayo. Here, he contributed significantly to identifying SOX17 and FOXO1 as two critical transcription factors required for uterine receptivity, along with uncovering a novel uterine-specific enhancer (Ihh19) using CRISPR/Cas technology.

Currently, Dr. Wang's research focuses on elucidating the mechanisms underlying reproductive aging in the uterus, particularly the convergence of the Sirtuin 1 (SIRT1) signaling pathway and the hormonal endometrial response during endometrial decidualization and placentation. His other NIH-funded project also delve into the role of DNA demethylation in endometrial biology. Another major research area in his lab, funded by the USDA, is to understand the role of adrenomedullin in regulating conceptus elongation and implantation, with the goal of enhancing uterine capacity, and improving reproductive performance in animal agriculture. Complementing his research endeavors, Dr. Wang is deeply committed to mentoring and educating the next generation of scientists as a member of the graduate faculty at NCSU, both in the classroom and in the laboratory.

SSR 2024 Distinguished Fellows

The SSR Distinguished Fellowship recognizes active SSR members for their outstanding contributions to the field of reproductive biology and to the Society, illustrated by sustained high impact research, leadership, service, and mentorship.

The SSR congratulates the 2024 Distinguished Fellows!

Andrea Cupp, PhD
University of Nebraska-Lincoln

Vasantha Padmanabhan, MS, PhD
University of Michigan

Humphrey Hung-Chang Yao, PhD
National Institute of Environmental Health Sciences

Mary Zelinski, PhD
Oregon Health & Science University

BOR Award Winners

Biology of Reproduction 2023 Top Cited Research Paper

"Glycyrrhizin ameliorates impaired glucose metabolism and ovarian dysfunction in a polycystic ovary syndrome mouse model,"
Volume 109, Issue 1, July 2023, Pages 83–96.
Jun-Pu Yang, Amin Ullah, Ya-Nan Su, Antonia Otoo, Enoch Appiah Adu-Gyamfi, Qian Feng, Ying-Xiong Wang, Mei-Jiao Wang, Yu-Bin Ding

Biology of Reproduction 2023 Most Popular Research Paper

"Glucagon-like peptide-1 receptor agonists decrease hyperinsulinemia and hyperandrogenemia in dehydroepiandrosterone-induced polycystic ovary syndrome mice and are associated with mitigating inflammation and inducing browning of white adipose tissue,"
Volume 108, Issue 6, June 2023, Pages 945–959.
Yahui Zhang, Yi Lin, Guoqiang Li, Yuan Yuan, Xuejiao Wang, Na Li, Chuanhao Xiong, Yueying Yang, Yuhang Ma, Zhijian Zhang, Xiaoying Ding

Biology of Reproduction 2023 Top Review

"Sex differences in innate and adaptive immunity impact fetal, placental, and maternal health,"
Volume 109, Issue 3, September 2023, Pages 256–270.
Kelly J Baines, Rachel C West

BIOLOGY OF REPRODUCTION TOP REVIEWER AWARDS

BOARD OF REVIEWING	TRAINEE REVIEWERS	AD-HOC REVIEWERS
Dong-bao Chen	Jordana Bloom	Bin Cao
Tony DeFalco	Sneha Mani	Hungwen Chen
Shuangbo Kong	Sudeshna Tripathy	Wenbo Deng
Shuo Xiao		Lauren Hamilton
		Jinhua Lu

Trainee Awards

SSR Trainee Research Awards are presented to the best oral talk and poster presentations by SSR Trainee members at the Annual Meeting as evaluated by the SSR Awards Committee. The finalists for the 2024 awards are listed below.

SSR Trainee Research Awards–Poster Competition will include separate categories for Pre-Doctoral trainees and Post-Doctoral trainees. Poster finalists will present on Tuesday, July 16th during Poster Session A from 8:00–9:45 AM.

The Awards Committee will select a 1st, 2nd, and 3rd place winner in each category (Pre-Doctoral and Post-Doctoral) on Friday, July 19th during the SSR Business Meeting from 5:00-5:45 PM.

SSR Trainee Research Awards–Platform Competition. There will be two platform competitions: one for Pre-Doctoral Finalists and one for Post-Doctoral finalists. All Platform Finalists will present on Wednesday, July 17th during the Platform Competition Talks from 5:30–7:00 PM. The Awards Committee evaluates the presentations according to the following criteria: (1) merit of the study, (2) presentation format, (3) delivery, (4) visual aids, and (5) response to questions during discussion.

The Awards Committee will select a 1st, 2nd, and 3rd place winner in each category (Pre-Doctoral and Post-Doctoral) on Friday, July 19th during the SSR Business Meeting from 5:00-5:45 PM

2024 SSR Trainee Research Award Pre-Doctoral Platform Competition Finalist

The SSR Pre-Doctoral Platform Awards are supported by Dr. T. Rajendra Kumar through the Makowski Family Endowment at the University of Colorado Anschutz Medical Campus

- Development and Characterization of Novel Follicle-Stimulating Hormone Receptor (FSHR) Inhibitors. Ruijuan Xu, King's College London, United Kingdom.
- The Heterogeneity of Ovary-derived Hydrogels Elucidates the Matrisome Properties that may influence Follicle growth and survival in vitro. Hannah McDowell, Northwestern University, USA.
- Neurotensin Mediates Follicular Vascular Endothelial Cell Function via both NTSR1 and SORT1 during Ovulation. Andrew Pearson, Eastern Virginia Medical School, USA.

2024 Trainee Research Award Post-Doctoral Platform Competition Finalist

- Assessment of Premature Reproductive Aging In IVF Female Offspring Using A Mouse Model. Eric Rhon-Calderon, University of Pennsylvania, USA.
- Differential Transcript Usage in Bovine Blastocysts Exposed to Varying Concentrations of Energy Substrates. Fernanda Fagali Franchi, University of Milan, Italy.
- Single-nuclei Sequencing Reveals Compositional Alterations in Ovarian Cell Types of AMH Deficient Mice. Li Meng, University Medical Center Rotterdam, Netherlands.

2024 SSR Trainee Research Award Pre-Doctoral Poster Competition Finalist

- Culture Conditions and Cumulus-Oocyte Complex Integrity Affect the Program of Oocyte Maturation in Higher-Order Mammals. Magdalena Ladrón de Guevara, Università degli Studi di Milano, Italy.
- Estradiol-Induced Labor Initiation: Changes on Gene Expression of Maternal Uterine and Cervical Tissues in Periparturient Ewes. Bethania Davila Ruiz, North Dakota State University, USA.
- Effect of Maternal Age on the Oocyte Cortical Actin Layer and Associated Endoplasmic Reticulum Clusters. Ashley Teate, University of Kansas Medical Center, USA.
- Investigating ribosome dynamics in the aging mammalian oocyte. Anna Galligos, Stowers Institute for Medical Research, USA.

- The oxidative metabolism dictates the histone lactylation levels during in vitromaturation of bovine oocytes. João Alcantara da Silva, Federal University of UFABC, Brazil.
- Pig Conceptuses Utilize Extracellular Vesicles for Interferon Gamma-mediated Paracrine Communication with the Endometrium. Joe Cain, Texas A&M University, USA.
- SPACE SPERM–The Importance of Gravity in Sperm Navigation, Fertilisation and Early Embryo Eormation. Hannah Lyons, The University of Adelaide, Australia.

2024 SSR Trainee Research Award Post-Doctoral Poster Competition Finalist

- The Age-Associated Increase In Ovarian Stiffness Impairs Follicle Development And Oocyte Quality Through Early Modulation Of Follicles' Transcriptome. Sara Pietroforte, Washington University in St. Louis, USA.
- Gene Therapy Delivery of Anti-Müllerian Hormone in Kittens Induces Long-term Contraception Without Impairing Puberty. Philippe Godin, Massachusetts General Hospital, USA.
- In VivoDynamics of Mouse Ovulation and Oocyte Transport. Kohei Umezu, Baylor College of Medicine, USA.
- Novel Therapies To Protect Sperm Quality In ART. Macarena Gonzalez, The University of Adelaide, Australia.
- Physiologic and Physical Interactions between the TRPV4 Channel and Oxytocin Receptor Modulate Human Myometrial Contractility. Daiana Fornes, Stanford University, USA.
- Reproductive Seasonality Influences Follicle Dynamics and the Ovarian Extracellular Matrix Structural Properties in Ewes. Johanne Grosbois, The University of Edinburgh, Scotland.

Lalor Foundation Merit Awards

Supported by a grant from the Lalor Foundation, Inc.

Winners are selected based on abstracts submitted for presentation and evaluated by the Awards Committee according to the following criteria: scientific merit, interpretation and impact of the results, and clarity of the abstract. Each of the 10 presenters will receive a Lalor Foundation Merit Award of USD $500. Awardees will be recognized on Tuesday, July 16th during the Opening Ceremony from 3:30-5:45 PM.

2024 Lalor Foundation Merit Award Recipients

- Assessment of Premature Reproductive Aging in IVF Female Offspring Using a Mouse Model. Eric Rhon-Calderon, University of Pennsylvania, USA.
- Culture Conditions and Cumulus-Oocyte Complex Integrity Affect the Program of Oocyte Maturation in Higher-Order Mammals. Magdalena Ladrón de Guevara, Università degli Studi di Milano, Italy.
- Development and Characterization of Novel Follicle-Stimulating Hormone Receptor (FSHR) Inhibitors. Ruijuan Xu, King's College London, United Kingdom.
- Effect of Maternal Age on the Oocyte Cortical Actin Layer and Associated Endoplasmic Reticulum Clusters. Ashley Teate, University of Kansas Medical Center, USA.
- The Heterogeneity of Ovary-derived Hydrogels Elucidates the Matrisome Properties that may influence Follicle growth and survival in vitro. Hannah McDowell, Northwestern University, USA.
- In VivoDynamics of Mouse Ovulation and Oocyte Transport. Kohei Umezu, Baylor College of Medicine, USA.
- Investigating Ribosome Dynamics in the Aging Mammalian Oocyte. Anna Galligos, Stowers Institute for Medical Research, USA.
- Novel Therapies to Protect Sperm Quality in ART. Macarena Gonzalez, The University of Adelaide, Australia.
- Single-nuclei Sequencing Reveals Compositional Alterations in Ovarian Cell Types of AMH Deficient Mice. Li Meng, University Medical Center Rotterdam, Netherlands.
- SPACE SPERM–The Importance of Gravity in Sperm Navigation, Fertilisation and Early Embryo Eormation. Hannah Lyons, The University of Adelaide, Australia.

USDA NIFA-AFRI Merit Awards

Supported by a grant from USDA National Institute of Food and Agriculture

Winners are selected based on abstracts submitted for presentation and evaluated according to the following criteria: relevance of research to the goal of enhancing understanding of reproduction in agriculturally important species, scientific merit, interpretation and impact of the results, and clarity of the abstract. Each of the 10 presenters will receive USD $500. Awardees will be recognized on Tuesday, July 16th during the Opening Ceremony from 3:30-5:45 PM.

2024 USDA NIFA-AFRI Merit Awards Recipients

- Developmental Patterns and Gene Expression of Bovine Blastocysts Exposed to Imbalanced Energetic Levels. Giulia Musmeci, University of Milan, Italy.
- Differential Transcript Usage in Bovine Blastocysts Exposed to Varying Concentrations of Energy Substrates. Fernanda Fagali Franchi, University of Milan, Italy.
- Effect of Highly Expressed Intrauterine microRNAs in Low-Fertility Cows on Embryo Gene Expression. Rei Ichikawa, Nagoya University, Japan.
- Estradiol-Induced Labor Initiation: Changes on Gene Expression of Maternal Uterine and Cervical Tissues in Periparturient Ewes. Bethania Davila Ruiz, North Dakota State University, USA.
- Molecular Profile of Founder Primordial Germ Cells in the Bovine Embryo. Carly Guiltinan, University of California, Davis, USA.
- The oxidative metabolism dictates the histone lactylation levels during in vitromaturation of bovine oocytes. João Alcantara da Silva, Federal University of UFABC, Brazil.
- Reproductive Seasonality Influences Follicle Dynamics and the Ovarian Extracellular Matrix Structural Properties in Ewes. Johanne Grosbois, The University of Edinburgh, United Kingdom.
- Transcriptomic Profiling Identifies Key Players in Myometrial Activation During Chronic Equine Placentitis. Hossam Elsayed, University of Kentucky, USA.
- Validating Hyper7 Sensors for Quantitative Hydrogen Peroxide Measurement in Bovine Oocytes. Maria Plevridi, University of Milan, Italy.
- Validating Sperm Surface Lectin Targets for Use in the Nanopurification of Bull Semen. Lauren Hamilton, University of Missouri-Columbia, USA.

The Gates Foundation Poster Award for Research Relevant to Contraceptive Research and Development

Made possible by the Bill & Melinda Gates Foundation

Simultaneous High-Resolution Live Imaging of Cytoplasmic and Intracellular Calcium Store Dynamics in Progesterone-Induced Capacitated Mouse Sperm Acrosomal Exocytosis. Ana Romarowski, Instituto de Biologia y Medicina Experimental (IBYME-CONICET).

Gates Foundation–SSR Scholarship

Funded by the Bill & Melinda Gates Foundation

- Enitome Bafor, National Institutes of Health (NIH), USA
- Kenley Joule Pierre, Laval University, Canada

Anita Payne Scholarship

- Emily Zaniker, Northwestern University, USA

SSR MCI Poster Award

Sponsored by the Male Contraceptive Initiative

- Investigating Genes Regulated by BRDT In Vitrofor Non-Hormonal Male Contraception. Leah Simon, Cornell University, USA.

Burroughs Wellcome Travel Awards

A grant from the Burroughs Wellcome Fund provides travel fellowships for underrepresented minority trainees and junior faculty, US or International, to enable their participation in the SSR Annual Meeting. The fellowship includes reimbursement of meeting registration; up to USD $1,200 for housing, food, and travel expenses; and complimentary SSR Membership through the next calendar year. Fellowships are awarded competitively based on applications submitted to and evaluated by the SSR Diversity Committee. Approximately six trainees and three junior (non-tenured) faculty with a background in reproductive biology receive fellowships each year. Awardees will be recognized on Tuesday, July 16th during the Opening Ceremony from 3:30-5:45 PM.

2024 Burroughts Wellcome Travel Award Recipients

- **Amanda Macias,** Cornell University, USA.
- **Arslan Tariq,** University of Florida, USA.
- **Cecilia Constantino Rocha,** University of Florida, USA.
- **Maddison Olivarez,** Texas A&M University, USA.
- **Mariana Ianello Giassetti,** Baylor University, USA.
- **Martín Estermann,** National Institute of Environmental Health Sciences, USA.
- **Mohamed Elsokary,** Benha University, Egypt.
- **Priscilla Day-Walsh,** University of Cambridge, United Kingdom.
- **Viviana Garza,** Texas A&M University, USA.

Best International Abstracts

Awardees of the SSR Best International Abstract Award will be announced onsite. Winners in each region were selected by Awards Committee score, which were attributed to each abstract based on technical characteristics (legibility, adherence to the rules for submitting an abstract) and content (title, reasoning, quality of the results, conclusions, and impact in the field of reproductive biology).

Best International Abstract Recipients

- ACLY Regulates the Metabolic Control of Histone Acetylation to Promote Human Trophoblast Stemness. Giulia Avellino, University of Cambridge, United Kingdom.
- The Epididymis: Balancing the Burden & Responsibility of Fertility. David Skerrett-Byrne, The University of Newcastle, Australia.
- Impact of Yoga-Conditioned Serum from infertile men on Prostate cancer Cell Characteristics. Anjali Yadav, All India Institute of Medical Science, India.
- JNJ-7706621 Treatment during the Post-activation Period Enhances the Developmental Competence of Mouse Somatic Cell Nuclear Transfer Embryos. Hyo-gu Kang, Korea Research Institute of Bioscience and Biotechnology, South Korea.
- Local Effect of Allopregnanolone in Rat Ovarian Steroidogenesis, Follicular and Corpora Lutea Development. Antonella Caceres, IMBECU-CONICET, Argentina.
- Preantral Follicles of Over 12-Month-Old Mice Have Developmental Potential for Matured Egg Production. Tomohiro Kohama, Shinshu University, Japan.
- SLC1A5 Induces Metabolic Reprogramming in Granulosa Cells and Impairs Follicular Development in Polycystic Ovary Syndrome. Yishu Wang, Shanghai Jiaotong University, China.

TRAINEE ACTIVTIES AND EVENTS

Trainee Forum

The Trainee Forum is scheduled for:

Tuesday, July 16	12:00 PM–1:00 PM	The Liffey B

Our panel this year includes two panelists to speak on Mental Health in Academia, Professors Barabara Dooley (University College Dublin) and Sharon Milgram (National Institutes of Health, USA). This forum will give you an opportunity to ask all your burning questions about how to balance your career and mental health. We recommend it for all trainees. To give you a taste, some of our questions to the panel will include:

- How can we reduce the stigma associated with mental health issues among peers?
- Could you share any proactive measures or preventative strategies that graduate students can incorporate into their daily routines to promote resilience and psychological well-being?
- How could you consider your mental health when making career decisions?

Career Consultation Center

The Career Consultation Center offers trainees the opportunity to meet one on one with a mentor for 30 minutes to discuss their career pathway, strategies for success, finding a mentor, tips for applications and more. These meetings also provide a starting point for genuine, ongoing mentoring relationships, which are crucial for trainee success. You'll be matched with a mentor and assigned a meeting time prior to the start of the annual meeting.

Career Consultation will take place:

Wednesday, July 17	3:00 PM–3:30 PM	Liffey Room 2
Thursday, July 18	3:00 PM–3:30 PM	Liffey Room 2

Trainee Mixer

This is for Trainees only *(no guests)*.
Come to a casual happy hour to get to know other trainees in an informal setting on:

Thursday, July 18	6:00 PM–7:30 PM	Urban Brewing: CHQ Building, Custom House Quay, IFSC, Dublin, D01 Y6P5, Ireland

Trainee / Junior Investigator Grant Workshop

The Grant Workshop will take place:

Tuesday, July 16	11:00 AM–12:00 PM	Liffey Room 1

Due to increased demand this year the Grants Workshop will take the format of a 'question-answer' forum to allow all trainees and early-stage investigators the opportunity to ask questions that can help develop their grant writing knowledge. We have mentors from diverse backgrounds and locations (USA and the UK) so this forum will be applicable for all.

Trainee Mentor Lunch

The Trainee Mentor Lunch provides trainees an opportunity to engage with SSR mentors in an informal setting over lunch. This is your opportunity to meet with mentors from academia, editorial staff, clinicians, funding agency representatives and potential employers. Tickets are $25 which includes a plated lunch and must be selected as part of registration. The Trainee Mentor Lunch will take place:

Tuesday, July 16	1:15 PM–2:15 PM	Wicklow Hall 2

**Doors Open for check-in at 1:00 PM.*

Fun Run 5k

This year's annual SSR 5K Fun Run will take place:

Thursday, July 18	6:30 AM–7:30 AM	Wicklow Hall 2

Runners will meet in the Convention Centre, Ground Floor Lobby starting at 6:00 AM.
Be sure to pick up your fun run t-shirt at the registration desk!

SSR Trainee Travel Award (SSR-TTA)

The Society for Study of Reproduction Trainee Travel Awards (SSR-TTA) was established to support participation of Trainee members at the Annual Meetings.

SSR will contribute up to $500 to support each of 20 Trainee members enrolled in the Continental North America (United States and Canada) and up to $1000 to support each of 5 international (non-North American) enrolled Trainee members as a contribution towards the costs of meeting registration, travel, and accommodation. Applicants are judged on abstract quality and volunteer service to the scientific community.

2024 SSR-TTA RECIPIENTS

Continental North America

- Cell-type Specific Transcriptomic Changes Associated with Maternal Obesity in Term Human Placenta. Fatima Gunter-Rahman, MIT, USA.
- Defining the function of tubulin post-translational modifications in mammalian oocyte meiosis. Madison Gowett, Yale University, USA.
- Disruption of Reproductive Function in vivo and ex vivo using a Novel CRISPR/Cas13d Mouse Model. Stephanie Tanis, Cornell University, USA.
- Endometrial TGF Signaling via TGFBR2 Coordinates Estrogen Response during the Peri-Implantation Window and is Critical for Pregnancy. Sydney Parks, Baylor College of Medicine, USA.
- From Cleavage to Pregnancy Loss: Insights into the First Mitotic Division and its Implications for

Developmental Potential, Pregnancy, and Early Embryonic Loss in Horses.
Soledad Martin-Pelaez, University of California, Davis, USA.

- High Androstenedione Cows Have Increased Endocrine Hormones and Inflammatory factors which may contribute to Persistent Follicles Resulting in Anovulation. Brooke Rudloff, University of Nebraska Lincoln, USA.
- Investigating the Role of the Sperm Centrioles in Rabbit Reproduction. Katerina Turner, University of Toledo, USA.
- Investigation of Receptor Tyrosine Kinases as Novel Drug Targets for Treatment of Endometriosis.
  Dominique Cope, Baylor College of Medicine, USA.
- Loss of Inhibin Negative Feedback in the Pituitary Leads to Enhanced Ovulation but Pregnancy Failure in Mice.
  Yeu-Farn Lin, McGill University, Canada.
- LRH-1: The Master Regulator of Lipid Metabolism in Luteal Cells.
  Florence Gagnon, Université de Sherbrooke, Canada.
- Maternal Tamoxifen Effects on Mouse Pregnancy and Placental Development. Emma Grassi, University of Illinois, USA.
- Morphokinetics as a Tool to Identify Embryos with Superior Ability to Survive Cryopreservation.
  Tatiane Maia, University of Florida, USA.
- Neurotensin Mediates Ovulation in Mouse Ovarian Follicles In Vitro.
  Megan Sage, Eastern Virginia Medical School, USA.
- OoCount: A Deep-Learning Based Approach to Mouse Ovarian Follicle Counting and Classification.
  Lillian Folts, University of Colorado Anschutz Medical Campus, USA.
- SIK2 and SIK3 Differentially Regulate Granulosa Cell Response to Exogenous Gonadotropins.
  Emily Hayes, University of Illinois at Chicago, USA.
- SLIT1 and -2 Act Redundantly Through an AKT/FOXO1 Pathway in Mouse Follicular Granulosa Cells.
  Florine Grudet, Université de Montréal, Canada.
- Spatio-temporal Requirements of Aurora kinase A in Meiotic Spindle Building.
  Cecilia Blengini, Rutgers University, USA.
- SUMOylation is Required for Nuclear Organization in Mouse Oocytes.
  Tessa Steenwinkel, Baylor College of Medicine, USA.
- Transgenerational Epigenetic Inheritance and Autism Spectrum Disorder: Linking Meiotic Dysfunction and Cognitive Impairment. Katelyn DeNegre, University of Connecticut, USA.
- Understanding the Role of Cilia in Preimplantation Oviductal Transport.
  Deirdre Scully, Baylor College of Medicine, USA.

International

- ACLY Regulates the Metabolic Control of Histone Acetylation to Promote Human Trophoblast Stemness.
  Giulia Avellino, University of Cambridge, United Kingdom.
- The Epididymis: Balancing the Burden & Responsibility of Fertility.
  David Skerrett-Byrne, The University of Newcastle, Australia.
- Investigating the impact of experimentally-induced endometriosis on ovarian function and fertility.
  Meaghan Griffiths, University of Edinburgh, Scotland.
- Local Effect of Allopregnanolone in Rat Ovarian Steroidogenesis, Follicular and Corpora Lutea Development.
  Antonella Caceres, IMBECU-CONICET, Argentina.
- Paternal miR-146a Regulates Female Immune Receptivity to Embryo Implantation and Fetal Viability in Mice.
  Hon Chan, University of Adelaide, Australia.

T-Shirt Sales

2024 Annual Meeting t-shirts are available for $25 each in unisex adult styles (S to XXL).

Proceeds from the sales of the shirts provide much needed funding for Trainee Affairs. Pick up your preordered shirt at t-shirt pickup or purchase one onsite across from the registration desk on the **ground floor** in the **main foyer!**

Trainee Volunteer Subcommittee

The co-chairs of the Trainee Volunteer Subcommittee, Chandlar Kern and Shweta Dipali, have worked tirelessly organizing this year's group of volunteers, who provide invaluable assistance in running the meeting! Volunteers are responsible for much of the behind-the-scenes action, including assistance with the Fun Run, posters, trainee booth, registration, session monitoring, signage placement as well as help in the slide preview room and the operations of trainee-specific events. The SSR is especially devoted to enhancing the trainee experience; therefore, we strongly urge you to take advantage of this opportunity to participate as a trainee volunteer at next year's meeting. It's a great way to meet peers and network with influential scientists in our field.

TRAINEE FACEBOOK GROUP

For the latest news and views of your peers in reproductive science, please join our Facebook group, Society for the Study of Reproduction Trainee Affairs.

TRAINEE CONTACTS

Have a question? Please contact your SSR Trainee Representatives Jacinta Martin and Alison Ermisch, at trainees@ssr.org; both are more than happy to answer your questions.

FOCUS SESSIONS AT-A-GLANCE

MEETING SCHEDULE

For the most accurate and real-time updates, please visit the SSR 2024 Annual Meeting Website. Login is required to see specific agenda related information, build your own schedule and connect with other attendees.

Scan the QR Code and save the site for convenience!

Monday, July 15th

PRE-MEETING

Ovarian Workshop **Ticketed Event* **12:00 PM–6:00 PM**

THE LIFFEY A

12:00 PM–12:30 PM	Investigating the Role of the Rete Ovarii in Ovary Development and Homeostasis *Jennifer McKey, PhD, University of Colorado Anschutz Medical Campus*
12:30 PM–1:00 PM	Fate Mapping Oocyte Development *Diana Laird, University of California at San Francisco*
1:00 PM–1:30 PM	Integrating the Granularity of Single Cell-omics with Spatial Information to Generate a Human Ovary Atlas (HubMAP) *Kate O'Neill, University of Pennsylvania*
1:30 PM–2:00 PM	Coffee Break
2:00 PM–2:30 PM	Germline-soma Communication During Follicular Growth *Hugh Clarke, McGill University*
2:30 PM–3:00 PM	The Biological Effects of the Ovarian Inflammasome *Karla Hutt, Monash University, Claytonk VC Australia*
3:00 PM–3:30 PM	Mammalian Reproductive Aging Using the Naked Mole Rat Model *Miguel A. Brieño-Enriquez, MD, PhD, Magee – Women's Research Institute, U. of Pittsburgh*
3:30 PM–4:00 PM	Coffee Break
4:00 PM–5:00 PM	Flash Session: Rising Star Trainee Talks
5:00 PM–6:00 PM	Poster Presentations *THE FORUM*

DADE Workshop **Ticketed Event* **12:45 PM–6:00 PM**

LIFFEY HALL 2

1:00 PM–1:30 PM	Embryo Metabolism & Mitoepigenetic Programming *Camila B. de Lima, PhD, Université Laval*
1:30 PM–2:00 PM	Multi-Omic Analysis of Embryo & Foetal Development *Maria B. Rabaglino, Ultrecht University*
2:00 PM–2:15 PM	The Oxidative Metabolism Dictates the Histone Lactylation Levels During In Vitro Maturation of Bovine Oocytes *João V. Alcantara da Silva, PhD candidate, Federal University of UFABC*
2:15 PM–2:30 PM	Identification of Transcriptomic and Associated DNA Methylation Changes Induced by the Oocyte In Vitro Maturation in Pig *Laura Abril-Parreño, Physiology of Reproduction Group, Department of Physiology, Faculty of Veterinary Medicine, International Excellence Campus for Higher Education and Research (Campus Mare Nostrum), University of Murcia//Institute for Biomedical Research of Murcia, IMIB-Pascual Parrilla, Murcia, Spain*

2:30 PM–3:00 PM	Coffee & Refreshments
3:00 PM–3:45 PM	Dog Developmental Programming *Sylvie Chastant-Maillard*
3:45 PM–4:15 PM	Heat Stress During Late Pregnancy: Placenta and Offspring Outcome *Geoff Dahl*
4:15 PM–4:30 PM	Epigeneticinsights into Fertility: Involvement of Immune Cell Methylation in Bovine Reproduction *Lotfi Bouzeraa, Laval University*
4:30 PM–5:00 PM	Illumina Sponsored Session
5:00 PM–6:00 PM	Cocktail Supper

Tuesday, July 16th

PRE-MEETING

Ovarian Workshop **Ticketed Event* **8:30 AM–11:45 AM**

THE LIFFEY A

8:30 AM–9:00 AM	The Role of Anti-Müllerian Hormone (AMH) in the Ovary *Jenny A. Visser, PhD, Erasmus MC, Rotterdam, The Netherlands*
9:00 AM–9:30 AM	Androgen Exposure on Early Follicle Development in the Human Ovary *Richard Anderson, MD Phd, University of Edinburgh*
9:30 AM–10:00 AM	New Facets of PR Signaling During Ovulation *Darryl Russell, University of Adelaide*
10:00 AM–10:15 AM	Coffee Break
10:15 AM–10:30 AM	Ovary-on-a-chip for Species Conservation *Jennifer Nagashima, The Smithsonian National Zoo and Conservation Biology Institute*
10:45 AM–11:15 AM	Ovary-on-a-chip to Understand Transmitted Signals to or from the Follicle *Shuo Xiao, PhD, Rutgers University*
11:15 AM–11:45 AM	Panel Discussion: Inclusivity in Research & Career Development
11:45 AM	Boxed Lunch Pick-Up

DADE Workshop **Ticketed Event* **8:30 AM–11:45 AM**

LIFFEY HALL 2

8:45 AM–9:15 AM	The Pioneer 100 Horse Health Project *Callum Donnelly*
9:15 AM–9:45 AM	Toxicology & Foetal Development *Almudena Veiga-Lopez*
9:45 AM–10:00 AM	Impacts of Sire Nutrition on Growth, Glucose Metabolism, And Ovarian Reserve of Ewe Lambs Managed at Two Rates of Body Weight Gain *Carl R. Dahlen, MS, PhD, North Dakota State University*
10:00 AM–11:45 AM	Coffee & Poster Session *THE FORUM*
11:45 AM–12:45 PM	**DADE Lunch** *LIFFEY HALL 2*

MAIN MEETING AGENDA

Trainee Grants Workshop — **11:00 AM–12:00 PM**
LIFFEY ROOM 1

Board Meeting **Invitation Only* — **11:45 AM–1:45 PM**

Trainee Forum **Ticketed Event* — **12:00 PM–1:00 PM**
THE LIFFEY B

Trainee Mentor Lunch **Ticketed Event* — **1:15 PM–2:15 PM**
WICKLOW HALL 2

Board & Committee Chair Meeting — **2:15 PM–3:15 PM**

Session Chairs & Program Chairs Meeting — **2:30 PM–3:15 PM**
THE LIFFEY B

Opening Ceremony & Keynote — **3:30 PM–5:45 PM**
THE AUDITORIUM

3:30 PM–3:45 PM
Welcome Remarks
Recognition of Award Recipients
- *Mahesh New Investigator Award*
- *Jansen Distinguished Leadership and Service Award Anita Payne FIR Scholarship Recipients*
- *Best International Abstracts*
- *Best Fundraisers*

3:45 PM–4:40 PM
Plenary Presentation:
Performance All the Way Down: How Queer Theory Informs Our Understanding of the Biology and Evolution of Reproduction *Richard Prum–Yale University*

4:40 PM–5:45 PM
BOR Review of the Year Award Recipient
Janice Bahr Junior Science Travel Award
Fuller W. Bazer International Scientist Award
Distinguished Fellows
Trainee Travel Awards
Carl G Hartman Award

Opening Reception @ The EPIC Museum — **7:00 PM–9:00 PM**
**Doors Open at 6:30 PM*

Wednesday, July 17th

Attendee Light Breakfast — **7:30 AM–9:15 AM**
THE FORUM

Breakfast for SSR Committees — **7:00 AM–8:00 AM**
WICKLOW HALL 2A & 2B

Poster Session A — **8:00 AM–9:45 AM**
THE FORUM

AM Focus Sessions — **10:00 AM–12:00 PM**

AM Focus Session 1 — Sex Chromosomes

THE LIFFEY B

Session Chair: Blanche Capel, PhD–Duke University

Session Co-Chair: Yuzuki Goto–Kyoto University

10:00 AM–10:30 AM Sex Chromosome Gene Regulation in the Male Germline
Julie Cocquet, PhD, Institut Cochin–Université Paris Cité

10:30 AM–11:00 AM The Mouse T-Haplotype: Masquerading as a Sex Chromosome
Jacob Mueller, PhD, University of Michigan Medical School

11:00 AM–11:15 AM Mice Sex Ratio Altered by Deletion of Y Chromosome Ssty2 Repetitions
María Maroto Oltra, PhD, INIA-CSIC

11:15 AM–11:30 AM Functionally Characterizing SYCP3-Related XLR3 Involvement in Male Meiosis and Mouse Spermatogenesis
Katelyn R. DeNegre, University of Connecticut

11:30 AM–11:45 AM Histone Demethylase Activity of UTX contributes to the Epigenetic Regulation of Sexual Spectrum
Mio Kojima, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University

11:45 AM–12:00 PM Unraveling the Regulatory Significance of Sperm Hypomethylated Regions in Mammalian Germline Development
Rexxi D. Prasasya, PhD, University of Pennsylvania

AM Focus Session 2 — John Eppig Symposium on Oocyte Quality and Function

THE AUDITORIUM

Session Chair: Alberto Maria Luciano, PhD–University of Milan

Session Co-Chair: Antonella Cáceres, PhD–IMBECU-CONICET

10:00 AM–10:30 AM Implication Of NAD+ Metabolism in Ovarian Aging
Carla Tatone, University of L'Aquila, L'Aquila (Italy)

11:00 AM–11:15 AM NEDDylation: An Essential Regulatory Pathway for Oocyte Quantity and Quality *Avery A. Ahmed, BS, BA, Baylor College of Medicine*

11:15 AM–11:30 AM Validating Hyper7 Sensors for Quantitative Hydrogen Peroxide Measurement in Bovine Oocytes
Maria Plevridi, MSc, Reproductive and Developmental Biology Laboratory (ReDBioLab), Department of Veterinary Medicine and Animal Sciences, University of Milan

11:30 AM–11:45 AM GDF9:BMP15 Complexes Identified in Ovarian Extracts
Robert B. Gilchrist, D.Sc., University of New South Wales

11:45 AM–12:00 PM Multiple Human Induced Pluripotent Stem Cell Lines Differentiated with a Ligand-Based Approach Recapitulate Granulosa Cell Development and Express Steroidogenic Pathway Genes
Hana Kubo, Northwestern University

AM Focus Session 3 — Fertilization and Embryogenesis

LIFFEY HALL 2

Session Chair: Savannah Speckhart, PhD–University of Kansas Medical Center

Session Co-Chair: Emma Jooni Grassi, MPH–University of Illinois Urbana-Champaign

10:00 AM–10:30 AM Identification of Key Embryonic Factors Facilitating Successful Reprogramming of Rabbit Induced Pluripotent Stem Cells and Production of Systemic Chimeras *Nathalie Beaujean, PhD, HDR, Stem Cell and Brain Research Institute*

10:30 AM–11:00 AM From Mechanisms to Millions: A Complex Systems Approach to Understanding Sperm Capacitation
Cameron A. Schmidt, PhD, East Carolina University

11:00 AM–11:15 AM GATA3 Ablation Reduces Ovine Epiblast Survival and Proliferation at Post-Hatching Stages
Inés Flores-Borobia, MsC, Animal Reproduction Department, INIA, CSIC

11:15 AM–11:30 AM Human Embryonic Mesoderm Originates from GATA6+/CDH1+ Embryonic Disc Cells
Auriana Arabpour, UCLA

11:30 AM–11:45 AM Molecular Profile of Founder Primordial Germ Cells in the Bovine Embryo
Carly Guiltinan, B.S., University of California, Davis

11:45 AM–12:00 PM From Cleavage to Pregnancy Loss: Insights into the First Mitotic Division and Its Implications for Developmental Potential, Pregnancy, And Early Embryonic Loss in Horses
Soledad Martin-Pelaez, DVM, Dip.ACT, School of Veterinary Medicine, University of California, Davis

AM Focus Session 4 — Environmental Effects

WICKLOW HALL 1B

Session Chair: Niamh Forde, PhD–University of Leeds

Session Co-Chair: Hannah E. Lyons Jr., Bsc–Robinson Research Institute and School of Biomedicine, The University of Adelaide

10:00 AM–10:30 AM Heat Stress-Induced Impacts on Ovarian Steroidogenesis, Folliculogenesis and The Response to Ovotoxicant Exposures.
Aileen Keating, PhD, Iowa State University

10:30 AM–11:00 AM Environment Matters–An Exploration of the Effects of Environment on Sexual Differentiation, Sex Determination and Reproduction
Neil J. Gemmell, PhD, University Of Otago

11:00 AM–11:15 AM Developmental Effects of in Utero and Lactational Exposure to Perfluoroundecanoic Acid (PFUdA) in a Mouse Model
Anne Marie Gannon, PhD, Health Canada

11:15 AM–11:30 AM Reproductive Seasonality Influences Follicle Dynamics and the Ovarian Extracellular Matrix Structural Properties in Ewes
Johanne Grosbois, PhD, The University of Edinburgh

11:30 AM–11:45 AM Early Preimplantation Alcohol Exposure: Developmental Effects and Persistent Epigenomic and Cognitive Implications
Serge McGraw, PhD, University of Montreal

11:45 AM–12:00 PM Altered DNA Methylation Causes Transgenerational Effects on Female Fertility and Reproductive Development Following Exposure to an Estrogenic Endocrine Disruptor *Deidre Mattiske, PhD, University of Melbourne*

AM Focus Session 5 — Evolution

THE LIFFEY A

Session Chair: Peter J. Ellis, PhD–University of Kent

Session Co-Chair: Eulalie Liorzou–Institut Pasteur, Universite de Paris, Comparative Functional Genomics group

10:00 AM–10:30 AM Pervasive Relaxed Selection on Spermatogenesis Genes Coincident with the Evolution of Polygyny in Gorillas
Vincent Lynch, PhD, University at Buffalo, SUNY

10:30 AM–11:00 AM How Meiosis Can Shape Sex Chromosome Evolution and Beyond
Aurora Ruiz-Herrera, PhD, Universitat Autonoma de Barcelona

11:00 AM–11:15 AM Oviductin Plays a Crucial Role in Establishing the Species-Specificity of Mammalian Fertilization
Alfonso Gutiérrez Adán, PhD, INIA-CSIC

11:15 AM–11:30 AM	A Newly Identified Cilium in Meiosis Mechanically Controls Chromosomal Pairing and Germ Cell Morphogenesis in Zebrafish, Mouse, And Human Fetal Ovarie *Yaniv M. Elkouby, PhD, The Hebrew University of Jerusalem Faculty of Medicine*
11:30 AM–11:45 AM	Rewired Regulatory Pathways Involving Retrotransposons Impact Reproduction and Preimplantation Development *Andrew J. Modzelewski, PhD, University of Pennsylvania*
11:45 AM–12:00 PM	Dampened HPG Axis Activity and Improved Reproductive Lifespan in Dummerstorf Superfertile Mouse Lines *Joachim Weitzel, PhD, FBN Dummerstorf*

AM Focus Session 6 — Epigenetic

Liffey Hall 1

Session Chair: Pat Lonergan

Session Co-Chair: Giulia Musmeci, MSc–Reproductive and Developmental Biology Laboratory (ReDBioLab), Department of Veterinary Medicine and Animal Sciences, University of Milan

10:00 AM–10:30 AM	The Role of Early Life Nutrition on the Physiological and Molecular Control of Sexual Development in Calves *David A. Kenny, PhD, Teagasc*
10:30 AM–11:00 AM	Epigenetic Dynamics in the Mammalian Germline *Kathleen Stewart-Morgan, PhD, University of Copenhagen*
11:00 AM–11:15 AM	Parallel Genotyping and DNA Methylation Profiling from Trophoblast Biopsies of Bovine IVP Embryos *Jessica Ispada, MSc PhD, Animal Biotechnology, AgResearch, Hamilton New Zealand*
11:15 AM–11:30 AM	Obesity in Mice Affects the Occurrence of Alternative Splicing Events in Oocytes and Early Embryo Development *António Galvão, Royal Veterinary College, University of London, UK*
11:30 AM–11:45 AM	Molecular Profile of Brains from IVF Offspring Using a Mouse Model *Cassidy N. Hemphill, University of Pennsylvania*
11:45 AM–12:00 PM	Maternal Obesity During Pregnancy Impacts Pancreatic DNA Methylation and Protein Expression in the Offspring *Maria L. Peterson, PhD, University of Rhode Island*

Diversity Lunch **Ticketed Event* **12:00 PM–1:15 PM**

WICKLOW HALL 2A & 2B

PM Focus Sessions **1:30 PM–3:00 PM**

PM Focus Session 7 — Sperm Quality and Function

LIFFEY HALL 2

Session Chair: Masahito Ikawa, PhD–Osaka University

Session Co-Chair: David Skerrett-Byrne, PhD–Helmholtz Zentrum München

1:30 PM–2:00 PM	Multiple Evaluation of Sperm Function: From Motility Assessment to Advanced Chromatin Analyses *Jordi Ribas-Maynou, PhD, Unit of Cell Biology and Medical Genetics, Department of Cell Biology, Phisiology and Immunology, Autonomous University of Barcelona*
2:00 PM–2:15 PM	Simultaneous High-Resolution Live Imaging of Cytoplasmic and Intracellular Calcium Store Dynamics in Progesterone-Induced Capacitated Mouse Sperm Acrosomal Exocytosis *Ana Romarowski, PhD, Instituto de Biologia y Medicina Experimental (IBYME-CONICET)*

2:15 PM–2:30 PM Electrophysiological Insights into Ionic Conductivity of Noncapacitated versus Capacitated Mice Spermatozoa
Dilip K. Swain, PhD, Lishko Lab, Department of Cell Biology and Physiology, Washington University in St. Louis, School of Medicine

2:30 PM–2:45 PM Spermatogenesis and Sperm Quality Protections under Nutritional Stress–Novel Roles of Melanoma Antigens
Klementina Fon Fon Tacer, DVM, PhD, Texas Tech University School of Veterinary Medicine, TC3R

2:45 PM–3:00 PM Sperm Motility In Mice With Oligo-Astheno-Teratozoospermia Restored By in Vivo Injection And Electroporation Of Naked mRNA
Jessica Escoffier, PhD, INSERM

PM Focus Session 8 — Ovary/Oocyte and Technologies

THE AUDITORIUM

Session Chair: Karen Schindler

Session Co-Chair: Dominika Kawka, M.Ed–Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences, Olsztyn, Poland

1:30 PM–2:00 PM Reconstructing Human Oocytes
Shoukhrat Mitalipov, Oregon Health & Science University, Center for Embryonic Cell and Gene Therapy

2:00 PM–2:30 PM Mechanisms of Spindle Positioning in Oocytes and Their Developmental Implications *(2023 Investigator Awardee) Ahmed Z. Balboula, PhD, University of Missouri*

2:30 PM–2:45 PM A Tug-Of-War Between Germ Cell Motility and Stable Intercellular Bridges *Determines Cyst Size in Mice. Eszter Posfai, PhD, Princeton University*

2:45 PM–3:00 PM The cGAS-STING Pathway is Functional in Ovarian Secondary Follicles and May Serve as an Active Surveillance Mechanism
Prianka H. Hashim, BS/BA, Northwestern University

PM Focus Session 9 — SRB Exchange Session on Placenta

THE LIFFEY A

Session Chair: Rachel West

Session Co-Chair: Giulia Avellino, MSc–University of Cambridge

1:30 PM–2:00 PM The Soluble Prorenin Receptor in Preeclampsia: A Potential Therapeutic Target
Kirsty G. Pringle, BSc, Phd, The University of Newcastle

2:00 PM–2:30 PM Trophoblast Stem Cell Models to Understand the Pathogenic Drivers of Fetal Growth Restriction
Joanna James, PhD, Department of Obstetrics and Gynaecology, Faculty of Medical and Health Sciences, University of Auckland

2:30 PM–2:45 PM High-Fat, High Sugar Feeding Interrupts Placental Lactogen Adaptation Signaling in a Murine Model of Gestational Diabetes Mellitus
Kathryn Storey, PhD, Smithsonian's National Zoo and Conservation Biology Institute

2:45 PM–3:00 PM Maternal Obesity is Associated with Global Reductions in Gene Expression including mRNAs thContribute to Cell Migration and Glucocorticoid Metabolism in the Mid-Gestation Mouse Placenta
Petra Rose, University of Nebraska-Lincoln

PM Focus Session 10 — Endometrium

LIFFEY HALL 1

Session Chair: Julie Kim

Session Co-Chair: Sydney Parks, B.A.–Baylor College of Medicine

1:30 PM–2:00 PM Endometriosis: New Insights and Opportunities for Relief of Symptoms
Philippa T. Saunders, PhD, FMedSci, FRSE, The University of Edinburgh

2:00 PM–2:15 PM Investigation of Receptor Tyrosine Kinases as Novel Drug Targets for Treatment of Endometriosis
Dominique Cope, Baylor College of Medicine–Houston, TX

2:15 PM–2:30 PM Progenitor Cells Responsible for Endometrial Regeneration Reside in the Uterus
Margaret Rush, MD, Hospital of the University of Pennsylvania

2:30 PM–2:45 PM Paternal MiR-146a Regulates Female Immune Receptivity to Embryo Implantation and Fetal Viability in Mice
Hon (Dexter) Y. Chan, PhD, The Robinson Research Institute, University of Adelaide, Australia

2:45 PM–3:00 PM From Ovary to Endometrium: Mapping Gene Expression Across Female Reproductive Tissues and Cells in Humans and Mice
Rachel Parkes, PhD, Department of Pathology & Immunology and Center for Drug Discovery, Baylor College of Medicine, Houston, TX

PM Focus Session 11 — Embryo Epigenetics

WICKLOW HALL 1

Session Chair: John McCarrey

Session Co-Chair: Katelyn DeNegre–University of Connecticut

1:30 PM–2:00 PM Inter- and Intra-Specific Variation in One Carbon Metabolism: Implications for Epigenetic Programming of Long-Term Development *Kevin D. Sinclair, PhD, DSc, University of Nottingham*

2:00 PM–2:15 PM Feeding Rumen-Protected Choline During the Peri-Conceptional Period Programs Postnatal Phenotype of Beef Calves *Masroor Sagheer, DVM, MS, Department of Animal Sciences, University of Florida*

2:15 PM–2:30 PM TET2 and TET3 Methylcytosine Dioxygenases Are Required for Blastocyst Implantation and Endometrial Decidualization *Magdalina Cummings, North Carolina State University*

2:30 PM–2:45 PM Epigenomic Crosstalk in H3K27Ac Regulation and RNAseq: An Integrative Approach Assessing Metabolically Modulated Bovine Embryos
Aldcejam Martins da. Fonseca Junior, DVM, MSC, Federal University of ABC 564

2:45 PM–3:00 PM Developmental Patterns and Gene Expression of Bovine Blastocysts Exposed to Imbalanced Energetic Levels *Giulia Musmeci, MSc, Reproductive and Developmental Biology Laboratory (ReDBioLab), Department of Veterinary Medicine and Animal Sciences, University of Milan*

PM Focus Session 12 — Exotic Animals

THE LIFFEY B

Session Chair: Suzannah Williams, PhD–University of Oxford

Session Co-Chair: Noemi Monferini, University of Milan

1:30 PM–2:00 PM Advanced Assisted Reproduction Technologies in Large Endangered Mammals *Thomas Bernd. Hildebrandt, DVM, Reproduction Management*

2:00 PM–2:30 PM Challenges and Joys of Working with Monotreme Reproduction
Jane C. Fenelon, PhD, Colossal Biosciences

2:30 PM–2:45 PM Indefinitely Preserving Mammalian Biodiversity Using Induced Pluripoten Stem Cells: Progress and Perspectives
Hannah N. Sylvester, B.S., Cornell University

2:45 PM–3:00 PM Luteinisation of Granulosa Cells In 3D Cell Culture from Southern White Rhinoceros *Michał M. Hryciuk, PhD, Leibniz Institute for Zoo and Wildlife Research*

Trainee Career Consultation Center **3:00 PM–3:30 PM**
LIFFEY ROOM 2

Exhibitor Networking Break **3:00 PM–3:30 PM**
THE FORUM

Plenary Session I **3:30 PM–5:00 PM**
THE AUDITORIUM

3:30PM–4:00 PM Mapping the Development and Regeneration of Reproductive Tissues
Roser Vento-Tormo, PhD, Wellcome Sanger Institute

4:30 PM–5:00 PM State-Of-The-Art-Lecture. Katsuhiko Hayashi

Trainee Platform Competition **5:30PM–7:00PM**
THE AUDITORIUM

Biology of Reproduction Reception **7:00PM–8:00PM**
**Invitation Only*
ECOCEM

Thursday, July 18th

Attendee Light Breakfast **7:30 AM–9:15 AM**
THE FORUM

BOR Assoc. Editors Breakfast **7:00 AM–8:00 AM**
**Invitation Only*
LIFFEY ROOM 1

Poster Session B **8:00 AM–9:45 AM**
THE FORUM

AM Focus Sessions **10:00 AM–12:00 PM**

AM Focus Session 13 — Spermatogenesis
THE LIFFEY A
Session Chair: Brian Hermann, PhD
Session Co-Chair: Martin Estermann, PhD–National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina

10:00 AM–10:30 AM Germ Granule-Mediated RNA Regulation during Spermatogenesis
Noora Kotaja, PhD, University of Turku

10:30 AM–11:00 AM Activin A Modulation of Reproductive Development and Pathology Through Impacts on Steroids and Lipids
Kate L. Loveland, PhD, Hudson Institute of Medical Research and Monash University

11:00 AM–11:15 AM Investigation of Undifferentiated Spermatogonial Population Dynamics in an Experimentally Tractable System
Brietta E. Latham, Washington State University

11:15 AM–11:30 AM Two Mouse Spag6 Genes Coordinate to Control Sperm Formation and Male Fertility *Wei Li, CS Mott Center*

11:30 AM–11:45 AM A New Device for Seminiferous Tubule Culture
Maki Kamoshita, PhD, Osaka University

11:45 AM–12:00 PM Towards a Map of Promoter Interactions During Male Germ Cell Development
Alberto de la iglesia, PhD, Université Paris Cité, INSERM, CNRS, Institut Cochin, Paris, France

AM Focus Session 14 — SRF Exchange Session on Oogenesis

LIFFEY HALL 2

Session Chair: Melissa Pepling, PhD–Syracuse University

Session Co-Chair: Brooke Rudloff, BA–University of Nebraska Lincoln

10:00 AM–10:30 AM Actin-dependent Mechanisms of Chromosome Segregation in Mammalian Oocytes *Binyam Mogessie, PhD, Yale University*

10:30 AM–11:00 AM Application of Imaging Mass Cytometry to Reveal Protein Networks in Competent and Non-Competent Meiosis I Oocytes
Suzanne Madgwick, PhD, Newcastle University

11:00 AM–11:15 AM Diminished Autophagy Activation Contributes to Weakened DNA Damage Repair in Full-grown Oocytes
Ahmed Z. Balboula, PhD, University of Missouri

11:15 AM–11:30 AM PHB/JAK Axis Regulates Meiotic Recombination via the Modulation of Histone Modifications in Spermatogenesis
Hong Chen, MD, PhD, Shanghai Medical College of Fudan University

11:30 AM–11:45 AM Single-Cell and Bulk Transcriptional Profiling of Mouse Ovaries Reveals Novel Genes and Pathways Associated with DNA Damage Response in Oocytes *Ewelina Bolcun-Filas, PhD, The Jackson Laboratory*

11:45 AM–12:00 PM Identification of New Targets for Non-Hormonal Contraceptive Drug Development Using a Phenotypic Assay of Murine Oocyte Meiotic Maturation *Jeffrey Pea, PhD, Northwestern University*

AM Focus Session 15 — Pregnancy: Implantation to Parturition

LIFFEY HALL 1

Session Chair: Pascale Chavatte-Palmer

Session Co-Chair: Deirdre Scully, PhD–Baylor College of Medicine

10:00 AM–10:30 AM Assisted Reproduction Technologies: Friend or Foe for Conceptus Attachment and Pregnancy Maintenance?
Stephen T. Butler, PhD, Teagasc

10:30 AM–11:00 AM Single Cell Multiome Analysis of the Bovine Placenta Identifies Gene Regulatory Networks in Trophoblast Differentiation
Kimberly M. Davenport, PhD, Washington State University and University of Missouri

11:00 AM–11:15 AM Transcriptomic Profiling Identifies Key Players in Myometrial Activation During Chronic Equine Placentitis
Hossam Elsayed, Ph.D, Mansoura University

11:15 AM–11:30 AM Estradiol-Induced Labor Initiation: Changes on Gene Expression of Maternal Uterine and Cervical Tissues in Periparturient Ewes
Bethania J. Davila Ruiz, North Dakota State University

11:30 AM–11:45 AM Embryo Developmental Potential Is Sensed by Receptivity-Related Transcriptional Networks in the Endometrial Epithelium
Peter T. Ruane, Dr, University of Manchester

11:45 AM–12:00 PM ACLY Regulates the Metabolic Control of Histone Acetylation to Promote Human Trophoblast Stemness
Giulia Avellino, MSc, University of Cambridge

AM Focus Session 16 — Trophoblast

THE LIFFEY B

Session Chair: Troy Ott, PhD–Penn State University

Session Co-Chair: Fernanda Fagali Franchi–University of Milan

10:00 AM–10:30 AM Bovine Beginnings: From Trophoblast Stem Cells to Placental Development *Vimal Selvaraj, B.V.Sc., M.S. PhD, Cornell University*

10:30 AM–11:00 AM Rethinking Pregnancy Recognition in Ruminants: Initial Insights on Pregnancy in Type I Interferon Receptor (IFNAR2) Knockout Ewes
Christopher J. Davies, DVM, PhD, Utah State University

11:00 AM–11:15 AM Cell-Type Specific Transcriptomic Changes Associated with Maternal Obesity in Term Human Placenta
Fatima Gunter-Rahman, B. S., MIT

11:15 AM–11:30 AM Exposure Of Trophoblast Cells to the Antiretroviral Drug Dolutegravir Impairs MMP Activity and Cytokine Release
Mona H. Al-Mugotir, PhD, University of Nebraska Medical Center

11:30 AM–11:45 AM Microbial-Derived Tryptophan Metabolites Alter Trophoblast Differentiation and Metabolism Through G-Protein Coupled Receptors (GPCRs)
Priscilla Day-Walsh, PhD, University of Cambridge

11:45 AM–12:00 PM 3D-Cultured Human Blastoids Model Trophoblast Expansion, Diversification, and Invasion During Post-Implantation Development
Rowan M. Karvas, PhD, Washington University in St. Louis

AM Focus Session 17 — Toxicology

WICKLOW HALL 1

Session Chair: Geraldine Delbes, PhD–Institut National de la Recherche Scientifique

Session Co-Chair: Eric A. Rhon-Calderon–Epigenetics Institute, Department of Cell and Developmental Biology, University of Pennsylvania

10:00 AM–10:30 AM Bovine and Porcine In Vitro Embryo Production (IVEP) and Confocal Laser Scanning Microscopy of Blastocysts in Toxicity Testin
Ylva CB. Sjunnesson, Swedish University of Agricultural Sciences SLU

10:30 AM–11:00 AM Ovarian Impact of Forever Chemical Per- and Polyfluoroalkyl Substances
Shuo Xiao, PhD, Rutgers University

11:00 AM–11:15 AM Understanding the Impact of Estrogen and Endocrine-Disrupting Chemicals (EDCs) On the Mammary Gland Metabolism Using Mammary Epithelial Cell in Two- and Three-Dimensional Cultures
Aurélie Lacouture, MSc, Centre de Recherche du CHU de Québec–Université Laval

11:15 AM–11:30 AM Cannabis Consumption Impacts Human Embryo Euploid Rates
Brandon Wyse, MSc, CReATe Fertility Centre

11:30 AM–11:45 AM Environmentally Relevant Concentrations of Individual Per- And Polyfluoroalkyl Substances (PFAS) and a PFAS Mixture Impacts Proliferation and Gene Transcription in a Human Myometrial Cell Line
Kendra L. Clark, PhD, University of Nebraska Medical Center

11:45 AM–12:00 PM Influence of Gut Microbiome and Diisononyl Phthalate (DiNP) Exposure on Uterine Development in Mice
Sarah Ibrahim, PhD, University of Illinois Urbana Champaign

WinRS Lunch **Ticketed Event* **12:00 PM–1:15 PM**

WICKLOW HALL 2A & 2B

12:15 PM – 1:15 PM Tools for Combating the Imposter Syndrome
Invited Oral Speaker: Judy Williams, Queen's University Belfast

PM Focus Sessions **1:30 PM–3:00 PM**

PM Focus Session 18 — Male Fertility

THE LIFFEY A

Session Chair: Ali Fouladi, DVM, MSc, PhD–Department of Comparative Biomedical Sciences, The Royal Veterinary College

Session Co-Chair: Macarena Gonzalez, PhD–Robinson Research Institute, School of Biomedicine, The University of Adelaide

1:30 PM–2:00 PM Sperm Transport Across the Ovine Cervix; Do Norwegian Sheep Hold the Answer?
Sean Fair, Prof, Principal Investigator, University Of Limerick

2:00 PM–2:15 PM Hyper-7 Sensor: A Novel Tool for Unveiling the Role for Unveiling the Role of Hydrogen Peroxide in Bovine Zygotes
Sai Kamal Nag Bonumallu, MSc, Reproductive and Developmental Biology Laboratory (ReDBioLab), Department of Veterinary Medicine and Animal Sciences, University of Milan

2:15 PM–2:30 PM Investigating the Role of the Sperm Centrioles in Rabbit Reproduction
Katerina Turner, BS, University of Toledo

2:30 PM–2:45 PM Structural Snapshots of the Sperm Acrosomal Matrix and Its Disassembly
James A. Foster, PhD, Randolph-Macon College

2:45 PM–3:00 PM Generation of a Rat Nanos2 Knockout Model for Spermatogonial Stem Cell Transplantation and Xenotransplantation
Miranda L. Bernhardt, PhD, Washington State University

PM Focus Session 19 — William Hansel Session on Ovarian Biology

LIFFEY HALL 2

Session Chair: Serge McGraw, PhD–University of Montreal

Session Co-Chair: Prianka Hashim, BS/BA–Northwestern University

1:30 PM–2:00 PM Decoding the Transcription Circuitry When the Life Begins
Wei Xie, Tsinghua University

2:00 PM–2:15 PM Understanding The Functional Impact of Modulating Luteinizing Hormone Receptor (LHR) Oligomerisation in the Murine Ovary
Thomas R. Hopkins, PhD, King's College London

2:15 PM–2:30 PM LRH-1: The Master Regulator of Lipid Metabolism in Luteal Cells
Florence Gagnon, Université de Sherbrooke

2:30 PM–2:45 PM AMH Induces a Reversible Quiescence-Associated Secretory Phenotype in Preantral Follicles *Marie-Charlotte L. Meinsohn, PhD., Massachusetts General Hospital*

2:45 PM–3:00 PM In Vivo Dynamics of Mouse Ovulation and Oocyte Transport *Kohei Umezu, PhD, Baylor College of Medicine*

PM Focus Session 20 — Immunology

WICKLOW HALL 1

Session Chair: John Bromfield, PhD–University of Florida

Session Co-Chair: Hon Chan, PhD–The Robinson Research Institute, University of Adelaide

1:30 PM–2:00 PM Dispelling Misconceptions Regarding Pregnancy Pathophysiology Using Insights from the Horse *Amanda de Mestre, BVSc (hons) PhD MRCVS FHEA, Baker Institute for Animal Health*

2:00 PM–2:15 PM Repeated Seminal Fluid Exposures Progressively Expand the Female Reproductive Tract Regulatory T Cell Pool in Mice *Sarah A. Robertson, PhD, University of Adelaide*

2:15 PM–2:30 PM Effects of Heat Stress on the Immune Response of Bovine Endometrial Epithelial Cells in Dairy Cows *Arslan Tariq, University of Florida*

2:30 PM–2:45 PM Single Cell RNA Sequencing and Multiplex Flow Cytometry Reveal Dynamic Changes in Immune Cell Composition and Function During Menstruation *Rebecca J. Ainslie, MScR, University of Edinburgh*

2:45 PM–3:00 PM Seminal Fluid Histocompatibility Antigens Contribute to T Cell Priming After *Mating in Mice. Ha M. Tran, University of Adelaide*

PM Focus Session 21 — Reproductive Tract Organoids

THE LIFFEY B

Session Chair: Constantine Simintiras, PhD–Louisiana State University

Session Co-Chair: McKenna Crossen–University of Wisconsin-Madison

1:30 PM–2:00 PM Mechanisms of Uterine Epithelial Specification: Insights from Organoid Culture *Andrew M. Kelleher, PhD, Assistant Professor, University of Missouri*

2:00 PM–2:15 PM Melatonin and Resveratrol Alleviate Molecular and Metabolic Toxicity Induced by Bisphenol a In Endometrial Organoids *Islam M. Saadeldin, PhD, King Faisal Specialist Hospital and Research Center, Mariam Abady*

2:15 PM–2:30 PM Evaluation of Extracellular Vesicles Secreted by Mouse Oviductal Organoids for Loading With CRISPR-Cas9 Ribonucleoproteins *Riley Thompson, DVM, PhD, Diplomate ACT, Colorado State University*

2:30 PM–2:45 PM Establishment of In Vitro Implantation Model Using Newly Developed Endometrial Organoid *Taishi Fujimura, Medical doctor, Yamaguchi University Graduate School of Medicine*

2:45 PM–3:00 PM Transcriptomic Characterization and Effect of Reproductive Cycle on Equine Endometrial Organoids: A Tool for Exploring Embryo-Endometrium Crosstalk *Margo H. Verstraete, DVM, Ghent University and University of California Davis*

PM Focus Session 22 — Artificial Intelligence

LIFFEY HALL 1

Session Chair: Marc-André Sirard, DMV, PhD

Session Co-Chair: Deidre Logsdon, PhD–University of Colorado at Boulder

1:30 PM–2:00 PM	Application of Artificial Intelligence in the IVF Laboratory *Charles L. Bormann, PhD, HCLD, Massachusetts General Hospital*
2:00 PM–2:15 PM	3D Approximation of the Expression of Lineage-Specific Markers of Inner Cell Mass (SOX2, OCT4 And Trophectoderm (CDX2) In Mouse Blastocysts *Lyda Yuliana Parra Forero, PhD, Department of Animal Sciences, University of Illinois Urbana-Champaign*
2:15 PM–2:30 PM	Deep Learning, Label-Free Sperm Plasma Membrane Integrity Diagnostics *Ian J. Shofner, Iowa State University*
2:30 PM–2:45 PM	Puberty Classifications In Beef Heifers Are Moderate To Highly Heritable And Associated With Single Nucleotide Polymorphisms From Candidate Genes Related To Cyclicity And Timing Of Puberty *Mackenzie D. Stohlmann, University of Nebraska-Lincoln*
2:45 PM–3:00 PM	OoCount: A Deep-Learning Based Approach To Mouse Ovarian Follicle Counting And Classification *Lillian Folts, B.S., University of Colorado Anschutz Medical Campus*

Trainee Career Consultation Center — **3:00 PM–3:30 PM**

LIFFEY ROOM 2

Exhibitor Networking Break — **3:00 PM–3:30 PM**

THE FORUM

Plenary Session II — **3:30 PM–5:00 PM**

THE AUDITORIUM

3:30 PM–4:00 PM	An Engineered Cohesion System Reduces Errors in Aged Mammalian Eggs *Melina Schuh, Prof. Dr., Max Planck Institute for Multidisciplinary Sciences*
4:00 PM–4:30 PM	Presentation of Jansen SSR Distinguished Leadership and Service Award and SSR Trainee Mentor Award
4:30 PM–5:00 PM	Live-Imaging the Preimplantation Embryo *Nicolas Plachta, PhD, UPenn*

New Investigator Mixer — **6:00 PM–7:30 PM**

**Invitation Only*

CAFÉ ON SEINE

Trainee Mixer **Ticketed Event* — **6:00 PM–8:00 PM**

URBAN BREWING

Past President's Reception — **8:00 PM–10:00 PM**

**Invitation Only*

5TH FLOOR AUDITORIUM FOYER

Friday, July 19th

President's Breakfast **7:00 AM–7:45 AM**
**Invitation Only*

LIFFEY ROOM 1

Attendee Light Breakfast **7:30 AM–9:15 AM**

THE FORUM

Poster Session C **8:00 AM–9:45 AM**

THE FORUM

AM Focus Sessions **10:00 AM–12:00 PM**

AM Focus Session 23 — Yanagimachi Session on Assisted Reproduction Technologies

THE LIFFEY A

Session Chair: Monika Ward, PhD–Institute for Biogenesis Research, University of Hawaii

Session Co-Chair: Tatiane Maia–University of Florida

10:00 AM–10:30 AM Assisted Reproductive Techniques in Mice and Hamsters–Past, Present, and Future *Atsuo Ogura, PhD, DVM, RIKEN BioResource Research Center*

10:30 AM–11:00 AM I Aim to Be a Researcher Who Inherited Dr. Yanagimachi's Genes
Teruhiko Wakayama, PhD, University of Yamanashi

11:00 AM–11:15 AM SPACE SPERM–The Importance of Gravity in Sperm Navigation, Fertilisation and Early Embryo Eormation
Hannah E. Lyons, Bsc, Robinson Research Institute and School of Biomedicine, The University of Adelaide

11:15 AM–11:30 AM Calcium Oscillations: The Egg's Elevator Pitch at Fertilization
Virginia Savy, PhD, Reproductive and Developmental Biology Laboratory, National Institute of Environmental Health Sciences

11:30 AM–11:45 AM Neurodevelopmental (ND) Changes in Mice Obtained Following In Vitro Culture of Embryos Conceived at Advanced Paternal Age (APA)
Kinga Fic, PhD, Malopolska Centre of Biotechnology Jagiellonian University

11:45 AM–12:00 PM Novel Therapies to Protect Sperm Quality in ART
Macarena Gonzalez, PhD, Robinson Research Institute, School of Biomedicine, The University of Adelaide

AM Focus Session 24 — Ovary/Oocyte

LIFFEY HALL 2

Session Chair: Camila de Lima, PhD–Université Laval

Session Co-Chair: Florence Gagnon–Université de Sherbrooke

10:00 AM–10:30 AM Lipid Profile Changes in the Egg–Causes and Consequences
Grazyna E. Ptak, Jagiellonian University in Kraków

10:30 AM–10:45 AM Effect of Highly Expressed Intrauterine MicroRNAs in Low-Fertility Cows on Embryo Gene Expression
Rei Ichikawa, MA, Laboratory of Animal Production Science, Graduate School of Bioagricultural Sciences, Nagoya University

10:45 AM–11:00 AM RGD-Modified Dextran Hydrogel Promotes Follicle Growth and Theca Cell Migration Through Integrins v3/v5 in Three-Dimensional Culture
Yukiko Yamazaki, PhD, Institute for Biogenesis Research, Department of Anatomy, Biochemistry and Physiology, John A. Burns School of Medicine, University of Hawaii at Manoa

11:00 AM–11:15 AM Like Mother, Like Daughter: Multigenerational Effect of Early-Life Malnutrition on Female Mice Phenotype and Oocyte Energetic Capacity
Dominika Kawka, M.Ed, Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences, Olsztyn, Poland

11:15 AM–11:30 AM Defining The Function of Tubulin Post-Translational Modifications in Mammalian Oocyte Meiosis
Madison Gowett, MS, Yale University

11:30 AM–11:45 AM Investigating Ribosome Dynamics in the Aging Mammalian Oocyte
Anna M. Galligos, B.S., Stowers Institute for Medical Research

11:45 AM–12:00 PM Differential Expression of Mitochondrial Function-Related Genes After In Vivo And In Vitro Maturation of Bovine Cumulus-Oocyte Complexes
Camilla Benedetti, Master in Reproductive Biotechnology, Ghent University

AM Focus Session 25 — Embryo Models

LIFFEY HALL 1

Session Chair: Harry Leitch, MB/PhD–Great Ormond Street Hospital
Session Co-Chair: Sai Kamal Nag Bonumallu, MSc–University of Milan

10:00 AM–10:30 AM Synthetic Ex Utero Embryogenesis: From Naive Stem Cells to Complete Embryo Models
Jacob Hanna, MD, PhD, Weizmann Institute of Science

10:30 AM–11:00 AM Bioengineering Human Embryo and Organ Models
Jianping Fu, PhD, University of Michigan, Ann Arbor

11:00 AM–11:15 AM Mechanical YAP1 Function Safeguards Amnion Fate from the Early Human Embryonic Lineages
Amber Carleton, Medical College of Wisconsin

11:15 AM–11:30 AM TET2-Mediated ENPEP Activation Is Required for Trophoblast Cell Differentiation
Yin Lau Lee, PhD, The University of Hong Kong

11:30 AM–11:45 AM Single-Cell RNA-Seq Reveals the Earliest Lineage Specification and X Chromosome Dosage Compensation in Bovine Preimplantation Embryos
Hao Jin, Laboratory of Mammalian Molecular Embryology, College of Animal Sciences, Zhejiang University

11:45 AM–12:00 PM Pcgf5 Transcribed from Endogenous Retroviral Element Has Important Functions in Mouse Preimplantation Embryos
Satoshi Mashiko, M.Ed., Reproductive Biology, Graduate School of Agriculture, Kyoto University

AM Focus Session 26 — Uterine Biology

WICKLOW HALL 1

Session Chair: Agnieszka Waclawik, PhD–Institute of Animal Reproduction and Food Research of Polish Academy of Science
Session Co-Chair: Sarah Ibrahim, PhD–University of Illinois Urbana Champaign

10:00 AM–10:30 AM Müllerian Duct Biology in Development and Reproduction
Richard R. Behringer, PhD, University of Texas MD Anderson Cancer Center

10:30 AM–11:00 AM Dysregulation of Insulin Signaling in the Uterine Stroma Impacts Pregnancy Establishment and Maintenance
James A. MacLean II, PhD, Washington State University

11:00 AM–11:15 AM γδT Cells Are a Major Constituent of the Uterine Immune Response to Seminal Fluid Exposure in Mice
Kerrie L. Foyle, PhD, The University of Adelaide

11:15 AM–11:30 AM The Impact of Negative Energy Balance Mediated by Extracellular Vesicles on Uterine Environment in Dairy Cows
Juliana Germano Ferst, PhD, University of São Paulo / University College Dublin

11:30 AM–11:45 AM Investigating The Impact Of Experimentally-Induced Endometriosis On Ovarian Function And Fertility
Meaghan Griffiths, PhD, University of Edinburgh

11:45 AM–12:00 PM Defining the Human Endometrial Stem/Progenitor Cell Atlas
Harriet C. Fitzgerald, PhD, Hudson Institute of Medical Research and Monash University

AM Focus Session 27 — Cha Health System Sponsored Session on New Technologies

THE LIFFEY B

Session Chair: Monica Laronda, PhD, Northwestern University

Session Co-Chair: Ian Shofner–Iowa State University

10:00 AM–10:30 AM Dynamic In Vivo Investigation Of The Fallopian Tube Physiology Eggs, Sperm, And Cilia
Irina V. Larina, PhD, Baylor College of Medicine

10:30 AM–11:00 AM Fluidics and AI for Fertility
Reza Nosrati, PhD, Monash University

11:00 AM–11:15 AM Disruption of Reproductive Function In Vivo and Ex Vivo Using a Novel CRISPR/Cas13d Mouse Model
Stephanie Tanis, MSc, Cornell University

11:15 AM–11:30 AM 3DMOUSEneST: A Method for Evaluation of Decidualization Efficacy in Mice Using Three-Dimensional, Label-Free Higher Harmonic Generation Microscopy
Audrey Savolainen, MSc, University of Oulu

11:30 AM–11:45 AM Microfluidic Chips to Study Ovulation Reveal Novel Mechanism Regulation of Tumor Suppressors in Primary Human Fallopian Tube Tissue
Joanna Burdette, PHD, University of Illinois Chicago

11:45 AM–12:00 PM Safe Magnetic Force-Based Technique to Select Pig Mature Eggs
Maria Jiménez-Movilla, University of Murca

Heritage Lunch **Ticketed Event* **12:00 PM–1:15 PM**

WICKLOW HALL 2A & 2B

PM Focus Sessions **1:30 PM–3:00 PM**

PM Focus Session 28 — Gates Foundation Sponsored Session on Contraception

THE LIFFEY A

Session Chair: Paula Cohen, PhD, Cornell University

Session Co-Chair: Philippe Godin, DMV, PhD–Massachusetts General Hospital

1:30 PM–2:00 PM sAC Inhibitors as Potential Nonhormonal On-Demand Contraceptives for Men
Lonny R. Levin, PhD, Weill Cornell Medicine

2:00 PM–2:15 PM Investigating Genes Regulated by BRDT In Vitro For Non-Hormonal Male Contraception *Leah E. Simon, MS, Cornell University, Ithaca, NY*

2:15 PM–2:30 PM Knockout of PKDREJ, A Candidate Oviduct Receptor on Porcine Sperm, Reduces Fertility Assessed by Competitive Insemination
Kankanit Doungkamchan, University of Illinois at Urbana-Champaign

2:30 PM–2:45 PM The Epididymis: Balancing The Burden & Responsibility of Fertility
David A. Skerrett-Byrne, PhD, Helmholtz Zentrum München

2:45 PM–3:00 PM Absence Of Eppin and Its Closely Related Wap Four-Disulfide Core Genes Wfdc6A, Wfdc8, And Wfdc6B Leads to Defects in Spermatid Elongation and Male Sterility in Mice *Katarzyna Kent, B.S., Baylor College of Medicine*

PM Focus Session 29 — Ovary and Time

LIFFEY HALL 2

Session Chair: Stephanie Pangas, Baylor University

Session Co-Chair: Caitlin E. Ross, PhD Candidate–University of Nebraska–Lincoln

1:30 PM–2:00 PM Why X-Chromosome Dosage Control Exists During Mouse Oocyte Development
Bernhard Payer, PhD, Centre for Genomic Regulation (CRG)

2:00 PM–2:15 PM Revealing the Secrets of Ovulation.
Christopher Thomas, PhD, Max Planck Institute for Multidisciplinary Sciences

2:15 PM–2:30 PM Delineating Changes In The Hippo Pathway with Aging Towards Ovary Matrix Modifications
Dipanwita Das, DVM, M.V.Sc (Vet Path), University of Nebraska Medical Center

2:30 PM–2:45 PM Defining the Cell and Molecular Origins of the Primate Ovarian Reserve
Sissy E. Wamaitha, PhD, UCLA Department of Molecular, Cell and Developmental Biology

2:45 PM–3:00 PM The Age-Associated Increase in Ovarian Stiffness Impairs Follicle Development and Oocyte Quality Through Early Modulation of Follicles' Transcriptome
Sara Pietroforte, PhD, Washington University in St. Louis

PM Focus Session 30 — Germ Cells

THE LIFFEY B

Session Chair: Moira O'Bryan, Monash University

Session Co-Chair: Wei Li–CS Mott Center

1:30 PM–2:00 PM Germ Cell Specification and Development
Ramiro Alberio, PhD, University of Nottingham

2:00 PM–2:30 PM Determining The Potency of Primordial Germ Cells by Injection into Early Mouse Embryos *Harry G. Leitch, MB/PhD, Great Ormond Street Hospital*

2:30 PM–2:45 PM The Combined Action of Transcription Factors FOXL2 and RUNX1 Overrides the Testis Program to Enforce Granulosa Cell Differentiation During Gonad Differentiation
Barbara Nicol, PhD, NIEHS / NIH

2:45 PM–3:00 PM Confirmation of Embryonic Donor-Derived Germline Stem Cell Migration, Colonization, and Proliferation within Host Gonads
Kendra Roberts, Wells College

PM Focus Session 31 — Virendra B. Mahesh Session on Neuroendocrinology

LIFFEY HALL 1

Session Chair: Casey Nestor, PhD–North Carolina State University

Session Co-Chair: Yeu-Farn Lin–McGill University

1:30 PM–2:00 PM Mechanisms for Suppression of Gonadotropin Secretion During Stress in Mice
Richard McCosh, PhD, Colorado State University

2:00 PM–2:15 PM Serum Concentrations of Luteinizing Hormone (LH) and Follicle Stimulating Hormone (FSH) in KISS1 Knockout Gilts Treated with Neurokinin B, Kisspeptin, and GnRH Hormone Analogs
Clay Lents, PhD, Dpl ACAS, USDA, ARS, US Meat Animal Research Center Clay Center

2:15 PM–2:30 PM Secretoneurin: A Paracrine Regulator of Gonadotrope Cyclicity
Ashley Herdman, University of Arkansas for Medical Sciences

2:30 PM–2:45 PM Regulation of Follicle-Stimulating Hormone β Subunit Transcription by Newly Discovered Enhancers
Yangfan Jin, McGill University

2:45 PM–3:00 PM High Androstenedione Cows Have Increased Endocrine Hormones and Inflammatory Factors which may Contribute to Persistent Follicles Resulting in Anovulation
Brooke Rudloff, BA, University of Nebraska Lincoln

PM Focus Session 32 — Fertility Preservation

WICKLOW HALL 1

Session Chair: Kyle Orwig

Session Co-Chair: Jeong-Won Bae, MS–Kyungpook National University

1:30 PM–2:00 PM Fertility Preservation: Twenty-Five Years of Bold Progress
Kutluk H. Oktay, MD, PhD, Yale University

2:00 PM–2:15 PM Development of Microbead-Based Human Sperm Binding Assay
Julieta G. Hamze, PhD, University of Murcia

2:15 PM–2:30 PM The Growing Follicle Protection During the Chemotherapy Exposure Using Functionalized Gold Nanoparticle (AuNP)-Mediated Let-7A Delivery
Camille A. Pavoncelli, Master, ULB

2:30 PM–2:45 PM Propranolol Treatment Activates Murine Primordial Follicles In Vitro and In Vivo
Paulo HA. Campos-Junior, Universidade Federal de São João Del Rei

2:45 PM–3:00 PM A Wild Semen Bank for African Elephants
Susanne Holtze, PhD in biology, veterinarian, Leibniz Institute for Zoo and Wildlife Research

Exhibitor Networking Break **3:00 PM–3:30 PM**

THE FORUM

Plenary Session III **3:30 PM–5:00 PM**

THE AUDITORIUM

3:30 PM–4:00 PM President's Invited Lecture–The Genetics of Epigenetic Variation
(Cha Health System Sponsored) Anne Ferguson-Smith, PhD, University of Cambridge

4:00 PM–4:30 PM Epigenetics: A Game-Changer in Livestock Production
Marcella Pecora Milazzotto, PhD, Federal University of ABC

4:30 PM–5:00 PM Testis-Enriched Genes and Their Function in Spermatogenesis and Sperm Function
Masahito Ikawa, PhD, Osaka University

Annual Business Meeting & Trainee Competition Awards **5:00 PM–6:00 PM**

THE AUDITORIUM

Closing Banquet & Reception **7:00 PM–10:00 PM**

THE FORUM

POSTER SESSIONS

Poster Author(s), Institution(s), and credentials can be searched in the mobile app and website.

Assisted Reproductive Technologies

P-1 The Effect Of Resveratrol On The Developmental Competence Of Feline Oocytes After Vitrification

P-2 Tests Préimplantatoires Non Invasifs Pour L'Étude Des Aneuploïdies Embryonnaires

P-3 Semen Collection From Rhinoceros During Standing Sedation

P-4 Oestrus Synchronization: A Tool For Sustainable Breeding And Conservation Program In Smallholder Sheep Farming

P-5 Improved Detection Method Of Estrus Behaviors In Individually Housed Kiko Goats Using Yolov8

P-7 Jnj-7706621 Treatment During The Post-Activation Period Enhances The Developmental Competence Of Mouse Somatic Cell Nuclear Transfer Embryos

P-8 Beyond Mommies And Daddies: Mental Health Needs Of Gender Expansive Patients

P-9 Identification Of Bioactive Small Molecules Altering Endometrial Receptivity And Embryo Implantation In Vitro And In Vivo

P-10 Effect Of Lactate, Ph And Microbiomes In Regulating Human Endometrial Receptivity And Pregnancy Outcomes

P-11 Using A Time-Lapse System To Examine The Association Between Morphokinetic Patterns And Bovine Embryo Gender

P-12 Investigations On Antimicrobial Properties Of Stallion Seminal Plasma

P-14 Sperm Capacitation Status Correlation With Porcine Ivf Cleavage Rates

P-15 Studies On The Impact Of Hyaluronidases And Low Molecular Weight Hyaluronan On Preimplantation Embryo Development, Morphokinetics, Pregnancy And Live Birth Rates In Sheep

P-16 Pre-Stimulation Level Of Serum Anti-Müllerian Hormone Is Associated With Subsequent Quality Of Ovarian Response To Ecg/Plh In The Domestic Cat (Felis Catus)

P-17 Normal Rates Of Pregnancy And Foaling Achieved Following Transfer Of Large Expanded Equine Blastocysts Vitrified After Blastocoele Collapse

P-18 Novel Therapies To Protect Sperm Quality In Art

P-19 Preimplantation Development of Bovine IVF Embryos Obtained from the Blastomere Separation at 2-Cell Stage and Gene Expression Homology In Pair Demi-Blastocysts

P-20 Exploring the Influence of Extracellular Vesicle Supplementation on the Equine Oocyte Fertilization Rate After ICSI

P-21 Reprogramming Conditions For Induced Pluripotent Stem Cells Using Immortalized Mink Cells

P-22 Glycaemic Response in Pigs Derived From Assisted Reproductive Technologies: A Long Term Follow-Up Study

P-23 Predicting the Success of Laparoscopic Artificial Insemination in Sheep

P-24 Microfluidic Sperm Selection Improves Number And Quality of In Vitro Produced Bovine Embryos

P-25 Gene Editing Affects Embryo Quality in Rhesus Macaques

P-26 Efficiency of The Cryoeyelet® Device in Simultaneously Vitrifying Large Numbers of Mouse Oocytes

P-27 Assessing Cryotolerance in Rabbit Embryos Across Three Consecutive Generations: The Impact of Vitrification On Offspring

P-28 Morphokinetics as a Tool To Identify Embryos With Superior Ability to Survive Cryopreservation

P-29 Changes in Liver Metabolism in Mouse Offspring Born After In Vitro Embryo Culture

P-30 Long-Term Phenotypical Implications of Assisted Reproductive Technologies in Cattle

P-31 Non-Invasive Targeted Gene Knockdown of Gdf9 and Bmp15 Genes With Lna™ Gapmers: Implications for Bovine Embryo Development

P-33 Toward Decoding Sub-Fertility in Boars

P-34 The Correlation Between Anti-Müllerian Hormone and Antral Follicle Count in Mares Undergoing Estrous Cycle Manipulation

P-35 Development of Non-Invasive Cervical Insemination in Rhesus Macaques

P-36 Impacts of Immunomodulatory Feed Supplementation on Ovum Pick-Up Collections in Beef Cattle

P-37 Preliminary Study of Sex Hormone Levels Throughout the Estrous Cycle in the Saliva of 4.5-Year-Old Sows Born By Art

P-38 Comparative Application of a Natural, Sustainable Plant Extract With Antimicrobial Properties in Fish, Rooster, Bull, and Boar Spermatozoa

P-39 Incidence and Timing of Pregnancy Loss Following Timed Artificial Insemination or Timed Embryo Transfer With a Fresh or Frozen In Vitro Produced Embryo

P-40 Sperm Injection At The Para-Polar Body Site In Piezo-Icsi Improves The Survival Rate Of Treated Metaphase Ii Oocytes.

P-41 Quercetin Affects Boar Sperm Motility During Refrigerated Storage

P-42 In Vitro Embryo Production Alters The Liver Transcriptome Preferentially In Female Compared To Male Calves

P-43 Assessing Developmental Competence Through Mirna Markers In Aneuploid Human Blastoids

P-44 Functional Capacitation Of Stallion Sperm Promotes Interspecies Embryo Chimerism And Equine In Vitro Blastocyst Development From Cryopreserved Sperm

P-45 Effects Of The Supplementation Of In Vitro Maturation Media With Fatty Acid Binding Protein On The In Vitro Developmental Rates Of Bovine Embryos

Education/Research

P-46 Healthcare Provider Perspective on In-Vitro-Fertilization and Inclusivity in Reproductive Healthcare

P-47 From Lab to Clinic: Mastering Reproductive Health through the MS in Reproductive Science and Medicine Program

P-48 Revolutionizing Female Fertility: Pioneering In-Vitro Culture of Multiple Ovarian Follicles on a Reproductive Tissue Engineering Scaffold for the Advancement of Transplantable Artificial Ovaries

Embryo/Fetus

P-49 Pyruvate Carboxylase Mediated Macrophage Polarization Regulatemale Reproductive Function Under High-Fat Diet

P-50 Developing Nanotechnology Based Lateral Flow Bioassay Capturing Pregnancy Circulatory Microrna
for Early Pregnancy Diagnosis In Buffaloes

P-51 LEUTX Regulates Non-Rodent Mammalian Embryonic Genome Activation And Somatic Cell Reprogramming

P-52 Processes And Pathways Associated With In Vivo Derived And In Vitro Produced Male And Female Bovine Conceptus Proteins

P-53 Exploring Sex Differences In Prenatal Human Fetal Mammary Bud Development

P-55 Chemerin In Egg White, Oviduct And During The Embryo Development In Pekin Duck

P-56 Metabolic Enhancement Of Mammalian Developmental Pausing

P-57 Effects Of Superovulation With Follicle-Stimulating Hormone On Embryo Production And Cryopreservation

P-59 Assessment Of Responsiveness And Sensitivity Of The Spindle Assembly Checkpoint During The First Cell Division Of The Human Embryo

P-60 Investigating The Presence Of Acetylated Histone Post-Translational Modifications In Bovine Preimplantation Embryos

P-61 TEAD3 And TEAD4 Exhibit Redundant Roles In Morula-To-Blastocyst Transition During Bovine Early Embryonic Development

P-63 Identification Of Amnion Progenitor-Like Cells At The Amnion-Epiblast Boundary In The Primate Peri-Gastrula

P-64 Pronuclear Migration In Zygotes With Sperm Centrosome Is Regulated By Microtubules Oriented From Centrosomes

P-65 Investigating Centromere Dynamics In Bovine Early Development

P-66 Zinc Supplementation Influences 8-Cell Stage Global Transcriptional Activity And Improves Preimplantation Embryo Development In Cattle.

P-67 Oviduct Epithelial Spheroids During In Vitro Culture Enhance Bovine Embryo Development, Mitigate The Negative Impact Of Oxidative Stress And Induce Changes In Embryonic Transcriptome

P-68 Non-Invasive Metabolic Imaging Of Early Embryos Is Associated With Altered Metabolic Signatures In Aging

P-69 Knock-In On The Y Chromosome

P-70 NEK2 Plays An Essential Role In Mitotic Division And DNA Damage Response By The Wnt/-Catenin Signaling Pathway In Porcine Embryonic Development

P-71 Exploration Of Transposon-Derived Chimeric Transcripts Expressed In Mammalian Embryos

P-72 How Important Is Fast Re-Expansion Of FETs After Thawing On Implantation Rate?

P-73 Germ Cell Nuclear Factor Regulates Craniofacial, Axial And Reproductive Development

P-74 Radiographic Candling: A New Method To Evaluate Embryo Survival In Speckled Or Thick-Shelled Eggs

P-75 Correlation Between MicroRNSs In Amniotic Fluid And mRNAs In Maternal Blood At 42 Days Of Gestation In Cattle

P-76 Suppressing CXCL12-CXCR4 Chemokine Axis During Implantation In Sheep Results In Shorter Fetal Limbs And Altered Expression Of Glucose And Amino Acid Transporters In Fetal Tissues At Midgestation.

P-78 Effects Of Dietary Supplementation Of Creatine-Monohydrate On Fetal-Placental Development In Mid- And Late-Gestating Gilts

P-79 The Role Of IVF Culture Media Mrnas In Embryo-Mother Communication In Cattle

P-80 RAB35 Small Gtpase Activity Coordinates Endosome Dynamics To Facilitate Apicosome Formation In A Human Model Of Epiblast Formation

P-81 Activin A In Mouse Preimplantation Development And Reproduction: Deciphering The Role Of Protein Of Zygotic And Maternal Origin

P-82 Bovine Trophectoderm Has The Metabolic Capacity To Convert Glucose Into Glycogen

P-83 Generation Of Porcine Fetuses With Monoallelic HNF1A Mutation By CRISPR/Cas9 Electroporation In Oocytes

P-85 Regulation Of Transposable Elements By TRIM28 Protects The Sex-Determination Program In PGCs

P-86 Effect Of MAT2A On Porcine Embryonic Development

P-87 Extension Of Development (ED) Of Mouse Blastocyst Leads To Activation Of Steroidogenesis

P-88 Deregulation Of Oxidative Phosphorylation Pathways In Embryos Derived In Vitro From Prepubertal And Pubertal Heifers Based On Whole-Transcriptome Sequencing

P-89 Postovulatory And Maternal Aging Do Not Affect The Biomechanical Properties Of Trophectodermal Cells In Mouse Embryos

P-90 Comparative Analysis Of Embryo Development According To Goat Oocyte Grade, Fertilization Time, In Vitro Culture Method

P-91 Chemical Inhibition Of IL6ST Compromises The In Vitro Production Of Bovine Embryos

P-92 CDX2 is Not Essential for Bovine Blastocyst Formation But Plays a Role on First Lineage Specification

P-93 Conceptus Derived PGs Are Not Essential For Early Bovine Post-Hatching Development

P-94 Dynamics Of Higher-Order Interactions Define Transcriptomic Trajectories Associated With Human Embryonic Genome Activation

P-95 Embryo-Induced Alterations In The Protein Profile Of Bovine Oviductal Extracellular Vesicles In Vitro

P-96 HAND1 Controls Epithelial Morphogenesis And Fate Specification In A Human Pluripotent Stem Cell-Based Amnion Model

P-97 ANKRD49 Is Required For Peri-Implantation Embryogenesis

P-98 Paternal Aggresome Content Is Associated With Increased Reactive Oxygen Species And Impaired Mitophagy During Preimplantation Development Of Bovine Embryos

P-99 Dissecting The Role Of WBP1 In Preimplantation Embryonic Development: Insights Into Hippo Signaling And Trophectoderm Formation In The Bovine

P-100 NANOG Is Required For Proper Hypoblast Development In Ovine

P-101 Increased Male Sex Ratio And Significantly Altered Gene Expression Coincide With Increased Pace Of Development In Bovine Embryos Produced And Cultured In Vitro

Emerging Technology

P-103 A Multimeric Variant Of The Human Contraception Antibody (HCA) Demonstrates Enhanced Contraceptive Activity

P-104 Advances In Reproductive Genetic Technology: Expanding Toward Global Reproductive Health Equity Among Populations With Sickle Cell Disease In The United States And Africa

P-105 Efficient Simultaneous Knock-In Of Multiple Long DNA Sequences In Mouse Embryonic Stem Cells By CRISPR/Cas9 For Generating Gene-Edited Mouse Models

P-106 Development Of A Low-Invasive Mrna Electroporation Method Into Immature Mouse Oocytes And Visualization Of Oocyte Chromosomes During Early Embryogenesis

P-107 Engineered Gene Therapy Vectors Enable Accelerated In Vivo Reproductive Genetics

P-108 Investigating The Internalization Of Hybrid Structures Comprising Cationic Liposomes And Extracellular Vesicles From Follicular Fluid In Bovine Granulosa Cells

P-109 Enhancing ART Efficiency: Ootrap For Oocyte Capture, In Vitro Maturation And Fertilization

P-110 Toward The Generation Of Haploid Human Oocytes By Somatic Cell Nuclear Transfer (SCNT)

Female Reproductive Tract

P-111 Transcrocetin Inhibits Endometriosis Growth By Regulating Autophagy And Perturbing Redox Balance

P-112 Metabolic Characterisation Of The Roe Deer Uterine Fluid During Diapause And Elongation

P-114 Harnessing Amniotic-Derived Cells For Advanced Regenerative Medicine And Tracking Technologies.

P-115 Study On The Clinical Application Of Saline Contrast Sonohysterography(SHG) In Cesarean Section Scar Evaluation

P-116 Complement Alternative Pathway Contributes To The Intrauterine Spermicidal Activity In Mice

P-117 Deriving Hormonally Responsive Bovine Endometrial Organoids

P-118 A New Model Of Menstruation And Uterine Regeneration

P-119 Comparative Molecular Dynamics Of Aromatase In Ancient And Modern Felines

P-120 Antagonism Between Retinoic Acid And Estrogen Signaling Maintains Uterine Cytodifferentiation

P-122 A Comparison Of RNA- Versus DNA-Based 16S Rrna Amplicon Sequencing Analysis Of The Equine Uterine Microbiome

P-123 The Development Of A Diet-Induced Obese Mouse Model And Its Effect On Fertility

P-124 Embedded IUD/IUCD In Multiparous Female–Case Report And Retrieval Options

P-125 Elevated Testosterone Attenuates Vaginal Wall Thickness In Rhesus Macaques

P-126 Dynamics Of PDGFR+ Mesenchymal Cells In Oviductal Regeneration

P-127 Proteomics Of The Apical Oviduct Epithelium After Laser Microdissection: Identification Of New Candidate Receptors For Sperm Binding In Cattle

P-128 Dissecting The Spatiotemporal Development Of The Human Reproductive Ducts Through The Lens Of Single-Cell And Spatial Genomics

P-129 Local Uterine Drug Delivery In A Mouse Model Of Menstruation

P-130 Nuclear F-Actin Formation

P-131 Single Microcystin Exposure Impairs The Hypothalamic-Pituitary-Gonadal Axis At Different Levels In Female Rats

P-132 Müllerian Duct Maintenance At The Cranial Region Is Dependent Upon GATA2

P-133 Inflammatory Environment Regulatory And Anti-Oxidant Properties For Endometriosis Treatment With Cymophenol

P-134 Histological Characterisation Of The Ovine Cervical Epithelium Along The Length Of The Cervix At Different Stages Of The Reproductive Cycle

P-135 Subacute Exposure To A Mixture Of Tributyltin Plus Mercury Impairs Reproductive Axis Function, Exacerbating Premature Ovarian Insufficiency Features And Reducing Fertility In Female Rats

P-136 Transplantation Of Abnormal White Adipose Tissue Induced By Obesogen Tributyltin Leads To Abnormalities In The Reproductive Tract Of Female Rats

P-138 TGF-1 Stimulates Migration/Proliferation In Immortalised Fallopian Tube Epithelial Cells

P-139 In Vitro Reminiscence: Uterine Disturbances In Vivo Affect Respective Luminal Epithelial Cells Function In Vitro

P-140 The Influence Of Phthalates On Ovarian Endometriotic Cell Invasion Patterns Using A 3D In Vitro Model

P-141 Mucus Production In Conditionally Reprogrammed Endocervical Cell Cultures Derived From Human And Baboon Cytobrush Samples

P-142 Effect Of Embryonic Signals On Activity Of DNA Methyltransferases In Luminal And Stromal Cells Of The Porcine Endometrium

P-143 Bovine Endometrial Response To Different Concentrations Of Progesterone Before Estrus And Different Intensities Of Estrous Expression

P-144 The Activated Platelet-Rich Plasma-Fibrin Hydrogel Attenuates Uterine Endometrial Fibrogenesis After Acute Injury Via Modulation Of Senescence, Inflammation, And Epithelial-Mesenchymal Transition

P-145 Association Of The Rs17576 Matrix Metalloproteinase 9 (MMP-9) Polymorphism With Endometriosis.

P-146 SMRT Plays An Important Role For Implantation And Decidualization.

P-147 Both Obesity And DMBA Exposure Alter Ovarian Follicle Number, ZP3 And PPP2CA In Prepubertal Female

P-148 Uterus Healing After Cesarean: Development Of A Rabbit Model

P-149 Lineage Tracing Of Endometrial ALDH1A1+Cells Reveals Their Contribution To Uterine Development

P-150 Investigating The Enzymatic Activity Of Endometrial DPPIV In The Molecular Adhesive Pathways At Embryo Implantation Using An In Vitro Co-Culture Model

P-151 Loss Of Wnt5a Impairs Upper Müllerian Duct Differentiation In Mice

P-152 Investigating The Female Reproductive Tract Mucosa As A Sex Specific Site For Anti-Citrullinated Protein Antibody Formation

P-153 Update On Extracellular Vesicles In Porcine Reproductive Fluids: Isolation, Proteomics And Their Interaction With Spermatozoa

P-154 Peptidylarginine Deiminase 2 And 4 Double Knockout Mice Reveal Citrullination Is An Important Post Translational Modification That Regulates Female Reproduction

P-155 Regulation Of Basigin Production By Steroid Hormones And Secretion Of Extracellular Vesicles In Bovine Uterine Epithelial Cells

P-156 Utilising 3D Culture Systems To Investigate The Effect Of Conceptus-Derived Factors Upon The Bovine Endometrium

P-157 Long-Term Consequences Of Repeated Superovulation On The Ageing Mouse Female Reproductive Tract

P-158 Intrauterine Administration Of Lipiodol® Enhances Fertilization Rates In Mice Inseminated With Low Sperm Numbers

P-159 The Conserved MicroRNS miR-151 Alters The Ability Of The Endometrial Epithelium To Facilitate Implantation

P-160 Characterization Of ThreeDimensional ScaffoldBased Model Of The Porcine Endometrium In Vitro

P-161 Prevalence Of Dysmenorrhea And Its Association With Hemoglobin Levels Among Saudi Females

P-162 Transcriptomic Analysis Reveals Effects On Oxidative Phosphorylation And Canonical Wnt Signaling By Form Of Selenium In The Intercaruncular Tissue Of Beef Heifers At Maternal Recognition Of Pregnancy

P-163 Decoding The Biochemical Uterine Environment Essential For Successful Establishment Of Pregnancy In Pigs: A Metabolomics View

P-164 Loss Of Uterine Histone Deacetylase Activity In Neonatal DES Exposed Mice Contributes To Persistent Changes In Gene Expression And The Epigenome

P-165 Remodeling Of The Uterine Luminal Metabolome Prior To Embryo Elongation In Beef Cattle

P-166 Sustained YAP Activity Induces Transdifferentiation of Luteal And Müllerian Mesenchymal Cells In Mice

P-167 Role Of NCOR1 In Implantation And Decidualization

P-168 Molecular Characterisation Of The Marsupial Histotroph: A Dynamic Uterine Fluid Microenvironment

P-169 The Postcopulatory Transcriptional Response In Different Sections Of The Female Reproductive Tract In Mice

P-170 Gelma Hydrogels: Towards The Development Of An In Vitro Model Of The Human Endometrium

P-171 Efficacy And Underling Mechanisms Of D-Chiro Inositol In A Mouse Model Of Endometriosis

P-172 Mirna Expression In Equine Follicular Fluid Secretome Is Affected By The Clinical Condition And Age Of The Mare

P-173 Estradiol-17 Increases Bovine Oviductal Tonus Via G Protein Coupled Estrogen Receptor 1 And RhoA/Rho Kinase Signaling Pathway

P-174 Distribution Of Ovarian Steroid Hormones Across The Oviductal Epithelium: Insights From A Compartmentalized In Vitro Model

P-175 Comparative 3D Cell Culture Models Of The Mammalian Endometrium To Understand The Evolution Of Uterine Function

P-176 Leveraging Single Cell Transcriptomics To Dissect Cellular Changes In The Late Endometrial Cycle Across Primates.

P-177 A Conserved Core Of Epididymal-Derived Micrornas May Contribute To Modifying The Endometrial Transcriptome To Facilitate Receptivity To Implantation In Placental Mammals

P-178 Bovine Oviductal Organoid-Derived Secretions Increase Blastocyst Yield At Day 7 And Day 8 Of In Vitro Culture.

P-179 Investigating The Impact Of Ovariectomy- And Chemotherapy-Induced Estrogen Loss In The Mouse Vagina

P-180 Elevated Methylglyoxal Concentrations Induces Cellular Senescence In Endometrial Cells In Dairy Cows

P-181 Effect Of Unsaturated N-3 Fatty Acids From The Camelina Sativa L Cake On Fatty Acid And Adipokine Contents In The Serum Of HF Heifers

P-183 Understanding The Role Of Cilia In Preimplantation Oviductal Transport

P-184 Formation of Bovine Uterine Gland-Like Structures in a 3D Culture System.

P-185 Effect Of Oxytocin Administration On Luteal Function, Blood Flow And Luteolysis In Nili-Ravi Buffaloes

P-186 Spatial Transcriptomics Of The Neonatal Bovine Uterus Reveals Potential Markers Of Epithelial Differentiation Driving Endometrial Adenogenesis

P-187 Steroidomic Profiling To Assess Follicular And Luteal Dynamics Across Species Using Semi-Targeted High Resolution Mass Spectrometry

P-188 Single Cell Insights Into Epithelial Morphogenesis In The Developing Neonatal Mouse Uterus

Fertility Preservation

P-189 The Effects Of Bull-specific Scents On The Reproductive Performances Of The Postpartum Hanwoo Cows

P-190 The Impact Of Micro-nanoplastics On Female Reproduction

P-191 Progesterone Receptor Component (PGRMC) 1 And 2 Regulates Primordial Follicle Formation

P-193 A Remarkable Finding For Embryologists To Choose The Best Protocol In IVF Procedures

P-194 Exploring The Effect Of PRP On Tissue Vascularization And Survival Of Follicles In Human Ovarian Tissue Transplanted To Immunodeficient Mice

P-195 Improving Trehalose Uptake And Release Via Cold-responsive Nanoparticles To Promote Dehydration Tolerance Of Cumulus-oocyte Complexes During Microwave-assisted Drying

P-196 Impact Of Long In Vitro Culture On Oocytes From Sheep Early Antral Follicles: A Comparison Of Mitochondrial Activity And ROS Levels Between Single And Group Culture

P-197 Pharmacoprotection Of The Ovaries During Chemotherapy Using Micrornas Technology Delivered By Gold Nanoparticles

P-198 Testosterone And Il-1b Induced Spermatogonial Cells From Normal And Busulfan-treated Immature Mice To Develop Different Stages Of Spermatogenesis In 3D In Vitro Culture

Immunology

P-199 A Possible Role Of Estrogen Receptors In Primordial Follicle Activation In 3D Culture Model

P-200 Vaccination Against Foot-and-mouth Disease Deteriorates Acute-phase Inflammation With Anovulation In Hanwoo (Bos Taurus Coreanae)

P-201 Effects Of Aqueous Plant Extracts On Growth Performance And Haematology Of Pure And Crossbred Chickens

P-202 Expression Of Receptors For Progesterone In Blood Leukocytes Of Cattle

P-203 Dietary Inclusion Of African-bread Fruit (Treculia Africana) Pulp On Growth Performance And Hematological Indices Of Weaner Rabbits

P-204 Sperm Interact With Human Cervical Epithelial Cells To Modulate Cytokine Synthesis

P-205 Evaluating Pregnancy Induced Changes To Peripheral Immune Cell Populations In Cattle Using Single Cell RNA Sequencing

P-206 MZB1 Regulates The Immune Microenvironment And Promotes Ovarian Cancer Cell Migration

Male Contraception

P-207 Single Cell 'Omics Technologies For Contraceptive Discovery

P-208 Identifying Chemical Features That Favor Or Block The Passage Across The Blood-testis Barrier In Mice

P-209 Exploring QRICH2 As A Potential Male Contraceptive Target

P-210 NICHD's Contract Facilities For Contraceptive And Reproductive Health Research Development

P-211 Phosphorylation Does Not Regulate The Activity Of Steroidogenic Acute Regulatory Protein (STAR): Disputing The STAR Phosphoprotein Narrative

P-212 Acute Regulation Of Steroidogenesis: Endocytosis-mediated Mitochondrial Cholesterol Supply Is An Imperative Step That Enables STAR Function

Male Reproductive Tract

P-213 GATA2 Is An Essential Transcription Factor For Epididymal Morphogenesis

P-214 The Aryl Hydrocarbon Receptor Agonist ITE Reduces Inflammation And Urinary Dysfunction In A Mouse Model Of Autoimmune Prostatitis

P-215 Deciphering The Contribution Of Non-genomic Estrogen Signaling In Steroidogenesis In Perinatal Mouse Testis

P-216 Enhanced Identification And Autophagic Clearance Of Aging Spermatozoa Through A Dual-response Logic Gate Probe

P-217 C-X-C Motif Chemokine Ligand 5 Is A Wnt-1-induced Oncogene With Proinflammatory And Antioxidation Roles In Human Prostate Cancer Cells

P-218 Regulation Of NHE3-dependent Proton Secretion In Epididymal Principal Cells: Ph, Camp, And Adenosine Signaling

P-219 Unveiling Interleukin-13 Receptor Subunit Alpha 2 In Prostate Biology: Expression Patterns, Functions, And Therapeutic Prospects

P-220 Wnt9b/-Catenin Signaling Controls Wolffian Duct Maintenance

P-221 In Silico Molecular Studies Of Bioactive Compound From Massularia Acuminata Extracts As A Potential Inhibitor Of Phosphodiesterase-5-enzymes In The Prophylaxis And Management Of Erectile Dysfunction

P-222 Investigating The Role Of Extracellular Vesicles In Paracrine Communication Between Epithelial Cells From Different Regions Of The Domestic Cat Epididymis

P-223 Postejaculatory Sperm Exposure To Tributyltin Chloride Induces Novel Structural, Genomic And Epigenomic Alterations In Mammalian Sperm

P-224 FHL2 Deletion Reduces Male Fertility By Impairing The Sperm Meiosis

P-225 Glyphosate Presence In Human Sperm: First Report And Positive Correlation With Oxidative Stress In An Infertile French Population

P-226 Comparison Of Prostanoid Concentrations In Extended Boar Seminal Plasma To Pregnancy Status Of Sows After Artificial Insemination

P-227 Interactions Between Estrogens And Cyclin D1 Are Crucial For Epithelial Cell Recovery In The Initial Segment Of The Mouse Epididymis.

P-228 A Newly Identified Role For Endocrine Disrupting Chemicals In Erectile Dysfunction

P-229 Identifying Testosterone Producing Hydroxysteroid Dehydrogenase Enzymes In Hsd17b3-Deficient Mice

P-230 Impact Of Yoga-conditioned Serum From Infertile Men On Prostate Cancer Cell Characteristics

P-231 Expression Of Ppp1r Protein Regulators Of Smooth Muscle Relaxation Is Altered In Prostates of Aged Mouse Models of LUTS/BPH and in Human Cells Cultured from BPH Diseased Prostate

P-232 In Vivo Dynamic Volumetric Imaging Of Mouse Testis And Epididymis

Neuroendocrine

P-233 Human INHBB Gene Variant (C.1079t>c:p.Met360thr) Is Disruptive For Pregnancy
And Labouring In Female Mice

P-234 Sexual Dimorphisms In Alzheimer's Disease-related Disruptions Of Circadian Entrainment And A Potential Role For Gonadotropin Receptor Signaling

P-235 Seasonal Changes In The Short Form Of Leptin Receptor Expression And The VEGF System In The Choroid Plexus, Arcuate Nucleus And Anterior Pituitary In Leptin/Mts-leptin And Resistin-treated Sheep

P-236 Omentin-1 Increases Cell Proliferation And Decreases Apoptosis In Cultured Porcine Anterior Pituitary Cells: A Description Of The Potential Signaling Pathways Involved

P-237 Serum Concentrations Of Luteinizing Hormone (LH) And Follicle Stimulating Hormone (FSH) In KISS1 Knockout Gilts Treated With Neurokinin B, Kisspeptin, And Gnrh Hormone Analogs

P-238 DHED, A Brain Specific 17βE2 Prodrug, Affects Gonadal Steroid Receptor Expression
But Not Metabolic Function

P-239 Immortalized Ovine Kndy Neuronal Cell Lines Reveal Mechanisms Underlying Regulation
Of Reproduction By Sex Steroids And Seasonal Cues

P-240 Knockout Of The FSH Receptor In Adipocytes Does Not Impact Body Composition In A Mouse
Model Of Post-menopause

P-241 Hormonal Havoc: Dysregulation Of Hippo Signaling In Murine Gonadotropes Leads To Morphological Alterations And Dysfunction Of The Anterior Pituitary Gland

P-242 Raphe Glucose-Sensing Serotonergic Neurons Stimulate KNDy Neurons To Enhance LH Pulses Via Stimulatory Serotonin-2C Receptor In Female Rats And Goats

P-243 Biological Pathway Analysis Of Mass Spectrometry Results Reveals A Temporally Induced Citrullinome That Regulates Gonadotrope Cell Function

Ovary / Oocyte

P-245 The Age-associated Increase In Ovarian Stiffness Impairs Follicle Development And Oocyte Quality Through Early Modulation Of Follicles' Transcriptome

P-246 RAB3A and RAB27A Interact with Rabphilin 3A to Promote Cortical Granule Exocytosis in Mouse Eggs

P-247 Long-term dietary metformin supplementation alters liver metabolism to sustain egg production in the aging broiler breeder hen

P-248 Gene Therapy Delivery of Anti-Müllerian Hormone in Kittens Induces Long-term Contraception Without Impairing Puberty

P-249 SkQ1 Treatment Preserves Ovarian Reserve in Mice.

P-250 Selective Autophagic Degradation of ACLY (ATP citrate lyase) Maintains Citrate Homeostasis and Promotes Oocyte Maturation

P-251 Effect of Maternal Age on the Oocyte Cortical Actin Layer and Associated Endoplasmic Reticulum Clusters

P-252 Effect of antioxidant procyanidin B2 (PCB2) on ovine oocyte developmental potential in response to in vitro maturation (IVM) and vitrification stress

P-253 PRC2: a Novel Regulator of Ovarian Folliculogenesis

P-254 Later Onset of DNA Methylation in Bovine Oocytes

P-255 Ovarian Infusion of Anti-Mullerian Hormone does not improve fertility outcomes in reproductively aged rhesus macaques

P-256 Expression of TGFb signaling molecules and genes in loci linked to polycystic ovary syndrome in human fetal and adult tissues

P-257 Culture Conditions and Cumulus-Oocyte Complex Integrity Affect the Program of Oocyte Maturation in Higher-Order Mammals

P-258 The role of PARP1 in female gametogenesis

P-259 Bovine Follicular Fluid Extracellular Vesicles mRNAs Contents and Effects on Oocyte Maturation and Development When Supplemented During In Vitro Maturation, Preliminary Results

P-260 SOX9: A Novel Downstream of PGR and Regulator of Steroidogenesis in Granulosa Cells of Human Ovulatory Follicles

P-261 Effect of MAPRE1 on Oocyte Maturation and Preimplantation Embryonic Developmentin Mice

P-262 Anthocyanins present in dietary berries reduce the high androgen production of granulosa cells by interfering with the mitochondrial population and lipid metabolism.

P-263 In Vitro Culture Improves the Transcriptome and Chromosome Structure of Secondar Follicles in Aging Mice

P-264 The impact of vitrification and in vitro culturing on expression of FOXO3 and Ki-67 proteins in bovine ovarian tissue

P-265 Optimising a Multi-omics Approach for Characterising the Progenitor to Theca Cell Transition in Mice

P-266 The Effect of Pigment Epithelial-Derived Factor (PEDF) Supplementation on Ovarian Aging

P-267 In Vivo Dynamics of Mouse Ovulation and Oocyte Transport

P-268 Identification of a novel Skp1 isoform that encodes a novel SKP1 protein in mouse oocytes

P-269 MEIOC Prevents Continued Mitotic Cycling Prior to Meiotic Entry During Mouse Oogenesis

P-270 Follicle size influences bovine oocyte cytoplasmic maturation and early embryonic development

P-271 Notch Signaling Differentially Regulates Proliferation of Cultured Mouse Ovarian Granulosa Cells Dependent on Exogenous Gonadotropin Exposure.

P-272 In Vitro Differentiation of Bovine Embryonic Stem Cells Toward Progenitors of Bipotential Gonad-like Somatic Cells

P-273 Secretome by Human Mesenchymal Stromal Cells can Mitigate Age-related Ovarian Dysfunction by acting on both Follicle and Stroma Compartments: focus on Signaling Pathways deregulated by released MiRNAs

P-274 Effect of short and long-term oestrus synchronisation protocols in Merino ewes during non-breeding season

P-275 Inhibin A and Antral Follicle Numbers Correlate in Mares Subjected to Follicular Growth Manipulation

P-276 Status of 25-(OH) Vitamin D3 Levels Among Young Women with Polycystic Ovarian Syndrome (PCOS).

P-277 Spatially Resolved Transcriptomic Profiling of Developing Primary Follicles in the Chicken Ovary Reveal a Potential Developmental Checkpoint

P-278 In Vitro Cannabis Exposure Alters Human Granulosa Cell Extracellular Vesicle Release

P-279 Isolation and Characterisation of Extracellular Vesicle Subpopulations in Human Follicular Fluid

P-280 In vitro Effect of Intelectin-1 on the Levels of Adipokines in Porcine Ovarian Cells: Interaction with Estradiol

P-281 ADROPIN in Polycystic Ovarian Syndrome: Expression and Impact on Proliferation, Apoptosis, Steroidogenesis and Signaling Pathways in Human Granulosa Cells

P-282 Expression of spexin and GALR2/3 receptors in human granulosa cells collected from polycystic ovarian syndrome women and in vitro effect of spexin on steroidogenesis, proliferation and signaling

P-283 Effect of Supplementation with GDF9 and BMP15 at IVM media of Prepubertal Goat Oocytes on Intracytoplasmic GSH and Parthenogenic Blastocyst Production.

P-284 Reproductive Seasonality Influences Follicle Dynamics and the Ovarian Extracellular Matrix Structural Properties in Ewes

P-285 Ovarian Stromal Cell Conditioned Media Improves Survival in Pre- and Early Antral Cat Follicles

P-286 CRISPR/dCas9-Tet1-mediated targeted DNA demethylation of MTNR1A in porcine cumulus-oocyte complexes enhances oocyte maturation

P-287 Follicle-Stroma Interplay Unravel the Mechanisms Involved in Bovine Early Folliculogenesis

P-288 Identifying risk variants for embryo aneuploidy using ultra-low coverage whole-genome sequencing from preimplantation genetic testing

P-289 Effect of DMBA exposure on ovarian chemical metabolism, DNA damage sensing and repair, and oxidative stress proteins in prepubertal mice

P-290 TRPV2 as a Potential Therapeutic Target of Granulosa Cell Tumors

P-291 Development of Bovine Oocytes Cultured with Nicotinamide Monocleotide (NMN) Was Improved via Enhanced Mitochondrial Function

P-292 Transcriptomic Analysis of Luteal Tissue Supports the Delayed Timing of Luteolysis in Heifers with Greater Ovarian Reserve

P-293 Environmentally Relevant Maternal Atrazine Exposure Leads to Aberrant Endocrine Effects in Piglets

P-294 Naked Mole-Rat as Model of Reproductive Aging: In Vitro Germ Cell Expansion and Oocyte IVM Using the Same Ovary

P-295 Interactions between addition of serum and type of culture medium on gene expression of bovine blastocysts produced in vitro

P-296 Spatio-temporal Requirements of Aurora kinase A in Meiotic Spindle Building

P-297 Interaction of cumulus cells and granulosa cells during luteinization based on analysis of transcriptome

P-298 ORC 1 is Required for the First Round of DNA Synthesis in the Zygote

P-299 Treatment of Cumulus-Oocyte-Complexes with Age-Associated FSH Gycoforms Results in Differential Modulation of Meiotic Resumption

P-300 The Inhibition of the NLRP3 Inflammasome via Autophagy Regulation Mitigates Ovarian Fibrosis in Reproductively Aged Mice

P-301 The Mouse Ovary has the Capacity to Convert the Neonicotinoid Pesticide Imidacloprid to Toxic Metabolites In Vivo

P-302 IFNT-Dependent and IFNT-Independent Changes in the Corpus Luteum of Early Pregnancy

P-303 Role of Zinc Insufficiency in Bovine Granulosa Cell Viability

P-304 Melatonin improves porcine oocyte maturation through regulation of F-actin associated mitochondrial fission in vitro

P-305 Oocyte Storage Vesicle and Lipid Droplet Composition and their Role in Oocyte Quality

P-306 Deoxynivalenol induces the endoplasmic reticulum stress-mediated apoptosis via the IRE1/JNK/CHOP signal pathway in porcine embryos

P-307 Medaka mutant of cyp21a2 with the loss of cortisol reveals presence of two populations of pomca-expressing cells in pituitary and the defect in reproduction–a new disease model

P-308 Mitochondrial Contribution to the Oocyte and Embryonic Development

P-309 In vitro study of phoenixin-14 action on porcine luteal cells angiogenesis and apoptosis: role of GPR173 and kinases ERK1/2, AKT, AMPK pathways

P-310 Characterization of Human Follicular Fluid Extracellular Vesicle Subtypes and Their Impact on Human Granulosa-Like Tumor Cell Line KGN Transcriptome

P-311 Double knockout of NR5A1 and NR5A2 in the mouse ovary disrupts follicle development and ovulation

P-312 Female offspring ovarian chemical metabolism protein abundance is altered by in utero atrazine exposure

P-313 The effects of heat stress on the abundance of proteins involved in chemical biotransformation in the corpora lutea of post-pubertal gilts

P-314 Characterizing the G-protein activities of the membrane Androgen Receptor, ZIP9

P-315 TRPV3 and Cav3.2 ion Channels Functionally Interacts in Mouse eggs

P-316 A Disabled-1 (DAB1) Isoform is Differentially Expressed in Granulosa Cells of Healthy Antral Follicles and Contributes to Cytoplasmic Vesicular Transport

P-317 In Vitro Embryo Production can be Achieved After Delayed Harvest of Bovine Oocytes from Abattoir-derived Ovaries

P-318 Somatic Cell Fate Specification and Separation in the Fetal Ovary

P-319 Expression levels of FSHR, IGF-1R, AMH, AMHR, EGFR, Bax and Caspase-3 in Cumulus cells are correlated Developmental Competence of Bovine Oocytes

P-320 Effect of Novel Plasticizers, Bisphenol S and F, on The Meiotic Maturation and Spindle Structure of Mouse Oocytes

P-321 Application of Transient Gene Expression Using Lipid Nanoparticle During Early Embryo Development.

P-322 Expression of Estrogen-Related Receptor GPR30 in Mouse Metaphase II Oocytes and Its Effect on Fertilization-Induced Ca2+Oscillations

P-323 Maturation of bovine cumulus-oocytes complex in microfluidic device: Effects on lipid accumulation and blastocyst rates

P-324 The Alpha 7 Nicotinic Acetylcholine Receptor (CHRNA7) May Limit Inflammatory Responses in Cultured Human Granulosa Cells

P-325 Preantral Follicles of Over 12-Month-Old Mice Have Developmental Potential for Matured Egg Production

P-326 Signaling Between the LH Receptor and the NPR2 Guanylyl Cyclase in Mouse and Rat Preovulatory Follicles

P-327 Transcriptional Modifications in Cumulus Cells during Human Oocyte In vitro Maturation

P-328 Saturated Fatty Acids are Crucial Components in Follicular Fluid for Ensuring Endocrine Regulation of Estradiol Production in the Bovine Ovary

P-329 The Dummerstorf high-fertility mouse line 1–a worldwide unique model for increased female reproductive performance

P-330 Obesity alters sumoylation-dependent proteomic response in ovaries of mice exposed to 7,12-dimethylbenz[a]anthracene

P-331 Obesity prone mice present impaired steroidogenesis associated with SOCS3- mediated Nodal downregulation in ovarian theca-stromal compartment

P-332 Importance of CENP-E in Meiotic Maturation of Human Oocytes

P-333 A Phenotypic Screening Assay of Mouse Egg Activation Identifies Novel Inhibitors Targeting WEE2 for Non-Hormonal Contraceptive Applications

P-334 Proteomic Approaches to Identify Age-Specific Biomarkers in Oocyte

P-335 Extracellular vesicles isolation method can influence its contents and the bovine in vitro oocyte maturation upon supplementation

P-336 Role of Ankyrin-repeat and SOCS-Box Protein 9 (ASB9) in PAR1 Inhibition and MAPK Signaling Pathway in the Bovine Ovary

P-337 Follicular fluid from overweight women displays altered energy metabolism and oocytes with smaller sizes

P-338 Analysis of the Expression of Tight Junction Proteins in Corpora Lutea of the Domestic Cat

P-339 Rescue of Preantral Follicles from Ovaries of Endangered Cattle Breeds Undergoing Genetic Salvage

P-340 Towards the Optimization of Targeted Systems for the In Vitro Culture of Isolated Bovine Primordial Follicles

P-341 The Positive Role of AMH Regulation in Oocyte Number and Embryonic Development in Aged Mice

P-342 Hypoxia-Related Regulation of Luteal Function:
New Insights from Gene Expression and LPS Challenge Studies in Cattle

P-343 Relationship between bone morphogenetic protein-15 (BMP-15) and formation of the hyaluronan-rich cumulus-oophorus extracellular matrix (ECM)

Placenta

P-364 Effects Of Inhibiting CXCL12-CXCR4 During Implantation On Pregnancy—associated Glycoproteins (Pags) In The Sheep Placenta At Midgestation

P-365 Placenta-specific RNA Interference Of Transthyretin In Sheep

P-366 Maternal Myostatin Deficiency Modulates Placental Gene Expression And Signaling Pathways

P-367 In Vitro Fertilization Significantly Impacts The Female Placental Proteome In A Mouse Model

P-368 B-Raf And Epigenetic Regulation Of Placentation

P-369 Placental Cell Type Specific Transcriptional Responses To Maternal Obesity: Implications For Fetal Growth

P-370 Appropriate Glycemic Management Protects The Germline But Not The Uterine Environment In Hyperglycemia

P-371 Gestational Age-specific Expression Of Placental Endoglin In Normal Human Pregnancy

P-372 Leukemia Inhibitory Factor Signaling In Human Trophoblast Cell Development

P-373 Fetal Sex-dependent Metabolic Influence On Placental Protein Synthesis And Signaling Pathways In Gestational Diabetes Mellitus

P-374 Epigenetic Profiling In Late Gestation Porcine Placenta Reveals Sex-dependent Adaptations To Fetal Endocrine Status

P-375 Effects Of Dietary Supplementation Of Creatine On Fetal Muscle And Placental Development In Mid-and-late Gestating Gilts

P-376 Endometrial Expression And Secretion Of Insulin-like Growth Factor 2 Facilitates Uterine Angiogenesis And Trophoblast Differentiation During Placenta Development

P-377 Single Cell RNA Sequencing Identifies CXADR As A Fate Determinant Of The Placental Exchange Surface

P-378 Effect Of Visfatin On Human Placental Endocrinology. In Vitro Studies On Bewo Cell Line And Villous Explants From Third-trimester Human Pregnancy

P-379 Down Syndrome Trophoblasts From Induced Pluripotent Stem Cells Display Differentiation Defects

P-380 Placental Vascular Development Throughout Gestation In Beef Heifers

P-381 Epigenome Profiling Reveals An Essential Role For Jun-n-terminal Kinase Signaling During Human Trophoblast Stem Cell Specification And Differentiation Into Terminal Lineages

P-382 Pro-inflammatory Interleukin 1 Affects The Function Of Decidualized Uterine Stromal Cells–Clues From The Canine Model

P-383 Disrupting The CXCL12-CXCR4 Chemokine Axis At The Fetal-maternal Interface During Implantation In Sheep Results In Less Placental VEGFA At Midgestation

P-384 Developing A 3D Long-term Trophoblast Culture System To Study Fetal-maternal Interactions In Cattle

Pregnancy

P-386 Estradiol-Induced Labor Initiation: Changes On Gene Expression Of Maternal Uterine And Cervical Tissues In Periparturient Ewes

P-387 Concentrations Of Amino Acids And Expression Of Their Transporter In The Pig Uterus Throughout Pregnancy

P-388 Modification Of The Expression Profiles Of Prnp Gene And Marker Genes In Early Stage Embryo By DNMT1 Modulators

P-389 Physiologic And Physical Interactions Between The TRPV4 Channel And Oxytocin Receptor Modulate Human Myometrial Contractility

P-391 ADAMTS4 Is A Crucial Proteolytic Enzyme For Versican Cleavage In The Amnion At Parturition

P-392 Mammalian Implantation And Subsequent Pregnancy–A Story Of Mirna Evolution And Co-Option

P-393 Loss Of Function Mutations In ALPL Alter Nutrient Abundance In Fetal Plasma, And Allantoic And Amniotic Fluids In Sheep

P-394 Effect Of Bacitracin Methylenedisalicylate Supplementation On Pelvic Organ Prolapse Incidence In Late Gestation Sows

P-395 Pig Conceptuses Utilize Extracellular Vesicles For Interferon Gamma-Mediated Paracrine Communication With The Endometrium

P-397 Neuregulin—1 Signaling In Corpus Luteum

P-398 Age-Related Changes In The Uterine Environment During The Peri-Implantation Period Of Pregnancy.

P-399 Does Lipopolysaccharide Influence Bovine Endometrial Response To Interferon Tau?

P-400 Gestational Intermittent Hypoxia Impairs AT2R-Mediated Cardiovascular Protection In Female Offspring On A High-Fat, High-Sucrose Diet

P-401 Uterine Injury During Diestrus Leads To Placental And Embryonic Defects In Future Pregnancies In Mice

P-402 Prolonged Gestation In Cows Carrying IVP Calves Is Not Predicted By Bovine Pregnancy-Specific Proteins B

P-403 Loss Of Inhibin Negative Feedback In The Pituitary Leads To Enhanced Ovulation But Pregnancy Failure In Mice

P-404 Maternal Tamoxifen Effects On Mouse Pregnancy And Placental Development

P-405 Serum Metabolites Differ In Late Gestation Sows At Various Risk For Pelvic Organ Prolapse

P-406 Maternal Adaptation To Nutrient Restriction In Sheep Herds From Chilean Patagonia: A Random Response Or A Repeatable Trait?

P-407 Identification Of ISG15 Conjugated Proteins In Murine Reproductive Tissues During Early Pregnancy

P-408 Cervical ISG15 And PGR mRNA Expression During Early Pregnancy In Holstein Heifers

P-409 Differential Regulation Of In Vitro Decidualization By Circulating Exosomes Isolated From Recurrent Pregnant Loss (RPL) Women And Normal Pregnant Women

P-411 The Zinc-Finger Domains Of Wilms' Tumor 1 Protein Are Critical For Uterine Receptivity During Pregnancy

P-413 Targeting Matrix Metallopeptidase 9 To Modulate Uterine Contraction

P-414 Direct Proteomic Profiling VEGF Responsive Sulfhydromes In Human Uterine Artery Endothelial Cells

Testis/Sperm

P-415 SPACE SPERM–The Importance of Gravity in Sperm Navigation, Fertilisation and Early Embryo Eormation.

P-421 Glucose Metabolism as a Driver for Embryonic Sertoli Cell Differentiation

P-423 TEX15 Regulates Spermiogenesis Through Interaction with TASOR2

P-424 Glutamine protects mouse spermatogonial stem cells against NOX1-derived ROS for sustaining self-renewal division

P-425 Intracytoplasmic sperm injection induces transgenerational abnormalities in mice

P-426 COVID-19 Compromises Spermatogenesis Even After Recovery

P-427 Histological analysis of gonadal sex differentiation of gonads in Chamaeleo calyptratus

P-428 A new insight into testis development of the zebra finch (Taeniopygia guttata)

P-429 A loss-of-function variant in HIPK4 causes male infertility with oligoasthenoteratozoospermia

P-430 The Induction of Stress via Social Isolation in a Rat Model: The Effect on Male Reproductive Parameters

P-431 The Time Doesn't Stop: Impact of Paternal Aging on Fertility in a Mouse Model

P-432 MRNIP Interacts with Sex Body Chromatin to Support Meiotic Progression, Spermatogenesis, and Male Fertility in Mice

P-433 Standardization of sperm analysis using Computer-Assisted Sperm Analysis (CASA) from Cynomolgus monkey (Macaca fascicularis) semen in Primate Resources Center

P-434 Molecular Interaction Between Nucleolus and Chromatoid Body of Male Germ Cells Evidenced by in Vitro and in Vivo Nucleolar Blocking

P-435 Post-Thaw Characteristics of Ram Spermatozoa and Activity of Antioxidant Enzymes after Supplementing Semen Extender with Mn2+-, Zn2+- or Cu2+ -Nanosuccinate

P-436 Transition nuclear protein 2 (TNP2) mRNA cargo: a putative marker for assessment of breed differences?

P-437 Cytoplasmic dynein 2 is required to the regulation of intraflagellar transport system in sperm flagellum formation

P-438 The Addition of a Xenobiotic Prior to Cryopreservation of Bovine Semen Increases Its Resilience Post-Thaw

P-439 Chemical Profiling of Testicular Parenchyma in Rams Using an Exploration of Echointensity Bands and a Novel Computer Algorithm (r-Algo) Increasing Specificity and Accuracy of Echotextural Analyses

P-440 High fertile boars present a decrease in the mRNA cargo of TRPC1, a key regulator of sperm motility

P-441 Assembly and Maintenance of the Centromeric Histone CENP-A in the Male Germ Line

P-442 Differential Expression of Oestrogen and Androgen Receptors in Spermatozoa from Different Boar Breeds and Fertility Levels

P-443 Histological and Metabolomic Analysis of Testis Tissues in Japanese Macaques (Macaca fuscata) Aiming the Establishment of In Vitro Spermatogenesis Technique in Primates

P-444 ARMC2: a multifaceted protein involved in both flagella and cilia formation and function.

P-445 Human benign Leydig cell tumour–biochemical evaluation

P-446 Exploring Oxylipid Changes in Human Sperm During Cryopreservation

P-447 Protective Effects of Monosodium Glutamate on the Preparation of Freeze-Dried Sperm in Mice

P-448 Optimization of Rehydration Process for Freeze-Dried Mouse Sperm

P-449 Proteins of Huntington's Disease Pathway Participate in Pig Sperm Capacitation

P-450 CCDC183 is Essential for Axonemal Compartmentalization during Spermiogenesis

P-451 Unveiling Sperm Capacitation Dynamics: A Novel Spectral Flow Cytometry and Stochastic Modeling Approach

P-452 Age-associated metabolomic changes in human spermatozoa

P-453 Bio-electrosprayed mammalian sperm remain viable

P-454 Development of a Plasmid Repository Encoding Oocyte Membrane Proteins to Unveil Novel Sperm-Oocytes Interactions: A Focus on Human CRISP

P-455 Physiological Characterization of Purinergic Signalling in Mouse Seminiferous Tubules Using an ATP Biosensor

P-456 Fine-tuning inbreeding analysis reveals genomic regions associated with the abundance of kinetic subpopulations in fresh and frozen stallion sperm

P-457 Tex46 Knockout Male Mice are Sterile Secondary to Sperm Head Malformations and Failure to Penetrate Through the Zona Pellucida

P-458 The Antioxidative Effect of MnTBAP on Boar Sperm Cryopreservation

P-459 A Molecular Mechanism of Transcriptional Activation by a Mouse Testis-specific Long Noncoding RNA, Tesra

P-460 From Proteins to Potency: An Integrative Proteomic Approach Towards Male Infertility Management

P-461 Time-Dependent Changes in PI3K/AKT Signaling During Capacitation in a Mouse Model

P-462 Assessing of Fertilization and Developmental Ability of Mouse Spermatozoa Head Separated from Tail by Freeze-drying Treatment

P-463 Advancements in Mouse Testis Organoid Formation and Characterization: A 3D In vitro Model for Studying Spermatogenesis

P-464 3D Robust Spatiotemporal Molecular Model of Acrosome Biogenesis

P-465 Spermiogenesis in 3D: Pitfalls and Challenges

P-466 Single Cell RNA Sequencing of Testicular Tissues from Infertile Men with Loss of Function Variants

P-467 In Vitro Assessment of Di(2-Ethylhexyl) Phthalate Induced Alterations in Epididymal Semen Quality and Sperm-Oviduct Binding Efficiency in Dromedary Camels (Camelus dromedarius)

P-468 In Vivo Investigation of Ca2+Signaling in Seminiferous Tubules.

P-469 Identification and Characterization of Novel Candidate Post-Fertilization Sperm Mitophagy Determinants

P-470 TMC5-CIB1 Complex at the Spermatid Plasma Membrane is essential for Spermiogenesis

P-471 Transgenerational Epigenetic Inheritance and Autism Spectrum Disorder: Linking Meiotic Dysfunction and Cognitive Impairment

P-472 HyperSperm, a New Sperm Preparation Method for In Vitro Fertilization (IVF), Improves Sperm Capacitation, Increasing the Number of High-Quality Blastocysts in Mice.

P-473 BSA-Mediated Rapid Calcium Uptake Initiates sAC Activation and cAMP Production During Mouse Sperm Capacitation

P-474 Identification of Paternal Factors Compromising Pregnancy Establishment and Reproductive Outcomes in Bovine Model

P-475 Elucidating the Proteome of Seminal Plasma-Derived Extracellular Vesicles from GnRH-II Receptor Knockdown Boars with Poor Semen Quality

P-476 The Effect of Ifosfamide and Cyclophosphamide on the Pre-Pubertal Testis

P-477 Successful Classification of Normal and Abnormal Ram Sperm by a Machine Learning Model

P-478 Accelerated Mitochondrial Dynamics Promote Spermatogonial Differentiation

P-479 ARRDC5 Regulation of Histone-to-Protamine Exchange During Spermiogenesis

P-480 KDM2A maintains H3K36me2/3 deposition and recruits HCFC1 and E2F1 to orchestrate male meiotic entry and progressio

P-481 A Mouse Testis-specific Long Noncoding RNA, LncRNA-HSVIII, Regulates the Testosterone Production and the Morphology of Testis, Cauda Epididymis, and Sperm

P-482 Aging, Sperm Proteome, And Neurodegenerative Diseases: Incidental Observations Or A Little Bit More Than Meets The Eye?

P-483 Specific disruption of Dcaf17 gene in spermatids is dispensable for post-meiotic germ cell development and fertility in mice

P-484 The Germline Undergoes Genome-Wide DNA Methylation Changes During Human Spermatogenesis

P-485 New Insights in Porcine Zonadhesin Protein Under Different Physiological Conditions

P-486 Investigations into the Endocrine Regulation of Horse Testicular Polyunsaturated Fatty Acids Synthesis via Experimental Inhibition and Stimulation of Testicular Function.

P-487 Characterization of Na+/H+Exchanger (NHE11) by Immunofluorescence and High-Resolution Microscopy in Porcine Sperm

P-488 Phenotyping Differentially Abundant Proteins in Cryopreserved vs Fresh Bull Sperm

P-489 Capacitation Signatures in Fresh and Cryopreserved Bovine Sperm

P-490 Sperm RNA Characteristics in Stallion Fresh Semen are Influenced by Somatic Cell Lysis

P-491 Adenylate Kinase 9 Involvement in Sperm Flagellar Movement and Ependymal Cell Cilia of Mouse Brain Ventricles

P-492 Validating Sperm Surface Lectin Targets for Use in the Nanopurification of Bull Semen

P-493 Single cell RNA sequencing shed light on the cellular and molecular alterations behind distinct types of cryptozoospermia

P-494 Deciphering the Metabolic Reprogramming during Sperm Capacitation

P-495 Exploring the fertility rescue effect of transgenic expression of human PRSS55 in Prss55 null mice

P-496 Changes in Sialylation of Sperm Glycocalyx during in Vitro Capacitation

P-497 Unmixing the [Fluorescent] Spectrum of Sperm Cellular Health Utilizing High-Parameter, Image-based, Spectral Flow Cytometry

P-498 Elucidating the Cellular and Molecular Mechanisms Driving Testicular Dysfunction Within In Utero Growth Restricted (IUGR) Boars

P-499 Testis-Specific Actin-Like 7 Family Members A and B (ACTL7A/B) Are Key Components of Cytoskeletal Regulation in Spermatid Development and Are Required for Male Fertility

P-500 Nuclear Associations and In Silico Modeling Implicate Chromatin and Epigenetic Regulatory Mechanisms for Testis-Specific Actin Related Proteins in Spermiogenesis

P-501 Optimization of the Sperm Energy Restriction and Recovery (SER) Treatment in the Bovine Model

P-502 Sperm Maturation Regulates Function and Binding of Sperm to Complex and Hybrid N-Linked Oligosaccharides

P-503 New Multi-Parametric Flow Cytometry Analysis Unveils SCSA Limitations, Enhancing Sperm DNA Fragmentation Assessment

P-504 Metabolic Characterization of Sperm after Early-life Exposure to Malnutrition

Toxicology

P-505 The Effects Of Short-Term And Chronic Daily Propylparaben Exposure On Estrous Cyclicity And Fertility In Mice

P-506 Di(2-Ethylhexyl) Phthalate Increases Expression Of Several Oxidative Stress Markers In The Mouse Ovary

P-507 Prenatal Exposure To BPA And BPS Transgenerationally Alters The Transcriptome And Epigenome In Male Germ Cells

P-508 Altered Abundance Of Proteins Involved In Chemical Biotransformation In Inguinal Adipose Tissue In Lean And Obese Female Mice During Exposure To Dimethylbenz[A]Anthracene

P-509 Molecular Mechanisms Underlying The Adverse Outcomes Of DEHP Exposure On Human Preovulatory Follicles

P-510 Bisphenol A Impairs Brain Formation And Neurodevelopment By Enhancing HOX Genes

P-511 Diethylstilbestrol And Ketoconazole Alter Lateral Adherence Of Cultured Bovine Oviduct Epithelial Cells

P-512 Iodoacetic Acid Alters The Expression Of Oxidative Stress Genes In The Mouse Ovary

P-513 Investigation Into The Effects Of Sodium Valproate On Developing Fetal Gonads In Vitro

P-514 Effect Of Selective Serotonin Reuptake Inhibitor, Escitalopram, On Adrenal Cell Steroidogenesis

P-515 Flavored E-Cigarettes Reduce Embryo To Placental Weight Ratios And Elicit Differential Gene Expression Of Placental Growth, Invasion, And Antioxidant Response Pathways

P-516 Plastics Make It To The Follicular Fluid Of Poor Ovarian Responders Patients Undergoing ICSI

Other

P-102 Gonadal Development Following Blastocyst Complementation In Mice

P-137 The Development Of A Pre-clinical Swine Endometriosis Model

P-385 Evaluation Of Anti-müllerian Hormone Plasma Levels As A Predictor Of Pregnancy Outcome In The Rhesus Macaque

P-390 Mastitis Infection During Pregnancy Alters The Liver Proteome Of Calves Postnatally

P-416 Transcriptional Regulation Of Ribosomal RNA By A Germ Granule Component, Meioc, For Differentiation Of Germline

P-417 Exploring The Impact Of Hypoxia On Gonadal Steroidogenic Cells: New Insights From Proteomic And Spheroid Development In Leydig Cells

P-418 Detection Of Perivitelline Membrane Bound Sperm Gdna Profiles Using Quail-specific Microsatellites

P-419 Epigenetic Effects Of Adverse Lifestyle Choices In Males

P-420 Systems Investigation Reveals An Unexpected Lh-mediated Signal Transducer Of Steroidogenesis In Leydig Cells

SPONSORS & EXHIBITORS

EmbryoCloud SL	Supporter Sponsor
Minitub GmbH.	Supporter Sponsor
Nasci Biologie Médicale Inc.	Supporter Sponsor
Réseau Québécois en Reproduction	Supporter Sponsor
Colorado Center for Reproductive Medicine	Friend Sponsor
Cosmo Bio USA	Contributor Sponsor
ARTSMedia Denmark	Exhibitor
Bioscientifica	Exhibitor
EggTech	Exhibitor
IVF Bioscience	Exhibitor
The Journal of Reproduction and Development	Exhibitor

GRANT ORGANIZATIONS

Bill & Melinda Gates Foundation

Burroughs Wellcome Fund

Lalor Foundation

March of Dimes

National Institutes of Health

USDA-NIFA

THANK YOU FOR YOUR CONTINUED SUPPORT!

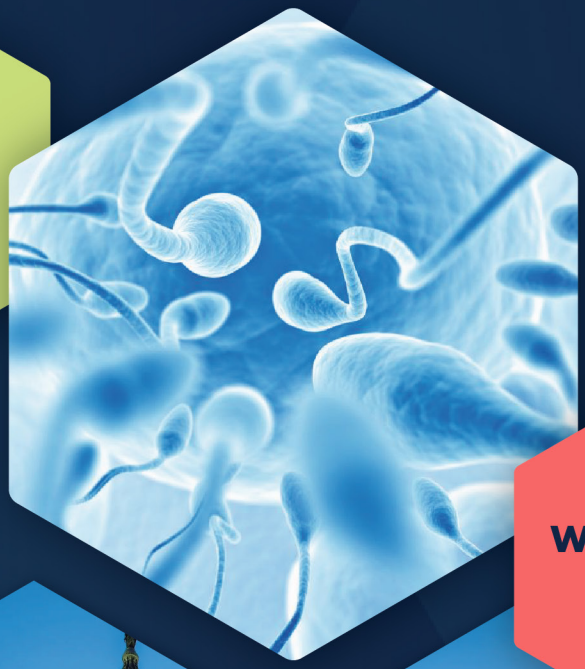
Save the Date!

SSR
Society for the Study of Reproduction

SSR 2025 Annual Meeting

Uniting Scientific Disciplines for Breakthroughs in Reproduction

July 28 — August 1 2025



Washington, D.C.