TRANSLATING REPRODUCTIVE SCIENCE TO THE BEDSIDE

VANCOUVER

MARCH 10-14, 2020

Vancouver Convention Centre East
999 Canada Pl
Vancouver, BC, Canada V6C 3C1

The SRI 67th Annual Scientific Meeting is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, and approved by Society of Obstetricians and Gynaecologists of Canada.
Message from the SRI President and Program Director

Dear Colleagues:

Welcome to the 67th Annual Meeting of the Society for Reproductive Investigation (SRI), March 10 – 14, 2020 in Vancouver, BC, Canada. The theme of the 2020 is meeting, “Translating Reproductive Science to the Bedside.”

With Irina Burd, MD, PhD, as Program Director, we have developed an outstanding program that includes Presidential Distinguished Lecturers, a New Investigator Plenary, Oral Sessions, Invited Mini-Symposia, Invited Lunch and Learn Symposia and a Hot Topics Plenary. Moreover, the 2020 Program is packed with several career development sessions and networking opportunities, such as the Career Development Workshops, including a new Grant Writing Clinic; New Investigator, Early and Mid-Career sessions; and the popular “Connection Corners.” This year, the Diversity, Equity and Inclusion Forum has been placed on Thursday, over the lunch hour, giving all delegates the option to attend. Of course, your very own SRI Band, The Featles, will be back for their Canadian Tour!

The meeting will feature exciting and inspiring presentations by leading scientists. Our first Presidential Distinguished Lecturer will be Joan A. Steitz, PhD. Prof. Steitz is the Sterling Professor of Molecular Biophysics & Biochemistry at Yale University. She is internationally recognized for her work in discovering and establishing the structures and functions of non-coding (nc)RNAs in vertebrate (mostly mammalian) cells. In 2018, Prof. Steitz was awarded the Lasker-Koshland Special Achievement in Medical Science Award not only for her leadership in RNA biology, but also for her dedication to scientific training, as she has trained almost 200 scientists either as postdoctoral fellows or PhD students. Prof. Steitz will be speaking on March 13th at 8:00 a.m.

Our second Presidential Distinguished Lecturer will be Janet Rossant, CC, PhD, FRS, FRSC. Prof. Rossant is a Professor in the Department of Molecular Genetics, University of Toronto. She is internationally recognized as a trailblazer for her work on cell fate in embryo development and stem cells. Her research has opened new vistas in reproduction. Prof. Rossant has received numerous awards including the 2007 March of Dimes Prize in Developmental Biology, and is an inspiration and mentor to many scientists in the field of reproduction. Dr. Rossant will deliver her presentation on March 14th at 8:00 a.m.

Furthermore, for the first time, the SRI meeting in Vancouver will host the Annual March of Dimes Prize in Developmental Biology and the Agnes Higgins Award. The March of Dimes Developmental Biology Prize recipient will be named in March 2020. Past recipients of the March of Dimes Prize in Developmental Biology include highly distinguished scientists that have transformed their fields and several have later become Nobel Laureates. The recipient of this prestigious award will deliver a presentation at the 2020 SRI meeting on March 12th at 8:00 a.m. The recipients of the Agnes Higgins Award will also be announced.

The SRI has offered several travel awards for the Annual Meeting. All awardees will be acknowledged during different sessions throughout the Annual Meeting.

True to the nature of our Society, the 67th Annual SRI Meeting will be highly collegial and provide a forum for outstanding science and the opportunity for fruitful global networking. On behalf of the SRI Council, Program Committee, and Staff, we welcome you to Vancouver!

Sincerely Yours,

James Segars, MD  
SRI President, 2019-2020

Irina Burd, MD, PhD  
SRI Program Director, 2020
Member Recognition Program

Members of SRI took this opportunity to recognize a member of SRI publically in exchange for a donation to the SRI Foundation. Thank you to all those who participated!

**Dr. Robert Garfield**

A legend in the field of preterm birth
A generous mentor who encouraged and fostered many young investigators and always remained a friend for life

A big thank you!

— Dr. Linda Chambliss

**Laura T Goldsmith, PhD**

Wonderful scientist and colleague
National leader in resident and fellow research education
Tireless advocate for women in SRI

— Nanette Santoro, MD

**Sandy Davidge**

Sandy, the work you accomplished for SRI has changed our trajectory for the better. Thank you for all you have done!

— SRI Council

**Murray Mitchell**

Murray, thank you for your fore vision and work with the Society. We are so grateful for your dedication to SRI.

— SRI Council
There once was a man from Oregon
Who dreamed of becoming — The One
To unite the clinic and science
And find answers to guide us
He found it was perfectly fun
You may think that this story’s absurd
But there’s more – he’s a joker – I heard
Starting with preterm birth
Jumping to proteomics
And ending up as a global health nerd
Now his mark on us all is not small
We learned to write, tell a story – not scrawl
But the craziest part
Are his continuous pranks
That come to an unsuspecting meatball
The lesson he is trying to impart
Is to keep science simple – it’s an art
What an honor it would be
To end up like he
With such a legacy of science and heart

With deep gratitude:
Kristina A.W.
David E.
Kara H.
Sophia L.
Stephen M.
Sarah W.
Christie W.
Alisa K.

Irina Burd
I could never thank you
enough for all the work you have done to make this week possible. I couldn’t have done it without you.
— Jim Segars

I could never thank you enough for all the work you have done to make this week possible. I couldn’t have done it without you.
— Jim Segars
Anne Krolikowski

Thanks for all you do!
— SRI Council

Leah Miller

Thanks for all you do!
— SRI Council

Michelle Holm

Thanks for all you do!
— SRI Council
SRI Mentor Hall of Fame

The SRI leadership realizes that the society is nothing without its members and we want to recognize your contributions. In 2019, in an effort to recognize SRI’s best Mentors, as well as raise funds for the SRI Foundation, voting was open to the Membership for just $25 per vote. Members of SRI were encouraged to team up with their peers and raise the most funds in the name of their favorite mentor.

2020 Mentor Hall of Fame Inductee:
Gerson Weiss, MD

Honorable Mention:
Anne Colston Wentz, MD | Gary Hodgen, PhD | Hugh Taylor, MD | Norman Gant, MD | Zev Rosenwaks, MD
## 2020 Program Committee

### Program Committee Chair
Emre Seli, MD  
Yale School of Medicine

### 2020 Program Director
Irina Burd, MD, PhD  
Johns Hopkins University

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
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<tbody>
<tr>
<td>Sarah K. England, PhD</td>
<td>Washington University School of Medicine</td>
</tr>
<tr>
<td>Ayman Al-Hendy, MD, PhD</td>
<td>University of Illinois at Chicago Department of Obstetrics and Gynecology</td>
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<tr>
<td>Charles A. Ducsay, PhD</td>
<td>Loma Linda University</td>
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<tr>
<td>Thomas Jansson, MD, PhD</td>
<td>University of Colorado Anschutz Medical Campus</td>
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<tr>
<td>Leslie Myatt, PhD, FRCOG</td>
<td>Oregon Health and Science University</td>
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<tr>
<td>Bo R. Rueda, PhD</td>
<td>MGH / Harvard Medical School</td>
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<tr>
<td>Floor Spaans, PhD</td>
<td>University of Alberta</td>
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<tr>
<td>James H. Segars, MD</td>
<td>Johns Hopkins University School of Medicine</td>
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<tr>
<td>Nanette F. Santoro, MD</td>
<td>University of Colorado</td>
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<tr>
<td>Dineo Khabele, MD</td>
<td>The University of Kansas Medical Center</td>
</tr>
</tbody>
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General Meeting Information

Meeting Description
The SRI Annual Meeting gathers leading scientists and clinical investigators annually to share cutting-edge information in reproductive sciences and women’s health. The 67th Annual Meeting will feature an exciting lineup of distinguished speakers, 12 mini-symposia sessions, several new investigator events, career development sessions, and excellent scientific oral and poster presentations.

Meeting Location
Vancouver Convention Centre East
999 Canada Place
Vancouver, BC V6C 3B5, Canada
Phone: +1-866-785-8232

Host Hotels
Pan Pacific Hotel Vancouver
300 - 999 Canada Pl
Vancouver, BC V6C 3B5, Canada
Phone: +1-800-663-1515

Fairmont Waterfront Hotel
900 Canada Place Way
Vancouver, BC V6C 3L5, Canada
Phone: +1-604-691-1991

Fairmont Pacific Rim
1038 Canada Pl
Vancouver, BC V6C 0B9, Canada
Phone: +1-604-695-5300

Meeting Objectives
• Provide attendees with state-of-the-art knowledge in the reproductive sciences and women’s health research fields.
• Gain insight into future directions from critical analysis of investigative findings.
• Distinguished lectures and symposia will provide a focused format that fosters more meaningful dialogue among clinicians and researchers.
• Connect and network with international leaders who are advancing the scientific study of reproductive and women’s health.

Target Audience
Scientists and clinical investigators who conduct basic, translational and clinical investigation in reproductive sciences and women’s health.

Authorship Policy
All authors connected to a presentation and/or abstract must agree on all information contained in the presentation. Failure of an author to agree to the presentation format will lead to the presentation being withdrawn from the conference.

An author who submits a presentation to the Annual Meeting must have intentions of attending, registering, and presenting at the meeting once the submission is accepted into the program. Repeated or consecutive last-minute cancellations by presenters may result in future submissions being denied.

Photography Disclaimer
By registering for the SRI Annual Meeting, you give consent to be photographed by SRI staff for purposes of advertising and public display.

Session Recording and Photos
Session content is copyright-protected by SRI. Recording of any session without the consent of SRI is prohibited. Any recording done with consent of SRI is for personal use only and cannot be reproduced or distributed. Please refrain from taking photos of the presenter or the presentations as it is disruptive and the flash is distracting.

No Smoking Policy
Smoking is not permitted during any SRI activity or event.

Website
For more information on the Society for Reproductive Investigation, visit our website at www.sri-online.org.
Meeting Attendance Code of Conduct Policy

By attending any SRI event, you agree voluntarily to abide by our code of conduct:

We value your attendance, and want to make your experience as productive and professionally stimulating as possible.

Expected Behavior:
- Please communicate openly with respect and consideration for others, valuing a diversity of views and opinions.
- Avoid personal attacks directed toward other attendees, participants, volunteers, exhibitors, staff and suppliers/vendors.
- Turn off any ringers or otherwise disrupting devices during oral or poster sessions.
- Request permission from speakers before recording or taking photographs during their presentation.
- Photos are not to be taken of posters either during or outside of poster viewing hours, unless you have received permission from the author.
- Be mindful of your surroundings and your fellow participants. Alert staff if you notice a dangerous situation or someone in distress.
- Respect the rules and policies of the convention center, hotels, contracted facility, or any other venue.

Harassment and Safety:
SRI is dedicated to providing a collegial, safe, hospitable, and productive environment for everyone attending our events, regardless of ethnicity, religion, disability, physical appearance, gender, sexual orientation, marital status, educational background, ability status, political affiliation, nationality. It is important to remember that a community where people feel uncomfortable or threatened is neither healthy nor productive. Accordingly, SRI prohibits intimidating, threatening, or harassing conduct during our conferences. This policy applies to speakers, staff, volunteers, attendees and vendors. Conference participants violating these rules may be sanctioned or expelled from the conference, at the discretion of SRI.

Harassment of SRI participants will not be tolerated in any form. Harassment includes, but is not limited to, offensive gestures or verbal comments related to ethnicity, religion, disability, physical appearance, gender, sexual orientation, marital status, educational background, ability status, political affiliation, nationality, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate or unwanted physical contact or touching, unwelcome attention, or other disruptive or harassing behavior of any kind. Participants asked to stop any harassing behavior are expected to comply immediately.

If anyone subject to this policy engages in behavior which is harassing or in otherwise violation of this policy, SRI may take any action they deem appropriate, ranging from a simple warning to the offender to expulsion from a meeting without refund and/or future meetings and events, or such other action including notifying authorities. If you are the subject (or know someone who is the subject) of harassment or other violation of this policy, or have any other concerns, please do not hesitate to contact SRI staff who can work with appropriate SRI leadership to resolve or otherwise respond to the situation.

SRI staff will be happy to help participants contact convention center/hotel/venue security or local law enforcement, and otherwise assist those experiencing harassment, to enable them to feel safe for the duration of the conference.

Need to file a complaint? Please contact the SRI Executive Director, Anne Krolikowski, at akrolikowski@sri-online.org.
## 2020 Schedule-at-a-Glance

<table>
<thead>
<tr>
<th>Tuesday March 10</th>
<th>Wednesday March 11</th>
<th>Thursday March 12</th>
<th>Friday March 13</th>
<th>Saturday March 14</th>
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<tbody>
<tr>
<td><strong>Morning</strong></td>
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<tr>
<td>9:00 a.m. – 12:00 p.m.</td>
<td>Your Grant in One Page Clinic</td>
<td>7:00 a.m. – 6:00 p.m. Registration</td>
<td>7:00 a.m. – 6:00 p.m. Registration</td>
<td>7:00 a.m. – 6:00 p.m. Registration</td>
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<tr>
<td>11:00 a.m. – 6:00 p.m.</td>
<td>Registration</td>
<td>8:00 a.m. – 8:10 a.m. President’s Welcome Address</td>
<td>8:10 a.m. – 9:00 a.m. March of Dimes Developmental Biology Prize Presentation and Lecture and Agnes Higgins Award Announcement</td>
<td>7:00 a.m. – 8:00 a.m. SRI Business Meeting *Breakfast will be served and ALL SRI Members are invited to attend.</td>
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<tr>
<td><strong>Afternoon</strong></td>
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<tr>
<td>1:00 p.m. – 5:45 p.m.</td>
<td>Career Development Workshops</td>
<td>12:00 p.m. – 1:00 p.m. Mid-Career Session *Lunch will be available for purchase through the Advance Registration Deadline</td>
<td>12:00 p.m. – 1:30 p.m. Parallel Lunch and Learns</td>
<td>12:35 p.m. – 2:05 p.m. Diversity, Equity and Inclusion Forum *Ticketed and includes lunch</td>
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<td>2:00 p.m. – 6:00 p.m.</td>
<td>SRI Council Meeting (Closed)</td>
<td>12:00 p.m. – 1:30 p.m. SRI Past President’s Lunch (Invitation Only)</td>
<td>12:00 p.m. – 1:30 p.m. SRI Past President’s Lunch (Invitation Only)</td>
<td>12:35 p.m. – 2:05 p.m. Lunch and Learn Symposium</td>
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<td>1:30 p.m. – 5:00 p.m.</td>
<td>Satellite Sessions Continued</td>
<td>1:35 p.m. – 3:35 p.m. Concurrent Mini Symposia I</td>
<td>12:10 p.m. – 2:05 p.m. Concurrent Mini Symposia II</td>
<td>2:10 p.m. – 4:10 p.m. Concurrent Mini Symposia II</td>
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<td>5:15 p.m. – 6:15 p.m.</td>
<td>New Investigator Forum</td>
<td>3:35 p.m. – 4:00 p.m. Coffee Break</td>
<td>4:10 p.m. – 4:25 p.m. Coffee Break</td>
<td>4:10 p.m. – 4:25 p.m. Coffee Break</td>
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<tr>
<td><strong>Evening</strong></td>
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<td>6:00 p.m. – 7:30 p.m.</td>
<td>Mentor-in-a-Cloud Speed Dating Event *Members Only - Sign-up prior to event is required</td>
<td>6:15 p.m. – 7:45 p.m. Connection Corners *Ticketed</td>
<td>6:15 p.m. – 7:30 p.m. President’s Address and Awards Ceremony</td>
<td>12:05 p.m. – 1:35 p.m. Hot Topics and Awards Luncheon *Boxed lunches will be provided</td>
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<tr>
<td>6:30 p.m. – 8:00 p.m.</td>
<td>Welcome Reception</td>
<td>6:30 p.m. – 8:00 p.m. Welcome Reception</td>
<td>6:15 p.m. – 7:30 p.m. President’s Address and Awards Ceremony</td>
<td>1:45 p.m. – 3:45 p.m. SRI Council Meeting (Closed)</td>
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<tr>
<td><strong>Evening</strong></td>
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<tr>
<td>6:15 p.m. – 7:30 p.m.</td>
<td>The Beatles Canadian Tour *Ticketed</td>
<td>7:45 p.m. – 11:00 p.m. The Beatles Canadian Tour *Ticketed</td>
<td>7:45 p.m. – 11:00 p.m. The Beatles Canadian Tour *Ticketed</td>
<td>7:45 p.m. – 11:00 p.m. The Beatles Canadian Tour *Ticketed</td>
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### Note:
- *The Beatles Canadian Tour* is ticketed and requires advanced registration.
Social Events

Welcome Reception
Wednesday, March 11, 2020 – 6:30 p.m. – 8:00 p.m.
EAST BALLROOM AB
Join us for socializing, drinks and light appetizers.

SRI Member Lounge
Open throughout the Annual Meeting on Thursday, March 12 at 8:00 a.m. – Saturday, March 14 at 1:00 p.m.
EAST MEETING ROOM 19
All SRI Members are invited to the Member Lounge at the 67th Scientific Annual Meeting. The Member Lounge will be an area for you to meet with your colleagues, mentors, and mentees and to network with other SRI Members throughout the meeting.

Connection Corners
Thursday, March 12 – 6:15 p.m. – 7:45 p.m.
EAST MEETING ROOM 1
A ticketed event for new investigators to meet and connect with mid-career and senior investigators about jobs, career advice or just some friendly banter. Drinks and light appetizers provided.

President’s Address Reception Featuring The Featles
President’s Address and Awards Ceremony
Friday, March 13 – 6:15 p.m. – 7:30 p.m.
EAST BALLROOM BC
The Featles Canadian Tour
Friday, March 13 – 7:45 p.m. – 11:00 p.m.
EAST BALLROOM A
Join us as we celebrate a successful meeting with a night of honoring key leaders in our field, followed by food and drinks during The Featles Canadian Tour. Please note The Featles Canadian Tour is a ticketed event.
Exhibitors

Coppe Laboratories
W229N1870 Westwood Dr
Waukesha, WI 53186, USA
http://www.coppelabs.com/

DOHad 2021-International Society for Developmental Origins of Health and Disease
#504-1166 Alberni St
Vancouver, BC V6E 3Z3, Canada
https://www.dohad2021.com/welcome

Research Centre for Women’s and Infant’s Health BioBank (RCWIH)
60 Murray St
Toronto, ON MSP 2J8, Canada
http://biobank.lunenfeld.ca/

Reproductive Scientist Development Program (RSDP)
University of Missouri, Columbia
500 North Keene, Suite 203
Columbia, MO 65201, USA
https://www.rsdprogram.org/

Springer
233 Spring Street
New York, NY 10013, USA
www.springer.com
Vancouver Convention Centre East and Host Hotels Map
Continuing Medical Education

Purpose
Provide an opportunity for physicians to receive updated information and solidify their knowledge of reproductive sciences and women’s health.

Target Audience
Physicians and scientists who are involved in the evaluation and/or care of patients requiring reproductive health care. Participants should be clinicians or scientists who have backgrounds in the fields of obstetrics, perinatology, reproductive genetics, gynecology and gynecologic oncology, endocrinology, reproductive physiology, biochemistry, pharmacology, immunology, epidemiology, reproductive infectious disease, reproductive stem cell and developmental biology.

Learning Objectives
At the completion of the activity participants should be able to:
• Provide attendees with state-of-the-art knowledge in the reproductive sciences and women’s health research fields.
• Gain insight into future directions from critical analysis of investigative findings.
• Distinguished lectures and symposia will provide a focused format that fosters more meaningful dialogue among clinicians and researchers.
• Connect and network with international leaders who are advancing the scientific study of reproductive and women’s health.

Accreditation Information
This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, and approved by Society of Obstetricians and Gynaecologists of Canada. You may claim a maximum of 6 hours (credits are automatically calculated).

Through an agreement between the Royal College of Physicians and Surgeons of Canada and the American Medical Association, physicians may convert Royal College MOC credits to AMA PRA Category 1 Credits™.

“Live educational activities recognized by the Royal College of Physicians and Surgeons of Canada as Accredited Group Learning Activities (Section 1) are deemed by the European Union of Medical Specialists (UEMS) eligible for ECMEC®.”

More information can be found on the SRI Website here: https://www.sri-online.org/meetings-calendar/2020/attendee/continuing-medical-education
Scientific Program

**Tuesday, March 10**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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| 9:00 a.m. - 12:00 p.m. | **Grant Writing Clinic - Your Grant in One Page**  
EAST MEETING ROOM 8 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2 |
| 11:00 a.m. - 6:00 p.m. | **Registration**  
VANCOUVER CONVENTION CENTRE EAST - LOBBY (LEVEL 1) |
| 1:00 p.m. - 6:00 p.m. | **Career Development Workshops**  
EAST MEETING ROOM 8 & 15 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2 |
| Workshop Chair: Thomas Jansson, MD, PhD  
University of Colorado Anschutz Medical Campus |
| 1:00 p.m. - 1:15 p.m. | **Welcome and Introductions**  
Thomas Jansson, MD, PhD  
University of Colorado Anschutz Medical Campus  
Thomas Zollner, PR, Dr Med  
Bayer AG, Berlin, Germany |
| 1:15 p.m. - 2:00 p.m. | **Dicing Results: Boon and Bane of Statistics in Research and Early Clinical Development**  
Richardus Vonk  
Bayer AG, Berlin, Germany |
| 2:00 p.m. - 2:45 p.m. | **Lost in Translation: How to Do Translational Research**  
Phillip R. Bennett, PhD, MD, FRCOG, FMedSci  
Imperial College London, London, United Kingdom |
| 2:45 p.m. - 3:15 p.m. | BREAK |
| 3:15 p.m. - 4:00 p.m. | **Network or Perish: The Untold Secrets of Successful Networking**  
Sandy T. Davidge, PhD, FCAHS  
Women and Children’s Health Research Inst. - University of Alberta, Edmonton, AB, Canada |
| 4:00 p.m. - 4:45 p.m. | **Using Social Media Responsibly to Promote Science**  
Helen Jones, PhD  
Cincinnati Children’s Hospital MC, Cincinnati, OH, USA  
Dorothy K. Sjo, PhD  
Washington University, St. Louis, MO, USA |
| 4:45 p.m. - 5:00 p.m. | BREAK |
| 5:00 p.m. - 5:45 p.m. | **Grant Writing 101: How is the Reviewer Thinking?**  
Chair: Les Myatt, PhD, FRCOG  
Oregon Health Science University, Portland, OR, USA  
Panelists: Shannon K. Laughlin-Tommaso, MD  
Mayo Clinic, Rochester, MN, USA  
Janna Morrison, PhD  
University of South Australia, Adelaide, SA, Australia |
| 6:00 p.m. - 7:30 p.m. | **Mentor-in-a-Cloud Speed Dating Event**  
EAST MEETING ROOM 11 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2 |

* Prior sign-up is required
Scientific Program

Wednesday, March 11
7:30 a.m. - 6:30 p.m.  Registration
VANCOUVER CONVENTION CENTRE EAST - LOBBY (LEVEL 1)

8:30 a.m. - 5:00 p.m.  Satellite Meetings (See each Satellite Programs starting on pg. 18)
12:00 p.m. - 1:00 p.m.  Mid-Career Session - Pathways to Senior Leadership: Department Chair and Beyond
EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

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<thead>
<tr>
<th>Table Number</th>
<th>Mentors</th>
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<tbody>
<tr>
<td>1</td>
<td>Kelle Moley, MD</td>
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<td></td>
<td>Riccardo Azziz, MD, MPH, MBA</td>
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<td>2</td>
<td>Sarah Berge, MD</td>
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<td>Roger Smith, MBBS, Hons., PhD</td>
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<td>3</td>
<td>Jerry Strauss, MD, PhD</td>
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<td>Lynn Seely, MD</td>
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<td>4</td>
<td>Michael Diamond, MD</td>
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<td>5</td>
<td>Yoel Sadovsky, MD</td>
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<td>Gordon Smith, PhD</td>
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<td>6</td>
<td>Kristof Chwalisz, MD, PhD</td>
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<td>Nanette Santoro, MD</td>
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<td>7</td>
<td>John Challis, PhD, FRCOG, FRSC</td>
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<td>Caroline Gargett, PhD</td>
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<td>8</td>
<td>Geoffrey Cundiff, MD</td>
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<td>Sandy Davidge, PhD</td>
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<td>9</td>
<td>Phil Bennett, PhD</td>
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<td>Hugh Taylor, MD</td>
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<td>10</td>
<td>Errol Norwitz, MD, PhD</td>
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<td>Mark Phillippe, MD</td>
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5:15 p.m. - 6:15 p.m.  New Investigator Forum – Breaking Away From Your Mentor and How to Do This in a Peaceful Way
EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Panelists:  Mentor/Mentee Pair 1: Guatam Chaudhuri, MD, PhD and Carla Janzen, MD, PhD
Mentor/Mentee Pair 2: Sarah Robertson, PhD and Alison Care, PhD

6:30 p.m. - 8:00 p.m.  Welcome Reception
EAST BALLROOM AB - VANCOUVER CONVENTION CENTRE EAST LEVEL 1
Join us for socializing, wine and light appetizers.
Scientific Program

Wednesday, March 11, continued
8:30 a.m. - 5:00 p.m.

Endometrium Satellite Meeting
EAST MEETING ROOM 2 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Implantation, Menstruation and Endometrial Repair

Chairs: Peter A.W. Rogers, PhD
University of Melbourne Royal Women’s Hospital, Parkville, VIC, Australia
Asgi Fazleabas, PhD
Ob/Gyn & Reproductive Biology
Michigan State University, Grand Rapids, MI, USA

8:30 a.m. - 9:30 a.m.
Evidence for Corpus Luteal and Endometrial Origins of Adverse Pregnancy Outcomes in Women Conceiving With or Without Assisted Reproduction
Kirk P. Conrad, MD
University of Florida COM, Gainesville, FL, USA

9:30 a.m. - 10:00 a.m.
BREAK

10:00 a.m. - 10:30 a.m.
The Role of Adult Bone Marrow-Derived Progenitor Cells in Decidua: Contribution to Embryo Implantation and Pregnancy
Reshef Tal, MD, PhD
Yale School of Medicine, New Haven, CT, USA

10:30 a.m. - 11:00 a.m.
Maternal-Fetal Communication: Deciphering Decidual Signals
Ellen M. Menkhorst, PhD
The University of Melbourne, Melbourne, VIC, Australia

11:00 a.m. - 12:00 p.m.
Uterine Stem Cells: Biology and Promise for Reproductive Medicine
Shiying Jin, PhD
Buck Institute for Research on Aging, Novato, CA, USA

12:00 p.m. - 1:30 p.m.
LUNCH

1:30 p.m. - 2:30 p.m.
Chromatin Regulation of the Endometrium
Ronald Chandler, PhD
Michigan State University College of Human Medicine, Grand Rapids, MI, USA

2:30 p.m. - 3:00 p.m.
Defining the Heterogeneity and Function of Macrophages During Endometrial Tissue Repair
Douglas A. Gibson, PhD
University of Edinburgh and The Queen’s Medical Research Institute, Edinburgh, United Kingdom

3:00 p.m. - 3:30 p.m.
Shedding Some CLARITY on the Adenomyotic Lesion Microenvironment
Juan Gnecco, PhD
Massachusetts Institute of Technology, Cambridge, MA, USA

3:30 p.m. - 4:00 p.m.
BREAK
Wednesday, March 11, continued

4:00 p.m. - 5:00 p.m.  The Evolution of Endometrial Invasibility
Gunter Wanger, PhD
Yale Systems Biology Institute, West Haven, CT, USA

8:30 a.m. - 5:00 p.m.  Fetal Physiology Satellite Meeting
EAST MEETING ROOM 13 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Chairs:  Kent Thornburg, PhD
Oregon Health & Science University, Portland, OR, USA
Jennifer A. Thompson, PhD
University of Calgary, Calgary, AB, Canada

Introduction  8:30 a.m. - 8:35 a.m.
Jennifer A. Thompson, PhD
University of Calgary, Calgary, AB, Canada

Morning Session  Moderators:  Stephanie R. Wesolowski, PhD
University of Colorado, Aurora, CO, USA
Michael Nash
University of Colorado Denver, Aurora, CO, USA

8:35 a.m. - 9:30 a.m.  The Influence of the Early Life Environment on Long-Term Risk of Disease
Kirsten Poore, PhD
University of Southampton, Southampton, United Kingdom

9:30 a.m. - 10:00 a.m.  BREAK

10:00 a.m. - 10:30 a.m.  The Effects of PFAS Exposure on Placental Development and Fetal Growth During Pregnancy
Liping Feng, MD
Duke University Medical Center, Durham, NC, USA

10:30 a.m. - 11:00 a.m.  Maternal Exposure to Nanomaterials During Pregnancy, Implications in Fetal Health
Phoebe Stapleton, PhD
Rutgers University, New Brunswick, NJ, USA

11:00 a.m. - 11:30 a.m.  Identifying Mechanisms for Toxicant-Induced Epigenetic Change: Towards “Bench to Community” Translation of Environmental Epigenetics
Caren Weinhouse, PhD
Oregon Health & Science University, Portland, OR, USA

11:30 a.m. - 12:00 p.m.  The Effects of Inadequate Maternal Iron Intake on Fetal Growth and Development
Stephane L. Bourque, PhD
University of Alberta, Edmonton, AB, Canada

12:00 p.m. - 1:30 p.m.  LUNCH

Afternoon Session  Moderators:  Stephane L. Bourque, PhD
University of Alberta, Edmonton, AB, Canada
Meghan Riddell, PhD
University of Alberta, Edmonton, AB, Canada
Scientific Program

Wednesday, March 11, continued

1:30 p.m. - 2:30 p.m.  Toxicants and Maternal Lifestyle Disturb Human Fetal Developmental Programming  
Paul A. Fowler, PhD  
University of Aberdeen, Aberdeen, United Kingdom

2:30 p.m. - 3:30 p.m.  Maternal Lipids, Fetal Lipids: Regulation of Developmental Trajectories  
Lisa A. Joss-Moore, PhD  
University of Utah, Salt Lake City, UT, USA

3:30 p.m. - 4:00 p.m.  BREAK

4:00 p.m. - 4:30 p.m.  Inflammation and Fetal Programming: Establishing Causality  
Alina Maloyan, PhD  
Oregon Health and Science University, Portland, OR, USA

4:30 p.m. - 5:00 p.m.  Perinatal Programming of Glucose Intolerance in Fetuses with Placental Insufficiency  
Sean W. Limesand, PhD  
University of Arizona, Tucson, AZ, USA

8:20 a.m. - 5:00 p.m.  Joint Satellite - Myometrium/Parturition/Preterm Birth International Collaborative (PREBIC) Satellite Meeting  
EAST MEETING ROOM 8 & 15 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

PREBIC Organizer: Ramkumar Menon, PhD  
The University of Texas Medical Branch at Galveston, Galveston, TX, USA  
Executive Director - PREBIC

Parturition/Myometrium Organizer:  
Rachel Tribe, PhD  
King’s College London, London, United Kingdom

Session I  
Moderators: Calvin J Hobel, MD  
Cedars-Sinai Medical Center, Los Angeles, CA, USA  
Cynthia Gyamfi-Bannerman, MD  
Columbia University Irving Medical Center, New York, NY, USA  
President - PREBIC

8:20 a.m. - 8:30 a.m.  Preterm Birth International Collaborative Activities  
Cynthia Gyamfi-Bannerman, MD  
Columbia University Irving Medical Center, New York, NY, USA  
President - PREBIC

8:30 a.m. - 9:00 a.m.  Pursuit of New Tools for Addressing Adverse Pregnancies and Newborn Complications in Global Health  
Sindura Ganapathi, BVSc (DVM), PhD  
Bill & Melinda Gates Foundation, Seattle, Washington, USA
Scientific Program

Wednesday, March 11, continued

9:00 a.m. - 9:30 a.m. Risks Associated with Viral Infections During Pregnancy
Gil G. Mor, MD, PhD
Wayne State University School of Medicine, Detroit, MI, USA

9:30 a.m. - 10:00 a.m. BREAK

Session II

Moderators: Hanns Helmer, MD
Medical University Vienna, Vienna, Austria
Past President - PREBIC
Elizabeth Bonney, MD
University of Vermont, Burlington, VT, USA
Secretary General - PREBIC

10:00 a.m. - 10:30 a.m. Immune System Dynamics in Healthy and Pathological Pregnancies
Brice Gaudillière, MD, PhD
Stanford University School of Medicine, Palo Alto, CA, USA

10:30 a.m. - 11:00 a.m. Baby Talk and Baby Steps: Uncovering Microbial-Immune Conversations at the Maternal-Fetal Interface
Indira U. Mysorekar, PhD
Washington University School of Medicine, St. Louis, MO, USA

11:00 a.m. - 11:05 a.m. Introduction to Calvin J Hobel, MD Lecture Series by PREBIC
Ramkumar Menon, PhD
The University of Texas Medical Branch at Galveston, Galveston, TX, USA
Executive Director - PREBIC

11:05 a.m. - 12:00 p.m. Calvin J. Hobel, MD “Keynote Lecture”
Cell-Free Nucleic Acids in Maternal Plasma as Biomarkers of Feto-Placental and Maternal Disease
Diana W. Bianchi, MD
National Institute of Child Health and Human Development (NICHD), Bethesda, MD, USA

12:00 p.m. - 1:30 p.m. LUNCH

Session III

Moderators: Nanbert Zhong, MD, PhD
New York State Institute for Basic Research in Developmental Disabilities, Staten Island, NY, USA
Past President - PREBIC
Mark Johnson, MD, Imperial College, London, United Kingdom
Chairperson - PREBIC

1:30 p.m. - 2:00 p.m. Impaired Autophagy and Proteinopathy in Adverse Pregnancy Outcomes
Surendra Sharma, MD, PhD
Warren Alpert Medical School of Brown University, Providence, RI, USA
Scientific Program

Wednesday, March 11, continued

2:00 p.m. - 2:30 p.m.  Epigenetic Regulation of LncRNA ADAM9 in Preterm Birth Syndrome
Nanbert Zhong, MD, PhD
New York State Institute for Basic Research in Developmental Disabilities, New York, NY, USA

Session IV

Moderators: Sam Mesiano, PhD
Case Western Reserve University, Cleveland, OH, USA
Treasurer - PREBIC
Rachel Tribe, PhD
King’s College London, London, United Kingdom
Board of Directors - PREBIC Europe

2:30 p.m. - 3:00 p.m.  Exploring the Physiological Adaptations to Pregnancy - Can it Inform our Understanding Preterm Birth?
Michael Taggart, PhD
University of Newcastle, Newcastle Upon Tyne, United Kingdom

3:00 p.m. - 3:30 p.m.  Modelling Maternal Obesity: Identifying the Mechanism Behind Myometrial Contractile Dysfunction During Parturition
Matthew Elmes, PhD
University of Nottingham, Loughborough, Leicestershire, United Kingdom

3:30 p.m. - 4:00 p.m.  BREAK

4:00 p.m. - 4:30 p.m.  On Target for Novel Therapies?
Jonathan Paul, PhD
University of Newcastle, New Lambton Heights, NSW, Australia

4:30 p.m. - 5:00 p.m.  Partnering with Industry for Drug Development in High-Risk Pregnancy
Jennifer Gudeman, PharmD
AMAG Pharmaceuticals, Inc, Waltham, MA, USA

8:30 a.m. - 5:00 p.m.  Ovarian Biology Satellite Meeting: Long Term Health Effects of Assisted Reproduction
EAST MEETING ROOM 3 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Organizers: Paolo F. Rinaudo, MD, PhD
UCSF, San Francisco, CA, USA
Emre Seli, MD
Yale School of Medicine, New Haven, CT, USA
Scientific Program

Wednesday, March 11, continued

Morning Session  DOHAD

Moderator: Paolo F. Rinaudo, MD, PhD
UCSF, San Francisco, CA, USA

8:30 a.m. - 9:30 a.m. Introduction to DOHAD: History, Evidence and Implications
Kent L. Thornburg, PhD
Oregon Health & Science University, Portland, OR, USA

9:30 a.m. - 10:00 a.m. BREAK

10:00 a.m. - 10:30 a.m. How Epigenetics Can Explain DOHAD
Robert Waterland, PhD
Baylor College of Medicine, Houston, TX, USA

10:30 a.m. - 11:00 a.m. Role of Inflammation in Reprogramming
Michael G. Ross, MD, MPH
David Geffen School of Medicine at UCLA, Los Angeles, CA, USA
Mina Desai, PhD
David Geffen School of Medicine at UCLA and LA BioMed at Harbor-UCLA Medical Center, Los Angeles, CA, USA

11:00 a.m. - 12:00 p.m. How Maternal Nutrition Induces Reprogramming
Kelle Moley, MD
March of Dimes, Arlington, VA, USA

Afternoon Session  IVF and Long Term Risks

Moderator: Emre Seli, MD
Yale School of Medicine, New Haven, CT, USA

1:30 p.m. - 2:00 p.m. How Uterine Stress Affect the Pancreas Beta Cell Function and Reprogramming
Paul Rozance, MD
University of Colorado School of Medicine, Aurora, CO, USA

2:00 p.m. - 2:30 p.m. IVF and New Born Risks
Dmitry Kissin, MD, MPH
Centers for Disease Control and Prevention, Atlanta, GA, USA

2:30 p.m. - 3:00 p.m. How IVF Can Affect the Placenta: A Mouse Model
Monica Mainigi, MD
University of Pennsylvania, Philadelphia, PA, USA

3:00 p.m. - 3:30 p.m. How IVF Can Affect Human Placenta Function
Margareta D. Pisarska, MD
Cedars Sinai Medical Center, Los Angeles, CA, USA

3:30 p.m. - 4:00 p.m. BREAK
Scientific Program

Wednesday, March 11, continued

4:00 p.m. - 4:30 p.m.  IVF and the Offspring: Bovine Model
Marc Andre Sirard, DVM, PhD
Universite Laval, Quebec, QC, Canada

4:30 p.m. - 5:00 p.m.  Can We Predict the Future? A Mouse Model of IVF and Long Term Risks
Paolo F. Rinaudo, MD, PhD
UCSF, San Francisco, CA, USA

8:30 a.m. - 5:00 p.m.  Placental Satellite Meeting
EAST MEETING ROOM 1 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Supported by NICHD 1R13HD084096
Organizers: Julian Christians, PhD
Simon Fraser University, Burnaby, BC, Canada
Thomas Jansson MD, PhD
University of Colorado Anschutz Medical Campus, Aurora, CO, USA

Plenary Session

Moderator: Isabella Caniggia, MD, PhD
Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Toronto, ON, Canada

8:30 a.m. - 9:30 a.m.  Mechanisms of Early Placental Development in Mice and Humans
Myriam Hemberger, PhD
University of Calgary, Calgary, AB, Canada

9:30 a.m. - 10:00 a.m.  BREAK

Session II  Cutting Edge Approaches to Study Placental Development and Function

Moderators: Mana Parast, MD, PhD
University of California San Diego, La Jolla, CA, USA
Alexander Beristain, PhD
The University of British Columbia, Vancouver, BC, Canada

10:00 a.m. - 10:40 a.m.  The Challenges of Single Cell Analysis of the Placenta
Stephen Charnock-Jones, PhD
University of Cambridge, Cambridge, United Kingdom

10:40 a.m. - 11:20 a.m.  Trophoblast Organoids and Stem Cells: Advances and Challenges to Study Molecular Signaling Pathways in Trophoblast Biology
Sandra Haider, PhD
Medical University Vienna, Vienna, Austria

11:20 a.m. - 12:00 p.m.  Rapid 3D Bioprinting of Stem Cell-Based Human Placenta-On-A-Chip
Shaochen Chen, PhD
UCSD, San Diego, CA, USA

12:00 p.m. - 1:30 p.m.  LUNCH
Scientific Program

Wednesday, March 11, continued

Session III  Mechanistic Insights into Differences in Female and Male Placentas
Moderators:  Janet Catov, PhD
University of Pittsburgh SOM, Pittsburgh, PA, USA
Julian Christians, PhD
Simon Fraser University, Burnaby, BC, Canada

1:30 p.m. - 2:10 p.m.  Sex Differences in Placental Responses to Maternal Stress
Tracy Bale, PhD
University of Pennsylvania, Philadelphia, PA, USA

2:10 p.m. - 2:50 p.m.  Sex Differences in Placental Metabolism: X Marks the Spot
Irving Aye, PhD
University of Cambridge, Cambridge, United Kingdom

Session IV  Clinical Theme
Moderator:  Samantha Benton, PhD
University of Ottawa, Ottawa, ON, Canada

2:50 p.m. - 3:30 p.m.  Relationship between Placental Malperfusion and Maternal Cardiovascular Risk
Janet Catov, PhD
University of Pittsburgh SOM, Pittsburgh, PA, USA

3:30 p.m. - 4:00 p.m.  BREAK

4:00 p.m. - 4:40 p.m.  Virtual Reality Biomarkers of Utero-Placental Vascular Characteristics in Early Pregnancy
Eric A.P. Steegers, MD, PhD
Erasmus MC, University Medical Center, Rotterdam, Netherlands
Scientific Program

Thursday, March 12

7:00 a.m. - 6:00 p.m.  
**Registration**  
VANCOUVER CONVENTION CENTRE EAST - LOBBY (LEVEL 1)

8:00 a.m. - 8:10 a.m.  
**President’s Welcome**  
EAST BALLROOM ABC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1  
James H. Segars, MD  
SRI President, 2019-2020

8:10 a.m. - 9:00 a.m.  
**March of Dimes Developmental Biology Prize Presentation and Lecture**  
EAST BALLROOM ABC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1  
The March of Dimes Agnes Higgins Awardees will be announced following the Developmental Biology Prize Lecture

9:00 a.m. - 10:00 a.m.  
**New Investigator Plenary Session - Supported by the Past Presidents’ Fund**  
EAST BALLROOM ABC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1  
Moderators: Sandy T. Davidge, PhD, FCAHS  
SRI Past President, 2017-2018  
Stephen J. Lye, PhD  
SRI Past President, 2011-2012

9:00 a.m. - 9:15 a.m.  
**O-001: Premenstrual Dysphoric Disorder (PMDD) is Associated with Estradiol-dependent Aberrations in Cellular Ca2+ Homeostasis and the Endoplasmic Reticulum Stress Response**  
Howard Li, MD

9:15 a.m. - 9:30 a.m.  
**O-002: Fetal Heart Rate Decelerations in Women with Sleep-Disordered Breathing**  
D’Angela S. Pitts, MD

9:30 a.m. - 9:45 a.m.  
**O-003: Acute Treatment with Granulocyte-Colony Stimulating Factor at Advanced Reproductive Age Improves Ovarian Reserve**  
Natalie M. Hohos, PhD

9:45 a.m. - 10:00 a.m.  
**O-004: Placental Central Carbon Metabolism Links Polyamines to Histone Acetylation**  
Giulia Avellino

10:00 a.m. - 10:30 a.m.  
**SRI President’s Presenter’s Awards Presentation**  
EAST BALLROOM ABC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

10:30 a.m. - 12:00 p.m.  
**Poster Session I**  
EAST EXHIBIT HALL B - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

12:00 p.m. - 1:30 p.m.  
**Lunch and Learn Symposium I: Big Data and the Impact on Scientific Success**  
EAST MEETING ROOM 1 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2  
Moderators: Dorothy K. Sojka, PhD  
Aleksandar K. Stanic, MD, PhD

12:00 p.m. - 12:30 p.m.  
**Introduction to Big Data Analysis**  
Piraye Yurttas Beim, PhD

12:30 p.m. - 1:00 p.m.  
**Multi-Omics Approach in Uterine Fibroids Research**  
Benedikt Kessler, PhD
Thursday, March 12, continued

1:00 p.m. - 1:30 p.m.
Systems Biology Study to Puzzle out Preterm Birth with an Integrated-Omics Approach
Nanbert Zhong, MD, PhD

Learning Objectives:
After this session, participants will be able to:
• Identify the importance of genetic evidence and its correlation with success rate in drug development
• Interpret how technology advancement is enabling the power enrichment of the limited access and/or availability of data from human samples

12:00 p.m. - 1:30 p.m.
Lunch and Learn Symposium II: NIH and Reproductive Medicine
EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Moderators: Irina Burd, MD, PhD
Emre Seli, MD

12:00 p.m. - 12:25 p.m.
NICHD Strategic Planning Update
Diana Bianchi, MD

12:25 p.m. - 12:50 p.m.
Strategies for Obtaining NIH Extramural Funding
Lisa Halvorson, MD

12:50 p.m. - 1:15 p.m.
Life as an Intramural NIH Researcher
Alan DeCherney, MD

1:15 p.m. - 1:30 p.m.
Introduction of NIH/NICHD Staff
Diana Bianchi, MD

Learning Objectives:
After this session, participants will be able to:
• Translate the challenges in the translatability of both in vitro and in vivo to human patients
• Illustrate the importance of evaluation of the best tools available, and its thorough validation with back-translation clinically relevant endpoints

1:35 p.m. - 3:35 p.m.
Concurrent Mini Symposia I
Antenatal Steroid Therapy Optimisation. From Clinic to Bench and Back Again
EAST MEETING ROOM 13 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™

Moderators: Matthew W. Kemp, PhD
Cynthia Gyamfi-Bannerman, MD, MSc

1:35 p.m. - 2:05 p.m.
When, What and How Often? Revisiting the Scientific Basis of Antenatal Steroid Therapy
Stephen G. Matthews, PhD

2:05 p.m. - 2:35 p.m.
Hunting for Goldilocks - Efforts Past and Present to get Antenatal Steroid Dosing Just Right
Matthew W. Kemp, PhD

2:35 p.m. - 3:05 p.m.
Optimisation of Antenatal Steroids for Low and Middle Income Countries
Alan H. Jobe, MD, PhD
Thursday, March 12, continued

3:05 p.m. - 3:35 p.m.  Short & Long Term Benefits & Risks of Multiple Courses of Antenatal Corticosteroids
                      Kellie E. Murphy MD, MSc

Learning Objectives
After this session, participants will be able to:
• Demonstrate an understanding of the scientific basis of antenatal steroid therapy
• Identify differing levels of evidence that exist for the use of antenatal steroids, and the relevance of that evidence to the contemporary clinical context
• Recognize both limitations in current evidence for some antenatal steroid applications, and opportunities for further basic and clinical research in the field

Pregnancy - A Lost Opportunity to Screen
EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™
Moderators: Sandy T. Davidge, PhD, FCAHS
                      Laura A. Magee, MD, FRCP, MSc, FACP, FRCOG

1:35 p.m. - 2:05 p.m.  Placenta Insufficiency and Impact on Fetal Development
                      Emily J. Su, MD

2:05 p.m. - 2:35 p.m.  Screening for Subclinical Cardiovascular Disease Following Pre-Eclampsia
                      Fergus McCarthy, MSc, PhD

2:35 p.m. - 3:05 p.m.  Pregnancy Complications and the Life Course - Implications for the Child
                      Lucilla Poston, PhD

3:05 p.m. - 3:35 p.m.  Patient-Reported Outcomes and the Feasibility of Tracking Long-Term Cardiovascular Disease Outcomes - The Pre-eclampsia Foundation Registry
                      Eleni Tsigas

Learning Objectives
After this session, participants will be able to:
• Identify the link between pre-eclampsia and long-term paediatric metabolic and cardiovascular outcomes
• Compare the link between placental insufficiency, fetal growth restriction and their role in affecting the long-term health of the fetus
• Develop on screening strategies to detect particular cardiovascular risk among women following pre-eclampsia, who are already at higher risk compared with women with normotensive pregnancy
• Realize the research-enabling work of the Pre-eclampsia Foundation and how one can get involved

Role of miRNA’s and Inflammation in the Pathology of Endometriosis
EAST MEETING ROOM 2 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™
Moderators: Asgerally T. Fazleabas, PhD
                      Valerie A. Flores, MD

1:35 p.m. - 2:05 p.m.  Insights into Contributions of Stem Cell and Inflammatory Pathways in the Pathophysiology of Endometriosis
                      Caroline E. Gargett, PhD
Scientific Program

Thursday, March 12, continued

2:05 p.m. - 2:35 p.m.  Macrophages in the Pathophysiology of Endometriosis: Mouse Models As Tools for Clinical Translation
Erin Greaves, PhD

2:35 p.m. - 3:05 p.m.  miRNA's in Endometriosis: Pathological Insights and Clinical Implications from a Baboon Model
Asgerally T. Fazleabas, PhD

3:05 p.m. - 3:35 p.m.  miRNA's in Endometriosis: Diagnostic Potential and Pathophysiology in Women with Disease
Hugh S. Taylor, MD

Learning Objectives
After this session, participants will be able to:
• Describe the role of stem cells and inflammatory pathways in the pathophysiology of endometriosis
• Describe the emerging clinical applications of biomarkers in the setting of endometriosis
• Interpret the molecular action of miRNAs in the context of endometriosis
• Detect the limitations of miRNAs as biomarkers given their unique biology
• Recognize their potential value as non-invasive biomarkers for the disease
• Describe the mechanisms by which microRNA's regulate gene expression in endometriotic lesions

Reproductive Infectious Diseases: From Bench to Bedside to Tomorrow
EAST MEETING ROOM 3 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™
Moderators: Lynn M. Yee, MD, MPH  David M. Aronoff, MD

1:35 p.m. - 2:05 p.m.  Understanding the Management of Hepatitis B and C in Pregnant or Reproductive Age Women
Lynn M. Yee, MD, MPH

2:05 p.m. - 2:35 p.m.  Mechanisms of Group B Streptococcus as a Cause of Chorioamnionitis, Preterm Birth & Stillbirth
David M. Aronoff, MD

2:35 p.m. - 3:05 p.m.  Placental Malaria: The Inflammatory Response and Fetal Growth Restriction
Stephanie L. Gaw, MD, PhD

3:05 p.m. - 3:35 p.m.  STIs, the Vaginal Microbiome, and Reproductive Health: Recent Evidence and Clinical Applications
Lisa Haddad, MD, MS

Learning Objectives
After this session, participants will be able to:
• Describe details of how Group B streptococcus causes intrauterine infection during pregnancy and gain familiarity with the nature of host-microbe interactions during chorioamnionitis
• Describe the latest evidence on screening for and management of Hepatitis B and C before and during pregnancy, including the current state of evidence regarding novel Hepatitis C therapy for pregnant women
• Distinguish the global malaria burden and the latest science on placental malaria and the role of placental inflammatory conditions with adverse perinatal outcomes
• Evaluate a translational perspective on the impact of sexually transmitted infections on the vaginal microbiome and reproductive health, including new data regarding contraception and STI acquisition
Scientific Program

Thursday, March 12, continued

Embryo Aneuploidy and Mosaicism: Implications for Reproduction and ART
EAST MEETING ROOM 8 & 15 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™

Moderators: Robert N. Taylor, MD, PhD
             Mindy S. Christianson, MD

1:35 p.m. - 2:05 p.m.  Understanding Aneuploidy
            Pat Hunt, PhD

2:05 p.m. - 2:35 p.m.  Developmental Potential of Aneuploid Human
            Embryos Beyond Implantation
            Magdalena Zernicka-Goetz, PhD

2:35 p.m. - 3:05 p.m.  Assessment of Aneuploidy and Mosaicism
            in Human Embryos: Promises and Pitfalls of
            Molecular Approaches and Study Designs
            Richard T. Scott Jr., MD

3:05 p.m. - 3:35 p.m.  New Insights from Clinical NIPT Data Regarding
            Human Aneuploidy and Mosaicism
            Diana W. Bianchi, MD

Learning Objectives
After this session, participants will be able to:
- Describe how environmental factors and sex differences impact germline aneuploidy
- Differentiate the effects of aneuploidy on cells of fetal vs. placental lineage
- Discuss whether preimplantation genetic testing for aneuploidy (PGT-A) is cost-effective in the clinical practice of IVF
- Recognize how discordant noninvasive prenatal testing (NIPT) results can reflect different mechanisms
- Identify how to better counsel patients regarding mosaicism results for patients undergoing PGT-A

Update on Diagnostics and Therapeutics for Preterm Birth
EAST BALLROOM ABC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™

Moderators: David M. Olson, PhD
            Kelycia B. Leimert, PhD

1:35 p.m. - 2:05 p.m.  The Need for, Barriers to, and Hope for New
            Preterm Birth Diagnostics and Therapeutics
            David M. Olson, PhD

2:05 p.m. - 2:35 p.m.  New and Emerging Biomarker Prediction Tests for
            Preterm Birth
            Laura Jelliffe-Pawlowski, PhD

2:35 p.m. - 3:05 p.m.  Development of Novel Therapeutics to Counter
            Preterm Birth
            Sylvain Chemtob, MD, PhD
Scientific Program

Thursday, March 12, continued

3:05 p.m. - 3:35 p.m.  Challenges in Developing New Treatment Options for Preterm Birth - From Industry’s Perspective
Yosuke Komatsu, MD, PhD, FJSOG, FJSUM

Learning Objectives
After this session, participants will be able to:

- Realize the need (and market size) for identifying and treating women at risk of preterm delivery
- Identify barriers impeding progress in investment, development, and commercialization of preterm birth diagnostics and therapeutics
- Describe innovative new approaches and advances in the diagnosis and treatment of preterm birth and fetal inflammation.
- Point out the problem of diagnosing and treating preterm birth from an industry perspective
- Recognize regulatory pathways that new preterm birth diagnostics and therapeutics should follow and apply methods to overcome obstacles

3:35 p.m. - 4:00 p.m.  Coffee Break
FOYER SOUTH - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

4:00 p.m. - 6:00 p.m.  Concurrent Oral Presentations I
Clinical and Translational Perinatology I
EAST MEETING ROOM 2 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Michael J. Fassett, MD
Maritza G. Gonzalez, MD

4:00 p.m. - 4:15 p.m.  O-005: Maternal Urinary Metabolites in the Latter Half of Pregnancy Predict Gestational Diabetes Mellitus
Aisling Murphy, Jeffrey Gornbein, Ophelia Lin, Brian Koos

4:15 p.m. - 4:30 p.m.  O-006: Advanced Paternal Age Is Associated With an Increased Risk of Spontaneous Miscarriage: A Systematic Review and Meta-Analysis
Nadia A. du Fossé, Marie-Louise P. van der Hoorn, Jan M.M. van Lith, Saskia le Cessie, Lisa Elo Lashley

4:30 p.m. - 4:45 p.m.  O-007: Placental MiRNAs Predicted to Target Insulin Signaling Pathways are Associated with Maternal Insulin Resistance in Late Pregnancy
Fernanda Alvarado, William Beyer, Tomoko Kaneko-Tarui, Tianjiao Chu, Yoel Sadowsky, Patrick Catalano, Perrie O’Tierney-Ginn

4:45 p.m. - 5:00 p.m.  O-008: Postpartum Transient Elastography in Patients with Metabolic Disorders of Pregnancy
Farrah Naz Hussain, Lois Brustman, Emily Schneider, Emily Schmidt-Beautchat, Clara Rodriguez-Rivas, Melissa T. Chu Lam, Kristina M. Feldman, Tatyana Kushner

5:00 p.m. - 5:15 p.m.  O-009: Adipose Tissue Extracellular Vesicles from Women with Gestational Diabetes Exhibit Tissue-specific Suppression of Insulin Signaling
Angela Rodriguez Boyd, Marcel Fourcaudot, Ralph DeFronzo, Luke Norton
5:15 p.m. - 5:30 p.m.  **O-010: A Novel Murine Model of Cytomegalovirus Infection in Pregnancy**  
Angela Shaddeau, Anna Chudnovets, Quan Na, Ayan Ghosh, Halli Miller, Jun Lei, Ravit Boger, Irina Burd

5:30 p.m. - 5:45 p.m.  **O-011: Anti-LPS Antibodies and Stillbirths**  
Yiping Han, Qing Meng, Zhezhen Jin, Robert Goldenberg, Robert Silver Emilie Vander Haar, Cynthia Gyamfi-Bannerman, Ron Wapner, Stillbirth Collaborative Research Network

5:45 p.m. - 6:00 p.m.  **O-012: Regulatory T Cell Adoptive Transfer Alters Macrophage Populations at the Maternal-Fetal Interface and Decreases Late Fetal Loss**  
Emma L. Lewis, Amy G. Brown, Paige M. Porrett, Michal A. Elovitz

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**Gynecology I**  
**EAST BALLROOM ABC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1**  
**Moderators:** Pamela Stratton, MD  
Reshef Tal, MD, PhD

4:00 p.m. - 4:15 p.m.  **O-013: Single Cell Transcriptomes From Uterine Fibroids and Fibroid-Free Myometrium Elucidate Myometrial Tumorigenesis**  
Wanxin Wang, Aymara Mas, Patricia Escorcia, Javier Monleon, Stephen Quake, Carlos Simon

4:15 p.m. - 4:30 p.m.  **O-014: Effect of Selective Progesterone Receptor Modulator (SPRM), Ulipristal Acetate (UPA) on Uterine and Fibroid Volume Measured by Unbiased Stereology and MRI**  
Hilary Critchley, Kaiming Yin, Lucy Whitaker, Suzanne McLenachan, Jane Walker, Graham McKillop, Neil Roberts

4:30 p.m. - 4:45 p.m.  **O-015: Nintedanib Alters Hippo Signaling in Uterine Fibroid Cells Leading to Decreased Levels of Connective Tissue Growth Factor and Cyclin D1, and Reduced Fibroid Cell Proliferation**  
Md Soriful Islam, Ha Vi S. Nguyen, Jacqueline Y. Maher, Joshua T. Brennan, James H. Segars

4:45 p.m. - 5:00 p.m.  **O-016: Association Between Anxiety/Depression, Uterine Fibroid Symptomology and Health Status Among Women Undergoing Interventional Treatments for Uterine Fibroids**  
Thursday, March 12, continued

5:00 p.m. - 5:15 p.m. 0-017: Gene Expression Analysis of Foreign Body Response to Engineered Nano-Mesh with Endometrial Stem/Stromal Cells for Pelvic Organ Prolapse Repair
Shayanti Mukherjee, Saeedeh Darzi, Kallyanashis Paul, Fiona Cousins, Jerome A. Werkmeister, Caroline E. Gargett

5:15 p.m. - 5:30 p.m. 0-018: Urogynecologic Mesh Complications: Low FGF Suggests Impaired Wound Healing
Amanda M. Artsen, Rui Liang, Steven D. Abramowitch, Pamela A. Moalli

5:30 p.m. - 5:45 p.m. 0-019: Euploid Miscarriage is Associated with Lactobacillus spp. Deplete Vaginal Microbial Composition and Local Inflammation
Karen Grewal, Yun S. Lee, Ann Smith, Maya Al-Memar, Tom Bourne, David A. MacIntyre, Phillip Bennett

5:45 p.m. - 6:00 p.m. 0-020: Pregnancy Outcomes Following Routine Early Provision of IUD After First Trimester Induced Abortion - 5-year Follow-up of a Randomized Controlled Trial
Elina Pohjoranta, Satu Suhonen, Maarit Mentula, Mika Gissler, Oskari M. Heikinheimo

Parturition I
EAST MEETING ROOM 8 & 15 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Moderators: Sarah K. England, PhD
Hui Wang

4:00 p.m. - 4:15 p.m. 0-021: Evaluating Cervical Remodeling in Preterm and Term Birth Mouse Models with in vivo Raman Spectroscopy
Rekha Gautam, Jennifer Herington, Naoko Boatwright, Jackson Rogers, Wilson Adams, Jen Bateman, Christine O’Brien, Jeff Reese, Anita Mahadevan-Jansen

4:15 p.m. - 4:30 p.m. 0-022: Polarized Light Imaging of the Pregnant Cervix
Jessica Ramella-Roman, Ilyas Saytashev, Sudipta Saha

4:30 p.m. - 4:45 p.m. 0-023: In vivo Diffusion Tensor Imaging of the Cervix Early and Late in Normal Pregnancy
Wenxu Qi, Peinan Zhao, Hui Wang, Wenjie Wu, Zhexian Sun, Yong Wang

4:45 p.m. - 5:00 p.m. 0-024: Essential Roles of Uterine Peristalsis by Cav1.2 in Reproduction and Adenomyosis in Mice
Mingzi Qu, Ping Lu, Christina Baer, Lawrence Lifshitz, Ronghua Zhuge
Scientific Program

Thursday, March 12, continued

5:00 p.m. - 5:15 p.m. 0-025: NF-κB and AP-1 Transcription Factors Regulate Human 20 alpha HSD Transcription: Potential Pathways to Labour Induction Lubna Nadeem, Rathesh Balendran, Oksana Shynlova, Sam Mesiano, Stephen Lye

5:15 p.m. - 5:30 p.m. 0-026: Dynamic MicroRNA 203 Expression Regulates Myometrial Smooth Muscle Cell Transient Receptor Vanilloid 4 Channel Expression During Pregnancy Lihua Ying, Judith A. Ingles, Cristina M. Alvira, David N. Cornfield

5:30 p.m. - 5:45 p.m. 0-027: Regulation of Mouse Uterine Contractility by Regulator of G-Protein Signalling 2 Daniela Urrego, Stephen L. Wood, Robert Newton, Donna M. Slater

5:45 p.m. - 6:00 p.m. 0-028: Differential Regulation of SOX Family Transcription Factors in the Pregnant and Labouring Mouse Myometrium Nawrah Khader, Virlana Shchuka, Anna Dorogin, Luis E. Abatti, Oksana Shynlova, Jennifer Mitchell

Placenta I

EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Margareta D. Pisarska, MD Yuliya Fakhr

4:00 p.m. - 4:15 p.m. 0-029: Cell-free DNA Methylation and Transcriptomic Signature Prediction of Pregnancies with Adverse Outcomes Giorgia Del Vecchio, Qingjiao Li, Wenyuan Li, Shanthie Thamotharan, Anela Tosevska, Marco Morselli, Kyunghyun Sung, Carla Janzen, Xianghong Zhou, Matteo Pellegrini, Sherin U. Devaskar

4:15 p.m. - 4:30 p.m. 0-030: Under-Expression of Placental Endocrine-Specific Igf2 Programmes Cardiovascular Disease in the Adult Male Offspring W. Ching, Y. Niu, T. A. Garrud, H. Yong, E. R. Christoforou, J. Lopez-Tello, D. A. Giussani, A. N. Sferruzzi-Perri

4:30 p.m. - 4:45 p.m. 0-031: Nanoparticle-Mediated Transgene Expression of Insulin-like Growth Factor in the Guinea Pig Placenta Reduces Angiogenic Factor Transcription but Enhances Glucose Transporter Expression Rebecca L. Wilson, Kendal Stephens, Kristin Lampe, Helen Jones
4:45 p.m. - 5:00 p.m.  **O-032: Regulatory T Cells Determine Uterine Natural Killer Cell Abundance and Decidual Vascular Remodeling in Early Pregnancy in Mice**
  Alison S. Care, Holly M. Groome, Shanna L. Hosking, Claire T. Roberts, Sandra T. Davidge, Sarah A. Robertson

5:00 p.m. - 5:15 p.m.  **O-033: Novel Placental Cell Defense Against Lipotoxicity-induced Ferroptotic Death**

5:15 p.m. - 5:30 p.m.  **O-034: Role of Toll-Like Receptor 8 (TLR8) in the Inflammatory Response to Virus in Hofbauer Cells (HBCs)**
  Victoria Lindstrom Chase, Zhonghua Tang, Gil G. Mor, Vikki M. Abrahams, Seth Guller

5:30 p.m. - 5:45 p.m.  **O-035: Less is More! Commensal Microbiome Supports Macrophage-Trophoblast-Interaction**
  Rebekka Einenkel, Damián Muzzio, Jens Ehrhardt, Martha Heusler, Meike Hofer, Kristin Hartmann, Theresa Meiner, Marek Zygmunt

5:45 p.m. - 6:00 p.m.  **O-036: Derivation of Human Trophoblast Stem Cells from Pluripotent Stem Cells to Model Early Placental Development**
  Francesca Soncin, Tony Buy, Mariko Horii, Omar A. Farah, Mana M. Parast

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**Maternal Biology and Health**

**EAST MEETING ROOM 13 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2**

**Moderators:** Egle Bytautiene Prewit, MD, PhD
  Loren P. Thompson, PhD

4:00 p.m. - 4:15 p.m.  **O-037: The Influence of Artificial Sweetener During Pregnancy on Long Term Maternal Health**
  Pania E. Bridge-Comer, Ana Paula Machado Spara, Jasmine F. Plows, Jacon Morton-Jones, Mark H. Vickers, Clare M. Reynolds

4:15 p.m. - 4:30 p.m.  **O-038: Mechanisms of Action of Intervention in the PHOENIX Trial: In Women with Preterm Preeclampsia Does Planned Delivery Improve Postpartum Maternal Cardiac Function Through Attenuation of Myocardial Ischaemia at Time of Disease (PHOEBE Study)?**
  Fergus McCarthy, Jamie O’Driscoll, Paul Seed, Mike Marber, Anna Placzek, Lucilla Poston, Andrew Shennan, Basky Thilaganathan, Paul Leeson, Lucy Chappell
Scientific Program

Thursday, March 12, continued

4:30 p.m. - 4:45 p.m.

0-039: Maternal Obesity During Pregnancy Induces Oxidative Stress and Mitochondria Functional Alterations in the Maternal Liver

4:45 p.m. - 5:00 p.m.

0-040: 10 Years Prediction Model for Chronic Hypertension After Preeclampsia in Initially Normotensive Women
Mieke Hooijschuur, Marc E.A. Spaanderman, Jori M.J. Meijers, Eva Mulder, Chahinda Ghossein-Doha

5:00 p.m. - 5:15 p.m.

0-041: Postpartum Hemorrhage After Vaginal Delivery is Associated with a Decrease in Immediate Breastfeeding Success
Lilly Y. Liu, Patricia Rekawek, Mackenzie Naert, Julie Cadet, Johanna Monro, Joanne Stone

5:15 p.m. - 5:30 p.m.

0-042: Changes in Maternal Gut Microbiome Diversity and Composition Associated with Infant Feeding Behaviors
Adetola Louis-Jacques, Jean Lim, Anujit Sarkar, Tina Ho, Ronald R. Magness, Maureen Groer

5:30 p.m. - 5:45 p.m.

0-043: Prenatal Maternal Stress Induces Preterm Birth and Impacts Neonatal Adaptive Immunity
Valeria Garcia-Flores, Roberto Romero, Jose Galaz, Chaur-Dong Hsu, David Olson, Gerlinde A. S. Metz, Nardhy Gomez-Lopez

5:45 p.m. - 6:00 p.m.

0-044: Association of Pre-pregnancy Subclinical Insulin Resistance With Cardiac Dysfunction in Healthy Nulliparous Women
Rachel B.C. Psoinos, Erin A. Morris, Carole A. McBride, Ira M. Bernstein

Reproductive Biology I

EAST MEETING ROOMS 3 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Joshua Johnson, PhD
Qiwei Yang, PhD

4:00 p.m. - 4:15 p.m.

0-045: Towards Three-Dimensional Imaging of the Murine Vagina
Kristin S. Miller, Diego Gatica, Bihe Hu, Elvis K. Danso, Katherine Effer, J. Quincy Brown

4:15 p.m. - 4:30 p.m.

0-046: Proteomic Analysis of Secretions from a Novel Endocervical Cell Culture Using Conditionally Reprogrammed Cells
Leo Han, Walker Andrews, Karsten Wong, Ashok Reddy, Phillip Wilmarth, Jeffrey T. Jensen
Scientific Program

Thursday, March 12, continued

4:30 p.m. - 4:45 p.m. 0-047: Differentiation of Mouse iPSCs into Functional Oocytes
Raymond M. Anchan, Nicholas W. Ng, Kh U. Dam, Ankrish Milne, Emily R. Disler, Nicole Dunn, Kevin M. Elias, Elizabeth Ginsburg

4:45 p.m. - 5:00 p.m. 0-048: Mitochondrial Stress Response Gene Clp is Not Required for Granulosa Cell Function
Ecem Esencan, Gizem A. Imamoglu, Mauro Cozzolino, Emre Seli

5:00 p.m. - 5:15 p.m. 0-049: Exposure to Synthetic Glucocorticoids Modifies the Sperm MicroRNA Profile: Implications for Intergenerational Transmission
Christopher Casciaro, Hirotaka Hamada, Alisa Kostaki, Stephen Matthews

5:15 p.m. - 5:30 p.m. 0-050: Recombinant AMH (rAMH) for Stalling in vitro Granulosa Cell Replication
Laura Detti, Irene Peregrin-Alvarez, Mary E. Christiansen, Pouran Malekzadeh, Jennifer Sledge, Ghassan M. Saed

5:30 p.m. - 5:45 p.m. 0-051: Loss of Ovarian Expression of the Noncoding RNA H19 Promotes Susceptibility to Doxorubicin-induced DNA Damage
Jing Wang, Joshua Johnson, Amanda N. Kallen

5:45 p.m. - 6:00 p.m. 0-052: Metabolomics Study of Mouse Blastocysts Cultured in a Microfluidic Device to Assess Development in Uterine Cell-Conditioned Media
Vanessa Mancini, Paul J. McKeegan, Stacy D. Sherrod, Alexandra C. Rutledge, Simona G. Codreanu, Helen M. Picton, Virginia Pensabene

6:15 p.m. - 7:45 p.m. Connection Corners
EAST MEETING ROOM 1 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2
*This is a limited ticketed event. Tickets will be available at the Registration Desk.
Friday, March 13

7:00 a.m. - 6:00 p.m. **Registration**
VANCOUVER CONVENTION CENTRE EAST - LOBBY (LEVEL 1)

7:00 a.m. - 8:00 a.m. **SRI Business Meeting**
EAST MEETING ROOM 1 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

All SRI members are invited and breakfast will be provided during the meeting.

8:00 a.m. - 8:30 a.m. **SRI Grant Program Recipients Presentations**
EAST BALLROOM BC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

Moderator: James H. Segars, MD

8:00 a.m. - 8:15 a.m. **Investigation of Genome Wide DNA Methylation Changes in Mouse Embryos Associated with Superovulation**
Bo Yu, MD
2017 - 2018 SRI Early Career Grant Recipient

8:15 a.m. - 8:30 a.m. **Unraveling the Consequences of Elevated Advanced Glycation End Product Levels on Female Fertility**
Jemma Evans, PhD
2017 - 2018 SRI Bridge Grant Recipient

8:30 a.m. - 9:30 a.m. **President’s Distinguished Lecture I - Viral Noncoding RNAs: Approaching Answers**
EAST BALLROOM BC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

Eligible for **2.0 Royal College MOC credits**/2.0 AMA PRA Category 1 Credits™
Moderator: James H. Segars, MD
Joan A. Steitz, PhD
Department of Molecular Biophysics and Biochemistry
Yale University School of Medicine
New Haven, CT, USA

**Learning Objectives**
After this session, participants will be able to:
- Identify that noncoding (nc)RNAs come in a variety of sizes, concentrate in various subcellular locations and can be derived from either cellular or viral genomes
- Illustrate that cellular microRNA populations are likely to be influenced by the interactions of specific microRNAs with their targets, through a process called “target directed microRNA degradation” (TDMD), which occurs on the microRNA partner protein, Ago
- Translate RNA triple helices that involve the polyA tail can play significant roles in stabilizing both ncRNAs and mRNAs

9:30 a.m. - 11:00 a.m. **Poster Session II**
EAST EXHIBIT HALL B - VANCOUVER CONVENTION CENTRE EAST LEVEL 1
Scientific Program

Friday, March 13, continued
11:00 a.m. - 12:30 p.m. Concurrent Oral Presentations II
Developmental Programming I
EAST MEETING ROOM 13 · VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Lucilla Poston, PhD
Kathleen A. Pennington, PhD

11:00 a.m. - 11:15 a.m. O-053: Sex-specific Alterations in the Early Embryonic Mouse Epigenome
Kathleen O’Neill, Sarah Johnston, Kim Taehyong, Xiang Zhang, Rebecca A. Simmons

11:15 a.m. - 11:30 a.m. O-054: A Life Course Approach to the Relationship Between Fetal Growth and HPA-Axis Function
Wrivu M. Martin, Carol A. Wang, Stephen J. Lye, Rebecca M. Reynolds, Stephen G. Matthews, Carly E. McLaughlin, Roger Smith, Craig E. Pennell

11:30 a.m. - 11:45 a.m. O-055: Sex-Specific Effects of a Placenta-Targeted Treatment with nMitoQ on the Mechanisms of Cardiac Dysfunction in Adult Offspring Exposed to Hypoxia in Utero
Natalia Hula, Jennie Vu, Anita Quon, Raven Kirschman, Christy-Lynn M. Cooke, Thomas J. Phillips, C. Patrick Case, Floor Spaans, Sandra T. Davidge

11:45 a.m. - 12:00 p.m. O-056: Perinatal Protein Deficiency and Postnatal Catch-up Growth Leads to Hepatic Mitochondrial Dysfunction in Adult IUGR Offspring
Shelby L. Oke, Gurjeev Sohi, Daniel B. Hardy

12:00 p.m. - 12:15 p.m. O-057: Iron Restriction During Pregnancy Causes Dysfunction and Morphological Changes in the Hearts of Neonatal Offspring
Ronan Noble, Jason Li, Andrew Woodman, Richard Mah, Ferrante Gragasin, Luke Eckersley, Stephane Bourque

12:15 p.m. - 12:30 p.m. O-058: Epigenetic Effects of N-acetylcysteine on H2S-Mediated Protection Against Fetal Origins of Vascular Disease
A. A. Paz, T. A. Garrud, E. Peñaloza, F. Vega-Tapia, S. G. Ford, Y. Niu, B. J. Krause, D. A. Giussani

Fetus I
EAST MEETING ROOMS 3 · VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Janna L. Morrison, PhD
Stephen A. Contag, MD

11:00 a.m. - 11:15 a.m. O-059: PiggyBac Transposase Mediated Inducible Trophoblast-specific Knockdown of Mechanistic Target of Rapamycin (mTOR) in Mice Decreases Placental Nutrient Transport and Inhibits Fetal growth
F. J. Rosario, J. Urschitz, T. L. Powell, T. Jansson
Friday, March 13, continued

11:15 a.m. - 11:30 a.m.  **O-060: Effects of Nanoparticle-encapsulated MitoQ (nMitoQ) Delivery to the Placenta on Fetal Cardiomyocyte Development in a Rat Model of Prenatal Hypoxia**
Esha Ganguly, Raven Kirschenman, Floortje Spaans, Thomas Phillips, Christy-Lynn Cooke, Patrick Case, Sandra T. Davidge

11:30 a.m. - 11:45 a.m.  **O-061: Exploring Genetic Variation in Normal and Diseased Human Placentas**
Nathan R. Blue, Amelia Wallace, Aaron Quinlan, Robert M. Silver

11:45 a.m. - 12:00 p.m.  **O-062: An Aberrant Endothelial Cell Response to Flow: Mechanistic Implications for Congenital Heart Defects in the Feto-Placental Unit**
Yalda Afshar, Anhyo Jeong, William M. Jones, Luisa Iruela-Arispe

12:00 p.m. - 12:15 p.m.  **O-063: Low Dose Insulin Infusion in IUGR Fetal Sheep Stimulates Skeletal Myoblast Proliferation but Not Fiber Number**
Eileen I. Chang, Byron Hetrick, Stephanie R. Wesolowski, Paul J. Rozance, Carrie E. McCurdy, Laura D. Brown

12:15 p.m. - 12:30 p.m.  **O-064: Decreased Mitochondrial Complex I Activity in Skeletal Muscle of Growth Restricted Ovine Fetuses with Placental Insufficiency**
Alexander Pendleton, Melissa A. Davis, Amy C. Kelly, Leticia E. Camacho, Miranda J. Anderson, Paul R. Langlais, Sean W. Limesand

**Preeclampsia I**

EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Thomas F. McElrath, MD, PhD
Anna Palatnik, MD

11:00 a.m. - 11:15 a.m.  **O-065: Proinflammatory and Anti-inflammatory Cytokine Responses by Decidua T Cells in Preeclampsia**
Ai-ris Yonekura Collier, Dan H. Barouch

11:15 a.m. - 11:30 a.m.  **O-066: Sulforaphane Improves Vascular Reactivity in Arteries After Preeclamptic-like Injury**
Annie Georgina Cox, Kirsten R. Palmer, Euan M. Wallace

11:30 a.m. - 11:45 a.m.  **O-067: Progesterone Induced Blocking Factor Attenuates Hypertension, Placental and Endothelial Cell Mitochondrial Dysfunction and Reactive Oxygen Species in Response to sFlt-1 During Pregnancy**
Lorena M. Amaral, Evangeline Deer, Kyleigh Comley, Denise
Scientific Program

Friday, March 13, continued

11:45 a.m. - 12:00 p.m. 0-068: Challenging the Definition of Hypertension in Pregnancy - A Retrospective Cohort Study
C. Cornelius, Jalisa Jones, Tarek Ibrahim, Ramana Vaka, Michael Franks, Babbette LaMarca
Maya Reddy, Daniel L. Rolnik, Katrina Harris, Wentao Li, Ben W. Mol, Fabricio da Silva Costa, Euan Wallace, Kirsten Palmer

12:00 p.m. - 12:15 p.m. 0-069: Hypoxic Pregnancy Recapitulates In Vivo, Mitochondrial and Molecular Markers of Preeclampsia in the Mother, Placenta and Offspring

12:15 p.m. - 12:30 p.m. 0-070: Surgically Increasing Uteroplacental Impedance Results in Attenuated Uterine Vascular Remodeling and Preeclampsia-Related Placental Secretomics During Pregnancy
Nga Ling Ko, Narmin Mukhtarova, Catrina Hood, Ying Wai Lam, George Osol

Gynecology II

EAST BALLROOM BC – VANCOUVER CONVENTION CENTRE EAST LEVEL 1

Moderators: Lisa M. Halvorson, MD
Elliott G. Richards, MD

11:00 a.m. - 11:15 a.m. 0-071: Endometriosis Lesion-specific cxcr4 Knockdown Increases Estrous-cycle Dependent Intraepithelial Lymphocyte Infiltration in the Mouse, Compromising Lesion Integrity
Aya Tal, Reshef Tal, Harvey J. Kliman, Hugh S. Taylor

11:15 a.m. - 11:30 a.m. 0-072: Targeting and Treatment of Endometriosis with Nanoparticles
Oleh Taratula, Olena Taratula, Abraham Moses, Fangzhou Luo, Ov D. Slayden

11:30 a.m. - 11:45 a.m. 0-073: Large-scale Genome-wide Association Meta-analysis of Endometriosis Reveals 44 Loci in 61K Cases and 711K Controls and Genetically-associated Comorbidity with Other Pain Conditions
Nilufer Rahmioglu, International Endometriosis Genomics Consortium
Scientific Program

Friday, March 13, continued

11:45 a.m. - 12:00 p.m.  
**0-074: Microvascular Endothelium-Dependent Vasodilation is Impaired in Women with Endometriosis and Improved with Acute Atorvastatin Treatment**
Anna E. Stanhewicz, Corinna F. Serviente, Gabrielle Dillon, Nina S. Stachenfeld, Hugh S. Taylor, Lacy M. Alexander

12:00 p.m. - 12:15 p.m.  
**0-075: Identification of FOXC1 as a Key Transcriptional Regulator in Induced Endometriosis Lesions**
Gregory W. Burns, Niraj R. Joshi, Kevin M. Elias, Asgerally T. Fazleabas

12:15 p.m. - 12:30 p.m.  
**0-076: Spontaneous Ovarian Endometriosis in Mice with Deletion of Arid1a and Gain of KrasG12D**
Jillian R.H. Wendel, Xiyin Wang, Rakshin Kharwadkar, Xiaoyu Lu, Robert Emerson, Mark H. Kaplan, Chi Zhang, Shannon M. Hawkins

Parturition II
EAST MEETING ROOM 8 & 15 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: John R.G. Challis, PhD, FRCOG, FRSC
Mancy Tong, PhD

11:00 a.m. - 11:15 a.m.  
**0-077: Lung Maturation in Extremely Preterm Fetal Lambs Maintained on an Artificial Placenta is Driven by Glucocorticoid Signalling, Not Inflammation**
Erin Lesley Fee, Matthew Warren Kemp, Masatoshi Saito, Haruo Usuda

11:15 a.m. - 11:30 a.m.  
**0-078: A Novel Allosteric Modulator of IL-6R Successfully Prevents Deleterious Effects of Inflammation in a LPS Model of Preterm Birth**
Elizabeth Prairie, Sarah-Eve Loiselle, Frédérique Vermette-Lacroix, Xin Hou, Estefania Marin Sierra, Christiane Quiniou, Sarah Robertson, David Olson, Sylvain Chemtob

11:30 a.m. - 11:45 a.m.  
**0-079: Enhanced Decidual FKBP51 Expression Promotes Idiopathic Preterm Birth by Inducing Functional Progesterone Withdrawal**
Nihan Semerci, Asli Ozmen, Ozlem Guzeloglu-Kayisli, Xiaofang Guo, Irina Buhimschi, Catalin Buhimschi, Frederick Schatz, Umit Kayisli, Charles Lockwood

11:45 a.m. - 12:00 p.m.  
**0-080: Selective Progesterone Receptor Modulator Delay Term Labor and Prevents Preterm Labor in Mice**
Oksana Shynlova, Lubna Nadeem, Anna Dorogin, Sam Mesiano, Stephen Lye
Friday, March 13, continued

12:00 p.m. - 12:15 p.m.  O-081: Multi-Omic, Longitudinal Profile of Third-Trimester Pregnancies Identifies a Molecular Switch That Predicts the Onset of Labor
Ina Stelzer, Mohammad Sajjad Ghaemi, Xiaoyuan Han, Kazuo Ando, Laura Peterson, Kevin Contrepois, Edward Ganio, Amy Tsai, Eileen Tsai, Kristen Rumer, Natalie Stanley, Ramin Fallazadeh, Martin Becker, Anthony Culos, Dyani Gaudilliere, Ronald Wong, Virginia Winn, Gary Shaw, David Stevenson, Michael Snyder, Martin Angst, Nima Aghaeepour, Brice Gaudilliere

12:15 p.m. - 12:30 p.m.  O-082: Association Between Daily Melatonin and Cortisol Rhythms and Risk of Preterm Birth
Ronald T. McCarthy, Peinan Zhao, Anjana Delhi, Emily S. Jungheim, Justin C. Fay, Erik D. Herzog, Sarah K. England

Reproductive Endocrinology and Infertility I
EAST MEETING ROOM 2 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2
Moderators:  Gaurang S. Daftary, MD
            Mary Ellen Pavone, MD, MS

11:00 a.m. - 11:15 a.m.  O-083: An In Vivo Model of Human FSH Dysregulation in Obesity: Obese Women Exhibit Lower Serum FSH Levels in Response to Intravenous Recombinant FSH After GnRH Suppression
Katherine Kuhn, Thanh-Ha Luu, Andrew Bradford, Luke Wittenberg, Nne-Omoji Nwobodo, Alex Polotsky

11:15 a.m. - 11:30 a.m.  O-084: A Multi-Center, Prospective, Blinded, Non-Selection Study Evaluating the Predictive Value (PV) of an Aneuploid Preimplantation Genetic Testing for Aneuploidy (PGT-A) Diagnosis and Impact of Biopsy
Ashley W. Tiegs, Xin Tao, Yiping Zhan, Chaim Jalas, Christine Whitehead, Emre Seli, George Patounakis, Jacqueline Gutmann, Arthur Castelbaum, Richard T. Scott

11:30 a.m. - 11:45 a.m.  O-085: Identification of Novel PRDM9 DNA Binding Alleles in an Azoospermia Cohort
M. Blake Evans, Sherry Ralls, Mohamed Mahgoub, Micah J. Hill, Alan H. DeCherney, Todd Macfarlan

11:45 a.m. - 12:00 p.m.  O-086: A Superovulatory Uterine Environment Impacts Embryo Implantation, Results in Placental ER Stress and Reduces Fetal Growth of Both Fresh and Vitrified Embryos
Cassandra Roeca, Elena Silva, Kenneth Barentsen, Theresa Powell, Thomas Jansson
Scientific Program

Friday, March 13, continued

12:00 p.m. - 12:15 p.m.  
O-087: Anti Mullerian Hormone is Low in Women with Sickle Cell Disease Who Participated in the Multi-Center Study of Hydroxyurea  
Lydia Pecker, Hyunwook Koh, Ni Zhao, Sophie Lanzkron, Mindy Christianson

12:15 p.m. - 12:30 p.m.  
Jeffrey Hoek, Willem Boellaard, Eva S. van Marion, Sten P. Willemsen, Régine P.M. Steegers-Theunissen, Sam Schoenmakers

12:35 p.m. - 2:05 p.m.  
Diversity, Equity and Inclusion Forum: People Like You Can’t Do That  
EAST MEETING ROOM 1 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2  
Moderator: Ayman Al-Hendy, MD, PhD  
Genevieve S. Neal-Perry, MD, PhD  
Chief, Reproductive Endocrinology and Infertility  
University of Washington, Seattle, WA, USA  
**Learning Objectives**  
After this session, participants will be able to:  
• Interpret the difference between a mentor, sponsor and coach  
• Recognize the role of an IDP in designing a successful career  
• Demonstrate how to build a network for professional and personal success  
• Identify which habits engender career success

12:35 p.m. - 2:05 p.m.  
Lunch and Learn Symposium III: Don’t Get Lost in Translation: Importance of *In Vivo* and *In Vitro* Model Validation  
EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2  
Moderators: Irene Cervello, PhD  
Erica E. Marsh, MD, MSCI, FACOG  
12:35 p.m. - 1:20 p.m.  
Back-Translation of Clinical Endpoints and Model Validation in Preclinical Research (fibroids examples)  
Thomas M. Zollner, MD

1:20 p.m. - 2:05 p.m.  
Modeling Artificial Ovary  
Monica M. Laronda, PhD  
**Learning Objectives**  
After this session, participants will be able to:  
• Translate the challenges in the translatability of both in vitro and in vivo to human patients  
• Illustrate the importance of evaluation of the best tools available, and its thorough validation with back-translation clinically relevant endpoints
Scientific Program

Friday, March 13, continued
2:10 p.m. - 4:10 p.m.

Concurrent Mini Symposia II

Controversies: Yes or No for Placental Microbiome
*Interactive Session

EAST BALLROOM BC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™

Moderator: Phillip R. Bennett, MD, PhD, FMedSci

2:10 p.m. - 2:40 p.m. Panelist 1: Kjersti Aagaard, MD, PhD
2:40 p.m. - 3:10 p.m. Panelist 2: Frederic Bushman, PhD
3:10 p.m. - 3:40 p.m. Panelist 3: Indira U. Mysorekar, PhD
3:40 p.m. - 4:10 p.m. Panelist 4: Michal A. Elovitz, MD

Learning Objectives
After this session, participants will be able to:
• Discuss general concepts regarding biological systems, their microbiota and health and disease
• Describe the strengths and limitations of methodology used to study low biomass microbiome
• Appraise existing data supporting or refuting the presence of a placenta microbiome

Reproduction Meets Imaging

EAST MEETING ROOM 13 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™

Moderators: Hari Eswaran, PhD
Jessica Ramella-Roman, PhD

2:10 p.m. - 2:40 p.m. In Vivo Imaging of Reproductive Dynamics in the Mouse Oviduct
Shang Wang, PhD

2:40 p.m. - 3:10 p.m. Active Fluctuations Modulate Nuclear Dynamics in Oocytes
Marie-Helene Verlhac, PhD

3:10 p.m. - 3:40 p.m. Quantitative Ultrasound of the Cervix in Pregnancy: Today & Tomorrow
Helen Feltovich, MD

3:40 p.m. - 4:10 p.m. Preventing Postpartum Depression: An Intergenerational fMRI Clinical Trial
Kristen Mackiewicz Seghete, PhD

Learning Objectives
After this session, participants will be able to:
• Identify reproductive mechanics across gestation through in vivo and ex vivo imaging techniques
• Demonstrate a multi-level perspective of maternal reproduction and fetal development in pregnancy
• Appraise novel imaging modalities for the assessment of reproductive function
Scientific Program

Friday, March 13, continued

SRI - SSR Joint Session: Immune Cell Regulation of Implantation/Pregnancy
EAST MEETING ROOM 8 & 15 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™
Moderators: Bo R. Rueda, PhD
Vikki M. Abrahams, PhD

2:10 p.m. - 2:40 p.m.  Neutrophils at the Maternal-Fetal Interface: Friend or Foe?
Vikki M. Abrahams, PhD

2:40 p.m. - 3:10 p.m.  The Stage Is Set Before the PlayCommences - Maternal Immunological Detection of the Conceptus
Troy Ott, PhD

3:10 p.m. - 3:40 p.m.  Maternal Immunity and Tolerance During Pregnancy
Margaret G. Petroff, PhD

3:40 p.m. - 4:10 p.m.  Fetal-Maternal Disagreement: Immune Responses in Placental Villitis
Elizabeth Ann Enninga, PhD

Learning Objectives
After this session, participants will be able to:
• Demonstrate the role of maternal immune cells in normal and pathological pregnancies.
• Determine modes of placental-immune cell communication
• Discuss current research on the processes of immune tolerance during pregnancy

SRI - PRS Joint Session: Interaction at the Maternal-Fetal Interface and Origins of Child Health and Disease
EAST MEETING ROOM 11 & 12 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™
Moderators: Maide Ozen, MD
Yoel Sadovsky, MD

2:10 p.m. - 2:40 p.m.  Implications of Immunoperinatology Research on Neonatal and Lifetime Health
Maide Ozen, MD

2:40 p.m. - 3:10 p.m.  Multidisciplinary, Multiplatform Approaches to Unravel the Mechanisms of Adverse Pregnancy Outcomes
Nima Aghaeepour, PhD

3:10 p.m. - 3:40 p.m.  Next Frontiers in Vesicle-Based Placental-Maternal-Fetal Communication
Yoel Sadovsky, MD
Friday, March 13, continued

3:40 p.m. - 4:10 p.m. Gaps in Knowledge in Understanding the Immunobiology and Immunopathology of Pregnancy and Future Directions
Ana Claudia Zenclussen, PhD

Learning Objectives
After this session, participants will be able to:
• Discuss the utilization of multiplatform approaches, such as immunome, metabolomics, genomics, proteomics and microbiome, to identify markers of adverse pregnancy and neonatal outcomes
• Discuss the advances in our understanding of the feto-placental interface and its contribution to pregnancy and lifelong health
• Summarize the immunobiology and immunopathology of pregnancy and explore available therapeutic options to improve maternal and neonatal health

Drivers and Therapeutic Targets for Gynecologic Cancers Associated with Benign Gynecologic Conditions
EAST MEETING ROOM 3 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Eligible for 1.0 Royal College MOC credits/1.0 AMA PRA Category 1 Credits™
Moderators: Dineo Khabele, MD, FACOG, FACS
Gloria Huang, MD

2:10 p.m. - 2:40 p.m. ARID1A as a Driver and Target for Therapy for Endometriosis-Associated Ovarian Cancer (Implications for Immunotherapy)
Rugang Zhang, PhD

2:40 p.m. - 3:10 p.m. Toxicant Exposure, Endocrine Disruptors and Adenomyosis (Environmental Influence)
Kaylon L. Bruner-Tran, PhD

3:10 p.m. - 3:40 p.m. The Insulin/Insulin Growth Factor and Sex Hormone Axes in the Normal Endometrium and in Tumor Microenvironment of Endometrial Cancer (Environmental Influence of Obesity and Implications for Immunotherapy)
Gloria Huang, MD

3:40 p.m. - 4:10 p.m. Mouse Models of Endometriosis-Associated Gynecologic Cancers
Warren B. Nothnick, PhD

Learning Objectives
After this session, participants will be able to:
• Describe the role of ARID1A in endometriosis-associated ovarian cancer and the development of precision medicine strategies targeting ARID1A
• Identify endocrine-disrupting toxicants and their relationship to benign gynecological diseases and cancer
• Describe obesity-related endocrine biomarkers and next-generation endocrine therapy for endometrial pre-cancer and cancer
Friday, March 13, continued

**Stem Cell Therapy of Reproductive Disorders**

**EAST MEETING ROOM 2 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2**

Eligible for **1.0 Royal College MOC credits / 1.0 AMA PRA Category 1 Credits™**

**Moderators:**  Ayman Al-Hendy, MD, PhD  
Sonia Herraiz, PhD

2:10 p.m. - 2:40 p.m.  **Opportunities and Challenges in Regenerative Therapies**  
Sonia Herraiz, PhD

2:40 p.m. - 3:10 p.m.  **Stem Cell and Gene Therapy of Ovarian Infertility: from Bench to Rodents to Women, and Back**  
Ayman Al-Hendy, MD, PhD

3:10 p.m. - 3:40 p.m.  **Cell Therapy of Asherman Syndrome and Endometrial Atrophy**  
Carlos Simon, MD, PhD

3:40 p.m. - 4:10 p.m.  **Cell Therapy of Male Infertility**  
Kyle Orwig, PhD

**Learning Objectives**

After this session, participants will be able to:

- Identify the role of different adult stem cell populations and related molecules in the development of stem cell-based techniques for reproductive disorders
- Discuss mechanisms underlying the stem cell-induced regeneration/recovery of reproductive organs
- Evaluate benefits and limitations of the described techniques
- Identify differences of the stem cell-based techniques outcomes depending on the study population

4:10 p.m. - 4:25 p.m.  **Coffee Break**

FOYER SOUTH - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

4:30 p.m. - 6:00 p.m.  **Concurrent Oral Presentations III**

**Epidemiology and Global Health**

**EAST MEETING ROOM 1 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2**

**Moderators:**  Andrea G. Edlow, MD, MSc  
Alison S. Care, PhD

4:30 p.m. - 4:45 p.m.  **O-089: Likelihood of Women Achieving More Than One Live Birth After Various Types of Cancers**  
Deepika Garg, Huong Dieu Meeks, Erica Johnstone, Alexander Pastuszak, Sarah Berga, Ken Smith, Jim Hotaling, Joseph M. Letourneau

4:45 p.m. - 5:00 p.m.  **O-090: Women with History of Pregnancy Complications Have Higher Risk of Midlife Stroke: The PATH Study**  
Eliza C. Miller, Rindcy E. Davis, Natalie A. Bello, Alexander M. Friedman, Amelia K. Boehme, Sarah E. Tom

5:00 p.m. - 5:15 p.m.  **O-091: Analysis of Fetal Birth Weight Percentiles at Birth Improves Our Understanding of How the Maternal Postpartum Phenotype is Linked to Poor Pregnancy Outcome**  
Calvin J. Hobel, Christine M. Guardino, Max Mansolf, Richard Liang, James Mirocha, Christine Dunkel Schetter
Friday, March 13, continued

5:15 p.m. - 5:30 p.m.  O-092: Losing Specificity. The Unintended Harm of Improved Detection of Fetal Growth Restriction
Roshan Selvaratnam, Mary-Ann Daveym, Shirin Anil, Susan J. McDonald, Tanya Farrell, Euan M. Wallace

5:30 p.m. - 5:45 p.m.  O-093: Racial Disparities in Infant Mortality Following Singleton Pregnancies in the US
Adwoa Baffoe-Bonnie, Jasmine Johnson, Celeste Green, Tracy Manuck

5:45 p.m. - 6:00 p.m.  O-094: Confidential Review of Maternal Deaths in the Community Level Interventions for Pre-Eclampsia Pakistan Trial
Annet M. Aukes, Kristina Arion, Rahat N. Qureshi Sumedha Sharma, Tang Lee, Beth A. Payne, Jing Li, Marianne Vidler, Jeffrey Bone, Zulfigar A. Bhutta, Peter von Dadelszen, Laura A. Magee, CLIP Pakistan Working Group.

Development Programming II

EAST MEETING ROOM 2 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Jorge P. Figueroa, MD, PhD
Chiara Mando, PhD

4:30 p.m. - 4:45 p.m.  O-095: Maternal Adiposity Alters Hippocampal Epigenomic and Transcriptomic Profiles in the Fetal Baboon
Ashley A. Martin, Sarah O. Ocanas, Hunter Porter, Martin-Paul Agbaga, Willard M. Freeman, Dean A. Myers

4:45 p.m. - 5:00 p.m.  O-096: Sexual Dimorphic Mechanisms of Programming of Adipose Tissue (AT) Expansion by Maternal Obesity (MO) in the Rat
Carlos A. Ibáñez-Chávez, Gabriela Lira-León, Luis A. Reyes-Castro, Consuelo Lomas Soria, Alejandra Hernández-Rojas, Eyerahí Bravo-Flores, Mario Solís-Paredes, Guadalupe Estrada-Gutiérrez, Fernando Larrea, Peter W. Nathanielsz, Elena Zambrano González

5:00 p.m. - 5:15 p.m.  O-097: Pronuclear Transfer Reveals Oocyte Nucleus is Sufficient to Transmit Cardiac Mitochondrial Abnormalities in Offspring of Obese Dams
Jeremie L. Ferey, Meghan Ruebel, Keith Latham, Kelle Moley, Abhinav Diwan

5:15 p.m. - 5:30 p.m.  O-098: Maternal Obesity (MO) in Sheep Elevates Fetal Left Ventricular (LV) Tissue Cortisol Concentration and the Components of the 11βhydroxysteroid Dehydrogenase (11βHSD1) System at Term
Qiurong Wang, Steven P. Ford, Wei Guo, Peter W. Nathanielsz
Friday, March 13, continued

5:30 p.m. - 5:45 p.m.  O-099: Females Are Not Just ‘Protected’ Males: Sex-Specific Vulnerabilities In Placenta and Brain After Prenatal Immune Disruption
Amy E. Braun, Pamela A. Carpentier, Brooke A. Babineau, Aditi R. Narayan, Michelle L. Kielhold, Hyang Mi Moon, Jennifer Su, Vidya Saravanapandian, Theo D. Palmer

5:45 p.m. - 6:00 p.m.  O-100: Maternal Obesity Diminishes Inhibitory Interneuron Function in Rat Hippocampus
Helena C. Parkington, Ammar Abdulwahid, Harold A. Coleman.

Reproductive Biology II
EAST MEETING ROOMS 3 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Yoel Sadovsky, MD
Irene Cervello, PhD

4:30 p.m. - 4:45 p.m.  O-101: The Role of Sirt1 and Progesterone Resistance in Normal and Abnormal Uterine Physiology: A Novel Hypothesis
Bruce A. Lessey, Abigail Gifford, Tae Hoon Kim, Asgerally T. Fazleabas, Steven L. Young, Jae-Wook Jeong

4:45 p.m. - 5:00 p.m.  O-102: Extracellular Vesicles Secreted by Uterine Decidual Cells Carry Critical Information for Establishment of Pregnancy
Indrani C. Bagchi, Qiuyan Ma, Arpita Bhurke, Kannan Athilakshmi, Jie Yu, Robert N. Taylor, Milan K. Bagchi

5:00 p.m. - 5:15 p.m.  O-103: Loss of MIG-6 Results in Endometrial Progesterone Resistance and Endometriosis-related Infertility Through ERBB2 Overexpression
Tae Hoon Kim, Jung-Yoon Yoo, Jung-Ho Shin, Ulrich Müller, Asgerally T. Fazleabas, Steven L. Young, Bruce A. Lessey, Ho-Geun Yoon, Jae-Wook Jeong

5:15 p.m. - 5:30 p.m.  O-104: Endometrial Mitochondrial DNA Secreted in Extracellular Vesicles: A Novel Mechanism Modulating Maternal-Embryo Bioenergetics
David Bolumar, Alicia Amadoz, Inmaculada Moreno, Carlos Marín, Antonio Diez, Jorge Jiménez-Almazán, Carlos Simón, Felipe Vilella

5:30 p.m. - 5:45 p.m.  O-105: Entosis Occurs in Human Embryo Implantation
Andrea Palomar, Roberto Gonzalez-Martin, Stefania Salsano, Silvia Pérez-Debén, Alicia Quionero, Francisco Domínguez

5:45 p.m. - 6:00 p.m.  O-106: MicroRNA Expression in Pregnancy of Unknown Location (PUL)
Christopher Kyriacou, Sung Hye Kim, Shabnam Bobdiwala, Phillip Bennett, Tom Bourne, Vasso Terzidou
Scientific Program

Friday, March 13, continued

Placenta II
EAST MEETING ROOM 11 & 12 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Carlos Salomon, PhD, DMedSc, MSc
Sarah J. Delforce, PhD

4:30 p.m. - 4:45 p.m.  
O-107: Placental Genomic Imbalances Contribute to Poor Fetal Growth: From Trisomy to Copy Number Variants
Giulia F. Del Gobbo, Yue Yin, Sanaa Choufani, Emma A. Butcher, John Wei, Rosanna Weksberg, Ryan K.C. Yuen, Wendy P. Robinson

4:45 p.m. - 5:00 p.m.  
O-108: Transcription Factor NRF2 Serves a Key Role in the Expression of Immune Modulators During Human Trophoblast Differentiation
Youn-Tae Kwak, Sribalasubashini Muralimanoharan, Carole R. Mendelson

5:00 p.m. - 5:15 p.m.  
O-109: Placental Cell-specific Extracellular Vesicle Profiles from Syncytiotrophoblasts and Extravillous Trophoblasts in the First Trimester
Terry Morgan, Mayu Morita, Leslie Myatt

5:15 p.m. - 5:30 p.m.  
O-110: Bi-directional Signaling Between Placental Endothelial Cells and Extracellular Matrix Regulates Fetoplacental Angiogenesis in Severe Fetal Growth Restriction
Shuhan Ji, Diane Gumina, Kathryn Kilpatrick, Emily J. Su

5:30 p.m. - 5:45 p.m.  
O-111: Identifying Metabolite Signatures in Placental Development Using iHumanPlacenta Metabolic Network
Alison Paquette, Priyanka Baloni, Gina Huynh, Heather Brockway, Helen Jones, Yoel Sadovsky, Louis Muglia, Nathan D. Price

5:45 p.m. - 6:00 p.m.  
O-112: Trophoblast Derived Soluble-PDL1 Modulates Macrophage Polarization and Function
Gil G. Mor, Paulomi Aldo, Jiahui Ding, Yuan You, Janina Kaislasuo, Yonghong Zhang, Aihua Liao

Reproductive Endocrinology and Infertility II
EAST MEETING ROOM 8 & 15 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Zaher Merhi, MD, HCLD
Lusine Aghajanova, MD, PhD

4:30 p.m. - 4:45 p.m.  
O-113: Exposure to D-galactose is Not Embryotoxic
Mili Thakur, Bai David, Husam M. Abu-Soud

4:45 p.m. - 5:00 p.m.  
O-114: Examination of Androgen Effects on Female Reproductive Axis: Hypothalamus-Pituitary-Ovary
Sheng Wu, Olubusayo Awe, Mingxiao Feng, James Segars
Scientific Program

Friday, March 13, continued

5:00 p.m. - 5:15 p.m.

0-115: Mild hyperandrogenemia in Presence/Absence of a High-fat, Western-style Diet Alters Secretory Phase Endometrial Transcriptome in Nonhuman Primates
Cecily Bishop, Fangzhou Luo, Lina Gao, Suzanne Fei, Ov Slayden

5:15 p.m. - 5:30 p.m.

0-116: Effect of Mitochondrial Dynamin Like GTPase on Steroidogenesis in the Corpus Luteum
Michele R. Plewes, Pan Zhang, Xiaoying Hou, John Davis

5:30 p.m. - 5:45 p.m.

0-117: Bioavailable Inhibin B May be a Better Marker of Oocyte Yield Than Ovarian Reserve
Rachel B. Danis, Intira Sriprasert, Jacqueline R. Ho, Lynda K. McGinnis, Ajay Kumar, Frank Z. Stanczyk

5:45 p.m. - 6:00 p.m.

0-118: Dose-Dependent Ovulation Rates and Endocrine Correlates of Ovulation in PCOS Patients Undergoing Letrozole Ovulation Induction: A Secondary Analysis of the PPCOS II Trial
Tracy Nicole Hadnott Harrison, Alexander Quaas, R. Jeffrey Chang

Clinical and Translational Perinatology II

EAST MEETING ROOM 13 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Laxmi V. Baxi, MD
Kenneth K. Chan, MD

4:30 p.m. - 4:45 p.m.

0-119: First Use of an Artificial Placenta to Support Extremely Preterm Sheep Fetuses Compromised by Intrauterine Inflammation
Haruo Usuda, Matthew Kemp

4:45 p.m. - 5:00 p.m.

0-120: Fetal Rh Antigen is Present Consistently Throughout Cells in the Maternal Circulation in Early Pregnancy
Stefanie J. Hollenbach, Mathew Cochran, Taylor Waldrop, Keelin Abbott, Amy Harrington

5:00 p.m. - 5:15 p.m.

0-121: Individual Edinburg Perinatal Depression Scale (EPDS) Components and Preterm Birth
Shelby Smith, Talati Asha, Stephanie Sun, Robert Bradford, Hudson Santos, Tracy Manuck

5:15 p.m. - 5:30 p.m.

0-122: Racial and Ethnic Disparities in Mode of Delivery During Labor Induction
Christina Ackerman, Masaru Negi, Uma Reddy, Lisbet Lundsberg, Audrey Merriam, Jessica Greenberg, Sarah Meller, Anna Sfakianaki
Scientific Program

Friday, March 13, continued

5:30 p.m. - 5:45 p.m.  
**O-123: Maternal and Neonatal Morbidity Associated With TOLAC Versus Elective Repeat Cesarean as a Function of VBAC Success Prediction**  
Hayley Pierce, Frank B. Williams, Carole McBride, Kelley McLean

5:45 p.m. - 6:00 p.m.  
**O-124: Maternal and Neonatal Morbidity Following Uterine Rupture by History of Previous Cesarean Section**  
Stephanie Sun, Asha Talati, Catherine Vladutiu, Tracy Manuck

6:15 p.m. - 7:30 p.m.  
**Presidential Address and Awards Ceremony**  
EAST BALLROOM BC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

6:15 p.m. - 6:35 p.m.  
**Presidential Address**  
James H. Segars, MD, SRI President, 2019 - 2020

6:37 p.m. - 6:42 p.m.  
**DeCherney Society Lifetime Distinguished Service Award Presentation**  
Sarah L. Berga, MD, University of Utah School of Medicine

6:44 p.m. - 6:49 p.m.  
**SRI Mentorship Award Presentation**  
Sarah A. Robertson, PhD, The University of Adelaide

6:51 p.m. - 7:01 p.m.  
**SRI Distinguished Scientist Award Presentation**  
Hugh S. Taylor, MD, Yale University School of Medicine

7:03 p.m. - 7:13 p.m.  
**President’s Achievement Award**  
Kjersti Aagaard, MD, PhD, Baylor College of Medicine

7:45 p.m. - 11:00 p.m.  
**The Beatles Canadian Tour**  
*Ticketed Event*  
EAST BALLROOM A - VANCOUVER CONVENTION CENTRE EAST LEVEL 1
Scientific Program

Saturday, March 14

7:30 a.m. - 1:45 p.m.  Registration
VANCOUVER CONVENTION CENTRE EAST - LOBBY (LEVEL 1)

8:00 a.m. - 9:00 a.m.  President’s Distinguished Lecture II - Modeling Early Placental Development – Can Pluripotent Stem Cells Do the Trick?
EAST BALLROOM BC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

Eligible for 2.0 Royal College MOC credits / 2.0 AMA PRA Category 1 Credits™
Moderator: James H. Segars, MD
Janet Rossant, CC, PhD, FRS, FRSC
The Hospital for Sick Children and Department of Medical Genetics
University of Toronto, Toronto, ON, Canada

<table>
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<tr>
<th>Learning Objectives</th>
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<tbody>
<tr>
<td>After this session, participants will be able to:</td>
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<tr>
<td>• Interpret the properties of different stem cells derived from early mouse/human embryos</td>
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<tr>
<td>• Consider future potential of trophoblast stem cells to model early pregnancy failure</td>
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<tr>
<td>• Identify the ethical implications of generating human embryo models from different stem cell types</td>
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9:00 a.m. - 10:30 a.m.  Poster Session III and Late Breaking Posters
EAST EXHIBIT HALL B - VANCOUVER CONVENTION CENTRE EAST LEVEL 1

10:30 a.m. - 12:00 p.m.  Concurrent Oral Presentations IV
Fetus II
EAST MEETING ROOM 13 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

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<tr>
<th>10:30 a.m. - 10:45 a.m.</th>
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<tbody>
<tr>
<td>O-125: Late Gestation Fetal Hyperglucagonemia Results in Lower Fetal Weight, Fetal Hypoaminoacidemia, and Decreased Uteroplacental Nutrient Uptake</td>
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<tr>
<td>Sarah Cilvik, Stephanie R. Wesolowski, Russ V. Anthony, Laura D. Brown, Paul Rozance</td>
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<th>10:45 a.m. - 11:00 a.m.</th>
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<tr>
<td>O-126: Intrauterine Hypoxia Induces Compensatory Changes in Fetal Heart Function in Growth Restricted Fetuses in a Sex Dependent Manner</td>
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<tr>
<td>Loren P. Thompson, Shifa Turan, Graham W. Aberdeen</td>
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<th>11:00 a.m. - 11:15 a.m.</th>
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<tr>
<td>O-127: Maternal and Fetal Immunological Consequences of Intrauterine Inflammation: Implications for Fetal Brain Injury</td>
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<tr>
<td>Emma L. Lewis, Amy G. Brown, Natasha M. Tulina, Paige M. Porrett, Michal A. Elovitz</td>
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<th>11:15 a.m. - 11:30 a.m.</th>
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<td>O-128: Novel Gasotransmitter Cardio-Protection in the Developing Heart: Comparative Roles of Hydrogen Sulphide and Carbon Monoxide</td>
</tr>
</tbody>
</table>
Scientific Program

Saturday, March 14, continued

11:30 a.m. - 11:45 a.m.  O-129: Human Microglia Acquire a More Mature, Homeostatic Phenotype During the Transition of the First and Second Trimester of Gestation.
Sharon Eskandar, Laura Kracht, Malte Borggrewe, Astrid M. Alsema, Nieske Brouwer, Michel Meijer, Susana M. Chuva de Sousa Lopes, Maaike C. Nieveen, Susanne M. Kooistra, Sicco A. Scherjon, Jelmer R. Prins, Bart J.L. Eggen

11:45 a.m. - 12:00 p.m.  O-130: Bacterial and Viral Infections Inhibit Defence Mechanisms in the Developing Human Blood-Brain Barrier (BBB) in Vitro
Guinever E. Imperio, Petchawan Lye, Enrico Bloise, Stephen G. Matthews

Parturition III
EAST MEETING ROOM 8 & 15 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Matthew W. Kemp, PhD
Gautam Chaudhuri, MD, PhD

10:30 a.m. - 10:45 a.m.  O-131: Extracellular Calcium Entry via the TRPV4 Channel Potentiates NFκB Activation in the Myometrium
Judith A. Ingles, Saidie Rodriguez, Lihua Ying, David N. Cornfield, Cristina M. Alvira

10:45 a.m. - 11:00 a.m.  O-132: Synthetic PreImplantation Factor (sPIF) Prevents Preterm Birth and Preserves Fetal Brain Development
Marialuigia Spinelli, Céline Boucard, Fiorella Di Nicuolo, Roberta Castellani, Alfredo Pontecorvi, Giovanni Scambia, Chiara Granieri, Eytan Barnea, Daniel Surbek, Nicoletta Di Simone, Martin Mueller

11:00 a.m. - 11:15 a.m.  O-133: Exosomal Delivery of NF-kB Inhibitor Delays LPS-Induced Preterm Birth and Reduces Fetal Inflammatory Response in Mouse Models
Samantha Sheller-Miller, Enkhtuya Radnaa, Dolores Quiroz, Kyungsun Choi, Steven J. Fortunato, Chulhee Choi, Ramkumar Menon

11:15 a.m. - 11:30 a.m.  O-134: The Vaginal Immune Response, the Microbiome, and Their Interactions in Women Who Ultimately Deliver Preterm or at Term
Violetta Florova, Roberto Romero, Adi L. Tarca, Chaur-Dong Hsu, Kevin Theis, Nardhy Gomez-Lopez

11:30 a.m. - 11:45 a.m.  O-135: Microbial Metabolites Compromise Epithelial Barrier Integrity: Potential Mechanisms by Which Non-Optimal Cervicovaginal Microbiota Lead to Preterm Birth
Kristin D. Gerson, Yusra Gimie, Lauren Anton, Michal A. Elovitz
Scientific Program

Saturday, March 14, continued

11:45 a.m. - 12:00 p.m.  **0-136: Fetal Membrane-Activated Neutrophils Propagate Fetal Membrane Inflammation and Markers of Membrane Weakening**  
Mancy Tong, Abigail H. Smith, Vikki M. Abrahams

**Placenta III**

EAST MEETING ROOM 11 & 12 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

**Moderators:** Denise G. Hemmings, PhD  
David Owen, MD, PhD

10:30 a.m. - 10:45 a.m.  **0-137: In Vivo Impact of Chorionic Somatomammotropin RNA Interference in the Absence of Intrauterine Growth Restriction**  
Amelia R. Tanner, Ashgar Ali, Quinton A. Winger, Paul J. Rozance, Russell V. Anthony

10:45 a.m. - 11:00 a.m.  **0-138: Identification of Placental MiRNA Associated with Maternal Insulin Sensitivity During Pregnancy**  
Fernanda Alvarado, William Beyer, Tianjiao Chu, Yoel Sadovsky, Patrick Catalano, Marie-France Hivert, Perrie O’Tierney-Ginn

11:00 a.m. - 11:15 a.m.  **0-139: Changes in Lipid Profiles of Placental Exosomes in Maternal Plasma Characterize Pregnancies with a Small-for-Gestational Age Fetus**  
Miira M. Klemetti, Porter R. Tyler, Ante B.V. Pettersson, Martin Post, Isabella Caniggia

11:15 a.m. - 11:30 a.m.  **0-140: Azithromycin Treatment of Placental Inflammation in a Non-Human Primate Model of Intra-Amniotic Ureaplasma Infection**  

11:30 a.m. - 11:45 a.m.  **0-141: MRI Compatible Ex-vivo Human Whole Placenta Dual Perfusion System**  
Shahin Rouhani, Jeffrey N. Stout, Esra Abaci Turk, Christopher G. Ha, Lawrence L. Wald, William H. Barth, P. Ellen Grant, Drucilla J. Roberts

11:45 a.m. - 12:00 p.m.  **0-142: Circulating CD31+ Exosomes From Pregnant Women with Placenta Accreta Spectrum Stimulate Uterine Angiogenesis and Trophoblast Differentiation and Invasion**  
Q.R. Qi, J. Makhoul, Q.W. Zhang, J. Bai, Y. Li, Y.H. Yang, D.B. Chen
Scientific Program

Saturday, March 14, continued

Reproductive Biology III
EAST MEETING ROOM 2 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Caroline E. Gargett, PhD
Bo Yu, MD

10:30 a.m. - 10:45 a.m. 0-143: G-CSF Mobilized Plasma Regenerate Ovarian Stroma and Restore Ovarian Function
Anna Buigues, Maria Marchante, Jessica Martinez, Antonio Pellicer, Sonia Herraz

10:45 a.m. - 11:00 a.m. 0-144: Modeling Preeclampsia Using Human Induced Pluripotent Stem Cells
Mariko Horii, Tony Bui, Ojeni Touma, Louise C. Laurent, Mana Parast

11:00 a.m. - 11:15 a.m. 0-145: Pluripotent Stem Cell Derived Endometrial Mesenchyme and Decidual Epithelium Form a 3-Dimensional Model of the Human Endometrium
Virginia Chu Cheung, Mirna Marinic, Chian-yu Peng, Vincent J. Lynch, John A. Kessler

11:15 a.m. - 11:30 a.m. 0-146: A Single-cell RNA-Seq Survey of Mouse Implantation Site Mapping the Contribution of Maternal Exogenous Bone Marrow Cells to Decidua
Reshef Tal, Jacqueline Kisa, Francesc Lopez-Giraldez, Avraham Unterman, Hugh S. Taylor

11:30 a.m. - 11:45 a.m. 0-147: miR-155 Deficiency Impairs Pregnancy Tolerance and Predisposes to Inflammation-Induced Fetal Loss in Mice
Sarah A. Robertson, John S. Schjenken, Lachlan M. Moldenhauer, Bihong Zhang, Holly M. Groome, Hon Yeung Chan, Alison S. Care

11:45 a.m. - 12:00 p.m. 0-148: Human Regulatory T Cells at the Maternal-Fetal Interface Show Functional Site-Specific Adaptation with Tumor-Infiltrating-Like Features
Judith Wienke, Laura Brouwers, Michal Mokry, Femke van Wijk, Bas B. Van Rijn, On Behalf of the SPAR Study Group

Preeclampsia II
EAST MEETING ROOM 1 – VANCOUVER CONVENTION CENTRE EAST LEVEL 2

Moderators: Shannon A. Bainbridge, PhD
Jenny Myers, PhD

10:30 a.m. - 10:45 a.m. 0-149: Can WS1442 Ameliorate Maternal Vascular Dysfunction in Preeclampsia?
Stephanie A. Worton, Yasmin Mills, Susan L. Greenwood, Jenny E. Myers
Saturday, March 14, continued

10:45 a.m. - 11:00 a.m.  **O-150: Effect of Pregnancy Prolongation in Early-Onset Preeclampsia on Remote Maternal Cardiovascular, Renal and Metabolic Function**  
Eva G. Mulder, Chahinda Ghossein, Janneke Crutsen, Sander M.J. van Kuijk, Baskaran Thilaganathan, Marc E.A. Spaanderman

11:00 a.m. - 11:15 a.m.  **O-151: Using Machine Learning Tools to Classify and Predict Preeclampsia in Asymptomatic Women**  
Jianhong Zhang, Melanie Audette, Nir Melamed, Stephen J. Lye, John C. Kingdom, Kelsey McLaughlin

11:15 a.m. - 11:30 a.m.  **O-152: Galectin-7: A Novel Placental-released Driver of Preeclampsia**  
Ellen Menkhorst, Wei Zhou, Teresa So, Leilani Santos, Jian-Guo Zhang, Argyro Syngelaki, Kyros Nicolaides, Yves St-Pierre, Eva Dimitriadis

11:30 a.m. - 11:45 a.m.  **O-153: The New Generation Antiplatelet Agent Prasugrel Represents an Exciting Novel Candidate Therapy for Preeclampsia**  
Natasha De Alwis, Natalie Binder, Sally Beard, Vi Nguyen, Kaitu’u-Lino Tu’uhevaha, Stephen Tong, Natalie Hannan

11:45 a.m. - 12:00 p.m.  **O-154: Identification of Subtype-specific Markers for Preeclampsia Using Placental Pathology and RNAseq**  
Mariko Horii, Cuong To, Rebecca Adami, Kathy Zhang-Rutledge, Leah Lamale-Smith, Louise C. Laurent, Mana Parast

**Gynecologic Oncology**  
EAST MEETING ROOM 3 - VANCOUVER CONVENTION CENTRE EAST LEVEL 2

**Moderators:** Gloria S. Huang, MD  
Erin George, MD

10:30 a.m. - 10:45 a.m.  **O-155: Evaluation of ATR Inhibitors for Targeted Therapy of Ovarian Clear Cell Carcinoma**  
Jing Ji, Zhigui Li, Emily Sherman, Oloruntoba Osagie, Shijun Mi, Gloria Huang

10:45 a.m. - 11:00 a.m.  **O-156: The Expression of FKBP5 is Important to Overcome Progesterone Resistance in Endometrial Hyperplasia**  
Munseok Paul Jeong, Hanna E. Teasley, Tae Hoon Kim

11:00 a.m. - 11:15 a.m.  **O-157: Identifying a Potential Biomarker for Anti-PD-1 Immunotherapy in Patients with Advanced Stage, Surgically-Resectable Endometrial Cancer**  
Katherine C. Fuh, Elena Lomonosova, Lei Guo, Wendy J. Fantl, Russell K. Pachynski, Olga Malkova, Stephen T. Oh, Andrea R. Hagemann, Carolyn K. McCourt, Matthew Powell, Premal H. Thaker
Scientific Program

Saturday, March 14, continued

11:15 a.m. - 11:30 a.m.  O-158: Excess Adiposity Induces Intrauterine Cytochrome P450 Expression in Mice
Emily Xiao, Dejian Zhao, Clare Flannery

11:30 a.m. - 11:45 a.m.  O-159: Differential Sensitivity to the PARP Inhibitor Niraparib vs Olaparib in Homologous Recombination Proficient (HRP) Uterine Serous Carcinoma Cell Lines
Joan Rose Tymon-Rosario, Paola Manara, Aranzazu Manzano, Luca Zammataro, Elena Bonazzoli, Stefania Bellone, Ludmil Alexandrov, Emanuele Perrone, Burak Zeybek, Chanhee Han, Gary Altwerger, Gulden Menderes, Elena Ratner, Dan-Arin Silasi, Gloria Huang, Azodi Masoud, Peter Schwartz, Alessandro D. Santin

11:45 a.m. - 12:00 p.m.  O-160: Genetic Relationship Between Endometriosis and Ovarian Cancer Subtypes
Sally Mortlock, Kate Lawrenson, Simon Gayther, Stuart Macgregor, Paul Pharoah, Grant Montgomery, Siddhartha Kar

12:05 p.m. - 1:35 p.m.  Hot Topics and Awards Ceremony Luncheon
EAST BALLROOM BC - VANCOUVER CONVENTION CENTRE EAST LEVEL 1
Moderators: Emre Seli, MD
Dineo Khabele, MD

12:05 p.m. - 12:20 p.m.  Impact of the PD-1 Signaling Pathway Upon Ovarian Vascular Development
Thanh-Ha Luu, Evelyn Llerena Cari, C. Elise Bales, Erin D. Lucas, Alex J. Polotsky, Benjamin G. Bitler, Beth Tamburini, Joshua Johnson

12:20 p.m. - 12:35 p.m.  Aiding the Decision-making Process of Subfertile Couples by Using a Diagnostic Test (ReceptIVFity) for Recognition of Embryo Implantation Failure
Rivka Koedooder, Sam Schoenmakers, Andries Budding, Joop Laven

12:35 p.m. - 1:35 p.m.  Awards Ceremony
Thank You to Our 2020 Poster Judges

Lusine Aghajanova, MD, PhD
Emmanuel Amabebe, PhD
Dilly Anumba, MD, FRCOG, LLM
Sarah Berga, MD
Loic Blanchon
Silvina Bocca, MD, PhD, HCLD, CC
Derek Boeldt, PhD
Stephane Bourque, PhD
Egle Bytavieniete Prewit, MD, PhD
Alison Care, PhD
Irene Cervello, PhD
Natasha Chattergoon, MS, PhD
Dongbao Chen, PhD
Mindy Christianson, MD
Kathleen Connell, MD
Stephen Contag, MD
Sandra Davidge, PhD, FCAHS
Sarah Delforce, PhD
Jeffrey Denney, MD, MS, FACOG
Nataki Douglas, MD, PhD
Annie Dude, MD, PhD
Andrea Edlow, MD, MSc
Elizabeth Ann Enninga, PhD
Yuliya Fakhr
Helen Feltoitch, MD
Liping Feng, MD
Jeremie Ferey, PhD
Esha Ganguly
Haijun Gao, PhD
Caroline Gargett, PhD
Stephanie Gaw, MD, PhD
Styliani Goulopoulos, PhD
Kathryn Gray, MD, PhD
Erin Greaves, PhD
Shannon Hawkins, MD, PhD
Denise Hemmings, PhD
Sonia Herrainz, PhD
Meghan Hill, MBBS
Joseph Huang, MD, PhD
Natallia Hula
K. Joseph Hurt, MD, PhD
Thomas Jansson, MD, PhD
Patricia Jimenez, MD
Joshua Johnson, PhD
Helen Jones, PhD
Lisa Joss-Moore, PhD
Tu’uhevaha Kaitu’u-Lino, PhD
Amanda Kallen, MD
Ludwig Kiesel, MD, PhD
Nga Ling (Theresa) Ko, PhD
Seung-Yup Ku, MD, PhD
Jamie Lo, MD
Monica Mainigi, MD
Chiara Mando, PhD
Thomas McElrath, MD, PhD
Zaher Merhi, MD, HCLD
Sam Mesiano, PhD
Eliza Miller, MD
Amy Murtha, MD
Lubna Nadeem, PhD
Linda Nelson, MD, PhD
Christopher Nold, MD
Errol Norwitz, MD, PhD, MBA
Perrie O’Tierney-Ginn, PhD
Mana Pastar, MD, PhD
Mary Ellen Pavone, MD, MS
William Parast, MD
Margaretta Pisarska, MD
Lucilla Poston, PhD
Robert Powers, PhD
Elliott Richards, MD
Victoria Roberts, PhD
Paul Rozance, MD
Carlos Salomon, PhD, DMedSc, MSc
Alessandro Santin, MD
Alireza Shamshirsaz
Donna Slater, PhD
Roger Smith, AM, MBBS, FRACP, PhD
Dorothy Sojka, PhD
Anna Sokalska, MD, PhD
Robert Sokol, MD
Emily Su, MD, MSCI
Junichi Sugawara, MD, PhD
Reshef Tal, MD, PhD
Loren Thompson, PhD
Bas Van Rijn, MD PhD
Ian Vasicke
Ganesa Wegienka, PhD
Virginia Winn, MD, PhD
Roger Young, MD, PhD
Jie Yu, MD, MSc
Ronghua Zhuge
SRI Grant Opportunities

SRI Grant Programs
SRI is pleased to announce the recipients of the SRI International Training Grant Program, and the SRI and Bayer Discovery/Innovation Grants.

The International Training Grant provides three trainees, at $5,000 each, an opportunity to obtain research experience in an Institution outside of their home country for 4-8 weeks.

The 2019-2020 recipients are:

Laura James-Allen, PhD
University of Colorado

Sofía Makieva, PhD
San Raffaele Hospital

Aleksandra Tsolova
University of Edinburgh

The SRI and Bayer Discovery/Innovation Grants, established in 2017, provide up to seven individuals with research focused on novel treatment options and animal models, a one-year grant. These awards are made possible by a generous grant from Bayer HealthCare LLC. Recipients to date include:

For the 2020-2021 Year:

Olga Bougie, MD, MPH, FRCSC
Queen’s University
Endometriosis and Cardiovascular Disease

Jae-Wook Jeong
Michigan State University
Nonsteroidal treatment for endometriosis

Alexander M. Kotlyar, MD
Yale University
Assessment of the Effect of JAK-inhibitors on Endometriosis and Endometriosis-related infertility

Monique J. LeMieux
Texas Woman’s University
Effect of Different Protein Sources on Reproductive Hormones in women with PCOS

Rachel Mejia, D.O.
University of Iowa
Randomized controlled trial of Combined Letrozole and Clomid (CLC II) versus letrozole alone for women with anovulation

Shannon D. Whirledge, PhD, MHS
Yale School of Medicine
Targeting Glucocorticoid Activation to Stop Uterine Fibroid Growth
2020 Awards

The Society for Reproductive Investigation is pleased to be able to provide the following awards at our 2020 Annual Scientific Meeting:

President’s Plenary Awards
Recognizes the four highest ranked abstracts chosen for presentation at the President’s New Investigator Plenary Session. The recipients of the award will each be presented with a $1,000 award at the Annual Meeting Awards Luncheon. These awards are supported by the SRI Past Presidents Fund.

The Kusum Lata Award
Established in 2020 and supported by Dr. Bhuchitra Singh. The Kusum Lata Award will provide a $1,000 award to two worthy In Training Investigators, coming from Indian Universities and currently residing in India. The award is based on high quality of their abstract submitted and accepted for the Annual Meeting, chosen by the SRI Program Committee. The award winners will be presented a certificate and monetary award at the Award Ceremony on Saturday afternoon during the SRI Annual Scientific Meeting.

SRI Chinese Trainee Award
Established in 2020 Provides a $500 award each to ten worthy In Training Investigators coming from Chinese Universities. The award is based on high quality of abstracts submitted and accepted (decided by the SRI Program Committee). The award winners will be presented a certificate and monetary award at the Award Ceremony on Saturday afternoon during the SRI Annual Scientific Meeting.

Early Career Investigator Award
The Early Career Investigator Travel Award, with support from the National Institutes of Health, was established to enhance the career development of early investigators by facilitating interaction with other scientists in the field, development of research collaborations, and exposure to the latest technologies and scientific developments in reproductive biology and medicine. Early career investigators are defined as individuals who have completed their terminal research degree or end of post-graduate clinical training, whichever date is later, within the past 10 years and who has not previously competed successfully as PD/PI for a substantial NIH independent research award. Up to four $1,000 travel awards and certificates will be given beginning in 2019 to awardees who will be selected by competitive review of abstracts submitted to each annual SRI meeting by the Program Committee, with special regard paid to representation of women and minorities.

SRI President’s Presenter’s Award
Originally established in 1996 as the Wyeth President’s Presenter Award to recognize the 25 most meritorious oral abstracts submitted by individuals still in training. Fellows and those in both pre and post-doctoral training are eligible to receive the award. The 25 awardees will receive a certificate and a $1,000 award, and they and their training directors will be honored at the Annual Meeting Awards Luncheon. The Society has always sought a means by which to encourage young investigators to present their research at our meeting. We anticipate the SRI President’s Presenter’s Award will encourage more abstract submissions and higher quality abstracts by the very people who need encouragement to consider a research career.

Laxmi Baxi Award
Established in 2013 and will be awarded to PhD individuals only, who are either graduate students still in training or postdoctoral fellows within five years of their PhD degree. Two $1,000 travel awards will be given to the top abstracts in basic reproductive science and in translational reproductive science. The awardees will receive a plaque, award and they will be honored at the SRI Annual Meeting Awards Ceremony. This award is made possible by a generous, long-standing member of SRI, Dr. Laxmi Baxi, and was created to encourage young PhD trainees to present their research at our meeting.
2020 Awards

**Thomas McDonald Award**
Acknowledge the highest ranked abstract by an In Training Investigator within the field of fetal neuroscience. This award honors the legacy of Dr. McDonald, whose immense contributions to the field of obstetrics and gynecology focused upon the neuroendocrinology of the developing fetus, placental function, fetal brain development, and the uterine contractility. The $750 monetary award and certificate will be presented at the Award Ceremony during the SRI Annual Scientific Meeting.

**Giorgio Pardi Foundation Awards**
Provide a $1,000 monetary award to a Junior Scientist as well as the three best young worthy investigators coming from Italian Universities. The award winners will be presented at the Award Ceremony during the SRI Annual Scientific Meeting.

**SRI In Training Investigator Poster Awards**
Initiated at the 2010 SRI Annual Meeting in Orlando, Florida, two senior investigators will be discussing/judging posters presented by In Training Investigators. The Poster Presenter will summarize their work for the judges, followed by questions from the poster discussants/judges. Certificates and $100 monetary awards will be given to the best 20 posters at the SRI Annual Meeting Hot Topics and Awards Luncheon.

**Underrepresented Minority Registration Awards**
To both encourage global participation and further diversify the Annual Meeting, SRI offers Awards to allow discounted Annual Meeting registration for 25 individuals who are underrepresented in their country or originate from a low-income, lower-middle-income, or upper-middle-income country. The awardees will be recognized at the Annual Meeting.
About SRI

It started in 1953... when a small group of physician-scientists and a basic researcher studying hypertensive disorders of pregnancy proposed the formation of an “Eclampsia” or “Toxemia” society. Leaders of the group included Drs. Nicholas Assali, Leon Chesley, Edward Davis, William Dieckmann, Russel de Alverez, Louis Hellman, and Ernst Page. In Dr. Larry Longo’s book, A Short History of the Society for Gynecologic Investigation, he states that the “Society of University Gynecologists”, as it was first called, was organized “…to stimulate, encourage, and to provide opportunities for investigators in obstetrics and gynecology to enter into free exchange of ideas to the end of increasing knowledge and techniques in this field. It was intended primarily for individuals who are giving full or considerable time to teaching and research, either in obstetrics and gynecology or in the fields kindred or related thereto.”

The first official meeting of the Society of University Gynecologists was held on June 15, 1953, at the Yale Club in New York City. The first annual meeting took place in December of 1953 in Cincinnati, OH, with a programmatic focus on toxemias of pregnancy. During this time, the leadership contemplated whether the name of the society was truly representative of the overarching interests of the members. While the name was formally changed to “Society for Gynecologic Investigation” at the annual meeting in Chicago in 1954, the topic was re-visited over the years, and in the summer of 2013, as a part of an SGI Executive Council strategic planning discussion, the name of the Society was re-evaluated, and in 2014 it was changed to the current, “Society for Reproductive Investigation.”

The Society adopted its first journal in 1970, which was termed “Gynecological Investigation”, and became the society’s official publication, with Walter Hermann serving as Editor-in-Chief. Publication was stopped shortly thereafter, in 1975. All SGI proceedings were subsequently published by the American Journal of Obstetrics and Gynecology, with Dan Mishell as the SGI Editor. The SGI re-initiated its own journal in 1994, The Journal of the Society for Gynecologic Investigation, with Roger Lobo as its first Editor. In 2007, under Hugh Taylor’s leadership, the Society’s journal transitioned to its current title, Reproductive Sciences, and in 2020, SRI welcomed Drs. Ayman Al-Hendy and Seung Yup-Ku as co-editors.

From its initial roster of 15 members, the Society has grown in numbers and diversity, with 93 members in 1964 to nearly 300 members in 1978, and to the 2016 membership of almost 1,000 worldwide. One-third of the members are basic scientists and two-thirds are clinical investigators. SRI members conduct basic, translational and clinical investigation in the reproductive sciences and women’s health. Areas of focus include obstetrics, perinatology, reproductive genetics, gynecology, gynecologic oncology, reproductive endocrinology, reproductive physiology, biochemistry, pharmacology, immunology, epidemiology, reproductive infectious disease and reproductive stem cell and developmental biology. Many members hold esteemed government level grants and serve on study sections and advisory councils for national agencies and private foundations.
About SRI

Mission Statement
The mission of the Society for Reproductive Investigation (SRI) is to advance reproductive and women’s health care through (1) outstanding basic, translational, and clinical science, (2) training and mentoring future generations of investigators, (3) advocacy targeting funding agencies, policy makers, donors and the community and, (4) promoting women’s health globally.

Membership
Regular Membership may be conferred on those individuals who provide evidence of a doctorate degree (MD, PhD, DPharm) and evidence of at least two (2) years of research experience including, but not limited to, postdoctoral, basic science or clinical fellowship. While a minimum of two (2) years should have been spent in this research career, there is no requirement that the nominee should have worked at his/her current institution for two (2) years.

Associate Membership is for individuals involved in research and/or health care in Obstetrics and Gynecology, Reproductive Medicine and Biology, or allied fields. This category includes laboratory managers, technologists, clinical research nurses and study coordinators, medical marketing and promotion, nonacademic-based researchers, pharmaceutical/biotechnology representatives, among others.

Emeritus Membership Each member of the Society shall, upon reaching his/her sixty-fifth (65) birthday and working no more than 25 percent, provide a written statement in order to become eligible for “Emeritus” status. The member may elect to stay active for as long as he/she wishes. Once a member elects “emeritus status”, he/she shall be entitled to all the rights and privileges of the Society, but will not have to pay annual dues, and will not be eligible to be a an elected officer.

Honorary Membership in the SRI is awarded to an individual who has achieved recognition for scientific contributions of an original nature in reproductive biology in which he/she has personally actively participated. This person should have demonstrated by past performance and future objectives that this interest in reproductive biology is dynamic. The individual need not necessarily occupy a position in an institution of higher learning, nor necessarily function in a medical or paramedical area. Honorary Members shall enjoy all of the rights and privileges of other members of the Society, except that they shall not be required to pay any dues or assessments, nor to hold any elective or appointive office in the Society.

In Training Membership is available for members who are not in a faculty position. They must be a full-time postdoctoral trainee, resident, fellow or student enrolled in a formal approved training program leading to a degree (BA, BS, MD, PhD, MS, MPH, and DVM). Candidates will be proposed by a member in good-standing of the Society. The In Training member will pay nominal dues sufficient to cover administrative costs, may participate in all activities of the Society and subscribe to the Society’s journal. This status expires when the member completes training at which time application for regular membership is expected.

NEW FOR 2019-2020! Developing Country Dues Rate
Beginning in 2019, SRI will be offering a reduced membership dues rate for those currently working in a developing country (as defined by the World Bank).

DEVELOPING COUNTRY REGULAR MEMBERSHIP DUES - $75
DEVELOPING COUNTRY ASSOCIATE & IN TRAINING MEMBERSHIP DUES - $50
MISSION: To advance reproductive and women’s health care through (1) outstanding basic, translational, and clinical science, (2) training and mentoring future generations of investigators, (3) advocacy targeting funding agencies, policy makers, donors and the community and, (4) promoting women’s health globally.

VISION: To lead outstanding multidisciplinary basic, translational, and clinical research, mentorship and training, and advocacy in reproductive science and research and women’s health.

2019-2020 SRI COUNCIL
President
James H. Segars, MD

Immediate Past President
Murray D. Mitchell, DPhil, DSc

President Elect
Nanette F. Santoro, MD

President Nominee
Carole R. Mendelson, PhD

Secretary Treasurer
Ian M. Bird, PhD (2020)

Secretary Treasurer-Elect
Paul J. Rozance, MD (2023)

Council Members:
Ayman Al-Hendy, MD, PhD (2022)
Amy P. Murtha, MD (2022)
Asgerally T. Fazleabas, PhD (2021)
Thomas Jansson, MD, PhD (2021)
Stephen G. Matthews, PhD (2020)
Sam A. Mesiano, PhD (2020)

In-Training Ad Hoc
Floortje Spaans, PhD (2020)

Past President Representative
Jerome F. Strauss, III, MD, PhD

FAST FACTS
Beginning in 2020, Reproductive Sciences is now published by Springer Nature

SRI is managed by five professionals with a combined experience of 50 years serving non-profit organizations

SRI is headquartered in Milwaukee, Wisconsin

12 active committees that help support its mission

DIVERSITY STATEMENT
As a Society that is devoted to research in the service of women’s health and reproductive medicine we are united in the assertion that research excellence and productivity are directly linked to diversity in ideas, perspectives, approaches, and interpretations. Such diversity is generated from not only tolerance or acceptance, but primarily from celebration of several elements of diversity exhibited by our members and the larger community of reproductive scientists. We therefore respect, support, and seek to expand our diversity in educational background, professional status, country of origin or working environment, gender, sexual orientation, race, ethnicity, social/economic background, and physical or psychological ability. We strive to generate and grow an internal environment of justice, honesty, and integrity that is inclusive of all the diverse elements of our community and seek to be a leader for diversity and inclusion in women’s health and reproductive science on a global level.
2019 - 2020 Annual Report

MEMBERSHIP

ARE YOU MISSING OUT ON THESE BENEFITS?

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- Grant Eligibility
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The SRI Leadership has identified 9 different domains of the Society they believe contribute to the mission

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2019 ANNUAL MEETING: IN REVIEW

| Registrants – Record Attendance | 1321 |
| Countries represented | 49 |
| Satellite Sessions | Six |
| EACCME Credits | 12 |
| Featles Performance | 2nd Annual |

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<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Institution(s)</th>
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<tr>
<td>BASIC PARTURITION, PREMATUREMATY</td>
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<tr>
<td>T-001 Dose-Response and Preferred Timing of Efficacy of a New Therapeutic Candidate, Rytvela, for Prevention of Inflammation-induced Preterm Birth and Fetal Tissue Injury</td>
<td>Sarah-Eve Loiselle,1 Renay Poupart,2 Xin Hou,1 Mathieu Nadeau-Vallée,1 Christiane Quiniou,1 David M. Olson,1 Sylvain Chemtob,2,3 CHU Sainte-Justine, Montreal, QC, Canada; 3University of Montreal, Montreal, QC, Canada; 4University of Alzheimer, Edmonton, AB, Canada.</td>
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<tr>
<td>T-002 Sulfonafuraboglycine ROS Mediated Nrf2 Decrease in Mechanically Stretched Primary Amnion Cells</td>
<td>Justin G. Paterson; Chelsea Saito-Reis, Claire E Kendall-Wright*. Chaminade University of Honolulu, Honolulu, HI, United States.</td>
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<tr>
<td>T-003 Upregulation of miR-877-3p and Downregulation of miRNA-186-3p in the Placentas of Patients with Iodopathic Preterm Birth</td>
<td>Duo-Ming Mei,*, Xiaolong Guo, Umit Kayisi, Frederick Schatz, Charles Lockwood, Otem Guzeloglu-Kayisi. University of South Florida, Morsani College of Medicine, Tampa, FL, United States.</td>
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<tr>
<td>T-004 Abstract Withdrawn</td>
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<td>T-005 How Dihydropyrimidinophosphatidylcholine (DPPC), a Fetal Lung Maturation Marker, Potentially Initiates Human Parturition.</td>
<td>Yousef Almohait*, Melissa Whitworth*, Anna Nicolau*, Ian Crocker.* The University of Manchester, Manchester, United Kingdom.</td>
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<tr>
<td>T-006 Characteristics of Enhanced Leucocyte Chemotaxis at Term &amp; Preterm Labour</td>
<td>Han Leet,<em>, Nanlin Yin,</em>, Zheng Liu,<em>, Luoji Wang,</em>, Yuan Ren,<em>, Jeneelle Chert,</em>, Hongo Qiu,<em>, Kessaph Lernert,</em>, David Olson,*, University of Alberta, Edmonton, AB, Canada; 4Chongqing Medical University, Chongqing, China.</td>
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<td>T-007 Differential Metabolic Profiles of Lactobacillus Species and Preterm Birth-associated Bacteria.</td>
<td>Emmanuel Amabieba*, Dily Anrunba*, Steven Reynolds*, University of Sheffield, Sheffield, United Kingdom.</td>
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<tr>
<td>T-008 Role of the Type-B Progesterone Receptor Isoform in Inflammation-induced Cervix Ripening and Preterm Birth in Mice</td>
<td>Steven M. Wilson,<em>, Jennifer L. Ebling,</em>, Seung S. Shin,<em>, Iris Shoukry,</em>, Sam Messiano,<em>, Michael A. Kirby,</em>, Loma Linda University, Loma Linda, CA, United States; 2Case Western Reserve University, Cleveland, OH, United States.</td>
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<td>T-009 New Insights into the Nature and Role of Potassium Channels in Regulating Uterine Contraction in Human Labour</td>
<td>Rangee Srivastavan,<em>, Mary A Tonta,</em>, Penelope M Sheehan,<em>, Harold A Coleman,</em>, Shawn P Breenecche,<em>, Helena C Parkington,</em>. Monash University, Clayton, Australia; Royal Women’s Hospital, Melbourne, Australia; University of Melbourne, Melbourne, Australia.</td>
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<td>T-010 De Novo Synthesis of Serum Amyloid A1 in the Placenta Participates in Parturition</td>
<td>Dan Xiaowen*, Yang Sun*, Ren Ji Hospital, Shanghai Jiao Tong University, Shanghai, China.</td>
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<td>T-013 Differential Expression Changes in Human Decidua at Labor, Term Versus Preterm - Role for Upstream Targets in the PG Pathway</td>
<td>Kye Hornaday*, Moss Brutton Joel,<em>, Stephen Wood</em>, David Andersson*, Donna Slater*, University of Calgary, Calgary, AB, Canada.</td>
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<tr>
<td>T-014 NICHD Workshop Criteria for Suspected Triple I: Confirmation by Placental Pathology</td>
<td>Danielle Prentice,<em>, Philip J Katzman,</em>, Heather Florescu,<em>, Leon A Meloy,</em>, Sertdar H Usak,<em>, William M. Curtin,</em>, 1Penn State College of Medicine, Hershey, PA, United States; 2University of Rochester School of Medicine and Dentistry, Rochester, NY, United States; 3University of Rochester School of Medicine and Dentistry, Rochester, NY, United States.</td>
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<td>T-016 Comparison of Bacterial DNA Profiles in Mid-gestation Amniotic Fluid Samples From Preterm and Full-term Deliveries in Sweden</td>
<td>Marie Payner,<em>, Lisa Stinson,</em>, Maria Hallingström,<em>, Malin Bornman,</em>, Jeffrey Keelan,<em>, Marian Kacerovsky,</em>. Peter Celen,<em>, Bo Jacobsson,</em>. University of Western Australia, Crawley, Australia; University of Gothenburg, Gothenburg, Sweden; 2Chalmers University of Technology, Gothenburg, Sweden; 3Charles University, Prague, Czech Republic; 4Comenius University, Bratislava, Slovakia.</td>
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<td>T-017 MicroRNA Levels Change in Human Placenta During Onset of Spontaneous Delivery.</td>
<td>Hei Tiersuo,<em>, Antti Haapalainen,</em>, Ravindra Gadadali,<em>, Marja Ojamies,</em>, Riitta Marttila,<em>, Mikko Hallman,</em>, Miika Rämets,*, University of Oulu, Oulu, Finland; University of Tampere, Tampere, Finland.</td>
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<td>T-018 Genome-wide Changes in Myometrial Contraction and Labor: Integration of ChIP-seq and RNA-seq Reveals Critical Steroid-Target Genes</td>
<td>Ariel J Dotts,<em>, Ping Yin,</em>, William A Grobman,<em>, Sertdar E Bulun.</em> Northwestern University, Chicago, IL, United States.</td>
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T-019  Cervicovaginal Microbiota and Immune Output: Potential Determinants of Spontaneous Preterm Birth in Black Women.  
Kristin D. Gerecht, Clare McCarthy, Heather H Burns, Michael A Elorza.  
University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, United States.

T-020  Uterine Electromyography: Novel Uterine Bioelectrical Signaling Patterns Lead to Advances in Understanding of Uterine Contractile Activity.  
Pernilla S Manessson1, Lauren A Miller1, Roger C Young2, Braxton Herm1, Eva K Pressman2, Neil S Seligman2, University of Rochester, Rochester, Rochester, NY, United States; 1Stanford University, Stanford, CA, United States; 2University of Tennessee College of Medicine, Chattanooga, TN, United States.

T-021  Cellular Aging in Pregnancy: Telomere Dynamics Across Gestation  
Daniela M. Panelli1, Stephanie A. Leonard1, Ronald J. Wong1, Anna T. Ginsen1, Maria K. Stevenson1, Katherine Bianco1, Stanford University, Stanford, CA, United States; 1University of Rochester, Rochester, NY, United States.

T-022  The Integrin Activator Talin is Highly Expressed in Myometrium During Late Pregnancy and Labour and Distinctly Localized to Focal Adhesions  
Daniel J. MacPhee1, Soleil M Gagne1, Eva I Miskiewicz1, University of Saskatchewan, Saskatoon, SK, Canada.

T-023  Effect of Cervical Cerclage Suture Type on Pregnancy Outcomes.  
Navya G. Kazzri, Ashley Hessom1, Elizabeth S. Langer1.  
Michigan Medicine, Ann Arbor, MI, United States.

T-024  Contraction Synchronization Predicts the Onset of “True” Labor.  
Pernilla S Manessson1, Roger C Young2, David Aas1, Braxton Herm1, Eva K Pressman2, Neil S Seligman2, University of Rochester, Rochester, Rochester, NY, United States; 1University of Rochester, Rochester, NY, United States; 2University of Tennessee College of Medicine, Chattanooga, TN, United States.

T-025  Cathelicidin Antimicrobial Peptide LL-37 mRNA Levels in Cervix, Placenta and Fetal Membranes at Preterm and Term Birth.  
Aurelius Dubicka1, Emma Fransson2, Gunvor Ekman-Orlendberg1, Sarah J Stock2, Karolinska Institutet, Stockholm, Sweden; 1University of Edinburgh, Edinburgh, United Kingdom.

T-026  Novel Drug Discovery Pathways in the Myometrium for the Treatment of Preterm Labor  
Scott D Barnett1, Haik Asf1, Coral Gramelis-Schaper2, Jennifer Burnham3, Irene Richardson3, Veronica Anrini3, Iain L O Buxton1, University of Nevada, Reno School of Medicine, Reno, NV, United States; 1University of Nevada, Reno, Reno, NV, United States; 2University of Edinburgh, Edinburgh, United Kingdom.

GYNECOLOGY
T-027  Neuropeptide S Receptor 1 is a Novel Non-Hormonal Treatment Target in Endometriosis  
Thomas T Taxmark1, Nilsfrid Rahmo1, Jianghai Lin2, Malte Obendorf3, Bianca de Leo1, Grant Montgomery4, Udo Oppermann5, Stephen Kennedy6, Thomas Zoli7, Christian M Becker1, Joseph Kemmitz8, Jeffrey Rogers4, Krista T Zondervan2, University of Oxford, Oxford, United Kingdom; 2University of Queensland, Brisbane, Australia; 3University of Wisconsin, Madison, WI, United States; 4Baylor College of Medicine, Houston, TX, United States.

T-028  PolyChlorinated Biphenyl126 Drives Endometriosis via Activating Estrogen Receptor β axis  
Sang Jun Han1, Yeon Jeon Cho2, 3Baylor College of Medicine, Houston, TX, United States; 2Dong-A University, University, Korea, Republic of.

T-029  Simvastatin Inhibits Steroid Receptors and Caveolin-1 Expression in Human Leiomyoma Cells  
Sadia Afrin1, Malak El Sabeh2, Mostafa A Borahay3, Johns Hopkins University, School of Medicine, Baltimore, MD, United States.

T-030  Impact of Vilaprisan on Well-Being in Mice in the Induced Menstrual Bleeding Model  
Oliver M Fischer, Frank Sacher, Jens Nagel, Thomas M Zollner, Bayer AG, Berlin, Germany.

T-031  Artificial Intelligence for Diagnosis and Quantification of Adenomyosis: Can Robots Assist?  
Joseph Huang1,2,3, 4Yan-Ru Shu1,5, Chuin-Yen Huang1,2,1Chun-Yu Yu1,2,3, Nan Kay1,2,1University of South Florida, Tampa, FL, United States; 2E-D Hospital, Kaohsiung, Taiwan; 3Shou University, Kaohsiung, Taiwan; 4National Sun Yat-Sen University, Kaohsiung, Taiwan.

T-032  Neuropathic Pain Marker Expression in Endometriosis  
Patients with Chronic Pelvic Pain  
Iain Waldmann1, Emily R Dister, Anke Hill Meine, Kha U Dam, Nicholas W Ng, Xinjie Chen, Marian Damian Cruz, Madya Seshan, Bradley J Quade, Raymond M Anchor1, Brigham & Women's Hospital, Harvard Medical School, Boston, MA, United States.

T-033  Analysis of 46 Cases of the Uterine Fibroid Embolization in Which Enlarged Ovarian Arteries Revealed.  
Gen Ishikawa1, Kimsato Asano1, Yasunori Taki2, Nippom Medical School, Tokyo, Japan; 1Artemis Women’s Hospital, Tokyo, Tokyo, Japan; 2Chofu Keijinkai Hospital, Tokyo, Japan.

T-034  Long Term Outcome for Patients with a Transverse Vaginal Septum Undergoing Excision using the ObiBT Balloon Catheter Method  
Sasha Mihaich1, Sophia Halass2, Laria Gavrilova-Jordan3, Erin Loudert2, Soumia Brakats2, Lawrence L Layman4, Medical College of Georgia at Augusta University, Augusta, GA, United States; 2Providence Hospital-Michigan State University College of Human Medicine, Southfield, MI, United States.

T-035  Bone Marrow Mesenchymal Stem Cells Increase Proliferation of Endogenous Endometriosis Stromal Cells Through CXCL12 Signaling  
Ramarasiah Mambili1, Peng Chen1, Shutaro Habata1, Zhishao Wang1, Taylor S Hughes1, Yale School of Medicine, New Haven, CT, United States; 2Present Address: Shenzhen Hospital of China Medical University, Shenyang, China.

T-036  Cilia Associated Genes are Upregulated in the Adenomyosis: Can Robots Assist?  
Children’s Hospital in Stockholm, Sweden; 2University of Edinburgh, Edinburgh, United Kingdom.

T-037  Studies of Human Reproductive Innervation Resulted in a New Topical Formulation, SHACT, Suitable for Minor Gynecological Procedures  
Gustavo Esteva1, Elmar Oranskayat2, Dept of Women and Child Health Karolinska Institute, Stockholm, Sweden.
T-038 Exercise as an Immune Regulator of CXC3L1/CX3CR1 Cell Recruitment in Endometriosis
Luis A Riverat1, Juan Gabriel Jiménez2, Myrella L Cruz1, Raquel M Rivera-Mendez1, Johnathan Velazquez1, Gladys Chompre1, Caroline B Appleyard1, 2Ponce Health Sciences University, Ponce, PR, United States; 3Universidad Autónoma de Guadalajara, Guadalajara, Mexico; 4Pontificia Catholic University of Puerto Rico, Ponce, PR, United States.

T-039 Progesterone Regulates NOTCH1 Cleavage and Translocation in Human Endometrial Stromal Cells.
Garcia G Wilker1, Hagerty T Fadlulbag1. Michigan State University, Grand Rapids, MI, United States.

T-040 Association of Cardiometabolic Risk Factors with Uterine Leiomyomomas.
Abdelrahman A Alsharif1, 2, *Winston Chau1, *Yong-Fang Kuo1, Mustafa A. Borahay1, Johns Hopkins School of Medicine, Baltimore, MD, United States; 2University of Texas Medical Branch, Galveston, TX, United States.

T-041 Does Fibroid Size and Bulk Affect Uterine Fibroid Symptom (UFS) Scores in Asian Compared to Caucasian Women?
Norma Jiménez Ramirez1, Zainub Dhananjay, Pejman Ghazvini, Bertha Chaster1. Stanford School of Medicine, Stanford, CA, United States.

Paula Nunez-Badige1, Jens Ngel1, Blanca De Leo1, Philippa Saunders1, Ioannis Simitsisellis1, Duygu Kring1, Thomas Tschentscher1, Stephen McMahan1, Manuel Merlos1, Ana Chama1, Francisco Cruz2, Ruiz Gomez1, Alexis Laux-Biehmann1, *Bayer AG, Berlin, Germany; 2University of Edinburgh, Edinburgh, United Kingdom; 3Gründental GmbH, Aachen, Germany; 4King’s College London, London, United Kingdom; 5Estève Pharmaceuticals, S.A., Barcelona, Spain; 6Institute for Molecular and Cell Biology, Porto, Portugal; *INCLIVA, Valencia, Spain.

T-043 Does the RBC Indices in Patients with Endometriosis Reflect the Existence and Severity of Endometriosis?
SUNGHOL PARK1, Kyung-Do Ki1. *Hallym University, School of Medicine, Chuncheon, Republic of Korea; 2Kyung Hee University Hospital at Gangdong, Seoul, Korea, Republic of.

T-044 Earlier and Improved Pre-clinical Assessment of Acidemia Risk in Labor
David W Britt1, Mark L Evans2, Robert D Edin, Shara M Evans1, Paula Gallagher1, Barry S Schifrin1. *Fetal Medicine Foundation of America, New York, NY, United States; 2Fetal Medicine Foundation of America & Mt Sinai School of Medicine, New York, NY, United States; 3GiGLing School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States.

T-045 Adipose Tissue Inflammation-Stimulated Adrenomedullin (ADM) Overexpression Contributes to Lipid Dysfunction in Diabetic Pregnancy
Yuqian Dong1, Ancizar Betancourt1, Michael Belfort1, Chandrashekar Vallampalli1. Baylor College of Medicine, Houston, TX, United States.

T-046 The Cost-Effectiveness of Prenatal Congenital Heart Defect Screening Methods in IVF Pregnancies
Easter H Chuang1, Stephanie L Lim1, Laura J Havrileasky1, Anne Z. Steiner1, Sarah Dotters-Katz1. Duke University, Durham, NC, United States.

T-047 Topical Negative Pressure Wound Therapy to Prevent Wound Complications Following Cesarean Delivery in High Risk Obstetric Patients
Martiza G Gonzalez1, M Elisa Barske1, Kristine B Kellan2, Kathrynn Sabotta1, Meghan G Hill1. 1University of Arizona, Tucson, AZ, United States; 2The University of Arizona Cancer Center, Tucson, AZ, United States.

T-048 Gestational Weight Gain and Delivery Gestational Age Among Women with a Cervical Cerclage
Anne Horan1, Catherine Viadutiu, Tracy Manuck1. UNC-Chapel Hill, Chapel Hill, NC, United States.

T-049 Association of Second Trimester Serum Leptin Concentrations with Length of Gestation and Progression of Labor in Normal Term Pregnancies
Kara Reiner1, Elizabeth Sherman1, Moghan Golzy, Erma Dobrovs, Laura C Schultz1. *University of Missouri, Columbia, MO, United States.

T-050 Maternal Risk Factors Associated with Neonatal Sepsis in a Cohort of Preterm Infants: Are the Risks Modifiable?
Samson Ounj1, *Cynthia GYanni Banemann1, Mirella Mourad, Elizabeth Ludwig1. *Duke University Irving Medical Center, New York, NY, United States.

Enasha D. Diag1, *Kavita Vani1, Lisa M. Bodnar1, Katherine P. Himes1. 1University of Pittsburgh Medical Center, Pittsburgh, PA, United States; 2Albert Einstein Medical Center, New York, NY, United States.

T-052 Comparative Adverse Effects of Antenatal Glucocorticoid Formulations: Studies in the Chicken Embryo.
T A Gamut1, N Teuling1, F G Conforti1, W Tong1, S G Ford1, Y Nut1, L M Nicholas1, J B Derks1, S E Ozanne1, D A Glissain1. 1University of Cambridge, Cambridge, United Kingdom; 2University Medical Centre, Utrecht, Netherlands.

T-053 The Etiology of Periventricular Leukomalacia in Southern Japan: A Regional Population-based Study
Tomoko Yamaguchi1, Yuki Kodama, Koutarou Doi, Rie Yamashita, Masatsuki Kaneko, Hiroshi Sameshima, Tsuyomu Ikenoue. Miyazaki University, Miyazaki city, Japan.

T-054 Do Species and Bacterial Load Matter in Bacteriuria of Pregnancy?
Jeffery A Goldstein1, David M Aronoff1, Lisa A Bastarache1. 1Northwestern University, Chicago, IL, United States; 2Vanderbilt University, Nashville, TN, United States.

T-055 Diabetic Fetopathy: Does Accelerated Fetal Growth Adversely Impact Neonatal Outcomes?
Megan Varvudis1, Keny Druyt1, Chad Grotegut, Sarah Dotters-Katz1. *Duke University, Durham, NC, United States.

T-056 Distinguishing Characteristics of Placenta Accreta Spectrum with and without Concurrent Placenta Previa: Insights into Pathophysiology
Daniele A Carusi1, *Karim A Fox2, Deirdre J Lyell2, Nicola C Perriam1, Sorosh Alipour1, Brett D Eimeren1, Robert M Silver1, *Alireza A Shamshiripour1, *Bighorn & Women's Hospital, Boston, MA, United States; 2Harvard Medical School, Boston, MA, United States; 3Baylors College of Medicine, Houston, TX, United States; 4Stanford University, Stanford, CA, United States; 5Texas Children’s Hospital, Houston, TX, United States; 6University of Utah Health, Salt Lake City, UT, United States; 7Intermountain Healthcare, Salt Lake City, UT, United States.
Thursday, March 12, 2020 - Poster Session I - East Exhibit Hall B

T-057 Continuous Local Bupivacaine Wound Infusion Reduces Oral Opioid Use for Acute Postoperative Pain Control Following Myelomeningocele Repair
Anne C Portert,1,2 Chriss M Nielsen,1,2 Nicholas J Beherendi,1,2 Michael V Zaretsky,1,2 Kenneth W Liechty,1 Ahmed I Marwan,1 Cristina Wood,1 Franklin Chow,1,2 Henry L Galant,1,2 1University of Colorado School of Medicine, Aurora, CO, United States; 2Children’s Hospital Colorado, Aurora, CO, United States.

T-058 Persistence of Maternal Group B Streptococcal Colonization After Intrauterine Amoxicillin Administration
Melissa L Kazakiewicz,1 Sarah E White,1 Mallory Akis,2 Rita Kaplon,1 Brian C Brotz,1 Wake Forest University School of Medicine, Winston Salem, NC, United States; 1Medical University of South Carolina, Charleston, SC, United States.

T-059 Periviable Birth in the North Carolina Triad: Do Outcomes Vary by Birth Etiology?
Melissa L Kazakiewicz,1 Kathleen V Ferrytt, Jeff M Remley,2 Wake Forest University School of Medicine, Winston Salem, NC, United States.

T-060 Impact of Different Management on Latency to Delivery in Preterm Prelabor Rupture of the Membranes
Stefania N Romanzi1,2, Teresa Cobo,1,2 Elizabeth Azaltos,1,2, Susan O’Rinn,1,2, Xingshan Cao,1 Ana Herranz,1 Jon Barrett,1 Victoria Aldeacoa,1,2, Nir Melamed,1 Montse Palacio,1 Sunnybrook Health Sciences Centre, Toronto, ON, Canada; 1Hospital Clinic of Barcelona, Barcelona, Spain.

T-061 How Does Bariatric Surgery Influence Maternal Periconception Health? A Systematic Review
Katinka M Snedeker,1,2 Regine P.M. Steegers-Theunissen,1 Sander Gjalda,1 Sam Schoenmakers. Erasmus MC, Rotterdam, Netherlands.

T-062 Suspected Abruption: Factors Associated with Delivery within Seven Days of Initial Bleed
Rachel Newman,1,2 Joshua Makhotu,1 Elizabeth Blumenhalh,1 Dana Senderoff,1 Bradley Bossert,2 Brian Crossland,1 Emily Geet,1 Kenneth Chan,4 1University of California - Irvine, Orange, CA, United States; 2Children’s Hospital Colorado, Aurora, CO, United States; 4University of California, Irvine, Orange, CA, United States.

T-063 Understanding and Reducing Barriers to Utilization of Progesterone (17P) and Other Evidence Based Interventions to Prevent Preterm Birth in Fresno County.
Suhahchos Ladella1, Amber Shaver,1 Mallory Novack,2 Tanja Pacheco-Werner,3 Minam Kuppermann,1 1University of California, San Francisco, San Francisco, CA, United States; 2University of California, Irvine, Orange, CA, United States; 3University of California Irvine, Orange, CA, United States.

T-064 Risk Factor Assessment for Cesarean Scar Pregnancy Implantation
Patricia Grasso,1 Samantha Bayer, Lori Day*,1 University of Michigan, Ann Arbor, MI, United States.

T-065 Placenta Abruption, Beware the Readmission.
Brian A Crossland,1 Rachel Newman,1,2 Joshua Makhotu,1 Dana Senderoff,1 Elizabeth Blumenhalh, Bradley Bossert,1 Emily Geet,1 Kenneth Chan,1 University of California Irvine, Orange, CA, United States.

T-066 Maternal Exposure to Δ⁹-Tetrahydrocannabinol Results in Symmetrical IUGR Associated with Cardiac Dysfunction in Postnatal Life.
Kendrick Legg,1,2 Kristian McCarthy,2 Steven R Lawroickett,1 Geping Feng,1 Daniel B Hardy,1 1Western University, London, ON, Canada; 2Children’s Health Research Institute, London, ON, Canada; 1Children’s Health Research Institute, London, ON, Canada.

T-067 Does Fetoplacental Weight Ratio Impact Childhood Growth of Term Newborns in a Low-Risk Community Based Setting?
Jennifer S Feng,1,2,3,4,5 Jean Krickellas,1,2 Sadia F Chowdhury,1,2,3,4,5 Adwoa Nantwigt,1,2,3,4,5 Sylvia Dylugski,1,2,3,4 Hannah Bromberg,1,2,3,4,5 Ruthi Shah,1,2,3,4,5 Michael Joyce,1,2,3,4,5 Mehrin Jan1,2,3,4,5 Serena Chen,1,2,3,4,5 Christine Chen,1,2,3,4,5 Jilamikaa Pongsachai,1,2,3,4,5 Beata Dylugski,1,2,3,4,5 Carolyn Satalia,1,2,3,4,5 1Placental Analytics, New Rochelle, NY, United States; 2WPPBMH, Brooklyn, NY, United States; 3CUNY Hunter College, New York, NY, United States; 4NYU CGPM, New Rochelle, NY, United States; 5Institute of Basic Research, Staten Island, NY, United States; 1Institute for Basic Research, Staten Island, NY, United States.

T-068 Developmental Programming Dysfunction in Postnatal Life.
Results in Symmetrical IUGR Associated with Cardiac Dysfunction in Postnatal Life.
Kendrick Legg,1,2 Kristian McCarthy,2 Steven R Lawroickett,1 Geping Feng,1 Daniel B Hardy,1 1Western University, London, ON, Canada; 2Children’s Health Research Institute, London, ON, Canada; 1Children’s Health Research Institute, London, ON, Canada.

T-069 How Does Bariatric Surgery Influence Maternal Periconception Health? A Systematic Review
Katinka M Snedeker,1,2 Regine P.M. Steegers-Theunissen,1 Sander Gjalda,1 Sam Schoenmakers. Erasmus MC, Rotterdam, Netherlands.

T-070 How Late is Too Late to Reverse the Effects of the Developmental Origins of Health and Disease?
Craig E Pennek,1 Carol A Wang,1 Wendy O Oddy,1 Claire E Meyerkoort,2 Stephen G Matthews,3,4 Stephen J Ly,4 1University of Newcastle, New South Wales, Australia; 2Hunter Medical Research Institute, New South Wales, Australia; 3University of Tasmania, Hobart, Australia; 4Sir Charles Gairdner Hospital, Western Australia, Australia; 5Lunenfeld-Tanenbaum Research Institute, Toronto, ON, Canada; 6Institute of Basic Research, Staten Island, NY, United States.

T-071 Maternal E-cigarette Exposure Causes a Sex-dependent Alteration of Transcriptional Signatures Resulting in Programming of a Hypoxia-ischemia Sensitive Phenotype in Offspring Brain
Andrew Wallaert,1 Yong Li1,2,3 Hossein Asanjan Maryam,1 Zhong Chen,1 Xuetai M Shao,1 Charles Wang,1 DaLiao Xiao,1 1Loma Linda University, Loma Linda, CA, United States; 2UCLA, Los Angeles, CA, United States.

DEVELOPMENTAL PROGRAMMING

T-066 Maternal Exposure to Δ⁹-Tetrahydrocannabinol Results in Symmetrical IUGR Associated with Cardiac Dysfunction in Postnatal Life.
Kendrick Legg,1,2 Kristian McCarthy,2 Steven R Lawroickett,1 Geping Feng,1 Daniel B Hardy,1 1Western University, London, ON, Canada; 2Children’s Health Research Institute, London, ON, Canada; 1Children’s Health Research Institute, London, ON, Canada.
T-072 Placental Gross Pathology in a Population Based Case-Control Study of Autism
Serena Chen,1 Christine Chang,1* Mehri Jani,1 Jennifer S Feng,1,2,3 Joan Krickellas,1 Sadia F Chowdhury,1,2,4 Adrienne Nantett,2 Sylvia Dygulski,2 Hannah Bromberg,1,2 Ruchit Shah,1,2 Jilamika Pongsachai,1,2 Michael Joyce,1 Beata Dyguliska,2 Carolyn Safaiya,1,2,4 *Placenta Analytics, New Rochelle, NY, United States; NYFPMH, Brooklyn, NY, United States; *CUNY Hunter College, New York, NY, United States; *NYU CGPH, New York, NY, United States; Institute of Basic Research, Staten Island, NY, United States; Institute for Basic Research, Staten Island, NY, United States.

T-073 Sex-Specific Cardiac Function and Structure in Aging Mice
Rolaadna Lister,1 Anjali Ravee,1 Lin Zhong,1 Yibing Yan,1 H. Scott Baldini,1,2 Vanderbilt University Medical Center, Nashville, TN, United States; 2Baylor University, Houston, TX, United States.

T-074 The Role of HPA-Axis Genetics in the Relationship Between Birthweight and Adult Disease
Carol A Wang,1 Winnu N Martin,1 Stephen J Lye,1 Rebecca M Reynolds,4 Stephen G Matthews,1,2 Early E McLaughlin,1 Roger Smith,1,2 Craig E Pennell,1,2 1University of Newcastle, New South Wales, Australia; 2Hunter Medical Research Institute, New South Wales, Australia; 3Lunenfeld-Tanenbaum Research Institute, Toronto, ON, Canada; 4University of Edinburgh, Edinburgh, United Kingdom; University of Toronto, Toronto, ON, Canada; 5Curtin University, Western Australia, Australia.

T-075 Maternal Microchimeric Cells are Linked to Early Life Immunity In Children
Christopher Urschbach,1 Steven Scheckerski,2 Kristin Thiele,1 Agnes Wieszorek,1 Ina A Stelzer,1 Boris Fehse,1 Anke Diemer,1 Petra C Arck,1 1University Medical Center Hamburg-Eppendorf, Hamburg, Germany; 2Stanford University School of Medicine, Stanford, CA, United States.

T-076 Inhaled Nicotine Exposure in utero Causes a Gender-dependent Alterations of ATR/TFG-β/ ROS Signaling Leading to Development of Heart Ischemia-sensitive Phenotype in Adult Offspring
Ying Li1,2,4; BaiLin Li,1,2,4; WaiYat Andrew Ng,1,2,4; Chen Zewen1,2,4; LuBo Zhang,1,2,4; XuYi M Shao,1,2,4; DaLiao Xiao,1,2,4; Loma Linda University, Loma Linda, CA, United States; 2UCLA, Los Angeles, CA, United States.

T-077 Identification of Bacterial Metabolic Abundances in the Gut Microbiome of Preterm Infants
Anuji Sarkar1,2,4; Jin Yuan Yoo,1 Jean Lim,1 Samia Dutra,2,4,5; Larry Dishaw,2 Bradley Kane1,4,5; Maureen Grace Edith,4,5; Grigory, Elizabeth Miller,2,4,5; University of South Florida, Tampa, FL, United States.

T-078 Gestational Diabetes Perturbs Energy Metabolism in Early Pregnancy
Brian J Kong,1 Jeremy Gomboin. 1UCLA, Los Angeles, CA, United States.

T-079 Adrenomedullin Induced In-Utero Programming of Hypertension in Female Rat Offspring
Marhu Late S. Cauthon,1 Manvik Chandra,1 Ancizar Benmack,1 Chandra Yallampalli,1 Baylor College of Medicine, Houston, TX, United States.

T-080 Roles of Maternal and Fetal Vascular Pathology in a Case-Control Study of Autism
Serena Chen,1 Jilamika Pongsachai,1 Jennifer S Feng,1,2,3 Joan Krickellas,1 Sadia F Chowdhury,1,2,4 Adrienne Nantett,2 Sylvia Dygulski,2 Hannah Bromberg,1,2 Ruchit Shah,1,2 Michael Joyce,1 Beata Dyguliska,2 Carolyn Safaiya,1,2,4 *Placenta Analytics, New Rochelle, NY, United States; NYFPMH, Brooklyn, NY, United States; CUNY Hunter College, New York, NY, United States; NYU CGPH, New York, NY, United States; Institute of Basic Research, Staten Island, NY, United States; Institute for Basic Research, Staten Island, NY, United States.

T-081 Fatty Acid Transport Gene Expression Increases Before Birth in the Ovine Myocardium
Rachel B Drake,1 Samantha Lowrey,1 Kent L Thorburn,2 Oregon Health & Science University, Portland, OR, United States.

T-082 A Non-Human Primate Model of Hypoxic Ischemic Encephalopathy to Evaluate Novel Translational Therapies
Rosemary J. Steinbach,1 Stacey J. Ellery,2 Rodney J. Snow,1 David W. Walker,1 Beth Kempton,1 John V. Brigande,1 Lauren Renner,1 Martha Neuringer,1 Christopher D. Kroenze,1 Robert L. Schelonia,1 Larry S. Sherman,1 Meredith A. Kelleher,1 1Oregon National Primate Research Center, Beaverton, OR, United States; 2Monash University, Melbourne, Australia; 3Deakin University, Melbourne, Australia; 4RMIT University, Melbourne, Australia; Oregon Health & Science University, Portland, OR, United States.

T-083 The Vertical Transfer of Maternal Immune Cells During Pregnancy Promotes Neonatal Immunity Against Viral Infections
Ira Staley1,2,4,5 Christopher Urschbach,1 Kristin Thiele,1 Joanna Trivaili,1 Felix Stahl,1 Maria Emilia Solano,1,2 Petra Arck,1 1University Medical Center Hamburg-Eppendorf, Hamburg, Germany; 2Stanford University, Stanford, CA, United States.

T-084 Machine Learning on Drug-Specific Data to Predict Small Molecule Teratogenicity
Amir P Charati1,2,4,5 Andrew L Beam1,2,4,5 Min Shen,1,2,4 Tyler Perryza,1 David R Lavin,4,5 Jeffrey A Goldstein,1,2 Jana K Shirey-Rice,3 Ethan S Lippmann,1 David M Aronoff1,2,4,5 1Vanderbilt University Medical Center, Nashville, TN, United States; 2University of Toronto, Toronto, ON, Canada; 3University of Oregon, Portland, OR, United States; 4Oregon National Primate Research Center, Beaverton, OR, United States; 5Institute of Basic Research, Staten Island, NY, United States.

T-085 Abstract Withdrawn

T-086 Upregulation of PPAR Signaling in Adipose Tissue from Ovine Fetuses Complicated with Placental Insufficiency
Rosa I Luna Remigret,1 The University of Arizona, Tucson, AZ, United States.

T-087 A One Week Fetal Leucine Infusion Increases the Proportion of Oxidative Fibers in Skeletal Muscle and Leads to Higher Rates of Leucine Oxidation in Late Gestation Fetal Sheep
Laura D Brown,4,5 Brit H Boehm,1 Stephanie R Wesolowski,1 Paul J Rozance*,1 University of Colorado Anschutz Medical Campus, Aurora, CO, United States.
Thursday, March 12, 2020 - Poster Session I - East Exhibit Hall B

T-088  Maternal Diabetes Alters Gene Expression in the Developing Mouse Embryonic Heart
Rolanda Lister, Chisom Ezekenwele, Eto Garrison, Scott Baldwin. Vanderbilt University Medical Center. Nashville, TN, United States.

T-089  Intrapartum Fetal Heart Rate Patterns and Neonatal Outcome in a Large Obstetric Cohort
Mikko Tarvonen 1, Susanna Sainio 2, Vilho Hilesmaa 1, Sture Andersson 1, Kari Tamor 1. 1Helsinki University Hospital, Helsinki, Finland; 2Finnish Red Cross Blood Transfusion Service, Helsinki, Finland.

T-090  Sustained Slow Release Resveratrol to the Mother and Fetal Blood Flow and Oxygenation Measured with MRI
Taro Taguchi 1, Jack R. T. Darby 2, Brachmdeep S. Saini 1, Ji Yn Soo 1, Mitchell C. Lock 1, Stacey L. Holman 1, Emma L. Bradford 1, Sunthara R. Perumal 1, Steven J. P. McIntyre 1, Nicolas H. Voelcker 1, Michael D. Wiese 1, Christopher K. Maagow 1, Tadzio K. Siedziuk 1, Janna L. Morrison 1. 1University of Toronto, Toronto, ON, Canada; 2The Hospital for Sick Children, Toronto, ON, Canada; 3University of South Australia, Adelaide, Australia; 4South Australian Health & Medical Research Institute, Adelaide, Australia.

T-091  Fetal Growth Restriction and Microcephaly in Mouse Models of Down Syndrome
Lauren A. Bishop, April Adams, Faycal Guerdj, Diana W. Bianchi. National Institutes of Health, Bethesda, MD, United States.

T-092  Machine Learning Enhances Noninvasive Prenatal Screening for Trisomy 21 by Maternal Plasma Cell Free RNA (PCFR)
Carla Philip Weiner 1, Helen Zhou 2, Kyprios Nicolaidis 2, Argyro Syngelaki 1, Yafeng Dong 2, Mark L. Weiss 4, 1University of Kansas SSM, Kansas City, KS, United States; 2Fetal Medicine Foundation, London, United Kingdom; 3Rosetta Signaling Laboratory, Mission Hills, KS, United States; 4University of South Australia College of Veterinary Medicine, Manhattan, KS, United States.

T-093  Effects of Bariatric Surgery on Birthweight
Katherine Alteme 1, Rachel Harrissort 1, Aimee Semsohn-Bookert 1, Emilie Braurt 1, Katarzyna Wlodarczyk 1, Meredith Cruz 1. Medical College of Wisconsin, Milwaukee, WI, United States.

T-094  Intrauterine Inflammation Enhances Fetal Cortisol Response to Corticotropin-releasing Hormone in the Extremely Preterm Ovine Fetus
Shinya Saito 1, Takushi Hanita 1, Hideyuki Ikeda 1, Tatsuki Takahashi 1, Yusaku Kuimakata 1, Haruo Usuda 2, Shimpel Watanabe 1, Masatoshi Saito 2, Matsuda Tadashi 1, Tohoku University Hospital, Sendai, Miyagi, Japan.

Ruth M. Farb 1, Christina Collart 1, Madelyn Pierce 1, Susannah Ross 1, Marissa Coleridge 1, Edward Chein 1, Uma Permi 1. 1Cleveland Clinic, Cleveland, OH, United States; 2MetroHealth Hospital, Cleveland, OH, United States.

T-096  Inducing BRCAAnes by Inhibiting the GAS6/AXL Pathway in Sporadic High Grade Serous Ovarian Cancer
Mary M. Mullen, Elena Lomonosova, Michael Toboni, Holle Noia, Daniel Wilke, Alyssa Opl, Lei Guo, Lindsay M Kuroki, Andrea R Hagemann, Carolyn K McCourt, Premai H Thaker, David G Mutch, Matthew A Powell, Katherine Fuh, Washington University, St. Louis, MO, United States.

T-097  Iron Overload and Ferroptosis in Endometriosis-Associated Ovarian Cancer
Allen C Ng 1, Shu-Kay Ng 1, Felice Arcuni 2, Paolo Tolli 2, Elizabeth M Genega 1, Errol R Norwell 1, Shu-Wing Ng 3, 1Rafi Medical Center, Boston, MA, United States; 2Griffith University, Nathan, Australia; 3University of Siena, Siena, Italy.

T-098  Elevated Cyclin E Expression is Associated with Recurrence and Worse Progression-Free Survival in Advance Staged High-grade Serous Ovarian Cancer
Shansika Paterse 1, Rana Alani 2, Andrew J Wilson 2, Ammanda Jewel 1, Liam Spooner 1, Julia Chapman 1, Dinoe Khabale 1, 1University of Kansas, Kansas City, KS, United States; 2Vanderbilt University Medical Center, Nashville, TN, United States; 3University of Kansas Cancer Center, Kansas City, KS, United States.

MATERNAL HEALTH

T-099  Changes in HDL Sizing and Proteome During Pregnancy in a Cohort of Women in Cincinnati.
Laura A Woolfert 1, John T Melchor 1, Alan T. Remaley 1, Janet M. Cutler 1, W. Sean Davidson 2. 1University of Cincinnati, Cincinnati, OH, United States; 2NIH, Bethesda, MD, United States; 3University of Pittsburgh, Mage Women’s Research Institute, Pittsburgh, PA, United States.

T-100  Differential Changes in Function and Mechanical Behavior of Mesenteric and Internal Carotid Vasculature During Early Postpartum Period in Mice
Rebecca I. Fanchill 1, Alexander P. Gokin 1, Kritika Prakash, Elizabeth A. Bonney 1, Natalia I. Gokina 1. University of Vermont, Burlington, VT, United States.

T-101  A1c as a Preconception Biomarker for Risk of Gestational Diabetes in Healthy Women
Jessica R Zollet 1, Lindsay A Sjaarda 1, Sunni L. Mumford 1, Kerr S Flannagan 1, Keewan Kim 1, Elizabeth A Davi 2, Neil J Perkins 1, Robert M. Silver 2, Micah J Hill 1, Alan H DeCherrey 1, Enrique F. Sistemasen 1, 1Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD, United States; 2University of Utah Health Sciences Center, Salt Lake City, UT, United States.

T-102  Pregnancy Trained Decidual NK Cells Fight Bacterial Infections More Effectively.
Rebecca Kotzurt 1, Debra S. Goldman-Wohl 1, Shira Kahlion 1, Simcha Yaggi 2, Ofir Mandelboim 2. 1Hebrew University Medical School, Jerusalem, Israel; 2Hadassah-Hebrew University Medical Center, Jerusalem, Israel.

T-103  The Relationship of Body Mass Index to Postpartum Hemorrhage by Quantitative Measure of Blood Loss.
Hei K. Kardajad 1, Sereen Nazhi 1, Ramon Durazo-Arvizu 2, Juliana Sung 3, Jean R. Goodman 3. 1Loyola University Chicago, Maywood, IL, United States; 2Loyola University Medical Center, Maywood, IL, United States.

T-104  The Effect of Maternal Anemia on Maternal Outcomes in the United States
Rachel K. Harrissort 1, Zachary Cokinit 1, Jennifer J McIntosh 1. Medical College of Wisconsin, Milwaukee, WI, United States.

T-105  Acute High Fat, High Sugar Diet Exposure Results in Insulin Intolerance, Insulin Resistance and Decreased Beta Cell Numbers During Pregnancy in Mice
Kathleen Parham 1, Pradip K Saha 1, Simone Hernandez Ruano 1, Baylor College of Medicine, Houston, TX, United States.
T-106 Downregulation of inflammatory biomarkers from maternal plasma in women with intrahepatic cholestasis of pregnancy.

Kareem K. Tebusty, 1,2 Alexander L. Pendleton, 1 Natalie K. Barker, 3 Paul R. Langlois, 1 Sean W. Limesand, 1 Meghan G. Hill, 3 University of Arizona, Tucson, Tucson, AZ, United States; 1University of Auckland, Auckland, New Zealand.

T-107 The effectiveness of the INTER-ACT lifestyle intervention on postpartum weight retention and fat mass among women with previous excessive gestational weight gain.

Margret Buhlho lt, 1 Lieveke Ameye, 1 Hannelore Vanden Eyndt, 1 Rolant Devlieger, 1 Annick Bogaerts, 1 1University of Antwerp, Antwerp, Belgium; 2KU Leuven, Leuven, Belgium.

T-108 Low-frequency electroacupuncture during pregnancy enhances whole-body insulin sensitivity in a diet-induced rat model of maternal obesity.

David J. Carro, 1 Kearsa McGinnity, 1 Paul D. Taylor, 1 Anna L. Davi, 1 Elissabat Steiner-Victorin, 1 Tom Jettom, 1 1University of Vermont, Burlington, VT, United States; 2University of Vermont, Colchester, VT, United States; 3Kings College London, London, United Kingdom; 4University College London, London, United Kingdom; 5Karolinska Institute, Stockholm, Sweden.

T-109 Perinatal outcomes in women with cardiac arrhythmia.

Christine J. Lee, 1 Lilian S. Berezis, 1 Anna I. Girsan, 1 Alisha T. Toland, 1 Hayley E. Miller, 1 Danielle M. Parell, 1 Samantha C. Doh, 1 Abha Khandelwal, 1 Katherine, 1 Stanford University, Stanford, CA, United States.

T-110 The effect of maternal anemia on neonatal outcomes in the United States.

Rachael K. Harris, 1 Zachary Colvint, 1 Jennifer J. McIntosh, 1 Medical College of Wisconsin, Milwaukee, WI, United States.

T-111 The role of circulating angiotensin converting enzyme 2 (ACE2) in pregnancy complications: Preeclampsia and small for gestational age.

Soria Tamannet, 1 Vicki L. Clifton, 1 Kyun Rae, 1 Dirk Van Helden, 1 Eugenie R. Lumbers, 1 Kirsty G. Pringle, 1 1The University of Newcastle, Newcastle, Newcastle, Australia; 2Mater Medical Research Institute, The University of Queensland, Queensland, Australia.

T-112 Abstract Withdrawn

T-113 Phosphorus, retinol and riboflavin intake during late pregnancy is associated with postpartum bone mineral density: A pilot study.

Jong Woon Kim, 1 Clara Yongoo Park, 1 Yoon Ha Kim, 1 Hangyeol Jeon, 1 Seunghie Kim, 1 Hyun Ah Chung, 1 Jin Wani Hu, 1 Chonnam National University Medical School, Gwangju, Korea, Republic of; 2Chonnam National University, Gwangju, Korea, Republic of.

T-114 External validation of a prediction model estimating the risk of caesarean section following induction of labour.

Nirong Keat, 1 Sarah Murray, 1 Dominique Bakert, 2 Sarah Stock, 1 1Simson Centre for Reproductive Health, Royal Infirmary of Edinburgh, Edinburgh, United Kingdom; 2MRC Centre for Reproductive Health, University of Edinburgh, Edinburgh, United Kingdom; 3Usher Institute of Population Health Sciences and Informatics, Edinburgh, United Kingdom.

T-115 Sexual dimorphism in cytotoxic and syncytial trophoblast energetic.

Matthew Buchert, 1 Leslie Myatt, 1 Oregon Health & Science University, Portland, OR, United States.

T-116 DEPTOR controls placental mitochondrial oxidative phosphorylation: A potential therapeutic target in intrauterine growth restriction (IUGR).

F J Rosario, 1 C Li, 1 L Myatt, 1 T Powell, 1 PW Nathanielisz, 1 T Jansson, 1 University of Colorado, Aurora, CO, United States; 2University of Wyoming, Laramie, WY, United States; 3Oregon Health and Science University, Portland, OR, United States; 4University of Wyoming, Laramie, AZ, United States.

T-117 Mid gestation placental transcriptome analysis reveals altered cholesterol and lipid metabolism markers in association with lifelong western diet consumption in the guinea pig.

Flavien Béchade, 1 Ousseynou Sarr, 1 Lin Zhao, 1 Lanette Friesen-Waldner, 1 Charles McKenzie, 1 Barbra de Vrijer, 1 Timothy Regnault, 1 UWO, London, ON, Canada.

T-118 Maternal tobacco smoke increases Setd8 in association with increased accumulation of DHA and AA in placenta supporting male rat pups.

Niccote Jenesson, 1 Claudia Weinheimer, 1 Jenna Whitham, 1 Hannei Wang, 1 Lisa Joss-Moore, 1 University of Utah, Salt Lake City, UT, United States.

T-119 Uterine artery endothelial cell proliferation in pregnancy can be elevated by both exogenous and endogenous catecholamines.

Ronald R. Magness, 1 Maja Okuka, 1 Omar S. Jobe, 1 Univ. South Florida, Perinatal Res MCOM, Tampa, FL, United States; 2Univ. of Wisconsin, Madison, WI, United States.

T-120 Characterizing sex-specific differences in placental epigenome using DNA sequencing data.

Yeon M Hwang, 1 Alison G. Paquette, 1 Paul Shannon, 1 Cory Funk, 1 Jocelyn Pearl, 1 Hanna Liao, 1 Yoel Sadovsky, 1 Leslie Myatt, 1 John Stamatiouannopoulus, 2 Louis Muglia, 1 Nathan D Price, 1 Institute for Systems Biology, Seattle, WA, United States; 2AllUs Institute for Biomedical Sciences, Seattle, WA, United States; 3Magee-Womens Research Institute, Pittsburgh, PA, United States; 4Oregon Health Sciences University, Portland, OR, United States; 5Cincinnati Children’s Hospital, Cincinnati, OH, United States.

T-121 Human ‘Placenta-on-a-chip’: Developing a biomimetic microfluidic 3D transport model.

Chandrika Tekkattu, 1 Claire Yu, 1 Henry H Hwang, 1 Xuanyi Ma, 1 Omar Farah, 1 Mara M Parast, 1 Shaocen Chen, 1 Louise C Laurent, 1 University of California San Diego, La Jolla, CA, United States.

T-122 Trophoblast-specific knockdown of the system A amino acid transporter, Slc38a2/SNAT2, reduces placental weight in mice.

Owen R Vayghan, 1 Elena Silva, 1 Russell V Anthony, 1 Theresa L Powell, 1 Thomas Jansson, 1 University of Colorado, Aurora, CO, United States; 2Colorado State University, Fort Collins, CO, United States.

T-123 Increased Myometrial CXCL12 Production in Response to Injury in Endometrial-myometrial Co-culture Experiments: Implications for Placenta Accreta Spectrum

Olga Gretchken, 1 Shota Popkovadze, 1 Hugh Taylor, 1 Yale University, New Haven, CT, United States.
T-124 Assessing Human Trophoblastic Cell-free DNA by Noninvasive Capture Methylation Sequencing (PICMe-Seq).
Devika Maule1, Warren Cheung2, Rebecca Biswell2, Carrie Vythial1, Michael J Soares1, Tami Pastinen1, Elin Grundberg1, Amy M Valen2, Haeri Choi, Kent L Thornburg2, Oregon Health and Sciences University, Portland, OR, United States.

T-125 Gestational Diabetes is Associated with Epigenetic Changes in Placental Genes That Regulate Glutamate Metabolism
Amy M Valen1, Haeri Choi, Kent L Thornburg2, Oregon Health and Sciences University, Portland, OR, United States.

T-126 Serum Amyloid A Effect on Intrauterine Inflammation and Preterm Birth
JUN LEHT, Anna Chudnovits, Liu Jin, Quan Na, Irina Burt, Johns Hopkins University School of Medicine, Baltimore, MD, United States.

T-127 Key Regulatory Drivers of Human Extravillous Trophoblast Differentiation and Maturation.
Robert Mercer1, Omar Farah, Daniela Requena Gilbert, Francesca Sorcin, Louise C Laurent, Mana M Parast2, University of California San Diego, La Jolla, CA, United States.

T-128 ASCL2 Reciprocally Controls Key Trophoblast Lineage Decisions During Hemochorial Placenta Development.
Kawin M Varberg1, Regan L Scott2, Masanaga Muto3, Khursheed Iqbal1, Kesuke Kozar2, Elin Grundberg1, Michael J Soares1, The University of Kansas Medical Center, Kansas City, KS, United States; Children’s Mercy, Kansas City, MO, United States.

T-129 Zika Virus Vertical Transmission Dynamics in the Pregnant Rhinoceros Macaque.
Michelle Koeger1, Ann Mitze2, Megan Murphy, Taylor Treadway1, Heather Simmons, Andres Mejia, Andrea Weiler, Mason Blos2, Siem Rylarzyczk3, Thomas Friedrich1, David O’Connor, Emma Mohr, Thaddeus Golos4, University of Wisconsin-Madison, Madison, WI, United States.

T-130 Critically Short Telomeres Increase in Placental Tissue Across the Third Trimester in Human Pregnancy.
Paula Edgerton1, Michala Sawyer1, Jasmine Lee1, Kathryn Gray2, David Cantownwine3, Thomas McGrath1, Mark Phillips1, Massachusetts General Hospital, Boston, MA, United States; Brigham and Women’s Hospital, Boston, MA, United States.

T-131 Genetic Sex Underlies Patterns of DNA Methylation in the Human Placenta
Amy M Inskirt1, Victor Yuan1, Chunai Konwarg2, Alison M Matthews2, Carolyn J Brown2, Wendy P Robinson1, BC Children’s Hospital Research Institute; University of British Columbia, Vancouver, BC, Canada; University of British Columbia, Vancouver, BC, Canada.

T-132 Maternal Administration of Nanoparticle-Based N-Acetyl-L-Cysteine Alleviates the Immune Response of Hofbauer Cells Exposed to Intrauterine Inflammation
Quan Ngu1, Jun Leht1, Chudnovits Anna2, Boyer Theresa1, Li Jin3, Lee Ji Yong4, Dong Jei5, Burt Irina1, Integrated Research Unit Center for Fetal Medicine, Department of Gynecology and Obstetrics, Johns Hopkins University School of Medicine, Baltimore, MD, United States.

T-133 The Expression and Activity of RAS Enzymes (ACE,ACE2 and NEP) in Syncytiotrophoblast Cells: Does ACE2 Contribute to Synchronisation?
Sonja Tamagnott1, Saja Morosin, Sarah J Delforce, Kym Rae, Dirk Van Helden, Eugenie R Lammers, Kirsty G Pringle, The University of New South Wales, Australia; Newcastle, Australia.

T-134 Placental Origin of Circulating Maternal Angiogenic Factors
F Giacobbi, DS Charnock-Jones, GCS Smith2, University of Cambridge, Cambridge, United Kingdom.

T-135 Modelling Placenta Mediated Diseases with Supervised Machine Learning.
Ariane Mullher1, Sina Salsabili1, Adrian D C Chan1, Michal Lickert2, David Grynpas3, Shannon Bambrick4, University of Ottawa, Ottawa, ON, Canada; Carleton University, Ottawa, ON, Canada; Children’s Hospital of Eastern Ontario, Ottawa, ON, Canada.

T-136 RNaseq of Placental/Mesenchymal Stem Cells From Normal and Preeclampsic Pregnancies: The Aspirin Effect
Matthew P Romagnoti1, Yahaira Naikdik, Markus El-Fatt, Sh Harka Pamarili, Lauren S Sherman2, Shauna F Williams3, Pamela Rameshwar4, Rutgers New Jersey Medical School, Newark, NJ, United States.

T-137 Initial Validation of Placental Immune Imaging, a Magnetic Resonance Imaging-Based Method
Wensie Wurt1, Zhexian Sun1, Wenuo Qi2, Zulfiya Kuzieva-Ware1, Xiao Ma2, Hui Wang1, Zhaoyi Wen3, Qing Yang2, Nanberi Zhong1, Ian S Hageman1, Alison G Cahill2, Yong Wang3, Washington University School of Medicine, St. Louis, MO, United States; New York State Institute for Basic Research in Developmental Disabilities, Staten Island, NY, United States; University of Texas at Austin, Austin, TX, United States.

T-138 Downregulation of MIR-126 Expression Contributes to Increased Inflammatory Response in Placental Trophoblasts in Preeclampsia
Xuexiao Cao4, Yang Gu5, Wenj Sheng5, David F. Lewis, Danielle Cooper, Charles E. McCrathan, Yuping Wang6, LUSUCCS-5, Shreveport, LA, United States.

T-139 Periconceptional High Maternal Homocysteine Levels are Negatively Associated with Placental Growth Trajectories.
Jeffrey Hoeh1, Sam Schoenmakers2, Bianca Ringelberg3, Inga F. Rejindert4, Stein P. Willemsen5, Annemarie G.M.J.G. Mulders4, Yoland A. de Rijke5, Renee P.M. Steegers-Theunissen6, ErasmusMC, Rotterdam, Netherlands.

T-140 Long Chain Polyunsaturated Fatty Acid Transport in the Placenta of Normal and Preeclamptic Pregnancies
Caetlin MacGregor1, Linda M Ernst1, Thomas Victor1, Dhavamani Sugaisi2, Alice Wizow2, PIN Venkatbasaramani1, Roland Gastfriend, Alex Choi1, Papasani Subbiah2, Beth Plunkett3, Northshore University HealthSystem, Evanston, IL, United States; University of Illinois at Chicago, Chicago, IL, United States.

T-141 Fatty Acid Distribution in Placentas of Normal Pregnancies
Caetlin MacGregor1, Linda M Ernst1, Thomas Victor1, Dhavamani Sugaisi2, Alice Wizow2, PIN Venkatbasaramani1, Roland Gastfriend, Alexandria Choi1, Papasani Subbiah2, Beth Plunkett3, Northshore University HealthSystem, Evanston, IL, United States; University of Illinois at Chicago, Chicago, IL, United States.
T-143 Investigating the Transgendered Effects of Maternal Obesity on Cytokine Activity
Melanie Maynard1, Corrie Millert2, Nicole Kuratst1, Paula Berry1, Chelsea Sato-Rest1, Claire Kendal-Wright3, Kelly Yamashato3, Men-Jan Lee4.1University of Hawaii John A Burns School of Medicine, Honolulu, HI, United States; 2Chaminade University of Honolulu, Honolulu, HI, United States.

T-144 Short-Chain Fatty Acids for the Prevention of Gestational Diabetes Mellitus.
Caitlyn Nguyen-Ngoc1, Rebecca Royt1, Ratana Lim2, Martha Lappas3,4.1The University of Melbourne, Melbourne, Australia; 2Mercy Hospital for Women, Melbourne, Australia.

T-145 Investigating the Impact of Non-Steroidal Anti-Inflammatory Drugs on Trophoblast Functions
Andreaana Burmanto1, Madeleine Wood1, Natalie DeWitt1, Seth Guller1, Sherron D. Whorledge1. Yale University, New Haven, CT, United States.

T-146 Air Contrast of the Intervillous Space Enables Non-Disruptive jct Analysis of Paraffin-Embedded Archival Placental Tissue.
Niray Baragat4, Beate Aschauer1, Cornelia Kampfer1, Christoph Schmilt1, Hans-Georg Frank4. Chair of Neuroanatomy, LMU, Munich, Germany.

T-147 Role of IGF2 in Regulating Rat Hemochorial Placental Development.
Ayasha Hasrat1, Kshureen Isqbal1, Regan L. Scott2, Stephen H Pierce1, Masanaga Muto1, Keisuke Kozuri1, Michael J. Soares1. 1University of Kansas Medical Center, Kansas City, KS, United States; 2Children’s Mercy, Kansas City, MO, United States.

T-148 It’s Not All in the Fluid: Occult Meconium-Associated Myonecrosis
Andrew S. Quinn1, Kathy C. Matthew2, Rebecca N Baergen1. 1New York Presbyterian Weill Cornell Medicine, New York, NY, United States; 2New York Presbyterian Weill Cornell New York, New York, NY, United States.

T-149 Characterization of Hematopoietic Stem Cells in Cord Blood by Gestational Age: A Prospective Cohort Study
Mehran G Hiji1, Michael S Badowski1, Harris T David1. University of Arizona, Tucson, AZ, United States.

T-150 Placental Glucose Uptake in a Nonhuman Primate Model of Western-style Diet Consumption and Chronic Hyperandrogenemia Exposure.
Victoria H J Roberts1, Jessica E Gaffney1, Aaron D Striblow1, Od D Sliyden2, Antonio E Frias2. 1Oregon National Primate Research Center, Beaverton, OR, United States; 2Oregon Health & Science University, Beaverton, OR, United States.

T-151 Differential DNA Methylation in the Comparison of Third Trimester Human Cytotrophoblast and Extravillous Trophoblast.
Sonia C. DaSilva-Arnold1, Marta Salas2, Stacy Zamudio1, Abdulla Al-Khan1, Benjamin Tycko1, Nicholas P. Illigey1. 1Hackensack University Medical Center, Hackensack, NJ, United States; 2Hackensack Meridian Health Center for Discovery and Innovation, Nutley, NJ, United States.

T-152 On the Clinical Phenotype of the Histopathological Diagnosis Chronic Intervillositis: John A Burns School of Medicine.
Maron Bos1, T.M.S. Harris-Mostert1, L.E. van der Meerentj, J.J. Baelde1, D.J. Williams2, P.G.J. Nikkelt3, K.W.M. Bloemenkamp1, M.L.P. van der Hoorn4. 1Leiden University Medical Center, Leiden, Netherlands; 2UMCU, Utrecht, Netherlands; 3University College Hospital, London, United Kingdom.

T-153 Prenatal Diagnostic Accuracy of Ultrasonography and Magnetic Resonance Imaging for Placenta Accreta Spectrum.
Suhbashini J Ladera1, Moreno Guillenro1, Mo Li Hong1, Manele Mendoza1, Cynthia Cortez1, Mallory Kramer1. 1UCSF Fresno, Fresno, CA, United States; 2University of Washington, Seattle, WA, United States.

T-154 Is Extracellular Outflow of Transition-related Factor: High-mobility Group A1 Protein Involved in the Pathogenesis of Preeclampsia?
Yuka Uchiyurt1, Keichi Matsuvara1, Yuko Matsubara1, Kazuko Takagi1, Takashi Sugiyama1, Eihe university, Toon, Japan.

T-155 The Effects of Hypoxia on Placental Mitochondrial Function in Pregnancies Complicated by Fetal Growth Restriction.
Yue-Yin Xu1, Juan Li1, Wei-Bin Wu1, Ji-Ru Zhao1, Martin John Quinn1, Hui-Jan Zhang1. International Peace Maternity and Child Health Hospital, Shanghai Jiao Tong University, School of Medicine, Shanghai, China.

T-156 Bile Acid Profile Changes in the Placenta are Associated with Changes in Metagenomic Signal in the Treatment of Intrahepatic Cholestasis of Pregnancy.
Maxim D. Selterovic1, Ryan Pacet1, Michael Beninari1, Derrick Churt1, Aagaard Kjers1. Baylor College of Medicine, Houston, TX, United States.

PREECLAMPSIA, RELATED DISORDERS

T-157 Ablation of Adrenomedullin 2 Causes Preeclampsia-Like Symptoms in Mice
Madhu Lata S. Chauhan1, Ancizar Betancourt2, Meena Balakrishnan1, Chandra Yallampalli1. Baylor College of Medicine, Houston, TX, United States.

T-158 The Cytokines From Immune Response Against ERAP2 Asparagine Isoform Increases Trophoblast Cell Migration
Eun D. Lee1, Hiten Mistry1, Leisa Kurlak1. 1Virginia Commonwealth University, Richmond, VA, United States; 2University of Nottinghun, Nottinghun, United Kingdom.

T-159 Sulforaphane Protects Placental Cell Mitochondrial Function Against Preeclamptic Injury in Vitro.
Anne Georgia Toett1, Anna-Maria Mucci1, Stacey J Ellery1, Sarah A Marshall1, Kirsten R Palmer1, Euan M Wallace1. 1Monash University, Clayton, Australia; 2Hudson Institute of Medical Research, Clayton, Australia.

T-160 Hydrogen SulphideProduction is Reduced by Placental Trophoblasts in Preeclampsia
Xiaodan Churt1, Yang Gu1, Xingui Shen1, Wenyi Sheng1, John Morgan1, David F. Lewis1, Charles E. McCrathan1, Yuan Wang1. 1LSUHSC-S, Shreveport, LA, United States.
T-161 Using Placental Pathology to Triage Women as High Priority for Cardiovascular Screening Following Preeclampsia
Samantha J Bontort, Erik E. Noyes, David Grynszpan, Laura Gaudet, Raywat Deonandan, G. Madeleine Boyer, Shannon A Bainbridge. 1 University of Ottawa, Ottawa, ON, Canada; 2Brock University, St. Catharines, ON, Canada.

T-162 Role of Lectin-like Oxidized LDL Receptor-1 and Angiotensin II Type 1 Receptor in High Cholesterol Dilated Vascular Dysfunction During Pregnancy.
Tamaara Stargel, Etienne Sumbaly, Tatsuya Sawada, S. Kristen Kahl. 1 University of Ottawa, Ottawa, ON, Canada; 2University of Alberta, Edmonton, AB, Canada.

T-163 Altered Structure and Function of Middle Cerebral Arteries of Offspring of Experimental Preeclamptic Rats: Effect of Maturation
Emett E Whistler, Devon Lindner, Justin E Miller, Marilyn J Capilla, University of Vermont Lamon College of Medicine, Burlington, VT, United States.

T-164 Absolute Quantification of Mitochondrial DNA in Peripheral Blood from Women with Preeclampsia
Speracini C. Dattieri, Telisa Sizer, Danielle Reid, Jie Sun, Sabrina M Scoggins, Mark K Santillan, Donna A Santillan, Nicole R Phillips, Stacy Goutopoulos. 1 University of North Texas Health Science Center, Fort Worth, TX, United States; 2University of Iowa Health Care, Iowa City, IA, United States.

T-165 Combined Cell-Free DNA Methylation and Fragment Size Profiles in Pre-eclampsia Identify Multi-Organ Involvement for Future Sequelae.
Irene Csehach, Tamara Gamrino-Gomez, Davide Bas, Roser Navarro, Jose R Hernandez-Mora, David Blesa, Alfredo Perales, David Monk, Carlos Simon, Antonio Diaz-Juan, Igenomix Foundation, Valencia, Spain; 2WICLIA Biomedical Institute, Valencia University, Valencia, Spain; 3Igenomix Valencia, Valencia, Spain; 4Bellvitge Institute for Biomedical Research (IDIBELL), Barcelona, Spain; 5Hospital Universitario La Fe, Valencia, Spain.

T-166 Longitudinal Metabolic Profiling in Pregnancy of Women with and without Pregestational Diabetes Who Develop Preeclampsia.
Kathryn J Gray, Mengxi Yang, Liming Liang, Richa Saxena, 1Bingham and Women’s Hospital, Boston, MA, United States; 2Harvard University, Boston, MA, United States; 3Massachusetts General Hospital, Boston, MA, United States.

T-167 Maternal Microchimerism in Umbilical Cord Blood in Preeclampsia Cases versus Controls
Shechenia McCartney, Samantha Birna, Angel Chea, Hilary B Gammill, J L Nelson, Raj Sheere. 1University of Washington, Seattle, WA, United States; 2Fred Hutchinson Cancer Research Center, Seattle, WA, United States.

T-168 Endothelium is a Direct Contributor to the Th17 Associated Endocrine Profile That Promotes Vascular Hypertension in Preeclampsia
Jacqueline Adams, Austin Jason, Ian M Bird. 1University of Wisconsin School of Medicine and Public Health, Madison, WI, United States; 2Perinatal Research Laboratories, University of Wisconsin-Madison, Madison, WI, United States.

T-169 Astaxanthin Induces Hemoxigenase-1 and Reduces sFlt-1 by Placenta
Yuko Aoki, Ruth Kalait, Shamma Ali, Ali Mahfuz, Morgan Pettler. NYU Long Island School of Medicine, Mineola, NY, United States.

T-170 L-Citrulline in Hypertensive Pregnant Women (CHERRY): A Randomised Controlled Feasibility Trial
Alice Dempsey, Laura Omershert, Heather Glossop, Elizabeth Cottrill, Ed D Johnstone, Jenny E Myers. University of Manchester, Manchester, United Kingdom.

T-171 Discovery of Extracellular RNA Biomarkers for the Prognostic Assessment of Preeclampsia.
Lara G. Poling, Peter DeHoff, Srimenakshi Srinivasan, Jill Mcauley, Ashwarya Vuppala, Khee Jun Lee, Megan Meads, Vy Tran, Aileen Fernando, Gladys Ramos, Mana M. Parast, Louise C. Laurent. UCSF, La Jolla, CA, United States.

REPRODUCTIVE ENDOCRINOLOGY, INFERTILITY
T-172 Preimplantation Genetic Testing for Aneuploidies (PGT-A) is Not Associated with Improved Live Birth Rates in Patients Under 35 Years Old
Eun B. Babayev, John X. Zhang, Mary Ellen Pavone. Northwestern University, Chicago, IL, United States.

T-173 Abnormal Puberty Progression and Mammary Gland Development in a Hyperinsulinemic Mouse
Aditi A Joshi, Julie R Hens, Farrah L Saleh, Aya Tal, Clare A Flanary. Yale school of Medicine, New Haven, CT, United States.

T-174 Frozen Blastocyst Transfer Cycle Following In Vitro Fertilization (IVF) with Pre-Implantation Genetic Testing for Aneuploidy (PGT-A) - Earlier is Better
Jason Silbermann, Joshua Stewart, Pak Chung, David Reichman, Zev Rosenwaks. Weill Cornell Medicine, New York, NY, United States.

T-175 Estradiol Stimulates Pregnancy-dependent H2S Biosynthesis in Human Uterine Artery Endothelial Cells via ERα/ERβ-Mediated Upregulation of CBS Transcription
Jin Barr, Thomas J Lehuqut, Qian-rong Qyi, Yi-hua Yang, Quan-wei Zhang, Yan Li, Dong-bao Chen. University of California, Irvine, CA, United States.

T-176 Hyperandrogenism and Insulin Resistance Induce Fetal Loss in a PCOS-like Pregnant Rat Model
Min Hu, Yuehu Zhang, Linus R. Shaor, Hakan Billig. 1University of Gothenburg, Gothenburg, Sweden; 2Guangzhou Medical University, Guangzhou, China; 3Wenzhou University of Chinese Medicine, Harbin, China.

T-177 Is Conception with Assisted Reproductive Technology Associated with Increased Maternal Psychological Stress in Nulliparous Women?
Amy L. Law, Nathan B. Barlow, Robert Silver. University of Utah, Salt Lake City, UT, United States.

T-178 A Validated Model for Predicting Live Birth Rates After In Vitro Fertilization

T-179 Towards the Molecular Understanding of PCOS Pathogenesis by RNA-seq Analysis of Multiple Tissues of Two Rat PCOS Models
Qiong Lin, Joerg Mueller, Martin Fritsch, Raif Lesche, Jorge Kageyama, Thomas M Zollner, Pharma R&D, Bayer AG, Berlin, Germany.

Acne Martin, Samad Jahandideh, Kate Devine, Micah Hik, Alan DeChennay, Frank Chang. 1National Institutes of Health, Bethesda, MD, United States; 2Shady Grove Fertility, Rockville, MD, United States.
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T-181 Towards Cell Therapy of Polycystic Ovary Syndrome (PCOS): Transforming Growth Factor Beta 1 Decreases Androgens Production in theca like In-Vitro Model of PCOS
Hana Takala, 1 Ribhi Man Chugh, 1 Hang-Soo Park, 1 Hoda Elkassas, 1 Mahmod Bilal, 1 Ayman Al-Hendy. 1 University of Illinois at Chicago, Chicago, IL, United States; 2 Rosalind Franklin University of Medicine and Science, Chicago, IL, United States.

T-182 Optimization of the Use of Preimplantation Genetic Testing for Aneuploidy During In Vitro Fertilization (IVF) in the United States: A SART Database Study
Padi Sarkar, 1 Sangita Jindal, 1 Erika Newt, 1 Rachel Sprague, 1 Jean P. Tanner, 1 Anthony Imudia, 1 University of South Florida, Tampa, FL, United States; 2 Albert Einstein College of Medicine, New York, NY, United States; 3 University of South Florida, Tampa, FL, United States.

T-183 Impact of Growth Hormone and Androgeal Adjuvant Therapies on IVF Outcomes in Low Responder Cycles
Siddhi E. Garway, 1 Sigal Kipnis, 1 Vishvanath Kanandane, 1 Elizabeth Purseck, 1-2 Wayne State University, Detroit, MI, United States; 3 Invia Fertility, Hoffman Estates, IL, United States.

T-184 The Role of Endometrial Stem Cells After Local Endometrial Injury in Women With Recurrent Implantation Failure Undergoing In-vitro Fertilization
Yaping Fan, 1 Ryan Vai Nhe Kong Le, 1 Xiang Wen Ngt, 1 Caroline Gargett, 1 Jerry Kok Yen Chan, 1* KW Women’s and Children’s Hospital, Singapore, Singapore; 2 Hudson Institute of Medical Research, Victoria, Australia.

T-185 Effect of Night Shift Work on Anti-Mullerian Hormone (AMH) Levels in Reproductive-Aged African American Women (AAW)
Chelsea Forti, 1 Emma Giulian, 1 Anne Waldo, 1 Lisa Bernardi, 1 Mercedes Carmethon, 1 Erica E. Marsh. 1 University of Michigan, Ann Arbor, MI, United States; 2 Northwestern University, Chicago, IL, United States.

T-186 The Role of Ethnicity in PCOS Patient Responses to Ovulation Induction in Timed intercourse and Intracervine Insenmination Cycles
Enam Jansen Pavlova, 1 Lauren Grimmel, 1 Sara Twehaust, 1 Nepheli Rapists, 1 Emma Radley, 1 Hannah Mandell, 1 Christy Oost, 1 Jessi Anderson, 1 Angie Beltsos, 1 Roohi Jeetan, 1 Rush University Medical Center, Chicago, IL, United States; 2 Visio Infertility Institute, Chicago, IL, United States.

T-187 Does a Decrease in Estradiol Level Despite an Adequate Endometrial Lining Thickness Have an Adverse Effect on Live Birth Rates in Frozen Embryo Transfer Cycles? Karrie Anne Brodell Walkert, 1 Peter Lindnert, 1 Niccan J Hill, 1 Saisa Torrealdays, 1 John M Csoomay, 1 Mae W Healy, 1 Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD, United States; 2 Walter Reed National Military Medical Center, Bethesda, MD, United States.

T-188 The Correlation Between Human Papillomavirus Infection on Sperm Motility and Morphology Among Infertile Men
Sarah Abdolahzad, 1 Imran Arbab Kazem Zadeh, 1 Majid Madaftaram, 1 Jahrom University of Medical Sciences, Jahrom, Iran; 2 Jahrom, Iran, Jahrom, Iran, Islamic Republic of; 3 University of Kassel, Kassel, Germany; 4 University of Kassel, Kassel, Germany; 5 JHWO Trading GmbH, Frankfurt am Main, Germany; 6 University of Kassel, Kassel, Germany.

T-189 Endometriosis Gene Variants and Assisted Reproductive Technology Outcomes
Kenneth Ward, 1 Predictive Laboratories, Salt Lake City, UT, United States.

T-190 Prognostic Value of Low Anti-Mullerian Hormone Level During IVF Among Young Women: A SART Data Study
Papi Sarkar, 1 Brittany Robertson, 1 Erika Newt, 1 Rachel Sprague, 1 Jean P. Tanner, 1 Anthony Imudia, 1 University of South Florida, Tampa, FL, United States; 2 University of South Florida, Tampa, FL, United States.

T-191 Effect of Uniketo, a Traditional Herbal Medicine, on a Rat Model of Polycystic Ovary Syndrome
Sayaok Yoshida, 1 Satoshi Osuka, 1 Reina Sonehara, 1 Natsumi Miyake, 1 Mayuko Murakami, 1 Wei Wei, 1 Shotoo Hayashi, 1 Ayako Muroaka, 1 Umida Gianvict, 1 Shino, 1 Watanishi, 1 Yoko Kasahara, 1 Bayasula Bayasula, 1 Nobushinchi Tadami, 1 Tomokio Murase, 1 Tomoko Nakamura, 1 Maki Goto, 1 Fujiitaka Kikkawa, 1 Nagoya University Graduate School of Medicine, Nagoya, Japan.

T-192 Caloric Restriction Effects on Female Wistar Rats Reproductive Health
Israel Enrique Cintron Lopes, 1 Pablo Lopez de Jesus, 1 Isabel Arrieta Cruz, 1 Juan Carlos Flores Alonso, 1-2 Benemérita Universidad Autonoma de Puebla, Puebla, Mexico; 3 Universidad Autonoma Metropolitana, Iztapalapa, Ciudad de Mexico, Mexico; 4 Instituto Nacional de Genetica, Ciudad de Mexico, Mexico; 5 Laboratorio de Biologia de la reproduccion, Centro de Investigacion Biomedica de Oriente-IMSS, Puebla, Mexico, Mexico.

T-193 The Impact of Artificial Intelligence on Farid’s Updated Innovation in Reproduction
Ali Farid Mohamed Af, * Heliopolis Hospital, Cairo, Egypt.

BASIC REPRODUCTIVE BIOLOGY

T-194 Identification and Isolation of Rare Microchimeric Cells in Paired Maternal-Cord Samples
Yonghoo Jiang, 1 Stephen McCartney, 1 Sami B Kanaan, 1 Francesca Urselli, 1 John Houck, 1 J. Lee Nelson, 1 Raj Shee, 1 Michael Hackett, 1 Seattle Children’s Research Institute, Seattle, WA, United States; 2 University of Washington, Seattle, WA, United States; 3 Fred Hutchinson Cancer Research Center, Seattle, WA, United States; 4 Fred Hutchinson Cancer Research Center / University of Washington, Seattle, WA, United States; 5 Seattle Children’s Research Institute / University of Washington, Seattle, WA, United States.

T-195 Exposure of Human Fetal Membranes to Bacterial LPS and Viral deRNA Augments Neutrophil Activation while Reducing Neutrophil Extracellular Trap Stability
Marcy Yong, 1 Sarah E Hannat, 1 Vikki M Abrahams, 1 Yale University, New Haven, CT, United States.

T-196 Human Endometrial Stromal Cell Biomarkers are Potently Stimulated by Peroxisome-Proliferator-Activated Receptor-beta/delta Ligation
Jie Xu, 1 Sarah L. Berga, 1 Robert N. Taylor, 1 Wake Forest School of Medicine, Winston-Salem, NC, United States; 2 University of Utah Health, Salt Lake City, UT, United States.

T-197 Glycophosphat Deteriorates Oocyte Quality Through a Mechanism That Involves Microtubule Organizing Center Disturbance
David Bae, 1 Zena A Yahoufi, 1 Sara Khan, 1 Charalampos Chatzicharalampous, 1 Hamid-Reza Kohan-Ghad, 2 Robert T Morris, 1 Husam M Abu-Soud, 1 Wayne State University, Detroit, MI, United States; 2 Michigan State University College of Human Medicine, Grand Rapids, MI, United States.
T-198 The Telomere Link Between Extended Fertility and Longevity

Jennia Michaela1; Keren Rotshenker Oshlinsky1; Naama Srebri1; Noa Serruya2; Talia Eldar-Geva3; Yehuda Tafali1; Shlomo Zedek Medical Center, Jerusalem, Jerusalem, Israel; Hebrew University of Jerusalem, Jerusalem, Israel.

T-199 A High Throughput Screen for Stress-forced Differentiation of ESC

Daniel A Raposo1; Daniel A Abdusalam2; Sudipta Dutta3; Katherine Gundziel4; Steven Korzeniewski5; Elisabete Buchelhoek6; Doug Roudi7; Wayne State University, Detroit, MI, United States; Wayne State University, Detroit, MI, United States.

T-200 ARID1A Restricts Chromatin Accessibility and Histone H4 Acetylation in the Endometrial Epithelium

Jake J Reske1; Mike R Wilson2; Ansgary T Fazekas3; Ronald L Chandler2; Michigan State University, Grand Rapids, MI, United States.

T-201 Safety and Toxicology Study After Intra-ovarian Engraftment of Human Bone Marrow Mesenchymal Stem Cell in Chemotherapy Induced POI Mouse Model

Hang-soo Park1; Rishi Man Chugh2; Amro Elsharoud3; Mona Uln1; Sahar Esfandian4; Late Bako5; Almasoo Abraham6; Ayman Al-Hendy7; University at Illinois at Chicago, IL, United States; Tehran University of Medical science, Tehran, Iran, Islamic Republic of; Tanta University Faculty of Medicine, Tanta, Egypt.

T-202 Immunologic Dysregulation of IL-10 and IL-18 is Associated With Decrease of GREM1 in Obese Women Undergoing Controlled Ovarian Stimulation (COS)

Tara Kint1; Yulian Zhao2; Elizabeth A Environa3; Mayo Clinic, Rochester, MN, United States.

T-203 Redox Regulation of Estrogen (E2)-Stimulated Uterine Blood Flow (UBF): A Mechanism of Fetal Growth Restriction (FGR)

Rachael Boff1; Sara A Wennerstent2; Sally P Stabler3; Laura D Brown4; James R Roedel5; Kenneth N MacLean6; Joseph Hurnt7; University of Colorado School of Medicine, Aurora, CO, United States; University of Colorado School of Pharmacology, Aurora, CO, United States.

T-204 Potential Role for Ferroptosis in the Pathogenesis of Prematurity

Shu-Wong Ng1; Chunyan Lee2; Allen C Ng2; Shu-Kay Ng3; Felice Aron3; Paolo Tobi3; Elizabeth M Genega4; Emma N Norwitz5; Tufts Medical Center, Boston, MA, United States; Griffith University, Nathan, Australia; University of Siena, Siena, Italy.

T-205 Developing a Genetically Modified Marmoset Model of Neurodevelopmental Disease

Joshua T Brennan1; Jessica Izz1; Yan-Ling Feng2; Ping Xia3; Xiongdong Song4; Jacqueline Maher5; Bhuchitra Singh6; Sharansh Zhu7; Christopher Ross8; John Davis9; James C Herris10; Xiaojun Wang11; James H Segars1; Johns Hopkins University School of Medicine, Baltimore, MD, United States; University of Illinois, Chicago, IL, United States.

T-206 PD-1/PDL-1 Expression of Peripheral Blood Th1, Th17 and Treg Cells in Women with Unexplained Recurrent Pregnancy Loss

Maria D Salazar Garcia1; Wen Juan Wang2; Xiuhua Yang3; Quachua He4; Gioviani Juzib5; Mahmood Bilal6; Svetlana Dambraeva1; Alice Gilman-Sachs7; Kenneth Beaman8; Kwai-Kim Joanner9; Mount Sinai Hospital, Chicago, IL, United States; Rosalind Franklin University of Medicine and Science, Vernon Hills, IL, United States; The Affiliated Yantai Yuhuangding Hospital of Qingdao University, Yantai, China; Rosalind Franklin University of Medicine and Science, North Chicago, IL, United States.

T-207 The Mechanism of Tumor Necrosis Factor-a and its Inhibitors on Unexplained Recurrent Spontaneous Abortion.

Xin Li1; Xue Qing2; Peking University First Hospital Beijing, Beijing, China.

T-208 Stem Cell Secreted Factors-Enriched Plasma Promotes DNA Repair and Protects Against Chemotherapy-Induced Cell Death in Ovarian Tissue.

Maricela Manchanez1; Anna Bugarzan2; Antonio Pellicer3; Sonia Herranz4; IVI Foundation-ILS La Fe, Valencia, Spain; University of Valencia, Valencia, Spain; IVI-RAVA Rome, Rome, Italy; IVI-RAVA Valencia, Valencia, Spain.


Hannes Campg1; Emilio Frances Herrero2; Sara Lopez-Martinez3; Amparo Faus4; Antonio Pellicer5; Irene Cervello6; IVI Foundation-ILS La Fe, Valencia, Spain; IVI-RAVA Rome, Rome, Italy; IVI-RAVA Valencia, Valencia, Spain.

T-210 Comparing Endocervical Mucus Proteomes of Humans and Rhesus Macaques

Ling Hart1; Walker Andrews2; Karsten Wong3; Ashok Reddy4; Philip Willmarth5; Jeffrey T Jensen6; Oregon Health and Science University, Portland, OR, United States; Oregon National Primate Research Center, Beaverton, OR, United States; Oregon National Primate Research Center, Beaverton, OR, United States.

T-211 A Novel Endocervical Cell Culture Using Conditionally Reprogrammed Cells Secreces MUCS5

Walker Andrews2; Jeffrey T Jensen3; Karsten Wong4; Leo Hart1; Oregon National Primate Research Center, Beaverton, OR, United States; Oregon Health and Science University, Portland, OR, United States; University of Minnesota, Albert E. Vally, Valencia, Spain; IVIRMA-Roma, Roma, Italy.

T-212 The Function of POTE F in Human Granulosa Cells, an Antigen for Ovarian Autoimmunity, in POI Patients

Yuko Kasahara1; Satoko Osuka2; Nobuyoshi Takasaki3; Wei Wei4; Natsumi Nakahara5; Bayasa Luisa, Yamada2; Tomoko Nakamura6; Tomohiko Murase7; Miki Goto8; Fumitaka Kikawata9; Nagoya University Graduate School of Medicine, Nagoya, Japan.

T-213 Powering Up! Comparing Mitoscore of Embryo Embryos From Egg Donors to Age-Matched Controls

Lauren Grimm1; J Anderson2; H Mandell3; E Radley4; N Raptis5; C Oost6; Z Pavlovic7; S Zimmermann8; R Jelens9; A Belloss10; A Cooper11; Vios Fertility Institute, Chicago, IL, United States.

T-214 Down-regulation of Salpa-reductase-mediated Progesterone Metabolism Promotes Differentiation of Human Endometrial Cells for the Establishment of Pregnancy

Mikihito Yoshio1; Sayaka Nakajima2; Kazumi Kawamura3; Tsukasa Chiba4; Junya Kojima5; Hirotsuka Nishik6; Keichi Isaka7; Kazuhiro Tamura7; Tokyo University of Pharmacy and Life Sciences, Tokyo, Japan; Tokyo Medical University, Tokyo, Japan.

T-215 Heat-induced Formulation of High-Age Diet Has Alterations in Essential Macro - and Micro - Nutrients That Are Important in Female Reproduction

Zaheer Merhi1; Michelle Goldsammier; Maureen Charron2; Erik Nudelman; Albert Einstein College of Medicine, Bronx, NY, United States.

T-216 Endometrial Aging at Transcriptomic Level

Almudena devesa-Peiró1; Patricia Sebastian-Leon2; Antonio Pellicer3; Patricia Diaz-Gimen4; IVI Foundation / Biomedical Research Institute La Fe, Valencia, Spain; University of Valencia, Valencia, Spain; IVI-RAVA Rome, Rome, Italy.
Thursday, March 12, 2020 - Poster Session I - East Exhibit Hall B

**EPIDEMIOLOGY, POPULATION HEALTH & GLOBAL HEALTH**

**T-217** Analysis of Female Demographics in the United States: Relationship Between Education, Fertility, and Infertility Service Utilization  
Ecen Esencort, Burcin Simsek, Emre Seil*. Yale School of Medicine, New Haven, CT, United States.

**T-218** Relationships Between Early Life Feeding Practices with Body Mass Index and Adiposity at 3 Years of Age in Children Born to Women with Obesity: A Secondary Analysis of the UPBEAT Trial  
Kathryn V Dalrymple, Angela C Flynn, Paul T Seed, Majella O’Keeffe, Annette Briley, Lucilla Poston*. King’s College London, London, United Kingdom.

**T-219** Cesarean Delivery Rates in Pregnancies Complicated by Fetal Anomalies: A National Database Study  
Mohana A Limaye, Ashley S Roman, Christina A Penfield*. NYU Langone Medical Center, New York, NY, United States.

**T-220** Financial Strain and Gestational Age at Delivery: A Pathway Analysis  
Courtney Olson-Chen, Yu-Fu Michael Chen*. University of Rochester Medical Center, Rochester, NY, United States; Nazareth College, Rochester, NY, United States.

**T-221** Does Antenatal Detection of Fetal Growth Restriction Benefit Neonatal Outcomes.  
Rosan Selvaratnam*, Euan M Wallace*, Sophie Treleaven, Peter G Davis, Stuart B Hooper*, Mary-Ann Davey*. The Ritchie Centre, Monash University, Melbourne, Australia; Safer Care Victoria, Melbourne, Australia; Newborn Research Centre, The Royal Women’s Hospital, Melbourne, Australia.

**T-222** Knowledge May Not be the Barrier to Care for Pregnant Women with Opioid Use Disorder: The ACOG District II Education “Bundle”  
Nicholas Ahern*, Kathleen Dermady, David Garry, Leah Kaufman, Dany Dreyer, Marilyn Kacica, Cassie Leonard, Aner Yukhaye*, Neil S Seligman*. University of Rochester, Rochester, NY, United States; SUNY Upstate Medical Center, Syracuse, NY, United States; Stony Brook Medicine, Stony Brook, NY, United States; March of Dimes, Rochester, NY, United States; New York State Department of Health, Albany, NY; United States; Hudson Headwaters Health Network, Queensbury, NY; United States; Northwell Health, Manhasset, NY, United States.

**T-223** Neighborhood Income Segregation and Birth Outcomes  
Enynne Smair*, Alexa Freedman, Lauren Keenan-Devlin, William Grobman, Hygiv Simhit, Pathik Wadhwa, Claudia Buss, Sonja Entringer, Greg Miller, Ann Borders. NorthShore Univ HealthSystem, Evanston, IL, United States; Northwestern Univ, Evanston, IL, United States; Northwestern Univ Feinberg School of Medicine, Evanston, IL, United States; University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; Univ of California Irvine, Irvine, CA, United States; Charite, Berlin, Germany.

**T-224** The Associations Between C-Reactive Protein and Reproductive Hormones in Men of Reproductive Age: Findings From a Preconceptional Cohort in China.  
Jun Zhang*, Kai Lu, Aizimu Ruixianglu, Tian Ying, Weiye Wang. Xinhu Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, China; Xinhu Hospital, Shanghai Jiao Tong University School of Medicine & School of Public Health, Shanghai, China; Xinhu Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, China.

**T-225** Interpregnancy Interval and Adverse Pregnancy Outcome-Analysis on US Birth Data  
Vanessa Graff*, Khadija Haleemt, W Spencer McClelland, Teresa Cheon, M. Teresa Benedetto, Yuzuru Arata*, University of Chicago, Chicago, IL, United States; Northwell Health, New York, NY, United States.
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Friday, March 13, 2020 - Poster Session II - East Exhibit Hall B

**Basic Parturition, Prematurity**

**F-001** Selenium Suppresses Pro-inflammatory and Pro-labor Mediators Associated with Spontaneous Preterm Birth. Caiyun Nguyen-Ngo,1,2 Dineli Kalansuryat,1,2 Ratana Lim,3 Martha Lappas.1,3 The University of Melbourne, Melbourne, Australia; 1Men's Clinic, Royal Melbourne Hospital, Melbourne, Australia.

**F-002** Regional Assessment of Mouse Cervical Smooth Muscle Composition and Contractility. Jackson H Rogers, Necko Boatwright, Shajia Siricola, Bibhash C. Paria, Jennifer L. Herington, Jeff Reese*. Vanderbilt University Medical Center, Nashville, TN, United States.

**F-003** Intestinal Dysbiosis is Associated with the Imbalanced Cytokines Network in Unexplained Miscarriage Yongjie Lui,1 Jun Zhang,1 Liping Feng,1 Xinhsu Hospital Affiliated to Shanghai Jiao Tong University School of Medicine, Shanghai, China; 2Duke University School of Medicine, Durham, NC, United States.

**F-004** Variation in Preterm Ovine Lung Maturation in Response to Antenatal Steroid Therapy is Not Due to Individual Differences in Steroid Exposure Tsukasa Takahashi1,1 Alan Hall Jobe1,2, Augusto F Schmidt1, Masatoshi Saito,1 Matthew Kemp.1 University of Western Australia, Perth, Australia; 1 Cincinnati Children’s Hospital, Cincinnati, OH, United States; 2University of Miami, Miami, FL, United States; 3Tohoku University, Sendai, Japan.

**F-005** Stretch, Scratch, and Stress: Suppressors and Supports of Senescence in Fetal Membranes Lauren S. Richardstorf1, Namrada Lavr1, Ramkrumar Menon1,2, UTMB, Galveston, TX, United States.

**F-006** Transient Modulation of Amino Acid Inflammation by the Peptide Rytyrva in a Sheep Model of Pregnancy Yuki Takahashi, Tsukasa Takahash1, Matthew Kemp. University of Western Australia, Crawley, Australia.

**F-007** Comparative Effects of TLR4 Inhibitors on Inflammatory Activation in Human Decidual Cells. Reanne M Hori,1 Chyn Peck Yin,2 Sarah A Robertson,1 Mark L Hutchinson,1 Jeffrey A. Keeter2.1 University of Western Australia, Perth, Australia; 2University of Adelaide, Adelaide, Australia.

**F-008** Ascending Vaginal Bacterial Infection with Bioluminescent E. coli Induces Perinatal Neuroinflammation in Mice Ashley K Boyer1, Natalie Suff,1 Simon N Waddington,1 Donald Peebles,1 1University College London, London, United Kingdom; 2King’s College, London, United Kingdom.

**F-009** Preeclampsia is Associated with Increased Levels of Intrinsically Disordered Protein - Prostate Associated Gene (PAGE)-4. Asli Ozment, Milene Levin, Duygu Mufyua, Xiaofang Guo, Nihan Semoori, Ozlem Guzeloglu Kayisli, Frederik Schatz, Charles Lockwood, Umit Kayisli. University of South Florida, Morsani College of Medicine, Tampa, FL, United States.

**F-100** Inhibition of NF-κB Pathway and Anti-inflammatory Effect of Exosomal-Encoded IkBa Super-Repressor in Human Fetal Membrane Cells Doreen G Quiroz1, Samantha Sheller-Miller1, Namrada Law1, Ramkrumar Menon1, Kyungsun Choi1, Jae Yoo,1 Chulhee Choi,1 Steven J Fortunato1.1 University of Texas Medical Branch, Galveston, TX, United States; 2IIAS Biologics, Deepen, Korea, Republic of; 3Ochsner Medical Center, Jefferson, LA, United States.

**F-111** Using Normoxia to Develop a Physiologically Relevant and Translational Vaginal Epithelial Cell Culture Model. Soojil Salampaport1, A. James Mason1, Rachel M Tribe1, King’s College London, London, United Kingdom.

**F-122** Acetate Weakens the Vaginal Epithelial Mucosal Barrier in a Multilayer Vaginal Epithelial Cell Culture Model. Soojil Salampaport1, A. James Mason1, Rachel M Tribe1, King’s College London, London, United Kingdom.

**F-133** Drug Combination Screen Reveals Synergistic Combinations of Current and Novel Tocolytics to Increase Their Potency/Effectivity Shajia Siricola, Jackson H Rogers, Lauren A Lambert, Carolyn L Simpson, Christian T Meyer, Vito Quanta, Jennifer L. Herington, Jeff Reese. Vanderbilt University Medical Center, Nashville, TN, United States.

**F-144** Liguistilide Inhibits Oxytocin-induced Human Myometrial Contraction and Alleviates Lipopolysaccharide-induced Proinflammatory Response in Human Macrophages Yuuke Udari, Haruta Mogami, Asako Inohaya, Yosuke Kawaumura, Mai Sato, Kunio Kawashiki, Yoshitsugu Chigusa, Eiji Kindoh, Masaki Mandai. Kyoto University, Kyoto, Japan.

**F-155** IL1 Receptor Antagonist Responses Among Women with History of Preterm Delivery Ozzie Ezuel2, James McGregor1, Genevieve Neale-Perry1, RFP Consulting LLC, Encino, CA, United States; 2Group B Streep International, Los Angeles, CA, United States; 3University of Washington, Seattle, WA, United States.

**F-166** Decreased Levels of Triggering Receptor Expressed on Myeloid Cells-Like (TREM-like) Transcript-1 (TLT-1) Are Present in Cord Blood From Premature Infants, and Deficiency in Mice Promotes the In-Utero Inflammatory Response to Maternal Systemic Lipopolysaccharide (LPS) Exposure. Paola E. Perla Garci1,1 Jessica Morales-Ortiz1, Barry A Finlay1, Anthony V Washington1, Elizabeth A Bonnie1,1 University of Puerto Rico-Rio Piedras, San Juan, PR, United States; 2University of Vermont, Burlington, VT, United States.

**F-177** Decreased Expression of HIF-1α-BNIP3-Bcl-2 In Pathway is Related to Inhibited Autophagy Activation in Human Myometrium During Prolonged Labor Yanshan Chen,1 Liu Fen,1 Wang Lete,1 Luo Yihong1, Di Xiaodan,2 Liu Hushu,1 Guangzhou Women and Children’s Medical Center, Guangzhou, China; 2The Third Affiliated Hospital Of Guangzhou Medical University, Guangzhou, China.

**F-188** Prediction of Delivery Date Using Maternal Lifelog and Metabolomic Data. Satsuki Kumatani,1 Daikusu Och1, Takuaki Yamauchi,1 Yoshiki Tanimoto,2 Satoshi Hiyama,3 Masao Nagasaki,1 Junichi Sugawara4,5,1 NTT DOCOMO, INC., Yokusukashi, Kanagawa, Japan; 2Kyoto University, Kyoto, Japan; 3Tohoku University, Sendai, Miyagi, Japan; 4Tohoku University Graduate school of Medicine, Sendai, Miyagi, Japan.
F-038 Using Clinical Phenotypes to Predict the Likelihood of Endometriosis Recurrence
Peter A.W. Rogers,1 Byung Kyeo Jun,1 Jessica Chung,1
Dominic Maderazo,1 Martin Healey,1 Uri Dion,1 Jacqueline Donoghue,1 Jane Gringl,5 Sarah J Holdsworth-Carson.1
1University of Melbourne, Parkville, Australia; 2Royal Women’s Hospital, Parkville, Australia; 3Hadassah Medical Center, Jerusalem, Israel; 4University of Otago, Dunedin, New Zealand.

F-039 Impact of Long-Acting Progestin Contraception on the Vaginal Microbiome
Wan C Huang1, Anita Shah1; Doyle Ward1; Erica Hardy; Wendy Kuchung;1 1Boston University School of Medicine, Boston, MA, United States; 2University of Massachusetts School of Medicine, Worcester, MA, United States; 3Women and Infants Hospital, Providence, MA, United States.

F-040 Double-Masked, Placebo-Controlled Trial of Botulinum Toxin for Endometriosis-Associated Chronic Pelvic Pain: 1-Month Data
P Straton1, H K Tardiff1, V P Frank1, J V Aredort1,2 N Sinai1,2, J P Shah1,2 B I Karp1; Office of the Clinical Director, IRP NINDS, NIH, Bethesda, MD, United States; 2Rehabilitation Medicine Department, IRP, CC, NIH, Bethesda, MD, United States; 3College of Medicine, University of Nebraska Medical Center, Omaha, NE, United States; 4Stanford University School of Medicine, Stanford, CA, United States; 5Biostatistics & Clinical Epidemiology Service, IRP, CC, NIH, Bethesda, MD, United States.

F-041 Endometriosis pathoetiology: The Role of microRNAs in the Dysregulation of Endometrial Function
Bhishma Singht1; Jahuiz Zhang1; Isabelle Baptista2; Pinta1; Johns Hopkins University School Of Medicine, Baltimore, MD, United States; 2Renaissance School of Medicine, Stony Brook, NY, United States; 3Johns Hopkins University, Baltimore, MD, United States.

F-042 Increased FK506-Binding Protein 51 (FKB5P1) Expression May Contribute to Dysregulation of Steroid Receptor Signaling in Uterine Fibroids.

F-043 Microwave Endometrial Ablation at a Frequency of 2.45 GHz is Effective for the Treatment of Hypermenorrhea
Toru Homma1, Masataka Kagimoto,2 Ayaka Karako1, Satoshi Ushimaru3, Yoko Fujimoto3, Kazuaki Nakuma3, Yuka Sakamoto4, Ken Imaizumi5, Yoshinori Kawarai, Kiyonori Saito,4 Motomasa Iha4, Hidemi Yashiro,5 Michitaka Ohwada,5 Kazu Yanaida,6 Hirokazu Tanaka,6 International University of Health and Welfare Hospital, Tochigi, Japan; 7International University of Health and Welfare Hospital, Nasushiobara, Japan.

Mira Mousa1,2, Moamer Al-Jelout1,3, Stacey Misam3,4, Nufar Rahmioglu4,5, Christian Becker6,7, Krina Zondervan1;1 University of Oxford, Oxford, United Kingdom; 2University of Arab Emirates University, Al Ain, United Arab Emirates; 3Harvard University, Boston, MA, United States.

F-045 Tafaxiparin, a New Drug Candidate: A Scientific Journey Clarifying the ECM Remodeling Process in Labor and the Transition of Knowledge into Late Stage Clinical Development.
Gunhild Ester Elman-Oloberg1, Dept of women and child health Karolinska Institute, Danderyd, Sweden.

F-046 Maternal Urinary Metabolites in Early Pregnancy Predict Gestational Diabetes
Brian J Koos1; Jeffrey Gombin, UCLA, Los Angeles, CA, United States.

F-047 Impact of Implementation of Chemoprophylaxis for Prevention of Venous Thromboembolism After Cesarean Delivery
Alexis G Bridge1, Tori D Metz, Amanda A Allhouse, Ann M Brunot, Brett D Evison1; University of Utah Health, Salt Lake City, UT, United States.

F-048 Associations Between Phthalate Exposure and Gestational Age at Delivery in a Diverse Pregnancy Cohort
Laura Siwanowicz1, Catherine Albright1, Yu Niu1, Adam Szpiro2, Nicole Bush3, Christine Loftus, Kurunthachalam Kannan1, Frances Tylavsky,3 Robert Davis,3 Catherine Kait1, Kaja LeWinn,4 Sheila Sathyaranayana1;1 University of Washington, Seattle, WA, United States; 2University of California San Francisco, San Francisco, CA, United States; 3New York State, New York, NY, United States; 4University of Tennessee Health Science Center, Memphis, TN, United States.

F-049 Alterations to Human Breast Milk Exosome Content in Response to Maternal Dietary Manipulation
Hassevdrinis N Peris1,2, Kanchan Vaswani,1 Rebecca J Hill,1 Tracy Hutt,1 Peter SV Davies,3 Murray D Mitchell,1 Queensland University of Technology, Brisbane, Australia; 2University of Queensland, Brisbane, Australia.

F-050 Impact of Western/USA Diet on Maternal Metabolism in Vervet Pregnancy
Sarah Therese Steppan*, Jeffrey Denney*, Kyle Kavanagh+, Mathew Jorgensen+, Brian Brost+, Wake Forest Medical School, Winston-Salem, NC, United States.

F-051 Race Does Not Affect Neonatal Outcomes in Perivable and Extremely Premature Neonates.
Courtney Townsend, Ashley Bessort+, Patricia Greco+, Nayla Kazzar+, Marjorie Treadwell*, University of Michigan, Ann Arbor, MI, United States.

F-052 The Effect of Maternal Vitamin E Supplementation on Maternal and Cord Blood Adiponectin Concentration
Jessica L. Pippert1, For the Eunice Kennedy Shriver NICHD Maternal - Fetal Medicine Units Network, Bethesda, MD, United States.

F-053 TOLAC Morbidity as a Function of VBAC Predicted Success and Labor Onset
Hayley Peeples1, Frank B. Williams2, Michael DeSarno2, Carole McBride+, Kelley Mclean1; University of Vermont Medical Center, Burlington, VT, United States.

F-054 The Association Between Late Preterm Preeclampsia and Respiratory Morbidity

F-055 Neonatal Blood Pressure Before and After Delayed Umbilical Cord Clamping.
Claudio Vitria*, Schemnie Giugni*, Pedro S Argoti,2 Patricia Godecke2, Giancarlo Marin2; University of Tennessee Health Science Center, Memphis, TN, United States.
F-066 Maternal Dietary Intervention (DINT) in Pregnant Obese (MO) Rates Prevents Liver Fat Accumulation and Adverse Metabolic Outcomes in Male Offspring (F1).
Consuelo Lomas-Sotelo,1,2 Carlos A. Ibarra-Chavez,1,3 Peter W. Nathaniel,1,7 Elena Zambrano,1,7 Instituto Nacional de Ciencias Medicas y Nutricion S. Z. Mexico, Mexico; CONACyT, Instituto Nacional de Ciencias Medicas y Nutricion S. Z. Mexico, Mexico; University of Wyoming, Laramie, WY, United States.

F-067 Inhibition of MLL1 and HDAC Activity Reverses Developmental Exposure to an Endocrine Disruptor (Diethylstilbestrol) in Myometrial Stem Cells
Mohamed Ajit,1,2 Hoda ElKafas,1,2 Nahed Ismail,2 Ayman Al-Hendy,2,1 Qiwei Yang,1 University of Illinois at Chicago, Chicago, IL, United States; An'An Shaams University, Cairo, Egypt; National Organization for Drug Control and Research, Cairo, Egypt.

F-068 Maternal Food Restriction Programs Neonatal Cerebrovascular, Neurobehavioral and Glucocorticoid Responses to Mild Hypoxic-Ischemic Injury
Naomi Franzén,1 Lara M Durrant, Coleen Doan, Alejandro Beltrán,1 William J. Pearse,1 Loma Linda University, Loma Linda, CA, United States.

F-069 Maternal Obesity is Associated with DNA Methylation Signatures in the Blood of Newborn Infants: Focus on Imprinted Genes.
Iva Sasašić,1,2 Kellie E. Murphy,1,2 Patrick O McGowran,1 Stephen G Mathews,1,2 University of Toronto, Toronto, ON, Canada; Lunenfeld-Tanenbaum Research Institute, Toronto, ON, Canada; University of California San Francisco, San Francisco, CA, United States.

F-070 Chronic Maternal Western Style Diet Exposure Triggers Hypoxemia and Liver Fibrosis in the Fetus that Persists Postnatally in Non-human Primates
Michael Nash,1,2 Evgenia Dobrinshak,1,2 Tyler Dean,1 Dana Takahashi,1,2 Paul Kevit,1 Jedd Friedman,1 Stephanie Wesolowski,1,2 University of Colorado Anschutz Medical Campus, Aurora, CO, United States; Oregon National Primate Research Center, Beaverton, OR, United States; University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States.

Nicole Kurats,1,2 Paula Bennyt,1,2 Corina Lesseurt,1,2 Corine Miller,1,2 Melanie Maykott,1,2 Jonathan Riekt,1,2 Kelly Yamasaot,1 Dena Towner,1 Carmen Marsit,1 Jia Chen,1 Men-Jean Lee,1 University of Hawaii John A. Burns School of Medicine, Honolulu, HI, United States; Icahn School of Medicine at Mount Sinai, New York, NY, United States; Emory University, Atlanta, GA, United States.

F-072 Benefits of Maternal Resveratrol (Res) Intervention on Adipose Tissue (AT) Hypertrophy Programmed by Maternal Obesity (MO) in Male Offspring (F1).
Alejandra Hernandez-Rojas,1 Carlos A Ibarra-Chavez,1 Consuelo Lomas-Sotelo,1,2 Luis A Reyes-Castrod,1,2 Ginma Juarez-Pilarst,1,2 Noeizmi Itaist,1,2 Peter W Nathaniel,1,2 Paul D Taylor,1,2 Elena Zambrano,1 Instituto Nacional de Ciencias Medicas y Nutricion S. Z. Mexico, Mexico; CONACyT, Mexico City, Mexico; Division of Women & Children’s Health, King’s College London, London, United Kingdom; University of Wyoming, Laramie, WY, United States.
F-073  Cell Fate Gene Expression is Initiated in Palmitic Acid-treated Mouse Preimplantation Embryos
Michèle D. Calvert, 1* Maisoon D. Yousif, Robert Chent, Zuleika C.I. Leung, 2* Shuyu Cui, Samira Adust, Dean H. Betts, 3* Andrew J. Watson. 4 Western University, London, ON, Canada.

F-074  Maturation Differences in the Cerebral Vein of Galen from Offspring of Normal Pregnant and Experimental Preeclampsia Dams
Lindsey Devilot, 1* Miller Jui-Sunt, Whitaker Emmett, Marilyn Jo Cipolla. 1 University of Vermont, Burlington, VT, United States.


F-076  Sex Dependent Decreased Carnitine Palmitoyl Transferase-1 (CPT1) and Altered Profiling of Acyl carnitine (AC) Are in Programmed in Hepatic Lipogenesis in Offspring (F1) of Obese Rats (MHO 110 days) Age.
Chao Qint, 1* Consuelo Lomas Soront. 2 Guadalupé L. Rodríguez Gonzale. 3 Elena Zambrano. 4 Peter W Nathaniel. 5 Xinian Han. 1* UT Health San Antonio, San Antonio, TX, United States; 2Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico; 3University of Wisconsin, Laramie, WY, United States.

F-077  Early Childhood Growth After Term NICU Admission by Admission Diagnosis Joan Krickellars, 1* Sadia F Chowdhury, 1* Adwoa Nantwir, 1* Sylvia Dyugski, 1* Hannah Bromberg, 1* Rachit Shah, 1* Michael Joyce, 1* Mehrin Jan, 1* Serena Chen, 1* Christine Chen, 1* Jillamka Pongaschaj, 1* Jennifer S Fung, 1* Joan Krickellars, 1* Hannah Bromberg, 1* Adwoa Nantwir, 1* Sylvia Dyugski, 1* Beata Dyuguskia, 1* Carolyn Saltilla, 1* 1Plancetrical Analysics, New Rochelle, NY, United States; 2NYPBMH, Brooklyn, NY, United States; 3Institute for Basic Research, Staten Island, NY, United States; 4CUNY Hunter College, New York, NY, United States; 5New York University College of Global Public Health, New York, NY, United States.

F-078  Specific Changes in 3rd Trimester Maternal Fatty Acids Correlate With Maternal % Body Fat, Cortisolines, and Neonatal Adiposity. Stephanie Pintos, 1* David Fields. 2 Martin-Paul Agbaga. 3 Raviudha Guanatilake. 4 Jacob Friedman. 5 Dean Myers. 6 1* Univ. of Oklahoma HSC, OKC, OK, United States; 2D. McGuire Eye Inst., OKC, OK, United States; 3Valley Perinatal, Phoenix, AZ, United States.

F-079  Female Mice over-nourished before Weaning Have Increased Insulin Levels but not Increased Beta Cell numbers at Two Years of Age
Kathleen Pennington, 1* Simone Hernandez Ruano, 1* Ryan Flessmann, 1* Chandra Yallampalli. 1* Baylor College of Medicine, Houston, TX, United States; 2USDA/ARS Children’s Nutrition Research Center, Houston, TX, United States.

F-080  Placental Histology of Acute and Chronic Inflammation in a Population Based Case Control Study of Autism Jillamka Pongaschaj, 1* Mehrin Jan, 1* Joan Krickellars. 1 Sadia F Chowdhury, 1* Adwoa Nantwir, 1* Sylvia Dyugski, 1* Hannah Bromberg, 1* Rachit Shah, 1* Michael Joyce, 1* Jennifer S Fung, 1* Serena Chen, 1* Beata Dyuguskia, 1* Christine Chen, 1* Carolyn Saltilla, 1* 1Plancetrical Analysics, New Rochelle, NY, United States; 2NYPBMH, Brooklyn, NY, United States; 3CUNY Hunter College, New York, NY, United States; 4NYU CGPH, New York, NY, United States; 5Institute of Basic Research, Staten Island, NY, United States; 6NYU CGPH, New York, NY, United States.

F-081  Does Placental Acute or Chronic Inflammation Impact Placental Efficiency in Term Newborns in a Low Risk Community Setting?
Sadia F Chowdhury, 1* Rachit Shah, 1* Michael Joyce, 1* Mehrin Jan, 1* Serena Chen, 1* Christine Chen, 1* Jillamka Pongaschaj, 1* Jennifer S Fung, 1* Joan Krickellars, 1* Hannah Bromberg, 1* Adwoa Nantwir, 1* Sylvia Dyugski, 1* Beata Dyuguskia, 1* Carolyn Saltilla, 1* 1Plancetrical Analysics, New Rochelle, NY, United States; 2NYPBMH, Brooklyn, NY, United States; 3Institute for Basic Research, Staten Island, NY, United States; 4NYU CGPH, New York, NY, United States.

FETUS

F-082  Lower Energy Intermediates in Skeletal Muscle From Late Gestation IUGR Fetal Sheep
Jane Stremin. 1 Michael Armstrong, Nichole Reislorph, Patricia G. Foy. 2 Laura Brown. 3 University of Colorado, Aurora, CO, United States.

F-083  The Impact of Maternal Diabetes on Fetal-Placental Size at Birth and Umbilical Cord Oxygen Values
Shanly Choit. 1 Barbra de Vrijer. 1* Harry Brown. 2 Larry Still. 1* Bryan Hl Regnault. 3 Ryan S. Richardson. 1* Western University, London, ON, Canada; 2University of Toronto, London, ON, Canada.

F-084  Thyroid Hormone Dominates IGF1 Expression and Actions in Fetal Cardiomyocytes
Natasha N. Chatperwong. 1* Samantha Lousey. 1* Sonnet Jonker. 1* George Giraud. 2* Kent L Thornburg. 3* Oregon Health and Science University, Portland, OR, United States; 4Portland VA Medical Center, Portland, OR, United States.

F-085  Optimizing Trophoblast Retrieval and Isolation From the Cervix to Study Genetic Birth Defects.
Souda Boussada, Angelique Kooper, Merel van Maarle, Gis Alink, Eva Pajkrt, Esther Worteboer, Marie van Dijk. 1* Amsterdam University Medical Centers, Amsterdam, Netherlands.

F-086  A Therapy to Prevent Neurodevelopmental Disabilities: Protection of Brain Cells by Sulforaphane Zeenal Ladak. 1* Elizabeth Garcia, Edward Armstrong, Jenny Yoon, Sujata Pennad, Jerome Yaggin. 1* University of Alberta, Edmonton, AB, Canada.

F-087  Universal Third Trimester Ultrasonic Screening Using Fetal Macrosomia in the Prediction of Adverse Perinatal Outcome, a Systematic Review and Meta-analysis of Diagnostic Test Accuracy
Alexandroes A. Moragas. 1* Norman Shriever. 1* Ulla Sovio. 2* Brocklehurst Peter. 3* Haezeit EP Alexander. 4* Thornton G Jim. 5* Stephen C. Robson. 6* Arts Papageorgiou. 7* Gordon CS Smith. 1* 1University of Cambridge, Cambridge, United Kingdom; 2University of Birmingham, Birmingham, United Kingdom; 3University of Manchester, Manchester, United Kingdom; 4University of Nottingham, Nottingham, United Kingdom; 5University of Newcastle, Newcastle, United Kingdom; 6University of Oxford, Oxford, United Kingdom.

SOCIETY FOR REPRODUCTIVE INVESTIGATION - 67th Annual Scientific Meeting
F-088 Metformin Suppresses Glucose Production and Induces Transcriptional Responses in Metabolic and Stress Pathways in Fetal Hepatocytes
Amanda Jones, Michael Nash, Dong Wang, Paul Rozance, Laura Brown, Stephanie Wescoat*, University of Colorado Anschutz Medical Campus, Aurora, CO, United States.

F-089 Late Gestation Maternal Undernutrition Increases Cardiac Function and Combined Ventricular Output Measured by Cardiac MRI (CMR)
Steven KS Choi1, Jack RT Darby1, Bahramdeh S Samii2, Mitchell C Lock1, Stacey L Holman1, Sunthara R Perumal1, Christopher K Macgowan1, Mike Seed1, Janna L Morrison2, 1University of Toronto, Toronto, ON, Canada; 2University of South Australia, Adelaide, Australia; 3South Australian Health & Medical Research Institute, Adelaide, Australia.

F-090 First Trimester Preeclampsia and Aneuploidy Serum Markers in Twin Pregnancy
Mark J. Evans1, David A. Krantz2, Terry Hallahan3, Hisao-Pin Liu4, 1Fetal Medicine Foundation of America & Mt. Sinai School of Medicine, New York, NY, United States; 2Jefferson Medical College, Philadelphia, PA, United States; 3Gold Coast Health and Medical Research Institute, Gold Coast, Australia; 4University College London Institute for Women’s Health, London, United Kingdom.

F-091 High Altitude Fetal Genetics and the Influence on Birthweight
Sara L. Hillman1, Sushil Bhandari2, Padma Dolma1, Mitul Mukerji2, Bhavana Prasher2, Hugh Montgomery1, Ankhet Bhattacharyya1,Qiangyao Cavallari1, 1Univ. College London Institute for Women’s Health, London, London, United Kingdom; 2Royal College of Surgeons in Ireland, Dublin, Ireland; 3Sanam Norooz Memorial Hospital, Leh, Ladakh, India; 4Institute for Genomics and Integrative Biology, Delhi, India; 5Univ. College London Institute for Human Health, London, United Kingdom; 6Institute of Human Genetics, Ontario, Canada.

F-092 Vaginal Delivery is Feasible and Safe in Giant Omphaloceles
Nicole R. Gauthier1, Amanda C. Mahle1, Eric B. Jelink, Clark T. Johnson1, Angie C. Jelink1, The Johns Hopkins Hospital, Baltimore, MD, United States.

F-093 Small for Gestational Age Outcomes Stratified by Identification Within a Week of Delivery
Hadas Liart1, Sheba Tel Hashomer, Moshav Hadid, Israel.

F-094 Changes of Middle Cerebral Artery (MCA) Flow During Decelerations in Early Onset Growth Restricted Fetuses. Pedro S. Angold1, Claudio Schonenberg1, Patricia Goedecke1, Mari Giancarlo1. UTHSC, Memphis, TN, United States.

F-095 Exposure to Nicotine in Pregnancy Does Not Cause Elevations in Maternal or Fetal Testosterone Levels in Humans at Birth
Sathana S. Gordon1, David N. Dharnay1, Ganga Devaiash, Donna S. Lambers, TriHealth, Cincinnati, OH, United States.

F-096 Does Inpatient Management of Early Onset IUlgR Affect Risk of Stillbirth?
Pedro Angold1, Jennifer Bart1, Claudio Schonenberg1, Patricia Goedecke1, Mari Giancarlo1. UTHSC, Memphis, TN, United States; 2UTHSC, Memphis, TN, United States.

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F-097 Survivin-Sodium Iodide Symporter Reporter as a Non-Invasive Diagnostic Marker to Differentiate Between Uterine Leiomyosarcoma versus Leiomyoma
Natalia Garciag, Mohamed Atf, Mara Ulit, Maarten Bostand2, Liachai Chen2, Al-Hendy Ayman3, University of Illinois at Chicago, Chicago, IL, United States.

F-098 The Role of the TRPV2 Ion Channel in Endometrial Carcinoma

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MATERIAL HEALTH

F-099 Isolating Cause on Future Cardiovascular Risk in Mothers with Complicated Pregnancy
K. J. Bridget1, Y. Niu1, T. A. Gaurd1, L. Zhang, Q. Lyut1, W. Tong2, S. G. Ford, D. A. Giussani3, University of Cambridge, Cambridge, United Kingdom.

F-100 Impact of Probiotic Intake on Obese Rat Mothers in the Maternal and Offspring Metabolism and Gut Microbiota
Diana C. Castro-Rodriguez1, Berenice Palacios2, Gonzalez2, Gimena Juarez2, Lucio Cano-Cano3, Peter W. Nathanielsza, Jorge Yehlez4, Etana Zambrano1, 1Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico; 2CONACYT-Cátedras, Mexico City, Mexico; 3Facultad de Medicina UNAM-IMIEMEN, Mexico City, Mexico; 4University of Wisconsin, Laramie, WY, United States; 5Instituto Politécnico Nacional, Mexico City, Mexico.

F-101 Maternal Age, but not IGFI Availability, Affects the Recovery of the Maternal Skeleton After Lactation in Mice.
Monsha D. R. Govorkw1, Untel N.V. Penat1, Julian K. Chinnosrai1, Simon Fraser University, Burnaby, BC, Canada.

F-102 The Periconceptional Maternal Renin-Angiotensin-Aldosterone System in Association with Embryonic and Fetal Growth Trajectories and Birth Outcomes.
Damad Aouda Fares1, Rosalieke Wiegelt1, Jan A.H. Danser2,3, Sten P. Willemens1, Régine P.M. Steegers-Theunissen1,4, Eric A.P. Steegers1, Erasmus Medical Center, Rotterdam, Netherlands.

F-103 Periconception Tehemore Length as a Novel Maternal Biomarker to Assess the Risk of Congenital Heart Defects in the Offspring
Damad Aouda Fares1, Rosalieke Wiegelt1, Alex J. Eggen1, Boye B.J. Meurs van1, Régine P.M. Steegers-Theunissen1, Erasmus Medical Center, Rotterdam, Netherlands.

F-104 Abstract Withdrawn

F-105 Hypertensive Disease in Pregnancy- Is it All in the Head?

F-106 Placental Growth Factor (PIGF) Vasodilates Mesenteric Veins from Pregnant Rats by Nitric Oxide and Endothelial Derived Hyperpolarizing Factor (EDHF).
Maurizio Mandala1, Nga Lin Kit, George Oost2, 1University of California, Cozenza, Italy; 2The University of Vermont, Burlington, VT, United States.
F-116   Fetal Metabolic Dysregulations in Response to Maternal Disease: Considerations During the Delivery Admission


F-118   Characterization of Placental DNA Methylation Across Early Human Gestation

Qianhui Wang*, James Brennan*, Shailem Y.L. Leeman, Stephen M. Pederson, Tanja Jankovic-Karasoulos, Dale C. McKinney, Dyla McCullough, Melanie S. Smith, K Justinian Bogias, Claire T. Roberts, Tina Bianco-Miotto, Adelaide Medical School, Adelaide, Australia; Robinson Research Institute, Adelaide, Australia; Bioinformatics Hub, Adelaide, Australia; South Australian Health & Medical Research Institute (SAHMRI), Adelaide, Australia; School of Agriculture, food and Wine, Adelaide, Australia.

F-119   O-GlicNAc Transferase (OGT) and Tryptophan Hydroxylase (TPH) are Highly Expressed in the Human Placenta Across Gestation with Lower OGT Expression in Male Fetuses.

Amy Kohly*, Anita Kramer, Lana Madi, Kathryn Erickson, Theresa Powell, Thomas Jansson.

F-120   Mice Lacking TRPV2 Adopt Compensatory Mechanism to Comply with Fetal Needs.

Kaiten De Clercq*, Jorge Lopez-Telo*, Yuki Kato, Keisuke Nakano, Kiyoe Tanno, Dallas, United States.

F-121   Placental Vulnerabilities to Diesel Particulate Matter Exposure: Trophoblast Accumulation and Pathological Effects

E D Johnstone, N Ahmad, N Yami, L Hammer, J Naylor, S Greenwood, C Jones, G Margison, A Heasell, APoor, University of Manchester, United Kingdom.

F-122   Endothelial Jagged1 Regulates Decidual Angiogenesis in Early Mouse Pregnancy

Nicole M. Marchetti, Saima Begum*, Valerie O’Bessot, Hill Yin, Tracy Wu, Carrie J. Shawber, 1Ewha Womans University, Medical School, Seoul, Korea, Republic of; 2University of Adelaide Bioinformatics Hub, Adelaide, Australia; 4South Australian Health & Medical Research Institute, Adelaide, Australia.

F-123   Placental Neurotransmitter Transporters and High Pathways of the Placenta During Early Pregnancy.

Nicole M. Marchetti, Saima Begum*, Valerie O’Bessot, Hill Yin, Tracy Wu, Carrie J. Shawber, Nataki C. Douglas*, Rutgers Biomedical & Health Sciences, Newark, NJ, United States; 2University of Adelaide, Adelaide, Australia; 3University of Adelaide, Adelaide, Australia.

F-124   Defining Co-expression Patterns and Molecular Pathways of the Placenta During Early Pregnancy.

James Brennan*, Melanie Smith, Dale McKinney, Tanja Jankovic-Karasoulos, Dylan McCullough, Stephen M. Pederson, Konstantinos J Bogias, Quanhu Wang, Tina Bianco-Miotto, Claire Roberts, South Australian Health & Medical Research Institute, Adelaide, Australia; Research Institute, Adelaide, Australia; University of Adelaide Bioinformatics Hub, Adelaide, Australia; University of Adelaide, Adelaide, Australia.

F-125   Fibronectin-Integrin Interactions Regulate Placental Endothelial Cell Complex Formation and Migration in Second Trimester Gestation

Diane I. Gumin*, Kathryn Kippatrick, Shuhan Ji, Emily J Su*, University of Colorado Anschutz Medical Campus, Aurora, CO, United States.
**F-126** Placental H-Scan Sonography Demonstrates Potential for Disease State Discrimination
Stefanie J. Hollenbach,1 Jiyhe Baek,1 Lorelei L. Thornburg,1 Helen Feltovich,1 Richard K. Miller,1 Kevin Parker,1 Stephen McNeeley,1 University of Rochester, Rochester, NY, United States; 2University of Wisconsin-Madison, Madison, NY, United States.

**F-127** Profiling Environmental Chemicals for Placental Toxicity Utilizing Primary Human Cytotrophoblasts

**F-128** Fostering Tolerance? GM-CSF Producing ILC3 as Players of the Immune Crosstalk in the Uterine Environment.
Hanaey Khazrani, Damiaan Muzzio, Rebekka Einenkel,1 Kristin Hartmann,1 Theresa Meier,1 Jens Ehrhardt,1 Marek Zygmunt. Greifswald University, Greifswald, Germany.

**F-129** Viral Infection During Mouse Pregnancy Impacts Placental ABC Transporters and Results in Behavioral Dysfunction in Adult Offspring
Victoria Regina S. Monteiro,1 Hanally R. Gomes,1 Chery B. V Andrade,1 Guilherme E Do Imperio,1 Enrico Boiie,1 Stephen G. Matthews,2 Pedro M. Pimentel-Coelho,2 Tania M ortiga-Carvalhão,3 Federal University of Rio de Janeiro, Rio de Janeiro, Brazil; 4University of Toronto, Toronto, ON, Canada; 5Federal University of Minas Gerais, Belo Horizonte, Brazil.

**F-130** A Meta-analysis of Transcriptomic Datasets to Identify Consistent Placental Biomarkers of Preterm Birth
Nasim Sobh,1 Chinnomnok Okoereti,1 Hao Chent,1 Nida Ozairet,2 Leticia Marczek-Magana,1 Stephanie Gax,1 Joshua Robinson1. University of California San Francisco, San Francisco, CA, United States; 2San Francisco State University, San Francisco, CA, United States; 3Marmara University School of Medicine, Istanbul, Turkey.

**F-131** Metformin Impacts Syncytiotrophoblast Mitochondrial Function in a Sexually Dimorphic Manner.
Jessica F. Heber,1 Leslie Myatt1. Oregon Health & Science University, Portland, OR, United States.

**F-132** Hyoxia Activates Notch Signaling to Promote HTR-8/SVneo Trophoblast Cell Migration
Barry E. Perritt,1 Markus El-Far,1 Carrie J Shawber,2 Douglas C. Nataki,1 Rutgers-NJMS, Newark, NJ, United States; 2Columbia University, New York, NY, United States.

**F-133** Exogenous IL-1β Induced Intrinsic Production of Tnfα in the Placenta
Anna Chudnovets,1 Jun Leit, Quan Nat, Jin Liut, Irina Burdt, Johns Hopkins University School of Medicine, Baltimore, MD, United States.

**F-134** Latent Tuberculosis Increases Placental Pro-inflammatory Profile in Women with HIV
Anna Chudnovets,1 Jun Leit, Quan Nat,1 Malika Alexander,1,2 Rashmi Bhoasale,1 Vandana Kulkarni,1 Anila Gupta,1,4,1 Jyoti S. Mathad,1 Irina Burdt,1 Johns Hopkins University School of Medicine, Baltimore, MD, United States; 2Byearme Jeejeebhoy Government Medical College Clinical Research Site (BJMCS), Pune, India; 3Byearme Jeejeebhoy Government Medical College Clinical Research Site (BJMCS), Pune, India; 4Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States; 5BJMC-Johns Hopkins University Clinical Health Site, Pune, India; 6Well Cornell Medical College, Center for Global Health, New York, NY, United States.

**F-135** How Do Maternal BMI and Fetal Membrane Inflammation Influence Infant Outcomes at Birth?
Eleanor Duffeary,1 Marina Whitel,1 David Grynsvam,1 Shannon Bainbridge,1 Kristin Connorn,1 CarletonU, Ottawa, ON, Canada; 2Children’s Hospital of Eastern Ontario, Ottawa, ON, Canada; 3Ottawa, Ottawa, ON, Canada.

**F-136** Mapping Enhancer - Transcription Factor Interactions in Human Placenta Development and Trophoblast Differentiation
David Owen, Xuan Huang, Anusha Nagari, Tulip Nandu, Lee Kraus, UT Southwestern Medical Center, Dallas, TX, United States.

**F-137** Dysregulation of HIF1α Impairs Placental Angiogenesis by Heme Oxygenase-1-Derived Pregnancies
Hui Zhao, Purmina Narasimhan,1 Flora Kalish, Virginia D Winn, Ronald J Wong, David K. Stevenson. Stanford University School of Medicine, Stanford, CA, United States.

**F-138** 35 Genes Expressed During Human Heart Development Are Co-expressed in First Trimester Placenta
Jennifer Courtney,1 Victor Yuan,2 James Coota,3 Helen Jones4. 1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, United States; 2BC Children’s Hospital Research Institute, Vancouver, BC, Canada.

**F-139** Human Fetoplacental Endothelial Cells Exhibit Sexually Dimorphic IFG2 Expression but Similar Angiogenic Potential
Kathryn Klipatric,1 Megan Kieley,1 Diane Gumina,1 Shuhan Ji,1 Emily J Su. University of Colorado Anschutz Medical Campus, Aurora, CO, United States.

**F-140** Phospholipid Composition in Placental Regions of Normal Pregnancy
Caetlin MacGregor,1 Linda M Ernst,1 Thomas Victor,2 Dharmansri Sugarsri,3 Alice Wynerz,2 PN Venkataseswaran,1 Roland Gasfile,1 Alexandra Choi,1 Papasani Subbaiah,1 Beth Pankett,1 Northshore University HealthSystem, Evanston, IL, United States; 2University of Illinois at Chicago, Chicago, IL, United States.

**F-141** AR-45 is a Novel Placental Androgen Receptor Variant That Regulates Growth and Angiogenic Pathways
Ashley Meakirt,1 Zanfa Safi,2 Tamas Zakar,3 Vicki Clifton4. 1Mater Medical Research Institute - University of Queensland, Brisbane, Australia; 2Hunter Medical Research Institute-University of Newcastle, Newcastle, Australia.

**F-142** AR-45 is a Novel Placental Androgen Receptor Variants That Regulates Growth and Angiogenic Pathways
Ashley Meakirt,1 Zanfa Safi,2 Tamas Zakar,3 Vicki Clifton4. 1Mater Medical Research Institute - University of Queensland, Brisbane, Australia; 2Hunter Medical Research Institute-University of Newcastle, Newcastle, Australia.

**F-143** Longitudinal Magnetic Resonance Imaging of Human Placental Immune Cell Infiltration
Zhevan Surt,1 Xiao Mat,1 Wenwu Qi,1 Wenjie Wu,2 Zufia Kisreva-Ware,1 Hui Wangt,1 Yong Wangt,1 Washington University in St. Louis, SAINT LOUIS, MO, United States; 2Washington University School of Medicine, Saint Louis, MO, United States; 3Washington University School of Medicine, SAINT LOUIS, MO, United States.

**F-144** Plasma From Obese Gravidas Delays Migrations Rates of HTTR/SVneo Placental Cells in Vitro
Corrie Milt,1 Nicole Kurat,1 Melanie Maykin1, Paula Bennet,1 Jonathan Riet,1 Johann Urschitz,1 Lena Toieter,1 Men-Jan Lee2,1 University of Hawaii, Honolulu, HI, United States.
F-144 Direct Induction of Trophoblast Stem Cells from Human Fibroblasts

Morikoh Naona Shacham\textsuperscript{a},\textsuperscript{b}, Valery Zayat\textsuperscript{c}, Shulamin Sebbani\textsuperscript{a}, Ahmed Radwan\textsuperscript{a}, Rachid Lasry\textsuperscript{a}, Ofra Sabagi\textsuperscript{a}, Silvina Epsteyn-Litman\textsuperscript{d}, Michel Novoselovsky Persky\textsuperscript{a}, Knel Makedonski\textsuperscript{e}, Dana Orzech\textsuperscript{f}, Noy Dery\textsuperscript{f}, Debra Goldman-WohI\textsuperscript{f}, Howard Cedar\textsuperscript{f}, Simcha Yogel\textsuperscript{a}, Rachel Eiges\textsuperscript{a}, Yosef Buganim\textsuperscript{a}.\textsuperscript{f} \textsuperscript{a}The Institute for Medical Research Israel-Canada, The Hebrew University-Hadassah Medical School, Jerusalem, Israel; \textsuperscript{b}Mossakowski Medical Research Centre, Warsaw, Poland; \textsuperscript{c}Medical Genetics Institute, Shaare Zedek Medical Center, Jerusalem, Israel; \textsuperscript{d}The Hebrew University School of Medicine, Jerusalem, Israel; \textsuperscript{e}The Magda and Richard Hoffman Laboratory of Human Placental Research, Hadassah-Hebrew University Medical Center, Jerusalem, Israel.

F-146 Transcriptional Analysis Of Bone Morphogenetic Protein (BMP2) Signaling In Human Placental Trophoblast Development

Xuyin Yi\textsuperscript{a}, Hua Zhu, Christian Klausen, Hsun-Ming Chang, Amy M. Inkster, Wendy P. Robinson, Peter C. K. Leung\textsuperscript{a}. \textsuperscript{a}BC Children's Hospital Research Institute, University of British Columbia, Vancouver, BC, Canada.

F-147 IL2C Produced IL-22 as Modulator of Angiogenesis in Early Pregnancy.

Teresa Meiner\textsuperscript{a}, Danil Muzio, Rebekka Einenk\textsuperscript{a}, Kristin Hartmann\textsuperscript{a}, Meike Hofert\textsuperscript{a}, Jens Ehrthardt, Marek Zygmunt\textsuperscript{a}. University Medicine Greifswald, Greifswald, Germany.

F-148 Placental Handling of Excess Nitric Oxide During Maternal Inflammation

George Tinjumenda Mukangwa\textsuperscript{a}, Tatiana C Clark\textsuperscript{a},\textsuperscript{b}, Steven M Yeoll\textsuperscript{a},\textsuperscript{c}, Maria Parast\textsuperscript{a},\textsuperscript{d}, Arlin B Blood\textsuperscript{a},\textsuperscript{e}, Giovanni L B Landoni\textsuperscript{a}, Loma Linda University, Loma Linda, CA, United States; \textsuperscript{b}University of California San Diego, San Diego, CA, United States; \textsuperscript{c}University of California San Diego, La Jolla, CA, United States.

F-149 Placental Fibroblast Growth Factor 21 and Maternal Obesity

Rachel K. Harrison\textsuperscript{a}, Katherine Allen\textsuperscript{a}, Aaron Naatz, John Corbett\textsuperscript{a}, Meredith Cruz\textsuperscript{a}. Medical College of Wisconsin, Milwaukee, WI, United States.

F-150 Chronic Intervillositis Series with 2 Cases of Recurrence: Successful Rescue Treatment.

Kateri Laveau\textsuperscript{a}, Dorothee Dal Soglio, Michele David, Evelyne Rey\textsuperscript{a}. Line Leduc\textsuperscript{a}. CHU Ste-Justine, Montréal, QC, Canada.

F-151 Maternal Characteristics Do Not Influence the Quantity of Critically Short Telomeres in Term human Placenta

Paula Edelsdottir\textsuperscript{a}, Kaylyn James\textsuperscript{a}, Michel Salmer\textsuperscript{a}, Jasmine Lee\textsuperscript{d}, David Cantownwine\textsuperscript{e}, Kathryn Gray\textsuperscript{e}, Thomas McElrath\textsuperscript{e}, Mark Philipp\textsuperscript{e}. Massachusetts General Hospital, Boston, MA, United States; \textsuperscript{b}Brigham and Women’s Hospital, Boston, MA, United States.

F-152 First-trimester Placental Growth Trajectories are Associated with Embryonic and Fetal Growth Trajectories and Birth Outcome

Igna F. Reindert\textsuperscript{a}, Annemarie GMGJ Mulders\textsuperscript{b}, M (Wendy) PH Koster\textsuperscript{a}, Anneliekke TM Kropman\textsuperscript{a}, Sten P Willemsen\textsuperscript{a}, Anton HJ Koning\textsuperscript{a}, Eric AP Steegers\textsuperscript{e}, Régine PM Steegers-Theunissen\textsuperscript{a}. Erasmus MC University Medical Center, Rotterdam, Netherlands.

F-153 Effect of Fluoxetine (Prozac), on Expression of Biomarkers for Inflammation and Neurodevelopment by the Placenta

Yuko Aita, Cara Cremetielli, Sarah Ahmed, Deboduth Pillai, Morgan-Pellier\textsuperscript{a}, NYU Long Island School of Medicine, Mineola, NY, United States.

F-154 Role of Decorin Induced Placental miRNAs in Trophoblast Function.

Chidambra Dhanwani Hollier\textsuperscript{a}, Pinki Nandi, Peeyush K Lal\textsuperscript{a}. University of Western Ontario, London, ON, Canada.

F-155 Chaperon Mediated Autophagy in Placentas of Obese Women: A Pilot Study

Chiara Mando, Cristina Martelli, Gaia Maria Anei\textsuperscript{b}, Daniela Salvador\textsuperscript{a}, Chiara Novelli, Fabrizia Liss\textsuperscript{a}, Anna Sera\textsuperscript{b}, Irene Celin, Luisa Ottobrini. Università degli Studi di Milano, Milan, Italy.

F-156 Regional Variations in Placental Protein Expression of Matrix Metalloproteinases-9 (MMP-9) in Term Uncomplicated Pregnancy

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PREECLAMPSIA, RELATED DISORDERS

F-157 Multiple Kinases Mediate TNFα-Induced Endothelial Damage in Uterine Artery Endothelial Monolayers; Could Complexity = Opportunity?

Rachel L Dahtli, Luca Clemente\textsuperscript{a}, Amanda C Ampey\textsuperscript{a}, Jason A Austin\textsuperscript{a}, Ian M Bird\textsuperscript{a}. University of Wisconsin, Madison, WI, United States.

F-158 L-Citrulline Supplementation During Pregnancy Improves Maternal Vascular Dysfunction in a Preeclampsia-like Mouse Model

Mary Gemmell\textsuperscript{a}, Elizabeth Sullivan\textsuperscript{a}, Marcia Gallagher\textsuperscript{a}, Robert W. Powers\textsuperscript{a},\textsuperscript{b}. University of Pittsburgh, Pittsburgh, PA, United States; \textsuperscript{b}Woman's Hospital, Baton Rouge, LA, United States.

F-159 Increased Arterial Stiffness in Maternal Obesity, Preeclampsia and IUGR

Genevieve Eastabrook\textsuperscript{a}, Erin Murray\textsuperscript{a}, Michael Miller\textsuperscript{a}, Samuel Siu\textsuperscript{a}, Barbara de Vrijer\textsuperscript{a}. University of Western Ontario, London, ON, Canada; \textsuperscript{a}University of Ottawa, Ottawa, ON, Canada.

F-160 ER Stress Contributes to Gestational hypoxia-induced Suppression of Ca2+ Sparks/STOCs and Enhanced Myogenic Tone in Uterine Arteries

Xiao-Dun Gu, Rui Song, Monica Romero, Sean Wilson, Lubo Zhang\textsuperscript{a}. Loma Linda University, Loma Linda, CA, United States.

F-161 Black and White Women in the United States Military Have Comparable Rates of Preeclampsia and Post- preeclamptic Cardiovascular Disease

Andrea I. Loewendorf\textsuperscript{a}, Emily A Stone\textsuperscript{a}, Lee Ann Zeraba\textsuperscript{a}, Thomas Mu\textsuperscript{a}, Amelia Duran-Stanton\textsuperscript{a}. \textsuperscript{a}ImmunoVation, Pasadena, CA, United States; \textsuperscript{b}Defense Health Agency, San Antonio, TX, United States; \textsuperscript{c}Brooke Army Medical Center, San Antonio, TX, United States; \textsuperscript{d}Schnell. Ready and Resilient Integration Branch/Deputy Surgeon, Houston, TX, United States.

F-162 DNA Methylation Profiling of Preeclampsia Across the Three Trimesters of Pregnancy

Mandy J Schmitz-Hayn\textsuperscript{a}, Haoyi Yu, Yvette P Conley, Daniel E Weeks\textsuperscript{a}. University of Pittsburgh, Pittsburgh, PA, United States.
F-163 Decidual Lymphatic Endothelial Cells in Preeclampsia Promotes Type 1 Macrophage Polarization
Yun Ji Jung1, Yejin Park1, Ja-Young Kwon2, Ha Yan Kwon1, Yong Sung Maenp3, Yoonse University College of Medicine, Seoul, Korea, Republic of; 1Institute of Women’s Medical Life Science, Placenta-derived Stem Cell Genomic Research Lab, Seoul, Korea, Republic of.

F-164 A Novel Laser Microdissection Approach for Proteomic Analysis of the Placental Syncytium in Severe Preeclampsia at Term
Nasim C Sobhani1, Matthew Gormley, M. Yvonne Kim, Peng-yuan Liu, Joshua F Robinson, Stephanie L Gaw, Susan J Fisher1, University of California San Francisco, San Francisco, CA, United States.

F-165 Perinatal L-Citrulline Supplementation Improves Maternal Vascular Dysfunction in a High-Risk Preeclampsia-like Mouse Model
Mary Gemmet, Elizabeth Sutton, Marcia Gallagher, Robert W. Powers*. University of Pittsburgh, Pittsburgh, PA, United States.

F-166 Increased Aspirin-Triggered Lipoxin A4 in Pregnancies Complicated by Preeclampsia
Veronica M Gonzalez-Brown1, Manwan Ma, Yehe Zhang, Douglass A Kinos1, Cara M Rood2. The Osho Clinic, College of Medicine, Columbus, OH, United States.

F-167 Aspirin Protects Against TNFα-induced Oxidative Stress in Trophoblast via Promoting PI3K/AKT/Nrf2 Signaling Pathway.
Kaimin Guo, Xiaoyan Sia, Huishu Liu*. Guangzhou Women & Children’s Medical Center, Guangzhou, China.

F-168 T Cell Subsets and Immune Regulatory Molecules in Preeclampsia
Natasha Scarpaci1, Maria Doranah Salazar Garcia2, Svetha Dambeva1, Kenneth Beaman2, Alice Gilman-Sachs2, Joanne Kwak-Kim3. 1Reproductive Medicine and Immunology & Chicago Medical School, Vernon Hills, IL, United States; 2Mount Sinai Hospital, Chicago, IL, United States; 3Rosalind Franklin University of Medicine and Science, North Chicago, IL, United States.

F-169 Placental Mitochondrial Abnormalities Upon Hypoxia: The Cause of Placental Oxidative Stress?

F-170 Circulating Microparticle Proteins Obtained at 12 Weeks Describe Clusters of Clinically Demonstrable Severe Preeclampsia Phenotypes
Thomas Frederick McEvath1, David Cantone1, Robert Doss1, Brian Broman1, David Sarracino1, Kevin Rosenblatt1, 1Brigham & Women’s Hospital, Boston, MA, United States; 2NovPrenatal, Boston, KY, United States; 3NovPrenatal, Louisville, KY, United States; 4Thermo Fisher Scientific, Cambridge, MA, United States.

F-171 Downregulation of Cry During Pregnancy Induces Complement Activation on Placenta and Increases Blood Pressure
Manu Banakrakoo1, Meena Balakirshnan, Kathleen Pennington, Chandrasekar Yallampalli. Baylor College of Medicine, Houston, TX, United States.

F-172 Validation of fFT/PIGF Ratio to Rule Out Preeclampsia with Severe Features
Ari Muller*, Sara Salahuddin*, Heba Naseem*, Rohin Dhir*, Sarooj Ram*. 1Beth Israel Deaconess Medical Center, Boston, MA, United States; 2University of Chicago, Chicago, IL, United States.

F-173 Mitochondrial Structure is Altered in the Cumulus Cells of Polycystic Ovary Syndrome Patients
Maja Barsky1, Janet Bruno-Gastroll, William E Gibbons*, Chellakann S Blesson*, Baylor College of Medicine, Houston, TX, United States.

F-174 IVF Outcomes in Males with Karyotypic Abnormalities and Y Chromosome Microdeletions
Olivia Carpenet1, Jessica Marinoro, Michal Hilli, Alain DeCherney*, Kate Devine*, Rebecca Chason*, NIH, Bethesda, MD, United States; 2MedStar Georgetown University Hospital, Washington, DC, United States; 3Shady Grove Fertility, Rockville, MD, United States.

F-175 Evaluating the Effect of Asynchronous Follicular Recruitment in Antagonist IVF Cycles on Oocyte Yield, Nuclear/Cyttoplasmic Maturity, and Embryo Developmental Competence
Elilot G. Richard*, Rebecca Fickel, Meng Yao1, Jenna Renner, Anne C Davis1, Natalia C Llarena1, Nina Dess1. 1Cleveland Clinic, Cleveland, OH, United States; 2University Hospitals, Cleveland, OH, United States; 3IVI America, Basking Ridge, NJ, United States.

F-176 Single Cell Analysis of Sperm DNA Methylation Reveals Correlation with Morphology
Stephanie Smetzer1, Carole Grenier, Douglas Raburn, Zhang Huang, Thomas Price, Susan Murphy*. Duke University, Durham, NC, United States.

F-177 Prepregnancy Vitamin D Status Predicts Risk of Preeclampsia: Profiling Vitamin D Metabolites in Women with PCOS Considering Ovulation Induction
Samantha Butts*, Nathaniel Koelper*, Halie Zarint1, Andrew N Hoofnagle2, David B Seifer3, Sunetra Senapati1, Richard S Legro2, 1Reproductive Medicine Network*, 2University of Pennsylvania, Philadelphia, PA, United States; 3University of Washington, Seattle, WA, United States; 4Yale School of Medicine, New Haven, CT, United States; 5Penn State Health, Hershey, PA, United States.

F-178 Total Follicle Stimulating Hormone (FSH) Dose is Negatively Correlated With Live Births in a Donor Recipient Model With Fresh Transfer: An Analysis of 8627 Cycles From the Society for Assisted Reproductive Technology (SART) Registry
Katherine L Shagat*, Kelly Acharya, Benjamin Harris, Jeremy Weber, Tracy Truong, Suheil Mushter*. Duke University, Durham, NC, United States.

F-179 Analysis of Inflammatory Signaling in Repro-metabolic Syndrome
Andrew Tannous*, Andrew P Bradford*. 1Nanette Santoro, Denver, CO, United States; 2University of Colorado School of Medicine, Aurora, CO, United States.

F-180 Hyperglycosylated Human Chorionic Gonadotropin (h-HCG) Variants in Human Chorionic Gonadotropin + β Subunit (HCG+β) for Early Prediction of Ongoing Pregnancy After In-Vitro Fertilization (IVF) and Embryo Transfer (ET): hyperPOC Study.
Emesio Boschi, Martin Hund*, Reinhard van der Does2, Laura Caracena*, Silke Ahler*, Elena Labarta1, 1IVI, RMA, Valencia, Spain; 2Roche Diagnostics International Ltd, Rodkreuz, Switzerland; 3IST GmbH, Mannheim, Germany; 4Prometrix GmbH, Mannheim, Germany.
F-181 Differential Gene Expression and DNA Methylation Analysis of Oocytes from a Mouse Model of Polycystic Ovarian Syndrome

Natsuki Nakajima; 1 Yoko Miura; 1 Sayaka Yoshida; 1 Tomoko Muraoka; 2 Tsuyoshi Saito; 1 Tadashi Kasuga; 1 Takanori Hayasaka; 2 Akiko Murakami; 1 Wei Wert; 1 Umida Ganieva; 1 Shotaro Hayasaka; 2 Ayako Murakata; 1 Sayoko Yoshida; 1 Yukyo Kashihara; 2 Yasuyasu Tsuchiya; 1 Katsunori Arakawa; 1 Tomoko Nakamura; 1 Goto Maki; 3 Fumitaka Kikawa; 1 1Nagoya University Graduate School of Medicine, Nagoya, Japan; 2Nagoya University, Nagoya, Japan.

F-182 Clinical Evaluation of Autologous Human Platelet-Rich Plasma as a Novel Treatment to Promote Endometrial Growth and Implantation in Patients with Recurrent Implantation Failure or a Thin Endometrium

Tina Tu; 1 Thuy Ngoc Nguyen; 1 2Yat Sze Sheila Kwok; 1 Jordana Mashiah; 1 2Rodeney Quiatichon; 2 Stewart J Russell; 2 Clifford Librach; 1 2University of Toronto, Toronto, ON, Canada; 3CREAte Fertility Centre, Toronto, ON, Canada.

F-183 Culture Medium Used During In Vitro Fertilisation Impacts Post-Implantation Embryonic Growth and Development Trajectories: The Rotterdam Periconception Cohort

Linette van Duigt; 1 Régine P.M. Sleegers-Theunissen, 1 Esther B Baart, 1 Eric A.P. Sleegers, 2 Joop S.E. Laven, 2 Maetek Rousian, 1 ErasmusMC University Medical Centre, Rotterdam, Netherlands.

F-184 Induction of PCOS-Like Rodent Model Using a Low Dose Continuous Streptozotocin Supply without the Onset of Diabetes Symptoms

Youngjae Ryu, 1 Yoon Young Kim, Sung Wook Kim, Hoon Kim, Seung-Yup Koo, 1 Chang Suk Suk, 1 Seoul National University Hospital, Seoul, Korea, Republic of.

F-185 Endometrial Human Herpesvirus 6 (HHV-6) Infection is Correlated with Uterine Polyp and Endometrial Adhesion in Infertile Women

Zifan Liu; 1 Fan Chen; 1 Yining Li; 1 Philip Pratt, 1 Constance Knox; 1 New Hope Fertility Center, New York, NY, United States; 2GenPath/BioReference Lab, Elmhurst Park, NJ, United States; 3Cooper Healthcare Solutions, Waukesha, WI, United States.

F-186 Effects of Pipelle Biopsy on Endometrial Gene Expression and Subsequent Pregnancy Outcomes

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F-187 Abstract Withdrawn

F-188 Risk of Adverse Pregnancy Outcomes in Women Conceived with Ovulation Induction and Intraperitoneal Insemination Using Partner Sperm

Shahla V Chauhan, 1 Heidi K LeFebvre, 1 Katherine Leung, 1 John Yeh, 1 University of Massachusetts, Worcester, MA, United States.

F-189 PCOS and Fertility Outcomes: What's a Thyroid Got to Do With It?

Emma Radtke; 1 N. Raptis, 1 L. Grinnit, 1 C. Ostor, 1 H. Mandelst, 1 Z. Pavlovic, 1 J. Anderson, 1 A. Bellosso, 1 R. Jeevan, 1 Vios Fertility Institute, Chicago, IL, United States.

F-190 The Association Between Vitamin D Levels and Insulin Resistance

Rosalba Guerra; 1 Fadi Yacoub, 1 Cassandra Charles, 1 Daniella Alvar; 12 Courtney Cuz, 12 Ozgul Meneyri-C-Delate. 1 Columbia University Irving Medical Center, New York, NY, United States; 2SUNY Downstate Health Sciences University, Brooklyn, NY, United States.

F-191 Patients With Recurrent Pregnancy Loss Do Not Have a Higher Rate of Embryonic Aneuploidy

Molly Siegel; 3 Thomas O’Leary; 3 Paula Amato, 3 David Lee, 3 Diana Wu, 3 Sacha Krieg, 3 Oregon Health & Science University, Portland, OR, United States.

F-192 Identifying the Optimal, Multistep and Adaptive Embryo Transfer Strategy for Improving IVF Outcome

Deborah Wolshander; 1 Yoav Kan-Tor; 3 Assaf Ben-Menas; 2 Jozef Bukumis, 1 The Hebrew University of Jerusalem, Jerusalem, Israel; 2Hadassah Medical Center, Jerusalem, Israel.

F-193 The Application of Methylprednisolone Improved Symptoms Associated with Ovarian Hyperstimulation Syndrome Avoiding Surgical Treatment with Culdectomies

Maria Guadalupe Nolazo Beltrán, 1 Stephanie R Montes, 1 Gari A Sánchez, 1 Ernesto Gutierrez; 2Esther López Baygaren; 1 Instituto Ingeños, Mexico City, Mexico; 3Instituto Ingeños, CDIIMX, Mexico; 4Conestavat, CA, Mexico.

F-194 Can Increased Embryonic Mitochondrial DNA Predict Rate of Miscarriage?

Jessica Anderson; 1 Lauren Grimm, 1 Hanna Mandell, 1 Emma Radtke; 2Nephiel Raptis, 2 Christy Osoy, 2 Zoran Pavlovic, 2 Rodol Jeevan, 2 Amber Cooper, 2 Angelina Bellos, 2 Shawn Zimmerman, 1 Vios Fertility Institute, Chicago, IL, United States.

BASIC REPRODUCTIVE BIOLOGY

F-195 Blastocyst Scrotects Induce Electrical Signals in Epithelial Cells of Murine Endometrium

Aurélien Hennet; 1 Marie Mulier, 1 Silvia Jojo Poseiro couthino Pinto, 1 Evy Van Den Broek, 1 Nele Van Ranst, 1 Thomas Voets; 2 Karen Peeran, 1 Joris Vriens; 1 KU Leuven, Leuven, Belgium; 2UZ Leuven, Leuven, Belgium.

F-196 Innate but Not Innocent: Fetal ILC3s Express Active TLRs.

Gernán O. Muzzio, Kristin Hartmann, Rebekka Einnek, 1 Meike Hofer, 1 Theresa Meiner, 1 Jens Ehhardt, 1 Marek Zygmunt, 1 University of Greifswald, Greifswald, Germany.

F-197 Generation of Primary Epithelial Cell Cultures from Endocytological Cytological Brushings Using Conditional Reprogramming

Karsten Weng; 1 Jeffrey T Jensen, 2 Leo Hart; 31 Oregon National Primate Research Center, Beaverton, OR, United States; 2Oregon Health and Science University, Portland, OR, United States.

F-198 Impact of Obesity on the Human Endometrium: Proteomics in a Well Phenotyped Cohort

Emma Guijar, 1 Maya Milletter, 1 Courtney Burnst, 1 Henriette Hemmer; 1 Yolanda Smith, 1 Carol Elisas, 1 Lisa Neff; 1 Erica Marsh, 1 University of Michigan, Ann Arbor, MI, United States; 2Northwestern University, Chicago, IL, United States.

F-199 γ-Aminobutyric Acid (GABA) Regulates Human Umbilical Vein Endothelial Cell (HUVEC) Permeability and Metabolism.

Abigail Anne Armstrong; 1 Ramadoss Sivakumar, 2 Ramachandran Ilangovan, Lauren Nathan; 1 Gautham Chaudhuri, 1 UCLA, Los Angeles, CA, United States.

F-200 In Situ Mechanical Characterization Predicts the Developmental Potential of Oocytes and Embryos

Oren Wininter; 1 Naama Srebnik; 2 Dorit Kado; 3 Zvi Roth; 3 Amazon Boibum, 1 The Hebrew University of Jerusalem, Jerusalem, Israel; 2The Hebrew University of Jerusalem, Rehovot, Israel.
F-201 Activation Induced Cytidine Deaminase (AIDCA) Regulate Folliculogenesis Related Genes Expression in Mouse Ovary
Takashi Izuka, 1 Masanori Ono, 1 Hiroshi Fujikawa, 1 Runothi Waliwe, 2 Masanichi Muramatsu, 1 Koichi Kitamura, 1 Kanazawa University, Kanazawa City, Japan; 2National Institute of Infectious Diseases, Tokyo, Japan.

F-202 Toward Stem Cell Therapy of Premature Ovarian Failure (POF): Human Bone Marrow Mesenchymal Stem Cells Restore Endometrial Structure in Chemotherapy Induced POF Mouse Model
Akhil Gupta, 1 Yang- soo Park, 1 Lale Bakir, 1 Sahar Esfandyar, 2 Rishi Man Chugh, 1 Amro Elsharou, 1 Mara Ulun, 1 Ayman Al-Hendy, 1 UIC, Chicago, IL, United States; 2Tanta University Faculty of Medicine, Tanta, Egypt; 3Tehran University of Medical science, Tehran, Iran, Islamic Republic of.

F-203 IL-33 and ST2 Expression in Murine Female Reproductive Tract
Valerie O’Beirne, 1 Barry E Perlman, 1 Salma Begum, 1 Sara S Morelli, 1Aimee M Beaulieu, 1 Nataki C Douglas, 1 Rutgers-NJMS, Newark, NJ, United States.

F-204 Preeclampsia in Oocyte Donation Pregnancies is Related to the Number of Fetal-Maternal HLA Class II Mismatches
Marie-Louise P. van der Hoog, 1 Kim van Bentem, 1 Manon Boon, 2 Carin van der Keur, 1 Simone Brand-Schaaf, 1 Geert-Jan Heasnoot, 1 Dave Roelen, 1 Michael Ekemans, 1 Sebastiaan Hei, 1 Frans H. J. Claas, 1 Lisa E. E. O.L. 1 Ashley, 1 Leiden University Medical Center, Leiden, Netherlands; 2National Institute of Infectious Diseases, Tokyo, Japan.

F-205 Impact of Bisphenol-F on Early Mouse Embryo Development.
Kaitlin McGrath, 1 Maya Barskyj, 1 Janet Bruno-Gaestont, 1 Blessom Chebleakian Selvanessn, 1 Louisiana State University Health Sciences Center, Baton Rouge, LA, United States; 2Baylor College of Medicine, Houston, TX, United States.

F-206 Toll-like Receptor Expression, Function and Regulation in ILCs During Murine and Human Pregnancies.
Kristin Hartmann, 1 Damiln Muzzio, 1 Rebekka Einenkel, 1 Theresa Meen, 1 Mekko Hfer, 1 Jens Enthardt, 1 Marek Zygmunt, 1 University Medicine Greifswald, Greifswald, Germany.

F-207 Expressions and Effects of Phoenixin and Its Receptor GPR173 During the Human Menstrual Cycle
Xuan Phuc Nguyen, 1 Tomoko Nakamura, 1 Satoko Osuka, 1, 2Bayasula Bayasula, 1 Ayako Murakotaq, 1 Shotoro Hayashit, 1 Natsuki Nakashimrit, 1 Yukko Kasaharat, 1 Tomohiko Murasea, 1 Maki Goto, 1 Akira Itasawet, 1 Fumiitaka Kikawai, 1 Nagoya University Graduate School of Medicine, Nagoiy, Japan; 2Nagoya University Graduate School of Medicine, Gunmi, Japan.

F-208 High-Fat Diet is Associated with Ovarialy Defects Regardless of the Development of Obesity
Natalie M Horst, 1 Emily M Elliott, 1 Malgorzata E. Skuznik-Wikel, 1 University of Colorado School of Medicine, Aurora, CO, United States.

F-209 Mercury Disturb Reproductive Functions of Primary Endometrial Stromal Cells (ESC).
Roberto Gonzalez-Marti, 1 Andrea Palomart, 2 Silvia Pérez-Debentin, 1 Alicia Quinomen, 1 Francisco Dominguezf, 1 IVF Foundation-RMA Global, Valencia, Spain; 2US La Fe - IVF Foundation, Valencia, Spain.

F-210 Mechanical and Signaling Mechanisms That Guide Pre-implantation Embryo Movement
Diana Flores, 1, 2 Manoj Madhavan, 1, 2 Savannah Wright, 1, 2 Dipa Angr, 1, 2 Michigan State University, East Lansing, MI, United States; 3Institute for Quantitative Health Science and Engineering, East Lansing, MI, United States.

F-211 Metabolic Imaging of Cumulus Cells.
Marta Venturgo, 1, 2 Khilay Kumart, 3 Xingbo Yang, 2 Dagan Wells, 1 Catherine Racowitzy, 1 Dan Ji Needlemman, 1 Harvard University, Cambridge, MA, United States; 2UAB, Barconnne, Spain; 3Oxford University, Oxford, United Kingdom; 4Bingham & Women’s Hospital and Harvard Medical School, Boston, MA, United States.

F-212 Primary Follicles Suppress the Growth of Primordial Follicles
Wei West, 1 Kou Komatsu, 1 Tomohiko Murase, 1 Reina Sonenharat, 1 Natsuki Miyake, 1 Mayuko Murakami, 1 Umida Ganevar, 1 Bayasula Bayasula, 1 Sayako Yoshits, 1 Ayako Murakotaq, 1 Shotoro Hayashit, 1 Natsuki Nakashimrit, 1 Yukio Kasaharat, 1 Nobuyoshi Takasakit, 1 Tomoko Nakamura, 1 Satoko Osuka, 1 Maki Goto, 1 Fumiitaka Kikawai, 1 Nagoya University, Nagoiy, Japan; 2Aichi Medical University, Nagakute, Japan.

F-213 Inflammatory Pathways and the Production of Prostaglandins in a Model of Maternal Fetal Crosstalk: Feto-maternal Interaction.
Hassendrins N Peirs, 1 Yong qin Koh, 1 Kanchan Vaswani, 1 Eman Mosaad, 1 Olivia Holland, 1 Renuka Sekar, 1 Alevsi Amoako, 1 Saiesh Kumar, 1 University of Queensland, Brisbane, Australia; 2Queensland University of Technology, Brisbane, Australia; 3Royal Brisbane and Women’s Hospital, Brisbane, Australia; 4Mater Health Services, Brisbane, Australia.

F-214 The Intersection of Hyperandrogenism and PCOS: The Hairy Details.
Nehe Piaptit, 1 H Mandl, 1 L Grimm, 1 Radies L, 1 Cirs, 1 Z Pavlovic, 1 J Andersson, 1 R Jeevan, 1 A Belitsos, 1 Vios Fertility Institute, Chicago, IL, United States.

F-215 Three-dimensional Evaluation of Oocytes in Murine Ovary Using a Tissue Clearing Method
Kazuske Kageci, 1 Takashi Izuka, 1 Matsumoto Takeo, 1 Takeshi Oba, 1 Ayumi Matsuckat, 1 Hoshino Takasak, 1 Yohli Shimyoi, 1 Hiroshi Kawasaki, 1 Fujwara Hiroshi, 1 Kanazawa University, Kanazawa City, Japan.

F-216 Gestational Diabetes Mellitus and Placental DNA Methylation in the Rhode Island Child and Health Study.
Corina Lessepst, 1 Amber Burtt, 2 Jia Chen, 1 Carmen J Marcs, 1 Icahn School of Medicine at Mount Sinai, New York, NY, United States; 2Emory University, Atlanta, GA, United States.

F-217 Temporal Trends in Cardiomyopathy Among Women with Childbearing Ages
Dennis Gettman, 1 Zimn Zhuang, 1 Michael J Fassett, 1 Kaiser Permanente Southern California, Pasadena, CA, United States; 2Kaiser Permanente West Los Angeles Medical Center, Los Angeles, CA, United States.

F-218 Severe Obstetric Morbidity in Gestational Carrier Pregnancies: A Population Based Study
Kala Savantst, 1 Joseph M Letourneau, 1 Brett D Emerson, 1 University of California, San Francisco, San Francisco, CA, United States; 2University of Utah, Salt Lake City, UT, United States; 3Intermountain Health Care, Murray, UT, United States.
F-219  Placental Adaptations to Maternal HIV-infection and ART Influence Infant Outcomes  
Marina Whitet,1  Eleanor Duffleyt,1  David Grymspan,1  Shannon Bainbridge,2  Felicia Molokonaet,3  Theresa Rossouwt,4  Ute Feucht,4  Kristin Connort,4  Carleton University, Ottawa, ON, Canada; 2Children’s Hospital of Eastern Ontario, Ottawa, ON, Canada; 3UOttawa, Ottawa, ON, Canada; 4U Pretoria, Pretoria, South Africa.

F-220  Comparison of Cause of Maternal Death Between Countries in the Community Level Interventions for Pre-Eclampsia Trial  
Arnet Aukiela,1  Kristina Anront,1  Sumedha Sharma1,1  Tang Lee1,1  Jing Li1,1  Jeffrey Bone1,1  Beth Payne1,1  Marianne Vidier1,1  Zulfiquar Bhuttas,2  Peter von Dadelszen1,1 4  Laurie Magees,1,1 4  CLIP Trials Working Group,1 University of British Columbia, Vancouver, BC, Canada; 2University of Toronto, Vancouver, ON, Canada; 3King’s College, London, United Kingdom.

F-221  Informatics Ascertainment of Elevated Blood Pressures in Pregnancy versus Billing Code Diagnoses  
Jessica Spiegelman,1  Fernanda C. G. Polubiagno,2  Alexander M. Friedman3,4  Columbia University Irving Medical Center, New York, NY, United States.

F-222  Higher Neighborhood Eviction Rates in Urban Centers are Associated with Lower Birthweight Percentile and Earlier Gestational Age at Delivery  
Britney K. Smart,1  Alexa Freedman,1  Lauren Keenan-Dewlin,1  William Grobman,1  Hyagriv Simhan,2  Patihk Wadhwa,2  Claudia Buss,2  Sorria Erfringe,2  Greg Miller,4  Ann Borders,4  NorthShore Univ HealthSystem, Evanston, IL, United States; 5Northwestern Univ, Evanston, IL, United States; 6Northwestern Univ Feinberg School of Medicine, Evanston, IL, United States; 7Univ of Pittsburgh School of Medicine, Pittsburgh, PA, United States; 8Univ of California Irvine, Irvine, CA, United States; 9Charite, Berlin, Germany; 10NorthShore Univ HealthSystem, Wilmette, IL, United States.

F-223  Marijuana Legalization in Colorado and Population-based Birth Outcomes  
Tom D. Meig,1  Amanda A. Althouse,1  Mayi Gnooilam,2  Michelle Debink,1  Elaine H. Stickrath,2  Robert M. Silver3 1University of Utah Health, Salt Lake City, UT, United States; 2Maison Blanche’s Hospital, Champagne-Ardenne, France; 3Denver Health and Hospital Authority, Denver, CO, United States.

F-224  Does Public Reporting Provide an Incomplete Picture of Success Rates of In Vitro Fertilization in the United States? Optional Reporting is Associated with Lower Cancelling Rates but Higher Cycle Success Compared to Mandatory Reporting  
Tham Ha Bun Lu1,1  Liest Nel-Themaat,1  Tracy Truong,1  Alex J. Polotsky1,1  U of Colorado, Aurora, CO, United States; 2Duke, Durham, NC, United States.

F-225  Testing the Twin Testosterone Transfer Hypothesis: Intergenerational Analysis of 317 Twins Born in Aberdeen, Scotland  
Chansa Taij,1  Edwin-Amaatraj Raja,2  Sohmin Bhattacharya,3  Paul A. Fowler3 1University of Aberdeen, Aberdeen, United Kingdom.

F-226  The Acceptability of a Patient Centered Care Approach to Reduce Maternal and Infant Mortality in Bafoussam Region, Cameroon  
Mike Brady1,1  Pooja Doehrman,1  Thomas Egbes,3  Ngaha Augustin1,1  Tatong M Thierry2 1Chimere, Expheary3 1Creighton University – Arizona Health Education Alliance, Phoenix, AZ, United States; 2University of Arizona College of Medicine, Phoenix, AZ, United States; 3University of Buea, Bafoussam, Cameroon.
9:00 AM - 10:30 AM  
Poster Session III - East Exhibit Hall B

BASIC PARTURITION, PREMATURITY

S-001  Role of Intra-amniotic Sludge at Examination-induced Cerclage  

S-002  Role of Intra-amniotic Sludge at Ultrasound Indicated Cerclage  

S-003  Biological Age Across Pregnancy is Associated with Gestational Age and Prenatal Stress.  

S-004  Replicated Umbilical Cord Blood DNA Methylation Loci Associated with Gestational Age at Birth  
Timothy P Young*, 1Shawn J Latendresse*, 2Colleen Jackson-Cook*, Dana M Lapato*, 3Moyer Sana*, 4Wilen R Aaron*, 5Roxann Roberson-Nay*, Elizabeth K Do*, Susan K Murphy*, Catherine Hoyo*, Bernard F Fuemeler*, Jerome F Strauss III−*, Virginia Commonwealth University, Richmond, VA, United States; 1Bayelor University, Waco, TX, United States; 2University of Tennessee Health Science Center, Memphis, TN, United States; 3University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, United States; 4The University of Washington, Department of Obstetrics & Gynecology, Washington, WA, United States; 5The University of Toronto, Department of Obstetrics & Gynecology, Toronto, ON, Canada.

S-005  Characterizing the Inflammatory Response to Cell-free Fetal DNA  

S-006  MicroRNA Signatures in Idiopathic Spontaneous Birth  
Heather Brookway*, Louis Muglia, Helen Jones*, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, United States.

S-007  Is There a Threshold of Inflammation Needed to Trigger Preterm Labor?  
M Capelle(1); P Presicrt; F Mat; P Serhan(2); M Pellegrin; A Jobes; S Diviacco; 5SS Way; C Chougnet; S Kallapur; 4UCLA, Los Angeles, CA, United States; 3Cincinnati Children’s Hospital Research Foundation, Cincinnati, OH, United States; 2UCD, Davis, CA, United States; 1University of California Los Angeles, Los Angeles, CA, United States.

S-008  The Effects of Connexin 43 S-nitrosation on Myometrial Quiescence  
Scott D Barnett*, Hazil Asf*, Coral Garmeltschaper, Jennifer Stich(1); Irene Richardson; Veronica Arizoe, Iain L.O. Buxton*−, University of Nevada, Reno School of Medicine, Reno, NV, United States; 2University of Nevada, Reno, NV, United States.

S-009  Gardnerella Vaginalis is Associated with Increased Tryptophan Metabolism in the Cervicovaginal Space: A Potential Role for Microbial Metabolites in Spontaneous Preterm Birth.  
Karen G Gerson*, Clare McCarthy, Heather H Burns, Michal A Elowitz*, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, United States.

S-101  Macrophage Morphology in Progestosterone Regulation of Cervix Ripening at Term and with Preterm Birth  
Steven M Yellon*, Oliva G Boek, Michael A Kirby, Lorna Lindi University, Lorna Linda University, CA, United States.

S-102  s-Lipoic Acid Blocks the GM-CSF Induced Protease/ Anti-protease Spectrum Associated with Fetal Membrane (FM) Weakening In-vitro: Comparison with This Spectrum in the Weak Zone of Naturally Delivered FM  

S-103  Vaginal Administration of Lipo polysaccharide Can Cause Clinical Preterm Birth in the Mouse  
Hasumi Tomita*, Masatoshi Saito*, Kenji Tsuji*, Nobuo Yasagish+, Toko University Graduate School of Medicine, Sendai, Japan.

S-104  Combination Viral Infection and Bacterial LPS Dampens Human Fetal Membrane Anti viral Responses  
Julie A Potter*, Manoy TONG, 1Gil Mör*, Vikki M Abraham*, Yale University, New Haven, CT, United States; 2Wayne State University, Detroit, MI, United States.

S-105  Infection and Preterm Birth in an Organ-specific Manner  
Kenshu Motomura, 1Roberto Romens, 2Adi L Tarca, 3Marcia Arenas-Hernandez†, 1Gaurav Bhatia†, 1Rebecca Sultsky†, 1Chaur-Dong Hsu, 1Nardhy Gomez-Lopez*, 2Wayne State University SOM, Detroit, MI, United States; 3Perinatology Research Branch, NICHD, Detroit, MI, United States; 1Perinatology Research Branch, Detroit, MI, United States.

S-106  Uterine Stimulation Index: A Promising Technique for Personalized Use of Oxytocin.  
Ponnilla S Marinacig, 1Roger C Young, 2David A Adair, 3Bashford Herr, 4Evelina Galas, 5Ev K Pressman, 6Neil S Seligman*, 7University of Rochester, Rochester, Rochester, NY, United States; 8PreTel, Inc., Chattanooga, TN, United States; 9University of Tennessee College of Medicine, Chattanooga, TN, United States.

S-107  Targeting Chemokine Response by Broad-Spectrum Chemokine Inhibitor Prevents Trans-endometrial Migration of Primary Human Leukocytes.  
Adam J Bowes-Rappolt, 1*Caroline E Dunk, 2Anna Dorgan, 3Kristina Adams Waldorf, 4Osanka P Shynolyeva, 1*Stephen J Lye, 1*The University of Toronto, Department of Physiology, Toronto, ON, Canada; 2The Lumenfeld-Tannenbaum Research Institute, Mount Sinai Hospital, Toronto, ON, Canada; 3The University of Washington, Department of Obstetrics & Gynecology, Washington, WA, United States; 4The University of Toronto, Department of Obstetrics & Gynecology, Toronto, ON, Canada.
S-018 Gardnerella Vaginalis, but not Lactobacillus Crispatus, Disrupts Cervical and Vaginal Epithelial Cell Function: Elucidating Cervicovaginal Host-microbiome Interactions

S-019 Gardnerella Vaginalis and Mobiluncus Mulieris Alter Vaginal Epithelial Cell Function Through Immunemediated Mechanisms

S-020 Investigating Differential Effects of Interpregnancy Interval on Pregnancy Complications by Country Developmental Status
Caitlyn E Flott, Jasmine M De Giovanni, Jason Phung, Craig E Pennefather, University of Newcastle, New South Wales, Australia; Hunter Medical Research Institute, New South Wales, Australia; John Hunter Hospital, New South Wales, Australia.

S-021 Identification of LncRNA Variants of the Sarcomere-Desmosomethal is Associated with Premature Uterocervical Contractions in Spontaneous Preterm Labor
Zhe Wang, Ju Wier, Nandert Zong*. Hainan Provenental Center for Maternal and Children's Health, Haikou, China; New York State Institute for Basic Research in Developmental Disabilities, Staten Island, NY, United States.

S-022 Latency Period and Outcomes after Periviable Preterm Premature Rupture of Membranes.
Nigel Maddern, Noelle Breslin, Cathy Baptiste, Russell Miller, Joy Vire, Cynthia G Yamari-Banerman. NYP-CUMC, New York, NY, United States.

S-023 Cytotrophoblasts Suppress Inflammation Through Direct Contact with Macrophages

S-024 Heat Shock Protein B1 Preferentially Associates with Vasodilator-Stimulated Phosphoprotein and Actin at Focal Adhesions Within Myometrial Cells
Daniel J. MacPhee*, Ayomiku O Okoluk. University of Saskatchewan, Saskatoon, SK, Canada.

S-025 Evaluation of the Anti-inflammatory Effects of Sytrolin and Other Nutraceuticals in Human Primary Trophoblast Culture
Tina L Barrow*, Shaofu Li, Jeffrey A. Keelan*. University of Western Australia, Perth, Australia.

S-026 Three-Dimensional Noninvasive Electromyometrial Imaging (EMMI) of Uterine Contractions - Geometry Registration
Hui Wang, Zichao Wen*, Wenjie Wu, Zhufu Sun. University of Manchester, Manchester, United Kingdom; University of Texas at Austin, Austin, TX, United States.

S-027 Dysregulation of the Eutopic Endometrial Transcriptome in Normweight Primates: Impact of Endometriosis in Presence of High Fat Diet and/or Hyperandrogenemia.
Cecilie Bishop*, Fangzhou Luo*, Lina Gao, Suzanne Feli*. Oregon National Primate Research Center, Beaverton, OR, United States; Oregon Health & Science University, Portland, OR, United States.

S-028 The Use of an Organoid Model for Studying Epithelial-Stromal Interactions in Endometriotic Lesion Development
Yang Song*, Gregory W Burns, Niraj R Joshi*, Aniruddha Ochora-Bimal, J. Julie Kim, Ripla Arora, Ronald L Chandler, A. Gerard T Faztebas. Michigan State University, Grand Rapids, MI, United States; Northwestern University, Chicago, IL, United States.

S-029 The Kinase Inhibitor Nintedanib Regulates Multiple Key Targets of Inflammation, Fibrogenesis, and Angiogenesis Involved in Uterine Fibroid Pathogenesis
Mid Seeul Shin, Sadia Afrin, Christin N Cordeiro Mitchell, Mostafa Borahay, James H Segars*. Johns Hopkins University, School of Medicine, Baltimore, MD, United States.

S-030 Detection of Lipopolysaccharide in the Uterosacral Ligament of Pelvic Organ Prolapse Surgical Patients: Correspondence with Tissue Inflammation
Joshua Johnson*, David Orlicky, Elise S Bales, Lauren Rascoff, Jaime S Arruda, T. Rajendra Kumar, Marsha K. Guss, Kathleen A Connell*. University of Colorado School of Medicine, Aurora, CO, United States.

S-031 The Effect of Perivenous Fluid-Derived Exosomes From Endometriosis Patients on Mesothelial Cells.
Kavia Y Li*, Kavita S Subramaniam*, Hannah M Nazzara, Thomas T Tapmeier, Krina T Zonderavan, Christian M Becker*. University of Oxford, Oxford, United Kingdom; Wellcome Centre for Human Genetics, Oxford, United Kingdom; Welcome Centre for Human Genetics, Oxford, United Kingdom.

S-032 Discovery of Novel Molecular Mechanisms Underlying the Pathophysiology of Uterine Fibroids and Associated Heavy Menstrual Bleeding

S-033 The Hippo Pathway Trasnscriptiion Coactivator Yes-associated Protein 1 Inhibits Endometriosis Stromal Cell Invasion Through Repression of Estrogen Receptor β
Pei-Li Wu, Cheng Zeng, Zhao-Tong Dong, Xin Li, Ying-Fang Zhou, Qing Xue. Peking University First Hospital, Beijing, China.

S-034 Increased Pro-Inflammatory Signaling of Stem Cells Correlating with the Phenotype of Uterine Fibroids.
Hoda El-Khossary Elkhattab*, Mohamed Ahmed ALI*, Laureen Prusinska Femurings*, Sribalasubashini Muralimohanarath*, Hanlan Sherri*, Thomas G. Boyer,*, Nahed Ismail, Ayman Al-Hendy*, Qiwei Yang*, University of Illinois at Chicago, Chicago, IL, United States; The National Organization for Drug Control and Research (NOODCAR), Cairo, Egypt; Faculty of Pharmacy, Ain Shams University, Cairo, Egypt; Augusta University, Augusta, GA, United States; University of Texas Health Science Center at San Antonio, San Antonio, TX, United States; University of Texas Health Science Center at San Antonio, Chicago, IL, United States.
Poster Guide

Saturday, March 14, 2020 - Poster Session III - East Exhibit Hall B

S-055 Longitudinal Assessment of Exosomal SVATs in Preterm, Preeclampsia, and Gestational Diabetes Mellitus
Nanbin Zhong,1 Jing Pan,1 Yong Wang,2 Weina Jia1.1 New York State Institute for Basic Research in Developmental Disabilities, Staten Island, NY, United States; 2Southern Medical University, Guangzhou, China; 3Washington University School of Medicine, St. Louis, MO, United States.

S-056 Association Between Maternal Obesity and Perinatal Depressive Symptoms
Samantha de los Reyes, University of Chicago/ NorthShore University Health Systems, Evanston, IL, United States.

S-057 Oxytocin Washout in Labor Induction
Preston Edgell,1 Ashley Battatree,2 David Stamilio.1 1University of North Carolina, Chapel Hill, NC, United States; 2University of Alabama Birmingham, Birmingham, AL, United States; *Wake Forest Baptist Health, Winston-Salem, NC, United States.

S-058 "The Short Story Is That She Was Born": A Longitudinal Analysis of Birth Experience Narratives in Women with and Without Persistent Postpartum Mood Disorders
Ashley Herrold, Joanna Kountana, Maria Musk, Elizabeth Langen. University of Michigan, Ann Arbor, MI, United States.

S-059 Does Maternal Progesterone Administration for Preterm Birth Prevention Modify the Risk of Neonatal Intraventricular Hemorrhage?
Daisy Leon-Martindel, Jennifer Culhane, Lisbet S. Lindsberg, Michelle Silasi, Uma M Reddy, Audrey A Morris*. Yale University, New Haven, CT, United States.

S-060 Association Between Maternal Obesity and Perinatal Infectious Morbidity
Michael J. Feldman,1 Morgan R Pelletier,2 Darios Getahun.1 1Kaiser Permanente West Los Angeles Medical Center, Los Angeles, CA, United States; 2NYU Langone School of Medicine, New York, NY, United States; 3Kaiser Permanente Southern California, Pasadena, CA, United States.

S-061 Advanced Maternal Age and Obstetric Outcome.
Anna Maria Macrò. University of Milano, Milano, Italy.

S-062 Have the Increases in Maternal Obesity, Diabetes and Fetal Macrosomia Impacted Fetal-Placental Size at Birth and Umbilical Cord Oxygen Values?
Bryan S. Richardson,1 Barbra de Vrijer,1 Hilary Brown,2 Sheryl Cho,1 Larry Stilt,1 Timothy RH Regnault.2 Western University, London, ON, Canada; 3University of Toronto, London, ON, Canada.

S-063 Clinical Significance of Very Short Cervix Detection at Late Mid-Trimester Under Vaginal Progesterone
Yossi Bart1,2 Shalni Mazzaki-Toivi,3 Anat Kalter,3 Edi Vaisbuch,3 Yifat Wiener,3 Boaz Weisz,3 1Tel Hashomer, Ramat Gan, Israel; 2Kaplan, Rehovot, Israel; 3The Yishuak Shamir Medical Center, Zerifin, Israel.

S-064 Evaluating Quality Metrics for Unexpected Complications in Newborns and Severe Maternal Mortality in Nulliparous Term Singleton Vertex Deliveries
Carina A McBridge, Erin A Morris, Marjorie C Meyer. University of Vermont College of Medicine, Burlington, VT, United States.

S-065 How Many Placenta Accreta Cases Have Preventable Uterine Scars?

DEVELOPMENTAL PROGRAMMING

S-066 Maternal Microchimeric Cells Modulate Immune Development in Mice by Skewing Hematopoiesis Toward Myeloid Cell Lineages
Christopher Urschel1,2, Stephen Schepanski1,2, Emilie M. Solano1,3, Ines A. Steel1,2, Nicole Fischer1,2, Malik Axel1,2, Kristin Thiele1, Petra Ackx1,2 1University of Medicine Center Hamburg-Eppendorf, Hamburg, Germany; 2Stanford University School of Medicine, Stanford, CA, United States.

S-067 Changes in Fetal Circulating MicroRNAs May Link Maternal Obesity to Altered Fetal Cardiac Function
Owen R Vaughan,1 Andrew E Goodspeed, Carmen G Suchaow, Theresa L Powell, Thomas Janssen*. University of Colorado, Aurora, CO, United States.

S-068 Maternal Obesity is Associated with Sedentary Behavior, Increased Sleep Duration, and Heightened Obesity Risk in Female Offspring
Sebastian Schön,1 William Jin, Claire Maesner, Andrea G Edlow. Massachusetts General Hospital, Boston, MA, United States.

S-069 A 9-day Fetal Leucine Infusion Increases Pancreatic Islet Size, Vascularity, and the Beta-cell Population; Insulin Secretion; and VEGFA and HGF Expression in Late Gestation Sheep
Brit H Boehmert, Laura D Brown, Stephanie R Wessolowski, Paul J Rozanov*. University of Colorado School of Medicine, Aurora, CO, United States.

S-070 Maternal Obesity Increases Fetal Endothelial Cell Expression of the Glucocorticoid Receptor and Dexamethasone-mediated Upregulation of the Anti-fibroinogenic gene SERPINE1
Eugenia Mana Greenwood1,2, Sara Solak,1 Olayemi Adeoyo,1 Stephen P Ford,2 Peter W Nathanielsz,2 1Loma Linda University, Loma Linda, CA, United States; 2University of Wyoming, Laramie, WY, United States.

S-071 High Fat (HF) Diet Consumption by Offspring (F1) of Obese Mothers (MO) Constitutes a Second Hit on Male Rat Reproductive Function: Effects of (-)-Epicatechin (epi) Intervention
Guadalupe J. Rodriguez-Gonzalez1,2, Sergio De Los Santos1,2, Vega C Claudia1,2, Dayana Méndez-Sánchez1,2, Roberto Chavira1,2, Luis A Reyes-Castro1,2, Fernando Larrea1,2, Patricia Cantos1,2, Ramón M Coral-Vázquez1,2, 1Peter W Nathanielsz,2, Elena Zambrano, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico; 2Universidad Nacional Autónoma de México, Mexico City, Mexico; 3Instituto Politécnico Nacional, México City, Mexico; 4University of Wyoming, Laramie, WY, United States.

S-072 Uteroplacental Insufficiency Alters Cholesterol Metabolism Molecular Signature and Enzymatic Antioxidant System in Livers of Young Adult Guinea Pigs in a Sex-specific Manner
Quyemoun Satt, Katherine E Materials, Christina Vanderboor, Lin Zhao, Timothy R H. Regnault. Western University, London, ON, Canada.

S-073 Prenatal Glucocorticoid Exposure Alters MicroRNA Expression in Germ Cells of Adult Male Guinea Pig Offspring: Implications for Intergenerational Programming
Hinrich J. Feramisco1,2, Vasillis G Miosidou1, Andrea Constantino1, Alisa Kostaki1, Stephen G Matthews1,2 1University of Toronto, Toronto, ON, Canada; 2Sina Health Systems, Toronto, ON, Canada.
Ronglieke E Wiegelt, Damlat Aouad Fares, A.H. Jan Danser*, Joop S.E. Laven, Sten P Willemsen*, Eric A.P. Sleeegers*, Regine P.M. Sleeegers-Theunissen*, Erasmus MC, University Medical Center, Rotterdam, Netherlands.

S-108 Medobasal Hypothalamic Gliosis in Pregnancy

S-109 Prediction Models for Pregnancy Complications Using Data Recordable on Smartphone Apps.
Yoshiki Tsunoumi†, Takafumi Yamachi†, Daikuke Ochi, Satuki Kumatani, Satoshi Hiyama†, Masao Nagasaki†, Junichi Sugawara†, H.T. DOCOMO INC., Yokosuka, Japan; Kyodo University, Kyoto, Japan; Tohoku University, Sendai, Japan; Tohoku University Graduate School of Medicine, Sendai, Japan; University of British Columbia, Vancouver, BC, Canada.

S-110 Circulating Placental Alkaline Phosphatase Correlates with Systemic Changes in Cardiovascular Function.
Maria Cristina Bravo, Carole McBride, Kathleen Brummer-Zielinska, Ila Bernstein. University of Vermont, Colchester, VT, United States.

S-111 Protective Role of Adrenomedullin Against Glucose Intolerance in Female Mice
Medhi Latifa S. Chauhan, Anicizer Betancourt, Marta L. Forots, Mee Bakarikhan‡, Kathleen Pennington, Simone Hernandez Ruano, Chandra Yallampalli†. Baylor College of Medicine, Houston, TX, United States; USDA/ARS Children’s Nutrition Research Center, Houston, TX, United States.

S-112 Testing the Water: Titration of Intrapartum Fluids and Postpartum Sequelae
S. Lattin†, A. Allenhouse, K. Benion†, H. Campbell+. University of Utah, Salt Lake City, UT, United States.

S-113 Rising Gestational Diabetes Mellitus: It’s Not Just About Maternal Obesity

S-114 Shock Index in Non-hypertensive and Hypertensive Gestational Diabetes Mellitus: It’s Not Just About Early Labor Induction for Maternal Blood Pressure
Ewa Gogolewiska†, Eileen Phelan†, Jin Young Kim†, Yu-Chen Pan†, Andrew E. J. Morgan†, Monica R. Shah†. University of California, San Francisco-Fresno, Fresno, CA, United States.

S-115 Ex Vivo Angiotensin II Responses in Human Omental Arteries From Normal Pregnant and Preclampsic Women.
Floor Spaans, Sandra T Davidge, Christy-Lynn Cooke*. University of Alberta, Edmonton, AB, Canada.

S-116 Lifelong Western Diet Exposure Impacts Upon the Vascularization of Placental Labyrinth at Mid-gestation in a Non-obese Guinea Pig Model
Takahiro Hashimoto†, Flavien Delfaë†, Karen Nygaard†, Lavette J Fransen-Walraven†, Charles A McKenzie†, Barbra de Vrijer†, Bryan S Richardeson†, Patti Kiser, Timothy RH Regnault†, Kogosho City Hospital, Kogosho City, Japan; University of Western Ontario, London, ON, Canada; Children’s Health Research Institute, London, ON, Canada; Lawson Health Research Institute, London, ON, Canada.

S-117 Altered Levels of Circulating Macrophage, M2 Macrophage, Regulatory T Cells, and T Cells in Fetal Growth Restriction and Stillbirth.
Ronny E Bezemer†, Mineke H School, Albertus Timmers*, Sizzo R Scherjon†, Jan Jaap H M Erwich†, Harry van Goor+, Sanne J Gerdin+, Jelmer R Prins+, University Medical Center Groningen, Groningen, Netherlands.

S-118 Differential Gene Expression Changes in the Comparison of Third Trimester Human Cytotrophoblast and Extravillous Trophoblast.
Sanae Carnell, DaSilva-Arnold, Stacy Zamudio, Abdulla Ali-Khan, Nicholas P Ilies†. Hackensack University Medical Center, Hackensack, NJ, United States.

S-119 Genome-wide Characterization of DNA Methylation in Human Placental Cell Types
Victor Yu†, Desmond Hui†, Yifan Yint†, Maria Penaherrera†, Alexandre G Berstein†, Wendy P Robinson†††. BC Children’s Hospital Research Institute, Vancouver, BC, Canada; University of British Columbia, Vancouver, BC, Canada.

S-120 Insulin-like Growth Factor-2 Overexpression Alters Murine Placental Endocervical Capacity in a Sexually Dimorphic Manner.
Bethany Asbury†, Simon Tunster†, Amanda Sferruzzi-Pernis†. University of Cambridge, Cambridge, United Kingdom.

S-121 BIR1 Contributes for DHA Transport Across BeWo Cells
Jay S Mishra, Satn Hattis†, Marmin Mukhtarova†, V Dangubbyapati†, Sathish Kumar†. University of Wisconsin-Madison, Madison, WI, United States.

S-122 In Utero Exposure to Ralstonia Insidiosa Occurs During Normal Pregnancy and May Promote Tolerance
Sonam Verma†, Elaine Parker†, Lindsay A Parnell†, Chetan S Joshi, Matthew J Wargo†, Indira U. Mysorekar†. Washington University SOM, St. Louis, MO, United States; University of Vermont Larner College of Medicine, Burlington, VT, United States.

S-123 Prenatal Phthalate Exposure is Associated With Changes to the Placental Transcriptome
Alison Paquet†, James MacDonal†, Drew Day†, Bamberlin Theo†, Christine Loftus†, Daniel Enguabrahine†, Nathan Price†, Tyasvisky Frances†, Nicole Bush†, Kaja Lewin°, Catherine Karn†, Sheela Sathyanarayana°. Institute for Systems Biology, Seattle, WA, United States; University of Washington, Seattle, WA, United States; Seattle Children’s Research Institute, Seattle, WA, United States; University of Tennessee Health Sciences Center, Memphis, TN, United States; University of California; San Francisco, San Francisco, CA, United States.

S-124 Hypoxia-Inducible Factor 2a (HIF-2a) Impairs Placental Development in Fetal Growth Restriction (FGR)
Arthur Colercott†, Christophe Depoix†, Pamela Baldwin, Mina Mhamel-Gziz†, Corinne Hubinont†, Pierre Schunawan†, Frédéric Delèvée††. Université catholique de Louvain, Brussels, Belgium; Cliniques universitaires Saint-Luc, Brussels, Belgium.

S-125 Trophoblast Plug Persistence and Structure in the First 20 Weeks of Pregnancy
Hannah Giller†, Aly R Clark†, Graham J Burton†, Joanna L James†. University of Auckland, Auckland, New Zealand; University of Cambridge, Cambridge, United Kingdom.
S-126 Use of Maternal Serum and Placental Tissue miRNA to Develop a Pregnancy Clock

S-127 Induction of Human Trophoblast Stem Cells From Term Placenta Derived Amniotic Cells

S-128 The Use of Placental Pathology to Examine Differential Adverse Pregnancy Outcomes Following In Vitro Fertilization and Oocyte Donation

S-129 Effect of Intrauterine inflammation on Hofbauer Cells and Their Association with Fetal Microglia

S-130 The Effect of Melatonin on Excess ROS Production

S-131 Defining the Interplay Between Fetal Sex, Inflammation, and Their Association with Fetal Microglia

S-132 Enabling Circulating Placental Extracellular Vesicle Isolation and Characterization

S-133 Mitochondrial Macronutrient Flux and Regulation of Syncytiotrophoblast Differentiation

S-134 Palmitic Acid Impairs Smooth Muscle Cell-induced Extravillous Trophoblast Migration.

S-135 Fetal Viral Burden and Placental Pathology with Intra-Amniotic Zika Virus Inoculation in Pregnant Macaques.

S-136 Use of Maternal Serum and Placental Tissue miRNA to Develop a Pregnancy Clock

S-137 Myostatin Increases Human Trophoblast Cell Invasion by Up-regulating N-Cadherin via SMAD2/3-SMAD4 Signaling

S-138 Progressive Dynamic of Placenta Exclusive Circulating miRNAs During Pregnancy

S-139 Maternal Inositol Supplementation During Pregnancy Impacts Placental Metabolic Pathways in an Obese Mouse Model

S-140 Metformin Regulates Mitophagy in Insulin Resistance-BeWo Trophoblast Cell Model

S-141 Endothelial Podocalyxin: A Novel Marker of Widespread Vascular Alterations in Placentas Affected by Decidual Vasculopathy

S-142 Maternal Obesity Does not Exacerbate the Effects of LPS Injection on Pregnancy Outcomes in Mice.

S-143 Palmitic Acid Impairs Smooth Muscle Cell-induced Extravillous Trophoblast Migration.

S-144 Upregulation of METTL3, m6A, HnRNPC1/C2 Expression in Placental Trophoblasts in Preeclampsia

S-145 Characterization of a New Mouse Model of Fetal Growth Restriction and Placental Dysfunction: The Moderately Aged Pregnant Mouse  
Stacey M Legat, Sian Rowet, Mark R Dilworth, Alexander E P Hazell, Lynda K Harris, The University of Manchester, Manchester, United Kingdom.

S-146 Multimodal Imaging Approach to Evaluate Glucose Kinetics in the Fetal-Placental Unit Across Pregnancy: A Pilot Study.  
Aaron J Wright, 1 Matthias C Schabel, 1 Jessica E Gaffney, 2 Samantha P Retke, 2 Antonio E Frias, 2 Victoria HJ Roberts, 1 1 ONSIRIC, Beaverton, OR, United States; 2 OHSU, Portland, OR, United States.

S-147 Single Cell Transcriptomic Analysis Elucidates the Course of Murine Trophoblast Stem Cell Differentiation  
Dafina M Angelovt, 1 Wendi Bacon, 1 Russell S Hamilton, Malwina Prater, Myriam Hemberger, 2 D Stephen Chalmock-Jones, 1 1 University of Cambridge, Cambridge, United Kingdom; 2EMBL-EBI, Heriot, United Kingdom; 3University of Calgary, Calgary, AB, Canada.

S-148 Placental Expression of Nutrient Transporters are Increased and Correlated with Birth Weight in Pregnancies Complicated by Type 2 Diabetes  

S-149 Sphingosine 1-Phosphate as a Mediator of Tumour Necrosis Factor-α (TNF-α) Signaling in Systemicatization.  
YuHo FaHr, 1 Saba Saadat, Kirsten Weisbek, Denise G Hemmings. 1 University of Alberta, Edmonton, AB, Canada.

S-150 TEAD4-CDX2Axis and GATA3Regulates Trophoblast Lineage Transition From Human Embryonic Stem Cell Through Independent and Parallel Pathways  
Luan Ma, Lu Xiao, Yongli Shang, Yanfang Wei. Nanfang Hospital, Guangzhou, China.

S-151 Prolonged Exposure to Dietary-Fatty Acids Alters BeWo Trophoblast Mitochondrial Function and Fatty Acid Desaturation  
Zachary Easton, 1 Ouuseyon San, 1 Timothy Regnault, 1, 2 Western University, London, ON, Canada; 3Children’s Health Research Institute, London, ON, Canada.

S-152 Zika Virus Infection Promotes Cell Death and Syncytia Remodeling in Human ex vivo Perfused Cotyledons  
Diana L. Villazana-Kretzer, 1 Jenny G., Jennifer P. Damics, 1 Dordoom M Elisabeth, 3 Pete Napolliano, 2 Michael Gale, Jr, 4 Nicholas Lenainnaki, 5 Madigan Army Medical Center, Tacoma, WA, United States; 1University of Washington Medical Center, Seattle, WA, United States.

S-153 Periconceptional Associations Between Maternal Dietary Patterns and First-trimester Placental Development  
Jang F Reindert, 1 Annemie GEMGI Mulders, 1 Kajal SC Mohaber, 1 M (Wendy) PH Koster, 2 Sten P Willemsen, 1 Anton HJ Koning, 3 Eric AP Steegers, 3 Régine PM Steegers-Teunissen, 4 Erasmus MC University Medical Center, Rotterdam, Netherlands.

S-154 Periconceptional Associations Between Maternal Dietary Patterns and First-trimester Placental Development  
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S 146 Multimodal Imaging Approach to Evaluate Glucose Kinetics in the Fetal-Placental Unit Across Pregnancy: A Pilot Study.  
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S-156 Circadian Clock Gene Clock is Involved in the Pathogenesis of Preeclampsia Through Hypoxia.  
Yuanwyn Lit, 1, 2 Jaap Lit, 1, 2 Yue Hout, 1, 2 Ling Huang, 3, 4, 5 Guixia Song, 1, 2, 3, 5 Chong Qiao, 1, 2 Shengjing Hospital of China Medical University, Shenyang, China; 3Key Laboratory of Maternal Fetal Medicine, Shenyang, China; 4Key Laboratory of Obstetrics and Gynecology of Higher Education, Shenyang, China.

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S-157 Neutrophil Activation in Preeclamptic Women is Epigenetically Regulated and Pregnancy Specific  
Marwan O Al-Awadi, 1 Phoebe Dachart, 1 William H Nugent, 1 Sonya L Washington, 1 Jerome F Strauss, III, 2 Scott W Walsh. Virginia Commonwealth University, Richmond, VA, United States.

S-158 GDF5 Is Increased in Preeclampsia and May be Regulated via Transcription Factors EGR1 and SPIPI  
Tessa Cruickshank, 1, 2 Teresa M MacDonald, 1 Susan L Walker, 1 Natalie J Hannah, 1 Damanteep Singh, 1 Ping Cannon, 1 PHiOsa, 1 Mike T Kajiwara, 1 Anton HJ Koning, 3 Shengjing Hospital of China Medical University, Shenyang, China; 1Key Laboratory of Maternal Fetal Medicine, Shenyang, China; 3Key Laboratory of Obstetrics and Gynecology of Higher Education, Shenyang, China.

S-159 Endometrial Transcriptomic Fingerprinting Associated to In Vivo Decidualization Resistance in Severe Preeclampsia.  
Tamar Garrido, 1 Monica Ceret-Ciscar, 2 Nerea Castillo-Marcot, 1 Teresa Cordero, 1 Alicia Amado, 1 Jorge Jimenez-Almazan, 1 Julia Escrigt, 1 Alfredo Peiras, 1, 2 Carlos Simon, 1, 2 Igenomix Foundation, Valencia, Spain; 3Igenomix Foundation, Valencia, Spain; 4Harvard Medical School, Boston, MA, United States.

S-160 Paternal Deficiency of Complement Component C1q Leads to Vascular Dysfunction in Apolipoprotein-E Female Knockouts: a Novel High-Risk Mouse Model of Preeclampsia  
Mary Gemmell, 1 Elizabeth Sutton, Marcia Gaffarder, Robert W. Powers, 1 University of Pittsburgh, Pittsburgh, PA, United States.

S-161 Preeclampsia Diminishes Pregnancy-augmented Myometrial H2S Biosynthesis and Myometrial Artery Cystathionine β-Synthase Expression in Women  
Joshua A Makhouogl, 1 Thomas Luchegat, 1 Robert Darty, 1 Qian-rong Qij, 2 Carol Major, 1 Alshan Hameed, 1 Dong-bao Chen, 1 University of California Irvine, Irvine, CA, United States.

S-162 Periconceptional Associations Between Maternal Dietary Patterns and First-trimester Placental Development  
Jang F Reindert, 1 Annemie GEMGI Mulders, 1 Kajal SC Mohaber, 1 M (Wendy) PH Koster, 2 Sten P Willemsen, 1 Anton HJ Koning, 3 Eric AP Steegers, 3 Régine PM Steegers-Teunissen, 4 Erasmus MC University Medical Center, Rotterdam, Netherlands.
**S-163 Downregulation of Vitamin D Receptor Expression and Upregulation of VDRE-BP Expression in Vascular Endothelial Cells from Preeclampsia**

Wenj Sheng¹, Yang Gu, John Morgan, Xiaodan Chu, David F. Lewis, Danielle Cooper, Charles E. McCrathan, Yaping Wang*. LSIUHS-C, Shreveport, LA, United States.

**S-164 Plasma Cell Free RNA for the Identification of Women at 12-20 Weeks Destined for Early Onset Preeclampsia**

Cari P. Weiner¹,² Helen Zhou,³ Howard S. Cuckle.¹ Megan M. Kuch¹,² Ira Bernstein.¹ Susan E. Carlson.¹

¹Byron Gajewski.¹,² Christine J. Valentine.¹ Beth Kerling.¹ Yafeng Dong.¹ University of Kansas, Kansas City, KS, United States; Tel Aviv University, Tel Aviv, Israel; ³University of Vermont, Burlington, VT, United States; ²University Cincinnati, Cincinnati, OH, United States; Rosette Signaling Laboratory, Mission Hills, KS, United States.

**S-165 Suppressor of Cytokine Signaling-1 (SOCS1): A Potential Mechanistic Target for the Study of Preeclampsia Development.**

Terahsa Denise Wilson¹,², Angela Shaddadju², Jun Le³, Anna Chudnovetz³, Naida Elsaity³, Theresa Boyer³, Irina Burd³, Arthur Vaughan.¹ Johns Hopkins, Baltimore, MD, United States.

**S-166 High Altitude Hypoxia During Gestation Inhibits the Ca2+ Spark-STOC Axis in Uterine Arteries: Roles of MiR210**

Xiang-Qun Hu, Chiranjib Dasgupta, Monica Romero, Sean Wilson, Lubo Zhang*. Loma Linda University, Loma Linda, CA, United States.

**S-167 Downregulation of CuZn-SOD Expression is Associated with Increased Histone H3K9 Methylation in Endothelial Cells from Preeclampsia**

Wenj Sheng¹, Yang Gu, Xiaodan Chu, John Morgan, David F. Lewis, Charles E. McCrathan, Yaping Wang*. LSIUHS-C, Shreveport, LA, United States.

**S-168 Role of TET2 in the Regulation of Uterine Arterial Adaptation to Gestational Hypoxia**

Xiao-Qun Hu, Chiranjib Dasgupta, Rui Song, Lubo Zhang*. Loma Linda University, Loma Linda, CA, United States.

**S-169 The Differential Placental Expression of ERAP1 and ERAP2, Its Association with the Renin Angiotensin System in Preeclampsia.**

Lesia Oha Kurpat¹,²,³,⁴ Eun D. Lee.¹,²,³,⁴ Hiten D. Mistri.¹,²,³,⁴ University of Nottingham, Nottingham, United Kingdom; ¹Virginia Commonwealth University, Richmond, VA, United States.

**S-170 Trophoblast-derived Soluble Fms-like Tyrosine Kinase-1 Production is Modulated by plCNP in Preeclampsia**

Yuki Matsubara¹,²,³,⁴ Keichi Matsubara¹,²,³,⁴ Yuka Uchikura¹,²,³,⁴,⁵ Katsumi Takahay¹,²,³,⁴ Takashi Sugiyama¹,²,³,⁴ Ehime Univ, SOM, Toon, Ehime, Japan; ³Ehime University Graduate SOM, Toon, Ehime, Japan.

**S-171 Cardiovascular Gene Expression in the Placenta in Preeclampsia and Diabetes: Defining Subpopulations in a Common Disease of Pregnancy**

Kelsey Tjest¹, Kymbreana Coley², Clare B Kelly, Misti Leyva³, Mary Sterrett⁴, Eugene Y Chang⁵, Timothy J Lyons⁶, Koo Ho Lee⁴, Medical University of South Carolina, Charleston, SC, United States.

**REPRODUCTIVE ENDOCRINOLOGY, INFERTILITY**

**S-172 Genetic and Hormonal Factors Affecting Bone Mineral Density and Bone Length in a Kiinefelter Syndrome Mouse Model.**

Gabriela Beroukhim¹,²,³,⁴ Shayn William-Burmis,² Arthur P Arnold.¹,² Yale New Haven Hospital, New Haven, CT, United States; ³University of California, Los Angeles (UCLA), Los Angeles, CA, United States.

**S-173 Mesenchymal Stem Cells Regulate the Steroidogenesis Pathway Genes in PCOS Cell Model by Secreting BMP-2 in its Conditioned Media.**


**S-174 Mitochondrial Genetic Perturbations in Cumulus Cells**

KISHILAY KUMAR¹,²,³,⁴ Marta Venturais,²,³,⁴ Xingbo Yang,² Daniel Needleman,² Catherine Racockis.¹ Dagmar Wells.¹ University Of Oxford, Oxford, United Kingdom; ²Harvard University, Cambridge, MA, United States; ³Harvard Medical School, Boston, MA, United States.

**S-175 Relationship of Urinary Phthalates to Ovarian Reserve and Live Birth in Women Undergoing ART Cycles**

Catherine I Hii,Vernorchi²,³,⁴,⁵ Kelly Lynch.¹,²,³,⁴,⁵ Halina Wiczyk²,³,⁴,⁵ Peter St. Marie²,³,⁴,⁵ Tayyab Rah¹,²,³,⁴,⁵ J. Richard Plasner²,³,⁴,⁵ Cynthia K Siter³,⁴,⁵ University of Massachusetts--Baystate, Springfield, MA, United States; ²University of Massachusetts, Amherst, MA, United States.

**S-176 Epigenetic Regulation of Hepatic IGFBP2 Expression in Gestational Diabetes Mellitus**

Di Kiet¹,² Huang Ximient³,⁴,⁵ Da Li¹,² Yingqiu Huang¹.¹ Yale University School of Medicine, New Haven, CT, United States; ²China Medical University, Shengyang, China.

**S-177 The Molecular Function of GALNT5 Restricted to Mouse Spermatids**

Nobuyoshi Takasaka¹,²,³,⁴ Mamoru Yamashita,² Akihito Nawa¹,² Nagoya University Graduate School of Medicine, Nagoya, Japan; ³Bell Research Center for Reproductive Health and Cancer, Nagoya, Japan.

**S-178 Trophodermorphology in Euploid Embryos is Related to infertility Diagnosis and Pregnancy Outcome After Transfer**

Nicole D Urich, Ashley Hessler, Anne Waido, Erin Irman, Micaela Stevenson, Molly Moravek, Samantha Schor, Min Xu.¹ University of Michigan, Ann Arbor, MI, United States.

**S-179 Ozone Therapy and Pulsed Electro-Magnetic Field (PEMF) Could Improve Female Reproductive Potential**

Zaher Mergi¹,²,³,⁴,⁵ Subasinghe Ashini R De,³,⁴,⁵ Amber Moseley²,³,⁴,⁵ Rajan Moseley-LaRue⁵,⁶ John Zhang¹,² Albert Einstein College of Medicine, Bronx, NY, United States; ³Seton Hall University, South Orange, NJ, United States; ⁴HOCATT USA, Weatherford, TX, United States; ⁵New Hope Fertility Center, New York, NY, United States.

**S-180 Prenatal Androgen Exposure Alters Gene Expression Patterns in Neonatal Uterus**

Jyvetha Pagh¹, Maya Bartsyk, Chellakan Blesson².¹ Baylor College Medicine, Houston, TX, United States.

**S-181 Baseline Endometrial Thickness or Endometrial Thickness Change in Response to Estrogen is Not Predictive of Frozen Embryo Transfer Success**

Eleen Babayev⁶, Caroline Hensley²,³,⁴,⁵ John X Zhang.¹,²,³,⁴,⁵ Serdar E Bulun.¹,²,³ Northwestern University Feinberg School of Medicine, Chicago, IL, United States; ²University of Cincinnati College of Medicine, Cincinnati, OH, United States.
S-182  Discovery and Quantification of Novel Markers of Primary Ovarian Insufficiency
Satoko Osuka*,1  Yukiko Kasahara*,1 Nobuyoshi Takasaki,1  Yayu Sula,2  Sayako Yoshitani,1  Natsumi Nakashima1  Tomohiko Murase,1  Tomoko Nakamura,1  Maki Goto,1 Akira Iwase,1  Fumitaka Kikikawa,1  *Nagoya University Graduate School of Medicine, Nagoya, Japan; 1Gunma University Graduate School of Medicine, Maebashi, Japan.

S-183  Intrauterine Insemination Cycles: Characteristics Associated with Live Birth and Thresholds for Ineﬀective and Futile Care
Alexandra J Ainsworth*,1  Emily Barnard,1  Sarah Baumparten,1  Camden Lopez,1  Amy Weaver,1  Zaraz Khan,1  Mayo Clinic, Rochester, MN, United States; 1University of Pittsburgh, Pittsburgh, PA, United States.

S-184  To FET or Not to FET: Embryo Transfer Cancellations in Patients with Polycystic Ovary Syndrome
Hanna S Manoil*,1  C Oso,1  E Radleyt,1  J Andersont,1  Z Pavlovic,1  L Gritttt,1  N Baptist,1  R Jesteant,1  A Belltos,1  Vios Fertility Institute, Chicago, IL, United States.

S-185  Optimal Criteria for Determining the Luteinizing Hormone Surge in Natural Cycle Frozen Embryo Transfers
Neril Shibt,1  Kolbe Hancock,2  Stephanie Willsont,1  Alexis Melnickt,1  Zev Rosenwaakt,1  *New York Presbyterian, New York City, NY, United States; 1The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, New York City, NY, United States.

S-186  Caloric Restriction Eﬀects on Reproductive and Metabolic Parameters on the Aged Wistar Rats
Pablo Lopez De Jesus*,1  Israael Enrique Cresbnt Lopez,2  Edith Arenas Roost,1  Isabel Amrita Cruz,2  Juan Carlos Flores Alonst,1  Marcela arteaga silvat,1  *UAM, Mexico, Mexico; 2BUAP, Puebla, Mexico; INGER, Mexico, Mexico; 3CIBIGR, Atlixco, Puebla, Mexico., Mexico.

S-187  Human Herpesvirus 6 (HHV-6): Prevalence in Prospectively Collected Endometrial Biopsies From Good Prognosis Women Before Undergoing Their First IVF Cycle
Humberto Scoccia,1  James Morong,2  Phillip Pratt,2  Konstanse Knox,1  *University of Illinois Chicago, Chicago, IL, United States; 1Coppe Healthcare Solutions, Weuskesa, WI, United States.

S-188  Impact of Serum Progesterone Concentrations on the Day of Trigger and Obstetric Outcomes. 
Anthony M. DeAgnello*,1  Ariel Dunnt,2  Mae Healy,1  Sahar TermaIeydl,1  Rhianna Saunders,1  John Cockmay,2  Micah HId,1  *National Institutes of Health, Bethesda, MD, United States; 1Walter Reed National Military Medical Center, Bethesda, MD, United States.

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Micaela Stevensont,1  Tyler Adkins, Yolanda Smith, Moly Moravekt,1  University of Michigan, Ann Arbor, MI, United States.

S-190  Outcome of 1347 IVF Cycles in Women Older Than 40 Years of Age
Lolita Mohd Alamani*,1  Hassan Burjaq,2  MMC, Doha, Qatar.

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Anna Hussiant,1  Abeer Salhat,1  Lauren Grinnmt,1  Jacqueline Seringt,1  Jody Eguerrant,1  Angeline Beltos,1  Roohi Jesteant,1  Vios Fertility Institute, Chicago, IL, United States.

S-192  Prediction of Thrombophilia in Patients with Unexplained Infertility and Recurrent Implantation Failure.
Xin Li, Xue Qing, Peking University First Hospital Beijing, Beijing, China.

S-193  Fertility Preservation in an Oncology Patient Who Presented with Positive hCG
Olive J Carron*,1  Alan DeCherney,1  Frank Chang,2  Arthur Sagosskin,1  Eric Vidra,2  *NIH, Bethesda, MD, United States; 1Shady Grove Fertility, Rockville, MD, United States.

S-194  Normalised Ovulation Timing in Population Using Core Body Temperature Monitoring to Corice
Robert Minges*,1  Bradley S Hurst,2  Craig Citron,1  Toby G Knoblett,2  *National Fertility Focus Inc, Old Saybrook, CT, United States; 1Carolinas Medical Center, Charlotte, NC, United States; 2University of Bristol, Bristol, United Kingdom.

S-195  Bioengineering Endometrial Extracellular Matrix Hydrols: A New Option to Improve Human Three-dimensional Endometrial Cell Culture and Organoid Development.
Sara Lopez-Martinot*,1  Hannes Camport,1  Lucia de Miguel-Gomez,1  Amparo Faus,1  Emilio Francesces,1  Herrero,1  Antonio Pellicer,1  Irene Cervello,1  *IVI Foundation, La Fe, Valencia, Spain; 1Universidad de Valencia, Valencia, Spain; 2IVIRMA-Roma, Roma, Italy.

S-196  Single Cell RNA-Sequencing of Immune Cells at Maternal-Fetal Interface in Murine Pregnancy
Dorothy K. Soka, Beatrice Plougastel-Douglas, Prabhakar S. Andhey, Liping Yang, Maxim N. Artymov, Wayne M. Yokoyama*, Washington University, St. Louis, MO, United States.

S-197  Bone Marrow-Derived Mesenchymal Stem Cells Modulate Human Endometrial Stromal Cell Migration and Invasion.
Qingyi Zhao, Yahaira Naiklij, Oleta Sandiford, Nicole M. Knoblett, Natalia C. Douglas, Pranala Rameshwar, Sara S. Morell, Rutgers-New Jersey Medical School, Newark, NJ, United States.

S-198  Vascular-Tissue Trafficking of Decidual Innate Lymphoid Cells
Jessica Vazquez,1  Payton Lindner, Yan Li, Aleksandar K Stanac,1  *University of Wisconsin-Madison, Madison, WI, United States.

S-199  DNMIs and TETs: Inversely Regulated in the Endometrium.
Vishakha Mahajurat,1  Diana Osavlyuk, Satya Amirapu, Anna P Ponnampalam,1  *The University of Auckland, Grafton, Auckland, New Zealand.

S-200  Functional MDR-1 Protects Mitochondria Against Transgenerational Eﬀects of Nitrogen Mustard Exposure.
Barbara Pereira Vergy,1  Mia Pattillo,2  Hailey Clark,2  Zijian Zhang,1  Lynae Brayboy,2  *Brown University, Providence, RI, United States; 1Women & Infants Hospital of Rhode Island, Providence, RI, United States.

S-201  Diaphragm Muscle Weakness Contributes to Ventilatory Deficits in Congenital Diaphragmatic Hernia.
Enriola R Ibrobitog,1  Elizabeth Ann L Enninga, Matthew J Fogarty, Gary C Sieck, Rodrigo Ruano, Mayo Clinic, Rochester, MN, United States.
S-202 Automated Evaluation of Human Embryo Blastulation and Impaired Spatiotemporal Imaging Potential Using Deep-Learning

Yoak Kim Tont, Nir Zabar, Tamar Amitai, Yuval Or, Zeev Shoham, Arieh Horowitz, Iris Har-Vardi, Matan Gavish, Asaad Ben-Meir, Amnon Buu-Brown, Hebrew University, Jerusalem, Israel; Kaplan Medical Center, Rehovot, Israel; Hadassah Medical Center, Jerusalem, Israel; Soroka Medical Center, Beer Sheva, Israel.

S-203 Characterization and Determination of Mechanism of Action, Biodistribution and Safety of Human Bone Marrow Derived CD133+ in a Rat Model of Asherman Syndrome

Xavier Santamaria, Carlos Simons, Ignemix, Paterna, Spain; Harvard University, Boston, MA, United States.

S-204 IGF-1 and IGFBP-3 Serum Concentrations in Patients Undergoing Natural Cycle Frozen-Thawed Embryo Transfer of Euploid PG-TA Embryos

Antonia Athanasiou, Robert Setton, Daylon James, Steven Spandorfer, Well Cornell Medicine, New York, NY, United States.

S-205 Human Platelet-Rich Plasma from Adult Peripheral Blood: Expression in Human Endometrial Stromal Cells and Proteomic Profiles in a Murine Model of Asherman Syndrome

Lucia de Miguel-Gomez, Amparo Faus, Sara Lopez-Martinez, Hannes Campot, Guillermo Molina-Robles, Antonio Filicici, Francisco Dominguez, Irene Cervello, IVI Foundation-ILS La Fe, Valencia, Spain; University of Valencia, Valencia, Spain; IVI/RMA, Rome, Italy.

S-206 Exogenous Anti-AMHRII Antibody Treatment Induces Follicular Development in Sliced Ovarian Tissue Cultures

Tomohiko Murao, Kouji Komatsu, Wei Wei, Reina Someharat, Natsuki Miyakak, Mayuko Murakami, Ganevia Umiday, Bayasalaya Bayasula, Sayako Yoshida, Ayako Murakata, Shotaro Hayashi, Natsuki Nakanishi, Yukiko Kasahara, Phuc X Nguyen, Nobuyuki Takasaki, Tomoko Nakamura, Satoke Osuka, Maki Goto, Fumitaka Kikikawa, Nagoya University, Nagoya, Japan; Aichi Medical University, Nagakute, Japan.

S-207 Development of a Novel Model for Infections at the Maternal-fetal Interface Using HIPS-C-derived Thelastis

Jennifer R Wangt, Aditya Mithal, Robin Ingalls, Wendy Kuchung, Gustavo Mottostavsky, Boston University, Boston, MA, United States.

S-208 Changes in Monocytes Subsets in Recurrent Pregnancy Loss/Implantation Failure.

giyanni R uaidh, Shahnaz Syedet, Xiuhua Yangt, Wenjuan Wangt, Qiaohua He, Dechun Goni, Svetlana Dambaeva, Aice Gilman-Sachs, Kenneth Beamam, Joanne Kwak-Kim, Rosalind Franklin University, Vernon Hills, IL, United States.

S-209 1D1 Mediates BMP2-induced Upregulation of IGF/FGF Expression in Human Endometrial Stromal Cells and Primary Human Decidual Cells.

Lin Lu, Hua Zhu, Yang Jing, Peter C.K. Leung, University of British Columbia, Vancouver, BC, Canada; Renmin Hospital of Wuhan University, Wuhan, China.

S-210 Impact Of Bisphenol-S On Early Mouse Embryo Development

Rina N Sabagh, Maya Barsky, Janet Bruno-Gaston, Blessen Chellakul Selvanases, Baylor College of Medicine, Houston, TX, United States.

S-211 Phospholipase C Zeta Profiles are indicative of Optimal Sperm Parameters in Patients Undergoing Fertility Treatment

Junadi Kasturi, Bhavesh V Misty, Lujain BuSall, Reema Abdawasser, Michal Nomiok, Ahmed Alian, Raed Abu-Dawud, Nadya AlYacoub, Saad AlHassan, F. Anthony Lee, Abdulrah M Assim, Serdar Coskun, Alfaisal University, Riyadh, Saudi Arabia; Cardiff University, Cardiff, United Kingdom; King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia; Qatar University, Doha, Qatar.

S-212 Intracellular Oxygen Levels in the Granulosa Cells Vary During Follicular Development in the Primate Ovary

Xiaoxiao Zhang, Maralee Lawson, Shelly Wolf, Xin Xu, Adam Krieg, Oregon National Primate Research Center, Beaverton, OR, United States; Sichuan Provincial People’s Hospital, Chengdu, China; Oregon Health & Science University, Portland, OR, United States.

S-213 Prostaglandin F2α Production is Increased in An In Vitro Co-culture Model of Maternal-fetal Communication.

Fatema B Almughith, Hassendrin N Peiris, Yong Qin Koh, Ranchan Vassani, Eann Mosaad, Holland Olivaa, Remu Seka, Akiwazi Amako, Salees Kumar, Murray D Mitchell, University of Queensland, Brisbane, Australia; Queensland University of Technology, Brisbane, Australia; Royal Brisbane and Women’s Hospital, Brisbane, Australia; Mater Health Services, Brisbane, Australia.

S-214 Determination of Optimal Housekeeping Genes for Transcriptional Study of the Endometrium

Josefa Maria Sanchez-Reyert*, Katharina Spalth, Patricia Sebastian-Leon, Dagmar Weis, Patricia Diaz-Gimenos*, IVI/RMA IVF Foundation, III La Fe, Valencia, Spain; University of Valencia, Valencia, Spain; UNNO Genetics, Oxford, United Kingdom; University of Oxford, United Kingdom.

S-215 ECM-associated Long Non-coding RNAs Inc-ADAM9 and Inc-PCHD10 Regulate Cell Adhesion Pathway in Premature Rupture of Fetal Membrane

Guoxian Wang, Dongxia Hou, Xiaoyan Dong, Nanbert Zheng, Arkiv Mongolia Maternal and Children’s Hospital, Hohhot, China; New York State Institute for Basic Research in Developmental Disabilities, Staten Island, NY, United States.

S-216 Characterization of Gene Regulation During Ovarian Tissue Cryopreservation and Xenotransplantation.

Jennifer Shemesh, Ornath Bukumu, Zexu Jiao, Sarah Capakuto, Kaitlin Doody, Bruce Carr, Laura Banaszynski, UT Southwestern Medical Center, Dallas, TX, United States.

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S-217 Trimester-Dependent Differential Induction of Anti-Viral and Inflammatory Genes in Decidual Cells by ZIKA Virus Infection

Xiaofeng Guo, Umit Kayilti, Nihan Semerci, Bradley Sipe, Erika New, Frederick Schatz, Charles Lockwood, Oztlem Guzeloglu-Kayisi, University of South Florida, Morsani College of Medicine, Tampa, FL, United States.

S-218 Association of Genetically-Predicted Placental Gene Expression with Adult Obesity and Blood Pressure Traits

Jaidyn N Hellberg, Jacqueline A Piekost, Eric S Toddcrs, Todd L Edwards, David M Aronoff, Digna R Velez Edwards, Vanderbilt University Medical Center, Nashville, TN, United States; Vanderbilt University, Nashville, TN, United States.
S-219  Effect of Gravidity, Parity and Breastfeeding on AMH Levels in Reproductive Aged African-American Women.  
Emma Giuliani, Anne Waldo, Lia Bernard*, Mercedes Carnethon, Lisa Neff, Erica Marsh*. University of Michigan, Ann Arbor, MI, United States; Northwestern University, Chicago, IL, United States.

S-220  The Association Between Living in a Food Desert and the Likelihood of Initiating Breastfeeding  
Ashana Campos*, Jean Paul Tanner, Rones E Wilson, Jason L Salem, Peeraya Sawangkum, Kimberly Frye, Adetola Louis-Jacques*. University of South Florida, Tampa, FL, United States; Baylor College of Medicine, Houston, TX, United States.

S-221  Design and Conduct of the Ovulation and Menstruation (OM) Health Pilot Study  
Sridhri Mahalingaiah*, Jay Cheng, Michael Winter, Erika Rodriguez, Carol Cosenza, Linda Rosen, Anna Williams, Mymi Nguyen, Rashmi Madhavan, Pascarine Karanja, Jill McCrea, Ann Aschengrau*. Harvard T.H. Chan School of Public Health, Boston, MA, United States; University of Wisconsin, Madison, WI, United States; Boston University School of Public Health, Boston, MA, United States; UMass Boston, Boston, MA, United States; Boston University Medical Campus and Boston Medical Center, Boston, MA, United States; Boston University School of Medicine, Boston, MA, United States.

S-222  Epidemiology of Placenta Previa in the United States Between 1970 and 2010: An Age-Period-Cohort Analysis  

S-223  Over-the-counter Analgesic Use During Pregnancy Impacts Neonatal Offspring Outcomes  
Aikaterini Zafeiri, Amalraj Raja, Sohinee Bhattacharya, Paul Fowler. University of Aberdeen, Aberdeen, United Kingdom.

S-224  Risk Factors and Complications of Peripartum Hysterectomy Based on Mode of Delivery  

S-225  Female Sleep Patterns and Spontaneous Abortion in a North American Preconception Cohort.  

S-226  Evaluation of Chlamydia Trachomatis Strain Types and Associated Demographic and Behavioral Risk Factors in Fiji  
Gabriela Bennett*, Noa Ziklo, Deborah Dean, Yale New Haven Hospital, New Haven, CT, United States; University of California, San Francisco (UCSF), San Francisco, CA, United States; University of California, San Francisco, CA, United States.
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