TENTATIVE AGENDA – SUBJECT TO CHANGE

**SUNDAY, JUNE 5, 2022**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>4:00 - 9:00 PM</td>
<td>REGISTRATION</td>
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<tr>
<td>5:00 - 6:00 PM</td>
<td>WELCOME RECEPTION &amp; DINNER – Salon E</td>
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<td>6:00 - 6:10 PM</td>
<td>OPENING REMARKS</td>
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<tr>
<td>6:10 - 7:00 PM</td>
<td>SESSION 1: INFERTILITY, AGING, AND HEALTH</td>
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<td>6:10 - 6:35 PM</td>
<td>Chair: Zhongwei Huang, National University of Singapore</td>
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<td>6:35 – 7:00 PM</td>
<td>Emily Jacobs, University of California, Santa Barbara</td>
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<td>7:00 - 8:00 PM</td>
<td>KEYNOTE LECTURE 1: Marcelle Cedars, University of California, San Francisco</td>
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**MONDAY, JUNE 6, 2022**

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 AM - 12:00 PM</td>
<td>REGISTRATION</td>
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<tr>
<td>8:00 - 9:00 AM</td>
<td>BREAKFAST</td>
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<tr>
<td>9:00 - 9:10 AM</td>
<td>WELCOME REMARKS &amp; INFORMATION</td>
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<tr>
<td>9:10 - 10:40 AM</td>
<td>SESSION 2: MICRO- AND MACRO-ENVIRONMENTS OF OVARIAN AGING</td>
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<td>9:10 – 9:35 AM</td>
<td>Chair: Francesca Duncan, Northwestern University</td>
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<td>9:35 – 10:00 AM</td>
<td>Sharon Stack, University of Notre Dame</td>
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<td>10:00 – 10:25 AM</td>
<td>Ulrike Luderer, University of California, Irvine</td>
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<td>10:25 – 10:40 AM</td>
<td>Miguel Brieno-Enriquez, Magee-Womens Research Institute</td>
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<td>10:40 - 11:00 AM</td>
<td>COFFEE BREAK</td>
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<td>11:00 AM - 12:15 PM</td>
<td>SESSION 3: CELL BIOLOGY OF OOCYTE AGING</td>
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<tr>
<td>11:00 – 11:25 AM</td>
<td>Chair: Iain Cheeseman, Massachusetts Institute of Technology</td>
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</table>
11:25 – 11:50 AM  Marco Conti, University of California, San Francisco
Maternal aging compromises the oocyte program of mRNA translation

11:50 AM – 12:15 PM  Mary Herbert, Newcastle University
Human oocyte meiosis - what does normal look like?

12:15 - 1:00 PM  BIOTECH PANEL DISCUSSION: Biomarkers and Interventions on the Horizon
Moderator: Jennifer Garrison, Buck Institute for Research on Aging
Panelists: Alicia Jackson, Evernow
Nikolina Lauc, GlycanAge
Dina Radenkovic, Gameto
Daisy Robinton, Oviva Therapeutics
Matt Krisiloff, Conception

1:00 - 2:00 PM  LUNCH (and Meet the Experts 1)

2:00 – 3:00 PM  FREE TIME

3:00 - 4:00 PM  GRANTS WORKSHOP WITH Q & A (Optional)
Moderator: Stephanie Pangas, Baylor University

4:00 - 5:30 PM  SESSION 4: METABOLIC CONTROL AND BEYOND
Chair: Carlos Ribeiro, Champalimaud Foundation

4:25 – 4:50 PM  Lindsay Wu, University of New South Wales
Rejuvenating oocyte quality and embryo development through supporting cell metabolism: role of NAD+ and the pentose phosphate pathway

4:50 – 5:15 PM  Chen Lesnik, Princeton University
Enhanced BCAA metabolism improves age-related reproductive function

5:15 – 5:30 PM  Karthikeyani Chellappa, University of Pennsylvania
Isotope tracing at the crossroads of targeting NAD metabolism to treat diseases

5:30 - 5:45 PM  LIGHTNING POSTER PITCHES – Odd numbered Posters

6:00 - 7:00 PM  GROUP DINNER – Starlight Terrace

7:00 - 9:00 PM  POSTER SESSION 1 – Odd numbered Posters

8:00 - 11:00 PM  NETWORKING SOCIAL – Starlight Terrace

8:00 - 9:00 AM  BREAKFAST

TUESDAY, JUNE 7, 2022
9:00 - 10:30 AM SESSION 5: GENETICS OF REPRODUCTIVE AGING
9:00 – 9:25 AM Chair: Yousin Suh, Columbia University
The regulatory landscapes of human ovarian aging

9:25 – 9:50 AM Aleksandar Rajkovic, University of California, San Francisco
Developmental origins of reproductive aging

9:50 – 10:15 AM Karen Schindler, Rutgers University
Identifying genetic variants that accelerate age-related egg quality decline

Short Talk

10:15 – 10:30 AM Seungsoo Kim, Columbia University
A comprehensive integrated post-GWAS analysis of reproductive lifespan reveals enhancer-based BRCA1/NBR2 dysregulation

10:30 – 10:40 AM OFFICIAL GROUP CONFERENCE PHOTO – location TBD

10:40 - 11:00 AM COFFEE BREAK

11:00 AM - 12:40 PM SESSION 6: ORIGINS OF OVARIAN RESERVE
11:00 – 11:25 AM Chair: Satoshi Namekawa, University of California, Davis
Ovarian reserve formation and maintenance

11:25 – 11:50 AM Humphrey Yao, National Institute of Environmental Health Sciences (NIEHS/NIH)
New insights into the establishment of the ovarian reserve

11:50 AM – 12:15 PM Stephanie Pangas, Baylor University
Mouse models for discovery of novel players regulating development of the ovarian reserve

12:15 – 12:40 PM Christian Kramme, Gameto
Multimodal investigation of transcription factor function via in vitro recapitulation of human oogenesis

12:40 - 1:40 PM LUNCH (and Meet the Experts 2)

1:40 - 3:00 PM FREE TIME

3:00 - 4:00 PM EDITORIAL ROUNDTABLE DISCUSSION: REPRODUCTIVE & AGING-FOCUSED JOURNALS
Moderator: Francesca Duncan, Northwestern University
Marcelle Cedars, Editorial Editor; Fertility and Sterility
Francesca Duncan, Deputy Editor-in-Chief; Molecular Human Reproduction
Matt Kaeberlein, Editor-in-Chief; Translational Medicine of Aging
Senior Editor; eLife
Anna Kriebs, Senior Editor; Nature Aging
Karen Schindler, Co-Editor-in-Chief; Reproduction
Yousin Suh, Associate Editor; Aging Cell
Associate Editor; PloS Genetics
Mary Zelinski, Co-Editor-in-Chief; Biology of Reproduction

4:00 – 4:15 PM COFFEE BREAK

4:15 - 5:55 PM SESSION 7: NEW FRONTIERS IN REPRODUCTIVE AGING
4:15 – 4:40 PM Chair: Judith Campisi, Buck Institute for Research on Aging
Evolutionary trade-offs during somatic and reproductive aging
4:40 – 5:05 PM Amanda Kallen, Yale University
Cellular senescence as a novel driver of female reproductive aging

5:05 – 5:30 PM Bérénice Benayoun, University of Southern California
Age-relevant mouse models of menopause

5:30 – 5:55 PM Ingrid Fetter-Pruneda, National Autonomous University of Mexico
Ants as a new model for extended fertility

5:55 – 6:05 PM LIGHTNING POSTER PITCHES – Even numbered Posters

6:10 - 7:00 PM GROUP DINNER – Starlight Terrace

7:00 - 9:00 PM POSTER SESSION 2 – Even numbered Posters

8:00 - 11:00 PM NETWORKING SOCIAL – Starlight Terrace

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WEDNESDAY, JUNE 8, 2022

8:00 - 9:00 AM BREAKFAST

9:00 - 10:30 AM SESSION 8: CROSS-TISSUE & ENDOCRINE SIGNALING
Chair: Jennifer Garrison, Buck Institute for Research on Aging
Deciphering the conversation between the brain and ovary during aging

9:25 – 9:50 AM T. Rajendra Kumar, University of Colorado
FSH glycoforms in female reproductive aging

9:50 – 10:15 AM Polina Lishko, University of California, Berkeley
Bioactive lipid signaling, bioelectricity and aging
Short Talk

10:15 – 10:30 AM Julia Balough, Buck Institute for Research on Aging
The impact of advanced male, female, and combined parental age on reproductive outcomes

10:30 - 11:00 AM COFFEE BREAK

11:00 AM - 12:00 PM BRAINSTORMING SESSION: MAPPING THE FUTURE OF REPRODUCTIVE LONGEVITY
We invite ALL attendees to join an in-depth discussion about where we want this field to go and lay the foundations for a sustainable, global community for years to come.

- What does progress look like in the short and long term?
- What are the key resources needed to support sustainable growth?
- How do we incentivize collaboration and dialogue between academic scientists, clinicians, and industry/biotech leaders that go beyond traditional models?
- How can we increase public engagement in supporting the science and scientists to bring much needed attention to this area of research?
- As we make advances in reproductive aging science, how can we insure that innovations and interventions are available to disadvantaged populations?

12:00 - 1:00 PM LUNCH

1:00 - 4:00 PM FREE TIME AND NETWORKING

4:00 - 5:05 PM SESSION 9: GEROSCIENCE & INTERVENTION STRATEGIES
4:00 – 4:25 PM  Chair: Kara Goldman, Northwestern University  
*Targeting mTOR signaling in reproductive aging*

4:25 – 4:50 PM  Matt Kaeberlein, University of Washington  
*Toward clinical evaluation of rapamycin to target biological aging*

**Short Talks**

4:50 – 5:05 PM  Mary Zelinski, Oregon Health and Science University  
*Impact of Rapamycin on ovarian function in young and old macaques*

5:05 – 5:20 PM  Michael Klutstein, The Hebrew University of Jerusalem  
*Loss of heterochromatin and retrotransposon silencing as determinants in oocyte aging*

5:20 - 6:30 PM  KEYNOTE LECTURE 2: Juan Carlos Izpisua-Belmonte, Altos Labs  
*Cell programming strategies for aging*

6:30 - 10:00 PM  CELEBRATION DINNER & RECEIPTION – Starlight Terrace  
POSTER & TALK AWARDS

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**THURSDAY, JUNE 9, 2022**

8:00 - 9:00 AM  BREAKFAST

9:00 - 10:30 AM  SESSION 10: MITOCNDRIAL FUNCTION AND REPRODUCTIVE AGING  
Chair: Lynae M. Brayboy, Charité – Universitätsmedizin Berlin  
*Dysfunctional MDR-1 disrupts mitochondrial homeostasis in the oocyte — a model for poor oocyte quality associated with diminished ovarian reserve*

9:25 – 9:50 AM  Keshav Singh, University of Alabama at Birmingham  
*Mitochondria as regulator of ovarian aging*

9:50 – 10:15 AM  Rebecca Robker, University of Adelaide  
*Targeting mitochondrial function to combat ovarian fibrosis, improve embryo development and extend fertility*

**Short Talk**

10:15 – 10:30 AM  Vanessa Cota, Princeton University  
*Oocyte mitophagy is critical for extended reproductive longevity*

10:30 - 11:00 AM  COFFEE BREAK

11:00 - 12:30 PM  CONFERENCE ROUNDUP / DEBRIEF & WORKING LUNCH in SALON D – Buffet in Salon E  
Trainee-focused working lunch to review concepts covered in the conference. All are welcome to join.  
Matt Kaeberlein, University of Washington  
Stephanie Pangas, Baylor University  
Bérénice Benayoun, University of Southern California  
Jennifer Garrison, Buck Institute for Research on Aging

**END OF CONFERENCE**

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