# 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>Chairs: Zhongwei Huang, National University of Singapore; Hannah Anvari, Northwestern University</td>
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<td>6:10 - 6:35 PM</td>
<td>Zhongwei Huang, National University of Singapore</td>
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<td><em>Manipulating the downstream targets of mTORC reveals molecular keys to fertility and longevity</em></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><em>The role of sex hormones and gonadotropins in the aging brain</em></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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<td><em>Effect of reproductive aging on infertility and health</em></td>
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## MONDAY, JUNE 6, 2022

<table>
<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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<td>9:00 - 9:10 AM</td>
<td>WELCOME REMARKS &amp; INFORMATION</td>
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<td>9:10 - 10:40 AM</td>
<td>SESSION 2: MICRO- AND MACRO-ENVIRONMENTS OF OVARIAN AGING</td>
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<td>Chairs: Francesca Duncan, Northwestern University; Julia Balough, Buck Institute</td>
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<tr>
<td>9:10 – 9:35 AM</td>
<td>Francesca Duncan, Northwestern University</td>
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<td><em>The aging ovarian environment – from the gamete and beyond</em></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><em>Aging and the ovarian tumor microenvironment</em></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><em>Impacts of in utero exposure to benzo[a]pyrene on female compared to male reproduction</em></td>
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<td>Short Talk</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><em>Forever Young: lessons from the naked mole rat ovary</em></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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<td>Chairs: Iain Cheeseman, Massachusetts Institute of Technology; Jose Isola, Oklahoma Medical Research Foundation</td>
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11:00 – 11:25 AM  Iain Cheeseman, Massachusetts Institute of Technology  
Rewiring cell division to safeguard oocyte fitness during reproductive aging

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:
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 College of Medicine

Bita Nakhai, Chief, Basic and Translational Sciences Section (BTSS) Scientific Review Branch, National Institute on Aging (NIA/NIH)

Susan Taymans, Chief, Fertility and Infertility Branch (FIB), National Institute of Child Health and Human Development (NICHD/NIH)

4:00 - 5:30 PM  SESSION 4: METABOLIC CONTROL AND BEYOND  
Chairs: Carlos Ribeiro, Champalimaud Foundation; Zita Santos, Champalimaud Foundation

4:00 – 4:25 PM  Carlos Ribeiro, Champalimaud Foundation  
How nutrients, neuronal circuits, and the microbiome shape nutritional decisions and reproduction

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  
Short Talk

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

9:00 - 10:30 AM  SESSION 5: GENETICS OF REPRODUCTIVE AGING
Chairs: Yousin Suh, Columbia University; Cosmo Hahn, Buck Institute for Research on Aging

9:00 – 9:25 AM  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

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

10:40 - 11:00 AM  OFFICIAL GROUP CONFERENCE PHOTO – location TBD

11:00 AM - 12:40 PM  SESSION 6: ORIGINS OF OVARIAN RESERVE
Chairs: Satoshi Namekawa, University of California, Davis; Bikem Soygur, University of California, San Francisco

11:00 – 11:25 AM  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 College of Medicine
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
Chairs: Judith Campisi, Buck Institute for Research on Aging; Jingxun Chen, Stanford University
4:15 – 4:40 PM 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
Chairs: Jennifer Garrison, Buck Institute for Research on Aging; Katelyn Adams, Buck Institute for Research on Aging
9:00 – 9:25 AM 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
   Chairs: Kara Goldman, Northwestern University; Sarah Ocanas, Oklahoma Medical Research Foundation

4:00 – 4:25 PM  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 & RECEPTION – Starlight Terrace
   POSTER & TALK AWARDS
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
Rebecca Robker, University of Adelaide
Bérénice Benayoun, University of Southern California

END OF CONFERENCE

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