2015 Meeting of the Organization for the Study of Sex Differences
Detailed Program

Tuesday, April 21

7:30-9:00  Breakfast – Berg A

9:00-12:00  WORKSHOP: "How to study sex differences" - Berg B+C

Chair: Virginia Miller, Mayo Clinic

Art Arnold, University of California, Los Angeles
Kathryn Sandberg, Georgetown University
Jill B. Becker, University of Michigan
Margaret McCarthy, University of Maryland
Gillian Einstein, University of Toronto
Cara Tannenbaum, University of Montréal
Londa Schiebinger, Stanford University

12:00-13:30  Lunch – Berg A

Stakeholder Forum hosted by CIHR with participation from NIH-ORWH: Introducing Sex as a Variable in Preclinical Research: Metrics and Evaluation. Participants: Cara Tannenbaum, Janine Clayton (RSVP required) – Berg B

13:30-15:45  Welcome and Introduction: Louise McCullough and Christine Disteche - Berg B+C

PRESIDENTIAL SYMPOSIUM
Chair: Louise McCullough, University of Connecticut

"Policy, Advocacy and Innovation; the Future of Sex Differences Research"

Martha Nolan, Society for Women’s Health Research - The View from Washington: Importance of Advocacy to Biomedical Research

Londa Schiebinger, Stanford - Gendered Innovations: How sex and gender interact

Janine Clayton, Office of Research on Women’s Health, NIH - Sex as IS a Biological Variable
Panel Discussion and Questions/Answers

15:45-16:00  Late-breaking Talk - Berg B+C

16:00-16:15  Break – Berg A

16:15-17:15  KEYNOTE ADDRESS - Berg B+C

  David Page, MIT "Sex and disease: Do males and females read their genomes differently?"

17:30-20:00  POSTER SESSION I - Berg Lobby / Reception – Berg A

Wednesday, April 22

7:00-8:00  Breakfast – Berg A

8:00-9:00  SPECIAL SESSION sponsored by the Stanford Cardiovascular Institute - Berg B+C

  Jennifer Tremmel  Stanford - Angina in the Absence of Obstructive Coronary Artery Disease: Is There Truly a Sex Difference?

9:00-9:30  Break – Berg A

9:30-11:15  SESSIONS I AND II

  SESSION I: "Sex and Vaccines"- Berg B
  Co-Chairs: Mark Davis, Sabra Klein

  9:30  Sabra Klein  Johns Hopkins - Sex differences and the effects of sex hormones on vaccine efficacy

  10:00  Andrew Pekosz  Johns Hopkins - Primary cell cultures as models to identify sex-specific effects on virus replication and host innate immune responses

  10:30  Renata Engler  University of the Health Sciences - Sex considerations in vaccine safety and efficacy

  11:00  David Furman  Stanford - Testosterone influences humoral immune responses to the influenza vaccine in males

  SESSION II: "Sex differences in brain networks"- Berg C
  Chair: Ivanka Savic-Berglund

  9:30  Nirao Shah, UCSF - Modular genetic and neural control of sexually dimorphic behaviors

  10:00  Sarah Burke, VU University - Sex-typical and sex-atypical white matter microstructure in
gender dysphoric children and adolescents – a Diffusion Tensor Imaging study

10:30 Jamie Feusner, UCLA - Sex differences in functional brain connectivity and relationships to obsessive-compulsive disorder symptoms

11:00 Elizabeth Young Award: Kristen Pleil, University of North Carolina - Sex-specific effects of chronic voluntary alcohol consumption on limbic neuronal function

11:15-11:30 Break – Berg A

11:30-13:15 SESSIONS III AND IV

SESSION III: "Sex effects in early adversity" - Berg B
Co-Chairs: Julia Zehr, Tracy Bale

11:30 David Lyons, Stanford - Sex differences in the neurobiology of stress inoculation

12:00 Tanja Jovanovic, Emory - Genotype and childhood trauma effects on development of sex differences in biomarkers of fear and anxiety

12:30 C. Neill Epperson, University of Pennsylvania - The role of adverse childhood experiences and lifelong social supports on cognitive aging and risk for depression at menopause

13:00 Elizabeth Young Award: Jessica Bolton, Duke University - Western Diets during Gestation and Lactation: A Novel Model for Postpartum Depression and Sex-Specific Developmental Programming?

SESSION IV: "Sex effects in cardiovascular diseases" - Berg C
Chair: Jill Barnes

11:30 Mansoureh Eghbali, UCLA - Estrogen rescues advanced heart failure in mice

12:00 Leslie Leinwand, University of Colorado, Boulder - A woman is not a small man

12:30 Fadi Charchar, Federation University - Y chromosome: Function and involvement in coronary artery disease

13:00 Soban Umar, UCLA - Genistein, a phytoestrogen for the treatment of pulmonary arterial hypertension and right ventricular failure

13:15-14:15 Lunch – Berg A
Mentor/Mentee Lunch – Berg B

14:15-16:00 SESSIONS V AND VI

SESSION V: "Sleep and Sex" - Berg B
Chair: David Ehrmann

14:15 Kristen Knutson, University of Chicago - The impact of sleep disturbances on metabolism in
women and in men

14:45  Jessica A. Mong, University of Maryland - Sex differences and the role of estrogen in sleep: what rodents can tell us about mechanism

15:15  Fiona C. Baker, University of the Witwatersrand - Menstrual cycle and menopause: Hormonal modulation of sleep

15:45  David Garbe, University of Pennsylvania - Sex differences in Drosophila sleep patterns

SESSION VI: "Sex determination, intersex and transsexualism"- Berg C
Co-Chairs: Peter Koopman, Fadi Charchar

14:15  Blanche Capel, Duke University - The battle of the sexes: Molecular pathways of male and female development

14:45  Vincent Harley, Monash University - A link between gender identity and genes involved in sex hormone signalling

15:15  Peter Koopman, University of Queensland - DSD advocacy: What can science bring to the debate?

15:45  Elizabeth Young Award: Sahin Naqvi, Whitehead Institute, MIT - Survival on mammalian sex chromosomes is associated with a unique combination of transcription factor binding and microRNA-mediated repression

16:30-18:30  Organized walks: meet at Berg Lobby

18:30  Free time

Thursday, April 23

7:30-8:30  Breakfast - Berg A

8:30-10:15  SESSIONS VII AND VIII

SESSION VII: "Epigenetic dynamics of sexual dimorphisms"- Berg B
Co-Chairs: Claudine Junien, Carolyn Brown

8:30  Claudine Junien, National Institute For Agricultural Research - Sex-specific epigenetics in transgenerational responses to environmental impacts: facts, gaps and new approaches for prevention and treatment of diseases

9:00  David J. Waxman, Boston University - Mechanisms of growth hormone-regulated, sex-dependent liver gene expression revealed by genome-wide analysis of mouse liver chromatin states

9:30  Carolyn Brown, University of British Columbia - Sex differences in X-linked gene expression: Human genes that escape from X-chromosome inactivation
10:00 Xinxian Deng, University of Washington - *Dosage-sensitive transcriptional regulation by histone demethylases encoded by mouse genes that escape X inactivation*

**SESSION VIII**: "Sex differences in sensory perception and cognition"- Berg C  
Chair: Katherine Sandberg

8:30 Claire Murphy, San Diego State University/UCSD - *Sex differences in taste responses*

9:00 Dolores Malaspina, New York University - *Olfaction and cognition in schizophrenia cases and healthy controls: sex matters*

9:30 Allan Reiss, Stanford - *Sex chromosomes, brain development and cognition*

10:00 Dena Dubal, UCSF - *The X Chromosome Confers Advantage in Alzheimer's Disease*

10:15-10:30 Break – Berg A

**SESSIONS IX AND X**

10:30-12:15 **SESSION IX AND X**

**SESSION IX**: "Sex differences in neurocognitive aging"- Berg B  
Chair: Agnès Lacreuse

10:30 Naftali Raz, Wayne State University - *Aging of Human Brain and Cognition: Measurable Sex differences?*

11:00 Agnès Lacreuse, University of Massachusetts - *Sex differences in cognitive aging: a pressing need for nonhuman primate data*

11:30 Liisa Galea, University of British Columbia - *Sex and age differences in the regulation of neuroplasticity and cognition by sex hormones*

12:00 Joshua Talboom, Arizona State University - *Sex differences in the influence of cognitive training in aged rodents*

**SESSION X**: "Sex and stress"- Berg C  
Co-Chairs: Gretchen Neigh, Nafissa Ismail

10:30 Gretchen Neigh, Emory University - *Sex differences in susceptibility and resiliency: it all depends on where you look*

11:00 Brian Trainor, UC, Davis- *Sex differences in effects of stress on the aversive properties of kappa opioid receptor*

11:00 Nafissa Ismail, University of Ottawa - *The sexed and stressed pubertal brain*

12:00 Katie Morrison, University of Pennsylvania - *Dynamic sex differences during PFC maturation and their disruption by stress*

12:15-13:30 Lunch – Berg A
13:30-15:15  **SESSIONS XI AND XII**

**SESSION XI: "Sex, Obesity, and Diabetes" - Berg B**
Chair: Art Arnold

13:30  **Karen Reue**, UCLA - *Sex chromosomes and obesity*

14:00  **Susan Fried**, Boston University - *Female and male adipocytes are different: mechanisms and implications for metabolic health*

14:30  **Franck Mauvais-Jarvis**, Tulane University - *Sex differences and sex hormones in glucose homeostasis and diabetes*

15:00  **Elizabeth Young Award: Sanne Peters**, University of Utrecht - *Greater excess risk of all-cause mortality and vascular events in women than in men with type 1 diabetes: a systematic review with meta-analysis*

**SESSION XII: "The X chromosome in neurodevelopmental disorders" - Berg C**
Chair: William Davies

13:30  **Rebecca Knickmeyer**, University of North Carolina - *The impact of X-chromosome loss on brain structure and function in infancy*

14:00  **William Davies**, Cardiff University - *Steroid sulfatase: an X chromosome-encoded modulator of attention and impulsivity phenotypes*

14:30  **Armin Raznahan**, National Institute of Mental Health - *The neuroanatomy of X-monosomy and autism spectrum disorders*

15:00  **Donna Werling**, UCSF - *Sex-differential gene expression patterns in the human brain and genetic risk for autism*

15:15-15:30  **Break – Berg A**

15:30-16:30  **CAPSTONE ADDRESS - Berg B+C**

| Vera Regitz-Zagrosek, "Sex and sex hormones in physiological and pathological cardiovascular stress – implications to management of human disease" |

16:30-18:30  **POSTER SESSION II – Berg Lobby**

18:30-19:30  **General OSSD membership meeting – LKSC Room 120**

19:30-22:00  **Banquet / Awards – Berg B+C**