

**Draft 2019 OSSD/IGM Program**  
4/2/19

Program Overview:

Sunday, May 5

9:00AM – 5:00PM	Registration. <b>Metropolitan Foyer.</b>	
9:00AM – noon	<b>Canadian Institute of Health Research Catalyst Awardee workshop</b> <i>Chair: Cara Tannenbaum, CIHR. Metropolitan 2-3.</i>	<b>Optional Education Events: Advancing Science for the Health of Women: The NIH Office of Research on Women's Health</b> <i>Chairs: Chyren Hunter and Samia Noursi, ORWH</i> 10am-12pm. <b>Metropolitan 4-5.</b>
12:00PM – 1:00PM	Lunch on own OR <b>Trainee lunch</b> sponsored by the Libin Cardiovascular Institute of Alberta Women's Cardiovascular Health Research Initiative	
1:00PM – 2:45PM	<b>Session 1: Cardiometabolic health across the lifespan in transgender individuals</b> <i>Chairs: Kerrie Moreau, Natalie Nokoff. Metropolitan 2-3.</i>	<b>Session 2: Sex differences in the impact of stress on cognitive functions across the lifespan</b> <i>Chair: Seema Bhatnagar. Metropolitan 4-5.</i>
2:45PM – 3:00PM	COFFEE BREAK. <b>Metropolitan Foyer.</b>	
3:00PM – 3:15PM	Welcome Remarks (Sandberg, Kautzky-Willer, Klein) <b>Metropolitan 2-5.</b>	
3:15PM – 5:00PM	<b>Session 3: Elizabeth Young New Investigators Symposium</b> <i>Chair: DeLisa Fairweather. Metropolitan 2-5.</i>	
5:00PM – 6:00PM	<b>Art Arnold Distinguished Lecture</b> (Eric Vilain). <b>Metropolitan 2-5.</b>	
6:00PM – 8:00PM	Opening Reception ( <b>West End</b> ) and Poster Session I. ( <b>Dupont Ballroom</b> )	

Monday, May 6

9:00AM – 5:00PM	Registration. <b>Metropolitan Foyer.</b>	
7:30AM – 9:00AM	Breakfast. <b>Metropolitan Foyer.</b>	BSD board meeting. <b>District.</b>
9:00AM – 10:45AM	<b>Session 4: Sex differences in nicotine and smoking: From brain and behavior to smoking cessation</b>	<b>Session 5: Sex differences in immune function and disease</b> <i>Chairs: Jayne Danska,</i>

	<i>Chairs: Cora Lee Wetherington, Sherry McKee.</i> <b>Metropolitan 2-3.</b>	<i>Paul Kubes.</i> <b>Metropolitan 4-5.</b>
10:45AM – 11:00AM	COFFEE BREAK. <b>Metropolitan Foyer.</b>	
11:00AM – 12:45PM	<b>Session 6: Role of the placenta in programming sex differences in disease risk through the lifespan</b> <i>Chairs: Tracey Bale, Kathleen Morrison.</i> <b>Metropolitan 2-3.</b>	<b>Session 7: The role of sex steroids in metabolic health and disease</b> <i>Chair: Annie Newell-Fugate.</i> <b>Metropolitan 4-5.</b>
12:45PM – 3:00PM	Optional Education event (12:45-2pm): <b>Sex and Gender Science: What is it and what's next?</b> <i>Chairs: Gillian Einstein and Cara Tannenbaum</i> NOTE: need RSVP and lunch (for people not attending, lunch on own). <b>Metropolitan 2-3.</b>	
	<b>Society for Women's Health Research media training</b> <i>Chairs: Amy Miller, SWHR Emily Ortman, SWHR</i> 2-3pm. <b>Metropolitan 2-3.</b>	SCORE CEC meeting (invitation only) <i>Chair: Art Arnold.</i> <b>Metropolitan 4-5.</b>
3:00PM – 3:15PM	COFFEE BREAK. <b>Metropolitan Foyer.</b>	
3:15PM – 5:00PM	<b>Session 8: Sex differences in prescription, efficacy and adverse drug reactions of commonly prescribed drugs</b> <i>Chair: Hester den Ruijter.</i> <b>Metropolitan 2-5.</b>	
5:00PM – 6:00PM	<b>IGM Keynote Lecture</b> (Alexandra Kautzky-Willer). <b>Metropolitan 2-5.</b>	
6:00PM – 8:00PM	Poster Session II ( <b>Dupont Ballroom</b> ) and snacks and cash bar ( <b>West End</b> )	
8:00PM	Trainee Social Event (Marrocco). <b>Site TBD</b>	

Tuesday, May 7

9:00AM – 5:00PM	Registration. <b>Metropolitan Foyer.</b>	
7:30AM – 9:00AM	Breakfast. <b>Metropolitan Foyer.</b>	
8:30AM – 9:00AM	OSSD Business Meeting. <b>Metropolitan 2-3.</b>	
9:00AM – 10:45AM	<b>Session 9: Sex differences in the cardiovascular consequences of type 2 diabetes</b> <i>Chair: Judith Regensteiner.</i> <b>Metropolitan 2-3.</b>	<b>Session 10: Sex-specific behavioral strategies during learning, fear, and ambiguity</b> <i>Chair: Natalie Tronson.</i> <b>Metropolitan 4-5.</b>
10:45AM – 11:00AM	COFFEE BREAK. <b>Metropolitan Foyer.</b>	
11:00AM – 12:45PM	<b>Session 11: Sex-specific regulation of energy metabolism across the lifespan</b>	<b>Session 12: Current topics in sex differences research I</b> <i>Chair: Karyn Frick.</i> <b>Metropolitan 4-5.</b>

	<i>Chairs: Rita Strakovsky, Almudena Veiga-Lopez.</i> <b>Metropolitan 2-3.</b>
12:45PM – 3:00PM	Optional Education events: <b>Trainee mentor lunch</b> (12:45-1:45pm) <i>Chair: Jordan Marrocco. Metropolitan 2-3.</i> NOTE: need RSVP and lunch (for people not attending, lunch on own)
	<b>Ally skills: how to stand up and step in</b> (2:00-3:00pm) <i>Chair: Sherry Marts. Metropolitan 4-5.</i>
3:00PM – 3:15PM	COFFEE BREAK. <b>Metropolitan Foyer.</b>
3:15PM – 5:00PM	<b>Session 13: Sex influence-omics: A Big-Data approach</b> <i>Chairs: Jordan Marrocco and Deena Walker. Metropolitan 2-5.</i>
5:00PM – 6:00PM	<b>OSSD Capstone Lecture</b> (Joan Roughgarden). <b>Metropolitan 2-5.</b>
6:00PM – 8:00PM	Wine Tasting and Awards Reception. <b>West End.</b>

Wednesday, May 8

9:00AM – 5:00PM	Registration. <b>Metropolitan Foyer.</b>	
7:30AM – 8:30AM	Breakfast. <b>Metropolitan Foyer.</b>	
8:30AM – 10:15AM	<b>Session 14: Sex differences in molecular phenotypes in cancer</b> <i>Chair: Art Arnold.</i> <b>Metropolitan 2-3.</b>	<b>Session 15: Current topics in sex differences research II</b> <i>Chair: Karyn Frick.</i> <b>Metropolitan 4-5.</b>
10:15AM – 10:30AM	COFFEE BREAK. <b>Metropolitan Foyer.</b>	
10:30AM – 12:15PM	<b>Session 16: Impact of sex on opioid action: Implications for pain management and opioid use disorder</b> <i>Chair: Anne Murphy.</i> <b>Metropolitan 2-3.</b>	<b>Session 17: Impact of sex on metabolic contributions to dementia</b> <i>Chair: Kristen Zuloaga.</i> <b>Metropolitan 4-5.</b>
12:30PM – 2:30PM	OSSD Council Meeting. <b>Metropolitan 2-3.</b>	

Detailed program:

**Sunday, May 5**

9:00AM-5:00PM, Registration, **Metropolitan Foyer**

9:00AM-12:00PM, Parallel sessions

**Metropolitan 2-3**

**Canadian Institute of Health Research Catalyst Awardee workshop**

*Chair: Cara Tannenbaum, CIHR and University of Montreal*

## Metropolitan 4-5

Optional Education Event:

**10:00AM-12:00PM: Advancing Science for the Health of Women: The NIH Office of Research on Women's Health (ORWH)**

*Chairs: Chyren Hunter, PhD, and Samia Noursi, PhD, NIH Office of Research on Women's Health*

**10:00-10:15 Chyren Hunter, PhD, Associate Director for Basic and Translational Research, ORWH and Samia Noursi, PhD, Associate Director for Science Policy, Planning and Analysis, ORWH**

Welcome and introductions: Overview of the symposium and learning objectives

**10:15-10:30 Elizabeth Spencer, RN, Deputy Director, ORWH**

Overview of the NIH Office of Research on Women's Health (ORWH)

**10:30-10:45 Janine Clayton, MD, Associate Director for Women's Health, NIH, Director, ORWH**

Highlights and recent spotlights from ORWH

**10:45-11:00 Chyren Hunter, PhD, Associate Director for Basic and Translational Research, ORWH**

Let's talk about sex as a biological variable: Policies and programs

**11:00-11:15 Samia Noursi, PhD, Associate Director for Science Policy, Planning and Analysis, ORWH**

Inclusion policy and science policy, planning and analysis at ORWH

**11:15-11:30 Margaret Bevans, PhD, RN, FAAN, Associate Director for Clinical Research, ORWH**

Understanding the influence of sex and gender in clinical research

**11:30-11:45 Victoria Cargill, MD, MSCE, Associate Director for Interdisciplinary Research, ORWH**

Research on marginalized and vulnerable women: Understudied, underrepresented, and underreported (U3) populations and interdisciplinary research

**11:45-12:00 Elizabeth Spencer, RN, Deputy Director, ORWH**

Discussion

12:00PM – 1:00PM, Lunch on own

1:00PM – 2:45PM, Parallel sessions

## Metropolitan 2-3

**Session 1: Cardiometabolic health across the lifespan in transgender individuals**

*Chairs: Kerrie Moreau, PhD, University of Colorado, Natalie Nokoff, MD, Children's Hospital Colorado*

**1:05-1:15 Kerrie Moreau, PhD, University of Colorado Anschutz Medical Campus and Denver Veterans Affairs Medical Campus**

Introduction to Symposium: Cardiometabolic health across the lifespan in transgender individuals

**1:15-1:45 Natalie Nokoff, MD, University of Colorado Anschutz Medical Campus**

Treatment of Transgender Youth and Impact on Cardiometabolic Health

**1:45-2:15 Carl G. Streed Jr, MD, MPH, Boston University School of Medicine, Boston Medical Center, Center for Transgender Medicine and Surgery**

Reproductive health in transgender individuals

**2:15-2:45 Deborah Clegg, PhD, American University and Cedars-Sinai Medical Center**

Sex and GENDER's Impact on Cardiometabolic Risk

### **Metropolitan 4-5**

**Session 2: Sex differences in the impact of stress on cognitive functions across the lifespan**

*Chair: Seema Bhatnagar, Children's Hospital of Philadelphia, University of Pennsylvania School of Medicine*

**1:05-1:30 Kimberly Urban, PhD, Children's Hospital of Philadelphia**

Social stress produces age- and sex-dependent changes in prefrontal cortical neuronal activity and morphology

**1:30-1:55 Marieke Gilmartin, PhD, Marquette University**

Predicting threat: sex differences in the neurobiology of temporal fear learning

**1:55-2:20 Seema Bhatnagar, Children's Hospital of Philadelphia**

Peptidergic influences on sex differences in cognitive functions

**2:20-2:45 Ruben Gur, PhD, University of Pennsylvania School of Medicine**

Sex differences in brain development affecting cognition and psychopathology: Results from the Philadelphia Neurodevelopment Cohort

2:45PM – 3:00PM, **BREAK, Metropolitan Foyer**

3:00PM – 3:15PM, **Welcome Remarks** (Kathryn Sandberg, Alexandra Kautzky-Willer, Sabra Klein), **Metropolitan 2-5**

3:15PM-5:00PM, **Session 3: Elizabeth Young New Investigators Symposium, Metropolitan 2-5**

*Chairs: DeLisa Fairweather, PhD, and Katelyn Bruno, PhD, Mayo Clinic Jacksonville*

**3:20-3:40 Brittany Osborne, PhD Student, University of Delaware**

Sex differences in microglia-neural signaling and learning following early-life immune activation in the juvenile rat

**3:40-4:00 Aarti Mishra, PhD Student, University of Southern California**

Sex differences in metabolic aging of the brain in humanized APOE-4 knock-in rats:

Implications for Alzheimer's disease

**4:00-4:20 Nithyananda Thorenoor, PhD, Postdoctoral Fellow, Pennsylvania State University College of Medicine**

Differential impact of co-expressed SP-A1/SP-A2 protein on AM miRNome

**4:20-4:40 Ryan Arathimos, PhD, Postdoctoral Fellow, University of Bristol**

Impact of sex hormone-binding globulin (SHBG) on the human phenome: A scan of over 21,000 traits in ~300,000 participants of UK Biobank

**4:40-5:00 Anna Levinsson\*, PhD, Postdoctoral Fellow, Montreal Heart Institute & Université de Montréal**

Pharmacogenomics call for sex-sensitive drug safety and effectiveness policy reform

\*Dr. Levinsson is a 2019 NIH ORWH and OSSD Science Policy Scholar Travel Award winner

5:00PM – 6:00PM, **Art Arnold Distinguished Lecture, Metropolitan 2-5**  
**Eric Vilain, MD, PhD, Children's National Medical Center**  
*Hurdling over sex: Sport, science, and equity*

6:00PM-8:00PM, Opening Reception (**West End**) and Poster Session I (**Dupont Ballroom**)

## **Monday, May 6**

9:00AM to 5:00PM, Registration, **Metropolitan Foyer**

7:30AM-9:00AM, Breakfast, **Metropolitan Foyer**

9:00AM – 10:45AM, Parallel sessions

### **Metropolitan 2-3**

#### **Session 4: Sex differences in nicotine and smoking: From brain and behavior to smoking cessation**

*Chairs: Cora Lee Wetherington, PhD, National Institute on Drug Abuse, Sherry McKee, PhD, Yale School of Medicine*

##### **9:05-9:30 Kenneth A. Perkins, PhD, University of Pittsburgh School of Medicine**

Sex differences in nicotine versus non-nicotine factors affecting acute smoking reinforcement and reward

##### **9:30-9:55 Teresa R. Franklin, PhD, University of Pennsylvania Perelman School of Medicine**

Influence of sex and hormones on brain and behavioral response to smoking cues, a major relapse predictor

##### **9:55-10:20 Kelly Cosgrove, PhD, Yale School of Medicine**

Imaging sex differences in the mesocortical and mesolimbic dopamine pathways of tobacco smokers

##### **10:20-10:45 Sherry McKee, PhD, Yale School of Medicine**

Considering sex differences in treatment development for smoking

### **Metropolitan 4-5**

#### **Session 5: Sex differences in immune function and disease**

*Chairs: Jayne Danska, PhD, Hospital for Sick Children, Paul Kubes, PhD, University of Calgary*

##### **9:05-9:30 Paul Kubes, PhD, University of Calgary**

Sex differences in control of bacterial infections

##### **9:30-9:55 Manu Rangachari, PhD, Quebec City University Hospital Research Centre**

Male sex and Th17 T cells exacerbate disease in a mouse model of progressive multiple sclerosis

##### **9:55-10:20 Connie Krawczyk, PhD, McGill University**

Specific X chromosome proteins and inflammation

##### **10:20-10:45 Sabra Klein, PhD, Johns Hopkins Bloomberg School of Public Health**

Sex differences in vaccine-induced immunity against influenza

10:45AM – 11:00AM, BREAK, **Metropolitan Foyer**

11:00AM – 12:45PM, Parallel sessions

### **Metropolitan 2-3**

#### **Session 6: Role of the placenta in programming sex differences in disease risk through the lifespan**

*Chairs: Tracy Bale, PhD, University of Maryland School of Medicine, Kathleen Morrison, PhD, University of Maryland School of Medicine*

**11:05-11:30 Tracy Bale, PhD, University of Maryland School of Medicine**

Programming prenatal female resilience: placental epigenetic mechanisms of the X

**11:30-11:55 Kent Thornburg, PhD, Oregon Health & Science University School of Medicine**

Sex differences in disease risk begin in the womb

**11:55-12:20 Wendy Robinson, PhD, University of British Columbia and BC Children's Hospital Research**

X-chromosome inactivation, mosaicism and the placenta

**12:20-12:45 Thomas Jansson, MD, PhD, University of Colorado School of Medicine**

Fetal programming in maternal obesity: Sex differences and the role of placental adiponectin signaling

### **Metropolitan 4-5**

#### **Session 7: The role of sex steroids in metabolic health and disease**

*Chair: Annie Newell-Fugate, DVM, MSc, PhD, Texas A&M University*

**11:05-11:30 Annie Newell-Fugate, DVM, MSc, PhD, Texas A&M University**

Sexually dimorphic effects of local androgens on white adipose tissue lipid metabolism

**11:30-11:55 Jennifer Shuwen Lee, MD, PhD, Stanford University**

Endogenous circulating sex hormones and CVD risk in older men and women with Type 2 diabetes

**11:55-12:20 Farida Sohrabji, PhD, Texas A&M University**

Sex and age differences in cerebrovascular disease

**12:20-12:45 Franck Mauvais-Jarvis, MD, PhD, Tulane University**

The role of androgens and estrogens in beta pancreatic cell function

12:45PM-2:00PM, Optional Education event, **Metropolitan 2-3**

#### **Sex and Gender Science: What is it and what's next?**

*Chairs: Gillian Einstein, PhD, University of Toronto, and Cara Tannenbaum, PhD, CIHR and University of Montreal*

NOTE: need RSVP and lunch (for people not attending, lunch on own)

**12:45-1:00 Gillian Einstein, University of Toronto**

Welcome and introductory remarks

**1:00-1:15 Cara Tannenbaum, PhD, Institute of Gender and Health, CIHR**

Mandate of the IGH to expand the field of Sex and Gender Science

**1:15-1:30 Geert de Vries, PhD, Georgia State University**

What sex and gender science will contribute

**1:30-1:45 Ian D Graham, PhD, University of Ottawa**

Sex and gender science: A view from the lens of implementation science

**1:45-2:00 Paul Kubes, PhD, University of Calgary**

Perspectives from a non-sex and gender scientist

2:00PM-3:00PM, Optional Education event, **Metropolitan 2-3**

**Society for Women's Health Research media training**, *Chairs: Amy Miller, Society for Women's Health Research, Emily Ortman, Society for Women's Health Research*

2:00PM-3:00PM, Invitation Only event, **Metropolitan 4-5**

**SCORE CEC meeting**, *Chair: Art Arnold*

3:00PM – 3:15PM, **BREAK**, **Metropolitan Foyer**

3:15PM-5:00PM, **Session 8: Sex differences in prescription, efficacy and adverse drug reactions of commonly prescribed drugs**, **Metropolitan 2-5**

*Chairs: Hester den Ruijter, PhD, Laboratory of Experimental Cardiology UMC Utrecht, Paula Rochon, MD MPH, Women's College Research Institute, Women's College Hospital; Department of Medicine and Institute of Health Policy, Management & Evaluation; Univ. of Toronto*

**3:20-3:45 Sarah Watson, MSc, Pharm, Uppsala Monitoring Centre**

Global reporting of adverse drug reactions in men and women

**3:45-4:10 Sophie Bots, MSc, UMC Utrecht**

Sex-specific ADR reporting in clinical trials for heart failure

**4:10-4:35 Vera Regitz-Zagrosek, MD, PhD, Charite**

Sex and gender in the development and use of cardiovascular drugs

**4:35-5:00 Virginia Miller, PhD, Mayo Clinic**

Sex hormones and adverse drug reactions

5:00PM – 6:00PM, **IGM Keynote Lecture**, **Metropolitan 2-5**

**Alexandra Kautzky-Willer, MD, Medical University of Vienna**

*Sex and gender matter in diabetes: From pathophysiology to prevention and personalized therapy*

6:00PM-8:00PM, **Poster Session II (Dupont Ballroom)**; snacks and cash bar (**West End**)

8:00PM, **Trainee Social Event**

*Chair: Jordan Marrocco, Georgetown Room*

## **Tuesday, May 7**

9:00AM to 5:00PM, Registration, **Metropolitan Foyer**

7:30AM-9:00AM, Breakfast, **Metropolitan Foyer**

8:30AM-9:00AM, OSSD Business Meeting, **Metropolitan 2-3**



9:00AM – 10:45AM, Parallel sessions

### Metropolitan 2-3

#### **Session 9: Sex differences in the cardiovascular consequences of type 2 diabetes**

*Chair: Judith Regensteiner, PhD, University of Colorado School of Medicine*

**9:05-9:30 Rita Kalyani, MD, Johns Hopkins University**

Sex differences in racial and ethnic factors in cardiovascular disease associated with T2D

**9:30-9:55 Kristen Nadeau, MD, University of Colorado School of Medicine**

Cardiovascular exercise capacity in youth and adults with type 2 diabetes

**9:55-10:20 C. Noel Bairey Merz, MD, Cedars-Sinai Medical Center**

Sex differences in heart disease in T2D

**10:20-10:45 Kerrie Moreau, PhD, University of Colorado School of Medicine**

Sex hormones and cardiometabolic health in type 2 diabetes

### Metropolitan 4-5

#### **Session 10: Sex-specific behavioral strategies during learning, fear, and ambiguity**

*Chair: Natalie Tronson, PhD, University of Michigan*

**9:05-9:30 Natalie Tronson, PhD, University of Michigan**

Beyond "better" or "worse": sex differences in strategies engaged during fear conditioning

**9:30-9:55 Liisa Galea, PhD, University of British Columbia**

Sex and hormone differences in strategy use following spatial learning

**9:55-10:20 Caitlin Orsini, PhD, University of Florida**

Hormonal regulation of risky decision making in male and female rats

**10:20-10:45 Jeansok Kim, PhD, University of Washington**

Ethobehavioral studies of sexually dimorphic risky decision-making in rats

10:45AM – 11:00AM, BREAK, **Metropolitan Foyer**

11:00AM – 12:45PM, Parallel sessions

### Metropolitan 2-3

#### **Session 11: Sex-specific regulation of energy metabolism by lifestyle and environmental factors across the lifespan**

*Chair: Rita Strakovsky, PhD, RD, Michigan State University, Almudena Veiga-Lopez, DVM, PhD, Michigan State University*

**11:05-11:30 Almudena Veiga-Lopez, DVM, PhD, Michigan State University**

Sex-specific effect of gestational bisphenols on fetal skeletal muscle and adipose tissue differentiation

**11:30-11:55 Vasantha Padmanabhan, PhD, University of Michigan**

Sexually dimorphic impact of prenatal chemical exposures on newborn metabolic outcomes

**11:55-12:20 Diana C. Pacyga, PhD, Michigan State University**

Associations of maternal obesity and adiposity with gestational steroid hormone levels: impact of fetal sex

**12:20-12:45 Kanakadurga Singer, MD, University of Michigan**

Sex differences in hematopoietic responses to dietary obesity

## Metropolitan 4-5

### **Session 12: Current topics in sex differences I**

*Chair: Karyn Frick, PhD, University of Wisconsin-Milwaukee*

**11:05-11:25 Nathan Schilaty, DC, PhD, Mayo Clinic**

Sex differences in anterior cruciate ligament injury

**11:25-11:45 Jean Hoffman-Censits, MD, Johns Hopkins University**

Sex as a factor influencing outcome of bladder cancer: understanding sex based differences and goals for improving outcomes

**11:45-12:05 Katelyn Bruno, PhD, Mayo Clinic, Florida**

Sex differences in chronic pain conditions: hypermobile Ehlers Danlos syndrome and fibromyalgia

**12:05-12:25 Holly Hunsberger, PhD, Columbia University**

Anxiety impacts cognitive decline in a sex-specific manner in Alzheimer's disease mice

**12:25-12:45 Christine Wagner, PhD, University at Albany**

Sex differences in progesterone receptor expression in developing brain: from RNA sequencing to aggressive behavior

12:45PM-3:00PM, **Optional Education events:**

**Trainee mentor lunch** (12:45-1:45pm), **Metropolitan 2-3**

*Chair: Jordan Marrocco*

NOTE: need RSVP and lunch (for people not attending, lunch on own)

**Ally skills: how to stand up and step in** (2:00-3:00pm), **Metropolitan 4-5**

*Chair: Sherry Marts*

3:00PM-3:15PM, BREAK, **Metropolitan Foyer**

3:15PM-5:00PM, **Session 13: Sex influence-omics: a big-data approach, Metropolitan 2-5**

*Chairs: Jordan Marrocco, PhD, The Rockefeller University, and Deena Walker, PhD, Icahn School of Medicine at Mount Sinai*

**3:20-3:45 Eldin Jašarević, PhD, University of Pennsylvania**

Big data do's and don'ts in sex differences research

**3:45-4:10 Adriana Maggi, PhD, University of Milan**

A novel understanding of male and female metabolic features that stems from 'omics investigational power

**4:10-4:35 Jordan Marrocco, PhD, The Rockefeller University**

Transcriptional profiling of the stressed hippocampus: does sex make a difference?

**4:35-5:00 Deena Walker, PhD, Icahn School of Medicine at Mount Sinai**

Adolescent stress reprograms the medial amygdala transcriptome and sex differences in reward

5:00PM – 6:00PM, **OSSD Capstone Lecture, Metropolitan 2-5**

**Joan Roughgarden, PhD, Stanford University**

*The gender binary in nature, across human cultures, and in the Bible*

6:00PM-8:00PM, Wine Tasting and Awards Reception, **West End**

## **Wednesday, May 8**

9:00AM to 5:00PM, Registration, **Metropolitan Foyer**

7:30AM - 8:30AM, Breakfast, **Metropolitan Foyer**

8:30AM – 10:15AM, Parallel sessions

### **Metropolitan 2-3**

#### **Session 14: Sex differences in molecular phenotypes in cancer**

*Chair: Art Arnold, PhD, UCLA*

**8:35-9:00 Camila Lopes-Ramos, PhD, Dana-Farber Cancer Institute, Harvard University**

Gene regulatory network analysis identifies sex-linked differences in colon cancer drug metabolism processes

**9:00-9:25 Paul Boutros, PhD, UCLA Department of Human Genetics**

Sex-differences in cancer driver genes and biomarkers

**9:25-9:50 Joshua Rubin, MD, PhD, Washington University School of Medicine**

Multiple contributors to sex differences in pediatric neural cancers

**9:50-10:15 Kristin Swanson, PhD, Mayo Clinic Phoenix**

Connecting sex differences in imaging of glioma with tumor biology

### **Metropolitan 4-5**

#### **Session 15: Current topics in sex differences II**

*Chair: Karyn Frick, PhD, University of Wisconsin-Milwaukee*

**8:35-8:55 Deepak P. Srivastava, PhD, King's College London**

Estradiol regulates the synaptic proteome through a local translation mechanism in a sexually dimorphic manner

**8:55-9:15 Marija Kundakovic, PhD, Fordham University**

Sex-specific chromatin organization and anxiety-related phenotypes

**9:15-9:35 Vesna Garovic, MD, PhD, Mayo Clinic**

Sex-specific risk factors and renal disease

**9:35-9:55 Karin Schenck-Gustafsson, MD, Karolinska Institutet**

Palpitations in women

**9:55-10:15 Meghan Rebuli, PhD, University of North Carolina at Chapel Hill**

Inflammatory response to wood smoke and live attenuated influenza virus is sex-specific in the human airway

10:15AM – 10:30AM, BREAK, **Metropolitan Foyer**

10:30AM – 12:15PM, Parallel sessions

### **Metropolitan 2-3**

**Session 16: Impact of sex on opioid action: Implications for pain management and opioid use disorder**

*Chairs: Anne Murphy, PhD, Georgia State University, and Marjorie Jenkins, MD, FDA Office of Women's Health*

**10:35-11:00 Anne Murphy, PhD, Georgia State University**

Sex differences in neural-glial signaling underlying opioid action

**11:00-11:25 Rita Valentino, PhD, NIDA**

Sex differences in the convergence of stress and opioid systems

**11:25-11:50 Jill Becker, PhD, University of Michigan**

Sex differences and the role of selective estradiol receptor subtypes in neural mechanisms of addiction

**11:50-12:15 R. Kathryn McHugh, PhD, Harvard Medical School and McLean Hospital**

Sex differences in clinical treatment of opioid use disorder

### **Metropolitan 4-5**

#### **Session 17: Impact of sex on metabolic contributions to dementia**

*Chair: Kristen Zuloaga, PhD, Albany Medical College*

**10:30-10:35 Kristen Zuloaga, PhD, Albany Medical College**

Introduction: Impact of sex on metabolic contributions to dementia

**10:35-11:00 Roberta Brinton, PhD, University of Arizona**

Transitions of the aging female brain: window into underlying mechanisms of late-onset Alzheimer's disease

**11:00-11:25 Lisa Robison, PhD, Albany Medical College**

Sex-dependent effects of prediabetes in mouse models of Alzheimer's disease & mixed dementia

**11:25-11:50 Kristen O'Connell, PhD, The Jackson Laboratory**

Gene X sex interactions in a novel mouse model of Alzheimer's disease

**11:50-12:15 Adviy Ergul, MD, PhD, Medical University of South Carolina**

Vascular cognitive impairment in diabetes: lost communication within the neurovascular unit

12:30PM – 2:30PM, OSSD Council Meeting, **Metropolitan 2-3**