

Draft 2019 OSSD/IGM Program
2/9/19

Program Overview:

Sunday, May 5

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

Monday, May 6

9:00AM – 5:00PM	Registration. Metropolitan Foyer.	
7:30AM – 9:00AM	Breakfast. Metropolitan Foyer.	BSD board meeting. District.
9:00AM – 10:45AM	Session 4: Sex differences in nicotine and smoking: From brain and behavior to smoking cessation <i>Chairs: Cora Lee Wetherington, Sherry McKee. Metropolitan 2-3.</i>	Session 5: Sex differences in immune function and disease <i>Chairs: Jayne Danska, Paul Kubes. Metropolitan 4-5.</i>

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

Tuesday, May 7

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

12:45PM – 3:00PM	Optional Education events: Trainee mentor lunch (12:45-1:45pm) <i>Chair: Jordan Marrocco. Metropolitan 2-3.</i> 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) <i>Chair: Sherry Marts. Metropolitan 4-5.</i>
3:00PM – 3:15PM	COFFEE BREAK. Metropolitan Foyer.
3:15PM – 5:00PM	Session 13: Sex influence-omics: A Big-Data approach <i>Chairs: Jordan Marrocco and Deena Walker. Metropolitan 2-5.</i>
5:00PM – 6:00PM	OSSD Capstone Lecture (Joan Roughgarden). Metropolitan 2-5.
6:00PM – 8:00PM	Wine Tasting and Awards Reception. West End.

Wednesday, May 8

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

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

District

Optional Education Event:

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

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

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

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

Natalie Nokoff, MD, University of Colorado Anschutz Medical Campus

Treatment of Transgender Youth and Impact on Cardiometabolic Health

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

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

Kimberly Urban, PhD, Children's Hospital of Philadelphia

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

Marieke Gilmartin, PhD, Marquette University

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

Seema Bhatnagar, Children's Hospital of Philadelphia

Peptidergic influences on sex differences in cognitive functions

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**

Chair: DeLisa Fairweather, PhD, Mayo Clinic Jacksonville

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

Kenneth A. Perkins, PhD, University of Pittsburgh School of Medicine

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

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

Kelly Cosgrove, PhD, Yale School of Medicine

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

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

Paul Kubes, PhD, University of Calgary

Sex differences in control of bacterial infections

Dawn Newcomb, PhD, Vanderbilt University

Sex differences and the effects of hormones on airway inflammation and asthma

Connie Krawczyk, PhD, McGill University

Specific X chromosome proteins and inflammation

Marjorie Robert-Guroff, PhD, NIH/NIAD

Sex differences in vaccine-induced protection against SIV

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

Tracy Bale, PhD, University of Maryland School of Medicine

Programming prenatal female resilience: placental epigenetic mechanisms of the X

Kent Thornburg, PhD, Oregon Health & Science University School of Medicine

Sex differences in disease risk begin in the womb

Dani Fallin, PhD, Johns Hopkins University Bloomberg School of Public Health

Using placenta biomarkers to inform etiologic questions in child health--examples from the EARLI study

Thomas Jansson, MD, PhD, University of Colorado School of Medicine

Placental adiponectin signaling mediates sex specific programming of metabolic and cardiovascular disease in maternal obesity

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

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

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

Jennifer Shuwen Lee, Stanford University

Title TBA

Farida Sohrabji, PhD, Texas A&M University

Sex and age differences in cerebrovascular disease

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)

Cara Tannenbaum, Institute of Gender and Health, CIHR

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

Geert de Vries, Georgia State University

What sex and gender science will contribute

Londa Schiebinger, Stanford University

How to get researchers to consider the influence of gender

Paul Kubes, 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, *Chair: Amy Miller, 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

Sarah Watson, MSc, Pharm, Uppsala Monitoring Centre
Global reporting of adverse drug reactions in men and women

Sophie Bots, MSc, UMC Utrecht
Sex-specific ADR reporting in clinical trials for heart failure

Vera Regitz-Zagrosek, MD, PhD, Charite
Sex and gender in the development and use of cardiovascular drugs

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

Sherita Hill Golden, MD, Johns Hopkins University

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

Kristen Nadeau, MD, University of Colorado School of Medicine

Cardiovascular exercise capacity in youth and adults with type 2 diabetes

C. Noel Bairey Merz, MD, Cedars-Sinai Medical Center

Sex differences in heart disease in T2D

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

Natalie Tronson, PhD, University of Michigan

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

Liisa Galea, PhD, University of British Columbia

Sex and hormone differences in strategy use following spatial learning

Caitlin Orsini, PhD, University of Florida

Hormonal regulation of risky decision making in male and female rats

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

Almudena Veiga-Lopez, DVM, PhD, Michigan State University

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

Vasantha Padmanabhan, PhD, University of Michigan

Sexually dimorphic impact of prenatal chemical exposures on newborn metabolic outcomes

Diana C. Pacyga, PhD, Michigan State University

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

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

Nathan Schilaty, DC, PhD, Mayo Clinic

Sex differences in anterior cruciate ligament injury

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

Katelyn Bruno, PhD, Mayo Clinic, Florida

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

Holly Hunsberger, PhD, Columbia University

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

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

Eldin Jašarević, PhD, University of Pennsylvania

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

Adriana Maggi, PhD, University of Milan

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

Jordan Marrocco, PhD, The Rockefeller University

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

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

Camila Lopes-Ramos, PhD, Dana-Farber Cancer Institute, Harvard University

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

Paul Boutros, PhD, UCLA Department of Human Genetics

Sex-differences in cancer driver genes and biomarkers

Joshua Rubin, MD, PhD, Washington University School of Medicine

Multiple contributors to sex differences in pediatric neural cancers

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

Deepak P. Srivastava, PhD, King's College London

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

Marija Kundakovic, PhD, Fordham University

Sex-specific chromatin organization and anxiety-related phenotypes

Vesna Garovic, MD, PhD, Mayo Clinic

Sex-specific risk factors and renal disease

Karin Schenck-Gustafsson, MD, Karolinska Institutet

Palpitations in women

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

Anne Murphy, PhD, Georgia State University

Sex differences in neural-gial signaling underlying opioid action

Rita Valentino, PhD, NIDA

Sex differences in the convergence of stress and opioid systems

Jill Becker, PhD, University of Michigan

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

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

Kristen Zuloaga, PhD, Albany Medical College

Impact of sex on metabolic contributions to dementia

Roberta Brinton, PhD, University of Arizona

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

Lisa Robison, PhD, Albany Medical College

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

Kristen O'Connell, PhD, The Jackson Laboratory

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

Adviye 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**