

## **Tuesday, June 18, 2019**

8:00am - 5:30pm Workshop Registration Nicollet Promenade

8:30am - 12:30pm MORNING WORKSHOPS (Registration Required)

Implementing G methods in complex longitudinal data

**Ashley Naimi** 

Data manipulation, visualization, and reproducible documents with

R and the Tidyverse

Malcolm Barret & Corinne Riddell

Critical review and preparation of manuscripts reporting epidemiologic findings

(Sponsored by AJE)

Moyses Szklo

Confounding control for estimating causal effects: Looking under the hood

Nicolle Gatto & Ulka Campbell

An introduction to R for epidemiologists

Steven Mooney

Hone your soft skills and own the job market Timothy Lash & Lauren McCullough

1:00pm - 5:00pm AFTERNOON WORKSHOPS (Registration Required)

Mendelian randomization: a practical guide

**Neil Davies** 

Using monte carlo simulations for quantitative bias analysis

Hailey Banack & Elizabeth Rose Mayeda

Communicating research findings to the media and public

Jennifer Loukissas

Deep learning for epidemiologists: An introduction to neural networks

Kathryn Rough

Introduction to causal inference for multiple time point exposures

Laura Balzer & Maya Petersen

E-values, unmeasured confounding, measurement error, and selection bias

Tyler VanderWeele & Louisa Smith

5:30pm - 7:30pm <u>EVENING WORKSHOPS</u> (Registration Required)

**SER Meeting Registration** 

Bayesian multilevel/longitudinal modeling

**Chuck Huber** 

3:00pm - 8:30pm

An introduction to directed acyclic graphs: What you never wanted but needed to know about bias and

didn't even know to ask.

Ian Shrier

How to make a picture worth a thousand words: Effectively communicating your research results

using statistical graphics

Michael Jackson

A primer on electronic health record research design and analysis

**Neal Goldstein** 

An introduction to predicting exposures and outcomes using omic biomarkers

Paul Yousefi & Matthew Suderman

Infographics 101 for public health

Sujani Sivanantharajah

7:00pm - 8:30pm **Poster Session 1 & Reception** (cash bar)

**Exhibit Hall** 

Nicollet Promenade

Wednesday, June 19, 2019

SPC Speed Networking (ticket required) 7:00am - 7:45am

Skyway AB **Exhibit Hall** 

6:45am - 8:00am **Continental Breakfast** 

Nicollet Promenade

8:00am - 9:30am PLENARY SESSION 1

Nicollet ABC

Session Chair: Andrew Olshan

SER President Address Recording

**Enrique Schisterman** Keynote Address Alix Spiegel

9:30am - 10:00am **Break and Poster Viewing**  **Exhibit Hall** 

**SYMPOSIA 1** 

Registration

10:00am - 11:30am

7:30am - 5:15pm

SPOTLIGHT ON THE CONTROLS: INTERESTING REAL-WORLD CHALLENGES FACED WITH CONTROL GROUPS AND THE IMPLICATIONS FOR RANDOMIZED CONROLLED TRIALS.

Nicollet A Recording

**Chairs: Jennifer Ahern and Maya Petersen** 

Cluster randomized trial design and interpretation in a rapidly evolving policy and implementation context: Insights from the Sustainable East Africa Research on Community Health (SEARCH) Trial

Measuring spillover effects in the treatment and control arms in cluster-randomized trials

Jade Benjamin-Chung

Adapting a community randomized trial design in response to a regional outbreak event: A case study

of malaria elimination in Namibia

Mi-Suk Kang-Dufour

What happened to the controls in the Moving To Opportunity housing experiment?

Theresa Osypuk

Usual and unusual care: Selecting control groups in behavioral interventions

**Brandon Marshall** 

Discussant

**Enrique Schisterman** 

10:00am - 11:30am

## THE ELEPHANT IN THE ROOM: CAUSAL INFERENCE IN THE FACE OF COMPETING EVENTS

Nicollet BC

Chairs: Jessie K. Edwards and Jessica G. Young

Making sense of analytic choices in competing events data using counterfactual

causal models

Jessica G. Young

Choices about competing events, illustrated

Jessie K. Edwards

Separable effects: new estimands for causal inference in competing risk settings

Mats Stensrud

Discussant

**Miguel Hernan** 

Discussant

**Stephen Cole** 

10:00am - 11:30am

## THE PROMISE AND PERIL OF RANDOMNESS

Nicollet D1

Chair: Eric Lofgren

Do these results seem random to you? A validation approach for investigating multiple exposures

using tree-based methods

Jeanette Stingone

Biologically or socially transmitted outcomes? Be (un)certain of your uncertainty!

Laura Balzer

Causal identification and randomness: why 'chance confounding' is a contradiction

in terms

**Daniel Westreich** 

Bad Doctors or Bad Luck?: Stochastic threats to common quality of care metrics

Eric Lofgren

Accounting for selection bias in the measurement of outbreak intervention efficacy

Jon Zeiner

10:00am - 11:30am REMOVE THE HESITATION FROM YOUR VALIDATION

Nicollet D2

Chairs: Lisa Bodnar and Matthew Fox

What do SER members know about validation studies? Results of an informal survey

**Matthew Fox** 

Battle of the bias parameters: comparing methods for validating BMI

in postmenopausal women

**Hailey Banack** 

The specific importance of specificity

**Timothy Lash** 

Cancer treatment and pregnancy outcomes: challenges in validation and bias analyses

Penelope Howards

10:00am - 11:30am

DIVERSITY & INCLUSION: EPIDEMIOLOGY AND COMMUNITY STAKEHOLDERS: IMPRESSIONS AND EXPERIENCES

Nicollet D3 Recording

Chairs: Martha Werler and Elisa Jean-Baptiste

Is it time to develop an epidemiologic triad model to support the theory of community engaged scholarship?

Ruby Nguyen

Who is responsible for eliminating health disparities? What are you doing about it?

**Mary Roary** 

Listen to and trust black women

Shawnita Sealy-Jefferson

Intersections of race, culture, & sovereignty hurt american indian epidemiology

Joseph Yracheta

Discussant

**Yvette Cozier** 

10:00am - 11:30am

GOOD EPI, BAD EPI: IS SHORT BIRTH SPACING REALLY THAT BAD?

Lakeshore A

**Chairs: Gavin Pereira and Katherine Ahrens** 

Why do we think there's a causal effect?

Mark Klebanoff

Is it all due to confounding and selection bias?

**Gavin Pereira** 

Response - No it's not!

**Katherine Ahrens** 

It is all due to effect modification.

Annette Regan

Response - Effect modification might exist but we have forgotten about low income countries, where

it matters the most

**Amanuel Gebremedhin** 

10:00am - 11:30am

USE OF SIMULATION IN NON-INFECTIOUS DISEASE EPIDEMIOLOGY

Lakeshore B

Chair: Melinda Power

Use of a simulation framework to combine data from multiple observational data sources

Teresa J. Filshtein

Simulations for quantifying selection bias in lifecourse epidemiology

Elizabeth Rose Mayeda

Simulating the bounds of plausibility: using agent-based models to estimate the impact of high-risk versus population-based approaches to prevent firearm violence

Magdalena Cerda

Strategies to optimize simulation fidelity and code readability — Perspectives, pair programming, and open source

James Burke and Luciana Copeland

11:30am - 1:30pm

Lunch (on your own)

Lunchtime Session (lunch not included)

12:00pm - 1:00pm

EARLY STAGE INVESTIGATORS - HONE YOUR SOFT SKILLS AND OWN

THE JOB MARKET

Chairs: Timothy Lash and Lauren McCullough

Nicollet A Recording

Page 3 of 18

12:00pm - 1:00pm DAG HACK-A-THON: CROWDSOURCING DAG DEVELOPMENT WITH AN EXAMPLE Nicollet B/C FROM REPRODUCTIVE EPIDEMIOLOGY Chair: Matthew Fox & Ellie Murray 12:00pm - 1:00pm THE ART AND SCIENCE OF PEER REVIEW (Sponsored by Publications Committee) Nicollet D3 Chair: Hailey Banack Recording Panelists: Sunni Mumford Jay Kaufman Justin Lessler 12:00pm - 1:00pm **SER Student & Faculty Recruitment Fair** Skyway AB CONCURRENT CONTRIBUTED SESSION 1 METHODS THAT ACKNOWLEDGE, ADDRESS, AND EVEN EMBRACE 1:30pm - 3:00pm Nicollet A DATA COMPLEXITY Recording Chairs: Maya Petersen and Kara Rudolph A quantile-based g-computation approach to addressing the effects of exposure mixtures Alexander P. Keil Censoring for loss to follow-up in time-to-event analyses of composite outcomes or in the presence of competing risks Catherine Lesko Disseminated effects in agent based models: A potential outcomes framework to inform pre-exposure prophylaxis coverage levels for HIV prevention **Ashley Buchanan** Improving instrumental variable studies of social determinants of health: evaluating the bias-variance tradeoff when adjusting for potential instrument-outcome confounders **Audrey Murchland** Guidelines for causal inference from pragmatic randomized trials require analytic methods from observational studies **Eleanor Murray** Valid causal effect estimates with machine learning algorithms Ashley Naimi NOVEL METHODS IN PERINATAL EPIDEMIOLOGY **Nicollet BC** 1:30pm - 3:00pm **Chair: Anna Pollack** Five complications of term pregnancies that predict future preterm delivery Liv Grimstvedt Kvalvik Interval between live birth and initiation of current pregnancy attempt and fecundability Sydney K. Willis How is gestational weight gain between clinical visits best estimated in twin and singleton pregnancies? Michelle Dimitris Firearm violence and preterm birth: Evidence of stochastic mediation by pregnancy complications and health behaviors Dana Goin Outbursts of anger immediately prior to placental abruption: A case-crossover study **Harpreet Chahal** Increase in preterm births among US Latina women after the 2016 presidential election **Alison Gemmill** CARDIOVASCULAR DISEASE Nicollet D1 1:30pm - 3:00pm **Chair: Pam Lutsey** The World Trade Center disaster and long-term CVD risk among firefighters Molly Skerker

The importance of non-traditional risk factors for prediction of cardiovascular disease in women of reproductive age

Sonia M Grandi

Effect of longitudinally measured physical activity on the 10-year risk of heart failure among postmenopausal women: A Women's Health Initiative study

Sina Noshad

Prevention of heart failure in hypertension - disentangling the role of evolving left ventricular hypertrophy and blood pressure lowering: the ALLHAT study

#### Larisa G. Tereshchenko

The impact of genetically predicted Hgb on ischemic heart disease myocardial infarction heart failure and venous thromboembolism using the UK Biobank

#### Shan Luo

The apparent protective effect of surgery versus medical treatment on mortality in patients with infective endocarditis: Possible selection bias and time-dependent confounding in cohort studies

#### Olivia Moir

1:30pm - 3:00pm

## INJURY AND VIOLENCE

Nicollet D2

#### **Chair: Steve Marshall**

Incidence of maternal deaths due to overdose and suicide in California 2010-2012

## Sidra Goldman-Mellor

A 15-year population-based investigation of sexual assault cases in Ontario Canada

#### **Katherine Muldoon**

Geographic variations in temporal trends in mortality from prescription opioids

#### Sarah Palumbo

Decomposition of the US black-white inequality in life expectancy: Quantifying the impact of the opioid epidemic

### Mathew V. Kaing

News coverage of intimate partner homicides in New York City (2013-16): A systematic review

#### Sandhya Kajeepeta

Is marijuana use associated with decreased use of prescription opioids? Findings from toxicological testing results for fatally injured drivers

#### Guohua Li

1:30pm - 3:00pm

## SOCIAL EPIDEMIOLOGY: RESEARCH AT THE INTERSECTION OF SOCIAL STRUCTURE AND PUBLIC POLICY

Nicollet D3 Recording

## Chairs: Lynne Messer and Mahasin Mujahid

Understanding the role of social support in the relationship between perceived discrimination and telomere length: The multi-ethnic study of atherosclerosis (MESA)

## Elleni Hailu

Acute care utilization among children experiencing eviction in San Francisco, California

## **Lara Cushing**

The Effect of the 287(g) immigration program on pediatric hospitalizations for ambulatory sensitive conditions in North Carolina

## Lindsay Fernandez-Rhodes

Do pro-family employee benefits mitigate the burden of competing workplace and domestic roles on women's depressive symptoms?

## Jonathan Platt

The effects of paid family leave on child and parent mental health: A quasi-experimental study of U.S. state policies

## Rita Hamad

Does declining state-level labor union density explain changing state-level racial and educational mortality inequities?

## Jerzy Eisenberg-Guyot

1:30pm - 3:00pm

## CANCER

Lakeshore A

## **Chair: Eric Polley**

Using mendelian randomization to understand how chronotype influences breast cancer risk

## Rebecca Richmond

Circulating immune cell composition and breast cancer risk

## Jacob K. Kresovich

Evaluation of the association between UGT2B17 gene deletion and adverse symptomatology in postmenopausal women treated with exemestane on the CCTG MAP.3 trial

## Vikki Ho

Cancer-attributable mortality among solid organ transplant recipients in the United States 1987-2014

## Anne-Michelle Noone

A semi-supervised machine learning approach to detecting recurrent metastatic breast cancer cases using linked cancer registry and electronic medical record data

## Albee Ling

Causal model-based reinforcement learning for physical activity interventions among prostate cancer survivors

#### Barbra A. Dickerman

1:30pm - 3:00pm

## POLICY EVALUATIONS IN GLOBAL HEALTH RESEARCH

Lakeshore B

#### **Chair: Robin Richardson**

Association of China's Universal 2-child policy with changes in births and birth-related health factors

#### Hongtian Li

Does moving orphans out of institutional care improve their wellbeing? Using marginal structural models to estimate policy-relevant effects

## Christine L. Gray

Exploiting minimum legal marijuana use age to assess the impact of marijuana legalization in Uruguay on marijuana use patterns

#### Ariadne Rivera-Aguirre

Understanding the impact of paid maternity leave policy on childhood diarrhea through mediation analysis: evidence from 40 low-and-middle-income countries

#### Yan Chai

Impact evaluation of explicit health guarantees policy in breast, gallbladder, stomach and colorectal cancer mortality

## Maria Jose Monsalves

Evaluating the impact of the Maternal Health Voucher Scheme in rural Bangladesh: a quasi-experimental interrupted time-series analysis

## Arijit Nandi

3:00pm - 3:30pm

## **Break and Poster Viewing**

Exhibit Hall

## **CONCURRENT CONTRIBUTED SESSION 2**

3:30pm - 5:00pm

## TRACKING THE BURDEN OF SUBSTANCE ABUSE

Nicollet A Recording

## Chair: Magdalena Cerda

Risk of suicide after emergency department visit for opioid overdose

## Sidra Goldman-Mellor

Fentanyl overdose deaths in the United States 2013-2017: A national county-level assessment of geographic patterns correlates and the relationship with heroin overdose deaths

## Christopher L. Rowe

Surveillance of emergency medical services response with naloxone administrations - North Carolina April - September 2017

## Lauren Tanz

Predicting drug overdose deaths in Rhode Island: A comparison of machine learning methods and variable selection procedures

## Yu Li (Seashore)

Premature mortality from drug overdoses: a comparative analysis of 13 OECD countries with high quality death certificate data 2001-2015

## Yingxi Chen

Alcohol and drug related offenses and risk for future firearm suicide among authorized purchasers of handguns in California

## Julia P. Schleimer

3:30pm - 5:00pm

## PERINATAL AND PEDIATRIC EPIDEMIOLOGY

Nicollet BC

## **Chair: Nigel Paneth**

Associations between oxidative stress and risk for preterm birth in Puerto Rico

## **Kelly Ferguson**

The association between vigorous physical activity and time to pregnancy

## Sifang Kathy Zhao

Validity of maternal weight and gestational weight gain measures from birth certificates

## Paige D Wartko

Predictors of up-to-date vaccination in the National Immunization Survey-Child

## Erika Fuchs

Antibiotic treatment of bacterial vaginosis to prevent preterm birth: an IPD meta-analysis with imputation of missing studies

#### Mark Klebanoff

Ambient temperature and acute risk of stillbirth

Jenna Kanner

3:30pm - 5:00pm

## PERSPECITVES IN PHARMACOEPIDEMIOLOGY: COMPARING DATA, DESIGNS AND ANALYTIC GOALS

Nicollet D1

Chair: John Jackson

Replicating randomized trial results with observational data using the parametric g-formula: An application to intravenous iron treatment in hemodialysis patients

#### Angelo Karaboyas

Statins and risk of seven cancers: a population-based cohort study using electronic health records of 722,213 UK adults

#### Barbra A. Dickerman

Incretin-based drugs and the risk of lung cancer in patients with Type 2 Diabetes

#### Julie Rouette

Oral corticosteroid use during pregnancy and risk of preterm birth

#### Kristin Palmsten

Estimating the effect of implantable cardioverter defibrillators on mortality in patients with long QT syndrome using marginal structural models

Meng Wang

3:30pm - 5:00pm

#### DIABETES: RISK FACTORS AND RAMIFICATIONS

Nicollet D2

**Chair: Stefanie Hinkle** 

Unhealthier food environments associated with higher hospitalization rates among adults with diabetes but not in most extreme "Food Swamps"

## **Aryn Phillips**

The association between environmental quality and diabetes control in the U.S.

## Jyotsna S. Jagai

Does liver fat mediate the estimated effect of BMI on type 2 diabetes risk? Evidence from The Multi-Ethnic Study of Atherosclerosis

## Luis A. Rodriguez

Fasting plasma glucose diagnosis of gestational diabetes and the risk of late stillbirth: a mediation analysis in a case-control study from England UK

## **Peter WG Tennant**

Gestational diabetes and longitudinal ultrasonographic measures of fetal growth in the NICHD fetal growth studies-singletons

## Mengying Li

Gestational diabetes in relation to urinary incontinence in US black women

Yvette C Cozier

3:30pm - 5:00pm

## NOVEL METHODS AND QUESTIONS IN UNDERSTANDING AND QUANIFYING HEALTH DISPARITIES

Nicollet D3 Recording

Chair: Nadia Abulezam

Does the type and timing of educational attainment influence health? A novel application of sequence analysis

## Anusha Vable

Causal methods for evaluating the health effects of migration history

## Adina Zeki Al Hazzouri

Longitudinal associations between worry about deportation and blood pressure, body mass index, and waist circumference among adult women: A community-based cohort study

## Jacqueline M. Torres

Setting matters in the relationships of reported interpersonal discrimination with cardiovascular health: findings from CARDIA

## Ganga Bey

Disentangling life-course socio-economic determinants of adult inflammation: a multi-cohort study using a counterfactual mediation framework

## Cristian Carmeli

3:30pm - 5:00pm

## MAPS, MODELS AND METHODS: APPROACHES IN INFECTIOUS DISEASE

Lakeshore A

Lakeshore B

**EPIDEMIOLOGY** Chair: Kumi Smith

Estimates of protection from natural immunity against enteric infections and diarrhea in a longitudinal birth cohort

## Elizabeth McQuade

Finding the scientific question in the exposure haystack: re-analysis of a matched case-control study of animal-related risk factors for pediatric diarrhea in Kenya

#### Julianne Meisner

Compared to whom? Reference population matters when calculating relative measures of STI and HIV rates by sexual risk category

## Jeremy Grey

Sustained virologic response as a surrogate marker for hepatocellular carcinoma after treatment of hepatitis C virus infection

## Rohit P. Ojha

Spatiotemporal distribution of dengue, chikungunya and zika cases across different ethnic groups in Brazil and Colombia

#### Mabel Carabali

Population structure drives differential methicillin-resistant Staphylococcus aureus colonization dynamics

#### Matthew S. Mietchen

3:30pm - 5:00pm

## LATE BREAKER

## Chairs: Matthew Fox and Shawnita Sealy-Jefferson

Is social is isolation as bad for health as smoking 15 cigarettes per day? Findings from two large prospective UK cohorts.

## **Robert Smith**

State-level social capital in relation to county-level suicide in the United

States: a multilevel analysis

#### Saloni Dev

The effect of an increased minimum wage on suicide rates in the U.S.

## John A. Kaufman

Location of pre-exposure prophylaxis (PrEP) services across New York City neighborhoods: Do neighborhood socio-demographic characteristics and HIV prevalence matter?

## **Byoungjun Kim**

Decreased emergency department usage rate following police killings of unarmed Black New Yorkers in 2013-2014

## Sze Yan Lin

Evaluation of causal effects of time-varying prescription opioid use on mortality among insured adults in the United States

## Hilary A. Aroke

The serpent of their agonies: Exploitation as structural determinant of mental illness

## Seth J. Prins

5:30pm - 6:30pm SPC Business Meeting - All SPC members welcome 6:30pm - 7:30pm Poster Session 2 & Reception (cash bar) 7:30pm - 9:30pm President's Reception - All Invited!

Minnehaha **Exhibit Hall** 

**Exhibit Hall** 

## Thursday, June 20, 2019

7:00am - 7:50am SPC Roundtables (Tickets Required)

7:00am- 8:00am **Continental Breakfast**  **Exhibit Hall** 

Registration 7:30am - 6:00pm

8:00am - 9:30am PLENARY SESSION 2 Cassel Lecture

Nicollet ABC

Session Chair: Enrique Schisterman

Recording

Sandro Galea & Miguel Hernan

"Reconciling social epidemiology and causal inference"

Distinguished Service to SER Award

Sandro Galea

Tyroler Student Prize Paper Award Winner

**Brittany Blouin** 

"Using Bayesian methods to adjust for exposure misclassification in a mediation analysis with multiple mediators: The role of hemoglobin levels and malnutrition in the association between Ascaris infection and IQ scores"

Lilienfeld Postdoctoral Award Winner

Matthieu Domenech de Cellès

"Unraveling the Seasonal Epidemiology of Pneumococcus"

9:30am - 10:00am

**Break and Poster Viewing** 

Chair: Paulina Mendola

**Exhibit Hall** 

**CONCURRENT CONTRIBUTED SESSION 3** 

10:00am - 11:30am

ENVIRONMENTAL HEALTH: MEASUREMENT AND OUTCOMES

Nicollet A Recording

Why error propagation might matter: the case of area-level noise pollution and health in the

United States

Joan Casey

Residential mobility and misclassification of environmental exposures in a prospective cohort

Danielle N. Medgyesi

Hurricane exposure microfinance and key infectious diseases in Haiti

Molly Rosenberg

Air pollution poverty and cardiometabolic dysfunction among United States adolescents

**Edmond Shenassa** 

Persistent organic pollutants exposure during early pregnancy and longitudinal fetal growth in the

NICHD Fetal Growth Studies - Singletons

**Marion Ouidir** 

10:00am - 11:30am

UNDERSTANDING, IMPROVING, POPULATION MENTAL HEALTH

Nicollet BC

Chair: Sandro Galea

Estimating the effect of neighborhood deprivation on mental health among refugees and non-refugee immigrants to Sweden: a natural experiment

Eva Raphael

Mitigating the mental health consequences of mass shootings: an in-silico experiment

Salma M. Abdalla

Food insecurity and antepartum depression in the National Children's Study

Megan Richards

Changes in age of handgun purchase policies and adolescent suicide fatalities in

the United States

Julia Raifman

Associations of maternal trauma experiences with offspring behavioral problems: Findings from the

PrOMIS cohort study

Bizu Gelaye

Age period and cohort effects of loneliness self-esteem and self-derogation among adolescents

from 1991-2016

**Ava Hamilton** 

10:00am - 11:30am

METHODOLOGICAL ISSUES FOR REPRODUCTIVE EPIDEMIOLOGIC RESEARCH

Nicollet D1

Chair: Brian Whitcomb

Dealing with competing events in the estimation of the health effects of fertility

treatment on the offspring

Yu-Han Chiu

Prediction of pregnancy loss by vaginal bleeding and nausea patterns in early pregnancy: prospective cohort nested within a randomized controlled trial

Elizabeth A. DeVilbiss

Evaluating methods to handle missing pregnancy indication: If she gave birth was she pregnant?

**Neil Perkins** 

Target trial emulation in perinatal epidemiology: Applications in the Generation R Study

Jeremy A. Labrecque

Implications of the choice of sample population for the development of risk prediction models for long-term outcomes incorporating pregnancy-related predictors

Sonia M. Grandi

10:00am - 11:30am

## RISK FACTORS FOR ALZHEIMER'S DISEASE AND COGNITIVE LOSS

Nicollet D2

**Chair: David Jacobs** 

The impact of public transportation use on cognitive function in older age: A quasi-experimental evaluation of the free bus pass policy in the UK

#### Erica Reinhard

Association of depression and posttraumatic stress disorder with all-cause mortality among older disaster survivors of the 2011 Great East Japan Earthquake and Tsunami

## Xiaoyu Li

Current and past physical activity and risk of Alzheimer's disease: a longitudinal study

#### Yian Gu

Differential returns to education by sociodemographic subgroup in predicting rate of memory decline

## Anusha Vable

Association between GlycA and cognitive function "results from the ELSA" Brasil

## Claudia Kimie Suemoto

Educational inequalities in survival after dementia diagnosis

Dominika Seblova

10:00am - 11:30am

## POTENTIAL IMPACTS OF POLICIES ON POPULATION HEALTH

Nicollet D3 Recording

Chair: Lorna Thorpe

The effect of timing of earned income tax credit refunds on preterm birth

#### Deborah Karasek

Inconsistent effect on background checks of newly-enacted comprehensive background check policies in 4 US states

#### Alvaro Castillo-Carniglia

Changes in emergency department dental visits after Medicaid expansion

## Hawazin Elani

Effects of the Affordable Care Act Medicaid expansion on subjective well-being: quasi-experimental evidence from the United States adult population

## Lindsay Kobayashi

Safety of guidelines recommending LAIV for routine use in children and adolescents with asthma

Gabriela Vazquez Benitez

10:00am - 11:30am

## FIREARMS AND SUBSTANCE USE: INFORMING POLICY TO PREVENT INJURY AND VIOLENCE

Lakeshore A

Chair: Rose Kagawa

Efficacy of a behavioral intervention among patients with gunshot wounds: A comparison of analytic methods

## Vivian Lyons

Prevalence of "Responsible Selling" tendencies in an online firearms marketplace

## Ashley M. Hernandez

Armed and prohibited: Characteristics of legal firearm purchasers in California who subsequently become prohibited persons

## Veronica A. Pear

Non-violent misdemeanors as a risk factor for future arrest for violent crime among hand gun purchasers

## **Aaron Shev**

Patterns of medical marijuana and alcohol laws and the association with traffic

fatalities 1987-2017

## Spruha Joshi

Driving under the influence of alcohol or cannabis in the United States: Relationship to state medical marijuana laws

## David S. Fink

10:00am - 11:30am CANCER SCREENING Lakeshore B **Chair: Steven Stovitz** Do the benefits of cervical cancer screening outweigh its harms: a decision modeling analysis comparing measures of harms and benefits of screening with cytology and HPV testing Talia Malagon A prospective study of cervical intraepithelial neoplasia its treatments and fecundability Lauren A. Wise Trends in surgical treatment for breast cancer in Germany after the implementation of the mammography screening program **Andreas Stang** Associations between serum inflammatory biomarkers and colorectal cancer incidence in the Singapore Chinese Health Study (SCHS) **Elizabeth Polter** Can we screen more precisely for colorectal cancer? Ellen M. Mikkelsen Accounting for endoscopic screening in colorectal cancer risk prediction models Esther K. Wei 11:30am - 2:00pm Lunch (on your own) 12:00pm - 1:00pm **Lunchtime Sessions (lunch not included)** SER GOES INTERNATIONAL - EPIDEMIOLOGY IN CHILE Nicollet A Chair: Veronica Iglesisas Recording Advance training in epidemiological research in Chile: challenges and opportunities Veronica Iglesias Cardiovascular disease epidemiology research in Chile Carolina Nazzal Environmental epidemiology: Respiratory health of asthmatic and non-asthmatic children and shortterm exposure to air pollution, PM2.5 composition and source factors in Santiago, Chile Karla Yohannessen Epidemiological research to support obesity preventive policies in Chile Cristobal Cuadrado WHO WANTS TO BE AN EPIDEMIOLOGIST GAME SHOW Nicollet BC **Host: Ian Shrier** Judges: Jay Kaufman Sonja Swanson Katherine Keyes 12:00pm - 1:00pm SPC CAREER PANEL Nicollet D1 **Panelists:** Anne-Marie Jukic Kathryn Rough Pia Mauro Arijit Nandi CAREER PATHWAYS FOR MASTER'S-LEVEL EPIDEMIOLOGISTS Nicollet D3 (Sponsored by Membership Committee) Recording Chairs: Erin Bowles and Rachel Ross Master's-level career at an academic medical center Janis Breeze Master's-level career at the VA **Tess Gilbert** Master's-level career at an integrated healthcare system Lisa Moy Master's-level career at a consulting company Elizabeth Best Nicollet D2 1:00pm - 2:00pm SER Business Meeting - All Members Welcome

Page 11 of 18

Nicollet A

Recording

TRIANGULATION OF CAUSAL EFFECT ESTIMATES

**SYMPOSIA 2** 

**Chair: Jeremy Labrecque** 

2:15pm - 3:45pm

Using counterfactuals to formalize triangulation

Jeremy Labrecque

Using triangulation to explore causal effects of maternal exposures on offspring outcomes

**Debbie Lawlor** 

Regression discontinuity and inverse probability weighting methods to estimate causal effects in HIV epidemiology

**Catherine Oldenburg** 

Triangulation in Alzheimer's disease and dementia research

Maria Glymour

2:15pm - 3:45pm

# GENETIC EPIDEMIOLOGY IN THE CAUSAL ERA: HOW DO GENES AFFECT THE HEALTH OF POPULATIONS AND HOW DO WE KNOW?

Nicollet BC

Chairs: Jay Kaufman and Stephanie London

Genetic epidemiology as an art of the possible: design and interpretation of genetic association studies

Peter Kraft

How studying racially/ethnically diverse populations informs causal inference.

**Christy Avery** 

Polygenic risk scores: prediction without causality

John Witte

Studying biological mechanisms of genetic susceptibility using causal reasoning

**Brandon Pierce** 

Discussant

Stephanie London

2:15pm - 3:45pm

## FUTURE OF EPIDEMIOLOGY: EMERGING TRENDS AND PERSPECTIVES

Nicollet D1

Chairs: Andrew Olshan and Brooke Anderson

Future of Epidemiology: What is the future of observational epidemiology?

Kirsten Bibbins-Domingo

Future of Epidemiology: Systems modeling

Magdalena Cerda

Future of epidemiology: Climate epidemiology

**Brooke Anderson** 

Future of Epidemiology: An outlook on measurement and methods for studying

social determinants
Allison Aiello

Future of epidemiology: Future of epidemiology: Infectious disease epidemiology in

the 21st Century

Art Reingold

2:15pm - 3:45pm

# OPEN EPIDEMIOLOGY, DATA TRANSPARENCY AND REPRODUCIBILITY: AN EGG THAT CAN'T BE UNBROKEN

Nicollet D2

Chair: Neal Goldstein

Open data: Ideology meets reality

**Timothy Lash** 

Overcoming obstacles for data sharing within epidemiological research: Hey, it's my data!

Tonya White

A pragmatic approach for reproducible research with sensitive data

**Bryan Shepherd** 

Using spatiotemporal models to generate synthetic data for public use

**Harrison Quick** 

The way forward for epidemiology

Tyler VanderWeele

2:15pm - 3:45pm

# BEYOND 'IS RACE A CAUSE?' - BRINGING CRITICAL RACE THEORY INTO EPIDEMIOLOGY

Nicollet D3 Recording

Chairs: John Pamplin II and Zinzi Bailey

If race is not biology, What is it?: Racialization, social constructs and epidemiology

Chandra Ford

The potential of critical race theory in epidemiology: Using historical imagination to construct counterfactual racial formation and dynamics

Zinzi Bailey

Embodying racism: Empirical evidence from the United States and Brazil

**Sharrelle Barber** 

Discussant

John Pamplin II

2:15pm - 3:45pm

## SPOTLIGHT ON AGING IN POSTMENOPAUSAL WOMEN: TWENTY-FIVE YEARS OF RESEARCH IN THE WOMEN'S HEALTH INITIATIVE (WHI)

Lakeshore A

**Chair: Hailey Banack** 

Leveraging old data for new insight into the obesity-cardiometabolic health relationship

#### **Andrew Odegaard**

Diving deeper into racial disparities: unique opportunities in WHI

## **Wendy Barrington**

Using intensive longitudinal measures of body movement to study the link between sedentary behaviors and incident CVD, diabetes and mortality

#### John Bellettiere

Can small bugs create big problems? Understanding the relationship between the microbiome and aging in postmenopausal women

**Hailey Banack** 

Discussant

JoAnn Manson

Discussant

Jean Wactawski-Wende

2:15pm - 3:45pm

# IEPIDEMIOLOGY: INNOVATIVE EXPOSURE AND OUTCOME ASSESSMENT USING ADVANCED TECHNOLOGIES

Lakeshore B

Chairs: Keewan Kim and Carrie Nobles

Leveraging data collected using a digital mobile app to improve women's health: the Ovia

Health experience

**Danielle Bradley** 

HealthWatch 360: Mobile app for population and interventional nutrition

**Christina Troutner** 

A new tool for epidemiological research: MyExposome silicone wristbands

Marc Epstein

3:45pm - 4:15pm

## **Break and Poster Viewing**

**Exhibit Hall** 

## **CONCURRENT CONTRIBUTED SESSION 4**

4:15pm - 5:45pm

# THEORY AND PRACTICE Chairs: Eleanor Murray and Penelope Howards

Nicollet A Recording

Toward a clearer definition of selection bias

Haidong Lu

Bias from incomplete case ascertainment in studies examining the transition from pediatric to adultcentered cardiac care in young adults with congenital heart disease: Results from the Colorado

Congenital Heart Disease (COCHD) surveillance system

Lindsey M. Duca

Simple sensitivity analysis for selection bias

Louisa H. Smith

An inverse probability weighting approach to correct for left truncation

Paul N. Zivich

An interval estimation approach to selection bias in observational studies

**Matthew Tudball** 

4:15pm - 5:45pm

## CARDIOVASCULAR DISEASE EPIDEMIOLOGY: INNOVATIVE METHODS AND NOVEL RISK FACTORS

Nicollet BC

Chair: Ryan Demmer

Longitudinal population-level health-related fitness patterns in New York City public school children and adolescents 2006-2017

Emily D'Agostino

Plasma Trimethylamine-N-Oxide and impaired glucose regulation: Results from The Oral Infections Glucose Intolerance and Insulin Resistance Study (ORIGINS)

**Sumith Roy** 

The impact of growth differentiation factor 15 (GDF-15) on coronary artery disease breast and colorectal cancer risk: A Mendelian randomization study

Shiu Lun Au Yeung

Association of life's simple 7 with atrial fibrillation burden in the Atherosclerosis Risk in

Communities (ARIC) Study

Wendy Wang

Cross-omics mediation in Epidemiology: Moving beyond biomarkers and into molecular mechanisms

Jessica Laine

Testosterone therapy and risk of venous thromboembolism among men without hypogonadism

Rob Walker

4:15pm - 5:45pm

## IMPACT OF NOVEL RISK FACTORS ON WOMEN'S HEALTH ACROSS THE LIFECOURSE

Nicollet D1

Chairs: Dale Sandler and Alexandra White

Identifying environmental agent profiles associated with early menarche among U.S. adolescent girls: A machine learning approach

Sabine Oskar

Association of early abuse with plasma metabolomics in middle-aged women

**Tianyi Huang** 

The modifying effect of social support on the association between neighborhood violence exposure and preterm birth

**Timothy Ihongbe** 

A prospective ultrasound study of cigarette smoking and risk of uterine leiomyoma

Amelia K. Wesselink

Oral contraceptive use and incidence of early natural menopause

Christine R. Langton

The association between women's inter-birth intervals and cardiovascular mortality

Yiska Loewenberg Weisband

4:15pm - 5:45pm

## SUBSTANCE USE EPIDEMIOLOGY WITH POLICY IMPLICATIONS

Nicollet D2

Chair: Pia Mauro

Opioid prescription use after vaginal delivery and subsequent persistent opioid use and misuse

Yanmin Zhu

Mortality among a population-based cohort of treated people with opioid use disorders following declaration of a public health emergency on opioid overdose in British Columbia Canada

**Lindsay Pearce** 

The role of drugs in alcohol overdose: A latent class analysis among patients in residential addiction treatment in Michigan 2014-2016

Rachel E. Gicquelais

Do tobacco taxes affect coronary heart disease mortality rates differentially among black compared to white Americans?

Gregory H. Cohen

Impact of state policy on opioid prescribing after common surgical procedures

Thomas P. Ahern

Understanding the effect of syringe service programs on neighborhood crime complaint rates in New York City

Michelle L. Nolan

4:15pm - 5:45pm

## NUTRITION AND OBESITY

Nicollet D3 Recording

Chair: Dianne Neumark-Sztainer

The roles of maternal comorbidities and cesarean birth in the association between prepregnancy body mass index and severe maternal morbidity

Stephanie A. Leonard

Association of maternal vegetarian diets with neonatal anthropometry in the NICHD Fetal Growth Study

Samrawit F. Yisahak

Caffeinated beverage intake and serum caffeine metabolites and risk of pregnancy loss

Alexandra C. Purdue-Smithe

Examining disparities in food accessibility among households in Columbus Ohio: An agent-based model

Ayaz Hyder

Disordered eating behaviors and 15-year trajectories in body mass index: Findings from

Project EAT

Cynthia Yoon

History of childhood maltreatment and obesogenic behaviors in early adulthood

Alison Cammack

OCCUPATIONAL EPIDEMIOLOGY

4:15pm - 5:45pm Chair: John Beard

Mortality among oil spill response and clean-up workers 1-6 years following the Deepwater

Horizon Disaster

Lvdia Feinstein

Lung function in oil spill responders 4-6 years after the Deepwater Horizon disaster

Kaitlyn B. Gam

Chronic obstructive pulmonary disease mortality: The Diesel Exhaust in Miners Study (DEMS)

Jacqueline Ferguson

Health effects of silica in the setting of mixed dust exposures in taconite mining

Nnaemeka U. Odo

Occupational pesticide use and risk of renal cell carcinoma in the Agricultural Health Study

Gabriella Andreotti

Maternal occupational oil mist exposure and birth defects - United States 1997-2011

Miriam Siegel

SEX DIFFERENCES IN EPIDEMIOLOGY 4:15pm - 5:45pm

**Chair: Stephen Gilman** 

Ambient air pollution during preconception and peri-implantation and odds of male versus

female live birth

**Carrie Nobles** 

The impact of household socioeconomic changes during the Great Recession on

children's biomarkers

Erica Reinhard

Considering race gender disability and the discipline gap

Karishma Furtado

Workplace gender composition and treatment for depression among blue-collar workers in the U.S.

aluminum industry

**Holly Elser** 

Sex steroid hormones and asthma in a nationwide study of US adults

Yueh-Ying Han

The effect of neighborhood perception on the divergence between chronological and DNA

methylation age

Tarek M. Zikry

6:00pm - 7:00pm Poster Session 3 & Reception (cash bar)

7:00pm Alumni Reunions (Contact your Institution for Details)

Friday, June 21, 2019

**Continental Breakfast Exhibit Hall** 7:00am - 8:00am

7:30am - 1:15pm Registration

8:00am - 9:30am **PLENARY SESSION 3 Nicollet ABC** 

Session Chair: Martha Werler

Rothman Career Accomplishment Winner

**Sherman James** 

"My African American Journey as an Epidemiologist"

Brian MacMahon Early Career Award Winner

Lauren McCullough

"In our backyard: building a career addressing disparities in breast cancer mortality"

Carol J. Hogue Mid-Career Award

"Testing the limits of mitigation measures for an influenza pandemic"

Noel Weiss and Tom Koepsell Excellence in Education Winner

Jill Norris

Page 15 of 18

Lakeshore A

Lakeshore B

**Exhibit Hall** 

Recording

9:30am - 10:00am **Bre** 

**Break and Poster Viewing** 

**Exhibit Hall** 

**SYMPOSIA 3** 

10:00am - 11:30am

THE BADDEST OF THE BAD: RANKING THE MOST PERNICIOUS BIASES FACING OBSERVATIONAL STUDIES

Nicollet A Recording

Chairs: Catherine Lesko and Matthew Fox

Misalignment of person-time (inappropriate time 0, immortal person-time, etc.)

**Robert Platt** 

Residual confounding or unmeasured confounders

Maria Glymour
Information bias
Matthew Fox
Missing data

Jessie Edwards

Model misspecification

Ashley Naimi
Selection bias
Chanelle Howe
Lack of generalizability
Catherine Lesko

Moderator

Jay Kaufman

10:00am - 11:30am

## SAVING LIVES AS AN OFF-TARGET EFFECT: THE IMPACT OF ECONOMIC AND SOCIAL POLICIES ON POPULATION HEALTH

Nicollet BC

**Chairs: Anjum Hajat and Steve Mooney** 

Effects of minimum wage increases on health and health behavior in working-age-adults

James Buszkiewic

Health impacts of an unconditional prenatal cash transfer in the Canadian

province of Manitoba
Nathan C. Nickel

Age differences in the effects of medical and recreational marijuana laws across the US

Pia M. Mauro

Local policy and firearm violence: A quasi-experimental study of the Operation Peacemaker

Fellowship in Richmond, California

**Ellicott Matthay** 

Discussant

Arjumand Siddiqi

10:00am - 11:30am

# FAMILY MATTERS: USING FAMILY DESIGNS TO CONTROL CONFOUNDING IN OBSERVATIONAL STUDIES

Nicollet D1

Chairs: Mollie Wood and Katherine Keyes

The Anna Karenina Principle in family designs

**Mollie Wood** 

Paternal medication use as a negative control exposure for pregnancy drug safety studies

Jackie Cohen

Introducing or amplifying bias by using sibling controls: a cautionary note

**Thomas Frisell** 

On subject of methods concerns in twin designs

Matt McGue Discussant Katherine Keyes

10:00am - 11:30am

## PREPIDEMIOLOGY: INNOVATIONS IN METHODS FOR BIOMEDICAL HIV-

Nicollet D2

PREVENTION RESEARCH Chair: Julia Marcus

PrEP implementation: challenges and opportunities

Julie Marcus

Integrating electronic health record data to identify potential PrEP candidates in U.S. primary

care settings

**Douglas Krakower** 

Super learning vs. traditional approaches for targeting PrEP in rural East Africa

Laura Balzer

Innovations and opportunities in modeling HIV PrEP: network-based targeting, co-circulating STIs, racial and geographic disparities, and long-acting formulations

**Samuel Jenness** 

Bridging clinical trials data to estimate public health impact for novel PrEP delivery methods

**David Glidden** 

10:00am - 11:30am

POPULATION-BASED INTER-GENERATIONAL STUDIES

Nicollet D3 Recording

**Chair: Enrique Schisterman** 

Inter-generational effects of maternal dietary and lifestyle behaviors on reproductive health of the offspring

Sunni Mumford

Multi-generational association between smoking during pregnancy and ADHD

**Gyeyoon Yim** 

Methodological considerations and challenges in the analysis of population-based inter-generational studies

Sebastien Haneuse

10:00am - 11:30am

NOVEL AND INNOVATIVE MEASURES OF FETAL GROWTH AND DEVELOPMENT

Lakeshore A

Lakeshore B

**Chair: Anne Marie-Jukic** 

Novel tools for measuring fetal and placental growth: 3D ultrasound as validated

by MRI measurements

Anne Eskild

What to measure? Fetal growth and fetal growth velocity in relation to preterm delivery, preeclampsia and birthweight

**Katherine Grantz** 

Analyzing fetal growth data with Individualized Growth Assessment (IGA): A more accurate and sensitive method for detecting growth restriction

**Russell Deter** 

Why stop at birth? Building ethnically-diverse standards for fetal plus infant growth

Jason Gardosi

10:00am - 11:30am

IS IT MY BRAIN OR MY SENSES? MEASURING AND INTERPRETING COGNITIVE FUNCTIONS IN THE CONTEXT OF SENSORY DEFICIT

Chairs: Alison Abraham and Bonnie Swenor

Do I really need to worry about this and why? Understanding the relationship between sensory impairment and cognitive outcomes

Frank Lin

Apples and oranges. Inconsistencies in assessing cognitive functioning in individuals with sensory impairment

**Bonnie Swenor** 

Who gets tested? Selection issues and missing data in cognitive function testing in individuals with sensory impairment

Jennifer Deal

What am I measuring? Disentangling cognitive status from sensory impairment

The horizon: how to get better at assessing cognitive function in individuals with sensory impairment

Walter Wittich

11:30am - 12:00pm

**Break** 

PROFESSIONAL DEVELOPMENT SESSIONS

12:00pm - 1:00pm

HOW TO FIND A POSTDOC Chair: Maria Glymour

Panelists:

Maria Glymour Enrique Schisterman

Matt Kiang

Sharrelle Barber

Nicollet A Recording

Page 17 of 18

12:00pm - 1:00pm ASK ANYTHING Nicollet D1

**Chairs: Chantel Martin and Whitney Robinson** 

**Panelists:** Dylan Galos Michael Oakes M. Kumi Smith Rachel Widome

12:00pm - 1:00pm DIVERSITY AND INCLUSION Nicollet D2

Chair: Martha Werler

**Panelists:** Salma Abdalla

Francelyne Jean-Baptiste Elisa Jean-Baptiste Charles Branas

12:00pm - 1:00pm DISSERTATION SURVIVAL SKILLS Nicollet D3 Recording

**Chair: Katherine Keyes** 

Panelists: John Jackson Chanelle Howe Katherine Keyes Ashley Naimi Holly Elser

1:00pm **Meeting Adjourns** 

See you in Boston - June 16-19, 2020