

University of Washington/ University of British Columbia/ Simon Fraser University/ Oregon State University  
Annual Symposium on Environmental, Occupational and Population Health

January 9 - 10, 2020

***Innovative approaches for a planet in crisis***

Thursday, January 9, 2020

**11:00 – 11:45 Registration table (pick up name tag)**

**11:50 – 12:00 Welcome (Ballroom)**

**11:45 – 1:15 Buffet Lunch (Pinnacle Ballroom)**

Bates Memorial Lecture 12:15 – 1:15

**Dr. Craig Stephen, DVM, PhD, Canadian Wildlife Health Co-Op, U Sask & SPPH, University of British Columbia**

**“Health and environment in the Anthropocene.”**

**1:15 – 2:15 Panel session: Innovative approaches for health at the intersections of workplace, community and the environment (Pinnacle Ballroom) Chair Noah Sexias**

Dr. Kate Weinberger (UBC) Dr. Tim Takaro (SFU) Dr. Peter Rabinowitz (UW) Dr. Perry Hystad (OSU) Dr. June Spector (UW)

**2:20 – 4:00 Environmental Health**

Valley: Chair Karen Bartlett (UBC)

**2:20 – 2:40: Caislin Firth (SFU)** For whom? Urban renewal, gentrification and population health consequences.  
**2:40 – 3:00: Matthew Jeronimo (UBC)** Low-cost analysis of black carbon on filters by image-based reflectance.  
**3:00 – 3:20: \*Shirley Kang (SFU)** Cadmium mediates the effect of portable air purifiers on birth weight after multiple imputation of missing values.  
**3:20 – 3:40: \*Josh Alampi (SFU)** Associations of gestational exposure to environmental chemicals and autistic behaviours using Bayesian quantile regression.  
**3:40 – 4:00: \*Mary Willis (OSU)** Associations between exposure to oil and gas drilling during pregnancy and term birth weight: a difference-in-difference analysis.

**2:20 – 4:00 Occupational Health**

Pinnacle 1: Chair Hugh Davies (UBC)

**2:20 – 2:40: Ailin He (UBC)** Evaluating program effectiveness on return-to-work in the construction sector.  
**2:40 – 3:00: Jeanne Sears (UW)** Modifiable Workplace Factors Associated with Return-to-Work Interruption and Re-Injury among Workers with a Permanent Impairment.  
**3:00 – 3:20: \*Liu Yang (OSU)** Understanding Occupational Safety and Health (OSH) surveillance: Proposing components, attributes and example measures for an evaluation framework.  
**3:20 – 3:40: Esther Maas (UBC)** Evaluating the effectiveness of gradual return-to-work for workers with a musculoskeletal disorder using linked administrative data.  
**3:40 – 4:00: Robert Macpherson (UBC)** Does being injured outside of your province of residence affect your work disability duration? A comparative analysis of six Canadian workers’ compensation jurisdictions.

**2:20 – 4:00 Public health**

Mt. Baker: Chair David Patrick (UBC)

**2:20 – 2:40 \*Chris Laugen (UBC)** The importance of organizational readiness for change for implementing clinical practice standards in Indonesian obstetric facilities.  
**2:40 – 3:00 Bill Daniell & BJ Cummings (UW)** Community-based projects inform policy making and improve health equity in Seattle’s Duwamish Valley.  
**3:00 – 3:20: \*Jaclyn Parks (SFU)** Understanding the context of tobacco smoke exposure in a cohort of Canadian infants using biomarkers, questionnaires, and machine learning.  
**3:20 – 3:40: Farah Shroff (UBC)** Better hearing health through public health approaches: filling the rhetoric to reality gap.  
**3:40 – 4:00: Linda Dix-Cooper (UBC)** Noise by-laws: navigating public health issues and designing communities to prevent harm associated with environmental noise in mixed use commercial-residential and industrial-residential zones.

**4:00 – 4:20 Refreshment and Networking Break (outside Pinnacle Ballroom)**

4:20 – 5:45 Ignite / Lightning Session

Pinnacle Ballroom Chair: Perry Hystad

- \*Mielle Michaux (UBC) Are childhood exposures to green space and solar vitamin D protective factors in the development of inflammatory bowel disease?
- \*Tina Afshar (UBC) Relationship between the external (air) microbiome and internal (airway) microbiome in participants with COPD and healthy controls.
- Michael Young (UW) The effect of traffic-related air pollution on blood pressure: a trial of vehicle filtration.
- Jordan Brubacher (SFU) Using local climate zones in combination with NDVI to characterize greenness.
- \*Kate Hosford (SFU) Mapping Vancouver's bikeway expansion and cycling to work mode share, 1996 – 2016.
- \*Jaimy Fischer (SFU) Addressing cycles of inequality: key learnings from an interdisciplinary workshop on bike equity.
- \*Dennise Drury (UW) Sexual harassment prevention in agriculture: evaluating a worksite training program.
- \*Richard Taing (UW) A welder's occupational wheeze.
- \*Allyson O'Connor (UW) Burnout: Addressing a Silent Epidemic in Healthcare.
- \*Erica Chavez Santos (UW) A multi-level approach to heat related illness prevention for agricultural workers.
- \*Kate Hultberg (OSU) Community risk factors for post-hurricane disease outbreaks.
- \*Brianna Willis (UW) Perceived exposures of disaster scientists that participated in Ridgecrest earthquake reconnaissance.
- \*Mira Ziolo (UBC) Voices matter: Occupational Health at the Mountain Gorilla-Human Interface.

5:45 – 7:00 Posters (Authors attend posters 6:00 – 7:00) Foyer  
Authors and titles listed on page 4

No host bar, poster viewing and pre-dinner networking

**7:30 – 9:30** Dinner Pinnacle Ballroom

After dinner special showing of video: “Preventing Sexual Harassment in Agriculture” Sarah Fish, Pacific Northwest Agricultural Safety and Health

**Friday, January 10, 2020**  
**8:00 – 8:30 Breakfast (Foyer)**

<p><b>8:30 – 10:10</b> Environmental Health 2 Valley: Chair Chelsea Himsworth</p>	<p><b>8:30 – 10:10</b> Occupational Health 2 – White Spot: Chair Noah Sexias (UW)</p>	<p><b>8:30 – 10:10</b> Public health 2 Mt. Baker: Chair Farah Shroff (UBC)</p>
<p><b>8:30 – 8:50: Cecilia Sierra-Heredia (SFU)</b> Climate change and potential effects on aeroallergen levels in 13 Canadian cities. <b>8:50 – 9:10: *Emily Acheson (UBC)</b> Did deforestation lead to the 1999 outbreak of <i>Cryptococcus gattii</i> on Vancouver Island? <b>9:10 – 9:30: *Undarmaa Enkhbat (SFU)</b> A randomized air purifier intervention study of prenatal air pollution exposure and social and behavioural development at two years of age. <b>9:30 – 9:50: *Battsetseg Ulziikhuu (SFU)</b> A randomized air purifier intervention study of prenatal air pollution exposure and neurocognitive development at four years of age. <b>9:50 – 10:10: Debra Cherry (UW)</b> Explaining cough and odors at a nuclear hazardous waste site: An exercise in risk communication.</p>	<p><b>8:30 – 8:50 Marissa Baker (UW):</b> Radical health and safety in a shipyard. <b>8:50 – 9:10: Sonja Senthanaar (UBC)</b> Characteristics of injured immigrant workers in British Columbia. <b>9:10 – 9:30: Andrea Jones (UBC)</b> Anxiety treatment and work disability after musculoskeletal injury: consideration of a physician-based instrumental variable approach. <b>9:30 – 9:50: Chris Simpson (UW)</b> Respiratory exposures and outcomes among cannabis workers. <b>9:50 – 10:10: June Spector (UW)</b> Can conservation interventions address global climate and sustainability goals while optimizing community and occupational health?</p>	<p><b>8:30 – 8:50: *Ethan Zhang (UBC)</b> Retention of early antibiotic use to childhood asthma: a scoping review. <b>8:50 – 9:10: David Patrick (UBC)</b> Declining antibiotic use and asthma incidence in children: satisfaction of the Brad-Hill criteria using evidence from population, prospective cohort and microbiota studies <b>9:10 – 9:30: *John Paul Bigouette (OSU)</b> Acute effects of temperature exposures on mortality and CVD events in the global PURE study <b>9:30 – 9:50: Stephen Berzruchka (UW)</b> Increasing mortality in the U.S. not just an opioid problem. <b>9:50 – 10:10: *Emily Carpenter (SFU)</b> Environmental justice, mental health, and Natural Disasters: A look at “The Beast”.</p>

**10:10 – 10:45 Refreshment break (Foyer) & check out from hotel rooms**

**10:45 – 12:15 Round table discussions** Pinnacle 3 & 4 Chair: Karen Bartlett (UBC)

**Tim Takaro (SFU) & Maya Gislason (SFU)** “The role of public health in climate change mitigation and adaptation.”  
**Mieke Koehoorn (UBC) & Noah Seixas (UW)** “Cross border collaborations and research opportunities.”  
**Esther Maas (UBC), Robert Macpherson (UBC) & Marissa Baker (UW)** “Degrees to jobs ... the road well-traveled.”  
**Gary Bangs (UW) & Srivani Kanamuri (UW)** “Risk communication in uncertain times.”

**12:15-12:30 Wrap-up and student awards** Pinnacle 3&4

**OPTIONAL field trip to Maple lane farms (by pre-registration only):** Bus loads from front of hotel 1:00 pm and returns ~ 5:00 pm.

**POSTERS:**

**Thursday January 9<sup>th</sup> 5:30 – 7:00 pm Foyer: Authors attend 6:00 – 7:00 pm**

- 1 OH Esther Maas (UBC)** A comprehensive picture of healthcare costs for workers with musculoskeletal disorders in British Columbia, Canada.
- 2 OH \*Kimberly Sharpe (UBC)** What facilitates or prevents successful return-to-work in the construction sector
- 3 OH \*Sana Javaheri (UBC)** Proposal for BC Ministry of energy, mines and petroleum resources' occupational exposure limit for hydrogen sulphide.
- 4 OH \*Aaron Agyeman (UBC)** Field officers' exposure to radiation from technologically enhanced natural occurring radioactive materials in oil and gas industries.
- 5 OH \*Michael Cashman (UW)** Hemiparesis in a seasonal grain elevator operator: Case presentation and exposure assessment.
- 6 OH \*Ehsan Hemmativaghef (UBC)** Assessment of occupational exposures during laser engraving.
- 7. OH \*Arthur Leung (UBC)** A health hazard assessment of aluminum pot lining workers for silica and noise exposures.
- 8. OH \*Hanna Echt (UW)** Characterization of naturally occurring alpha-diketone exposures at a coffee roasting facility and associated café.
- 9. EH \*Harry Zhuang (SFU)** Bayesian factor analysis model for epidemiological assessment of the perinatal health effects of environmental chemical mixtures in the HOME study.
- 10 EH \*Natasha Vitkin (SFU)** Climate change and Lyme disease in Canada.
- 11 EH \*Sigride Asseko (OSU)** Environmental exposure to high manganese concentrations in sub-Saharan Africa: Case studies of Gabon.
- 12 EH \*Ingrid Jarvis (UBC)** Natural environments and perceived health in Metro Vancouver, Canada.
- 13 PH \*Kwadwo Boakye (OSU)** Evaluating the role of urbanization on total and specific types of physical activity across 700 communities in 21 countries.