



UBC FACULTY
OF MEDICINE
PRESENTS

FLEX ACTIVITY DAY @ SMP

JANUARY 23, 2023 • 1-4 PM
IN PERSON UBC EVENT



INTRODUCTION

The FLEX Planning Committee and Faculty of Medicine are excited to welcome you to our 8th annual FLEX Activity Day!

FLEX Activity Day is a platform for medical students to share their scholarly passions and research interests. It is an opportunity to gain inspiration and see what can be achieved through your own projects. We encourage you to take advantage of this time by attending student talks in person, actively engaging in Q&A, and recognizing the hard work of your peers.

To start off the afternoon, we are honored to be joined by Dr. Katarina Wind, a UBC Medicine alumni currently in her residency who has conducted research focusing on weight-inclusive care from a Health at Every Size perspective.

Throughout the day, be sure to listen intently and engage with our presenters. Many potential activity supervisors will also be in attendance, recruiting for their projects!

KEYNOTE ADDRESS

DR. KATARINA WIND

**FAMILY MEDICINE
RESIDENT PHYSICIAN**



Dr. Katarina Wind is a Health at Every Size / Weight-Inclusive Care family physician and clinical instructor in Vancouver. She developed Canada's first curriculum in Weight-Inclusive Care for medical students; teaching them how to practice with an evidence-based, social justice-informed approach to body weight. She serves on the advisory board for the American Medical Students for Size Inclusivity and is currently supporting UBC students in creating their own club and podcast. Her clinical practice includes full service primary care, hospitalist, and rural medicine.

To learn more, you can check out her latest publication at: <https://thischangedmypractice.com/why-i-no-longer-prescribe-weight-loss/> "



SEQUENCE OF EVENTS

1:00-2:00 PM PROVINCE-WIDE KEYNOTE ADDRESS
WILL BE PLAYED LIVE @RHS 260

2:00 - 3:00 PM STUDENT PRESENTATIONS
IN PERSON @ RHS 260

3:00 - 4:00 PM SUPERVISOR PRESENTATIONS
IN PERSON @ RHS 260

4:00 SUPERVISOR/ STUDENT MINGLE (+FOOD!)
IN PERSON @ RHS FOYER

PRESENTER SCHEDULE

2:00 - Introduction from Dr. Kamran Golmohammadi

2:02 - 2:14 - Vanessa Thomson, Roshan Behrouzi, Matt Lavery, Annika Ackermann

(PRIZE RAFFLE)

2:16 - 2:31 - Stephanie McCann, Quinn Krahn and Sophie Jansen, Kayla Korolek, Brandon Hayashi, Nicole Watt

(PRIZE RAFFLE)

2:33 - 2:45 - Phoenix Yin and Harjot Bhandol, Lauren Walgren, Julie Zhao, Veronica Kessler

(PRIZE RAFFLE)

BREAK

3:00 - Dr. Cornelissen (presented by Sophie from VFMP)

3:05 - Jane Jun (SMP Librarian)

3:10 - Warren Brock

3:15 - Dr. Christine Voss

3:20 - Dr. Sarah Purcell

3:30 - Dr. Daryl Wile

3:35 - Dr. Sarah de Leeuw

3:40 - Dr. Julianne Barry

3:45 - Dr. Paul van Donkelaar

3:50 - Dr. Jason Curran

3:55 - Dr. Sarah McCorquodale

4pm - FOOD IN FOYER



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Student Abstracts

Vanessa Thomson (2023) Dr. Kiley Cindrich

Medicine Order Set Engagement Project (MOSEP) for Interior Health

As the Interior Health Authority (IHA) transitions to digital health care, there is a need for standardized electronic order sets for general inpatient medicine providers. This will reduce the administrative burden of maintaining site-specific order sets, and will standardize evidence-based practices across the health authority. We met with and surveyed physician and allied health groups across IHA to determine provider concerns and priorities in the transition to standardized order sets. We identified 3-5 priority order sets that will be used as pilots for standardization in the next phase of the project. There will be opportunities for student involvement as working groups are formed to develop these order sets.

Contacts: vthomson@alumni.ubc.ca or caitlin.danilkiewicz@interiorhealth.ca (administrative assistant)

Roshan Behrouzi (2025) Warren Brock

Healthcare Travelling Roadshow (BC Interior) - SMP Year 1 & 2

(Currently recruiting)

Year 1 FLEX students will help lead and deliver a Healthcare Travelling Roadshow to three rural communities within the Interior Health region. They will spend a full-week travelling as part of an interdisciplinary group of healthcare students giving interactive presentations to rural high school students and engaging with various community stakeholders. They will also assist with sourcing equipment for school presentations, planning extracurricular activities, and other logistics.

Matt Lavery (2025) Dr. Jason Curran

Chart review on deviation from Canadian Head CT Rule at a rural BC hospital

(Currently recruiting one student - creation of manuscript for publication)

The Canadian CT Head Rule is a highly validated tool for determining if minor head trauma patients require CT imaging. Although this tool is highly utilized in CT enabled facilities, it is speculated that there is decreased adherence to these guidelines at smaller/rural hospitals that do not have in house CT due to difficulties with transferring patients to larger centers (weather, patient preference, etc.). This FLEX project involved the creation of a research protocol aimed at determining physician adherence to this rule, gaining ethics approval, completion of a lit review, and acquiring grant funding for the research project.

Student Abstracts

Annika Ackermann (2025) Dr. Videsh Kapoor & Dr. Gilbert Lam

The Bhutan Health Project

(Not currently recruiting but applications will open up next fall via UBC's Global Health Initiative)

The small land-locked nation of Bhutan, nestled between India and China, is well-known for its use of the GNH (Gross National Happiness) metric as opposed to the predominant GDP (Gross Domestic Product) metric used to quantify a country's prosperity. Despite the codification of happiness and holistic wellbeing, stigma around mental illness remains pervasive and the country has seen a concerning increase in the mental health burden of its youth and young adults (YYA) specifically. Accordingly, the Khesar Gyalpo University of Medical Sciences of Bhutan (KGU) has collaborated with UBC to gain a deeper understanding of mental health perspectives amongst Bhutanese YYA to guide future resource creation and support existing infrastructure. To date, a large pilot survey and several focus groups have been conducted at KGU, with plans of expanding to other post-secondary institutions across the country as well as including healthcare workers and traditional medicine practitioners in future focus groups. Also in the works: a symposium at KGU to share research findings and run seminars promoting mental wellbeing through a culturally effective lens, publishing a manuscript of initial findings, and presenting at various North American conferences.

Stephanie McCann (2025) Dr. Sarah McCorquodale

Art-Based Mindfulness in Medicine

This activity was a mostly self-guided project that ultimately aimed to address whether art-led mindfulness activities can beneficially impact students during their medical education. I began the project by completing an 8-week Palouse Mindfulness course, which involved daily mindfulness exercises and reflective writing pieces. The main project deliverable was a full literature review concerning the use of art as a conduit of mindfulness and wellbeing in the medical field, with a focused search on its use with medical students and in medical education. I also created multiple art pieces that reflected my personal experience with continued mindfulness practice, including an acrylic painting and an accompanying digital "Mindfulness Diary" that can be accessed via an accompanying QR code. The findings from this project and feedback from classmates were also used to reshape the structure of first year medical mindfulness seminars at UBC.

Student Abstracts

Sophie Jansen and Quinn Krahn (2025) Dr. Sarah de Leeuw

Experiencing First Nations' Well-Being in Northern BC

The First Nations Community Education Program aims to bring medical students into northern Indigenous communities to meet local people and experience what life is like there. It is an opportunity for students to critically and creatively reflect on their own understandings about health, wellness, resiliency, capacity and culture in northern First Nations. Students in the program travel for 2-5 days with at least one other medical student and complete reflections about their experiences.

Kayla Korolek (2025) Dr. Sarah de Leeuw

FNCEP: Experiencing First Nations' Well-Being in Northern BC

The First Nations Health Authority, Northern Health, the Health Arts Research Centre, and UNBC's Northern Medical Program teamed up to offer undergraduate medical students a chance to visit northern First Nations communities for cultural learning and community teachings. This project allowed me to experience the daily life of Indigenous community members in Terrace and surrounding communities for three days in April 2021. I completed three reflections: one before, one during and one after the cultural experience to be used as 'data' to assess the impact and success of the program and to analyze the efficacy of reflective practice. This qualitative research intends to amass evidence about how to enhance cultural competency and safety in a manner that may improve First Nations accessibility to high quality health care services. I was able to meet many amazing Indigenous leaders and friends and gained a unique holistic perspective of some of the differences between a rural vs. urban community. This project fits with the broader calls by the Truth and Reconciliation Commission of Canada and the need to prepare culturally humble healthcare professionals for the future.

Student Abstracts

Brandon Hayashi (2025) Dr. Rod Knight

The social and structural factors influencing sexual and gender minority youth substance use through the COVID-19 pandemic.

The COVID-19 pandemic has exposed many social vulnerabilities that perpetuate social and health inequalities that are felt most by populations marginalized by oppression and systemic discrimination. Compared to heterosexual or cisgender individuals, sexual and gender minority (SGM) populations are more likely to report anxiety, depression, substance use issues and decreased family and social support. This can be partially explained by the minority stress theory. Additional stressors may contribute to shifts in substance use patterns, including catastrophic events, childhood stress, and life stressors. Through qualitative thematic analysis, I examined first-hand accounts of SGM youth experiences with substance use during the pandemic.

Nicole Watt (2025) Dr. Silvina Mema

COVID-19 Public Health Response and Unintended Consequences

The COVID-19 pandemic has caused massive disruptions in many sectors of the healthcare system, including a silent threat to population-based cancer screening. Several studies worldwide have found a decrease in screening for the three most commonly screened cancers, breast, cervical, and colorectal, during at least the first 6 months of the pandemic. The goal of my project was to gather and analyze data of cancer screening rates in Interior Health during the COVID-19 pandemic and compare it to cancer screening rates prior to the pandemic. I analyzed data of mammograms, colposcopies, and colonoscopies performed in Interior Health prior to and during the pandemic. I completed a literature review on screening patterns seen in other jurisdictions over the pandemic, proposed consequences of reduced screening, and interventions for reduced screening. I was able to discuss my findings with my supervisor and members of BC Cancer Kelowna and gain knowledge of public health and cancer screening.

Student Abstracts

Harjot Bhandol and Phoenix Yin (2025) Dr. Joanne Matsubara

The role of microglia in the Alzheimer's Diseased retina: morphology and activation

This FLEX project was a wet bench-based molecular science study about the imaging potential of the retina in terms of Alzheimer's Disease (AD) screening. The neural retina is of the same embryological origin as the brain and is part of the central nervous system (CNS). Thus, it is often thought of as a potential "window" into the brain. Currently Alzheimer's Disease is diagnosed clinically and through PET imaging ante-mortem, or histologically post-mortem. As such, the end goal of this research is to evaluate the feasibility and efficacy of imaging the retina for markers of AD as an alternative non-invasive method of pathological screening. The focus of this project was on the microglia cell population, a group of immune-derived support cell type that exists in the CNS, as there is increasing evidence that they have a role to play in the pathogenesis of AD. Immunohistochemical staining and confocal microscopy were the main techniques used to investigate the activation markers and morphology of microglia in AD retinas as compared to control. Markers of interest included CD68 and Iba-1. This project was conducted at the Eye Care Centre (VGH) with the Matsubara Lab.

Lauren Walgren (2025) Dr. Jennifer Locke

A Retrospective study on Pelvic Floor Physiotherapy for Improving symptoms in women with Dyspareunia Genitourinary Syndrome of Menopause

With my supervisor I created a project proposal for a retrospective study investigating Pelvic Floor Physiotherapy (PFPT) for improving symptoms in women with dyspareunia and/or Genitourinary Syndrome of Menopause (GSM) and submitted an application for ethics approval. This project aims to conduct a retrospective study investigating the satisfaction of women who have dyspareunia and/or GSM after receiving PFPT using questionnaires. GSM is a widespread condition experienced by women in their late or post-reproductive years. Currently, treatments for dyspareunia and GSM are understudied and there are no guidelines in Canada for the use of PFPT for the treatment of women with these conditions.

Student Abstracts

Julie Zhao (2025) Dr. Marianne Vidler

An Equity-focused Patient Engagement Strategy in Pregnancy

Background:

Perinatal health research participants often do not reflect the diversity of their communities. The goal of this project was to identify barriers and possible solutions to increase diversity and inclusion in research related to pregnancy, childbirth and the postpartum period.

Methods and Results:

We conducted workshops, virtual events, online surveys, eight virtual interviews and two focus groups to find strategies to engage diverse perinatal research participants. We interviewed researchers and perinatal participants from historically underrepresented communities such as rural residents, new immigrants and people of colour. Qualitative thematic analysis is being performed on interview data using NVivo 12 software. Various strategies for research recruitment and methodology including having diverse research teams, removing travel barriers and using appropriate incentives may mitigate barriers and increase research participation that better reflects the current diversity in the perinatal population.

Veronica Kessler (2025) Dr. Olusegun Oyedele

Addition of Clinical Case Scenarios to be implemented in conjunction with MDUP Cadaveric Anatomy Labs

This FLEX project focuses on developing a supplemental clinical anatomy teaching module to allow students to gain a better understanding of how the anatomy and radiology we learn during our first two years of didactic learning are seen in the clinical setting. Each module will have real life cases with XR and CT imaging for students to work through on their own time, in addition to some clinically based practice anatomy questions. At the end of each case, it walks students through the potential treatments for each case. An example of a common question I got in anatomy lab was related to the importance of Morrisons pouch, this module will provide an example of a patient entering the trauma bay after a car accident, and on efast you note that there is an accumulation of fluid in Morrisons pouch that needs to be drained. The goal behind this project is to help students understand anatomy, rather than memorize it, and therefore have a stronger anatomical knowledge base when they enter clerkship rotations.

Supervisor Abstracts

Dr. Evelyn Cornelissen

Teaching Science and Media Literacy to Kids

This project is about helping to expand childrens' skills in health literacy and critical media analysis skills. Last year, I created and delivered a series of three workshops on a variety of topics in science communication, to a class of grade 5/6 students in Kelowna. This year, I plan to take those workshops and turn them into a series of online modules and videos that can be used to teach future classes about critical media literacy. Teaching these skills is arguably one of the most important concepts one should learn in school – the critical thinking skills learned can apply to a very large variety of other settings. It is evident that learning these skills would help create a more health literate population, and health literacy often leads to better health outcomes. Given the current polarized political climate, learning how to critically analyze what is said in the media, especially with regards to health and science information, is doubly important.

Jane Jun

SMP Library Resources

This short presentation from our SMP librarian will cover how students can be supported throughout their research projects, and a little about library resources as a whole.

Warren Brock

2023 Healthcare Traveling Roadshow

Year 1 FLEX students will help lead and deliver a Healthcare Travelling Roadshow to three rural communities within the Interior Health region. They will spend a full-week travelling as part of an interdisciplinary group of healthcare students giving interactive presentations to rural high school students and engaging with various community stakeholders. They will also assist with sourcing equipment for school presentations, planning extracurricular activities, and other logistics.

Supervisor Abstracts

Dr. Christine Voss

Pediatric Health Research in the BC Interior

The overall goals of my research are to investigate how physical activity behaviours relate to current and long-term health outcomes in children in both clinical and community-based settings, and to identify strategies to improve physical activity participation in children. Examples of current projects that are partnered with Interior Health include: 1) a mixed-methods, longitudinal research study that utilizes Fitbits to estimate physical activity levels in children and youth with type 1 diabetes; and 2) the evaluation of a school-based intervention (school streets) to increase active travel and physical activity in schoolchildren – a first of its kind in the BC Interior.

Contact info: christine.voss@ubc.ca Office: Reichwald Health Sciences Room 323

Dr. Sarah Purcell

Purcell Lab

The research we conduct in my laboratory falls under the general umbrella of human energy balance, which is made up of energy expenditure (the calories we burn) and dietary intake (calories and nutrients we eat). I investigate energy balance primarily in adults with chronic disease (e.g., obesity, types 2, diabetes), with an emphasis on human nutrition. We are currently conducting a study to better understand appetite, dietary intake, and resting energy expenditure fluctuations across the menstrual cycle in premenopausal women. To improve the accuracy of dietary intake that we measure, we provide participants with two days of food before they complete a study visit in which we assess appetite sensations and objective dietary intake in response to a control meal. Participants are then provided with several food items and asked to eat as much or as little as they would like over three days. Student roles in this research project will focus primarily on refining the dietary intake assessment methods. Other roles may include synthesis of data from published studies that use controlled diets and/or measurement of appetite and dietary intake in human subjects. In terms of outcomes, I encourage trainees to create and present scientific abstracts and – depending on goals and experience – co-author journal articles. Other outcomes may include lay-audience educational materials, local presentations, or refinement of questionnaires for research studies.

Supervisor Abstracts

Dr. Daryl Wile

ICEBERg

Upper limb and lower limb aerobic exercise have been shown to improve upper limb force generation in small studies of people with Parkinson's disease. It's not clear if this is a general effect of cardiovascular exercise / aerobic stimulus, if there is a specific effect of upper limb exercise in people with PD, or what the ideal modality of exercise is to improve upper limb function. We will study upper limb ergometry (hand cycling task) in steady state and interval training paradigms to determine if an interval training intervention is more effective. The primary outcome measure will be performance of an upper limb dexterity task.

Dr. Sarah de Leeuw

Northern First Nations Community Education Program Printing the Fine Arts of Care

A growing body of evidence suggests that: medical students will benefit from becoming more comfortable with uncertainty and even failure; medical education must make effort to unsettle a long colonial history that has dominated ways the discipline is taught and practiced; and arts and humanities have important roles to play in medical learning, scholarship, and practice. Dr. Sarah de Leeuw's two FLEX projects (1) Northern First Nations Community Education Program and 2) Printing the Fine Arts of Care) both use creative processes, critical self-reflection, and experiential learning in unique places to encourage learners' thinking about positions of power, ways that specialized languages and modes of expression can be marginalizing for some people and communities, and why not having definitive answers or clear paths can be productive and inspiring. The Northern First Nations Community Education Program places students into northern rural First Nations, for up to a week, to learn directly from Indigenous community members. Printing the Fine Arts of Care, which does NOT require pre-existing artistic skills, places students into a print making studio in UBC Okanagan's Visual Arts Program. While there, medical students practice lithography, lino-printing, screen-printing, etching, or letter press and reflect on what it means to be immersed in a very specialized art-making practice. Expenses are covered to participate in both programs. Please be in touch with Dr. de Leeuw!

Supervisor Abstracts

Dr. Julianne Barry and Dr. Donna Kurtz

Learning from Our Elders: Indigenous Perspectives of Wellness in Harvesting and Gathering

Friendship and Métis Centre communities in the BC Interior, UBCO and Interior Health have worked together on Indigenous-led health research since 2015. Urban Indigenous community members said cultural Traditions and learning from the land has always been part of Indigenous Peoples lives, but colonization has made sharing of this Knowledge difficult. Urban Indigenous youth and young adults said they want to learn about these ways. Elders, Knowledge Keepers and Traditional Healers said they want to share Indigenous Knowledge and ways of being with Indigenous youth and young adults.

The project aims to learn from urban Indigenous youth, young adults, Elders, Knowledge Keepers and Traditional Healers how wellness is connected to land-based activities, Ceremony, Indigenous identity, and gender. In Phase 2, community members identified activities that would support youth and young adults in their identity and sense of wellbeing. Moving forward in Phase 3, communities will develop and deliver local programs to support youth and young adult identity, sense of wellbeing and connectedness.

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Dr. Julianne Barry @ julianne.barry@ubc.ca

Dr. Paul van Donkelaar

Supporting Survivors of Abuse and Brain Injury through Research (SOAR) Initiative

Almost half – 44% - of Canadian women will experience violence at the hands of an intimate partner in their lifetime. Annually, it is estimated 2-3% of women who experience intimate partner violence (IPV) each year suffer physical injuries as a result. This is equivalent to 276,000 women between the ages of 20-54 in Canada every year. Of the many challenges faced by women who have experienced IPV, one that has been remarkably understudied is the extent to which IPV-caused brain injury (BI) factors into the post-IPV period of recovery. This is of paramount importance because it has been shown that up to 92% of women who have survived IPV and seek medical help at hospital emergency rooms or refuge in women's shelters report at least 1 brain injury due to direct blows to the head or strangulation. Despite this context, the effect BI has on brain function in survivors of IPV is currently poorly understood and the extent to which such knowledge is integrated into supports for this population is in its infancy. The Supporting Survivors of Abuse and Brain Injury through Research (SOAR) Initiative aims to address these knowledge gaps. Current projects we are undertaking as part of the initiative include:

1. Ongoing assessments biomarkers of brain injury at both the acute and chronic stage.
2. Interventions designed to reduce symptoms and improve long term health outcomes.
3. Assessment of the IPV-BI in the queer community and associated barriers to receiving appropriate care.
4. IPV-BI education and training for law enforcement and paramedics

Supervisor Abstracts

Dr. Jason Curran

Manager, Rural Research & Physician Engagement

Affiliation: Interior Health Research Department; Rural Coordination Centre of BC (RCCbc)
Project title: Interior Health Research & Rural Research Projects (it's broad, but for the last several years, I've used the Activity Day as a way of introducing several projects, and then connecting with students thereafter to find a matches).

Dr. Sarah McCorquodale

Mindfulness in medicine and UBCO connections

Pallouse mindfulness is a medical mindfulness course open to anyone but designed for health care providers to learn about the practice of mindfulness so they can apply the principles in self and patient care. This practical 8 week course includes a weekly introduction, daily mindfulness practices, and supporting literature and videos to supplement learning. A certificate is granted on completion.

