

BCMHSUS RESEARCH

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Join us for BCMHSUS Research Day 2023!

Mark your calendars for November 7, 2023.

Don't miss out on BCMHSUS Research Day 2023! We are thrilled to extend our invitation to you for this remarkable event.

Save the date, help us spread the word, and prepare to be part of the driving force behind innovation, reshaping the landscape of mental health and substance use research for a brighter future.

If you have any questions or would like to get involved, please contact BCMHSUS_Research@phsa.ca.

For more info go [here](#) or see our [Upcoming Events](#) section.

Comings & Goings

Welcome to our new Affiliate Investigator, Dr. Angela Russolillo



Dr. Angela Russolillo is a clinician scientist and the Director of Mental Health Clinical Research in Psychiatry at St. Paul's Hospital. She is an adjunct professor in the Faculty of Health Sciences at Simon Fraser University (SFU) where she completed her academic training including a research-based MSc and PhD in Health Sciences. Her clinical training and experience as a nurse inform her program of research which examines health services use and related outcomes (e.g., mortality) among individuals with psychiatric and substance use disorders, including those who experience homelessness and criminal justice involvement. Her research aims to reduce disparities in mental health, substance use and treatment through health services reform, advocacy, and integration of evidence-based practices.

Dr. Russolillo has worked alongside multidisciplinary teams to evaluate supported housing models, examine cross-government data and develop standards of care for specialized mental health services. Her research program supports several national and international agendas focused on improving health care policy and practice for individuals with complex health and social challenges.

Please give her a big welcome!

Are you a researcher interested in being an affiliate investigator? Visit our website for eligibility on how to [Become a Member](#).

Farewell to our Knowledge Exchange Lead, Clayton Hamilton



Knowledge Exchange team update: Clayton Hamilton's last day with BCMHSUS was September 8, 2023. Please join us in thanking him for his contributions and wishing him all the best in his future endeavours!

We are delighted to share that we have hired a new KE Lead. Courtney Pankratz has an MA in Community Psychology and experience leading community-based research, evaluation, and knowledge mobilization initiatives in the harm reduction, housing, and community-based service sectors. Most recently, she was Manager, Knowledge Translation and Evaluation, at the Dr. Peter Centre. Courtney will join us Sept. 28th.

News & Announcements

Recognizing the 2023 National Day for Truth and Reconciliation

Each year, September 30 marks the National Day for Truth and Reconciliation – a day to recognize the history of colonialization in Canada and its impacts on Indigenous peoples, including the legacy of residential schools, the children who never returned home, and the survivors and their families. Offices across BC (along with all provincial public sector, federal and federally-regulated workplaces) will be closed on Monday, October 2 in recognition of this day.

This is an opportunity for all Canadians to reflect and commit to understanding, accepting and learning the truth of our history and to consider taking actions to advance truth and reconciliation.

Thank you for your commitment to our shared responsibility to truth and reconciliation and Indigenous-specific racism through individual and shared learning. Your actions contribute to building to building a racism-free, culturally safe, and accessible health care.



Highlighting Research

Featured Researcher

In this issue, we highlight Dr. Liv Yoon, Affiliate Investigator, BCMHSUS Research



Who are you?

I am an Assistant Professor in the School of Kinesiology at UBC. My research is at the intersection of climate change, social inequities, and health, with a focus on community engagement and participatory methods. My PhD training in social sciences and socio-cultural kinesiology informs me to think about bodies in sociopolitical contexts, provoking thought about how some bodies are considered more 'dispensable', and in turn, rendered more vulnerable to climate-related risks and pollution. My research considers taking climate change as an opportunity to challenge the status quo and promote structural changes that alleviate social inequities that both led to.

Dr. Liv Yoon

What are you working on?

I'm working on various projects with the overarching goal of better understanding experiences of people vulnerable to extreme heat-related risks – seniors, those experiencing precarious housing and/or poor indoor environmental quality, and people with schizophrenia, for example. Addressing shortcomings in, and seeking to improve, policy measures around these issues is another goal, which involves navigating the tension between 'troubleshooting the status quo' and 'expanding the scope of what's possible'. This tension is particularly relevant when considering the nexus of the housing crisis and the climate crisis.

Who are you working with?

Almost all of my projects are community-based and participatory in nature, and engage with grassroots organizations across metro Vancouver, as well as partners in NYC from my postdoc work. For the purpose of this newsletter, however, the most relevant is the Health Canada-funded interview-based project with people with schizophrenia and schizoaffective disorder about their experiences with extreme heat. With Dr. Christian Schütz and Dr. Randall White, we are working with BCMHSUS' Red Fish Healing Centre (PHSA), Vancouver Coastal, and the BC Schizophrenia Society. We are also working with guidance from Dr Sarah Henderson of the BC Centre for Disease Control (PHSA).

Why this project?

People with schizophrenia die at disproportionately higher rates during extreme heat events. Of the 619 deaths in the registry for the 2021 BC Heat Dome, 15.7% (n=97) had been diagnosed with schizophrenia – a staggering figure, given that about 1% of Canadians are diagnosed with schizophrenia. Similarly, in the 2018 heatwave in Montreal, even though people with schizophrenia only represent 0.6% of the city's population, they accounted for 25.8% (n=17) of heat-related deaths. These figures may indicate the cascading and compounding effects of social vulnerability factors that disproportionately impact people with schizophrenia, and warrant a closer look. We're currently awaiting UBC REB approval to start the research.

Fun fact:

I really love the rain (as long as it's not catastrophic) and still wear my trusty big yellow gumboots that I've had since my undergrad days!

Recent Publications from BCMHSUS Researchers

- **Reduction in Substance-Related Composite Harm Scores Through Street Soccer.** Bates, A.T., Tse-Agha, L., Agha, A., Nunez, J.J., Boyda, H.N., Jones, A.A., **Barr, A.M., Honer, W.G.**, Vila-Rodriguez, F., Bates, A. and Horner, W. *Cureus*. [Read more](#)
- **Rasch analysis of the beck depression inventory in a homeless and precariously housed sample.** Cho, L.L., Jones, A.A., Gao, C., Leonova, O., Vila-Rodriguez, F., Buchanan, T., **Lang, D.J.**, MacEwan, G.W., **Procyshyn, R.M.**, **Panenska, W.J.** and **Barr, A.M.** *Psychiatry Research*. [Read more](#)
- **Primacy and recency effects in verbal memory are differentially associated with post-mortem frontal cortex p-tau 217 and 202 levels in a mixed sample of community-dwelling older adults.** Gicas, K.M., **Honer, W.G.**, Petyuk, V. A., Wilson, R. S., Boyle, P. A., Leurgans, S. E., ... and Bennett, D. A. *Journal of Clinical and Experimental Neuropsychology*. [Read more](#)
- **Psychotic Symptoms in Frontotemporal Dementia with TDP-43 tend to be associated with subtype B pathology.** Hirsch-Reinshagen, V., Hercher, C., Vila-Rodriguez, F., Neumann, M., Rademakers, R., **Honer, W.G.**, ... & Mackenzie, I. R. *Neuropathology and Applied Neurobiology*. [Read more](#)
- **Multilayer depressive symptom networks in adults with bodily pain living in precarious housing or homelessness.** Jones, A.A., Cho, L.L., Gicas, K.M., **Procyshyn, R.M.**, Vila-Rodriguez, F., Stubbs, J.L., Leonova, O., Buchanan, T., **Thornton, A.E.**, **Lang, D.J.**, MacEwan, G.W. and **Honer, W.G.** *European Archives of Psychiatry and Clinical Neuroscience*. [Read more](#)
- **A Call for an Evidence-Based Strategy Against the Overdose Crisis.** Krausz, R.M., Westenberg, J.N., Tai, A.M., Fadakar, H., Seethapathy, V., Mathew, N., Azar, P., Phillips, A., **Schütz, C.G.**, Choi, F. and Vogel, M. *The Canadian Journal of Psychiatry*. [Read more](#)
- **Exploring low clozapine C/D ratios, inverted clozapine-norclozapine ratios and undetectable concentrations as measures of non-adherence in clozapine patients: A literature review and a case series of 17 patients from 3 studies.** Ruan, C. J., Olmos, I., Ricciardi, C., Schoretsanitis, G., Vincent, P. D., Yağcıoğlu, A. E. A., ... & **Procyshyn, R.M.** *Schizophrenia Research*. [Read more](#)
- **The journey from concealment to disclosure of an obsessive-compulsive disorder diagnosis in the high school setting: A qualitative study exploring youth perspectives.** Vallani, T. I., Naqqash, Z., Lin, B., Lu, C., **Austin, J. C.**, & **Stewart, S. E.** *Psychiatry Research*. [Read more](#)
- **Cytomegalovirus antibodies are associated with mood disorders, suicide, markers of neuroinflammation, and microglia activation in postmortem brain samples.** Zheng, H., Webster, M. J., Weickert, C. S., **Beasley, C. L.**, Paulus, M. P., Yolken, R. H., & Savitz, J. *Molecular Psychiatry*. [Read more](#)

Awards, Grants & Honours

Dr. Jehannine Austin is the new Editor-in-Chief for the Journal of Genetic Counselling

Dr. Austin will be taking over as Editor-in-Chief for the Journal of Genetic Counselling effective January 1, 2024. Join us in congratulating them for this great accomplishment, we are excited for Dr. Austin and wish them great success in their new role.

Dr. Evelyn Stewart is recipient of the UBC Medicine 2023 Distinguished Achievement Award

Each year, the Faculty of Medicine recognizes faculty members who exemplify exceptional contributions in the areas of education, research and/or service, and who are dedicated to advancing both the Faculty's values and vision of transforming health for everyone.

Congratulations to Dr. Stewart on being recognized for her significant work in psychiatric research, aimed at improved health outcomes of the population. [Read more](#)

Dr. Todd Woodward is Co-Investigator on a successful CIHR Project Grant

Congratulations to Dr. Woodward for his successful grant application as co-PI on the project "Schizophrenia Canadian Neuroimaging Database (SCanD)"

Congratulations to the recipients of the 2023 Trainee Endowment Award

Abhijit Chinchani, PhD Student under the supervision of Dr. Todd Woodward, is the recipient of the Benjamin Feldman and Family Endowment Fund for Transformational Activity in Mental Health. **Karina Aika Thiessen, MSc student** under the supervision of Dr. Christian Schütz, is the recipient of the DMCHB General Award.

Congratulations to both on this great accomplishment! [Read more](#)

Summer Studentship Research Projects Wrap up

This year, BCMHSUS proudly sponsored four summer students who had the opportunity to collaborate with our researchers. As a result, these students gained invaluable skills and experience, which are reflected in their final reports showcased below.

Every year we invite [applications](#) for Research Studentships in a health-related research area that has direct relevance to improving the health of individuals across the lifespan, at risk for, or experiencing mental health and/or substance use issues.



Zoe Kortje (Supervisor Dr. Donna Lang)

Assessing neurovascular health via retinal imaging in chronically treated schizophrenia patients

Persons with schizophrenia spectrum disorders (SSD) are disproportionately impacted by cardiovascular disease (CVD), likely due to genetic, pharmacological and lifestyle factors.

Our team expects to expose an increased volume of retinal deficits in the schizophrenia patient group. Secondary to this, it is expected that increased retinal deficit scores will be positively correlated with BMI and blood pressure. Results from this pilot study may facilitate the development of a rapid and tolerable method for detecting the risk of adverse cardio- and cerebrovascular events in a vulnerable patient population. After the completion of this study, we hope to conduct further investigation into the reliability and usability of non-invasive fundus imaging in clinical settings and with other psychiatric/neurological disorders.



Zhangyu Yang (Supervisor Dr. Todd Woodward)

Data simulation for comparison of CPCA and PCA

In this project, we investigate the performance of constrained principal component analysis (CPCA) in estimating the original dataset as compared to the classical principal component analysis (PCA) method, using simulated datasets generated through MATLAB. Our study investigated how accurately both CPCA and PCA can estimate data with different structure and

dimensions, by comparing the correlation between the estimated dataset and the initially generated dataset.

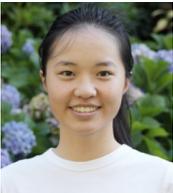
In recent studies at the CNoS lab to find correlations between human behavior and fMRI results, we found many similarities between the outcomes produced by CPCA and PCA. As a result, it's necessary for a comprehensive study to be done to find the similarities and differences of these two statistical methods. Our findings reveal that across all scenarios we tested, CPCA consistently demonstrates a stronger correlation compared to PCA.



Kaitlin Law (Supervisor Dr. Clare Beasley)

Plasma-Derived Exosomes as a Biomarker of Traumatic Brain Injury and Predictor of Long-term Psychiatric Symptoms

Extracellular vesicles (aka exosomes) are produced in the endosomal compartment of most cells and released as a means of communication between cells. As exosomes produced by brain cells can cross the blood brain barrier and can be isolated from blood and other peripheral tissues, they may provide an accessible means of exploring the health of brain cells. The aim of this study was to determine if exosomes could be a useful biomarker in identifying brain cell damage following TBI in youth. Exosomes were successfully isolated from blood samples using size exclusion chromatography, with nanoparticle tracking analysis used to demonstrate the number of exosomes present. Future studies will identify whether levels of protein markers of brain cell damage in exosomes differ between TBI and control groups. If differences in biomarkers between control and TBI groups are identified, a blood-based test could be developed to contribute to understanding diagnosis and prognosis of TBI, including prediction of long term mental health consequences.



Mido Luo (Supervisor Dr. Alasdair Barr)

Characterizing Medical Cannabis Use in the Downtown Eastside

The legalization of cannabis has led to increased social acceptability as well as interest in its therapeutic uses. Using data from the Hotel Study, a 15-year longitudinal cohort study of multimorbidity in the Downtown Eastside, I conducted statistical analyses to characterize the patterns in medical cannabis use, predictors for medical cannabis use, and general sociodemographics of the study population. To do so, I learned statistical tools such as regression analysis and built upon previous knowledge of R language. I became familiar with the various questionnaires administered in the Hotel Study, including the Maudsley Addiction Profile, SF-36, Beck Depression Inventory, and self reports of drug use. Preliminary results show that there may be correlations between cannabis use and gender, education, relationship status, work status, the presence of long term disability, self reported general health, and self reported mental health. Selected patterns found in cannabis use indicate most participants have used it for over 10 years, and most use over three times a day. Anxiety and the management of chronic pain or inflammation were the most commonly cited conditions for using cannabis medically. I will continue data analysis for the project through Directed Studies, completing a manuscript by April 2024. It may be noted that this project deviated from the initially proposed project due to some issues with animal ethics for the latter and the timely availability of the Hotel Study data.

Research Opportunities

Present your research at BCMHSUS Research Day 2023 - Call for Abstracts!

Present your research either via poster or oral (lightning round participation) presentation! We encourage all trainees, researchers, clinician researchers, and health care professionals to submit an abstract to showcase their research.



The theme of this hybrid event is: **“Making connections: Strengthening Mental Health and Wellness through Research”**, with the key objective is to strengthen connections— between researchers, clinicians, people with lived experience, and others – for research that is meaningful, responsive, and with impact.

Please contact BCMHSUS_Research@phsa.ca if you have any questions regarding the submission of an abstract or about BCMHSUS Research Day 2023 in general.

Abstract Deadline: Friday, October 13, 2023

Notice of Decision: Friday, October 20, 2023

Event Date: Tuesday, November 7, 2023

Location of Event: Chan Auditorium and Chieng Family Atrium at Oak Street Campus (C&W Site), 950 W28th Avenue, Vancouver

Looking for awards and scholarships?

Check out UBC’s [Directory of Award Opportunities!](#)

An extensive directory of external research prizes and award opportunities available to researchers in all career stages and disciplines.

You can also find a list of [Teaching and Service Awards](#), as well as [Graduate Awards and Scholarships](#).

For any inquiries, please contact research.prizes@ubc.ca.



The Knowledge Exchange

Mapping British Columbia’s MHSU Research Institutes

By Miriah Hodgins, Knowledge Exchange Lead, BCMHSUS



BC Mental Health and Substance Use Services (BCMHSUS) uses knowledge translation and exchange to help promote excellence and to strengthen the relationship between clinical practice and research. Part of the [vision and mission](#) for the BCMHSUS Research Institute is to bring together mental health and substance use researchers and research entities across the province “to inspire, inform, and amplify research that is relevant, meaningful, positively impacts patients, programs, and the health system.”

There is a lot of innovative research occurring in the fields of mental health and substance use in the province of British Columbia and across Canada. Further to discussions with leaders of various research institutes, we learned that there is a knowledge gap with respect to the research entities in B.C. with a focus on mental health and/ or substance use. In response to this gap, we are in the process of developing a map of research institutes in B.C. You can learn more about the numerous research institutes by clicking on this [link](#).



We would love to hear from you! Please let us know if you find this map useful and/or if you notice any research institutes that are missing. You can contact us at: bcmhsus_ke@phsa.ca.



Patient & Family Engagement

BCMHSUS families share stories of stigma in new mini-documentary series, UNITE Project

By Sandy Tedjasubrata, Advisor, Patient Experience and Community Engagement, BCMHSUS



The stigma surrounding mental health and substance use (MHSU) affects the experience and outcomes of care for individuals and families, pushing them into the shadows and making folks feel they are not deserving of help and partnership. As part of the [UNITE initiative](#) to disrupt stigma, BCMHSUS is launching Part 2 of the “Stories of Stigma” mini-documentary series. The three-part animated video series will bring you along a journey into the stories of family members of people with lived and living experience of mental health complexities, substance use issues and criminalization. It explores the roles that families play and how stigma has impacted them, how they have navigated trust and identity, and their insights and hopes for the healthcare system.

Three family storytellers (Shirley, Kristie, Kelly) share their narratives and wisdom as caregivers and loved ones of people with lived experience of MHSU and criminal justice involvement.

- **Video 1:** [Roles Family Members Play](#)
- **Video 2:** [Redefining Trust and Identity](#)
- **Video 3:** [Navigating the Health Care System](#)

Our highest hope is to disrupt stigma, demystify mental health and substance use, and highlight the positive role that healthcare system and research partners can play in the road towards wellness. By sharing their stories, we can create space for more stories, more dialogue, and more healing – together as a community.

“BCMHSUS Patient and Family Engagement 101” Sessions for Healthcare Partners and Providers

[“BCMHSUS Patient and Family Engagement 101 Sessions”](#) for Healthcare Partners and Providers is an open Lunch-and-Learn series offering you the knowledge and tools to enhance your skills for authentic patient and family engagement within BCMHSUS. Evidence shows that meaningful partnerships with people with lived experience in decision-making advances person- and family-centered care and improves health outcomes.

These sessions are designed for BCMHSUS healthcare partners, which includes staff, researchers, students, and contractors. Healthcare partners are teams and individuals interested in engaging patient and family partners, so that work is done in partnership with those who it will directly impact. Topics that are covered in our first series include an introduction to engagement, planning your engagement, implementing your engagement, and measuring and closing the loop which may help inform the engagement process as you involve patients, clients and family partners in your research.

In honour of the National Day for Truth and Reconciliation, the upcoming session is on **“Culturally Safe Engagement”**, taking place on **Friday, September 29th from 12:00-1:00PM PST**. Hosted by Chris Lamoureux (Leader, Patient Experience and Community Engagement at BCMHSUS) along with Cody Caruso (Program Manager, Cultural Safety and Transformation at PHSA Indigenous Health), this session will cover the guiding principles and tangible actions to culturally safe engagement.

Stay tuned for more details on how you can register for this session [here](#). If you are unable to make the session, we will be hosting these sessions again in the future.

In the meantime, don't forget to connect with the Patient Experience and Community Engagement team at engage_bcmhsus@phsa.ca if you are interested in:

- **Co-facilitating a future session** to incorporate concepts regarding patient-oriented research as we continue to design future sessions.
- **Sharing your research** in how you have engaged patients, clients and/or family partners.
- **Learning more** about how to meaningfully engage patient and family partners in your research from resources such as the [BCMHSUS Patient and Family Engagement Framework](#).

Upcoming Events

Second annual Indigenous Employee Community of Practice Gathering

Indigenous employees across PHSA are invited to attend the second [annual Indigenous Employee Community of Practice Gathering](#).

This event brings together Indigenous employees in an Indigenous-led, safe and supportive environment to build community and connection, engage in a variety of activities such as cultural gatherings and learnings, and access Indigenous thought leadership and guest speakers.

The event will take place on October 24, 2023 from 9:30 a.m. – 3:30 p.m. at the Prince George Native Friendship Centre.

[Please RSVP by Friday, Sept. 29](#) to confirm your attendance.

BCMHSUS Research Day 2023: Making connections: Strengthening Mental Health and Wellness through Research

Please plan to attend the BC Mental Health and Substance Use Services (BCMHSUS) Research Day 2023 on November 7th ([RSVP here](#)).

BC MENTAL HEALTH & SUBSTANCE USE SERVICES
Provincial Health Services Authority

7th Nov | 8AM-3PM

Chan Auditorium & Chieng Family Atrium

C&W Oak Street Site
950 W28th Ave
Vancouver, BC

Zoom details TBA!

BCMHSUS Research Day 2023

Making connections: Strengthening Mental Health and Wellness through Research

QR Code to RSVP

Program for the day coming soon!

Bev Holmes, PhD	Elder Roberta Price	Evelyn Stewart, MD	William Panenka, MD
Jennifer Duff, MBA	Tonia Nicholls, PhD	Christian Schütz, MD	Amanda Slauwhite, PhD
Courtney Defriend, PhD			

WAYFINDING
Driving: Paid parking is in effect 24 hours a day – \$3.50/hour or \$14.25/day. Parking meters accept change and credit cards only.
Public Transit: Multiple bus routes are a 5-10 minute walk from BC Children’s Hospital Research Institute, including:
 • #17: Oak/Downtown. Stop - Devonshire Crescent
 • #25: Brentwood Station/UBC. Stop - King Edward at Oak Street
 • The Canada Line SkyTrain to King Edward Avenue Station is a 15-20 minute walk
Biking: All major site entrances feature bike racks for public use. For accessible bike routes visit the [City of Vancouver](#) website.



For more information & to RSVP contact BCMHSUS_research@phsa.ca



Interested in research opportunities at BCMHSUS? Get involved! Visit the following [link](#) and become a member.