

BCMHSUS RESEARCH

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Message from the Executive Director



New year, more research!

Dear BCMHSUS Research Community,

We hope that 2023 is off to a good start, and that this year is full of great things for all of you. BCMHSUS RI is participating in some meaningful collaborations with the Women's Health Research Institute this year - check out the Women in Science and Women's Health Research Symposium in our Upcoming Events and celebrate all women in the broadest sense!

It is also time to submit your PHSAs Conflict of Interest (COI) declaration. Who must declare? Anyone who conducts research at a PHSAs site. More info [here](#).

Finally, we are searching to fill our brand new Research Lead role for Correctional Health Services! Interested researchers should submit their application [here](#).

Sincerely,

Jehannine



Need extra support during COVID-19?

PHSA: Visit Workplace Wellness: [Coping with COVID-19](#)

UBC: Visit <http://www.hr.ubc.ca/covid-19/#expressed> and <http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/staff-faculty/>

Comings & Goings

Welcoming our newest Affiliate Investigators

Dr. Nickie Mathew

Dr. Nickie Mathew holds the title of Psychiatrist with the Complex Mental Health Substance Use Services of BCMHSUS. Primarily working out of the Red Fish Healing Centre for Mental Health and Addiction, Dr. Mathew participates in research activities related to addictions, psychiatry, concurrent disorders, corrections and forensics.

Dr. Terri-Lee Seeley

Dr. Seeley is the Director of Inter-professional Practice with Correctional Health Services of BCMHSUS and is a member of the BCMHSUS Research Committee. Her research areas of focus are trauma-informed practice, concurrent disorders, women and correctional health settings.

Dr. Liv Yoon

Dr. Liv Yoon is an Assistant Professor with the UBC School of Kinesiology and is currently the Principal Investigator on a Health Canada-funded study regarding the experiences of people diagnosed with schizophrenia during the 2021 BC heat dome. Dr. Yoon has a strong interest in the intersections of social inequities, health, and climate change, with a focus on community engagement work.

Are you a researcher interested in being an affiliate investigator? Join us as we expand our research community and connect those interested in research, including clinicians, focused on improving the health, wellbeing, and health care for British Columbians at risk of or experiencing mental health and substance use issues and/or those involved with the criminal justice system.

Visit our website for eligibility on how to [Become a Member](#).

News & Announcements

Dr. Jehannine Austin lands new role as Faculty Research Advisor

Join us in congratulating Dr. Austin for their hot-off-the-press new role with The Canada Foundation for Innovation as UBC's Faculty Research Advisor.

Research Institute Boardroom Upgrades

We are happy to announce the upgrades to the Oak Street Site, TRB A3-131 boardroom have been completed! This new user-friendly AV system will allow for easier access to virtual meetings, smooth connection to other devices and improved presentations.

For bookings and training please contact Glory Mogas, Administrative Assistant at glory.mogas@phsa.ca.

Highlighting Research

Featured Researcher



Abhijit Chinchani

Who are you?

I am an electrical engineer by training, with a strong drive to understand the human brain. I use quantitative skills in signal processing and machine learning to solve convoluted problems in cognitive computational neuroscience. I am currently a PhD candidate in the Department of Bioinformatics at UBC. Under the guidance of Dr. Todd Woodward, I am using my computational skills to find the optimal conditions for transcranial alternating current stimulation (tACS) to reliably affect an individual's measurable physiology and behavior.

What are you working on?

My doctoral research project involves investigating the physiological and behavioral effects of transcranial alternating current stimulation (tACS). tACS is a neuromodulation technique that has been attempted to be used in therapeutic treatment of various neurological and psychiatric disorders. Although many studies claim improvement to behavioral impairments linked to mental health disorders, the results are highly inconsistent. Our goal is to clearly demonstrate how (or whether) this method can affect an individual's measurable physiology and behavior. In this regard, we use the state-of-art tACS system, where 256 electrodes deliver current in flexible patterns to precisely target stimulation of specific brain areas.

Who are you working with?

I work at the Cognitive Neuroscience of Schizophrenia (CNoS) lab, supervised by Dr. Todd Woodward. The tACS project team in our lab also consists of Dr. Rafal Skiba (postdoctoral fellow), Yudan Chen (research assistant), and Yvette Ni (research assistant). Moreover, the tACS project has many sub-projects, each with different collaborators. For example, we are collaborating with Dr. Tim Oberlander to affect eye-movements by stimulating the frontal eye fields (FEF). We are also collaborating with Dr. Evelyn Stewart and Dr. Lori Brotto to improve mindfulness training by affecting the alpha brain oscillations using tACS.

Why this project?

Although, tACS has tremendous potential to treat various neurological and psychiatric disorders, it is held back by unreliable results. I would like to remedy this by studying mechanisms of tACS and demonstrate reliable effects on physiology and behavior. In an experiment, we tried to affect auditory steady state responses (ASSR) using tACS. Our results showed no significant change in ASSR amplitude (n=45). We hypothesize that this could be due to a mismatch between the frequency and phase of tACS with the ongoing brain oscillation. In the next set of experiments, we aim to rectify this by performing closed-loop stimulation.

Fun fact:

Since the pandemic, I have been reading more books and taking long walks while listening to podcasts. In this era of doomscrolling, such long-form and in-depth content has kept me sane!

Learning from our first ever Research Challenge

The [Research Challenge](#) is a unique opportunity for direct care providers to work on a multi-disciplinary team on a practice-based, patient-oriented research project. Research Challenge teams learn by doing as well as through educational workshops and the support of a research mentor. The goal of the initiative is for clinicians to apply the acquired knowledge of research and promote evidence-informed practice.

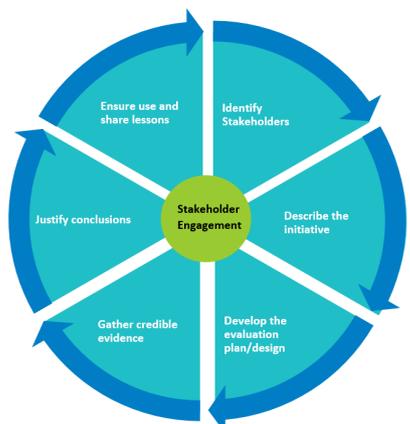
Six teams were awarded a \$5,000 grant to conduct their respective projects - ranging from exploring the benefits of leisure for people living in seclusion at a forensic psychiatric hospital to analyzing safety and efficacy of psycho-stimulant therapy in patients with concurrent ADHD and methamphetamine use disorder.

How do we know if the initiative has been successful and if its goals have been achieved?

Evaluation can answer these questions. Evaluation plays an important role at BCMHSUS. It is a valuable tool for program managers and planners who are seeking to strengthen the quality of their programs and improve care for the clients they serve. Given that this is our very first Research Challenge, we are completing a comprehensive evaluation to help inform improvements going forward.

As part of our evaluation, we looked at the level of knowledge about the research process and the quality of interdisciplinary multi-stakeholder engagement and collaboration. Evaluation findings can point to process improvements such as when and how often educational workshops are provided, where additional resources are needed to better support the novice researchers, and more.

To learn more about evaluation, visit the [BCMHSUS evaluation page](#) or contact us at evaluation_bcmhsus@phsa.ca if you have any questions.



Recent Publications from BCMHSUS Researchers

- **COVID-19 Vaccines and the Virus: Impact on Drug Metabolism and Pharmacokinetics.** McColl, E.R., Croyle, M.A., Zamboni, W.C., **Honer, W.G.**, Heise, M., Piquette-Miller, M., & Goralski, K.B. *Drug Metabolism and Disposition*. [Read more](#)
- **Sleep and Rest-Activity Rhythms in Recovering Patients with Severe Concurrent Mental and Substance Use Disorder: A Pilot Study.** Juda, M., Pater, J., Mistlberger, R.E., & **Schütz, C.G.** *Journal of Dual Diagnosis*. [Read more](#)
- **Working memory deterioration as an early warning sign for relapse in remitted psychosis: A one-year naturalistic follow-up study.** Tao, T.J., Hui, C.L.M., Hui, P.W.M., Ho, E.C.N., Lam, B.S.T., Wong, A.K.H., See, S.H.W., Chan, E.W.T., Suen, Y.N., Lee, E.H.M., Chan, S.K.W., Chang, W.C., Lo, W.T.L., Chong, C.S.Y., Siu, C.M.W., Choi, Y.Y., Pomarol-Clotet, E., McKenna, P.J., **Honer, W.G.**, Chen, E.Y.H. *Psychiatry Research*. [Read more](#)
- **Right Prefrontal Cortical Thickness Is Associated With Response to Cognitive-Behavioral Therapy in Children With Obsessive-Compulsive Disorder.** Bertolin S, Alonso P, Martínez-Zalacain I, Menchón J.M., Jimenez-Murcia S, Baker J.T., Bargalló N, Batistuzzo M.C., Boedhoe P.S.W., Brennan B.P., Feusner J.D., Fitzgerald K.D., Fontaine M, Hansen B, Hirano Y, Hoexter M.Q., Huyser C, Jahanshad N, Jaspers-Fayer F, Kuno M, Kvale G, Lazaro L, Machado-Sousa M, Marsh R, Morgado P, Nakagawa A, Norman L, Numi E.L, O'Neill J, Ortiz A.E., Perriello C, Piacentini J, Picó Pérez M, Shavitt R.G, Shimizu E, Simpson H.B., **Stewart S.E.**, Thomopoulos SI, Thorsen AL, Waitza S, Wolters LH; ENIGMA-OCD Working Group; Thompson PM, van den Heuvel OA, Stein DJ, Soriano-Mas C. *J Am Acad Child Adolesc Psychiatry*. [Read more](#)
- **Prevalence of pediatric acute-onset neuropsychiatric syndrome (PANS) in children and adolescents with eating disorders.** Aman, M., Coelho, J.S., Lin, B., Lu, C., Westwell-Roper, C., Best, J.R., & **Stewart, S.E.** *Journal of Eating Disorders*. [Read more](#)
- **Effects of clozapine treatment on the improvement of substance use disorders other than nicotine in individuals with schizophrenia spectrum disorders: A systematic review and meta-analysis.** Rafizadeh R, Danilewitz M, Bousman C.A. Mathew N, White R.F., Bahji A, **Honer W.G.**, **Schütz C.G.** *Journal of Psychopharmacology*. [Read more](#)
- **Differential age-associated brain atrophy and white matter changes among homeless and precariously housed individuals compared to the general population.** Stubbs JL, Jones AA, Wolfman D, Chan R.C.Y., Vila-Rodriguez F, Vertinsky AT, Heran MK, Su W, **Lang D.J.**, Field T.S., Gicas KM, Woodward ML, **Thornton A.E.**, **Barr A.M.**, Leonova O, MacEwan W, Rauscher A, **Honer W.G.**, **Pananka W.J.** [Read more](#)
- **Editorial Statement About JCCAP's 2023 Special Issue on Informant Discrepancies in Youth Mental Health Assessments: Observations, Guidelines, and Future Directions Grounded in 60 Years of Research.** De Los Reyes A, Epkins C.C., Asmundson G.J.G., Augenstein T.M., Becker K.D., Becker S.P., Bonadio F.T., Borelli J.L., Boyd R.C., Bradshaw C.P., Burns G.L., Casale G, Causadias J.M., Cha C.B., Chopita B.F., Cohen J.R., Comer J.S., Crowell S.E., Dirks M.A., Drabick D.A.G., DuPaul G.J., Ehrlich K.B., Evans S.C., Evans S.W., Felton J.W., Fite P.J., Gadow K.D., Galán C.A., Garbacz S.A., Gaylor-Harden N, Humphreys K.L., Gerber A.H., Hogue A, Ivanova M.Y., Jarrett M.A., Jensen-Doss A, Kang E, Kendall P.C., Laird R.D., Langberg J.M., Langer D.A., Lee S.S., Lerner M.D., Lippold M.A., Luebke A.M., Makol B.A., McLeod B.D., **McMahon R.J.**, Miller M, Ohannessian C.M., Ollendick T.H., Piña A, Prinstein M.J., Rabinowitz J, Reynolds E.K., Salekin R.T., Schleider J.L., Scott J.C., Tackett J.L., Talbott E, Silverman W.K., Spears A.P., von der Embse N, Wakschlag L.S., Wang M, Watts A.L., Weisz J.R., White B.A., White S.W., Youngstrom E.A. *J Clin Child Adolesc Psychol*. [Read more](#)

Awards, Grants & Honours



Kennedy Borle receives 2022 Health System Impact Fellowship from CIHR

Congratulations to Kennedy Borle, who under the supervision of Dr. Jehannine Austin, has been awarded this fellowship from the Canadian Institute of Health Research for her project entitled "Exploring the pathways for legal regulation and recognition of genetic counsellors in British Columbia". [Read more](#)

Research Opportunities

2023 BCMHSUS Research Summer Studentships | Deadline March 10, 2023

BCMHSUS Research is accepting applications for the 2023 Research Summer Studentships – deadline is March 10, 2023. Follow this link for [Application and Guidelines](#).

BCMHSUS Research Summer Studentships give undergraduate and medical students, supervised by BCMHSUS Investigators, the opportunity to complete a research project from May to August, with a final project report due by September 1, 2023.

Last year four of ten applications were funded! If you would like additional information or would like to apply, please contact BCMHSUS_Research@phsa.ca



New for BCMHSUS Investigators!

Patient and Family Partner Research Design Consultation Fund

BCMHSUS Research is supporting our investigators to work in closer partnership with people with lived/living experience. We are excited to be offering to cover honoraria costs up to \$500 for patient and family partners to support the planning stages of a research project lead by one of our investigators.

BCMHSUS compensates patient and family partners an hourly honorarium per hour depending on the level of involvement and type of work. To learn more, visit the [Patient and Family Engagement](#) webpage.

For more information and an application, please contact [BCMHSUS Research](#).

Upcoming Events

Women in Science

Women in Science – Thursday, February 9 at 7:00 p.m.

Join us at [Women in Science](#) on Thursday, February 9, 2023 from 7:00 – 8:30 p.m. to celebrate the International Day of Women and Girls in Science. The event, in partnership with BC Children's Research Institute and Women's Health Research Institute, will showcase the important contributions of six inspiring female leaders making ground-breaking discoveries and innovations in research. [Dr. Amanda Butler](#), postdoctoral research fellow with BC Mental Health and Substance Use Services, will be part of the panel.

The [Women in Science](#) evening strives to empower the community and promote an equitable and inclusive learning environment. It interprets women in the broadest sense and respect all ways in which people choose to self-identify including female-identified, agender, non-binary and women across the LGBTQIA2S+ spectrum. People of all genders are welcome to participate.

Registration is now closed. To be added to the waitlist, contact researchevents@phsa.ca

Women's Health Research Symposium

Register now to secure your spot at the Eighth Annual Women's Health Research Symposium on Wednesday, March 8th, 2023. This event will be held in person (at the Robert H. Lee Alumni Centre on the UBC campus) and virtually (via live-stream).

Co-hosted by the [Women's Health Research Institute](#) and the [BC Mental Health and Substance Use Services Research Institute](#), the theme of this year's event focuses on advancing women's mental health through research and will be an opportunity to energize and inspire the BC women's research community and to spark ideas for future research collaborations.

The Symposium encompasses the main program followed by an afternoon for trainees:

- 8:00 am – 1:00 pm PDT: WHRI Symposium program and speakers
- 1:00 pm – 1:45 pm PDT: Trainee-Focused Presentation
- 1:45 pm – 4:00 pm PDT: Trainee and Mentorship Workshop.

NOTE: BCMHSUS Research Institute staff can register for free by clicking the link below and selecting "BCMHSUS Research Institute staff member"

Register [here](#). Information about poster submission can be found [here](#).



3rd Annual BC Concurrent Disorders Conference (Hosted by BCMHSUS)

March 9 (Thu) | Virtual Conference

Audience: family physicians, specialists, mental health professionals, psychiatrists, mental health researchers, residents and students.

Overview: The third annual B.C. Concurrent Disorders Conference, hosted by PHSA's BC Mental Health and Substance Use Services (BCMHSUS), will advance knowledge and build capacity among provincial mental health and substance use professionals who treat people with complex concurrent disorders. Join this free conference as BCMHSUS brings together leading mental health and substance use care experts to share innovative ideas for service delivery.

Keynote Speakers:

- **Christian Schutz:** Concurrent Disorders — Emerging Practices
- **David Nutt:** Illegal Drugs and the Future of Mental Health
- **Nel Wieman:** Intergenerational Trauma and Healing: Honouring and Celebrating the Strength and Resilience of First Nations

Register for free [here](#).

Provincial Mental Health and Substance Use Learning Rounds

Provincial MHSU Learning Rounds are open to all who support people with mental health and substance use needs.

Date	Title	Presenters
9-Feb	Adjusting our response to drug poisonings	Cherlyn Cortes
23-Feb	BC Corrections, Programs and Services in Provincial Correctional Centres	Dr. Maureen Olley
23-Mar	Living in the DTES - Understanding and addressing acquired brain injury	Dr. Will Panenka

Join each session with this [Zoom Meeting link](#)

Meeting ID: 986 5259 9434

Passcode: 234567

The Knowledge Exchange

Featured Patient Partner

For this edition of our research newsletter, our KTE team sat down for an interview with prolific patient partner Lisa Ridgway.



**Lisa
Ridgway**

Who are you?

I am a former lawyer, now working as a patient partner in health research. My interest in research, particularly research into mental health issues, began after I was diagnosed with treatment-resistant depression. I spent a year as an out-patient at the Mental Wellness program at the Royal Jubilee, and tried repetitive transcranial magnetic stimulation (rTMS) which is a ground-breaking therapy. I tried many other types of therapy in order to become well, including the trial and error of medication. I invested in exercise, mindfulness training, and cognitive behavioral therapy. My psychiatrist finally recommended me to a professor at the University of Victoria to be part of a CIHR grant. After that, research became part of my toolbox to being healthy and well.

What are you working on?

I have several research projects on the go. One of the most exciting project with the Non-Invasive Neurostimulation Therapies (NINET) Lab at UBC which studies clinical applications of rTMS. My roles involves joining in weekly meetings, writing lay abstracts, co-authoring papers, and being the patient voice in this clinical work on rTMS. A second project, and even more exciting, is the study of pharmacogenomics testing, the case for its routine used in BC, and if its good value for money for our public health system. This two-year study is funded by Michael Smith Research BC, Genome BC and Genome Canada. We have just finished a major focus group with promising findings of major benefits from pharmacogenomics. We also found specific needs, such as education and clinical protocols, to enable wide use pharmacogenomics. Now the team is writing papers to present our positive findings at conferences. I just finished writing my first abstract - 350 words is not easy, even as a former lawyer!

Who are you working with?

The pharmacogenomics project is co-led by Dr. Jehannine Austin, the Executive Director at the BCMHSUS Research Institute. The project team is comprised of over 20 researchers from three different countries, and includes three patient partners. The other two patient partners are very informed and together we have changed the way the health researchers viewed major depression.

Together the team co-learned many things. Some of our lessons learned included:

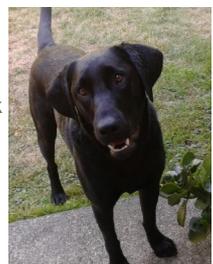
1. Patient partners had equal time on each meeting agenda.
2. Meetings had to be stigma-free and the team formed a safe space where the patient partners could talk about their lived experience.
3. We developed a new language, so instead of saying treatment resistant depression we used refractory depression, meaning depression has come back.
4. Build trust within the research team – some of the researchers had never worked with patient partners before so it was a learning curve for everyone.
5. Building trust within the research team is very important because, sharing about one's lived experience can be emotional labour. Sometimes it is not easy to talk about mental illness because of stigma.

Why this project?

Patient-oriented research is so important because, otherwise, who really represents the lived experience of a patient. Lived experience is a knowledge that complements the more obscure parts of mental health research. Research teams involving patient partners benefit from the insight and understanding that comes with living with, for instance, major depressive disorder. Patient partners know what its like to struggle with multiple medications, the trial and error of prescription medicine, and various forms of therapies. Our voice can strengthen the research team and process when we are equal partners. When have helped researchers understand the human face of depression rather than just ticks in a box. In fact, researchers have told us it's a beautiful experience working with us as patient partners.

Fun fact:

Depression is sometimes called the black dog. I have a big black dog, her name is Dazzle and I'd say living with Dazzle has become part of my own therapy. She is always happy to go for a walk, or help eat a cookie, or bark at the squirrels. You can't stay in bed when a 60 pound Labrador wants her breakfast!



Dazzle

Patient & Family Engagement

“Demystifying Concurrent Disorders” Webinar Series – Created By Patients and Families, For Patients and Families

By Katie Mai, Leader, Patient Experience and Community Engagement, BCMHSUS



The [“Demystifying Concurrent Disorders” Webinar series](#) is a quarterly education initiative to help patients and families understand topics related to navigating the healthcare system, support pathways and tools, medication options, related legislation, and more.

The Health Literacy Steering Committee, a group of Patient and Family Partners at BC Mental Health and Substance Use Services, launched the webinar series to improve access to and understanding of concurrent disorders knowledge. As former and current users of healthcare services themselves, the group found it difficult to access plain-language, public-facing information at the intersection of mental health, substance use, and criminal justice. Through the series, the hope is to demystify the complex world of concurrent disorders for patients and families in B.C. and beyond. Today, anywhere between 300-500 people attend and many more watch the recordings afterwards.

Join and share the next webinar on *Demystifying Psychosis*. In the first of our two-part webinar session (February 3), we aim to unpack everything related to psychosis to provide a solid foundation for supporting oneself or a loved one. In the second part (February 10), we will provide tips to help you support yourself or your loved one(s) who is experiencing psychosis.

Connect with the Patient Experience and Community Engagement team at engage_bcmhsus@phsa.ca if you are interested in:

- **Sharing your concurrent disorders research** with patients, families, and the public as part of the webinar series
- **Learning more** about the webinar series
- **Engaging the Health Literacy Steering Committee** for other health literacy initiatives, including feedback and review of public-facing education materials



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