

### **Brittany DeGraves - University of Alberta**

**Project:** Reducing Pandemic Stress Effects Among the Most Vulnerable: People Living in Long-Term Care



#### **Biography**

Brittany graduated with a Bachelor of Science in Nursing Honors in 2020 and is currently working as a Registered Nurse in Cardiology and a Research Assistant for Translating Research in Elder Care at the University of Alberta where she has worked for the last three years. Currently, Brittany is a Master's of Nursing Student and is continuing to build upon her passion for research focused on improving the quality of life of residents and the quality of work-life of care aides in long-term care. She has also worked to develop her experience in research through completing an internship in the Netherlands

focused on innovative dementia care facilities and continuing to work as a Research Associate with Maastricht University in the Netherlands. Brittany hopes to continue to develop her research and clinical abilities to become a Ph.D. prepared clinician-scientist with a focus on Geriatrics and Long-Term Care.

For her Master's thesis, Brittany will be working on projects focused on improving the mental health of residents in long-term care by reducing pandemic-related stress through innovative interventions including pet and robot dog therapies. During this time, Brittany will also continue to work on previous work she has developed focused on innovative dementia care homes while gaining experience as a Registered Nurse. Brittany looks forward to continuing to enhancing her research abilities and knowledge through the Alberta SPOR Graduate Studentship.







### **Project Summary**

COVID-19 has devastated long-term care homes, resulting in high mental health stressors for long-term care residents with possible impacts of trauma, confusion, anxiety, and post-traumatic stress disorders. Over 80% of long-term care residents have dementia and experience a range of stressful symptoms including impaired comprehension, mood alterations, loss of executive functions, and behavioural and psychological symptoms such as aggression. These behaviours relate to a possible history of trauma, post-traumatic stress disorders, and mental illnesses.

Individuals with dementia and previous trauma require an innovative person-centred care approach using alternative interventions to reduce stress. Pet therapy as an innovative intervention, has positive effects on mental and physical health by helping to regulate behaviours and stress, increase mental wellbeing, and increase socialization in dementia. Similar effects have been identified in studies using robot dog therapies. By studying both a pet therapy and robot dog therapy group we can identify the influence on innovative interventions in a larger group of individuals including those who may have barriers to interacting with real animals such as cultural considerations and allergies.

No studies have currently compared robot dog therapy with traditional pet therapy at large dosing rates to evaluate outcomes of stress relief and psychological behaviours related to COVID-19 in long-term care. Brittany's research will evaluate the feasibility of delivering such an intervention during COVID-19 in long-term care homes and provide a base by working with residents to build a larger control trial to provide these innovative interventions to a larger group of long-term care residents.







# **Chantal Rytz - University of Calgary**

**Project:** Reproductive Lifespan, Menstrual Cycle Regularity and Risk of Adverse Cardiovascular Outcomes



### Biography

Chantal is a born and raised Calgarian, and, after receiving a Bachelor's of Science in Medical Biochemistry from UBC in 2016, returned to Calgary to complete a Master's of Science in Cardiovascular and Respiratory Sciences in 2019. Chantal's master's thesis examined exercise-induced changes in oxidative stress in older adults, and how cardiovascular risk factors and biological sex impact such levels. Her work was nominated for a University of Calgary Graduate Medal and a Western Association of Graduate Schools (WAGS) Distinguished Master's Thesis Award.

These sex-related differences inspired Chantal to continue her studies as a PhD student at the University of Calgary with Dr. Sofia Ahmed, assessing sex and gender considerations in cardiovascular health. Chantal is passionate about translating her research into understandable, everyday science for the benefit of the public, and uses her evidence-based knowledge as a platform to advocate for improved cardiovascular health of individuals in her community and beyond. In her spare time, Chantal enjoys doing anything outdoors, and is an avid downhill skier, mountain biker, hiker and fly fisher.

#### **Project Summary**

Menstrual cycle irregularities are increasingly recognized as a potential risk factor for adverse cardiovascular outcomes, and the role of sex hormone variations (i.e., estrogen) in cardiovascular risk has been identified as an important area of research. This is not only an







important factor to consider when assessing cardiovascular health in cisgender (i.e., gender identity aligns with sex assigned at birth) women, but also in menstruating individuals who do not identify as women, such as transgender (i.e., gender identity does not align with sex assigned at birth) men and non-binary/gender non-conforming individuals.

Currently, the majority of menstruating Albertans are unaware of cardiovascular disease symptoms, risk factors and their own personal risk status. Together, with the lack of knowledge regarding cardiovascular health and risk management, as well as the increasing acknowledgement from the healthcare community of this issue as a priority in healthcare, there is a significant opportunity for both education and engagement of patients, their families, and multidisciplinary healthcare providers in order to improve cardiovascular outcomes and quality of life in these individuals.

The goal of my proposed PhD research program is to evaluate the associations between menstruation and reproductive lifespan, including onset of menarche and menopause, on cardiovascular risk throughout the life course of both cisgender women and transgender men. This program of research has the potential to make an important impact on menstruating individual's cardiovascular health in Alberta and beyond.







# **Dana Hunter - University of Calgary**

**Project:** Facilitators and barriers to medial collateral ligament bracing treatment: Moving towards improved patient outcomes



### **Biography**

Dana Hunter is a first year Masters student in the Faculty of Kinesiology at the University of Calgary. Dana first became involved in health care research during her undergraduate degree, earning a Bachelor of Arts in Psychology from the University of Calgary. Within the context of patient-oriented research, her Masters project is focused on understanding the facilitators and barriers to MCL knee bracing treatment compliance, with the aim of improving patient outcomes.

Dana is also currently involved in clinical research at the Sport Medicine Centre in orthopedic and sport medicine science.

She is excited to build skills in patient-oriented research to supplement her future vocational goal of working as an occupational therapist.

On a personal note, Dana has been a competitive gymnast for 24 years, which has allowed her to travel the world and build a passion for sport and human kinetics!

#### **Project Summary**

The medial collateral ligament (MCL) is the most injured knee ligament. MCL injuries are treated with crutches and constant range of motion restrictive knee bracing. Consistent use of the brace is associated with a reduction of pain, improved healing and recovery. Complying to this 24 hour-a-day protocol is challenging for patients. This Patient-Oriented Research project is aimed to fully understand patient experiences and outcomes with this common condition.







Actively engage patients as partners to identify and understand facilitators and barriers to compliance with the bracing protocol. This project aims to triangulate this qualitative information with sequentially collected quantitative data from patient-reported outcomes and clinical findings.

A sample of 20-30 participants enrolled in an on-going randomized clinical trial (RCT) investigating bracing protocols will be consented. They will be invited to attend a semi-structured interview to provide the qualitative data. Interviews will focus on participant experience with the bracing protocols, clinician interactions, personal goals, and barriers and facilitators to treatment compliance. This data will be triangulated with the quantitative patient-reported outcomes and clinical data from the RCT. Two patient-partners will help define adherence, refine study objectives, interpret findings, and participate in the development of resources to help clinicians improve future care.

This project will yield an understanding of MCL bracing to provide strategies and recommendations for clinicians to collaborate with patients in addressing barriers and facilitators with bracing treatment. A greater understanding regarding the challenges associated with compliance will allow the health care system to encourage adherence to treatment instead.







# **Daniel O'Brien – University of Alberta**

**Project:** Patient Conflict and Regret Regarding Endoscopic Sinus Surgery



### **Biography**

Dr. Daniel O'Brien received training in chemistry (BSc), clinical research design and implementation (MAS), and medicine (MD). He completed surgical training in Otolaryngology's Head and Neck Surgery in 2020 and thereafter moved to the University of Alberta where he is currently a clinical fellow in the Division of Otolaryngology. The focus of his clinical fellowship is on Rhinology and Endoscopic Skull Base Surgery under the supervision of Dr. Erin Wright.

In addition to his clinical work, Dr. O'Brien is also a first-

year doctoral student in the School of Public Health. Under the direction of Dr. Dean Eurich, the focus of Dr. O'Brien's PhD will be decision quality and regret among patients undergoing functional endoscopic sinus surgery. Dr. O'Brien's other research interests include the pathophysiology of chronic rhinosinusitis, occupational and environmental exposures for patients with chronic rhinosinusitis, and surgical outcomes following functional endoscopic sinus and skull base surgery.

#### **Project Summary**

Regret related to surgical decision making is a newer field of research. Most studies regarding this topic have been done in cancer patients. In these studies, decisional regret has been associated with younger age, older age, race, education level, shared decision making, and time since the operation. There are no studies looking at decisional regret in patients undergoing nasal and sinus surgery, which is performed to improve quality of life, rather than save life. As such, a study investigating the key concerns patients have when deciding to pursue surgical care would enable physicians and surgeons to better understand and better care for these patients.







Our group plans to collaborate with patients who are candidates for endoscopic sinus surgery, specifically those who have either a history of recurrent acute sinusitis or a history of chronic sinusitis. These patients will be asked to participate in both surveys and/or focus groups to identify what factors are important to them going into surgery, what factors are important following surgery, and to what degree, if any, they regret their decision to pursue surgery.

The results of these surveys and focus groups will allow us to better understand why some individuals pursue surgery, while others defer. This information will also further inform what, if any, clinical and personal factors clinicians can address before and following surgery to prevent patients from regretting their decisions to seek surgical care.







### **Danika Goveas - University of Alberta**

**Project:** Exploring the integration of Indigenous ways of knowing in PHC policy development to promote healing for Indigenous communities in Alberta



#### Biography

Danika Goveas completed her undergraduate degree in Health Sciences at the University of Ottawa, where she had the opportunity to work as a research assistant on several projects focused on Indigenous health, infectious disease, and food security.

Currently, Danika is an MSc Candidate in Epidemiology in the School of Public Health at the University of Alberta. Her current research aims to explore how Indigenous ways of knowing can be integrated into primary health care policy

development in Alberta to inform strategies that promote healing and health equity. She will be using a Two-eyed Seeing approach that integrates both western and Indigenous methods, drawing on the shared strengths of these world views to explore primary health care experiences among Indigenous communities.

Danika aspires to pursue a career as a primary care physician, working directly with patients to help support their health journeys and explore approaches to manage ongoing health challenges. Ultimately, she hopes to combine her interests in patient-oriented research and primary health care to support evidence-based practice, while working to improve patient health care experiences and promote health equity in the healthcare system.

In her spare time, Danika enjoys going on hikes, writing poetry, and cooking. She is thrilled to be a 2020 AbSPORU Studentship awardee and is looking forward to enhancing her skills in patient-oriented research through this Studentship.







### **Project Summary**

The 1978 Alma Ata Declaration envisions primary health care (PHC) as equitable access to essential health care services for communities. Although Canada has made efforts to shift control over PHC services to Indigenous communities, this population remains one of the most medically underserved in the country. Previous studies have demonstrated that PHC strategies rooted in policy and supported with appropriate infrastructure are associated with improved health outcomes, increased equity and lower mortality rates. PHC strategies have the capacity to promote health equity by engaging Indigenous people in the process and addressing historical trauma stemming from colonization to eliminate health disparities. However, existing PHC strategies have been developed for PHC systems, rather than for Indigenous peoples as recipients of healthcare. For instance, research suggests that contributors to PHC barriers for First Nations communities in Alberta include inadequate health service funding and a lack of cross-sector collaboration with Indigenous communities to promote sustainable solutions. Indigenous PHC strategies should be informed by Indigenous communities, to ensure that healthcare practices align with their experiences, knowledge and values.

This research project aims to engage Indigenous peoples in exploring approaches to integrating Indigenous ways of knowing to inform PHC policy development and strategies to promote healing. The main objectives of this research project are to: 1) Foster relationships and research collaboration with Indigenous communities in Alberta to promote PHC policy and system transformation; 2) Apply community-based, participatory research principles to engage with communities in co-developing a policy brief and thematic analysis to demonstrate PHC priorities for Indigenous communities in Alberta. Overall, these project outcomes will have the potential to direct policy development for Indigenous people in Alberta. More broadly, we hope this project will inform future PHC policy evaluation and relevant frameworks, which will serve to decolonize the healthcare institution, transform PHC policies and promote health equity.







# **Jacqueline Wilson - University of Calgary**

**Project:** Evaluating strategies for patient and family engagement in the scale and spread of Alberta Family Integrated Care (FICare™) in neonatal intensive care units



### **Biography**

Jacqueline Wilson is a first year PhD student in the Faculty of Nursing at the University of Calgary, working under the supervision of Dr. Karen Benzies. Jacqueline holds a Bachelor of Nursing from the University of Calgary and currently works as a registered nurse in an urban acute care hospital. Prior to commencing graduate studies, Jacqueline explored her research interests through several undergraduate research awards for qualitative and quantitative projects. Most notable in her experience is Jacqueline's ongoing involvement in Alberta Family Integrated Care (FICare™) scale and spread project which is providing all Alberta neonatal intensive care units with

tools and strategies to improve patient- and family-centered care (PFCC).

Jacqueline's unique clinical training and experiences have fueled her passion to explore how patients and families can have meaningful input in health services decisions and evaluation. Jacqueline has experienced nursing in several contexts including urban acute care, rural acute care in Whitehorse, and in Uganda where she completed additional coursework in global perinatal health and a research internship as a Queen Elizabeth II Diamond Jubilee Scholar after concluding her Bachelor of Nursing.

Across settings, Jacqueline began considering how PFCC is approached and whether optimal relationships are being facilitated with patients and families; these questions form the foundation of Jacqueline's doctoral research. With aspirations of becoming a nurse clinician-scientist, Jacqueline hopes to establish a research program that meaningfully engages patients







and families as partners and she looks forward to building her skills in patient-oriented research through the AbSPORU Graduate Studentship Program.

#### **Project Summary**

Patient- and family-centered care (PFCC) recognizes the importance of including patients and families in the healthcare team. PFCC involves openly sharing information with patients and families, forming equitable relationships for decision-making, and supporting patients and families to strengthen their knowledge and skills.

Although several components of PFCC have been identified, there is little evidence of a unified model of PFCC with operationalized definitions or strategies for evaluation to ensure that PFCC is in alignment with families' values and needs. Jacqueline's proposed mixed methods study will evaluate the feasibility and effectiveness of using a novel electronic app as a tool to measure PFCC outcomes for the scale and spread of a theoretically driven model of care, Alberta FICare™, designed to integrate parents into the care of their infants in the neonatal intensive care unit (NICU). Facilitators and barriers to implementing the app as a sustainable PFCC evaluation tool in Alberta NICUs will be assessed with cyclical data collection using the app in five Alberta NICUs. Concurrently, interviews with parents and nurses will occur at each site to facilitate meaningful consultation with families to gain their perceptions on the app and on PFCC practices to ensure they directly reflect families' needs.

The proposed research is an important step in improving understanding of parents' views of care in the complex NICU environment, identifying meaningful indicators of effective PFCC in the NICU, and determining the effectiveness of family engagement strategies used to build the skills and confidence families need to bring their babies home.







# **Jasmine Maghera - University of Alberta**

**Project:** Linking Cell Function and Gene Expression to Define Maturation of Stem-Cell Derived β-Cells to End Type 1 Diabetes



### **Biography**

Jasmine completed her Bachelors of science in pharmacology in 2019 at the University of Alberta and was involved in research since 2017 first working in a glycobiology lab in the department of Chemistry. She later moved onto research genetically linked Kv7.2/Kv7.3 mutants and their effects on Epilepsy with Dr. Harley Kurata where she first got to apply basic science research to real patients with real diseases.

She is now a Graduate student researching stemcell derived b-cell therapy for Type 1 diabetes, in

Dr. Patrick MacDonald's lab in the department of pharmacology. Jasmine's interest in this field stems from her own personal challenges with type 1 diabetes for 12 years. She recently built her own artificial pancreas using the open sourced loop project built by others with type 1 diabetes. Joining the #wearenotwaiting movement made her realized the need for more transparent research and expectation management.

She believes that It is important to interact and involve patients starting at the earliest time of discovery because that research will ultimately trickle down and impact them one day. Setting realistic expectations and ensuring that community members know where the research is headed has been one of her goals and will always be at the forefront of her research.

#### **Project Summary**

Type 1 diabetes is caused by the lack of insulin production from pancreatic  $\beta$ -cells. For patients with labile diabetes, blood sugar fluctuations can be deadly. Currently, patients who require







intervention can receive transplants of human cadaveric islets, but they are severely limited in quantity. Recently, there has been a push towards using stem cells to evade the limited supply, but differentiation protocols produce stem-cell-derived  $\beta$ -cells (SC $\beta$ -cells) that appear to be immature.

To generate functionally useful cells for transplantation, I will conduct in-depth characterization of the biophysical properties and gene expression of  $SC\beta$ -cells to propel cell-based treatments. Jasmine is currently using the Patch-seq platform developed by MacDonald lab to link the electrophysiological properties (Patch) with single cell RNA sequencing (Seq) to find gene markers and transcriptional changes that lead to cells that are more mature. She will also be applying Machine Learning to predict the functionality of cells based on the transcriptomic profiles. Doing so will be critical to scale the stem-cell differentiation protocol to ensure this technology can be accessible to those who need it.







# **Jaylynn Arcand - University of Calgary**

**Project:** Understanding the patients perspective: How and what physicians are communicating to patients with Functional Somatic Disorders



### **Biography**

Jaylynn was born and raised in Saskatoon, SK. She attended the University of Saskatchewan, where she completed an undergraduate degree in Psychology, a Medical Degree and a Certificate in Global Health. She moved to Calgary in 2017 to complete her Postgraduate residency training in Psychiatry, where she is now in her fourth year of training.

Jaylynn is completing her Master's Degree in Community
Health Sciences, Health Services Research, through the
Clinician Investigator Program at the University of Calgary.
Jaylynn's research interests include Functional Somatic
Disorders and physician communication skills. In her free time,

Jaylynn most enjoys spending time in the mountains, particularly skiing.

### **Project Summary**

"Functional Somatic Disorders" is a term used to describe similarities between many different conditions where patients have symptoms where blood tests or scans do not pick up the illness. Examples of these conditions are Functional Neurological Disorder, Chronic Fatigue Syndrome, Fibromyalgia, 'Medically Unexplained Symptoms', among others. There is a high rate of communication breaking down between patients and doctors when they discuss these conditions.

This results in patients not receiving the treatments they need. In order to reduce this, we must understand how patients with Functional Somatic Disorder are impacted by the way physicians communicate with them. My thesis project has two components which aim to explore the







patient's perspective of how physicians are communicating to patients with Functional Somatic Disorders. First, a review will be created, summarizing all the research that has already been done that looks at the patient's perspective of how physicians are communicating to patients with FSDs. This will help create a map of what is known and what still needs to be better understood. Then one-on-one interviews with patients who live with these conditions will take place, exploring the areas which were not covered in detail by previous research projects. Together, these findings will help healthcare professionals to understand how the way they communicate may be impacting the experience of their patients with Functional Somatic Disorders. This will open new opportunities in research and clinical work to identify ways to optimize physician communication by targeting the parts of clinical communication which most negatively impact patients.







# **Kathryn Lambert - University of Alberta**

**Project:** Developing an evidence based motor imagery training program for persons with Parkinson's Disease through collaboration with patients and therapists



### **Biography**

Kathryn is a born and bred Edmontonian who obtained a BA in Psychology and MSc in Occupational Therapy, both from the University of Alberta. She first studied motor imagery as an undergraduate student when she investigated the neural mechanisms of imagery performance through electroencephalographic recordings.

A long standing interest in Parkinson's Disease led her to consider how motor imagery may be used in rehabilitation of movement disorders. She later piloted a small scale motor imagery training program for persons with Parkinson's Disease during her master's degree. Currently, Kathryn is a first year PhD student in the Faculty of

Rehabilitation Medicine at the University of Alberta under the supervision of Drs. Ada Leung and Anthony Singhal. She is also a registered occupational therapist and continues to practice clinically at an acute care hospital in Edmonton. Her research aim is to explore patient and clinician perspectives on motor imagery training and incorporate these perspective into a larger scale, accessible motor imagery training program for persons with Parkinson's Disease.

#### **Project Summary**

Persons with Parkinson's Disease experience a worsening of motor symptoms and decline in function as their disease progresses. This deterioration has a significant negative impact on







quality of life. As Parkinson's Disease has no known cure, it is essential to explore treatments that may slow the functional declines accompanying its advancement.

Motor imagery refers to the imagining of one's body moving in the absence of actually performing said movement. It is a low cost, low risk tool that persons are able to complete in their own homes without a therapist present. Although promising findings exist for patients recovering from stroke, comparatively few studies have investigated motor imagery in Parkinson's Disease and none report incorporating patient or therapist views into intervention development.

The proposed project will develop a motor imagery training program that builds upon a motor imagery training program previously developed by Ms. Lambert for her master's thesis. Both persons with Parkinson's Disease and occupational and physical therapists trained in neurodegenerative disorders will be recruited to participate in semi structured interviews. These interviews will explore their perspectives on rehabilitation, motor imagery, and at home therapy programs.

Thematic analysis will be used to examine patient and therapist identified priorities, strategies, and potential barriers regarding imagery training. The information collected from these interviews will then inform the development of a user friendly, patient oriented motor imagery training program. Once established, this program will be run in a large, randomized control trial through a local rehabilitation hospital to examine intervention effectiveness.







# **Megan Pohl - University of Alberta**

**Project:** Recognizing and managing youth mental health: addressing a consumeridentified health priority through knowledge synthesis and translation



#### Biography

Megan is a first year Master's student in the Department of Paediatrics at the University of Alberta where she obtained her Bachelor of Science in Psychology last Spring.

Her passion for children and youth stems from her experience working with children in her community as a swimming instructor. Supporting the success of families in this context has given her a passion for improving the health outcomes of sick children. In her undergraduate degree, Megan explored how this passion could be channeled into research through her experiences researching autism and

neurodevelopmental disorders. Over the last three years she has come to see research as a mechanism to indirectly improve the health outcomes of the children she works with in swimming lessons.

Megan aims to give back to her community through her research. She is specifically interested in youth anxiety and pursuing research topics that can provide benefit to the children in her community and within Alberta. Ultimately, her motivation for pursuing advanced health research training comes from a desire to improve the health outcomes in sick children through a career in pediatric research.

In her spare time, Megan loves long distance running, volunteering at McTaggart Retirement home by playing piano and singing for the residents, and painting. She looks forward to developing her patient-engagement skills through the Alberta SPOR Graduate Studentship.







### **Project Summary**

A priority setting project has been conducted by Megan's research group to identify a priority health question of Albertan youths: how can youth identify signs and symptoms of anxiety, and when to seek help? Megan has been involved in an environmental scan to map the existing evidence in this area. Subsequently Megan will be involved in a consultation with youth to generate their thoughts and feedback on the resources identified and determine next directions of this project. Informed by the environmental scan, Megan's master's thesis will include a qualitative study to understand how youth seek mental health information online during COVID-19 (e.g. Where do youth look for mental health information? What do youth appraise as helpful/trustworthy?). This will build the foundation for a knowledge translation (KT) strategy for youth. While patient involvement is widely advocated, in adolescent health research this usually refers to "parents" and little research has been done on the acceptability and feasibility of including youth.

Megan plans to engage 2-3 youth as partners and collaborators on her project to develop the structure of the interviews, the questions, recruitment strategies, data analysis, and dissemination of findings. This research project presents a novel contribution to the field of patient-oriented research and addresses a critically important and common health issue: of youth that search for mental health information online, only 52% report that they find the information that they want. By including youth perspectives throughout, it is expected that KT efforts will prove more meaningful with potential for greater impact on health outcomes.







# Michaela Patton – University of Calgary

**Project:** Internet-delivered cognitive behavioral treatment for survivors of childhood cancer with chronic pain: A randomized pilot feasibility study



### **Biography**

Michaela Patton is a Clinical Psychology PhD student studying under the mentorship of Dr. Fiona Schulte. Michaela is originally from Washington and graduated from Oklahoma State University with a Bachelor of Science in Psychology. She earned her Master of Science in Clinical Psychology from the University of Calgary, where her master's thesis project focused on comprehensive assessment of pain in survivors of childhood cancer.

Michaela's doctoral dissertation project will test an internet-delivered cognitive behavioral therapy for survivors of childhood cancer struggling with chronic pain.

Michaela is also passionate about including patients as partners in her research.

### **Project Summary**

Background: Over 30,000 survivors of childhood cancer live in Canada today, but two-thirds will experience negative long-term side-effects of their toxic treatments, like chronic pain. This is concerning because young people with chronic pain report more worries, depressed mood, and difficulty sleeping. Chronic pain is one of the most common reasons for seeking healthcare costing the Canadian healthcare system about \$60 billion per year. An internet-delivered program called Web-Management of Adolescent Pain (WebMAP) rooted in cognitive-behavioural therapy has been shown to improve pain in young people but has not been tested in survivors of childhood cancer. In this study we aim to see if WebMAP can be used on survivors and whether it will help to improve pain, mood, worries and sleep.

Methods: We will invite 34 survivors of childhood cancer and their parents from the Alberta







Hospital to take part in our study. We are looking for survivors who: (1) are 10-17 years old, (2) have chronic pain, and (3) have computer access. Survivors will be asked questions about their pain, worries, mood, and sleep. Then, survivors and parents will complete WebMAP over the course of eight weeks. After they finish WebMAP, they will be asked the same questions again. We will record the number of survivors who are interested in WebMAP, who complete WebMAP, and whether they like WebMAP for the treatment of their pain. Finally, we will interview survivors after they finish WebMAP to get more feedback on changes we might make to the intervention.

Relevance: Pain can be extremely distressing and it is important to help survivors of childhood cancer improve their pain. This treatment might also be successful in improving other distressing symptoms like worries, depressed mood, and difficulty sleeping. Demonstrating that survivors of childhood cancer like WebMAP and find it helpful in managing their pain will be an important step toward improving long-term follow-up care for this population.







# Sandy Rao – University of Calgary

**Project:** Perceptions of Access Models that Enhance Mental Health and Addictions System Utilization in Young Adults with Mood Disorders.



### **Biography**

Sandy Rao formerly held the role of Director of Mental Health & Addictions at Ontario Health overseeing the strategy, planning, funding and evaluation of mental health and addictions programs and services for approximately 5 million Ontarians by the end of her tenure. Before leaving Ontario to pursue her PhD in the Faculty of Social Work as an Eyes High scholar, she was appointed to setting up Ontario's first Centre of Excellence for Mental Health & Addictions and had the distinct privilege of leading the COVID-19 Mental Health and Addictions strategy for the Central Region when the pandemic first began. She also held the role as guest Mental Health Expert for CTV, was a Preceptor for the University of Toronto's IMAGINE clinic, and a member of the Health Care Providers Against Poverty.

Sandy continues to practice as a Registered Social Worker and Registered Psychotherapist licensed in both Ontario and Alberta. She has been a clinician for over a decade in the hospital, community and primary care sectors. Sandy received her Bachelor of Science degree from McGill University. Upon graduating she worked in research at McMaster University and the Population Research Institute.

Sandy continued her academic career and pursued a Master's in Social Work at the University of Toronto where she specialized in Mental Health and Health. A lifelong learner, Sandy has since studied at the Rotman School of Business, Harvard University and has been certified in Community Engagement (IAP2), Indigenous Cultural Safety, Lean Six Sigma Black Belt and User Experience Design.







### **Project Summary**

Mood and anxiety disorders are the most prevalent mental illnesses in Canada, affecting over 4 million Canadians.1,2,5 The highest rate of mood disorders, and the highest risk for suicide, is among young adults 20 to 29 years of age.1,2,5 Not only an individual issue, the economic burden of mental illness in Canada is estimated at \$51 billion dollars per year.1,10 In addition to the stigmatic and structural barriers to access there are more nuanced issues at the clinical level.1,2,5,7,10 Canadians with mood disorders are disadvantaged in traditional health systems as all voluntary points of access are predicated on personal motivation or agency; and the same symptoms that warrant a diagnosis for a mood disorder interfere with those functions that are necessary to gain access to health care.5,7,9 The result is a fragmented, costly, system not designed for, or by, young adults with mood disorders (YAMD).

The proposed patient-oriented mixed-methods research study will aim to 1) Obtain data on YAMD's perceptions of access models, 2) Evaluate these models against the domains of an ideal mental health and addictions (MHA) system1,2,7,8, 3) Effectively disseminate knowledge about access to key stakeholders and health systems, and 4) Develop recommendations for policy and practice changes to enhance models of access for YAMD. Access challenges are a mainstay issue. Despite much discussion on the topic, perceptions of access models from YAMD has not been investigated.10 The proposed study aims to address MHA system burdens which until now has had a compounding and iatrogenic effect on YAMD.5,7,9.







# Stephanie Brooks - University of Alberta

**Project:** Advancing Theory of Learning Health System Implementation



### Biography

Stephanie has been a knowledge translation specialist in Edmonton since 2014. After completing her MSc (Global Health) at the University of Alberta (2014), she worked as a knowledge translation and stakeholder engagement lead on various research programs including clinical trial, occupational health and safety, and immunization communication teams.

Stephanie started her PhD in the School of Public Health, University of Alberta, in 2020. As an embedded

researcher, she will study how various initiatives in Alberta are building necessary infrastructures to support Alberta's province-wide Learning Health System. Her knowledge translation background paired with the training provided by this award will position her to leverage her patient-oriented research skills and create impact at a system scale. Her PhD project has true potential to create practical and policy-relevant evidence and improve patient outcomes and experiences in care.

#### **Project Summary**

There is a movement in Canadian healthcare to move from traditional health system setups to learning health systems. Learning health systems collect lessons from everyday care to speed up quality improvement and to rapidly implement cutting edge health research into practice. By doing so, learning health systems aim to improve patient experiences and outcomes, increase workplace satisfaction for care workers, and do so at a lower cost. Many researchers, health system staff, and policy-makers are working to make learning health systems the norm but there are still a lot of steps to figure out. One such step is how to create, implement, and maintain the infrastructure required to transition from conventional healthcare systems into learning health systems.







This study will follow different initiatives trying to build learning health system infrastructures by interviewing staff involved, studying initiative planning and implementation documents, and evaluating the initiatives' outcomes. Doing this will help create evidence-based guidance on effective facilitation of the transition into learning health systems. Without this research, teams will be forced to continue implementing learning health system infrastructures in non-evidence-based ways, perpetuating overpriced systems that unnecessarily delay healthcare improvements and negatively impacts patient and provider healthcare experiences.

During the tenure of this studentship I will complete multi-stakeholder engagement required to build meaningful knowledge translation products. I am employing an integrated knowledge translation approach, consulting with patients, clinical investigators, implementation scientists and support practitioners, learning health system researchers, and other relevant stakeholders identify practical tools and deliverables to come from the research findings.



