

Department of Pediatrics Research Report

March 2023



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The Vital Role of Clinical Research Coordinators in Advancing Pediatric Research

Clinical Research Coordinators are integral members of a research team who work diligently behind the scenes to ensure the success of a research study or program. Their responsibilities encompass a wide range of tasks, from providing patient support at the bedside, overseeing administrative duties, to managing large amounts of data through spreadsheets. They are highly valued for their contributions as they keep the study functioning smoothly by providing support to patients and their families, principal and co-investigators, laboratory personnel, and sponsors. The work of a clinical research coordinator is vital to the study's success as they ensure that all aspects of the study are executed seamlessly, much like the lifeblood that keeps the heart of the project beating.

Dawn Johnson is an experienced Clinical Research Nurse who works with the <u>Clinical Trial Support Unit</u> (<u>CTSU</u>) at the University of Saskatchewan (USask). Leveraging her nursing degree and background in acute care, Dawn provides essential support to various clinical research teams. She holds

certifications in Good Clinical Practice and Transportation of Dangerous Goods, which are crucial to ensuring the safety and effectiveness of clinical trials. In her role as a study coordinator for cystic fibrosis (CF) studies at USask, Dawn manages numerous responsibilities such as ethics submission, budget management, regulatory document acquisition, investigator liaison, subject eligibility screening, subject consent, and maintenance of clinical trial source documents. Dawn is currently involved in several pediatric studies, including a study sponsored by SICK KIDs and funded by CF Canada called PIPE - Prednisone In Pulmonary Exacerbation, which investigates the use of oral corticosteroids to improve lung function in CF patients (PI at USask site: Dr. Rupeena Purewal). Another study sponsored by SICK KIDS and funded by CF Canada is called COVID-19 Antibody Responses in Cystic Fibrosis Patients: (CAR-CF) Study, which examines SARS-CoV-2 seroprevalence in the Canadian CF population (PI at USask site: Dr. Nita Chauhan). Dawn is also involved in Trajectory, an

Dawn is also involved in Trajectory, an observational study focused on collecting data on the clinical characteristics, treatment requirements, and quality of life of patients aged 6-11 years old who are



taking Trikafta (Sponsor: Vertex. USask Site PI: Dr. Nita Chauhan), as well as Can-IMPACT, which investigates health trends and data in CF patients across Canada receiving modulator treatment (Sponsor: UBC. USask Site PI: Dr. Nita Chauhan). In addition, Dawn works closely with Dr. Brusky, serving as the clinical research nurse for two studies sponsored by SICK KIDS. The first is an observational study exploring the health outcomes of Cystic Fibrosis screen-positive infants with inconclusive diagnosis (CFSPID) children and identifying clinical markers and diagnostic tests to better predict who is at risk for a CF diagnosis or CF-associated symptoms.

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Clinical Research Coordinators, continued from pg. 1

You can read more about this this work here: Outcomes of Cystic Fibrosis Screening—Positive Infants With Inconclusive Diagnosis at School Age The second is a gene modifier observational study called "Mapping and Isolation of Genes Influencing Severity of Disease in Cystic Fibrosis". Dawn's passion for clinical research is apparent in her efforts to advocate for clinical trials in the province, ensuring that geographical challenges do not limit access to these important studies. Her expertise and dedication make her an invaluable member of the USask research community.



Amanjot Kaur is a pediatric research coordinator working with Dr. Krista Baerg. Amanjot completed her MSc in Community and Population Health Science from USask and she also has a Bachelor of Pharmacy from I.K.G Punjab Technical University, India. She has a certification in Clinical Research Coordinators and Canada Good Clinical Practice. She has always been interested in research intensive studies. She appreciates that the findings from these studies helps improve the quality of life for people around us and also the future generations. In her role a research coordinator she has the opportunity to work closely with Chronic Pain Network (CPN) and is involved in various sub-projects with different purpose and objectives. She coordinates research activities related to the CIHR SPOR funded Chronic Pain Network and will also be involved in a CIHR-funded follow-up project related to knowledge mobilization. As a result of her work with the Chronic Pain Network and Dr. Baerg, she is involved in quite a few local studies related to pediatric pain. One important local study is the Saskatchewan Pediatric Chronic Pain Registry.

The primary goal of this project is to learn more about chronic pain and how it impacts young people and their families over time. Patients attending the Interdisciplinary Pediatric Complex Pain Clinic are invited to participate in this registry. Her role includes patient recruitment and data management. She is also supporting medical students working on local projects related to pediatric pain. These projects included a scoping review which focused supporting youth with chronic pain in school. The purpose of this scoping review was to identify classroom accommodations that support attendance and participation in school for youth with chronic pain. Another summer research project was a retrospective chart review of patients seen in the interdisciplinary pediatric chronic pain care in JPCH, SK. The purpose of this study was to understand the factors that contribute to the necessity of further chronic pain care and the barriers with the transition to adult care.

Her research activities can range from data collection, statistical analysis and manuscript preparation, and preparation for conference presentations. Next up they will be launching a new study for patients on the pediatric pain clinic wait list at our Chronic Pain Network Clinical Research Network site. It is a multicenter waitlist intervention that will give patients access to a web portal called the Power over Pain Portal. Participants will be able to access resources to help with chronic pain management. Overall, Amanjot's dedication to her work and commitment to improving the lives of young people with chronic pain make her an invaluable member of the research team.

Funders for this research includes: Canadian Institutes of Health Research's Strategy for Patient-Oriented Research (SPOR) and College of Medicine

Andrea DesRoches holds a master's degree in Developmental Psychology and has always had an interest in research, which began during her undergraduate studies in psychology. Currently, she works as a research coordinator with the Clinical Trials Support Unit and is working with Dr. Ahmed Mater (USask Subsite PI) in the Pediatric Emergency department. The research study she is involved with is called the Mental Health Care study or MAPP, which is a multi-disciplinary, patient-partnered, pan-Canadian, comparative effectiveness evaluation of an innovative acute pediatric mental health and addiction care bundle. The primary objective of the study is to compare the effectiveness of this care bundle to standard ED mental healthcare in improving the well-being of children and youth who seek care for mental health and substance use concerns within 30 days after an ED visit. Andrea's primary responsibilities include participant recruitment and data collection.



She contacts patients over the phone after they have received care at the ER and returned home. The study is being conducted across multiple sites in Canada and is being led by Dr.'s Stephen Freedman and Amanda Newton. The study is funded by CIHR and sponsored by the University of Calgary.

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Dr. Sara Khalaj holds a Doctor of Medicine from Tehran University of Medical Sciences and a Master of Science in Pharmacology from USask. As a clinical research coordinator in Pediatric Oncology, she is passionate about the potential impact of pediatric research on the health and well-being of children and their families in the short and long term. Dr. Khalaj emphasizes that children are not just small adults, and that their bodies and minds are still developing, meaning that they may respond differently to treatments and interventions than adults.

In her role, Dr. Khalaj enrolls patients into studies, collects DNA samples and clinical information, and monitors adverse drug reactions (ADRs) in enrolled patients. USask is a site for the Canadian Pharmacogenomics Network for Drug Safety (CPNDS), an international network that aims to reduce serious ADRs in children and adults.

The CPNDS has developed a Canada-wide active surveillance network which searches for patients with ADRs. By exploring genetic variation as a key factor in the occurrence of serious ADRs, the CPNDS is finding drug safety solutions that can predict which patients are likely to experience serious ADRs before a drug is given.

Another project, the Genomic and Outcomes Databank for Pharmacogenomic and Implementation Studies (GO PGx), is a Genome Canada project that aims to reduce ADRs by developing genomic-based precision health strategies and technologies for the most common and severe ADRs in pediatric oncology and facilitating the implementation of pharmacogenomics into clinical practice. Dr. Khalaj's work as a clinical research coordinator in Pediatric Oncology, under the supervision of Dr. Kathleen Felton, and in collaboration with other Co-Investigators, such as Dr. Christopher Mpofu, Dr. Roona Sinha, Dr. Saima Alvi, Dr. Gina Martin, and Dr. Bilal Marwa, is incredibly important and has the potential to significantly impact the health and well-being of children and their families in the short and long term. To learn more about the CPNDS and GO PGx, visit their website at https://cpnds.ubc.ca/. CPNDS is funded by CIHR, Canada foundation for innovation, and smaller amounts come from the following: Genome Canada, Genome British Columbia, BC children Hospital's research, The University of British Columbia Faculty of Medicine, and the Provincial Health Services Authority. GO PGx is funded by CIHR and Genome Canada.

Joan Dietz is a pediatric research nurse who has dedicated her career to improving care for children. She brings a wealth of experience and expertise to her work, having spent many years as a pediatric nurse at RUH before joining Dr. Alan Rosenberg's research program: Pediatric Rheumatic Disease Research and Innovation Laboratory. As a research nurse coordinator, Joan has participated in multiple studies in Pediatric Rheumatology, Emergency Medicine, Respirology (adult and pediatric), Diabetes and Endocrinology, Palliative Care, Oncology and Nursing. She currently is involved in 13 studies at USask. She meets with patients and their families to discuss the study and assess their eligibility, enrolls patients, collects data including health information and blood samples, processes samples, and conducts follow-up visits with enrolled patients.



Joan's work is critical in improving care for children and in her own words believes children have their own unique needs and disease processes that require research at their level. Over the last 15-20 years, she has witnessed a significant increase in pediatric research both locally and internationally, which excites her about the potential impact on improving children's health and well-being.

Clinical research coordinators require a set of crucial traits, including organizational skills, effective communication, flexibility, and empathy. Being highly organized is vital to maintain meticulous records of each study, as Joan has demonstrated through her years of experience. Effective communication with both the study team and participants is also critical to ensure protocols are followed. Flexibility is another important attribute, as some studies may require coordinators to work outside normal hours for patient enrollment, sample collection, and processing. Finally, compassion is key, as many patients and families rely on coordinators for emotional support. Overall, the role of a clinical research coordinator is multifaceted and requires a diverse set of skills and qualities. Therefore, we thank them for their tireless efforts in advancing medical research.

Congrats to the following Department of Pediatric Faculty for being awarded a 2022-2023 College of Medicine Dean's Summer Research Project



Dr. Shuaa Basalom



Dr. Susan Petryk x2



Dr. Tim Bradley



Dr. Krista Baerg

Dr. Mehul Jariwala

Dr. Asma Nosherwan

Dr. Tristan Kerr





Department of Pediatrics' Dr. Rupeena Purewal hosts

The Canadian Breakpoint. A Canadian Infectious
Diseases Podcast by Canadian Infectious Diseases
Physicians. The latest episode is: Disseminated
Gonorrhea Infections
Check out the episodes here!





This event will bring their platform together, plus the IMPaCT, CHEER and MICYRN networks. Here you will have the opportunity to learn and network with peers and mentors across all sectors and disciplines. Join them for 3 days of team building, career building, and personal wellness and effectiveness.

.... JPCHF Awardees Continued from pg. 4

CIHR Fall Project Grant Awardees

<u>USask-led research project receives more than \$1.3 million to study bone strength development in children with diabetes</u> This is a multi-year study of the development of bone structure, density and strength in children with Type 1 diabetes. Co-led by Dr. **Saija Kontulainen** (PhD) with the College of Kinesiology and Dr. **Munier Nour** (MD) with the Department of Pediatrics.















Saija Kontulainen NPI

Munier Nour Co-PI

Leigh E Gabel Co-PI

bel Carol Lam Co-PI

Marie-Eve Robinson Co-PI

Leanne M Ward Co-PI

Andy Kin On Wong Co-PI

Co-investigator includes Steven Boyd; Andrea S Doria; Mark Inman; James Johnston; Farid Mahmud; Julia Sorbara; Michael L Szafron; Suraj Unniappan; Reza Vali; Richard E Walker; Sheldon Wiebe; Daphne Yau; Caroline Zuijdwijk

Children with type 1 diabetes (T1D) have a high risk of bone fractures but it is unknown why. We hypothesize that bone development is impaired in children with T1D, making bone structure weaker. This is important as development of weaker bones can contribute to bone fragility across the lifespan. The proposed Canadian Bone Strength Development Study aims to test if bone development is impaired in children with T1D by comparing their bone development to that of healthy peers over the critical years of growth. This study also aims to discover measures influencing bone development (such as physical activity, nutrition, hormones) to guide the design of therapies to optimize bone development in children with T1D. We will recruit female (ages 10-11) and male children (ages 11-12), including 208 children with type 1 diabetes (T1D group), from four Pediatric Diabetes Clinics (Calgary, Ottawa, Saskatoon and Toronto). We will also recruit 208 healthy children (control group). We will invite children to three annual follow-up visits to assess bone development during the pubertal growth spurt. We will measure bone strength, structure and density development with fine detail using high-resolution peripheral quantitative computed tomography. We will also measure growth (height and body mass), maturity, body composition and muscle strength. We will record hormones and growth factors from blood samples taken in the clinic and monitor nutrition and physical activity. We will compare bone development between T1D and control groups and explore measures (such as physical activity and hormones) related to bone development. Findings will inform how and why bone strength development differs in children with T1D and why fracture risk is higher in childhood and later life in individuals with T1D. Importantly, findings will guide interventions aiming to optimize bone strength development in children with T1D and improve lifelong prevention of fractures.



Dr. Darryl Adamko: Little Lungs, Lessons Learned

Diagnosing pulmonary diseases like asthma in young children is still largely a matter of trial and error, according to Saskatchewan's top pediatric respirologist. As viruses and colds tear through schools and daycares across North America, Dr. Darryl Adamko wants to change that.



Coming Events

April 18	Ideas Lab Funding Opportunity 2023 - Information Session
April 20	Mingling Minds seminar series: Dr. Wendie Marks and Dr. Sarah Oosman will be presenting!
April 20	Department of Pediatrics Child Health Research Trainee Day RSVP by April 13
April 20	Health Equity Webinar: Indigenous Health Presenter: Dr. Janet Tootoosis, Vice-Dean Indigenous Health
April 21	ohpahotân oohpaahotaan Spring Symposium
April 23	Anesthesiology Resident Research Day
April 28	6th annual māmowi āsohtētān Internal Truth and Reconciliation Forum
May 5	Red Dress Day/National Day of Awareness for Missing and Murdered Indigenous Women, Girls and Two-Spirit People
May 1	SSHRC Workshop
May 4	The 30th Annual Life & Health Sciences Research Expo
May 4	NSERC Alliance Workshop
May 6	Pediatric Conference
May 11	Pediatric Grand Rounds: Dr. Athena McConnell
June 1	<u>Pediatric Grand Rounds</u> : Visiting Lecture series welcomes: <u>Dr. Mohit Kehar</u>

New Research Staff in the Department of Pediatrics



Welcome <u>Jagmeet Bajwa</u> to the Division of Pediatric Research! Jagmeet's is taking on the new role, Pediatric Biostatistician in the Department of Pediatrics. He has a Master of Science in Statistics from Panjab University, Chandigarh, India. He has worked as a biostatistician both in industry and academia. His most recent roles were with Emmes, Saskatchewan Health Quality Council, and Department of Anesthesiology. He will be supporting faculty, trainees, and department wide initiatives.

Publications



Check out the Department of Pediatrics new Google Scholar Page. Here you can find publications from all faculty and trainees from the department

Pediatrics in the News

Most difficult time for pediatric ERs is now, Saskatoon doctor says



By Nathaniel Dove • Global News

Posted December 5, 2022 6:41 pm · Updated December 6, 2022 7:48 am

CANADA

What is Saskatchewan's COVID-19 Risk?



By Nathaniel Dove • Global News Posted January 20, 2023 1:38 pm

Saskatchewan

Respiratory illnesses in kids swamping children's hospital in Saskatoon, says pediatrician







SUN president says Jim Pattison Children's Hospital is overwhelmed



Scott Larson · CBC News · Posted: Jan 07, 2023 7:00 AM CST | Last Updated: January 7

Regina boy experiences severe complications, cardiac arrest due to RSV





Allison Bamford Video journalist at CTV News

Comprehensive sexual health care for adolescents Module

Course Content

Comprehensive sexual health care for adolescents





Check out this online module which is helping providers care for and counsel teens on sexual health, including 2SLGBTQIA+ youth, those with disabilities, and young people who are racialized and from diverse ethnocultural communities. Also featured in Canadian Paediatric Society Candian Paediatric Society (CPS) 2022 Year in Review

Congrats to Dr. Ayisha Kurji for her contributions to this module!





Department of Pediatrics Child Health Research Trainee Day 2023

Please join us at Louis' Loft on **Thursday April 20th**, 12-4 pm for this research symposium featuring presentations from residents, graduate students, post-doctoral fellows, and undergraduate students engaged in child health research at USask.

RSVP for LUNCH: Eventbrite By April 13th!

Program Lunch

Welcome & Opening Remarks
Keynote Speaker: Dr. Patrick Brophy
Trainee Presentations
Prizes and Closing Remarks













The Children's Health Research Trust Fund (CHRTF) was established in 1983 to help raise funds to support child health research at the University of Saskatchewan. As all donated funds are endowed, the CHRTF has continued to grow to become an important part in helping advance research in the Department of Pediatrics. For further information about the CHRTF and to donate: https://donate.usask.ca/online/chrtf.php



Our Partners:

The Jim Pattison Children's Hospital has historically provided strong support for child health research in Saskatchewan. The recent \$50 million donation from Jim Pattison allows for a steady stream of revenue to help meet research and programming needs for generations to come. Groundbreaking opportunities for pediatric researchers in Saskatchewan are on the horizon!



Contact us

For more information about The Department of Pediatrics Research, SPRING, or to contribute content to the Department of Pediatrics Research Report, please contact: Tova Dybvig Department of Pediatrics Email:Tova.dybvig@usask.ca