June 20, 2022

CELEBRATING 100 YEARS OF ALBERTA CHILDREN'S HOSPITAL

Research is Care. Care is Research.

We are sharing the pride, vision and excitement for all that our research community has and will continue to achieve in the years to come.

DR. SUZANNE TOUGH
‘Building partnerships to ensure children have the best chances of success’

Congratulations on the 100-year celebration. I have been working on the Alberta Children’s Hospital Foundation ACHF/ACHRI agenda for about 20% of this time! From the beginning my career at the old Children's Hospital developing the Decision Support Research Team, to the development of a research program in preterm birth, maternal mental health, and child development, to leading the All Our Families Cohort (AoF), ACHF has been key to success. It has been a privilege to collaborate with, and mentor, so many talented people.

My research focuses on understanding the links between and influences of society, family and maternal well being on child development. The findings of our work can be applied to program development, policy, and practice to ensure children have the best chances of success. The longitudinal nature of this work with the AoF cohort would not be feasible without ACHF and ACHRI.

Over the years, I have had the pleasure of ongoing collaboration with community partners and stakeholder organizations including United Way, Calgary Reads, Centre for Sexuality and others. It has been profoundly rewarding to have expert input into my research program from those meeting the needs of children and families daily. These partnerships have enabled the development of evidence of contemporary relevance. I look forward to seeing even more relationships with our important community partners to further accelerate the evidence-to-practice cycle and to really make a difference for our families and community.

- Suzanne Tough

DR. ASHLEY HARRIS

‘Informing new treatments and approaches for pediatric migraine’
I am an imaging scientist and one area of my research uses MRI scanners to look at brain chemicals. I study pediatric migraine, its neurochemical basis and the relationship between child development and migraine. It is increasingly apparent pediatric migraine cannot be treated as migraine in adults. My work shows that the chemical glutamate is lower in the visual cortex in children with migraine compared to controls, by contrast, adults’ glutamate is higher in migraine.

Our team has demonstrated relationships between brain chemicals and migraine severity and the phase of the migraine cycle. We have also shown there are developmental changes in connectivity between brain regions in children with migraine.

In collaboration with Dr. Serena Orr, I continue to investigate the underlying physiology of pediatric migraine through looking at the cyclical nature of migraine and changes with child development. This research will inform new treatments and approaches for pediatric migraine. I am inspired by the advanced and sophisticated methods we are using. The next generations of researchers will be able to build on our knowledge and improve methods to study all clinical conditions and development.

- Ashley Harris

CELEBRATING ACH 100 - CONNECT WITH US

Join us as we celebrate the Alberta Children’s Hospital 100 years of hope + healing! ACHRI invites you to share your stories of research excellence.

Researchers and Trainees can share stories by emailing fiona.mackenzie@ucalgary to set up a short interview. Stories will be shared in the newsletter and across social platforms throughout 2022.

CSM INSTITUTES PARTNER IN RESEARCH

Collaboration leads to evidence-based planning in gender-affirming facial surgery

UCalgary researchers have teamed up with a leading California surgeon to quantitatively determine and visualize the difference between male and female faces. The study, published in Facial Plastic Surgery & Aesthetic Medicine, including authors: Jordan Bannister, David Aponte, Dr. David Katz and Dr. Benedikt Hallgrímsson, shows that there are distinct local differences in the mandible, brow, lip, nose and cheeks. “ACHRI and McCaig partnered to support this important research. We are expanding the collaboration between McCaig and ACHRI in precision health and 3D facial imaging – a tremendous opportunity for our scientists
Congratulations to Dr. Stephen Freedman and team on the publication: **Severe Outcomes Associated With SARS-CoV-2 Infection in Children: A Systematic Review and Meta-Analysis**. The objective of the systematic review estimated the proportion of SARS-CoV-2 infected children experiencing hospitalization, intensive care unit (ICU) admission, severe outcomes, and death.

The review showed among children who tested positive for SARS-CoV-2, 3.3% were hospitalized, with rates being higher early in the pandemic. Severe outcomes, ICU admission and death were uncommon, however estimates vary by study population, pandemic timing, study risk of bias, and economic status of the country.

**COVID INSIGHTS**

Congratulations to **Dr. Meaghan Perdue**, who was awarded the 2022 *Killam Postdoctoral Fellowship*. Under the supervision of **Dr. Catherine Lebel**, Dr. Perdue's research applies advanced neuroimaging techniques to characterize links between specific properties of brain structure and chemistry and reading ability. She will also examine patterns of brain development related to the acquisition of reading and related skills in preschool and early school year children.

A huge congratulations goes out to the six ACHRI Post-Doctoral Trainees who have been awarded the highly competitive **CIHR Post-Doctoral Fellowships**:  
- Anees Bahji (Patten)  
- Daniel Davoe (Patten)  
- Gillian England-Mason (Dewey)  
- Marcel Van der Wouw (Giesbrecht)  
- Tatiana Maroilley (Tarailo-Graovac)  
- Jing Zheng (Kurrasch)

**ACADEMIC EXCELLENCE**

Congratulations to **Tali Glazer, BHSC 22’** who is graduating with the gold medal for highest academic distinction in the Cumming School of Medicine. Under the supervision of **Dr. Myriam**
Hemberger and Dr. Wendy Dean, Glazer's honors thesis explored the essential role of the placenta in fetal heart development. The research discovered that placental defects are causatively involved in the development of congenital heart defects in a substantial fraction of cases. This research informs a growing body of research highlighting the essential role of the placenta in healthy fetal development. Read more.

GRANT OPPORTUNITIES

New Frontiers in Research Fund - Exploration 2022
The goal of the Exploration stream is to inspire high-risk, high-reward and interdisciplinary research.
Deadline: Tuesday, June 21, 2022 (RSO NOI deadline)
Details

Canadian Cancer Society/CIHR Breakthrough Team Grants: Transforming Low Survival Cancers
This program aims to find new ways to prevent the onset of six cancers where the overall predicted 5-year net survival is less than 30% (pancreas, esophagus, brain, lung, liver, and stomach), through early detection and the development of more precise and effective treatments.
Deadline: Wednesday, June 22, 2022 (EOI)
Details

Arthritis Society 2022 Ignite Innovation Grants
The goal is to support the transformative, paradigm-shifting concepts and approaches to address critical barriers to progress in arthritis research, challenge our understanding of arthritis and its management, and generate novel approaches to defeat arthritis and deliver the best evidence-informed care possible.
Deadline: Thursday, June 23, 2022 (RSO Internal)
Details

CIHR Operating Grant: Joint Programme on Neurodegenerative Disease Research (JPND) 2022
This opportunity aims to understand the biomedical, psychological and/or social mechanisms of non-pharmaceutical interventions to identify potential target sites for enhanced personalized interventions or a combination of pharmacological and non-pharmacological interventions.
Deadline: Thursday, June 23, 2022 (RSO Internal)
Details
**Arthritis Society: Stars Career Development Award**

This award was created to help establish the career of early and mid-career investigators. The program provides support to research programs aligned with the Arthritis Society’s 2020-2025 Research Strategy relevant to five research priority areas: arthritis pain, OA, IA, childhood and work.

**Deadline: Friday, June 24, 2022**

[Details](#)

**Alberta Innovates Accelerating Innovations into CarE (AICE) Concepts**

This program advances early-stage research that demonstrates high commercial potential in priority areas of precision health. The program seeks to apply computational technologies or techniques for personalized prevention, diagnosis or digital therapeutics in healthcare.

**Deadline: Wednesday, June 29, 2022**

[Details](#)

**Diabetes Canada - End Diabetes 2022**

This program supports the development of solutions aimed at the prevention, management, and finding a cure(s) for people living with diabetes.

**Deadline: Tuesday, July 12, 2022 (RSO Internal)**

[Details](#)

**Clinical Research Fund - SEED Grant Competition**

This opportunity will support the Eyes High strategic vision of leadership in high-impact clinical research at UC and promote the objectives of AHS strategy for research innovation and analytics.

**Deadline: Friday, July 15, 2022**

[Details](#)

**Canadian Cancer Society Health Equity Research Grants**

This program supports research projects that seek to advance cancer-related health equity. Projects must be collaborative, co-created by people both affected by cancer and by structural marginalization, and designed to address the systemic, structural, and institutional factors that sustain health disparities in Canada.

**Deadline: Wednesday, July 20, 2022 (Registration)**

[Details](#)

**CIHR Team Grant: CIHR-JDRF Type 1 Diabetes and Precision Medicine**

This opportunity supports projects in precision medicine and T1D.

**Deadline: Thursday, July 21, 2022**

[Details](#)

**NSERC Discovery Grant Program**

This grant supports ongoing programs of research with long-term goals. They provide long-term operating funds and can facilitate access to funding from other programs.

**Deadline: Monday, August 1, 2022 (NOI)**
The Arthritis Society - Strategic Operating Grants
This funding supports research proposals aligned with the Arthritis Society’s priorities.
**Deadline: Monday, August 29, 2022 (Full Application RSO Deadline)**

CIHR Patient-Oriented Research Training Grant - Health System Stream
The aim of the grant is to build capacity for POR in the health system by providing non-governmental Canadian health systems or related organizations with an opportunity to embed POR practices within their organizations through training, mentorship, and practical opportunities.
**Deadline: Monday, September 5, 2022**

CIHR Catalyst Grant: Policy Research for Health System Transformation
This opportunity supports policy evaluations or policy development/implementation to inform policies to support health care and public health systems in Canada with the aim of advancing the Quadruple Aim – improved population health outcomes, better patient and provider experience, and increased value – and health equity.
**Deadline: Thursday, September 29, 2022**

CIHR Operating Grant: Diabetes, Psychosocial Health, Prevention and Self-Management
This grant is focused on interventions and models of care that address psychosocial issues and mental health disorders in people with T1D. This opportunity will also support psychosocial research in prevention and treatment in youth and young adults, with a focus on Indigenous and racialized, ethnocultural and low socio-economic status communities that are disproportionately affected by T2D.
**Deadline: Thursday, October 27, 2022**

Visit ACHRI website for funding opps.

TRAINEE FUNDING OPPORTUNITIES

GROWW Cohort Program
This training program includes seminars from academics in the field of women’s and girl’s health, experiential learning opportunities and workshops, mentorship partners, a summer institute, and professional networking to help co-create new research and/or employment opportunities. Open to: Passionate graduate students (those in a masters or PhD program), post-doctoral fellows, clinical trainees, and early career researchers.
**Deadline: Friday, June 24, 2022**
Mitacs - Elevate
Mitacs Elevate is a two-year training program for postdoctoral fellows where participants lead and undertake a research project with an industry partner. Open to all disciplines and all industry sectors.
Deadline: Thursday, June 30, 2022

Aisha Rea Research Fellowship in Vasculitis
This award, made possible through the Rea Family, provides support to trainees in the area of childhood inflammatory diseases, with preferred focus on vasculitis.
Deadline: Monday, July 4, 2022

CIHR HostSeq Fellowship
This program will support postdoctoral trainees whose research involves the study of human genetics and the challenges of COVID-19 disease in Canada using bioinformatic approaches.
Deadline: Monday, July 11, 2022 (RSO Internal)

Brain Tumour Foundation Undergraduate Student Research Competition
This competition is an opportunity to showcase undergraduate work relevant to the brain tumour research community.
Deadline: Friday, August 26, 2022 (LOI)

Visit ACHRI website for trainee funding opps.

If you haven't done so please complete the ACHRI Trainee Registration Form.

EVENTS AND SEMINARS

Neonatal Grand Rounds
Stress and Cortical Plasticity in the Developing Brain
Tuesday, June 21, 2022
4 - 5 pm
Dr. Bryan Kolb
Register

Paediatric Grand Rounds
MICYRN: Streamlining Maternal/Child Health Research in Canada
Wednesday, June 22, 2022
8:30 - 9:30 am
Thierry Lacaze & Breanne Stewart
Register
Calgary Adapted Hub - Research and Community Engagement Meeting -
Connecting Risk Factors, Physical Activity and Mental Health in Children with
Cerebral Palsy
Thursday, July 7, 2022
12 - 1 pm
Daniela Testani, PhD student
Register

For all events visit the ACHRI calendar.

SEND US YOUR NEWS!

Please send discoveries, work with partners, and news you want shared to Fiona Mackenzie at r4k@ucalgary.ca

Visit us: research4kids.ucalgary.ca

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