

Care Transformation for Children

Our program will build and empower multidisciplinary and multi-sectoral collaborations within hospital, clinic and community health program settings to translate evidence into action to improve outcomes for children and families.

Dr. Graham Thompson, MD, program director, is an assistant professor at the University of Calgary in the departments of paediatrics and emergency medicine.



Child Brain & Mental Health

Our program will translate research from bench to backyard, including cutting-edge molecular, genetic, neuroimaging, assessment and intervention techniques, in both model organisms and humans. Our members study brain development, neurodevelopmental and neurological disorders, brain injury, cognition, behaviour, and mental health.

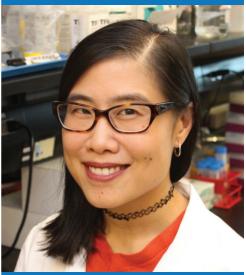
Dr. Catherine Lebel, PhD, program director, is an associate professor in the Department of Radiology and an adjunct associate professor in the Werklund School of Education at the University of Calgary.



Child Health Data Science

Our program will support the development and implementation of cutting-edge data science, including advanced big data machine learning, and foster high-end computational resources to enable precision medicine for children. We will collect, analyze, and integrate data from multiple sources to improve the prevention, diagnosis, and treatment of pediatric diseases in direct collaboration with clinicians.

Dr. Nils Forkert, PhD, program director, is an assistant professor at the University of Calgary in the departments of radiology and clinical neurosciences.



Childhood Cancer and Blood Disorders

A collaborative initiative of ACHRI and the Arnie Charbonneau Cancer Institute, our program will advance understanding of the biology and sequelae of childhood cancers and blood disorders, and use existing and new knowledge to improve diagnosis and treatment.

Dr. Jennifer Chan, MD, program director, is an associate professor at the University of Calgary in the departments of oncology, clinical neurosciences, and pathology & laboratory medicine.



Healthy Children, Families & Communities

Our program will bring together scientists and community partners in research to improve the health and well-being of children, youth and families. Major threats to Canada's children include: intentional (eg. child abuse, suicide) and unintentional injuries, mental health, poverty, infant mortality, obesity, inactivity, food insecurity, vaccine preventable illnesses, discrimination and bullying. Policies to address these threats, and prevention strategies focused on the social determinants of health will drive program research activities.

Dr. Brent Hagel, PhD, program director, is a professor at the University of Calgary in the departments of paediatrics and community health sciences and an adjunct professor in kinesiology.



Maternal & Child Health

Our program will conduct interdisciplinary research spanning fundamental research into fetal and placental development; understanding how events during pregnancy impact women and children's health in the short- and long-term; and how the health care system and communities can be strengthened to improve the health and wellbeing of mothers and children in Canada and abroad.

Dr. Amy Metcalfe, PhD, program director, is an associate professor at the University of Calgary in the departments of obstetrics & gynaecology, community health sciences, and medicine.



Precision Medicine & Disease Mechanisms

Our program will work at the surface of basic and clinical science to better understand mechanisms of normal development and the origins of disease. In an intercalated research pipeline, advanced genetic, epigenetic and genomic technologies are applied to decipher the molecular and cellular basis of development and childhood disorders.

Dr. Myriam Hemberger, PhD, program director, is a professor at the University of Calgary in the departments of biochemistry & molecular biology, and medical genetics.





