



Research Report

June 2025



Child Health Research Trainee Day Recap

On April 3rd, 2025, the Department of Pediatrics hosted the 2025 Child Health Research Trainee Day at Marquis Hall in Saskatoon. The event featured a keynote presentation by Dr. Katharine Smart. Her presentation, "How advocacy can deepen and expand your impact in your career", spoke on the importance of advocacy in child health research careers. Dr. Darryl Adamko, Pediatric Research Director, USask, served as the event's emcee. A total of 37 abstracts were submitted, and the event drew approximately 100 attendees. It was a successful and inspiring day dedicated to advancing child health research at the University of Saskatchewan. To learn more about the presented researched check out the Abstract Book Here: <https://medicine.usask.ca/documents/pediatrics/abstract-book-2025.pdf>

BE WHAT THE WORLD NEEDS

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2025 Child Health Research Trainee Day Standings				
Poster Presentations				
Category	Name	Title	Authors	Position
Graduate & Postgraduate Judges: Drs. Wendie Marks & Athena McConnell	Thomas Jurrissen Post Doctoral Fellow- Western College of Vet Medicine	Acute isometric handgrip exercise does not improve cognitive performance in patients with Fontan circulation	Thomas J. Jurrissen, Adam M. S. Luchkanych, M. Rafique Khan, Marta C. Erlandson, Charissa Pockett, Kristi D. Wright, Corey R. Tomczak, T. Dylan Olver	1 st
	Karlee Schoff MSc-Pharmacy & Nutrition	Composition of antenatal vs postnatal colostrum: A proof-of-concept-feasibility study	Karlee A Schoff, Naida Hawkins, Kelsey M Cochrane	2 nd
Graduate Judges: Drs. Susan Bobbitt & Tim Bradley	Adam Luchkanych PhD- Western College of Veterinary Medicine	Isometric handgrip exercise increases middle cerebral artery blood velocity in children with congenital heart disease	A.M.S. Luchkanych, R. Khan, N.G. Boyes, K.D. Wright, M. Erlandson, C. Pockett, C.R. Tomczak, T.D. Olver	1 st
	Emma Finch PhD-College of Medicine	How Total Metabolome Compares to Creatinine Normalization for LC-MS Biomarker Analysis in a Respiratory Disease Model for Children Samples	Finch, E, Alyari, M, Michel, D, Adamko , D, El-Aneed	2 nd
Undergraduate Judges: Drs. Munier Nour & Darryl Adamko	Sarah Al-Mouaiad Al-Azem Undergraduate-Kinesiology	Attenuation of Cardiovagal Baroreflex Gain Resetting During Isometric Handgrip Exercise in Patients with Fontan Circulation	Sarah Al-Mouaiad Al-Azem, M. Rafique Khan, Adam M. S. Luchkanych, Thomas J. Jurrissen, Stephanie Fusnik, Marta Erlandson, Kristi D. Wright, Charissa Pockett, T. Dylan Olver, Corey R. Tomczak	1 st
	Lorynn Labbie Undergraduate-Medicine	Comparing Sex Differences in Somatic Growth and Aortic Root Growth in Children with Marfan Syndrome in Saskatchewan	Lorynn Labbie, Dr. Tim Bradley	2 nd
Residents Judges: Drs. Daphne Yau & Krista Baerg	Julie Le/ Jessyca Brissaw Residents - Pediatrics	Physician Well-being: Apply Your Own Oxygen Mask First	Jessyca Brissaw, Julie Le, Shuaa Basalom, Nita Chauhan , Rachel V. Silverberg, Tova Dybvig, Jagmeet Bajwa	1 st
	Jacqueline Harvey Resident - Pediatrics	Variations of care with bronchiolitis associated apneas in infants: A retrospective study	Jacqueline Harvey, Tanya Holt, Gregory Hansen	2 nd

Trainee Day Highlights

CONTINUED FROM PAGE 2



UNIVERSITY OF SASKATCHEWAN
College of Medicine
DEPARTMENT OF PEDIATRICS
MEDICINE.USASK.CA

University of Saskatchewan
College of Medicine
Department of Pediatrics
Royal University Hospital
103 Hospital Drive
Saskatoon, SK S7N 0W8

Phone: 306-844-1068
Email: peditrics@usask.ca

CONTRIBUTORS

Editor:
Tova Dybvig

Designer:
Dallas Carpenter

Photography:
Submitted

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

We acknowledge that we live
and work on Treaty 6
Territory and the Homeland
of the Métis. We pay our
respect to the First Nations
and Métis ancestors of this
place and reaffirm our
relationship with one
another.

Oral Presentations				
Judges: Drs. Katie Felton, Keefe Davis	Rheanna Bulten Pediatric Resident-College of Medicine	Non-invasive Ventilation in Pediatric Bronchiolitis: Variables Related to Weaning Readiness and Efficiency	Rheanna Bulten, Greg Hansen, Tanya Holt	1 st
	Lauren Campbell Pediatric Resident-College of Medicine	Review of Antimicrobial Use for Pneumonia on 4F Pediatrics	Lauren Campbell, Magdalena Koziak, Dr. Abid Lodhi, Dr. Shauna Flavelle, Sabiha Sultana, Sanjida Newaz.	2 nd
Top Pediatric Resident Research Presentation Overall				
	Rheanna Bulten Pediatric Resident-College of Medicine	Non-invasive Ventilation in Pediatric Bronchiolitis: Variables Related to Weaning Readiness and Efficiency	Rheanna Bulten, Greg Hansen, Tanya Holt	1 st

Thank you

Our Presenters

Our Judges

The Department of Pediatrics, Research Office

The College of Medicine, University of Saskatchewan

The Jim Pattison Children's Hospital Foundation of Saskatchewan

Our Partners



The Jim Pattison Children's Hospital provides strong support for child health research in Saskatchewan. Groundbreaking opportunities for pediatric researchers in Saskatchewan are on the horizon!



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: donate.usask.ca/online/chrtf.php

Awards

Dr. Katie Felton



Congratulations to **Dr. Katie Felton** who is the USask lead for the recently awarded Genome Canada study, "[Longitudinal, Deep-Phenotyped Pediatric Databank of Medical and Drug Therapy Outcomes](#)"

Project Leader(s): Bruce Carleton (University of British Columbia), Michael Rieder (University of Western Ontario), Maja Krajnovic (Université de Montréal/Centre hospitalier universitaire Sainte-Justine)

This sequencing project will enable improvements to drug safety and effectiveness for children by making genomic data on their responses and adverse reactions to various medications more widely accessible to researchers and health regulatory agencies.

Dr. Spencer Zwarych



Congratulations to **Dr. Spencer Zwarych** who is the USask lead for the recently awarded Genome Canada study, "[PrairieGen: A Multi-omics Approach to Advancing Data Integration from Manitoba and Saskatchewan Populations into the Pan-Canadian Genome Library](#)"

Project Leader(s): Cheryl Rockman-Greenberg, Athanasios Zovoilis (University of Manitoba), Spencer Zwarych (University of Saskatchewan), Donna Turner (CancerCare Manitoba)

This sequencing project will help unlock the genetic story of Manitoba's and Saskatchewan's populations to improve healthcare efficiency, reduce costs and enhance patient outcomes in the Prairies.



Solutions Program

Innovation & Impact Grants

Collaborative, engaged research to generate, develop, and implement solutions for pressing health challenges in Saskatchewan

Pediatric Brain Health

Funding Available: \$500k*

In partnership with Jim Pattison Children's Hospital



2024-25 Innovation Grant

- Available Funding: \$50,000 for one year
- Funding Objective: To support interdisciplinary research teams to catalyze the development of innovative solutions to address pressing health challenges.
- Eligibility Deadline: September 13, 2025
- Full Deadline: November 13, 2025

2024-25 Impact Grant

- Available Funding: \$150,000 for two years
- Funding Objective: To support interdisciplinary research teams to advance the translation of evidence-based solutions into real world and practical applications.
- Eligibility Deadline: September 18, 2025
- Full Deadline: November 13, 2025

New Drug Trials at the Department of Pediatrics



The Division of Pediatric Nephrology was selected as a Canadian site for the Boehringer Ingelheim trial entitled, "A randomised, double-blind, placebo-controlled trial with an open-label extension to assess the pharmacokinetics, safety and efficacy of empagliflozin tablets in paediatric patients with chronic kidney disease (EMPA KIDNEY® Kids)"

PI: **Dr. Keefe Davis**



The Division of Pediatric Cardiology was selected for the Bayer trial entitled, "A multicenter, randomized, double-blind, placebo-controlled, Phase 3 study to investigate the efficacy, safety, and PK/ PD of finerenone, in addition to standard-of-care, in pediatric patients, 6 months to < 18 years of age, with left ventricular systolic dysfunction (LVSD)"

PI: **Dr. Tim Bradley**



MICYRN-CHEER PEDIATRIC RESEARCH ETHICS CONSULTING SERVICE

Multi-site pediatric health research studies are essential for advancing child health research in Canada. Initiating such studies at multiple sites presents significant challenges, involving management of complex, time-consuming processes such as obtaining research ethics approvals, as well as securing contracts and operational clearances within healthcare systems and hospitals. One key challenge for study teams is efficiently navigating the ethics review process across all participating sites. Each jurisdiction requires its own ethics review, and the differing platforms across the country can be complicated to navigate.

The Maternal Infant Child and Youth Research Network (MICYRN) and the Canadian Collaboration for Child Health: Efficiency and Excellence in the Ethics Review of Research (CHEER) Project are launching a Pediatric Research Ethics Consulting Service for multi-site, cross-provincial paediatric studies. This service aims to facilitate REB review processes for paediatric multi-site, cross provincial studies. This service, offered to academic investigators at no cost during the pilot period, includes:

MICYRN-CHEER Central Research Ethics Review Manager: hands-on support to child health researchers and study teams, helping them to understand and navigate the necessary ethics approvals and preparing and facilitating ethics submission across various electronic platforms, systems and jurisdictions.

Collaborating-site Research Ethics Navigators: working with the Central Ethics Review Manager, Collaborating-site Research Ethics Navigators will assist in customizing child health research ethics applications and materials to meet local and provincial requirements by serving as a repository of knowledge of local needs and nuances.

Scope of Service

To be eligible for support projects must meet the following criteria:

- Multicentre with study sites located in at least 2 provinces. The lead site may be in any province. A multicentre study conducted in two phases with a pilot phase at a single site or in one province is eligible.
- Prospective pediatric observational or interventional health research study
- Peer reviewed research, i.e., by a designated steering committee and/or granting body (i.e.: CIHR).

To use this service please contact the Central Ethics Review Manager, Megan Allore, at megan.allore@micyrn.ca or complete the intake form available on [CHEER](#), [MICYRN](#) and [RareKids-CAN](#)

In the News

Dr. Terry Klassen was recently interviewed to discuss the new RSV program rollout in Saskatchewan: Check out the interviews here:

[Saskatchewan expands RSV immunization to cover all infants born during respiratory season](#)
[Sask. expanding infant RSV immunization program](#)
[Saskatchewan's infant RSV immunization program expanding](#)



We know our smallest patients are often our most vulnerable during the winter months when respiratory illness season is most prominent," said Klassen. "Expanding RSV immunization provides an additional layer of protection against severe illness."

Dr. Susan Petryk was recently highlighted in multiple news reports advocating about the benefits of fluoride in drinking water:

[City council rejects motion to delay fluoride in Regina water](#)
[City council stands firm on plan to fluoridate Regina water](#)
[Regina city council confirms fluoride to be added to water supply after marathon session](#)



"Make the health of your community, not misinformation, your priority," she said in response to a question by Coun. Froh about which voices should be prioritized in this debate."

Dr. Ayisha Kurji was interviewed on the CBC Saskatchewan podcast where she discusses measles outbreaks in Saskatchewan:

<https://www.cbc.ca/listen/cbc-podcasts/1416-this-is-saskatchewan/episode/16139236-why-are-measles-making-a-comeback-in-saskatchewan>

She was also highlighted in the following article:

<https://www.cbc.ca/news/canada/saskatchewan/contagious-measles-saskatchewan-1.7508125>

Dr. Ayisha Kurji was also interviewed on Blue Sky with Sam Maciag: <https://www.cbc.ca/listen/live-radio/1-189-blue-sky/clip/16139393-vaccine-hesitancy-measles>



"Statistics show one in four or five people who get measles will end up hospitalized, while one in a thousand could face encephalitis or inflammation around the brain, Kurji said, noting other long-term consequences include the risk of deafness or blindness."

CES Trauma Code Navy: Transforming Pediatric Trauma Care

CES Trauma Code Navy is an in-situ simulation program at Jim Pattison Children's Hospital aimed at driving real change in how we care for critically injured children across Saskatchewan.

Each Code Navy simulation includes:

- A realistic, high-stakes pediatric trauma scenario.
- A structured debrief that dives deep into team dynamics, evidence-based care, equipment access, and system challenges.
- A "Trauma Talk" newsletter that distills key learnings
- Follow-up resources and opportunities to lead or observe future simulations.

In February, a recent Cody Navy simulation involved a complex pediatric case with extensive facial trauma resulting from a dog bite. During the debrief, the absence of a clearly labeled, rapidly accessible surgical airway kit specifically designed for young children was identified. In pediatric patients, especially those under the age of 8, the needle cricothyrotomy is the preferred emergency airway approach. While the necessary tools were ultimately located during the simulation, they were not readily available, prompting an important discussion on how to improve airway management readiness in similar high-stakes scenarios. As a direct result of this simulation, a custom pediatric needle cricothyrotomy kit was developed. The kit is now stored in the bottom drawer of all CES Broselow carts and is marked with bright orange stickers for immediate visual identification. Each kit contains all required supplies in a single zip-lock bag, along with clear, step-by-step instructions co-developed by CES nurses and physicians. This initiative has already enhanced bedside readiness and increased provider confidence during airway emergencies.

They are planning 10 Code Navies this year in CES. To get involved or be added to our mailing list, reach out to:

Dr. Jason Baserman – CES Trauma Code Navy Medical Director | Jason.baserman@gmail.com

Terra Dyky – Trauma Nurse Navigator | Terra.Dyky@saskhealthauthority.ca

Publications - Mar 2025 to June 2025

Tiffany Fitzpatrick, Peter Yamoah, David Summerby-Murray, Juthaporn Cowan, Manish Sadarangani, Alissa Wright, Sara Belga, Cora Constantinescu, Alex Carignan, **Athena McConnell**, Karina A Top, Canadian Immunization Research Network Investigators. [Neurological adverse events following COVID-19 vaccination among Canadians referred to the special immunization clinic network](#). *Vaccine*. 2025 May 20;59:127254. doi: 10.1016/j.vaccine.2025.127254. Epub ahead of print. PMID: 40398329

Top KA, Shulha HP, Hassan F, Sauvé L, Jadavji T, **Purewal R**, Constantinescu C, Sadarangani M, Halperin SA, Morris SK, Bettinger JA; IMPACT investigators. EPIDEMIOLOGY OF FEBRILE SEIZURES DURING THE COVID-19 PANDEMIC: A CANADIAN IMMUNIZATION MONITORING PROGRAM-ACTIVE (IMPACT) STUDY. *Pediatr Infect Dis J*. 2025 Feb 18;44(6):e230–3. doi: 10.1097/INF.0000000000004759. Epub ahead of print. PMID: 39970321; PMCID: PMC12058355

Karina A Top, Julie A Bettinger, Joanne E Embree, Taj Jadavji, **Rupeena Purewal**, Laura Sauvé, Jesse Papenburg, Shelley L Deeks, Sarah E Wilson, Nagib Dahdah, Manish Sadarangani, Scott Halperin, Fatima Kakkar, Shaun K Morris, N Bridger, J Comeau, R Thibeault, M Lebel, JM Pernica, K Kazmi, J Bullard, **R Chawla**, C Constantinescu, C Burton, N Le Saux. [Active Surveillance for Myocarditis and Pericarditis in Canadian Children 2021-2022: A Canadian Immunization Monitoring Program ACTIVE Study](#). *J Pediatr*. 2025 May 13:114642. doi: 10.1016/j.jpeds.2025.114642. Epub ahead of print. PMID: 40373954.

M Rafique Khan, Natasha Boyes, Adam MS Luchkanych, Thomas J Jurrisen, Cameron J Morse, Rory A Marshall, Idris Bare, Tony Haddad, Sherif Abdalla, Alexander Zhai, Haissam Haddad, Darcy D Marciniuk, Sarah Al-Mouaiad Al-Azem, Enoch Yang, Marta Erlandson, Kristi D Wright, **Charissa Pockett**, T Dylan Olver, Corey R Tomczak. "[When Hearts Race and Pressures Rise: Altered Exercise Pressor Reflex with Cardiac Abnormalities and Aging](#)." *Physiology*. 40.S1 (2025)

Adamko DJ and Hildebrand KJ (2025) [The changing epidemiology of paediatric childhood asthma and allergy in different regions of the world](#). *Front. Allergy* 6:1584928. doi: 10.3389/falgy.2025.1584928

Sarah Al-Mouaiad Al-Azem, M Rafique Khan, Adam MS Luchkanych, Thomas J Jurrisen, Stephanie Fusnik, Marta Erlandson, Kristi D Wright, **Charissa Pockett**, T Dylan Olver, Corey R Tomczak. "[Attenuation of Cardiovagal Baroreflex Gain Resetting During Isometric Handgrip Exercise in Patients With Fontan Circulation](#)." *Physiology*. 40.S1 (2025)

M Rafique Khan, Thomas J Jurrisen, Adam MS Luchkanych, Cameron J Morse, **Charissa Pockett**, Marta Erlandson, Kristi D Wright, T Dylan Olver, Corey R Tomczak. "[The Effect of Acute Dynamic Handgrip Exercise on Arterial Stiffness in Patients With Fontan Circulation](#)." *Physiology*. 40.S1 (2025)

Khan S, Brophy J, Kakkar F, Nashid N, Sauve L, **Purewal R**, Bitnun A. [Pediatricians' response to presenting formula and breast- or chestfeeding as equivalent options for parents with virally suppressed HIV](#). *CMAJ*. 2025 Apr 27;197(16):E457. doi: 10.1503/cmaj.152179-l. PMID: 40294943; PMCID: PMC12040333.

Mica Marbil, Justin Bonhomme, Alexandra Neville, Nicole MacKenzie, Prabjit Ajrawat, Gillian Backlin, Vina Mohabir, Katherine Wynne-Edwards, Isabel Jordan, Melanie Noel, Fiona Webster, **Krista Baerg**, Fiona Campbell, Tim Oberlander, Nivez Rasic, Jennifer Stinson, Karine Toupin-April, Tracy Wasylak, Kathryn Birnie. [Examining patient and health professional perspectives to inform an equitable, patient-oriented decision aid for in-person vs virtual pediatric chronic pain care](#). *IN JOURNAL OF PEDIATRIC PSYCHOLOGY* 2025 Mar 1 (Vol. 50, pp. 107-107). JOURNALS DEPT, 2001 EVANS RD, CARY, NC 27513 USA: OXFORD UNIV PRESS INC.

Gelech, J., Matthews, E., Mazurik, K., Graumans, R., Montgomery, H., **Neufeld, K.**, Beatty, B., Wellsch, J. [Indigenous Perspectives on Childhood Disability Across Canada: A Critical Integrative Review and Implications for Service Providers](#). *J Dev Phys Disabil* (2025). <https://doi.org/10.1007/s10882-025-10020-0>

Check out the [Department of Pediatrics Google Scholar Page](#). There, you can find publications from all faculty and trainees in the department

Coming Events

Sept 11: [Pediatric Grand Rounds](#) with Drs. Darryl Adamko and Christine Huel

Oct 2: [Pediatric Grand Rounds](#) – with Dr. Indra Narang

Oct 9: [Pediatric Resident Journal Club](#)

Oct 23: [Pediatric Grand Rounds](#) – With Dr. Jonathan Norton

Oct 30: [Pediatric Grand Rounds](#) – With Dr. Sarah Tehseen