Sarah Donkers is a faculty member for the School of Rehabilitation Science and whether she is teaching in the classroom, helping patients in the clinic, or working on research, her curiosity for movement is evident in all corners of her life. Sarah’s current research looks at optimizing function (walking with balance) in pediatric and neurological conditions. This project is about advancing clinical gait analysis in children with arthritis to enhance care and disease outcomes. More specifically, this project is about optimizing gait for children with Juvenile Idiopathic Arthritis (JIA) to ensure function, normal growth and development, and favorable quality of life. This research is timely as there is presently a lack of information about gait in JIA. Current approaches for gait assessment in children with JIA within the clinical setting remain rudimentary and largely subjective. Therefore, the purpose of this interdisciplinary research study is to investigate the value-added feasibility and sensitivity of quantitative, objective clinical gait measures in children with JIA. Sarah’s study involves state-of-the-art technologies that initially were developed to design video games. In a lighthearted turn, this tidbit of information certainly brightened the mood of one participant when setting up for the various tests. Smiles all around make this unique project a fun opportunity for learning.
Sarah is comparing three different portable (for use in clinic) gait technologies with observational gait analysis and timed walking tests to see which measures are most sensitive and appropriate for picking up gait deviations. She is also comparing a child’s walking and balance to measures of quality of life and disease severity. This research could help children with arthritis optimize their walking and minimize long-term musculoskeletal injuries. New innovative diagnostic tools for health professionals could also be developed in the future to best detect and monitor changes in gait. This project will definitely make you think twice the next time you consider the value of videogames.

**Summer Highlights of Notable Trainees and Students**

**Congratulations to Pediatric Resident, Kayla Parker:**

For being awarded one of the Top Clinical Poster Awards at the 2019 Interdisciplinary Resident Research Day (REACH).

And her co-authorship on the abstract, ‘A simulation Study to Assess the Effect of Analytic Error on Neonatal Glucose Measurements Using CPS Position Statement Action Thresholds’ that won 2019 AACC Best Abstract Award, Informatics Division in collaboration with Dr. Martha Lyons, Dr. Mark Inman, and Dr. Lannae Strueby.

**Congratulations to Medical Student, Madeline Parker** for her co-authorship with Dr. Krista Baerg and Casey McMahon on the abstract, ‘Assessment of a Job Aid for Pain Management at Pediatric Blood Collections’

**Congratulations to Pediatric Resident, Mehrieh Rahimi** for her poster titled, ‘Inspissated Bile Syndrome secondary to Hemolytic Disease of Newborn and Concomitant Serum Dynamics’ in collaboration with Drs. Samedi, Kalaniti, Musharaf, Lyon, Sinha, and Bingham.

**96th Annual Canadian Pediatric Society Conference**

Congratulations to Pediatric Resident, Kayla Parker for her co-authorship with Dr. Krista Baerg and Casey McMahon on the abstract, ‘Assessment of a Job Aid for Pain Management at Pediatric Blood Collections’

**Invitation to Youth/Patient**

Do you know a youth between 13-19 y.o. who would be interested in participating on the KidsCan Young Persons Advisory Group?

Youth will participate in design of research documents, raise awareness of the importance of youth in research

**Invitation to Researcher**

Are you interested in seeking consultations from youth on current or upcoming studies?

KidsCan can help in designing research documents, providing input on the format of research ethics consent and assent forms, and establishing patient-centered research protocols and methodology.

For more information [https://www.micyrn.ca/ypag](https://www.micyrn.ca/ypag)
### Coming Events

**Sept 16**  
Endocannabinoids: Multi-modal Regulators of the Stress Response-Dr. Matthew Hill from the Hotchkiss Brain Institute, University of Calgary – 10:30am E1130 HSB

**Sept 16**  
Using Patient Perspectives to Improve Amputee Care in Saskatchewan

**Sept 19**  
Mingling Minds

**Sept 23-24**  
QI: Exploring Artificial Intelligence for Quality Health Outcomes

**Sept 26**  
Stop Pain Think Tank – Interdisciplinary Research Network meeting

**Sept 26**  
SK Indigenous Mentorship Network – 2nd Annual Gathering

**Sept 28**  
Global Health Conference

**Oct 3**  
This year’s Prevention Matters conference is including a one-day medical stream that aims to address the needs of healthcare professionals, with applicable information, training, and tools to use in their practice.

**Oct 5**  
Pain and Therapeutics Conference

**Oct 18-19**  
The Animal-Human Relationship

### Stop Pain Think Tank

Are you interested in child and youth pain research? Stop Pain Think Tank was created to percolate interdisciplinary research collaborations in Saskatchewan.

**Agenda**
- Opening remarks
- Introduction to Complex Pain – Dr. Krista Baerg
- Mobilizing expertise: research strengths and possibilities
- Catalyzing action: subsequent Think Tank opportunities
- Projects/ funding
- Future networking
- Pain Week

Join the conversation on Thursday, September 26, 3:00pm - 5:00pm  
1821 Lounge, Health Science Building, University of Saskatchewan

Snacks and refreshments included provided by Department of Pediatrics – Research Division

**RSVP** Today!

For more information please contact stoppain@usask.ca

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**Department of Pediatric Grand Rounds**  
**September 2019**

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<tr>
<th>Date</th>
<th>Speaker</th>
<th>Topic</th>
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<tr>
<td>Sept 12</td>
<td>Dr. Nita Chauhan</td>
<td>A breath of fresh air: Environmental impacts on pediatric lung health</td>
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<td>Sept 19</td>
<td>Dr. Leslie Jocelyn</td>
<td>“Untangling ADHD Treatment” – Essentials for the Pediatrician</td>
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<td>Sept 26</td>
<td>Dr. Aiden Hollis</td>
<td>“Why Canada needs to invest in children [even if we don't care about them]”</td>
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<td>Oct 3</td>
<td>Dr. Noni MacDonald</td>
<td>Addressing Vaccine Hesitancy</td>
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**In the news!**

Congratulations to **Dr. Richard Huntsman** on his recent publication, ‘Dosage Related Efficacy and Tolerability of Cannabidiol in Children With Treatment-Resistant Epileptic Encephalopathy: Preliminary Results of the CARE-E Study’. Richard J. Huntsman, Richard Tang-Wai, Jane Alcorn, Stephanie Vuong, Bryan Acton, Scott Corley, Robert Laprairie, Andrew W. Lyon, Simona Meier, Darrell D. Mousseau, Doris Newmeyer, Erin Prosser-Loose, Blair Seifert, Jose Tellez-Zenteno, Linda Huh, Edward Leung and Philippe Major

Dr. Huntsman, pediatric neurologist at the University of Saskatchewan and fellow collaborators recently published an article in Frontiers in Neurology. The publication presents preliminary data of seven participants from the Cannabidiol in Children with Refractory Epileptic Encephalopathy (CARE-E) study. The study is an open-labeled, prospective, dose-escalation trial that is designed to assess the safety and efficacy of a Cannabidiol (CBD) - Enriched Cannabis Herbal Extract (CHE) in children with severe pediatric epilepsy. The overall reduction in seizures was close to 75% on average.

To see recent news about this study and learn more check out the following links!

- **Cannabidiol Oil Safely Lessens Seizures in Treatment-resistant Children,** *Early Trial Data Show*
- **Further research supports the use of cannabis oil in reducing seizures in kids** *Cannabis oil can reduce seizures in kids, University of Sask. study suggests*
- **Cannabis dosage studied at USask to reduce seizures in children with severe epilepsy** *Dosage Related Efficacy and Tolerability of Cannabidiol in Children With Treatment-Resistant Epileptic Encephalopathy: Preliminary Results of the CARE-E Study*
- **USask Research Shows Cannabis Treats Children with Epilepsy**

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**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.

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**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 Royal University Hospital 103 Hospital Drive Saskatoon, SK Canada S7N 0W8 Phone: 306-844-1229 Email:Tova.dybvig@usask.ca