



Pictured are (L to R) Rhonda Tailon, Dr. Caroline Tait, and Allison Piché, who are members of the Saskatchewan Indigenous Mentorship Network Team, who are also affiliated with the First Peoples First Person network

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View the Research Report online: 

Mentoring the Next Generation of Indigenous Health Researchers

by Allison Piché

Saskatchewan Indigenous Mentorship Network Director

The Saskatchewan Indigenous Mentorship Network is one of eight networks across Canada working with students, faculty, staff and community partners to identify the mentorship needs of Indigenous undergraduate and graduate students, and new investigators. In late 2016, Dr. Caroline Tait, Dr. Tom Graham, and the Social Sciences Research Lab (SSRL) administered a survey where respondents indicated the top three areas of academic mentor support as being: encourage mentorship from Indigenous elders; offer safe, productive, and regular spaces to conduct mentoring; and to help build community engaged research partnerships.

Thanks to funding support from CIHR's Institute for Aboriginal Peoples Health Training Grant, we are working on creating the above opportunities for students and evaluating the impact of our mentorship program over the course of the training grant. This will include conducting interviews in the coming months with a broader representation of students and staff, focusing particularly in areas with an underrepresentation of Indigenous students at the undergraduate and graduate levels. Ongoing program assessment will allow our program to respond and adapt to student needs, develop network activities that foster interdisciplinary and intergenerational

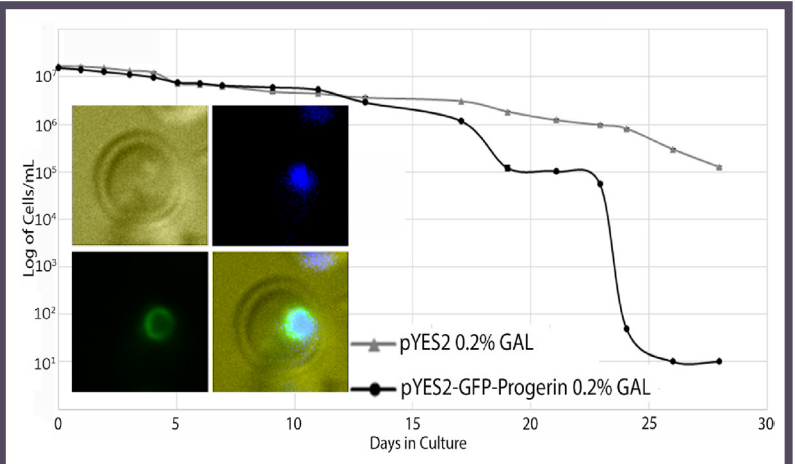
mentorship, and provide meaningful student research opportunities.

Our network is uniquely positioned to assist the University of Saskatchewan and the Health Science Colleges' response to the Truth and Reconciliation Commission's 'Calls to Action' as they relate to post-secondary education and community health and wellness advancement. In particular, action twenty-three "call[s] on all levels of government to: Increase the number of Aboriginal professionals working in the health care field; ensure the retention of Aboriginal health care providers in Aboriginal communities; [and] provide cultural competency training for all health-care professionals." In order to fulfill this call, our network is investing in emerging Indigenous health students and researchers and creating a community of

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Image of Interest

Human Progerin expressed in yeast. Expression of Progerin causes the premature aging disease Hutchinson Gilford Progeria Syndrome where young children experience 8x accelerated aging. In this image, Progerin was expressed in yeast (green) and was observed to correctly localize to the nuclear membrane. Nuclear DNA is shown in blue. The bottom right image is a merge of the 2 signals. The curves show yeast viability when Progerin is present or absent. Cells expressing Progerin have a shorter lifespan than cells that do not. The recapitulation of Progerin localization and function in yeast allows a genetic discovery of novel pathways controlling Progerin degradation in yeast. Image courtesy of Christopher Eskiw and Troy Harkness.



Pediatrics welcomes new Resident Research Coordinator

Dr. Oluwafemi Oluwole

The Department of Pediatrics wishes to extend a warm welcome to our new Resident Research Coordinator, Dr. Oluwafemi Oluwole. Dr. Oluwole will be working in this position on a casual basis, as he is also currently a Postdoctoral Fellow in the College of Nursing and the Canadian Centre for Health and Safety in Agriculture (CCHSA) working with Dr. Donna Rennie.



Dr. Oluwole completed his undergraduate degree in Agriculture from the University of Ibadan, Nigeria, and a Master's degree in Environmental Science from the University of Greenwich, United Kingdom. His MSc work, funded by the Department for International Development, focused on pesticide exposures and respiratory health symptoms among children and adults in rural communities in Nigeria. This was his first foray into research involving child health and has led to efforts aimed at educating and training farmers on safe handling of pesticides. In 2009, Dr. Oluwole joined the Centre for Global Health, University of Chicago as a Research Associate and led two international projects on pediatric asthma and maternal health in urban and rural communities in Nigeria. This work included epidemiological studies that have included questionnaire

report, lung function testing, measures of atopy, and assessments of household air pollution and pregnancy outcomes. His research found lower rates of physician-diagnosed asthma in rural compared to urban children despite similar or increased asthma-related symptoms in rural children. The results were consistent with evidence from studies on childhood asthma conducted in the United States, Canada, and other countries suggesting that rural living has a protective effect against the development of childhood asthma. Environmental factors have mostly been the most common explanation for these differences. However, having had a background from rural Nigeria and knowledge and experience of respiratory issues in rural communities, Dr. Oluwole was interested in finding an alternative explanation to the variations in urban-rural childhood asthma prevalence.

Eager to pursue his research question, he went on to complete his Doctor of Philosophy degree in the Department of Community Health and Epidemiology at the University of Saskatchewan under the supervision of Dr. Josh Lawson in the Department of Medicine and the CCHSA. His doctoral research project, funded by the Canadian Institutes of Health Research through the prestigious Vanier Canada Graduate Scholarship, focused on urban-rural childhood asthma diagnostic patterns, asthma severity and phenotypes. The project presented a unique opportunity to investigate if the lower asthma

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Featured Child Health Researcher

Dr. Ben Tan

The Division of Infectious Diseases, in the Department of Pediatrics, has two members, Dr. Ben Tan, and Dr. Athena McConnell, whom collaborate extensively in clinical research within the Department of Pediatrics. This month we feature Dr. Ben Tan.



Dr. Tan graduated from the University of Toronto medical school, during which he received a 3-year scholarship in gastroenterology to study an animal model of achalasia. After a rotating internship, he finished pediatric residency and infectious diseases fellowship at the Children's Hospital of Eastern Ontario in Ottawa. He received the PSI Award for research entitled, "Is the Hib vaccine working in Ontario and Quebec?". He later worked for a year as a field epidemiologist at the Laboratory Centre for Disease Control, Health Canada. During this stint he conducted 3 outbreak studies in Nunavut communities – two related to E. coli O157:H7, and the third a measles outbreak on Baffin Island. He then joined the Department of Pediatrics at the University of Saskatchewan, where

he is a pediatric infectious diseases consultant, and conducts clinical and epidemiological research.

Dr. Tan's prior research activities have included: examination of the cost-effectiveness of the immunization initiative in Saskatchewan in response to the 1993 Meningococcal C outbreak; outbreak of trichinellosis in two northern Saskatchewan communities; epidemiology of RSV disease at Royal University Hospital and Regina General Hospital; and clinical randomized control trial of palivizumab against RSV disease.

Dr. Tan is currently involved in long-standing, multi-centre studies, including a surveillance project for perinatal transmission of HIV. This project began in the mid-1990's in collaboration with the Canadian Pediatric AIDS Research Group (CPARG), and consists of a network of over 30 hospitals in Canada documenting proportion of infants who get infected, and the effectiveness of preventive measures (antiretroviral treatment of the mothers and prophylaxis in newborns). These data are entered electronically, analysed at HQ in Vancouver, and are reported yearly to the Public Health Agency of Canada (PHAC) and presented at HIV/AIDS research meetings. Up until 2017, Saskatoon was the only centre reporting in Saskatchewan.

Dr. Tan also participates in the Immunization Monitoring Program, ACTIVE (IMPACT), which is a surveillance system funded by PHAC and administered by the Canadian Paediatric Society (CPS). It was started in 1991, at first with 5 pediatric tertiary care centers, then expanded to 10 in 1993, and to 12 in 1999 (Saskatoon is the 12th centre). It was set up as a "safety net" for actively documenting any unusual adverse events following immunization (AEFI). As a second objective, IMPACT also conducts surveillance for vaccine-preventable diseases (VPD), especially before and after introduction of vaccines, to determine the changing epidemiology of those diseases. Specific VPD targets are pertussis, invasive bacterial

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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!



Indigenous Mentorship

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Indigenous intellectuals ready to tackle the requirements of a young and growing Indigenous population. The strength of our network is our potential to weave Indigenous ways of knowing, being, and lived experience, with interdisciplinary health-focused research and training. Saskatchewan is home to nationally and internationally recognized Indigenous health researchers, and our network's aim is to attract high quality Indigenous mentees and new investigators to the province, as well as grow our provincial talent. Alongside this, we will learn from our mentee/mentor community in order to better align institutional standards with community engaged research and scholarship that is accountable to the Indigenous peoples of Saskatchewan and beyond.



Dr. Caroline Tait

Interested in connecting with our network? You can find us online at www.usask.ca/groups/indigenous-mentorship or e-mail us at sk.imnp@usask.ca Or come see us in person! This month, we're hosting a networking night in partnership with the Indigenous Graduate Students' Council (IGSC) on January 31st from 5-7 pm, Graduate Student Association Commons (1337 College Drive). Here, you'll learn from the Student Employment and Career Centre networking ideas and strategies and meet colleagues and senior scholars doing Indigenous research on campus. Snacks provided!

SAVE THE DATE!

The Department of Pediatrics presents,
Child Health Research Trainee Day

Thursday, April 26th, 2018

12-6pm

Louis Loft

- Abstracts and RSVPs due **March 1st, 2018**
- Residents, graduate and undergraduate students, and postdoctoral fellows from any discipline who are engaged in child health related research are invited to present.
- Mix of poster and oral presentations
- Final agenda will be sent out once all of the abstracts are in
- Lunch and appetizers included!
- Contact erin.loose@usask.ca for abstract submission form and to RSVP

Coming Events

FEB THU 1	Competency by Design Updates Drs. Saxena and MacLean Pediatric Grand Rounds 11am-12pm East Lecture Thtr	FEB TUE 6	CIHR Project Grant Spring 2018 Competition Registration Deadline	FEB THU 8	Can Baby-Friendly and Fed is Best Co-Exist? Dr. Krista Baerg Pediatric Grand Rounds 11am-12pm East Lecture Thtr	FEB THU 15	Pediatric Anxiety Disorders Dr. Sarda Madhav Pediatric Grand Rounds 11am-12pm East Lecture Thtr
MAR THU 1	Choosing Wisely - for Pediatrics Dr. Jeremy Friedman Pediatric Grand Rounds 11am-12pm East Lecture Thtr	MAR TUE 6	CIHR Project Grant Spring 2018 Competition Application Deadline	MAR THU 8	Pediatric Oncology Dr. Chris Mpofu Pediatric Grand Rounds 11am-12pm East Lecture Thtr		
MAR THU 15	Physician Burnout Dr. Erin Woods Pediatric Grand Rounds 11am-12pm East Lecture Thtr	MAR THU 22	Undergraduate Medical Education (UGME) Career Advising & Year 5 Dr. Nair, Dr. Baptiste, and Stephanie Marshall Pediatric Grand Rounds 11am-12pm East Lecture Thtr	MAR THU 29	Epilepsy Surgery Dr. Walter Hader Pediatric Grand Rounds 11am-12pm East Lecture Thtr	APR THU 26	Child Health Research Trainee Day 12-6pm Louis Loft Send abstracts and RSVPs to erin.loose@usask.ca

Recent Publications & Presentations from U of S Researchers

- . Anderson I, Robson B, Connolly M, Al-Yaman F, Bjertness E, King A, et al. *Indigenous and tribal peoples' health (The Lancet-Lowitja Institute Global Collaboration): a population study*. Lancet. 2016;388:131-57.
- . Bally JMG, Smith NR, Holtslander L, Duncan V, Hodgson-Viden H, Mpofu C, Zimmer M. *A metasynthesis: Uncovering what is known about the experiences of families with children who have life-limiting and life-threatening illnesses*. Journal of Pediatric Nursing. 2018;38:88-98.
- . Hinks A, Marion MC, Cobb J, Comeau ME, Sudman M, Ainsworth HC, Bowes J, Juvenile Arthritis Consortium for Immunochip, Becker ML, Bohnsack JF, Haas JP, Lovell DJ, Mellins ED, Nelson JL, Nordal E, Punaro M, Reed AM, Rose CD, Rosenberg AM, et al. *The genetic profile of RF-positive polyarticular juvenile idiopathic arthritis (JIA) resembles adult rheumatoid arthritis (RA)*. Arthritis & Rheumatology. 2018; accepted for publication.
- . Khamis MM, Adamko DJ, El-Anead A. *Development of a validated LC- MS/MS method for the quantification of 19 endogenous asthma/COPD potential urinary biomarkers*. Anal Chim Acta. 2017;989:45-58.
- . Markland A, Hansen G, Banks A, Chibbar R, Adamko D. *A pediatric case of diffuse alveolar hemorrhage secondary to poststreptococcal glomerulonephritis*. Case Reports in Critical Care. 2017.
- . Oluwole O, Arinola GO, Huo D, Olopade CO. *Household biomass fuel use, asthma symptoms severity, and asthma underdiagnosis in rural schoolchildren in Nigeria: a cross-sectional observational study*. BMC Pulm Med. 2017;17:3.
- . Rumsey DG, Guzman J, Rosenberg AM, Huber AM, Scuccimarri R, Shiff NJ, Bruns A, Feldman BM, Eurich DT, for the ReACCh-Out Investigators. *Children with enthesitis have worse quality of life, function, and pain, irrespective of their juvenile arthritis category*. Canadian Rheumatology Association-Arthritis Health Professions Association Annual Scientific Meeting in Vancouver, February 21-24, 2018.

Dr. Oluwafemi Oluwole

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prevalence in rural compared to urban children was due to asthma under-diagnosis in rural compared to urban children. The core idea was that through a blinded physician assessment of asthma and/or the use of clinical lung function assessments with symptoms history, more rural children could be identified as cases for asthma. Findings from the study revealed evidence of significant asthma under-diagnosis in rural compared to urban settings and the possibility of misdiagnosis of childhood asthma in the absence of objective clinical assessments. The results are currently in-press for publication with the Journal of Asthma.

Dr. Oluwole looks forward to continuing his research on child and rural health. Currently, he has been awarded a two-year Postdoctoral fellowship by the Saskatchewan Health Research Foundation to investigate asthma phenotypes and healthcare utilization patterns among children in Saskatchewan using a large population-based database that covers almost 99% of Saskatchewan children born between 1995 and 2014. He hopes to continue to expand collaborations with clinicians, researchers, other professional healthcare workers, and patients in research aimed at improving respiratory health among children.

In Dr. Oluwole's role as the Pediatric Resident Research Coordinator, he will be available to assist our residents with their research projects, including: matching residents with supervisors, formulation of research ideas, assistance with ethics applications and statistical analysis, and more. We ask that pediatric residents please contact Dr. Oluwole at, email: oluwafemi.oluwole@usask.ca; phone: 306-844-1225; office: RUH 3726.

Dr. Ben Tan

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infections (i.e. pneumococcal, meningococcal and Haemophilus influenzae serotypes), varicella and zoster, influenza, rotavirus. The vaccines for these infections do not necessarily cover every serotype, hence it is important to know why disease lingers or re-emerges. The group is also introducing surveillance for respiratory syncytial virus (RSV), especially if an RSV vaccine becomes available. Unlike other surveillance systems, which collect data passively (retrospectively), IMPACT monitors collect data in real-time, or shortly after patient discharge (active surveillance). IMPACT target data are analysed every several years, and have led to a myriad of publications, presentations at meetings, and also used for decision making regarding vaccine programs in the provinces. Both Dr. Tan and Dr. McConnell supervise these activities.

Dr. Ben Tan is an Associate Professor in the Department of Pediatrics, Division of Infectious Diseases, University of Saskatchewan

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:

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Next submission deadline is March 9, 2018!

Online version of the newsletter:
[www.medicine.usask.ca/
pediatrics/research/newsletter](http://www.medicine.usask.ca/pediatrics/research/newsletter)



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Pediatric Grand Rounds

“Can Baby Friendly and Fed is Best Co-Exist?”

Thursday, Feb 8th, 2018

Presented by:

Dr. Krista Baerg

Associate Professor
Department of Pediatrics
University of Saskatchewan

and

Julie Smith-Fehr

Maternal Services Manager
Healthy & Home/
Prenatal Care Program
Saskatchewan Health Authority

“Worried Kids Worrying About Worry: An Approach to Anxiety in Children”

Thursday, Feb 15th, 2018

Presented by:

Dr. Madhav Sarda

Staff Psychiatrist
Department of Psychiatry
Division of Child and Adolescent Psychiatry
University of Saskatchewan

*Pediatric Grand Rounds take place every Thursday,
11am-12pm, East Lecture Theatre (room G763),
Royal University Hospital*

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 partner in helping advance research in the Department of Pediatrics. For further information about the CHRTF: <http://www.medicine.usask.ca/pediatrics/research/CHRTF>. To **Donate** to the CHRTF: <http://give.usask.ca/online/chrtf.php>

