

## Advancing Knowledge Strengthening Communities

**ALMANAC** 07.2017 - 06.2019



## **Working Together for a Better World**

Words from our Department Head



## ANNE LEIS, PHD PROFESSOR AND DEPARTMENT HEAD

In the context of an ever-changing world, the 2017-19 report is presented in an almanac format in order to tell the story of these 2 exciting years in the Community Health & Epidemiology (CH&E) Department.

The theme Advancing Knowledge, Strengthening Communities is very fitting as our work has gained in breadth and depth at the local and national level and our reach has grown internationally.

Over these 2 years the Department has continued its expansion in size and capacity.

We were thrilled to welcome three Indigenous faculty into our midst. They have been instrumental in the Indigenization process of the Department and have guided our efforts toward truth and reconciliation. As Director of the CIHR institute of Indigenous people's health Dr. Bourassa has been a model and advocate for Indigenous health research conducted with communities as equal partners.

Our graduate students' enrollment reached 65 graduate students (37 MSc and 28 PhD candidates) with the new addition of 7 postdoctoral fellows; 40% of trainees are from international origin and we celebrate this diversity.

Twenty students graduated (7 PhD and 13 MSc) which is a record high. Scholarships and student support from all sources over these 2 years reached over \$1 million.

Grounded in solid partnerships with Mozambican colleagues and governments and thanks to the 2017 Global Affairs Canada's award (16. 6 M over 5 years), Dr. Nazeem Muhajarine and colleagues started the Canada-Mozambique Maternal Health project.

Other research activities and advocacy work were very much rooted in local communities and focused on the needs of community members from diverse origins.

From grassroots community groups to national and international organizations, the stories compiled in this almanac illustrate how community-engaged research can result in positive, concrete change.

This report is a collection of our collective accomplishments



Back row: Bonnie Janzen, Gary Groot, Derek Jennings, Cory Neudorf, Lori Hanson, Anne Leis Front row: Punam Pahwa, Huyn Lim, Nazeem Muhajarine, Carrie Bourassa, Rachel Engler Stringer, Marcel D'Eon, Juan-Nicolás Peña-Sánchez Missing: Lilian Thorpe, Malcolm King, Sylvia Abonyi, Eddie Rooke (till September 2018)

## Who We Are

## Faculty and Staff

Composed of 17 faculty with diverse backgrounds, education and expertise, the department of Community Health & Epidemiology offers training in epidemiology, population health and community engaged research using an equity and social justice lens. It also encompasses a range of associate members and adjuncts who collaborate in research project and contribute to students' training when research interests converge. The department offers a stimulating and safe environment to learn, grow and engage in meaningful research.

## Where We Are

We learn, teach, work, and live on traditional Indigenous territories that in Canada include treaty lands, unceded lands, and Métis homelands. We pay our respects to First Nation, Métis, and Inuit ancestors. The University of Saskatchewan is on the Homeland of the Métis and Treaty 6 territory. In our commitment to this place we value respectful relationships with the people around us -past, present, and future – and the animals, lands, waters, and skies that nurture us all. We strive to live these values in our programs, activities, and interactions: relationships grounded in safety and humility, respect for all peoples and their world views, reciprocity in all relationships, relevance to wholistic wellness, and responsibility for informed pedagogy and practice.

## By The Numbers

Core faculty members – 17

Research and support staff – 44

Cross-appointed faculty members and adjunct - 30

Public Health & Preventive Medicine Residents - 6

Medical faculty – 20 Emeritus faculty - 2 Postdoctoral fellows - 7 Graduate students - 65

## **Our Graduates**

## Diverse and Brilliant

Students are the heart of CH&E. They are truly a a diverse and brilliant mix of scholars from all over Canada, and from all over the world. Congratulations to the graduates of 2017-2019!



#### 2017

#### **MSC**

Grace Akinjobi, Lizbeth Hernandez, Sylvia Ohene-Bekoe, and Kylee Wilyman.

#### **PHD**

Donelda Gowan, Daphne McRae, Hazel Williams-Roberts, Lena Zimmo and Prosanta Kumar Mondal

#### **PHPM**

Dr. Jasmine Hasselback and Dr. Olanrewaju [Lanre] Medu

### 2018

#### MSC

Muhammad Khan, Olasoji Awoyera, Nina McKinstry, Ulfat Ara Khanam, Rabia Kanwal Shahid, and Tamara Rebecca Leah Waldron

#### **PHD**

Oluwafemi Oluwole, Thuy Thi Cam Le

#### **PHPM**

Dr. Hortense Nsoh Tabien and Dr. Rotimi Orisatoki

### 2019

#### MSC

Michelle Keir, Rachel Malena-Chan, Jonathan Melville,

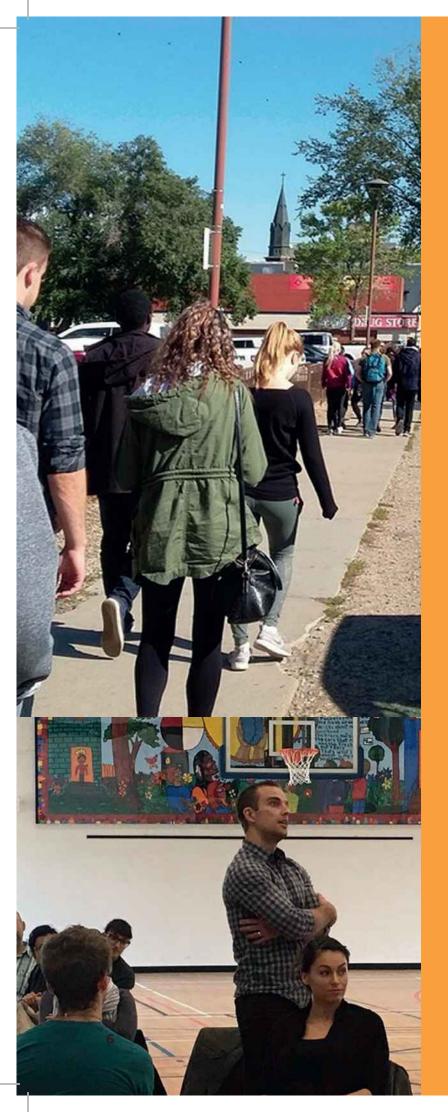
#### **PHD**

Thilina Bandara, Jeff Gu, Valerie Umaefulam

## **Research Highlights**

## Making Bold Advances

- \$16.6M by Global Affairs Canada over the next five years to work with Mozambique partners on improving the health and lives of 165,000 Mozambican women of child-bearing age and 23,000 newborns. U of S research team leader Dr. Nazeem Muhajarine and Mozambique Project director Lidia Monjane.
- Project THEPA (Targeted interventions to improve Healthy Eating and Physical Activity) a
  multi-university study recorded eating and exercise habits of residents in 21 Canadian cities.
  Researchers from SPHERU (Saskatchewan Population Health and Evaluation Research
  Unit) and the Léa-Roback Centre on Social Inequalities in Health, located at the University of
  Montréal received \$500,000 over three years from CIHR.
- As an invited panel speaker, Dr Lori Hanson presented a paper on 'Canadian imperialism,
   Nicaraguan state complicity, and a community's resistance to mining'. The XVIII Conference of
   the International Association of Health Policy in Europe (IAHPE): European Health Policies in
   the Era of Capitalist Crisis and Restructuring, Aristotle University, Thessaloniki, Greece
- Drs. Gary Groot, principal investigator (PI), Tracey Carr and Sylvia Abonyi recieved a two year Sprout Grant for Assessing the Support Needs for Saskatchewan Indigenous Cancer Patients and their Families: a Multi-method Study".
- \$1M received by Drs. Cory Neudorf, Nazeem Muhajarine, Hazel Williams- Robert to study
   "Screening for Poverty And Related social determinants and intervene to improve Knowledge
   of and links to resources (SPARK) Study. Establish Canadian standard for sociodemographic
   data collection, identify social needs in primary care.
- Dr. Engler-Stringer (PI) with Dr. Sylvia Abonyi (co-I) and Lise Kossick-Kouri (MSc student) were awarded a 2018 Social Sciences and Humanities Research Council (SSHRC) Connection Grant for a project entitled "Indigenous Food in the City Knowledge Dissemination and Exchange".
- Drs. Malcolm and Alexandra King received a 2.5M CIHR grant over 4 years for their project entitled, "Indigenous Knowledge Development Centres with a focus on Wellness - miyopimâtisiwin." In particular, promoting, maintaining and re-gaining wellness, by itself, or in the context of a variety of conditions or life circumstances that First Nations, Inuit and Métis peoples may find themselves.
- Drs. King A (PI), Jennings D (PI), Johnson-Jennings M, King, M (co-PI) received \$3.5M from CIHR (2019-2025) to establish Wuniska! Indigenous Centre on HIV/HCV/STBBI Inequities.
- Drs. Pena-Sanchez J, Jennings D (co-Pls) and and 10 co-I including community members received \$179,982 from SHRF and SCPOR (Sprout Grant) for the project: "Understanding and advocating for miyo-mhcihowin (good health and wellbeing) among Indigenous Peoples living with Inflammatory Bowel Disease".



# Learning Through Sharing

Taking the First Steps

## Training students to connect to the community:

Dr. JN Pena Sanchez offers a Community Plunge to second year medical students as part of the Community and Workplace Centred Learning Experience (CWCLE) which entails a minimum of 9 hours in the community.

This module recognizes the needs of people living in Saskatoon's inner city and familiarizes students with the resources available.

First year medical students took part in the United Way Poverty Simulation at Station 20 co-sponsored by the Division of Social Accountability and the Medicine & Society courses (Undergraduate Medical Education). The poverty simulation is a unique and powerful experience which challenges perceptions, changes perspectives and strengthens understanding and empathy.

The simulation replicates a month in the life of a family living in poverty. The ultimate mission of each of these families is to provide food, shelter and other basic needs with a limited income.

Participants experience a full range of encounters, obstacles and challenges, while trained volunteers populate the simulation as business owners, teachers, police officers, agency workers, service providers and government employees.

## **Learning Through Practice**

## Research Training Ground

The departmental Research Days provides an excellent experience for our medical residents and graduate students to hone their presentation skills, and expertise, and receive some constructive feedback from faculty. It also facilitates networking with classmates, faculty, and colleagues. In addition, students have the unique opportunity to present their outstanding research projects at local, national and international conferences for competitions.



#### **DR JEFF GU**

Resident and PhD student under the co-supervision of Drs. Groot and Engler-Stringer gave an oral presentation of his doctoral research at the Breast Cancer Symposium in Auckland, NZ, Nov 12-14, 2017. The title of Jeff's presentation was 'A systematic review of factors influencing women's choice of mastectomy versus breast conserving therapy in early stage breast cancer.'

#### **ROBIN REIST**

MSc candidate in CH&E presented her poster titled "Getting to the Bottom of Shoulder Pain: An Ergonomic Assessment of Bovine Rectal Palpations", at the 22nd Annual Applied Ergonomics Conference in New Orleans March 25-28, 2019; she was awarded one of four Creativeness in Ergonomics Student of the Year Awards with a free conference registration and \$1000 USD. She was the only Canadian student to win an award.

## **Sharing Our Expertise**

#### Current Research Collaborations

## **Facts**

28
CONFERENCE
PRESENTATIONS
IN
12
COUNTRIES

45%
MORE
PUBLICATIONS

65
GRADUATE
STUDENTS

#### **KEY ONGOING PARTNERS FOR HEALTHIER COMMUNITIES**

Through our commitment to cutting-edge research, we collaborate with communities locally and around the world to address health inequities and improve health outcomes regardless of origin or socioeconomic status.

#### Local community-based and non-profit organisations and coalitions

Station 20 West

Saskatoon Poverty Reduction Partnership

Saskatoon Food Council

Partners in food security and sovereignty advocacy

Saskatchewan Association for Community Living

Saskatoon Sexual Health Centre

Saskatoon Food Bank & Learning Centre

Saskatchewan Association for Community Living

White Buffalo Youth Lodge

United Way

Saskatoon Refugee Health Collaborative

YXE Connects

Lighthouse

**SWITCH** 

**OUT Saskatoon** 

#### Services and expertise

Canadian Gastro-Intestinal Epidemiology Consortium (CanGIEC)

Upstream

Choosing Wisely Canada (CWC)

Community Legal Assistance Services (CLASSIC)

Canadian Partnership Against Cancer

Réseau Santé en Français de la Saskatchewan

Mozambique: Department of Health (DPSI) directors of Health

Training Centres, Massinga Training Centre

Uganda Healthcare System and the Rwandan Healthcare System

Médecins Sans Frontières

WHO

Apunipima's Mossman Gorge Clinic

Women and Law in Southern Africa

Tamarack Institute

Canadian Journal of Public Health

Canadian Medical Association

Canadian Public Health Association (CPHA)

Canadian Mental Health Association (CMHA)

## **Enriching Curriculum**

#### Ahead of the Curve

#### **IMPROVING QUALITY**

Dr. Gary Groot, oncology surgeon and researcher leads the **Healthcare Research and Quality Improvement** (HRQI) team that supports vital research to improve clinical decision-making, advance patient safety, decrease medical errors and enhance health care quality and access. HRQI is uniquely positioned to support best practice research and to promote its dissemination to improve primary care in Saskatchewan.

HRQI puts research into the science of primary care and patient-centred outcomes and provides the critical evidence reviews needed to answer questions on acute, chronic, and comorbid conditions that family physicians see daily. HRQI research also examines health information technology to provide the evidence to inform the meaningful use of policy and practice so HIT is used effectively to improve Saskatchewan health care.





#### **IMPROVING RELATIONSHIPS**

Dr. Rose Robert's CHEP 819 course **Colonization impact** on Indigenous People's Health and Healing, delves into the historical and contemporary aspects of colonization, including federal policy initiatives (residential schools, origin of reserves, the 60's Scoop) and their impact on First Nations and Metis health status. The Truth and Reconciliation Commission (TRC) released its final report on residential schools in 2015, including Calls to Action (Health) to establish measurable goals to identify and close the gaps in health outcomes. This course links historical context with current reality, focusing on what is positive and valuable about Indigenous culture and its healing practices.

#### **IMPROVING METHODS**

We introduced a new course and a new unit! **Get Real: Introduction to Realist Methodology** (CHEP 898, Dr. Gary Groot), a one week intensive course providing students with expertise to conduct a Realist Synthesis or Evaluation project. Students are introduced to the philosophical assumptions of a realist philosophy, the implications for understanding policy and programs, and how they impact specific methods in design, data collection, data analysis, and reporting.



## **Engaged Scholarship**

## **Advancing Solutions**

A Graduate Program Review of the past 5 years documented our exceptional commitment to engaged scholarship. Employers of our graduates feel that CH&E trained students are better prepared than graduates of other departments!

- Our graduates are confident and successful in applying research methods they have learned through the program
- They have developed important skills of ethical community engagement
- They hold dear values of equity, fairness and justice which inform all activities and services of our Department.
- They are exceptional communicators and believe research powers knowledge and advances solutions for empowering people's lives

Our students grow a deep understanding and practice by working together with communities

## **Student Spotlight**

## Leading-Edge Research Success

We have exceptionally bright, hard-working students that have been published and presented in Canada and around the world. Some are the best in their field of research. We are proud to spotlight two such students in 2017-2019.

SEASON, BODY-MASS-INDEX,
DEMOGRAPHIC CORRELATES AND
BUILT ENVIRONMENT FEATURES
ARE ASSOCIATED WITH INCREASED
SEDENTARY BEHAVIOUR IN 9-14 YEAR OLD
CHILDREN.

#### **LARISSA LOTOSKI**

Her research has been presented across Canada, and she has won several prestigious CIHR travel awards. She presented at the Canadian Student Health Research Forum's CIHR National Poster Competition, a prestigious event recognizing the top 5% of doctoral students participating in health research within Canada. She won the prestigious (a first for one of our students!) national-level 2018 Dr. John Hastings Student Award. This award is given to the best student research paper (PhD) at the Canadian Public Health Association scientific meetings.



#### DIABETIC RETINOPATHY AWARENESS AND EYE CARE BEHAVIOR OF ABORIGINAL WOMEN IN SASKATOON.

#### **VALERIE UMAEFULAM**

Along with a travel award from the College of Medicine, she received a Confucius Institute Scholarship to spend four weeks in China, learning the language and immersing in the culture. She presented a paper entitled Development of Text Messages for Mobile Health Education to Promote Diabetic Retinopathy Awareness and Eye care Behavior among Indigenous Women at the International Conference for Smart Health (ICSH 2018) at Wuhan University.



## **Tomorrow's Leaders**

#### Creative Student Solutions

Knowledge Translation and Exchange (KTE) from 2017-2019, KTE events and products created by students included:

#### **RENAISSANCE WOMAN**

Renaissance Woman is a YouTube channel by April Liu's (PhD student in CH&E's Joint Biostatistics Program). She has created an 11-part series on statistics and demonstrations of how to perform statistical analyses, such as Hotelling's T2 Test for Mean Vectors.

#### **PATHWAYS: FEEDING EACH OTHER**

Pathways: Feeding Each Other is a documentary created by Lise Kossick-Kouri, (MSc student) and directed by the award-winning Tasha Hubbard. Lise and participants from her study storyboarded, collaborated on illustrations, and worked to ensure relationships between researchers and community members remained strong.

#### THE PATIENT-PROVIDER TOOLKIT

The Patient-Provider Toolkit is a collection of resources for people and families living with HIV, and their health care providers. Farzana Ali (PhD student), with a research team of people living with HIV and frontline service providers, created patient and provider Know-Your-Rights postcards, an infographic of health care optimization recommendations and a short video, all translated into French, Tagalog, Cree and Dene.

Creative, engaged students are advancing research to benefit communities

# **Community Driven Learning**

## Students Changing Lives

Specialized Community Engagement Learning Opportunities

## SOCIAL ACCOUNTABILITY LAB FOR LEARNING AND TEACHING (SALLT)

SALLT offers experiential learning opportunities for undergraduate, graduate students and residents to build community engagement, leadership and advocacy skills.

#### **GLOBAL HEALTH CONFERENCE**

Building Bridges, Breaking Barriers: Accessible Healthcare for Vulnerable Populations, the 2018 students run Global Health Conference, explored biases in healthcare, understanding health equity and cultural safety, integrating Indigenous knowledge in practice and research, and responding to the health needs of newcomers, refugees and migrant workers.

## HEALTH TRAINING IN FRENCH / FORMATION SANTÉ EN FRANÇAIS PROGRAM

Health Training in French / Formation Santé en Français program provides learning opportunities and practicum placements for health students and professionals to serve the francophone community in Saskatchewan. This project works in partnership with Réseau Santé en Français de la Saskatchewan and the AFMC national FrancoDoc project.

## MAKING THE LINKS - CERTIFICATE IN GLOBAL HEALTH PROGRAM (MTL-GHC)

Advanced training in socially accountable health care provision, relying on strong community partnerships for students working in the urban core of Saskatoon or Regina. MTL-GHC offers a 6-week placement in rural Indigenous communities in Saskatchewan, and an advanced 6-week practicum in Indigenous health or health of underserved international populations. Through the program, the DSA has established longstanding partnerships with Buffalo River Dene Nation, Île-à-la-Crosse, Pinehouse, Kawacatoose First Nation, Research and Training Center for Community Development in Vietnam, James Cook University in Australia, Universidade Lúrio in Mozambique, and Mbarara University of Science and Technology and Kigezi Healthcare Foundation in Uganda. Graduates of this program are more likely to stay in Saskatchewan, practice in primary care, and work in rural areas.



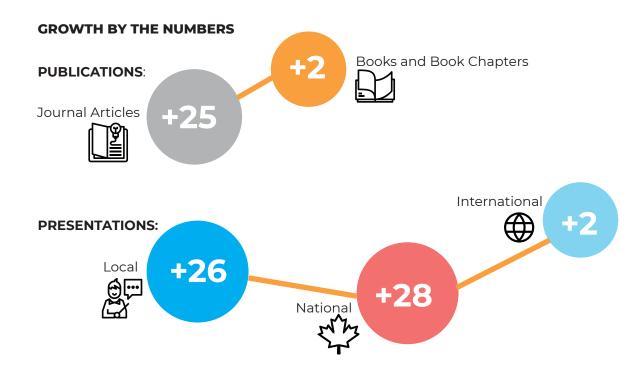
## **Did You Know?**

## Data on Research, Funding, and Partnerships

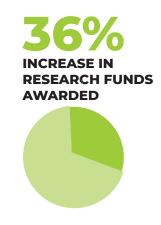
We worked with 15 local, 19 national and 7 international partners. CIHR was the highest funder with a total of \$11,429,407 in awarded funds. Total number of awards for this period was 61.

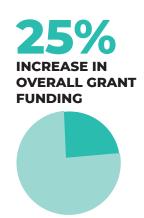
#### **FUNDING INSTITUTIONS**

- · Saskatchewan Health Research Foundation (SHRF)
- · Canadian Institute for Health Research (CIHR)
- · Social Sciences and Humanities Research Council (SSHRC)
- · Internal (Department, College of Medicine, University of Saskatchewan)
- · Other Institutions and foundations (local to national)
- Federal Government









# **Student Awards**Recognizing Excellence

#### **Confucius Institute Scholarship:**

Valerie Umaefulam

#### **SCPOR Trainee Launch Awards:**

Aisha Rafiq, Farzana Ali

## Frederick Banting and Charles Best Canada Graduate Scholarship (CIHR):

Lynette Epp

## Health System Impact Fellowship Scholarship:

Hazel Williams-Robert

#### **CH&E Legacy Award:**

- · Donelda Gowan
- Hasanthi Abeykoon

## Research Excellence in Interdisciplinary Awards:

Thilina Bandara

#### **U** of S Graduate Thesis Master's Award:

Rachel Malena-Chan

## Saskatchewan Innovation and Opportunity Scholarships:

April Liu and Tracy Everitt

#### **College of Medicine COMGRAD Awards:**

- Tracey Carr
- Marcus Ilesanmi
- · Valerie Umaefulam
- Jose Diego Marques Santos

#### **Travel Awards**

CIHR:

- · Larissa Lotoski
- Tracy Everitt

#### **Tamarack Institute:**

Kavitha Ramachandran



## **Recognizing Engaged Faculty**

Advancing Public Health Through Research



## FIRST NATIONS HEALTH AND SOCIAL SECRETARIAT HONOUR FOR RESEARCH

Dr. Carrie Bourassa was honoured by First Nations Health and Social Secretariat - Manitoba, for the work she has done as Scientific Director - IIPH in privileging Indigenous Knowledge, Indigenous Research Methodologies and ensuring Indigenous communities are determining the health research agenda in Canada. She was gifted a Star Blanket which the Knowledge Keeper Catherine Whitecloud explained that it is the modern day buffalo robe.

#### PATIENT-ORIENTED RESEARCH LEADER AWARD

Dr. Gary Groot received the 2018-2019 Patient-Oriented Research Leader Award for \$250,000 by SHRF and SCPOR. The award supports patient-oriented research leaders who will exemplify and champion the mandate and goals of SCPOR by leading a research program in the areas of indigenous health and/or mental health and addictions. Dr. Groot is the Principal Investigator for the research program "The Indigenous Health Collective: Advancing Indigenous Health Knowledge in Saskatchewan." This patient-oriented program will engage Indigenous patients in northern Saskatchewan as partners to pinpoint and address locally-identified health care needs through a collaboration between the Federation of Sovereign Indigenous Nations, the Métis Nation Saskatchewan, the Saskatchewan Cancer Agency, and the Saskatchewan Health Authority Vice President of Indigenous Health.



#### **USASK RESEARCH ON OPIOID USE OFFERS SOLUTIONS**

Led by Dr. Lori Hanson, associate professor in CH&E, Dr. Peter Butt, associate professor in the department of Family Medicine and James Dixon, PhD student, the study: "Consolidating Perspectives on Saskatoon's Evolving Opioid Crisis" has found that while care providers have different ideas about what constitutes a crisis, opioids are a growing concern in Saskatoon.

The study, started in January 2018, focused on speaking to local frontline workers and care providers who directly serve people using drugs. It found that a multi-layered response from multiple sectors to address the social, economic and political gaps in care services is needed here. For example, having policy makers and frontline care providers work together to create a one-stop shop would increase access to harm reduction supplies and treatment services, while alleviating costs between agencies. The study also found growing concern about the use of stimulants — crystal methamphetamine in particular. The importance of increasing service availability in Saskatoon to prevent further harms was the prevalent theme at the forum that gathered a number of stakeholders.

## **Faculty Honours**

## Making Global Impact

#### **DR. ANGELA SILVEIRA**

 elected as the co-Chair for the residents' council of Public Health Physicians of Canada (PHPC), representing PHPM residents, and is the first co-Chair elect from Western Canada, and the first from Saskatchewan.

#### **DR. GARY GROOT**

 named as Chair of the Canadian Partnership Against Cancer Equity Committee.

#### **DR. NAZEEM MUHAJARINE**

 appointed as Senior Editor of the Canadian Journal of Public Health.

#### DR. ZIAD AL BAGHDADI

 a recent graduate of CH&E, was appointed as Assistant Professor and Pediatric Dentistry Fellow in the Department of Preventive Dental Science Division of Pediatric Dentistry at the University of Manitoba's Rady Faculty of Health Sciences.

#### **DR. MARCEL D'EON**

 re-appointed for a five year term to the position of Editor in Chief of the Canadian Medical Education Journal (CMEJ).

#### DR. HYUN (JUNE) LIM

 published her second book, New Drug Development and Clinical Trials, in 2018. This is a follow-up to her first book (2015), Designs and Applications of Clinical Trials.

## **SPOTLIGHT**

Dr. Cory Neudorf



Professor Cory Neudorf's lauded career embodies the values and vision of CH&E, and is a testament to his important contributions to health systems research.

#### Between 2017-19:

- Impact Award recognized his work building capacity, advancing knowledge, decision making, and providing health, economic and social impact in Saskatchewan
- Reappointed as the Program Director of our Public Health and Preventive Medicine (PHPM) Residency Program for a second five-year term
- 2019 President's Award from the Public Health Physicians of Canada
- Awarded funds to support his Healthy Cities Think Tank
- He retired from his role as Area Lead Medical Health Officer (MHO) for the Saskatchewan Health Authority's (SHA's) Saskatoon Area.
- He continues to provide leadership as the MHO Medical Director for Surveillance and Health Status Assessment for the SHA.

## **Our Featured Projects**

## **Empowering Community Health**

## CANADA-MOZAMBIQUE MATERNAL HEALTH PROJECT (CMMH)

Centering women's maternal health and reproductive and sexual rights, the project addresses gaps in knowledge, skills, and resources, and centres women's empowerment. Community workshops, radio shows and social media explore qualified health workers, gender equality, birth control and family planning and access to income.

Women involved in the CMMH project discussed positive solutions such as the formation of Community Health Committees, with equal participation of women, that would organize resources for, and awareness of the issues affecting women's maternal health, and the development of micro-projects to provide local income for women.

The Micro Projects allied with an active Committee of Health are designed to bring more economic and social sustenance to the community and empowering women in key areas of leadership and direct economic support. Initiatives such as chicken and egg production, flour grinding mills, and better latrines will be the key areas of women's

involvement with a minimum of 50 per cent of women in Micro Projects and 75 per cent women in leadership positions.

Dr. Rachel Gough was a Making the Links medical student in Mozambique, when the course had just started and gave heath science students a chance to work in communities in northern Saskatchewan, west side neighbourhoods in Saskatoon and Mozambique.

Focusing on women's maternal health and reproductive and sexual rights, the project addresses gaps in knowledge, skills, and resources, and empowers women

Today, Rachel is a practicing doctor in sexual and reproductive health, and credits CMMH to the values of her medical practice.





## HEALTHY START, A POPULATION HEALTH INTERVENTION

Healthy Start-Départ Santé (HSDS) was designed as a population health intervention to increase opportunities for healthy eating (HE) and physical activity (PA) in 3-5 years old attending early learning childcare centres and it was extended to families during the Phase 3 of the project. Sponsored by the Réseau Santé en français de la Saskatchewan since 2011, the program has been implemented in English and French across rural and urban environments in both Saskatchewan and New Brunswick, and has been adapted for Indigenous and newcomer communities.

Thanks to great financial partnerships federal (PHAC), provincial (CIF) and Health authority, this two province initiative reached: 13,550 children, 318 training sessions, 490 sites trained, 1,700 people trained, and 16 community organizations trained.

Based on information from different sources and on 140 HSDS centres, it was found that the intervention was successful in reaching a large number of childcare centres and engaging both rural and urban communities across Saskatchewan and New Brunswick. Implementation fidelity of the initial training was high.

"Healthy Start was the kick start we needed to make changes in our child care centre" Of those centers who received the initial training, 75% participated in the mid-point booster session training. Centres reported increasing opportunities for physical activity and healthy eating, which were generally low-cost, easy and quick to implement. Of the 64 centres which responded at 10 months, 87% of those reported using the physical activity resource and 68% using the nutrition resource on a weekly basis.

Several faculty members in CH&E (Leis, Muhajarine, Engler-Stringer), post-doctoral and PhD students (Froehlich-Chow, Ramachandran) and others in Kinesiology (Humbert), Nutrition (Vatanparast) and Health Economics (Sari) were involved in the interdisciplinary evaluation component of this targeted yet far reaching intervention. Sixty-one ECCs were randomly selected and allocated to either the usual practice (n=30; n=433 children) or intervention group (n=31; n=464 children).

Preschoolers in the HSDS program demonstrated a significant increase in their locomotor motor skills. There was also a marginally significant increase in the portions of fruits and vegetables served to children in the HSDS program. The cost of the program per child was evaluated at 285\$. Sustainability was ultimately related to a sense of purpose and fun at the ELCC leadership and staff level, which in turn will foster children's enjoyment of both physical activity and healthy eating.

# Advancing Indigenous Knowledge and Leadership

## New Partnerships, New Research Networks

## In 2018, CH&E became the new home of the Institute of Indigenous Peoples' Health (IIPH).

Dr. Carrie Bourassa joined the University of Saskatchewan in September 2018 and made the department of Community Health & Epidemiology, College of Medicine her academic home. She is the scientific director of the CIHR Institute of Indigenous Peoples' Health (IIPH) which she has led since 2016.

She is also the Nominated Principal Investigator of Morning Star Lodge which is an Indigenous community-based health research lab in Regina, Saskatchewan, situated within Treaty 4 Territory and housed at the University of Saskatchewan. Founded in 2010, MSL hosts a number of research grants and utilizes a team of students at the undergraduate, graduate and post-graduate levels, trainees, Research Assistants, Community Partners, and Highly Qualified Personnel (HQP).

The lab has a unique open concept environment and employs a reciprocal learning and mentorship model to help build community capacity. Reciprocal Learning and mentorship means to make learning a two-way process, ensuring that the relationships between mentors (faculty, Elders, Knowledge Keepers) and trainees (students, research

assistants) as well as Community Partners, opens up new levels of understanding.

Learning is also holistic, reflexive, interconnected, reflective and relational. After two years engaging with grassroots community members, organizations, and researchers across Canada, the new five-year plan of the CIHR Institute of Indigenous Peoples' Health (IIPH) was announced on June 27, 2019 and will guide research investment of roughly \$43 million to 2024.

For Dr. Carrie Bourassa, "to truly address the serious health inequities that exist in comparison to the general Canadian population, Indigenous people need to lead the Indigenous health research in Canada." Grounding research in Indigenous holistic concepts of health is a priority of the plan: community wellness and resilience, Indigenous self-determination, environmental factors. While advancing research by increasing the number of Indigenous researchers and communities engaged in research, fostering Indigenous research mentorship, and undertaking research into land-based healing strategies will also be key strategies.





## **Advocacy and Health Projects**

## Our Commitment to Healthy Communities

#### **SPARK**

Screening for Poverty And Related social determinants and intervening to improve Knowledge of and links to resources (SPARK) Study establishes a Canadian standard for sociodemographic data collection and identifies social needs in primary care by following a large cluster of randomized controlled trials of an anti-poverty intervention.

#### **SASKATCHEWAN STORIES**

Saskatchewan Stories is a digital database project that centralizes information about all programs, projects, interventions, and initiatives about HIV and Hepatitis C that have been based in, or included, Saskatchewan. This interactive repository, stretching back to 1995, is co-created by provincial stakeholders of clinicians, community organizations, people living with HIV and Hepatitis C, researchers, and policy makers.

#### INDIGENOUS FOODS IN THE CITY

Indigenous Foods in the City: Community Dialogue and Action Plan Development is a workshop series supporting urban Indigenous organizations and individuals contributing to Indigenous food systems and food practices. With many communities identifying legal and other barriers to traditional food harvesting and sharing, these workshops support dialogue through networking and problem-solving support.

#### **IMPROVING SCHOOL FOOD**

Universal Integrated Healthy Lunch Intervention Research looks at what kids in and around Saskatoon are eating at school, and works towards a universal, curriculum-integrated school lunch program in partnership with the Saskatoon Public Schools Division and CHEP Good Food Inc.



## **Advancing Wellbeing**

## Our Work in Mental & Physical Health

## TRANSFORMING MIGRANT WORK CONDITIONS BY MIGRANT WORKER JUSTICE FOR SASKATCHEWAN

Drs. Lori Hanson and Michael Schwandt: This study shed light on the ways provincial legislation and regulations affect the well-being of migrant workers. Accessing health care, labour rights and occupational health were among the priorities identified.

#### SASKATOON'S FOOD INSECURITY ON U OF S CAMPUS

Limited finances for post-secondary students can lead to food insecurity. Dr. Rachel Engler-Stringer, faculty at U of S CH&E and her team randomly sampled 4,500 students in the winter of 2015—almost 20% of the student body—receiving responses from 1,359 of them (30% response rate). "39.5% of students were food insecure to some degree. Among them, 28.6% experience moderate to severe food insecurity. "I've seen data around student poverty, and this is very consistent," Engler-Stringer stressed.

**Project THEPA**: Targeted interventions to improve Healthy Eating and Physical Activity is a multi-university study across 21 Canadian cities on how health promotion initiatives are received by people. The project examines how health, socioeconomic status and geographic location factor into acceptance of these initiatives. This study identifies where to invest in health initiatives, encourages community involvement, and maps out future amenities and public spaces.

**INTERACT** Team Project: Interventions, Research, and Action in Cities Team is a national research collaboration of scientists, urban planners, and engaged citizens uncovering how the design of our cities shape the health and wellbeing of Canadians. In Saskatoon, INTERACT studies how changes to the city's transit system might impact physical activity, social interaction and wellbeing and examines the impact of route changes on transit use, rider satisfaction, etc.

#### **CHANGE LEADERS**

- Jack Hicks integrates policy and change federally. He co-created a national suicide prevention plan adopted by the House of Commons and the Federation of Sovereign Indigenous Nations' Saskatchewan First Nations Suicide Prevention Strategy.
- Dr. Kalyani Premkumar encourages physical activity and wellness leading CH&E team in the Great Cycle Challenge raising funds for children with cancer, and charity events for the Heart and Stroke foundation.
- Kathy Evans was appointed to the Board of Directors for the Schizophrenia Society of Saskatchewan for 2018-19, and advocates for change through empathy and awareness.

## **Going Forward**

Future Innovation

Words of gratitude and pride come to mind as we close these two years.

Let's keep our eyes on our mission and foster innovation, growth, and mutually beneficial relationships in order to understand, protect and promote health at the population level locally and globally.

Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has. ~Margaret Mead

In Memorium: Drs. Brian Habbick (2019) and Gerri Dickson (2017)



# Turning Research into Stronger, Healthier Communities

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