



SASKATCHEWAN POPULATION HEALTH AND EVALUATION RESEARCH UNIT



ANNUAL REVIEW  
2016-2017

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Cover (middle, top right)	Wanuskewin Park	Photo by Errol Sutherland
Cover (middle, bottom right)	School lunch study (Nov. 2016)	Photo by Kristen McEwen
Cover (top right)	Sarah Osman, Serene Kerpan, Sylvia Abanyi	Photo provided by Serene Kerpan



RESEARCH ASSISTANT AIYA AMERY INTERVIEWS STUDENT ABOUT HER LUNCH DURING A DATA COLLECTION FOR THE GOOD FOOD FOR LEARNING PROJECT IN NOVEMBER 2016.  
PHOTO BY KRISTEN MCEWEN

## MESSAGE FROM THE DIRECTORS

The 2016-17 year has brought changes to SPHERU and the sector of population health intervention research once more.

Throughout these changes, we have continued our commitment to our research goals including creating and distributing new knowledge; collaborating with other researchers, policy makers; and evaluating programs and initiatives. SPHERU itself has its first out-of-province researcher as Dr. Dan Fuller took up a full-time position at Memorial University, Newfoundland but will continue as SPHERU Research Faculty.

With the new academic year came changes to our Management Advisory Group (MAG), which provides advice and support for our unit. We welcome four new but familiar faces from both university campuses in the province. We welcome Dr. Marek Radomski (Vice-Dean Research), chair of the MAG, Dr. Adam Baxter-Jones (then Interim Dean, College of Graduate and Postdoctoral Studies) from the University of Saskatchewan, as well as Dr. Dena McMartin (Associate Vice-President Research Academic and Research) and Dr. Judy White (Dean of Social Work) from the University of Regina. All four research leaders serving on our MAG are themselves prominent researchers in their fields and we hope to be well-served by them.

We also thank Dr. Beth Horsburgh, Dr. David Malloy, Dr. Gordon McKay and Dr. Harold Reimer for their service as members of the MAG over the past number of years.

We also welcomed a new Post-Doctoral Fellow, Dr. Serene Kerpan, who worked with two of our SPHERU faculty at the University of Saskatchewan and received a \$100,000 grant from the Saskatchewan Health Research Foundation to explore the ties between physical activity and mental health in Indigenous youth in the province.

As always, projects are winding up as new ones begin to take shape. Healthy Start/Départ Santé (a bilingual initiative intended to encourage healthy choices for children) and the Healthy Aging in Place project with rural older adults are both moving into the final stages of their research. But new initiatives such as the New Horizons project, looking at social isolation among older adults in southern Saskatchewan, and the large global health project, Mozambique-Canada Maternal Health project are really beginning to ramp up. And the History of Health Timeline is back on-line after an absence of a couple of years due to technological issues that we have managed to resolve. More details on these projects, and others, are highlighted within these pages.

The 2016-17 Annual Review once again showcases SPHERU's contribution to population health in multiple scales—local, national and international. We encourage you to continue reading through this report to learn more about what this unique bi-university research unit has accomplished, and then engage with us for further dialogue.



Nazeem Muhajarine, PhD  
Co-Director, SPHERU  
University of Saskatchewan



Tom McIntosh, PhD  
Co-Director, SPHERU  
University of Regina

## WHO WE ARE

SPHERU is an interdisciplinary, bi-university unit at the Universities of Saskatchewan and Regina.

Founded in 1999, SPHERU promotes health equity through innovative, timely, policy-relevant research. Our researchers come from a variety of academic backgrounds including geography, political science, anthropology, epidemiology, social work, kinesiology, and nutrition. Researchers are located at three SPHERU sites: the main campus of the Universities of Saskatchewan and Regina, and at the University of Regina Prince Albert campus.

SPHERU has built a national profile and is one of a handful of research units in Canada well-known for advanced population health research.

SPHERU conducts intervention research to address issues of health inequity among vulnerable populations with a focus on children, rural older adults, and northern and Indigenous populations. This work involves evaluations of existing policies and programs, integrates interventions within research projects, and uses iterative and innovative knowledge translation strategies to ensure that findings from our research make their way to policy makers at multiple levels of governance.

### OUR MISSION

The promotion of health equity by understanding and addressing population health disparities through policy-relevant research – is incorporated into all of our projects. SPHERU's work includes the following types of research:

- Creation of new knowledge;
- Independent policy analysis;
- Collaborative research with communities;
- Collaborative research with policy makers; and
- Evaluations of policies, programs, and interventions.

## PARTNERS

Health research is a major focus for the University of Regina, with world-class researchers conducting leading-edge studies in aging, long-term care, pain assessment and management, cancer research, population health, rehabilitation and risk reduction, rural health, and northern health. Work at the University of Regina includes a multidisciplinary study of the impact of health determinants on various populations, as well as research on policy and program interventions designed to improve these determinants and provide equitable access to health services. Through the provision of funding and office space in both Prince Albert and Regina, the University of Regina continues to support SPHERU in its work to produce high-quality, policy-relevant research.



The University of Saskatchewan, through its involvement with SPHERU, is helping to redefine the way people think about health determinants and to chart new territory by actively engaging communities, non-governmental organizations, and policy makers in the research enterprise. With a wide range of health science colleges and programs, the University of Saskatchewan is committed to expanding health research. The university is home to SPHERU's Saskatoon-based researchers and staff. This relationship, along with an association with the College of Medicine, affords SPHERU opportunities to expand its research and achieve its goals.

## FUNDERS

SPHERU receives funding from a variety of sources. While its two university partners primarily provide in-kind support, the majority of SPHERU's funding comes in the form of project-specific grants from provincial and federal health research funding agencies. Key among these are the Phase III Health Research Group Grant from the Saskatchewan Health Research Foundation (SHRF) and operating grants from the Canadian Institutes of Health Research (CIHR) held by one or more researchers affiliated with the unit. As well, SPHERU has been awarded smaller grants from a number of sources that support conferences, knowledge translation, training, project development, and other activities. SPHERU undertakes contract research on behalf of governments and non-governmental agencies that align with the unit's overall mission, and also conducts program evaluations in the area of population health. All of these sources of funding combine to support the work of the unit.



Canadian Institutes of Health Research / Instituts de recherche en santé du Canada



Social Sciences and Humanities Research Council of Canada / Conseil de recherches en sciences humaines du Canada

Canada



Saskatchewan Health Research FOUNDATION

## MANAGEMENT ADVISORY GROUP

As a bi-university research group, SPHERU is guided by a Memorandum of Understanding (MOU) signed by the University of Regina and the University of Saskatchewan. The MOU, which is in effect for 2014-2019, outlines the cooperative agreement of the partner institutions to support the work of SPHERU and is operationalized through a Management Advisory Group (MAG). MAG members are senior university administrators who are appointed by the Vice-Presidents Research at both universities. SPHERU's co-directors meet twice a year with the MAG to provide updates on the group's research and financial activities and to seek advice and support for the unit.

### MAG members for 2016-2017:



**Dr. Adam Baxter-Jones** is a professor in the College of Kinesiology at the University of Saskatchewan. He held the position of interim dean in the College of Graduate and Postdoctoral Studies from 2013 to August 2017. Dr. Baxter-Jones is renowned for his international collaborations and seminal approaches to longitudinal research of children's growth and development. His many studies and leadership in this area have significantly altered how the medical and health professional communities view the role that exercise has on childhood growth and maturation.



**Dr. Dena McMartin** is the Associate Vice-President (Academic and Research) at the University of Regina and a professor in the Faculty of Engineering and Applied Science. Her research focus includes rural water and quantity needs in Canada and abroad, impacts of climate extremes on water availability and rural livelihoods in the Americas, and best practices in agriculture for improved water quality and quantity management, among others. Dr. McMartin has also developed and supported a number of academic and research partnerships within the university, community, and province.



**Dr. Marek Radomski (MD, PhD, DSc)** is the Vice-Dean Research at the University of Saskatchewan. He is the senior leader in the college for all research-related matters and provides vision for the development and implementation of a comprehensive, integrated research plan for the College of Medicine. His research interests include platelet regulation, cancer, nitric oxide and MMP biology and pharmacology, as well as nanomedicine, nanopharmacology and nanotoxicology.



**Dr. Judy White** is the Dean of Social Work at the University of Regina. She migrated to Canada from Trinidad in 1987. She received her bachelor and master of social work degrees from the University of Regina, and her PhD from the University of Manitoba. Much of her research has focused on the settlement experiences of immigrant and new Canadian women and families in Canada. Dr. White has worked at the University of Regina since 1999. She has served as Acting Dean from July 2013 to June 2015 and then accepted a five-year term as the Dean of Social Work.

## SPHERU

## FACULTY



**SYLVIA  
ABONYI,  
PHD**

Dr. Abonyi is an anthropologist working primarily in the area of Indigenous health. She explores the role of culture in health through a number of research projects in northern and remote areas of the province and across the Prairies. She is an associate professor with the University of Saskatchewan's Community Health and Epidemiology Department.



**JAMES  
DASCHUK,  
PHD**

Dr. Daschuk is an associate professor in the Faculty of Kinesiology and Health Studies at the University of Regina. His book, "Clearing the Plains: Disease, Politics of Starvation and the Loss of Aboriginal Life" (University of Regina Press, 2013) has won numerous awards including the Governor General's Medal for Scholarly Research in History.



**RACHEL  
ENGLER-  
STRINGER,  
PHD**

Dr. Engler-Stringer is an associate professor in Community Health and Epidemiology at the University of Saskatchewan. Her research expertise includes food security, food environment interventions, nutritional health inequities, community-based, and participatory research. Her current research includes a critical ethnographic study of food practices in the inner city, and studies on the school food environment.



**DANIEL  
FULLER,  
PHD**

Dr. Fuller is a Canada Research Chair in Population Physical Activity in the School of Human Kinetics and Recreation at Memorial University. His research is focused on using wearable technologies to study physical activity, transportation interventions, and equity in urban spaces. He focuses his methodological work on methods for natural experiments, and machine learning.



**PAUL  
HACKETT,  
PHD**

Dr. Hackett's research focuses on the impact of cultural change on community health. His research includes type 2 diabetes among First Nations in Saskatchewan and Manitoba. He is also team lead on the SPHERU project looking at the origins of health inequities in Saskatchewan. He is an assistant professor with the University of Saskatchewan Department of Geography and Planning.



**BONNIE  
JEFFERY,  
PHD**

Dr. Jeffery is a professor with the Faculty of Social Work at the University of Regina's Prince Albert site, and served as SPHERU Director from 2006 to 2012. She has extensive experience in community-based research with rural, remote and northern communities, and expertise in evaluation research. Her current work is focused on supporting healthy aging in place and reduction of social isolation for rural older adults.



**SHANTHI  
JOHNSON,  
PHD**

Dr. Johnson is a professor in the Faculty of Kinesiology and Health Studies at the University of Regina. Her work covers epidemiological research related to the surveillance and monitoring of falls and fall-related injuries among seniors, and intervention research on the understanding of the underlying mechanisms associated with falls among seniors in community and long-term care settings.



**TOM  
MCINTOSH,  
PHD**

Dr. McIntosh brings expertise on public policy making, knowledge transfer and exchange to numerous projects, including the political and economic components of SPHERU's historical analysis of population health in Saskatchewan. He is a professor and head of the Department of Politics and International Studies at the University of Regina, as well as co-director of SPHERU.



**NAZEEM  
MUHAJARINE,  
PHD**

Dr. Muhajarine is a social epidemiologist, academic and mentor with a passion for investigating family and neighbourhood contextual influences in children and promoting action on this knowledge. His research expertise include population health and primary care intervention research, physical activity in children, early childhood development, place and health, and application of epidemiological methods.



**CORY  
NEUDORF,  
MD**

Dr. Neudorf is an assistant professor in the Department of Community Health and Epidemiology at the University of Saskatchewan and Chief Medical Officer of Health for the Saskatoon Health Region. In this role, he collaborated with SPHERU to produce the *Healthy Families, Healthy Communities* report. As a research associate with SPHERU, he is also involved in research on health inequities.



**GABRIELA  
NOVOTNA,  
PHD**

Dr. Novotna is an assistant professor at the Faculty of Social Work at the University of Regina. Her research interests include understanding and addressing issues related to the implementation of treatment and interventions for substance abuse problems, and the development and testing of knowledge translation strategies into real-world clinical practice.



**NUELLE  
NOVIK, PHD**

Dr. Novik is an associate professor with the Faculty of Social Work at the University of Regina. Her research interests include the social determinants of health and equity, rural and remote practice in health and social services, aging and older adults, mental health, community-based research, and palliative care and bereavement. She works with the Healthy Aging in Place project.



**MICHELLE  
STEWART,  
PHD**

Dr. Stewart is the Director of the Community Research Unit at the University of Regina. Her research is focused on understanding and addressing the question of equal access to justice, supports and services for those living with stigmatized medical conditions, including Fetal Alcohol Syndrome Disorder (FASD) and mental illness.



**SARAH  
OOSMAN,  
PHD**

Dr. Oosman is a physiotherapist and an assistant professor at the School of Physical Therapy, University of Saskatchewan. She works in the area of health promotion with an interest in community-based health intervention research in partnership with First Nation and Métis communities. She is interested in culture-based health promotion programs.

## POST DOCTORAL FELLOW



### **SERENE KERPAN, PHD**

Dr. Serene Kerpan is a post-doctoral fellow in the Department of Community Health and Epidemiology at the University of Saskatchewan. She is working under the direction of Dr. Sylvia Abonyi and Dr. Sarah Oosman on her research *Bringing Together Physical Activity and Culture to Promote Mental Health for Indigenous Youth*. Dr. Kerpan was awarded a grant this year from the Saskatchewan Health Research Foundation for this project. She recently accepted a tenure track position with the University of Ontario Institute of Technology starting October 2017.

## PROJECT AND ADMINISTRATIVE STAFF

### **COLLEEN HAMILTON**

Research Coordinator  
Colleen is based at SPHERU's Prince Albert site, coordinating the administrative, financial and research activities for a number of Dr. Bonnie Jeffery's projects.

### **SHARIANNE CAFFET**

Project Coordinator  
Working from the University of Regina site, Sharianne coordinates the Reducing Isolation of Seniors Collective (RISC) evaluation project, funded by New Horizons for Seniors program.

### **CAROLYN TRAN**

Project Coordinator  
From the University of Saskatchewan site, Carolyn coordinates the community research activities of the Healthy Aging in Place project. She is completing her Master's degree in Social Work with the University of Regina.

### **KRISTEN MCEWEN**

Communications/Administrative Officer  
Based in Saskatoon, Kristen promotes and disseminates the work of the unit across both universities. She also handles the unit's social media pages and other administrative duties.

### **DIANA FEDOSOFF**

Research Officer  
As project coordinator for Dr. Sylvia Abonyi, Diana manages the administrative, financial, and research activities for a number of projects. Diana is based at the University of Saskatchewan site.

### **JOEL HEITMAR**

Research Officer  
Based in Saskatoon, Joel manages administrative, financial and research activities for Dr. Rachel Engler-Stringer as well as a number of other projects at the University of Saskatchewan.

## RESEARCH STAFF AND TRAINEES

Aiya Amery – Research Assistant  
Thilina Bandara – Student Research Assistant (PhD)  
Joanne Blythe – Administrative Assistant  
Janice Braden – Professional Research Associate  
Kelsey Brown -- Research Assistant  
Valerie Caron – Student Research Assistant (graduate)  
James Digel – Student Research Assistant (graduate)  
Alex Donald -- Research Coordinator  
Tracy Everitt -- Research Assistant  
Mariana Gonzales -- Visiting Research Student  
Donelda Gowan-Moody – Research Assistant  
Jacquelyne Hutton -- Student Research Assistant (undergraduate)  
Larisa Lotoski – Student Research Assistant (PhD)  
Nicole Loucks – Student Research Assistant (graduate)  
Swati Madan – Student Research Assistant (PhD)  
Jordan Nixdorf – Research Assistant  
Caitlin Olauson -- Research Assistant  
Selma Osman -- Research Assistant  
Derrick Owen – Research Assistant  
Boabang Owusu -- Research Assistant  
Thomas Roy – Research Assistant  
Khadija Samoylove -- Research Assistant  
Aisha Siddique -- Research Associate  
Joelle Schaefer – Technical Assistant  
Megan Sehn – Student Research Assistant (graduate)  
Tayyab Shah – Research Assistant  
Jacinda Sigurdson – Student Research Assistant (graduate)  
Tanner Treen – Student Research Assistant (graduate)  
Sylvana Tu -- Student Research Assistant  
Sugandhi Wickremarachchi – Student Research Assistant (graduate)  
Kylee Wilyman – Student Research Assistant (graduate)



RESEARCH ASSISTANT CAITLIN OLAUSON. PHOTO BY KRISTEN MCEWEN

## WHAT WE DO



SPHERU's work includes the creation of new knowledge, independent policy analysis, collaborative research with policy makers, and collaboration with communities to develop strategies to reduce health inequities.

### Healthy Children

SPHERU focuses on how social and physical environments play a role in the health and development of children. Our researchers also study the outcomes and impacts of community- and population-level interventions for children and families.

### Rural Health

With a significant portion of Saskatchewan's aging population living in rural communities, more people in those areas look to community groups to provide primary care and services. SPHERU research in this area is conducted in partnership with rural communities to create change based on study findings by developing programs and policy that can support healthy aging for older adults.

### History of Health Inequities

In order to compare Indigenous with non-Indigenous populations, or rural with urban populations, SPHERU is looking at a range of historical data collections to understand how health changed during the 20th century. SPHERU researchers are also looking at how health varied between communities, and how the lessons of the past could assist modern policy makers to reduce health inequities.

### Northern and Indigenous Health

Globally, Indigenous peoples experience poorer overall health outcomes when compared with other populations. Many Indigenous peoples and communities are characterized by incredible resilience and a growing capacity internally for addressing these inequities. SPHERU research projects and evaluation contracts in this area use a community-driven, participatory approach towards identifying relevant issues.

## KNOWLEDGE TRANSLATION HIGHLIGHTS

SPHERU brings researchers together in an environment that promotes and supports collaboration between academics and community partners. Researchers developing projects are able to draw on their colleagues' disciplinary expertise, experience and professional relationships.

SPHERU's knowledge translation and exchange activities are an integral part of our collaborative research strategy. We identify people who will potentially utilize research and involve them throughout the process.

### SPHERU knowledge translation and exchange strategies include:

- Publishing research findings in accessible, plain language documents;
- Using new media to share findings;
- Developing toolkits of findings for communities to use as resources;
- Developing research networks for knowledge exchange; and
- Delivering and participating in presentations, forums, and expert dialogues.

### SPHERU'S FOOD ENVIRONMENT RESEARCH PUBLISHED

In June 2016, contributions by SPHERU researchers were included in a series of papers in the Canadian Journal of Public Health entitled *Retail Food Environments in Canada: Maximizing the Impact of Research, Policy and Practice*.

SPHERU's Dr. Rachel Engler-Stringer coordinated the supplement, which provides an overview of unhealthy food landscapes across Canada.

It also includes a commentary on the state of food environments research in Canada entitled, *Retail food environments research: Promising future with more work to be done*.

Dr. Engler-Stringer co-authored the supplement with Dr. Daniel Fuller and Dr. Nazeem Muhajarine to outline key challenges in the field of food environment research.

Dr. Engler-Stringer and Dr. Muhajarine also looked at the impact of food swamps, neighbourhoods clustered with fast-food outlets and convenience stores, and food mirages, where healthy food is available but not affordable.

The findings from this food environment research was also featured on Global, CBC and Newswise media outlets.



SPHERU'S DR. PAUL HACKETT SPEAKS AT THE ADULT OBESITY EDUCATION WORKSHOP HOSTED BY THE YORKTON TRIBAL COUNCIL IN SASKATOON IN JANUARY 2017. PHOTO BY KRISTEN MCEWEN

### INDIGENOUS CHILDREN WERE HEALTHY BEFORE RESIDENTIAL SCHOOLS

Findings from research conducted by, SPHERU's Dr. Paul Hackett, Dr. Sylvia Abonyi and fellow University of Saskatchewan researcher Roland Dyck determined that Indigenous children were healthy prior to entering residential schools.

The researchers analyzed microfilm records of more than 1,700 children entering the schools between 1919 and the 1950s.

According to their findings, 80 per cent of children were at a healthy weight upon entering the schools.

This suggested that many of the health problems that disproportionately affect Indigenous people today can be linked back to the residential school experience. Findings from the study were published as an article in the International Journal of Circumpolar Health in June 2016.

While conducting the study, researchers noted the challenges of ethically carrying out archival research using public records of where issues of consent and confidentiality are present.

In the paper, researchers outlined the strategies taken in effort to mitigate these issues, including broad consultation with Indigenous partners, colleagues and organizations as the work unfolded.

### SPHERU FACULTY RECOGNIZED IN SHRF PUBLICATION

Dr. Bonnie Jeffery, Dr. Shanthi Johnson, Dr. Sylvia Abonyi and Dr. Sarah Oosman were among the researchers highlighted in the recent Saskatchewan Health Research Foundation report.

The 32-page publication, "Impacting Seniors' Health -- The Value of Aging-Related Research in Saskatchewan," recognized researchers, their work and contributions towards making a difference in seniors' health and aging-related health research.

SPHERU faculty were invited to attend the launch of the Saskatchewan Health Research Foundation publication in April.



DR. SERENE KERPAN, RIGHT, RECEIVES A \$100,000 GRANT FROM SHRF TO STUDY THE CONNECTION BETWEEN PHYSICAL ACTIVITY, CULTURE AND MENTAL HEALTH IN INDIGENOUS YOUTH. PHOTO PROVIDED BY SERENE KERPAN

### SPHERU POST-DOC RECEIVES SHRF GRANT

Post-doctoral research fellow Dr. Serene Kerpan was awarded a \$100,000 grant from the Saskatchewan Health Research Foundation to investigate the effect of physical activity on mental health in Indigenous youth in the province.

Acting as supervisors, SPHERU's Dr. Sylvia Abonyi and Dr. Sarah Oosman worked with Kerpan as she conducted her study.

Saskatchewan Indigenous youth are disproportionately affected by mental health issues, and they are the largest growing demographic in the province.

Kerpan worked with community members, youth, parents, leaders and Elders to design, implement and design the intervention.

### CLEARING THE PLAINS NAMED ONE OF 25 MOST INFLUENTIAL BOOKS IN CANADA

SPHERU's Dr. James Daschuk, and his best-selling academic book "Clearing the Plains," has continued to gain attention across Canada and internationally.

In November 2016, the book was listed by the Literary Review of Canada as "one of the 25 most influential Canadian books of the past 25 years."

Daschuk's book chronicles the history of disease, politics, starvation and the loss of Indigenous life on the prairies, as well as the role the federal government played, particularly under Prime Minister John A. Macdonald.

The book has had previously won a number of other awards including the Governor General's History Award, the Sir John A. Macdonald Prize as well as six Saskatchewan Book Awards.

*Clearing the Plains* has inspired a number of projects, including the company Colonialism Skateboards, founded by Michael Langan, which was inspired by Daschuk's research.

A New York Times op-ed by Stephen Marche mentioned *Clearing the Plains* in fall 2016, in which Marche commented on Prime Minister's Justin Trudeau's relationship with Indigenous people and the environment in Canada.



THE NEW HORIZONS FOR SENIORS PROJECT TEAM IS EVALUATING EXISTING PROGRAMS IN COMMUNITIES IN ORDER TO BECOME MORE AWARE OF THE NEEDS OF OLDER ADULTS. THE TEAM IS COLLABORATING WITH THREE AGENCIES: SASKATCHEWAN SENIORS MECHANISM, ALZHEIMER SOCIETY OF SASKATCHEWAN AND THE CANADIAN RED CROSS -- SASKATCHEWAN. PHOTO BY DALE WILLIAMS

### REDUCING SOCIAL ISOLATION IN OLDER ADULTS

SPHERU researchers are collaborating with provincial agencies to evaluate the effectiveness of programs designed to reduce social isolation experienced by urban and rural older adults.

The Reducing Isolation of Seniors Collective (RISC) partners include the Saskatchewan Seniors Mechanism, the Alzheimer Society of Saskatchewan, the Canadian Red Cross (Saskatchewan), along with the Lifelong Learning Centre at the University of Regina. SPHERU's role is to evaluate the collective impact of the RISC initiative in reducing social isolation of seniors.

The evaluation is funded in part by the Government of Canada's New Horizons for Seniors Program and will receive \$504,241 during the next three years.

Project lead, Dr. Bonnie Jeffery, Dr. Tom McIntosh and Dr. Nuelle Novik, will form the Evaluation Oversight Committee, along with Dr. Chad Nilson of Living skies Centre for Social Inquiry.

Upon completion of the evaluation, SPHERU will present its findings and results at a one-day policy summit where policy and community representatives from Central and Southern Saskatchewan will be in attendance.

Researchers are partnering with three agencies who have received funding for their projects:

**Saskatchewan Seniors Mechanism:** is fighting ageism by creating a culture of inclusion with rural, small urban and Francophone communities to help them become age-friendly; reducing ageism by changing the way older adults are portrayed in Saskatchewan media.

**Alzheimer Society of Saskatchewan:** is working with individuals, and urban and rural communities, to become dementia friendly; raising awareness about the warning signs of dementia and the importance of diagnosis.

**Canadian Red Cross – Saskatchewan:** is providing friendly visiting for isolated older adults.

### SPHERU FACULTY FEATURED IN DISCOURSE

SPHERU faculty have been featured in the first two issues of a new University of Regina research magazine.

Discourse debuted in the fall of 2016 and featured Dr. Michelle Stewart and Dr. Shanthi Johnson. Dr. Stewart's study on people living with Fetal Alcohol Spectrum Disorder (FASD) was in the article entitled, "Bridging the gap: Research seeks to understand FASD."

The article explores how Dr. Stewart is studying FASD, how it is understood, and how these interpretations can be improved and used to support for people living with FASD.

The issue also focused on Dr. Johnson's award-winning work in a profile entitled, "Innovation Award: Impacting the lives of seniors."

The article notes that Johnson was awarded the 2016 Award of Innovation for her project, "Saskatchewan Advantage: Improving functional Capacity and Preventing Falls Among Rural and Urban Seniors."

The project increased mobility and independence in older adults by teaching simple but effective physical exercises to keep older adults in their homes longer.

In the second issue of the new magazine, Dr. Bonnie Jeffery, Dr. Tom McIntosh and Dr. Shanthi Johnson weighed in on how to achieve health research with an impact on the local community and across the country.



SPHERU'S DR. MICHELLE STEWART APPEARED IN THE FIRST ISSUE OF DISCOURSE, A NEW UNIVERSITY OF REGINA RESEARCH MAGAZINE, TO DISCUSS HER WORK ON STUDYING FETAL ALCOHOL SPECTRUM DISORDER (FASD), HOW IT IS UNDERSTOOD AND HOW TO SUPPORT PEOPLE LIVING WITH FASD.

The story highlights several of SPHERU's current projects, including reducing social isolation for older adults in rural parts of the province, and Dr. Johnson's work with the Regina Qu'Appelle Health Region to prevent falls by creating an exercise program for older adults living on their own.

Dr. McIntosh said that health research projects can be more than an "interesting experiment." He noted that researchers are becoming more interested in the outcomes of their work and the impacts it could have economically.

All issues of Discourse are available on the University of Regina website: [uregina.ca/external/communications/publications/discourse.html](http://uregina.ca/external/communications/publications/discourse.html).



THE HEALTHY START/ DÉPART SANTÉ TEAM LEADS THE GROUP IN SOME AFTERNOON EXERCISES BEFORE BREAKING INTO GROUPS TO DISCUSS THE FINDINGS OF PHASE 2 OF THE INITIATIVE AND BRAINSTORM WAYS ON HOW TO MOVE FORWARD. PHOTO BY KRISTEN MCEWEN

### SPHERU AND A HEALTHY START

SPHERU partnered once again with the Healthy Start/Départ Santé team as it moved into the next phase of their early childhood initiative.

Healthy Start/Départ Santé (HSDS) is a bilingual initiative intended to encourage healthy eating and physical activity for children aged three to five.

On January 18, 2017, program staff, community partners, and policy makers gathered at the Healthy Start/Départ Santé Symposium in Saskatoon to share the program outcomes and evaluation findings to date, and to discuss implications of for policy and practice.



SPHERU'S DR. NAZEEM MUHAJARINE SPEAKS AT THE HEALTHY START/ DÉPART SANTÉ SYMPOSIUM IN JANUARY. HE EMPHASIZED THE NEXT OBJECTIVES OF THE CHILDHOOD INITIATIVE. PHOTO BY KRISTEN MCEWEN

Dr. Nazeem Muhajarine was invited to deliver closing remarks at the Symposium, emphasizing on the next objectives of the initiative.

“It comes down to sustainability,” Muhajarine said. “We have to be able to sustain this. And please advocate for this, please stay engaged, please innovate and please practice what you know to be right and true.”

As the initiative moves into Phase 3, HSDS plans to utilize SPHERU's assistance to look at the results of HSDS Phase 2 (2013-2017). Together, SPHERU and the HSDS team will be working to better understand where, on whom, how and why the HSDS had an impact on centres and preschool children.

SPHERU will also be looking at the HSDS knowledge development and exchange activities in phase 2 and evaluating its effectiveness. The results from this investigation will inform the KDE strategy in Phase 3.

SPHERU's Dr. Gabriela Novotna and Dr. Muhajarine will be working with the HSDS team during this collaboration.

### ASPIRATIONS FOR AGING IN PLACE

SPHERU researchers took part in a two-day conference in April that held sessions on an interprofessional approach to patient/client/family-centred care for older adults.

Dr. Sylvia Abonyi and Dr. Sarah Oosman gave a presentation entitled, “Aspirations for Aging in Place: Implications for the Healthcare of Rural and Remote Older Adults.”

The pair spoke about creating cultural humility within health care environments.

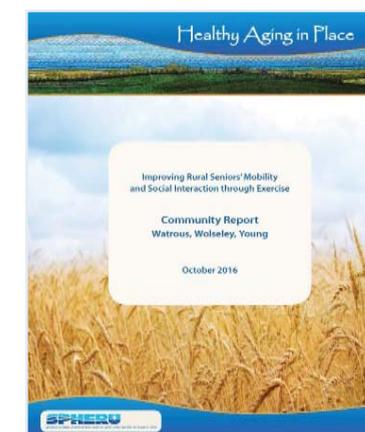
Dr. Oosman called for professionals to take into consideration their own cultural background, how it impacts their personal philosophy, and how that may affect the individuals they're treating.

Dr. Abonyi shared anecdotes and personal stories of real patients from rural communities and the circumstances surrounding events such as attending a medical appointment.

Dr. Bonnie Jeffery also helped to organize and moderate the two-day event in Saskatoon.



DR. BONNIE JEFFERY, DR. SYLVIA ABONYI AND DR. SARAH OOSMAN AT THE TRANSFORMING THE CARE OF OLDER ADULTS THROUGH INTERPROFESSIONAL TEAMS CONFERENCE IN SASKATOON. PHOTO BY KRISTEN MCEWEN



### SHRF HEALTHY AGING IN PLACE - FIRST STUDY COMPLETED

A report of findings from the first study of the Healthy Aging in Place (HAiP) research project has been prepared and disseminated to the research communities involved in the study. Community presentations were held in Young, Watrous and Wolseley in early March 2016.

The study involved an exercise program implemented in partnership with Forever... *in motion*. The report included findings of how the exercise program had an impact on rural older adults' mobility, social interactions and the benefits and challenges the program.

SPHERU's Bonnie Jeffery, Nazeem Muhajarine, Sylvia Abonyi, Paul Hackett, Shanthi Johnson, Tom McIntosh, Nuelle Novik and Sarah Oosman were all involved in the study. The Study 1 report is also available on SPHERU's website under the Healthy Aging in Place project.

## \$16 MILLION AWARDED FOR MOZAMBIQUE MATERNAL HEALTH PROJECT

A SPHERU faculty-led project, aiming to reduce maternal deaths in Mozambique, received \$16.6 million over the next five years from Global Affairs Canada in July 2017.

SPHERU director Nazeem Muhajarine and project director Denise Kouri are leading a team of Saskatoon leaders and university researchers, including SPHERU's Sylvia Abonyi, to improve health services for women and addressing barriers that prevent women's access to care in Mozambique.



Members of the community health committee in Tsele, Inhambane Province, Mozambique.  
DR. NAZEEM MUHAJARINE IS PART OF THE TEAM AIMING TO REDUCE MATERNAL DEATHS IN MOZAMBIQUE. IMAGE COURTESY OF YOUTUBE

The team is partnering with national and provincial health ministries in Mozambique. Mozambique has one of the highest maternal mortality rates in the world – 489 deaths per 100,000 live births in 2015.

A team of 25 University of Saskatchewan undergraduate and graduate students in medicine, nursing, nutrition, and physiotherapy, will be working on the project, aimed to improve birth conditions in 20 rural communities in five health districts.

The Mozambique maternal health project will:

- Train more than 1,000 new health care workers, to improve practitioners' training and responses to women's needs in maternity clinics.
- Hire close to a dozen staff members, consultants, and five community workers in communities to educate people about gender equity, women's sexual and reproductive rights, and empower women to use health facilities.
- Educate youth about gender equity and improve rights and health of adolescent girls by visiting schools with workers and health ministry staff.
- Purchase three ambulances for district hospitals, and 20 specially equipped off-road vehicles in the communities.
- Create a supportive network between local midwives, traditional healers and women's leaders.
- Build five maternal clinics and renovate five existing clinics.
- Build 10 waiting houses, so women nearing their due date will be relocated close to a hospital.
- Determine if waiting homes are effective in delivering better outcomes for women.

## OLDER ADULTS VOICE CONCERNS ABOUT FALLS

SPHERU researchers conducted a study about the frequency of falls among older adults and the physical and psychological consequences.

Dr. Shanthi Johnson, Dr. Bonnie Jeffery, Dr. Juanita Bacsu, Dr. Sylvia Abonyi and Dr. Nuelle Novik contributed to the study.

The study examined the experiences of 42 rural older adults and analyzed the nature, causes, and consequences of falls and injuries.

***“Falls are common and costly. The study highlighted the nuanced variation in how falls are voiced and experienced by rural seniors.”***  
- Dr. Shanthi Johnson

“Falls are common and costly,” Dr. Johnson said. “The study highlighted the nuanced variation in how falls are voiced and experienced by rural seniors.”

The study found that falls were not only common among elderly people but falls and almost-falls had various physical and psychological consequences.

Older adults also tended to rely on support from family and friends instead of turning to health professionals and the health care system.

Some older adults use adaptive strategies to avoid falls, as opposed to fall prevention strategies. For example, older adults may move laundry to the main floor of the house instead of using an established strategy like exercise.

## CIHR PROVIDES FUNDING FOR MUSE PROJECT

In May, the Multisectoral Urban Systems for health and Equity in Canadian cities (MUSE) team learned that CIHR would be investing \$2 million into their project.



As part of a \$17.7 million pledge to invest in nine intersectoral prevention research projects, Dr. Lise Gauvin's research team at Université de Montreal and CRCHUM (University of Montreal Hospital Research Centre) are using the funds to research how to make built environments in four cities across the country more favourable to healthy eating and physical activity.

SPHERU's Dr. Nazeem Muhajarine and Dr. Cory Neudorf will be working with Dr. Gauvin and her team as they prepare to launch MUSE.

## SYMPOSIUM AT WANUSKEWIN PARK

There was symmetry in the closing symposium for the First Nations Lung Health Project at Wanuskewin Park.

“The opening for this whole project took place here at Wanuskewin Park, so the closing -- it’s fitting that we have it here as well,” Dr. Sylvia Abonyi said.

Researchers, project staff, community leaders, and stakeholders from across the country, gathered at Wanuskewin Park on June 13 to recap and summarize the results of the five-year long project and decide what to do with the information on local and policy levels.

“We’ve produced a lot of data in the project,” Dr. Abonyi said. “There are a lot more questions that we can answer that we haven’t already answered. We’d like to know what those (questions) are.”

The First Nations Lung Health Project explored health and living conditions of people in two First Nations communities. Two data collections were conducted over the years, looking at factors such as lung function, allergy tests, basic social determinants and housing conditions.

The project also evaluated individual and contextual factors on the outcomes of asthma,

**“We’ve produced a lot of data in the project. There are a lot more questions that we can answer that we haven’t already answered. We’d like to know what those (questions) are.”**  
- Dr. Sylvia Abonyi



SPHERU'S SYLVIA ABONYI AND KATHLEEN MCMULLIN EMCEE THE CLOSING SYMPOSIUM AT WANUSKEWIN PARK ON JUNE 13. PHOTO BY KRISTEN MCEWEN

chronic bronchitis, and other respiratory conditions.

Between the data collections, the team tried out interventions at the community level to make some changes.

Throughout the project, the research team worked closely with the communities to ensure research was being done in a good way, Dr. Abonyi said.

The project launched two programs called the Green Tree Program and the Green Light Program. Through the Green Tree Program, school communities helped children connect the idea of a tree in nature as a symbol of a healthy respiratory system.

The Green Light Program is a community-chosen intervention that addresses non-traditional use of tobacco.

After four years, the number of individuals becoming free from non-traditional use of tobacco increased; the number of households free from non-traditional use of tobacco increased; and children were more knowledgeable of respiratory topics, including the respiratory system and how to keep lungs healthy.

During the closing symposium, Dr. Abonyi noted that the team and co-principal investigators want to get a sense of what sort of policy and other intervention programs should be considered as the project moves forward.

SYMPOSIUM ATTENDEES BROKE INTO GROUPS TO DISCUSS AND IDENTIFY THE NEXT STEPS IN ADDRESSING HOUSING ISSUES, SLEEP APNEA AND LUNG HEALTH ISSUES IN FIRST NATIONS COMMUNITIES. PHOTO BY ERROL SUTHERLAND



The symposium also served as an opportunity to consider interest in future studies for the two participating communities.

The project, also known as “Assess, Redress, Re-assess: Addressing disparities in respiratory health among First Nations People,” was led by Dr. Abonyi, Dr. James Dosman, Dr. Jo-Anne Episkenew, and Dr. Punam Pahwa.

The symposium finished with a memorial feast to honour, remember, and recognize the contributions of co-principal investigator and colleague Dr. Jo-Ann Episkenew who passed away in 2016.

## AWARDED PROJECTS

SPHERU researchers hold grant funds as principal investigators or co-investigators on a number of projects related to our research themes. The following is a listing of some of the recently awarded and continuing projects our researchers are working on, often collaboratively with others at Saskatchewan universities, and institutions throughout Canada and abroad.

### **ENGAGING COMMUNITIES AND HEALTH WORKERS FOR SEXUAL, REPRODUCTIVE, MATERNAL AND NEWBORN HEALTH**

*SPHERU RESEARCHERS: NAZEEM MUHAJARINE (CO-PRINCIPAL INVESTIGATOR), SYLVIA ABONYI (CO-INVESTIGATOR), DENISE KOURI (PROJECT DIRECTOR)*

Global Affairs Canada (\$16,594,946) 2017--2022

Maternal mortality rates remain high in Mozambique -- an estimated 408 deaths per 100,000 live births. The University of Saskatchewan has teamed up with the Mozambique Ministry of Health (MISAU), specifically the Province of Inhambane health Directorate (DPSI), to improve sexual, reproductive, maternal and newborn health for women, adolescent girls and newborns in five districts of Inhambane Province. The project aims to improve access to sexual, reproductive, maternal and newborn health care; increase community support; train health care workers; mobilize local leaders and residents in 20 communities on women's empowerment; improve the capacity of health clinics for maternal and reproductive health; and share information and research on sexual, reproductive, maternal and newborn health.

### **INTERVENTIONS, RESEARCH AND ACTION IN CITIES TEAM (INTERACT)**

*SPHERU RESEARCHERS: DANIEL FULLER (CO-PRINCIPAL INVESTIGATOR), NAZEEM MUHAJARINE*

Canadian Institutes of Health Research (\$2 million) 2017--2022

The key objectives of the program are to measure the impact of changes to the urban form on physical activity, social participation, and well-being, and inequalities in these outcomes. The secondary objective is to create and refine methodological tools that will be used for intersectoral urban form and health research.

The program will be looking at four investments in four separate cities: the Arbutus Greenway in Vancouver, #Biketoria in Victoria, the Bus Rapid Transit in Saskatoon and the Montreal Community 2016-2020 sustainability plan.

The INTERACT team is composed of uniquely positioned researchers including Yan Kestens (Université de Montréal), who holds a CIHR Chair in Urban Interventions and Population Health; Meghan Winters (Simon Fraser University), who holds a Michael Smith foundation for Health Research Scholar for a program on population health intervention research, and Daniel Fuller, who currently holds a Canada Research Chair in Population Physical Activity.

### **MULTISECTORAL URBAN SYSTEMS FOR HEALTH AND EQUITY IN CANADIAN CITIES (MUSE)/ MULTISECTORIELLES ET URBAINES: APPROCHES POUR LA SANTÉ ET L'ÉQUITÉ DANS LES VILLES CANADIENNES**

*SPHERU RESEARCHERS: NAZEEM MUHAJARINE (CO-PRINCIPAL INVESTIGATOR), CORY NEUDORF (COLLABORATOR)*

Canadian Institutes of Health Research (\$2 million) 2016--2019

The MUSE program is focusing on Intersectoral and Multisectoral Partnerships (IP) between health organizations and municipalities to transform built environments, and how to introduce health promotion initiatives based on how they will be received by individuals and by urban populations. The program will also look at how a person's health, socioeconomic status and geographic location factors into how receptive they are to these initiatives. The results of the study could help cities learn from each other's approaches, and help to identify where to invest in unfolding health initiatives. New evidence will help explain why parts of the population may or may not be receptive to new public initiatives. The project could also determine how to deliver health initiatives and how to encourage community involvement.

Researchers from SPHERU and the Léa-Roback Centre on Social Inequalities in Health at the University of Montreal (Lise Gauvin, Co-Principal Investigator) will be conducting the program as they take place in the four Canadian Cities in the study Montréal, Saskatoon, Toronto, and Vancouver.

### **REDUCING ISOLATION OF SENIORS COLLECTIVE (RISC) EVALUATION PROJECT**

*SPHERU RESEARCHERS: BONNIE JEFFERY (PRINCIPAL INVESTIGATOR), TOM MCINTOSH, NUELLE NOVIK (CO-INVESTIGATORS)*

Employment and Social Development Canada (ESDC) New Horizons for Seniors Program: (\$504,241) 2016--2019

SPHERU researchers are collaborating with provincial agencies to evaluate the effectiveness of programs designed to reduce social isolation experienced by urban and rural older adults.

The Reducing Isolation of Seniors Collective (RISC) partners include the Saskatchewan Seniors Mechanism, the Alzheimer Society of Saskatchewan, the Canadian Red Cross (Saskatchewan), along with the Lifelong Learning Centre at the University of Regina. SPHERU's role is to evaluate the collective impact of the RISC initiative in reducing social isolation of seniors.

Project lead Dr. Bonnie Jeffery, along with Dr. Tom McIntosh and Dr. Nuelle Novik, will form the Evaluation Oversight Committee, and work with Dr. Chad Nilson of Living Skies Centre for Social Inquiry. Upon completion of the evaluation, SPHERU will present its findings and results at a one-day policy summit where policy and community representatives from South and Central Saskatchewan will be in attendance.

## CONTINUING PROJECTS

### **ARE WE INVESTING WISELY? A SOCIAL RETURN ON INVESTMENT ANALYSIS OF THE SASKATCHEWAN/NEW BRUNSWICK HEALTHY START/DÉPART SANTÉ INTERVENTION**

*SPHERU RESEARCHERS: NAZEEM MUHAJARINE (CO-PRINCIPAL INVESTIGATOR) WITH NAZMI SARI (NOMINATED PRINCIPAL INVESTIGATOR)*

Public Health Agency of Canada (\$42,000) 2016

Healthy Start/Départ Santé (HSDS) is a bilingual, Saskatchewan grown initiative. It is a population health, evidence-based intervention which aims to increase opportunities for physical activity and healthy eating for 3 to 5 year old children in Francophone and Anglophone early learning and childcare settings (including Aboriginal, newcomer children and families) in Saskatchewan and New Brunswick.

The primary purpose of this study is to conduct the first phase of a social return on investment (SROI) analysis of a physical activity and healthy eating intervention (Healthy Start-Départ Santé) implemented in early learning centres throughout Saskatchewan and New Brunswick over the course of three years.

### **ASSESS, REDRESS, RE-ASSESS: ADDRESSING DISPARITIES IN RESPIRATORY HEALTH AMONG FIRST NATIONS PEOPLE**

*SPHERU RESEARCHER: SYLVIA ABONYI (CO-PRINCIPAL INVESTIGATOR) WITH JAMES DOSMAN, UNIVERSITY OF SASKATCHEWAN (NOMINATED PRINCIPAL INVESTIGATOR), JO-ANNE EPISKENEW, PUNAM PAHWA (CO-PRINCIPAL INVESTIGATORS)*

Canadian Institutes of Health Research (\$1,592,521) 2011-2016

Living and social conditions in some First Nations communities have created environments that are associated with adverse respiratory outcomes. In partnership with the rural communities of Beardy's and Okemasis First Nation and Montreal Lake Cree Nation, the project is evaluating individual and contextual factors on the outcomes of asthma, chronic bronchitis, and other respiratory conditions. Characterization of conditions will provide communities with information that will assist them to undertake interventions aimed at redressing the issues.



### **CHANGING INNER-CITY FOOD ENVIRONMENTS: INTERVENTIONS TO ADDRESS NUTRITIONAL HEALTH INEQUITIES**

*SPHERU RESEARCHERS: RACHEL ENGLER-STRINGER (PRINCIPAL INVESTIGATOR); SYLVIA ABONYI, NAZEEM MUHAJARINE (CO-INVESTIGATORS)*

Canadian Institutes of Health Research Operating Grant -- Population Health Intervention Research Saskatchewan Health Research Foundation (\$200,000) 2015-2016

This project builds on our on-going research on food environments and a grocery store intervention in the inner city. By examining household food practices in low income inner city neighbourhoods, the study will allow us to understand how families access the food they need in urban environments where healthy food access is limited. It will also provide insight into programs and policies that improve nutritional health. With the support of community agencies and the Saskatoon Health Region we will use interviews, observations, photos and videography to collect in-depth information on the food practices of participating families. This project will be conducted in close partnership with community groups in a way that achieves a positive impact for the people in the neighbourhood.

### **GOOD FOOD FOR LEARNING: AN EXAMINATION OF THE CURRENT STATE OF SCHOOL FOOD IN THE SASKATOON REGION**

*SPHERU RESEARCHERS: RACHEL ENGLER-STRINGER (PRINCIPAL INVESTIGATOR); NAZEEM MUHAJARINE (CO-INVESTIGATOR)*

University of Saskatchewan -- College of Medicine (\$30,000) 2016-2017

A national school food program has been presented as one solution to the problems associated with childhood nutrition. The purpose of this research is to characterize the school lunches and snacks of elementary school children in Saskatoon and the surrounding rural areas as the first step towards a comprehensive study of school food practices in Saskatchewan. This research will provide the first stage of data collection that will be used to compare the effectiveness of future interventions in these schools.

**HOTSPOTTING: IDENTIFYING SUPERUSERS OF HEALTH CARE SERVICES WITH MENTAL HEALTH AND ADDICTION PROBLEMS**

SPHERU RESEARCHERS: NAZEEM MUHAJARINE, CORY NEUDORF (CO-INVESTIGATORS); J. QUAIL & W. WODCHIS (CO-PRINCIPAL INVESTIGATORS)

Canadian Institutes of Health Research  
SPOR Network in Primary and Integrated Health Care Innovations -- (\$80,000) 2015-2016

“Hotspotting” is the growing trend to identify people who are very expensive for the healthcare system. Many of these people are frequent users of healthcare services, and have complex needs that are not adequately addressed by the services that are currently available. The proposed research addresses one category of high cost healthcare user: people with complex mental health and addiction issues (MHA).

The research will investigate the characteristics of these MHA users to gain an understanding of why some become so costly for the healthcare system. The research will use statistical analyses to chart and understand the trajectories of expensive MHA users through the Saskatchewan and Ontario healthcare systems. The ultimate goal of the research is to improve the health care management of people with MHA so that the system will address their needs proactively instead of reactively.

**HEALTHY AGING IN PLACE: IMPROVING RURAL SENIORS’ HEALTH THROUGH POLICY AND COMMUNITY LEVEL INTERVENTIONS**

SPHERU RESEARCHERS: BONNIE JEFFERY (PRINCIPAL INVESTIGATOR), NAZEEM MUHAJARINE (CO-PRINCIPAL INVESTIGATOR), SYLVIA ABONYI, PAUL HACKETT, SHANTHI JOHNSON, TOM MCINTOSH, NUELLE NOVIK, SARAH OOSMAN (CO-INVESTIGATORS)

Saskatchewan Health Research Foundation Phase III Health Research Group Grant (\$749,335) 2014-2017

This research builds on findings from our 2009-2010 pilot project (Role of Social Systems in the Health of Seniors Living in Rural Saskatchewan), and our previous Healthy Aging in Place (2011-2014) SHRF Group Grant project. Findings from these previous studies determined rural seniors had concerns about access to doctors, pharmacists, other health care services, and the ability to age in their communities. We will develop interventions that support rural older adults’ ability to remain independent and live within their own homes, and communities, for as long as they choose. Our community-based research is being conducted in collaboration with community advisory groups in the towns of Young, Watrous, Rosetown, and Woseley. The studies include: an exercise intervention to improve mobility and social interaction; an examination of the walkable built environment to determine barriers and supports to seniors’ mobility; and a project focused on assessing rural seniors’ access to information.



**HEALTHY START/DÉPART SANTÉ: A MULTILEVEL INTERVENTION TO INCREASE PHYSICAL ACTIVITY AND HEALTHY EATING AMONG YOUNG CHILDREN (AGES 3-5) ATTENDING CHILDCARE**

SPHERU RESEARCHER: NAZEEM MUHAJARINE (CO-PRINCIPAL INVESTIGATOR); RACHEL ENGLER-STRINGER (CO-INVESTIGATOR) WITH ANNE LEIS AND LOUISE HUMBERT, UNIVERSITY OF SASKATCHEWAN; ROGER GAUTHIER, RÉSEAU SANTÉ EN FRANÇAIS DE LA SASKATCHEWAN (CO-PRINCIPAL INVESTIGATORS)

Public Health Agency of Canada (\$240,000 – KDE portion) February 2013 to January 2017

Healthy Start is a bilingual initiative developed in Saskatchewan that increases healthy eating and physical activity opportunities in early learning environments. Through a partnership of organizations led by the Réseau Santé en français de la Saskatchewan (Saskatchewan Network for Health Services in French), the Healthy Start approach engages directors, educators, cooks, and parents by providing resources, training, and ongoing support. SPHERU, along with researchers across Canada, is involved in an evaluation component of the initiative to monitor and assess the impact of Healthy Start in both Saskatchewan and New Brunswick. SPHERU is leading the communications and knowledge dissemination and exchange (KDE) component of this research.



**SPOR PAN-CANADIAN NETWORK IN PRIMARY AND INTEGRATED HEALTH CARE INNOVATIONS: MANAGEMENT AND OPERATING GRANTS**

SPHERU RESEARCHERS: NAZEEM MUHAJARINE (CO-PRINCIPAL INVESTIGATOR), CORY NEUDORF (CO-PRINCIPAL INVESTIGATOR), SHANTHI JOHNSON (CO-INVESTIGATOR)

Canadian Institutes of Health Research / Strategy for Patient-Oriented Research Phase 2 (\$500,000) 2015-2020

The purpose of this grant is to develop a collaborative network of Saskatchewan researchers, physicians, community members, and policy makers that will focus on generating new evidence in primary and integrated health care effectiveness, efficiency, and access across the care spectrum. The team will work together to improve health equity, more specifically in Indigenous and rural areas, focus on prevention, and look for ways to improve services to patients across their life spans. The value of the Saskatchewan network lies in allowing researchers from different areas to come together to work on integrating primary health care and social determinants across urban and rural areas and with Indigenous peoples, while involving both physicians and policy makers to identify specific issues.



**A STEP TOWARDS CREATING ACTIVE URBAN COMMUNITIES: SEASONALITY AND ACTIVE SASKATOON KIDS (SASK)**

SPHERU RESEARCHER: NAZEEM MUHAJARINE (PRINCIPAL INVESTIGATOR), DAN FULLER (CO-INVESTIGATOR)

Canadian Institutes of Health Research (\$362,845) 2014-2016

Seasonality and Active Saskatoon Kids (SASK) is an obesity intervention research project that aims to measure and identify locations where physical activity occurs in Saskatoon, across all seasons, among children aged 10-14 years. Using both a self-reported activity questionnaire and accelerometers, the research team will learn about children's active and sedentary activities at school, at home, and within the community. The goal of the study is to create more active communities in Saskatoon by addressing several existing knowledge gaps, such as the seasonal effects on physical activity and sedentariness, and where these occur. This study builds on the Smart Cities, Healthy Kids studies previously conducted in Saskatoon from 2009 to 2014.



**USHERING IN TRANSFORMATIONS OF URBAN FORM TO PROMOTE POPULATION HEALTH AND EQUITY: THE ROLE AND IMPACT OF INTERSECTORAL PARTNERSHIPS NURTURED BY PUBLIC HEALTH ORGANIZATIONS AND CITIES IN CANADA**

SPHERU RESEARCHERS: NAZEEM MUHAJARINE, CORY NEUDORF (CO-PRINCIPAL INVESTIGATORS) WITH LISE GAUVIN (NOMINATED PRINCIPAL INVESTIGATOR); P.DALY, R. MASSE, D. MCKEOWN, AND M.RAYNAULT (CO-PRINCIPAL INVESTIGATORS)

Canadian Institutes of Health Research and Environments & Health: Programmatic grants in intersectoral prevention research LOI (\$50,000) 2016

Initially in developed countries and now in developing nations, there have been major increases in chronic diseases such as diabetes, cardiovascular disease, and several cancers. To counter these threats to population health, public health departments have forged new alliances with major Canadian cities to create environments that foster the supply of healthy and affordable food, enhance the practice of physical activity, and reduce the risks of road injuries. Our research will study the effectiveness of cross-sector partnerships aimed at transforming built environments to increase the availability of fruit and vegetables, promote active transport and physical activity, and improve availability of affordable housing. With the active participation of the directors of the public health organizations in Montreal, Saskatoon, Toronto, and Vancouver we will work together to identify the factors that lead to success in forward-looking initiatives aimed at preventing the new epidemics of chronic diseases.

**WHAT GETS MEASURED, GETS MANAGED: NUTRITIONAL QUALITY INDICATORS IN LONG-TERM CARE**

SPHERU RESEARCHERS: SHANTHI JOHNSON (PRINCIPAL INVESTIGATOR); TOM MCINTOSH, BONNIE JEFFERY (CO-INVESTIGATORS); WITH HEALTH REGION PARTNERS

Saskatchewan Centre for Patient-Oriented Research (SCPOR) (\$15,000) 2016-2017

Within long-term care (LTC), food, a basic necessity of life, has been a routine aspect of care provision and an indicator of quality care at the individual and facility levels. Despite this, malnutrition and other dietary problems are widespread. Improving nutrition-related quality of care in LTC facilities has been identified as a global priority for research, program, and policy. In Saskatchewan, addressing the quality of vulnerable seniors in home care and LTC as well as the culture of safety are part of the provincial priorities. In this study we will examine the nutrition-related quality indicators in LTC facilities in Saskatchewan. Using RAI-MDS data (2004 to 2014) a 10 year profile will be created for future quality improvement work. The study will also look at variation in the rates based on factors of importance within the Saskatchewan context, including age, gender, level of care, rural/urban setting, and health region.

**WUSKIWIY-TAN! LET'S MOVE! AGING WELL IN A NORTHERN SASKATCHEWAN MÉTIS COMMUNITY/ TAH-NIGAHNIWHAK!**

SPHERU RESEARCHERS: SYLVIA ABONYI, SARAH OOSMAN, BONNIE JEFFERY, SHANTHI JOHNSON, DR. NAZEEM MUHAJARINE, LIZ DUROCHER, TJ ROY (PROJECT COORDINATOR)

Canadian Institutes of Health Research (\$1.2 million) 2014-2019

Very little is known about the aging experiences, aspirations, and support needs of Indigenous and Métis older adults. The Wuskiwiy-Tan program is working with communities and community partners to fill the knowledge gap and provide evidence of the effectiveness of current and emerging programs and policy interventions that promote aging well for Métis and other Indigenous peoples. Tah-Nigahniwhak focuses on Indigenous youth populations in Canada and their experience with chronic conditions at an earlier age compared to the country's overall population. The project is intended to identify what Indigenous youth perceive to be important to them in order to set them on a healthier life trajectory.





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