



SHRF
SASKATCHEWAN
HEALTH RESEARCH
FOUNDATION

2017-18 Annual Report



Mandate

Saskatchewan Health Research Foundation (SHRF) was established by an act of legislature in 2002. The mandate provided to SHRF by the Government of Saskatchewan is to:

- Seek and receive funding to support health research
- Encourage and facilitate health research
- Assist the Minister of Health in developing a provincial strategy
- Fund research according to the strategy
- Disseminate information about funded research

Vision

By 2021, SHRF will have led the establishment of a vibrant culture of health research and innovation for a stronger Saskatchewan.

Mission

SHRF leads strategic investments in high-impact, peer-reviewed health research aligned with provincial needs; builds and broadens Saskatchewan's health research and innovation capacity; and facilitates the use of health research findings for informed decision-making at all levels, from the individual to care providers to policy-makers.

Values

Excellence:

SHRF's activities and investments serve as the catalyst for excellence in health research and innovation.

Collaboration:

SHRF's activities and investments facilitate the creation of partnerships among researchers, health care providers, patients and families, communities, not-for-profits and industry that support the creation and adoption of new knowledge and health innovations.

Transparency and Accountability:

SHRF's decision-making and business processes are open and accessible. We provide unbiased, peer-reviewed processes; evaluate and measure the impact of the research we fund; and report publicly on developments in health research across the province.

Efficiency and Effectiveness:

SHRF's lean organization allows it to be flexible and nimble in responding to the health research and innovation priorities of Saskatchewan, and to ensure that we meet the needs of our stakeholders and funders.

SHRF Team

PATRICK ODNOKON

Director of Impact and Evaluation/
Interim CEO (until September 2017)
Chief Executive Officer (as of September 2017)

CATHERINE KLOPOUSHAK

Executive Assistant
(as of May 2017)

LINA KAZAN

Director of Finance
(on leave as of September 2017)

IRENE BLUM

Senior Accountant

KAREN TILSLEY

Director of Funding Programs

DANIELLE ROBERTSON-BOERSMA

Funding Programs Officer

TANYA SKOROBHACH

Programs Coordinator

RICHARD KIES

Director of Communications and Outreach

NIKKI DESJARDINS

Communications and Outreach Officer

PAMELA RIFFEL

Communications Coordinator

TABLE OF CONTENTS

3	LETTER FROM THE BOARD CHAIR
4	LETTER FROM THE CEO
5	AGENCY OVERVIEW
5	GOVERNANCE
6	YEAR AT A GLANCE
6	PEER REVIEW
10	INVESTING IN RESEARCH
23	MEASURING IMPACT
26	COMMUNICATIONS AND OUTREACH
31	FINANCIAL STATEMENTS

Letter of Transmittal From the Minister Responsible for Innovation



His Honour, the Honourable W. Thomas Molloy, Lieutenant Governor of Saskatchewan

May it Please Your Honour:

I respectfully submit the annual report of Saskatchewan Health Research Foundation for the fiscal year ending March 31, 2018.

A handwritten signature in black ink, appearing to read 'Tina Beaudry-Mellor'.

Honourable Tina Beaudry-Mellor
Minister Responsible for Innovation Saskatchewan

Letter of Transmittal From the Board Chair



The Honourable Tina Beaudry-Mellor
Minister Responsible for Innovation Saskatchewan

The Honourable Jeremy Harrison
Minister of Immigration and Career Training

Dear Ministers:

I am pleased to submit for your consideration the annual report of Saskatchewan Health Research Foundation for the fiscal year period April 1, 2017, to March 31, 2018.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Don Somers'.

Don Somers, PhD
Board Chair



Letter From the Board Chair

Saskatchewan Health Research Foundation (SHRF) is the provincial agency that provides the funding necessary to fuel a vibrant culture of health research and innovation for a stronger Saskatchewan. Health research has a high value to society, and creating an environment where our researchers can continue to do world-class research is important to the future of the province.

SHRF invests in high-quality health research through research grants and award opportunities and promotes the impact this research has on local and global health. This past year has seen SHRF continue to lead this growth in the province's health research enterprise, during a time of change and transition in the health system environment.

SHRF also assumes a leadership role with our affiliated provincial health research funders, and with federal funding agencies and national organizations, in co-ordinating health research discussions and disseminating information to health professionals and the public. This leadership was evident in January 2018 when SHRF co-hosted a "Best Brains Exchange" with the Canadian Institutes of Health Research, drawing government officials and health system leaders together for a discussion of innovation in provincial health care.

In September 2017, the SHRF Board of Directors was pleased to appoint Mr. Patrick Odnokon as Chief Executive Officer (CEO). As a key member of SHRF's team for over 10 years, Patrick's work in research evaluation and impact assessment has established SHRF as a leader nationally. As interim CEO from January to September 2017, Patrick gained the full confidence of the Board of Directors to lead SHRF through these times of transition. He also brings continuity of vision to the organization.

The focus for SHRF moving forward will be to continue leading Saskatchewan into a new era of health research; engaging with the research community on how best to support and build the capacity of our researchers; collaborating with provincial stakeholders on a common vision for attaining collective impact through research; and working with government to determine how Saskatchewan's world-class research environment can best respond to a transformed health system and be leveraged into the province's innovation agenda.

SHRF is well positioned to lead the growth of Saskatchewan's health research enterprise. The Board of Directors is confident in the abilities and enthusiasm of the SHRF team to accomplish great things; on their behalf, I would like to thank and commend SHRF's staff and management for their on going dedication and commitment to operational excellence. I also thank our Board of Directors for their commitment of time and expertise to help move SHRF's mandate forward.



Don Somers, PhD
Board Chair



Letter From the CEO

This past year has been one of transition, both within SHRF and in the broader provincial health ecosystem. In September 2017, I was pleased to accept the Board of Directors' appointment as the CEO. I would like to thank the Board for their confidence and thank SHRF staff for their unwavering commitment to keeping us moving forward during this transition period.

In 2017-18, SHRF continued to fulfill its mission while laying the groundwork for future evolution and growth. SHRF invests in high-impact, peer-reviewed health research that helps to advance knowledge. This past year saw the expansion of our funding opportunities, with new Sprout grants for patient-oriented research and development of new funding opportunities for 2018-19. SHRF helps to build and broaden Saskatchewan's health research and innovation capacity in a variety of ways, from grants that help establish or advance health research careers in Saskatchewan, grants that support collaborative and interdisciplinary teams and patient-oriented research, to the hosting or support of outreach events that bring researchers together for creative collisions and conversations.

SHRF facilitates the use of health research findings for informed decision-making at all levels. This was further enhanced by improvements made to our Research Connections grants to fund knowledge translation events and activities. Ultimately, the research SHRF funds is intended to have meaningful health, economic and social impacts. In 2017-18, we released a significant impact report on our funding of aging-related research and we began work on another report to update the impact of previously-funded research in Indigenous health.

These are just a few of the highlights of the past year's work, which are detailed further in this report.

SHRF has many stakeholders who make our work possible. First, the Government of Saskatchewan through our funder, Innovation Saskatchewan – thank you for the continued investment in health research in Saskatchewan. We have many partners to thank – our post-secondary institutions in the province, the new provincial health authority, the Saskatchewan Centre for Patient-Oriented Research (SCPOR), our many funding partners in the health charity and non-profit sector, and our alliance of provincial health research organizations. Thank you to all our partners for your ongoing confidence in SHRF.

SHRF's granting process would not be possible without our volunteer peer reviewers, who give their time and expertise to ensure we fund excellent and relevant research. We thank you for your contributions.

Finally, SHRF exists to fund the enterprising and novel work of Saskatchewan's health researchers and to be good stewards of the province's health research environment. The work of Saskatchewan's health research community inspires and amazes us every day and we are truly thankful for the trust and support put in SHRF. Every SHRF grant tells a story – a story of hope, for a cure to an illness, for a better treatment, for a novel discovery or scientific breakthrough, for a chance to improve the health of an individual, a community or a population. Continue to do the work you do, and we will continue to support you in every way.



Patrick Odnokon
SHRF Chief Executive Officer

Agency Overview

SHRF's commitment to providing high-quality, peer-reviewed processes for health research that is responsive to provincial needs, its focus on accountability and impact, and its emphasis on partnerships and collaboration enable Saskatchewan health researchers to place themselves among the world's best, allowing the province to be a global leader in creating and adopting new health innovations.

Governance

SHRF's activities are guided by a Board of Directors whose membership is appointed by the Lieutenant Governor in Council. Membership can be drawn from the health research community, government, health delivery system, business and public at large.

Membership consists of not more than 12 members who hold office for a term not exceeding three years, renewable once. Each Board member also serves one of two current standing committees – Governance, and Finance and Audit.

A Governance Framework and Policies document sets out the Board's governance philosophy, its processes and policies for managing the affairs and business of SHRF. In 2017-18, a total of four board meetings were held. Figures in brackets indicate the number of meetings each Board member attended.

2017-18 Board of Directors

DON SOMERS (CHAIR) (4)
Private Business, Consulting

JOSEF BUTTIGIEG (3.5)
University of Regina

VIVIAN RAMSDEN (4)
University of Saskatchewan

PETRINA McGRATH (VICE CHAIR) (1.5)
Saskatoon Health Region

TAMI DENOMIE (3)
Saskatchewan Ministry of Health

ROBERT SHELDON (4)
University of Calgary

JANE ALCORN (4)
University of Saskatchewan

CECILE HUNT (4)
Prince Albert Parkland Health Region

JOHN THIEL (0)
University of Saskatchewan

BRENT BROWNLEE (3.5)
Ministry of Advanced Education

DANYA KORDAN (4)
Innovation Saskatchewan

JOE VIDAL (3)
Bioriginal Food and Science Corp.



Year at a Glance

2017-18 was a year of transition, both within SHRF and in the broader provincial health care and research environment. In September 2017, Patrick Odnokon was appointed as CEO. SHRF continued to offer a full suite of funding and added the Sprout grants for patient-oriented research, supported by the Saskatchewan Centre for Patient-Oriented Research (SCPOR). Work was undertaken to develop new funding opportunities in collaboration with funding partners, which will be offered to researchers in the 2018-19 fiscal year.

As in past years, SHRF continued to play a leadership role with its affiliated provincial health research funding organizations, federal agencies and other provincial stakeholders. SHRF co-hosted a “Best Brains Exchange” in January 2018 to coordinate discussions on health research innovation within the province. SHRF continued to connect with the provincial health research community through signature events, such as the annual Santé Awards Evening, and through sponsoring other outreach events, such as Innovation Saskatchewan’s SPARK night, to foster new research collaborations. Through the publication of impact reports, Research for Health magazine, social media channels and Research Connections grants, SHRF led the way in disseminating information and transferring knowledge to health professionals and the Saskatchewan public. This was also a year of fiscal restraint for SHRF as the organization attempted to do more with less and foster a culture of budgetary efficiency, without compromising the quality of our programs and services. SHRF’s 2017-18 Annual Report will provide a highlight of activities in the following areas:

- Peer Review
- Investing in Research
- Measuring Impact and Demonstrating Value
- Communications and Outreach
- Financial Statements

Peer Review

SHRF is proud to uphold a rigorous peer review process for our funding competitions. Committees of active researchers and other experts use a rating scale of excellence and relevance to assess research proposals, answering the following questions:

- Is it important and original?
- Is it feasible and ethical?
- Does it adhere to the objectives and priorities of the funding program?
- Does the researcher or team have the expertise and support to conduct the research?

SHRF’s peer review process is driven by our policies and practices, which uphold principles of peer review shared by all members of the National Alliance of Provincial Health Research Organizations (NAPHRO): integrity, accountability, transparency, balance, confidentiality and impartiality. This includes finding the right mix of reviewers to assess applications.

SHRF’s program manager evaluates the research areas of each application and searches for appropriate reviewers. For many competitions, this means overseeing the development of multiple committees with researchers working in the relevant scope (biomedical, socio-health, systems and clinical) of the applications to be evaluated. To accommodate expertise needed to review applications and potential conflicts of interest, reviewers are recruited both provincially and nationally. All our committees meet to discuss, rate and rank each application according to the SHRF-specified criteria for the funding opportunity. The program manager may also recruit external reviewers to support the review committee for highly specialized applications.



In 2017-18, to meet the needs of evaluating our patient-oriented research programs, SHRF brought in patients for the first time to participate in the review process and provided the guidance to ensure they felt comfortable carrying out the process of evaluating patient-oriented aspects of research proposals. Feedback from the patient reviewers was very positive, and they provided meaningful input into how SHRF can further improve the process of engaging patient reviewers in the future.

SHRF strives to continuously improve the peer review process by gathering feedback from reviewers and applicants after each competition. This provides valuable insights about programs, policies, practices and trends in the broader health research community, ensuring SHRF stays well informed of best practices and is able to respond to needs in the evolving research environment. Overall, the feedback from reviewers is consistently positive, with reviewers feeling well-supported during the review process, comfortable with the workload and expectations, and able to easily navigate the SHRF software used for application submission, reviews and tracking. They also appreciate the responsiveness of SHRF staff.

“Well done. SHRF staff make the process easy. And it is great that they are so accessible.”

“The SHRF staff are simply excellent! They are professional, pleasant, efficient, helpful and flexible.”
(Peer Review Feedback – Spring 2017)

2017-18 Peer Review Committee Membership

Committee membership for standing programs is typically for a three-year term. In 2017-18, the following peer reviewers provided their expertise. Figures in parenthesis indicate number of years served, including current year.

BIOMEDICAL ESTABLISHMENT GRANT REVIEW COMMITTEE

TANYA DAHMS (CHAIR) (1)

Chemistry and Biochemistry
Science
University of Regina

DANIEL MACPHEE (2)

Veterinary Biomedical Sciences
Western College of Veterinary Medicine
University of Saskatchewan

BOGDAN POPESCU (2)

Anatomy and Cell Biology
Medicine
University of Saskatchewan

ANDREW CAMERON (3)

Biology
Science
University of Regina

DAVID MARCHANT (1)

Medical Microbiology and Immunology
Medicine & Dentistry
University of Alberta

HEATHER WILSON (2)

Vaccine and Infectious Disease Organization -
International Vaccine Centre

KIRK McMANUS (3)

Research Institute in Oncology and
Hematology
University of Manitoba/Cancer Care Manitoba

BIOMEDICAL FELLOWSHIP REVIEW COMMITTEE

THOMAS FISHER (CHAIR) (3)

Physiology
Medicine
University of Saskatchewan

MOHAN BABU (3)

Chemistry and Biochemistry
Science
University of Regina

BRIAN EAMES (1)

Anatomy and Cell Biology
Medicine
University of Saskatchewan

JANET HILL (2)

Veterinary Microbiology
Western College of Veterinary Medicine
University of Saskatchewan

DONALD MILLER (1)

Pharmacology and Therapeutics
Max Rady College of Medicine
University of Manitoba

SURAJ UNNIAPPAN (2)

Veterinary Biomedical Sciences
Western College of Veterinary
Medicine
University of Saskatchewan

FRANCO VIZEACOMAR (2)

Oncology
Medicine
University of Saskatchewan

AARON WHITE (3)

Vaccine and Infectious Disease Organization -
International Vaccine Centre

JIAN YANG (2)

Pharmacy and Nutrition
University of Saskatchewan

SOCIO-HEALTH, SYSTEMS & CLINICAL ESTABLISHMENT GRANT AND FELLOWSHIP REVIEW COMMITTEE

COLLEEN DELL (CO-CHAIR) (2)

Sociology
Arts and Science
University of Saskatchewan

NANCY GYURCSIK (CO-CHAIR) (1)

College of Kinesiology
University of Saskatchewan

CAMELIA ADAMS (2)

Psychiatry
Medicine
University of Saskatchewan

PAUL BRUNO (2)

Kinesiology and Health Studies
University of Regina

TODD DUHAMEL (2)

Kinesiology and Recreation Management
University of Manitoba

CHRISTOPHER HERGOTT (2)

Respiratory Medicine
Cumming School of Medicine
University of Calgary

LORRAINE HOLTSLANDER (1)

Nursing
University of Saskatchewan

LYNN LOUTZENHISER (2)

Psychology
Arts
University of Regina

THOMAS ROTTER (1)

Pharmacy and Nutrition
University of Saskatchewan

COREY TOMCZAK (1)

Kinesiology
University of Saskatchewan

ELAINE WIERSMA (1)

Centre for Education & Research on Aging
and Health
Lakehead University

COLLABORATIVE INNOVATION DEVELOPMENT (CID) GRANT REVIEW COMMITTEE

**RACHELLE ASHCROFT* (CHAIR
SOCIO-HEALTH, SYSTEMS & CLINICAL) (4)**
Social Work
University of Toronto

**LEIGH ANNE SWAYNE* (CHAIR
BIOMEDICAL) (4)**
Medical Sciences
University of Victoria

LUSINE ABRAHAMYAN (1)
Institute of Health and Policy
Management & Evaluation
University of Toronto

JOAN ALMOST* (4)
Nursing
Health Sciences
Queen's University

KHALED BARAKAT (1)
Pharmacy and Pharmaceutical Sciences
University of Alberta

PATRICK LAJOIE (1)
Anatomy and Cell Biology
Schulich School of Medicine and Dentistry
University of Western Ontario

NATHAN LACHOWSKY (1)
School of Public Health and Social Policy
University of Victoria

MARION MAAR (3)
Northern Ontario School of Medicine
Laurentian University

PAOLA MARIGNANI (2)
Biochemistry and Molecular Biology
Medicine
Dalhousie University

MARIA MATHEWS (3)
Health Policy/Health Care Delivery
Medicine
Memorial University of Newfoundland

AMANDA NEWTON (4)
Pediatrics
Medicine & Dentistry
University of Alberta

MICHAEL NOSEWORTHY* (3)
Electrical and Computer Engineering
McMaster University

ALISON NOVAK* (4)
Toronto Rehabilitation Institute

MATTHEW PAMENTER (1)
Biology
Science
University of Ottawa

TABREZ SIDDIQUI* (2)
Physiology and Pathophysiology
University of Manitoba

ERIN WILSON (1)
Nursing
University of Northern British Columbia

* denotes individuals who took part in both the CID Letter of Intent (LOI) and full application review committee in the current year.

SPROUT GRANT REVIEW COMMITTEE

SARA KREINDLER (CHAIR) (1)
Community Health Sciences
Max Rady College of Medicine
University of Manitoba

LESLEY BAINBRIDGE (2)
Rehabilitation Services
University of British Columbia

MARK BECK (1)
Patient/Caregiver

JON MCGAVOCK (1)
Children's Hospital Research Institute of
Manitoba

AMY SALMON (1)
Centre for Health Evaluation and Outcomes
Sciences

RICK SAWATZKY (1)
Nursing
Trinity Western University

MARGARET TOMPSON (1)
Patient/Caregiver

ROBIN URQUHART (1)
Surgery
Medicine
Dalhousie University

Investing in Research

Funding world-class research is at the core of what we do. Through our funding opportunities, SHRF invests in innovative people and projects aligned with provincial health needs. Through the peer review process, those people and projects with promise for impact are chosen.

In 2017-18, SHRF executed a varied suite of funding programs designed to support researchers at all stages of their careers to innovate and collaborate for the benefit of Saskatchewan people. SHRF also expanded its funding programs with new opportunities in patient-oriented research, offered in collaboration with the Saskatchewan Centre for Patient-Oriented Research (SCPOR).

Programs Overview

SHRF's grants and awards are intended to achieve the following goals:

- Recruit best-in-class researchers
- Train and support next-generation researchers
- Enable knowledge translation
- Focus on innovation, new ideas and applications
- Address long-term needs specific to Saskatchewan

SHRF Funding Opportunities - Overview

Name	Purpose	Amount	Term
Collaborative Innovation Development Grant	Seed money to support interdisciplinary, innovative research to complete first steps in pursuit of more comprehensive funding	\$50,000	1 year
Establishment Grant	Support for researchers new to Saskatchewan to establish their health research program in the province	\$120,000	3 years
Research Connections Grants	Matching funds for knowledge mobilization events or activities	\$10,000	Per event or activity
Research Fellowship Awards	Salary support and professional development allowance for research fellows studying under the supervision of active researchers	\$50,000	2 years
Sprout Grants	Support for patient-oriented research activities in partnership with SCPOR	\$100,000***	2 years

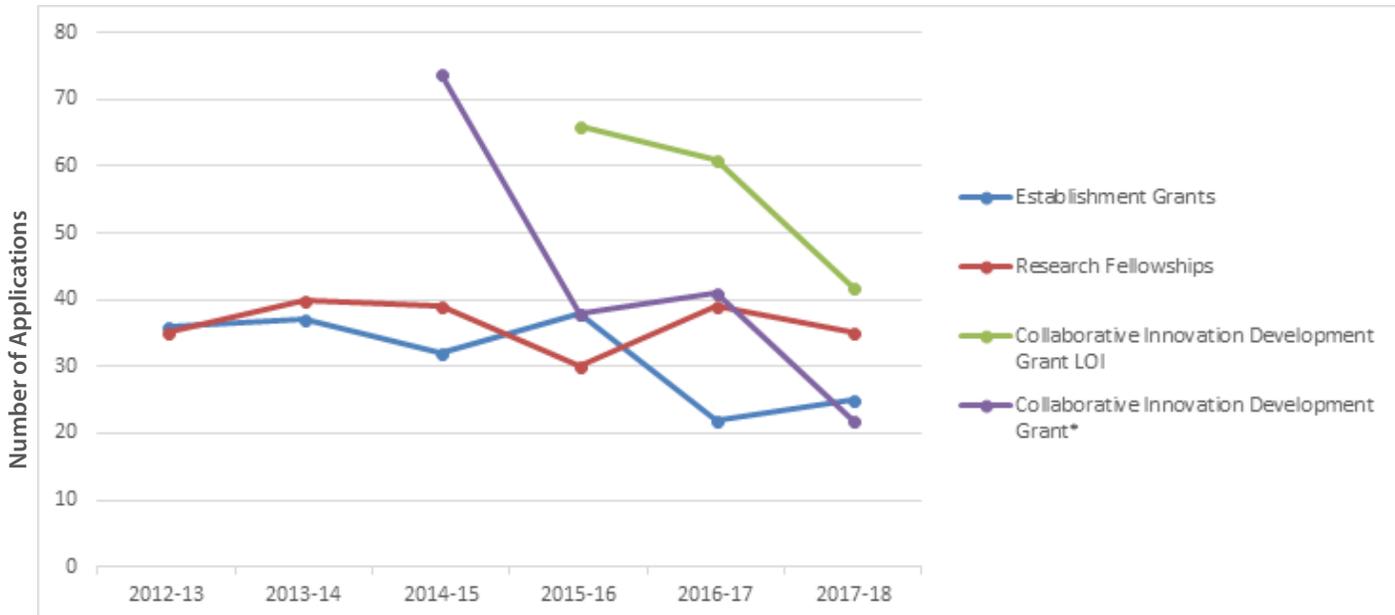
***Sprout:

SHRF: up to \$100,000

SCPOR: up to \$60,000 for eligible expenses

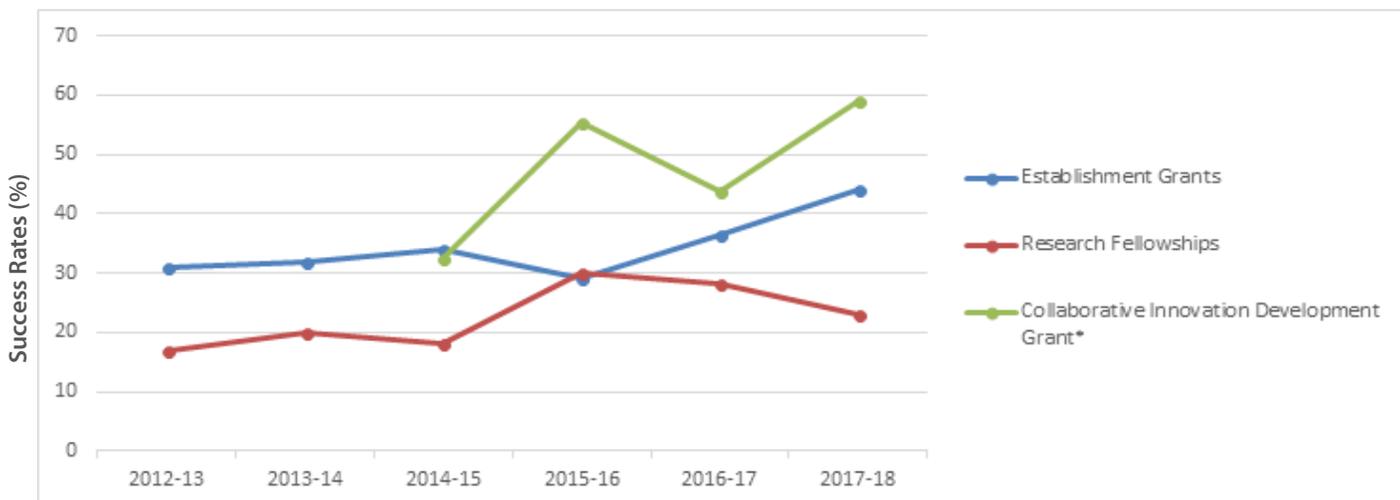


Demand by Program and Year



* Decrease due to introduction of LOI process

Percent Success Rates by Program and Year



* Calculation does not include LOI applications that did not go forward

SHRF Applications Received, Recommended and Awarded in 2017-18

SHRF Program	Received	Recommended	Awarded	
	No.	No.	No.	Term (yrs)
Collaborative Innovation Development Grants	22*	15	13	1
Establishment Grants	25	11	11	3
Research Connections Grants	17		16	
Research Fellowships	35	22	10**	2
Sprout Grants	24	13	8	2
Research Fellowship Top-Up Awards			1	

*42 Letters of Intent were received and 24 were invited to submit a full application

**Two awards were declined due to international or national Tri-Agency funding success. Tri-Agency funding recipients are eligible for a SHRF Top-Up Award.

Establishment Grants

SHRF's Establishment grants are awarded to research faculty who are new or newly resident in Saskatchewan. The grant aims to help recipients establish independent health research programs within the province and achieve the research productivity necessary to obtain longer-term and more substantial funding from other sources. Establishment grant recipients receive up to \$120,000 in funding over three years.

The following are the 11 recipients of the 2017-18 Establishment grants:

LLOYD BALBUENA

Psychiatry
Medicine
University of Saskatchewan
Neuroticism and Mood Instability as Suicide Prevention Targets

ALEXANDER CRIZZLE

Public Health
University of Saskatchewan
Where the Rubber Hits the Road: Alternative Transportation Planning to Enhance Health Service Delivery in Rural Saskatchewan

EKATERINA DADACHOVA

Pharmacy
Pharmacy and Nutrition
University of Saskatchewan
Development of Novel Radiopharmaceuticals to Combat Systemic Fungal Infections

MICHELLE GAGNON

Psychology
Arts and Science
University of Saskatchewan
Laboratory and Clinical Investigations of Parenting Factors in Pediatric Pain

ULADZIMIR KARNIYCHUK

Viral Pathogenesis and Vaccine Development
VIDO-InterVac
University of Saskatchewan
Comparative Analyses of Infection Outcomes in Fetuses Exposed to Pre-Epidemic and Epidemic Zika Virus Strains

STEVEN MACHTALER

Medical Imaging
Medicine
University of Saskatchewan
Developing a PET-Based Microbubble for Simultaneous Imaging and Treatment of Inflammatory Bowel Disease

GABRIELA NOVOTNA

Social Work
University of Regina
Professional Identity Development of Addiction Counsellors in Recovery Working in Addiction Services in Saskatchewan: Grounded Theory

PETROS PAPAGERAKIS

Dentistry
University of Saskatchewan
Innovative Approaches to Treat Tooth Defects

TRACIE RISLING

Nursing
University of Saskatchewan
Investing in Future Healthcare Solutions: Collaborating with Saskatchewan Patients to Measure Empowerment and Improve eHealth Engagement

ANTONIO RUZZINI

Veterinary Microbiology
Veterinary Medicine
University of Saskatchewan
A One Health Gene-to-Molecule Initiative: Systematic Investigation of Bacterial Plasmids Relevant to Health and Disease

MEENA SAKHARKAR

Pharmacy and Nutrition
University of Saskatchewan
Developing Combination Therapy to Treat Androgen-Insensitive Prostate Cancer

Supporting Those Who Treat Mental Health and Addictions

This piece originally appeared on the SHRF Blog and can be found at:

<https://shrf.ca/Health-Research/SHRF-Note-Details/Supporting-Those-Who-Treat-Mental-Health-and-Addictions>

Mental health and addictions is a serious public health issue in Canada. Statistics show that one in five Canadians have experienced a mental health or addiction problem.¹ In Saskatchewan, this would mean more than 200,000 individuals are affected to some degree.

The concept of "recovery" is well known and widely embraced by practitioners, service providers and policy makers in Canada and around the world.² However, it's often referred to in literature as a "process" or a "journey", implying that being "in recovery" does not mean that symptoms of mental health problems or addictions issues are completely gone. Rather, recovery is a continuum and is experienced as moving through and beyond the limitations of one's illness towards improved health and functioning.



Photo Credit: Michael Bell

But what if your profession is counselling other people with a mental health or addictions problem? How does your own recovery affect your performance, effectiveness and identity as a counsellor?

For Dr. Gabriela Novotna, Associate Professor in the Faculty of Social Work at the University of Regina (U of R), the personal recovery experience of substance abuse counsellors is one of the most distinctive aspects of what she sees as a unique specialty within health services. With 15 years of experience in mental health and addictions as a clinician, researcher and academic, she became aware of this specific group of counsellors a few years ago while doing postdoctoral studies.

"We have realized just recently how valuable they can be in relating to their clients, but at the same time, how vulnerable they can become because of their own experiences and conditions," she says. During her postdoctoral training prior to joining the U of R, she conducted a small pilot study with a group of managers in recovery, which helped to drive her interest into further researching counsellors with this attribute.

People with personal, lived experience of addictions are now delivering services across the treatment landscape, be it in residential settings, outpatient programs or community outreach. However, the prevalence of counsellors in recovery is much higher in the prairies – especially Saskatchewan – than anywhere else in Canada. In fact, a national survey shows Saskatchewan has the highest proportion of substance abuse counsellors in recovery, at 46 per cent. By comparison, the proportion in Ontario and Quebec is about 20 per cent.

Even though this group represents a significant component of the addiction workforce in Saskatchewan, there is a lack of research about this cohort. Novotna received a 2017-18 SHRF Establishment grant to study this unique group, investigating how their recovery status affects their professional identity and impacts their counselling performance and effectiveness.

To address this gap in knowledge, her research will include interviewing counsellors to determine how to capitalize on their lived experience. "I would like to give this community the opportunity to speak and have a voice in this project," she states. Novotna's research goal is that her findings will allow her to make recommendations that will influence the development of policies to assist and support these counsellors through their personal and professional journeys. She also hopes to inform the education and training that goes into the certification of counsellors at the provincial and national level.

Delivering effective counselling requires good counsellors, and "we need to understand who these particular services providers are and what their needs are," says Novotna. "They deserve our attention and deserve to be heard," she continues. "I think my research can contribute to a better understanding of what we can do for them and how we can support them. We cannot really provide good services if we don't have service providers that are well-trained, well-supervised and supported."

Helping counsellors in recovery to integrate their lived experience into their treatment, while supporting their own recovery needs, could ultimately mean better outcomes for these counsellors and those they treat.

¹ Smetanin et al. (2011). *The life and economic impact of major mental illnesses in Canada: December 2011*. Prepared for the Mental Health Commission of Canada. Toronto: RiskAnalytica.

² <https://www.mentalhealthcommission.ca/English/focus-areas/recovery>

Research Fellowships

SHRF's Research Fellowship program provides financial support to high-quality candidates for a period of postdoctoral research in a health-related field under the supervision of an experienced, active researcher. The program is intended to enhance the research productivity of the supervising Saskatchewan university faculty member. Recipients received \$50,000 per year (\$45,000 in salary and \$5,000 in research allowance for the award holder's professional development) for two years, for a total of \$100,000 in funding.

The following are the 10 recipients of the 2017-18 Research Fellowships:

BEHZAD BASHIRI

Catherine Trask (Lead Supervisor)
Canadian Centre for Health and Safety in
Agriculture (CCHSA)
Medicine
University of Saskatchewan
*Shake and Break: The Effects of Whole-Body
Vibration on Farm Machinery Egress*

SUPRIYA BHAT

Andrew Cameron (Lead Supervisor)
Biology
Science
University of Regina
*Transmission of Antibiotic Resistance by
DNA Uptake in the Priority Pathogens E.
Coli, Klebsiella, and Salmonella*

AYELEN BLANCO IMPERIALI*

Suraj Unniappan (Lead Supervisor)
Veterinary Biomedical Sciences
Veterinary Medicine
University of Saskatchewan
*Nucleobindin Endcoded Peptides and the
Regulation of Growth*

ELAHEH KHOZEIMEH SARBISHEH

Eric Price (Lead Supervisor)
Chemistry
Arts and Science
University of Saskatchewan
*The Application of Copper-free Click
Chemistry in the Preparation of Advanced
Radiotracers*

YUNCHENG LV

Francisco Cayabyab (Lead Supervisor)
Surgery
Medicine
University of Saskatchewan
*Lipid and Î±-Synuclein Accumulation in
Substantia Nigra Contributes to Parkinson's
Disease: Role of ABCA1 Cholesterol
Transporter and Adenosine A1 Receptor*

SWATI MEHTA**

Heather Hadjistavropoulos (Lead Supervisor)
Psychology
Arts
University of Regina
*Therapist-Assisted Internet-delivered
Cognitive Behavior Therapy for Persons
Following Spinal Cord Injury*

MOHAMED TAHA MOUTAOUFIK

Mohan Babu (Lead Supervisor)
Chemistry and Biochemistry
Science
University of Regina
*Elucidating Human Mitochondrial
Interactome and Protein Complexes Critical
for Mitochondrial Function and
Neurodegeneration*

OLUWAFEMI OLUWOLE

Donna Rennie (Lead Supervisor)
Nursing
University of Saskatchewan
*Asthma Diagnosis and Severity among
Children in Saskatchewan*

SATHIYA SEKAR

Changiz Taghibiglou (Lead Supervisor)
Pharmacology
Medicine
University of Saskatchewan
*Cellular Prion Protein (PrPC) as a Molecular
Link Between Traumatic Brain Injury (TBI),
Brain Insulin Resistance and
Neurodegenerative Diseases*

THIAGO SERAPHIM

Mohan Babu (Lead Supervisor)
Biochemistry
Science
University of Regina
*Global Analysis of Cellular Functions of the
Human R2TP Chaperone Complex Through
Physical and Genetic Interaction Mapping*

* This recipient declined due to success in securing international funding

** This recipient declined due to success in securing national Tri-Agency funding

One 2016-17 Research Fellow
received the salary top-up award
this year in lieu of full SHRF
funding following success in
securing Tri-Agency funding

ALLA GAGARINOVA

Mirosław Cygler (Supervisor)
Biology
Science
University of Regina
Elucidating the Roles of Pathogen Virulence Factors in Subverting Host Cell Processes

One 2017-18 Research Fellow received the salary top-up award this year in lieu of full SHRF funding following success in securing Tri-Agency funding

SWATI MEHTA

Heather Hadjistavropoulos (Supervisor)
Psychology
Arts

University of Regina

Therapist-Assisted Internet-delivered Cognitive Behavior Therapy for Persons Following Spinal Cord Injury

Collaborative Innovation Development Grants

Collaborative Innovation Development (CID) grants provide seed money to support collaborative, interdisciplinary and innovative research activities that represent the first steps toward pursuit of more comprehensive funding. Funding provided by SHRF is intended to foster creativity, novelty and innovation in research that has potential to benefit the health of Saskatchewan residents and strengthen future funding applications. CID grant recipients receive up to \$50,000 in funding for one year.

The following are the 13 recipients of the 2017-18 CID grants:

ANDREW CAMERON

Biology
Science
University of Regina

Developing Diagnostic Tools for Risk Assessment of the Zoonotic Pathogens Borrelia (Lyme Disease), Hantavirus, and Leptospira in Saskatchewan

XIONGBIAO (DANIEL) CHEN

Mechanical Engineering
Engineering
University of Saskatchewan

Synchrotron Imaging-Based Non-Invasive Studies on 3D Printed Scaffolds for Bone Repair

GRAHAM GEORGE

Geological Sciences
Arts and Sciences
University of Saskatchewan

Multimodal Imaging of Alzheimer's Disease Mouse Models

CLARENCE GEYER

Pathology
Medicine
University of Saskatchewan

Molecular Imaging of Epidermal Growth Factor Receptor (EGFR) Using a Domain II Specific Antibody

GARY GROOT

Community Health and Epidemiology
Medicine
University of Saskatchewan

Facilitators and Barriers to Clinical Pathway Uptake in Saskatchewan

LORRAINE HOLTSLANDER

Nursing
University of Saskatchewan

Supporting a New Caregiving Community Towards Improved Wellness

SHELLEY KIRYCHUK

Canadian Centre for Health and Safety in Agriculture (CCHSA)
Medicine
University of Saskatchewan

Mould as a Respiratory Risk Factor for Rural Populations

MICHAEL LEVIN

Medicine
University of Saskatchewan

A Novel Therapy That Attacks the Pathologic Immune Response in Multiple Sclerosis

JOSEPH NDISANG

Physiology
Medicine
University of Saskatchewan

A Novel Strategy Using Wheat Grains (Modern and Ancient) as a Tool for the Prevention and Management of Type-2 Diabetes

KALYANI PREMKUMAR

Community Health and Epidemiology
Medicine
University of Saskatchewan

Cortisol, Alpha-Amylase, Cytokines and Treatment-Related Symptoms in Breast Cancer Survivors Submitted to a Swedish Massage Intervention

LOUISE RACINE

Nursing
University of Saskatchewan

Indigenous Palliative Care in Saskatchewan: Exploring Access, Needs, and Challenges

JOSE TELLEZ-ZENTENO

Neurology
Medicine
University of Saskatchewan

Validation of a Mobile Electroencephalogram Technology Platform for Deployment in a Telehealth Epilepsy Clinic Setting: A Pilot Trial and Proof of Concept Study

COREY TOMCZAK

Kinesiology
University of Saskatchewan

A Pilot Study to Test the Effectiveness and Feasibility of Saskatchewan's First Chronic Disease Management Intervention Program for Children with Congenital Heart Disease

Patient-Oriented Research Funding

Canada's Strategy for Patient-Oriented Research (SPOR), as outlined by the Canadian Institutes of Health Research (CIHR), is about ensuring that the right patient receives the right intervention at the right time. It refers to "a continuum of research that engages patients as partners, focuses on patient-identified priorities and improves patient outcomes." CIHR states that the objective of SPOR is to "foster evidence-informed health care" with a guiding principle that patients be involved in all aspects of the research, to ensure questions and results are relevant.

The Saskatchewan Centre for Patient-Oriented Research (SCPOR) is Saskatchewan's SPOR Support for People and Patient-Oriented Research and Trials (SUPPORT) unit. SCPOR is a partnership of organizations, including SHRF, that support and promote patient-oriented research in Saskatchewan. Funded in part by CIHR, SCPOR is mandated to build provincial and national capacity for patient-oriented research. As part of SHRF's contribution to SCPOR, we offer research funding opportunities in line with SCPOR's mandate.

Sprout Grants

The Sprout grant program is offered in partnership with SCPOR to build capacity and collaborations to conduct responsive, equitable, innovative and patient-oriented research that continuously improves the care and health of Saskatchewan people. Each funded team receives up to \$100,000 in SHRF funding and up to \$60,000 in SCPOR funding for eligible expenses, over two years.

The following are the eight recipients of the 2017-18 Sprout grants:

CATHERINE ARNOLD

Physical Therapy
Medicine
University of Saskatchewan
A Collaborative Approach to Comprehensive Screening and Assessment of Fall Risk for Older Adults across the Continuum of Care in Saskatchewan

ANGELA BOWEN

Nursing
University of Saskatchewan
Bringing Birth Back: Improving Access to Culturally Safe Birth in Saskatchewan

JENNIFER GORDON

Psychology
Arts
University of Regina
Testing the Efficacy of Mindfulness-based Stress Reduction as a Prophylactic Intervention in the Prevention of Perimenopausal Depression: A Randomized Trial

GARY GROOT

Community Health and Epidemiology
Medicine
University of Saskatchewan
Sâkipakâwin - Assessing the Support Needs for Saskatchewan Indigenous Cancer Patients and their Families: A Multi-method Study

SAIJA KONTULAINEN

Kinesiology
University of Saskatchewan
Efficacy of Nordic Walking to Improve Physical Function, Quality of Life and Posture in Women with Osteoporosis, History of Vertebral Fracture or Hyperkyphosis

GEOFFREY MAINA

Nursing
University of Saskatchewan
Exploring the Needs for and Developing Resources for Families Affected by Addiction in Prince Albert, Saskatchewan

HOLLY MANSELL

Pharmacy
Pharmacy and Nutrition
University of Saskatchewan
Improving health outcomes of kidney recipients: A randomized controlled trial of a pre-transplant education intervention

IVAR MENDEZ

Surgery
Medicine
University of Saskatchewan
Development and Evaluation of a Remote Robotic Ultrasound Clinic Model to Improve Access to Medical Imaging in Rural, Remote and Indigenous Communities

2 robots to provide mental health help to northern Sask. youth

Remote Presence Technology allows 2-way communication between northern patients and specialists in the south

Bridget Yard · CBC News · Posted: Oct 10, 2017 2:50 PM CT (Re-printed with permission.)

Medical professionals in southern Saskatchewan are hoping to make youth mental health care more accessible for patients in the province's northern communities — and they think robots are part of the answer.

The robots, or Remote Presence Technology (RPT), work similarly to a Skype or FaceTime application, where both parties can see and hear each other in real-time.

"There's a true epidemic in terms of suicide in youth, especially in First Nations communities in the north — six times more than the rate of youth in the south," said Dr. Ivar Mendez, the head of the department of surgery at University of Saskatchewan.

"They may have an initial assessment but then they go back to their communities without a followup." Unlike basic smartphone applications, the units are outfitted with what Mendez calls "ears," which direct the top portion (or "head") of the robot towards the person speaking.

The physician using the robot remotely can also control where it goes, whether it's down the hall to another patient's room or in a patient's home.

The units can connect to diagnostic equipment like a stethoscope and ultrasonography.

Less travel for patients

The new RPT units will be added to six others in the northern part of the province. Officials are assessing communities now and will place the robots based on need. "Our hope is in the future that each community in northern Saskatchewan will have its own," said Mendez.

Last year, six young women in northern Saskatchewan communities died by suicide, and prompted calls for action by the FSIN, First Nations chiefs, and parents within those communities.

The situation is often referred to as a crisis.

Before the units, many children had to travel several hours from their home communities to tertiary medical centres

for follow-ups. The introduction of new communication technologies could have an effect on this practice.

"We can take care of these children in their own communities 64 per cent of the time," said Mendez.

Sometimes patients from the North have to use medical taxis, and may be seated with others who are ill and not feeling well. When they get to Saskatoon or Regina, further issues crop up.

"Sixty-five per cent or more speak a language other than English as a first language," said Dr. Veronica McKinney, director of Northern Medical Services.

"They don't necessarily feel they can ask questions, they feel uncomfortable, and they just want to get out of here. Sometimes they're here just for a 15-minute appointment," she said.

Tool for retention

The RPT units will not replace physicians in the North, according to McKinney and Mendez.

"When there's no other alternative, no other real person there, the system provides that important access," said Mendez.

Some northern communities don't have 24-hour access to a physician, and sometimes nurses are left with little support.

"We don't have psychiatrists who can practise in a small community because they might not be able to have a practice in a community of 1,000 people."

The units will be manned by existing psychiatrists on staff in the province.

They may also increase retention and recruitment rates for nurses in northern communities.

"Nurses want to go where they have the robots because they know they will have help from physicians in real-time," said Mendez.



Patient-Oriented Research Leader Awards

Leader Awards will support a cluster of patient-oriented research leaders, at any career stage, who will lead research in collaboration with patient-oriented research stakeholders throughout the province. The Leader Awards will provide funds to carry out research, as well as funding to support a portion of the award recipients' salaries to protect time for research activities.

Award recipients will contribute to achieving cultural change in how research is done, provide evidence-informed improvements for the health care system and strive to improve patient outcomes.

The initial call for Patient-Oriented Research Leader Awards is targeted at research in the areas of Indigenous health and/or mental health and addictions. Each award is jointly funded by SHRF and SCPOR for a total value of \$250,000 per award. The application deadline for the first call was March 15, 2018, and the award recipients will be notified early in the 2018-19 fiscal year, with a second competition planned for later in the fiscal year.

Ideas that Inspire

The Lung Association of Saskatchewan and SHRF have partnered to fund research grants throughout Saskatchewan in support of the new Respiratory Research Centre (RRC) with the shared goal of "discovery for healthy breathing." The RRC, which is housed within the College of Medicine at the University of Saskatchewan, aims to reduce risk, discover cures, save lives and improve quality of life for all Canadians.

This funding opportunity aims to breathe life into ideas that inspire by funding interdisciplinary teams doing human health and translational research projects with the aim of applying that knowledge for the benefit of patients. Grant recipients will receive \$25,000 funding for one year. The funding competition closed on March 15, 2018, and grant recipients will be notified within the first quarter of the 2018-19 fiscal year.

Saskatchewan Research Chairs Program

The Saskatchewan Research Chairs Program is a multi-year commitment to increase health research capacity in Saskatchewan. It was designed to match expert capacity to Saskatchewan's strengths and opportunities.

Saskatchewan Chair in Clinical Stroke Research

On June 13, 2017, SHRF and Heart & Stroke announced a five-year funding renewal for the Saskatchewan Chair in Clinical Stroke Research held by Dr. Michael Kelly. Dr. Kelly has held the Research Chair position since 2012. Highlights of his work as Chair include: establishing the Saskatchewan Acute Stroke Pathway to improve outcomes for stroke patients; founding the Ministry of Health's Saskatchewan Stroke Expert Panel, which he co-chairs; and leading a research team in the ESCAPE stroke trial, an international trial of a clot retrieval procedure known as endovascular treatment (ET).

Both SHRF and Heart & Stroke will each provide \$500,000 in funding for the Stroke Research Chair. With the University of Saskatchewan providing an additional \$500,000 of cash and in-kind support, the total funding commitment is \$1.5 million over five years from November 2017 to October 2022.

Chair in Multiple Sclerosis (MS) Clinical Research

Dr. Michael Levin was appointed as the Chair in Multiple Sclerosis (MS) Clinical Research and began his position at the University of Saskatchewan on March 1, 2017. SHRF and the Saskatoon City Hospital Foundation are each contributing \$500,000 over five years for the Saskatchewan Research Chair portion of the position.

Research Chair in Alzheimer's Disease and Related Dementia

Dr. Darrell Mousseau was renewed in 2015 for a second five-year term as the \$1 million Research Chair in Alzheimer's Disease and Related Dementia, in partnership with the Alzheimer's Society.

Research Connections Grants

The Research Connections grant program provides matching funds to support short-term, targeted knowledge mobilization (KMb) events and outreach activities. KMb initiatives are innovative, far-reaching, impactful and have a practical application for knowledge users in Saskatchewan. These events and activities promote sharing and usage of health research knowledge in Saskatchewan and encourage linkages between, and among, researchers and others.

In 2017-18, the program changed to three funding cycles with fixed results announcement dates in April, August and December. Each Research Connections grant recipient may receive up to \$10,000 in matching funding for a KMb event or activity. A total of \$150,000 in funding was available to applicants for this fiscal year.

The following is a list of 16 recipients awarded 2017-18 Research Connections grants:

SYLVIA ABONYI

Saskatchewan Population Health and Evaluation Research Unit (SPHERU)
Community Health and Epidemiology Medicine
University of Saskatchewan
Disparities in Respiratory Health Among First Nations People: Assess, Redress, Re-assess. Sharing Knowledge & Experience, Revealing Priorities & Directions

CAROL BULLIN

Nursing
University of Saskatchewan
Kidney Health and Wellness Day

LORNA BUTLER

Nursing
University of Saskatchewan
Telehealth in Northern and Indigenous Communities: Improving Access through Innovation & Collaboration

DARREN CADOW

Kinesiology and Health Studies
University of Regina
Canada Conference on Sports Nutrition and Training

FRANCISCO CAYABYAB

Surgery
Medicine
University of Saskatchewan
Neuroscience Research Symposium at U of S - Focus on Multiple Sclerosis and other Neurodegenerative Brain Disorders

RACHEL ENGLER-STRINGER

Community Health and Epidemiology Medicine
University of Saskatchewan
Indigenous Food in the City Knowledge Dissemination and Exchange

HUMPHREY FONGE

Medical Imaging
Nuclear Medicine
University of Saskatchewan
U of S Emerging Expertise in Molecular Imaging Research

HOLLY GRAHAM

Nursing
University of Saskatchewan
Gathering for miyo mahcihowin (physical, mental, emotional and spiritual well-being)

ROBERT LAPRAIRIE

Medicine
University of Saskatchewan
Inaugural Saskatchewan Cannabinoid Research Symposium

KIVEN (ERIQUE) LUKONG

Pharmacy and Nutrition
University of Saskatchewan
5TH ANNUAL PSFAM MEETING (2017)

JEAN MORRISON

Saskatchewan Hospice and Palliative Care Association
Palliative Care "Three Journals" Publication

CINDY PETERNELJ-TAYLOR

Nursing
University of Saskatchewan
Custody and Caring: 15th Biennial International Conference on the Nurse's Role in the Criminal Justice System

MEGAN VANSTONE

Research and Performance Support
Regina Qu'Appelle Health Region
Research Showcase 2017

FRANCO VIZEACOMAR

Oncology
Medicine
University of Saskatchewan
Saskatchewan Cancer Research Conference

BRANDACE WINQUIST

Saskatchewan Epidemiology Association
Saskatchewan Epidemiology Association's 17th Annual Fall Symposium & Workshop

YANBO ZHANG

Psychiatry
Medicine
University of Saskatchewan
Major Mental Illness: Early Intervention and Psychiatric Rehabilitation, with Special Consideration for Marginalized Populations

Peering Into the Living Brain

How Saskatchewan Research is Contributing to Parkinson's Disease Knowledge

This story originally appeared in Research for Health, Issue 4, October 2017 and can be found here:

<https://shrf.ca/Health-Research/Publications> (page 16)

Diagnosing early Parkinson's disease is a challenging process that relies largely on the clinical skills of neurologists who are familiar with the symptoms in other patients they have treated. There is no biological test that can confirm early Parkinson's – often, it is diagnosed late into its progression.

Researchers now know, however, that early in Parkinson's onset, levels in the brain of a protein called Glucocerebrosidase (GCase) begin to drop significantly. The only way researchers have learned that, however, is by analyzing tissue samples from the brains of people with Parkinson's disease who have died, or through experiments using human cells in tissue culture.

At the University of Saskatchewan (U of S), Dr. Christopher Phenix, an assistant professor of chemistry, has designed compounds that could be adapted into radioactive tracers that could attach to GCase in people.

His goal is to allow researchers and clinicians to use Positron Emission Tomography (PET) to scan images of the brains of living people and study their levels of GCase, which his tracer and chemical compound will make visible on an imaging scan.

“What we're trying to do is develop a PET method where we can actually peer into the brain of a living person and study GCase activity or levels in real time,” Phenix says.

Not only would PET scans that reveal levels of GCase serve as a diagnostic aid for Parkinson's disease, they could also be invaluable in measuring the effectiveness of drugs designed to increase the activity of the same protein. Phenix's compounds could produce a non-invasive test to see if the drugs are working, and could also help select patients with low GCase as good candidates for drug trials.

Being able to understand the underlying molecular mechanisms of Parkinson's disease and how it progresses before most of the dopamine-producing brain cells have died, will also be critical once other researchers develop a therapy to stop the disease's advancement. Indeed, several pharmaceutical companies have active GCase targeted drugs, some of which are already being tested in patients and are collaborating with the Phenix lab.

Coming Home to Opportunity

Phenix grew up in southeast Saskatchewan in a small town called Arcola. After working in Vancouver for 3 years and Thunder Bay, Ontario for 6 years, the growth of opportunities in his home province brought him back to the prairies. “I came home primarily because I was excited about how much enthusiasm and investment have been made in Saskatchewan's nuclear medicine research program, including the creation of the Saskatchewan Centre for Cyclotron Sciences located at the U of S and the recruitment of many world-class researchers,” says Phenix.

Not only was Phenix impressed with the direction nuclear medicine was taking in the province, he was enticed by the number of collaborations possible with other researchers in areas such as veterinary medicine, human health sciences, agriculture, medicine, biology and chemistry.

“Saskatchewan really does have fantastic opportunities as a province,” comments Phenix. “Great researchers, great students and great organizations to help support us. We are very close to making Saskatchewan world-renowned for PET imaging research.”

Advancing the Collective Impact on Parkinson's Disease.

Innovative research does not happen in a silo. Phenix recognizes that to see advances in the diagnosis and treatment of Parkinson's disease, you need collaborations that involve other scientists, students and trainees, and technicians who have skills in cell biology, chemistry, radiochemistry, animal handling and PET imaging.

Making these collaborations possible is the funding researchers like Phenix receive through provincial funders like SHRF and organizations like Parkinson Canada.

Phenix is supported by SHRF's Establishment grant program, which helps researchers new to Saskatchewan build their research program in the province and achieve the productivity necessary to be successful in obtaining further funding at the highly competitive national level.

Phenix was also successful in obtaining a pilot project grant from Parkinson Canada through its Research Program, which encourages Canadian researchers to test original theories that may not have been investigated otherwise. These projects also enable scientists to leverage additional funding resources once their concepts are proven. The Parkinson Canada Research Program also provides funding for graduate student awards, new investigators and for clinical and basic science fellowships. The possibility that a new idea could lead to a significant finding makes pilot project grants vital.

"If you were to get a grant in isolation, would it be helpful? Yes, it would be helpful. But you really can't operate at your full capacity without having the support from multiple organizations," says Phenix.

For Phenix, this research is also personal. His grandmother Lucille Sosiak had Parkinson's disease.

"It's a pretty devastating disease, so when you have a personal connection to it, it really helps you stay focused on your research and your goal to help people with Parkinson's disease," Phenix says.



Photo Credit: Stealth Media

The above article is written with contributions from Parkinson Canada. For more information about the Parkinson Canada Research Program, visit Parkinson.ca.

Partnerships

SHRF values strong partnerships, which are at the core of innovative health research. SHRF aims to build partnerships that contribute to our vision of a vibrant culture of health research and innovation for a stronger Saskatchewan.

Whether it's partners contributing to a SHRF-led funding opportunity, or SHRF contributing to a partner-led funding opportunity, partnerships provide dollars to build and broaden the province's health research and innovation capacity in important areas. By offering matching funds on partner-led programs and initiatives, SHRF helps to connect Saskatchewan researchers to national and international networks.

SHRF joins with other funding agencies, not-for-profit organizations and the health research community to encourage effective investment in Saskatchewan health research. SHRF also facilitates connections among health sector partners, patients and researchers, and works to encourage public engagement with health research in our everyday lives. Since 2010, SHRF has matched more than \$3 million in partnership dollars from non-profit funders of research, such as the Alzheimer Society of Saskatchewan, Heart & Stroke Foundation and MS Society of Canada, just to name a few. These are research funds that may not have been spent in Saskatchewan without SHRF's investment.

SHRF provided the following contributions to partner-led grants awarded in 2017-18:

PARTNER-LED PROGRAM	RECIPIENT/AFFILIATION	TITLE OF PROJECT	SHRF \$
CIHR Operating Grant: New Investigator Grants in Maternal, Reproductive, Child & Youth Health	Alana Cattapan Johnson-Shoyama School of Public Policy University of Saskatchewan	<i>Perpetually, Potentially Pregnant: The Discursive Construction of "Women of Childbearing Age" and its Effects in Public Health and Biomedical Research</i>	18,593
Canadian Glycomics Network (GlycoNet)	Christopher Phenix Chemistry Arts and Science University of Saskatchewan	<i>Evaluation of PET Radiotracers for Imaging Glucocerebrosidase in Parkinson's Disease</i>	50,000
SPOR PIHCl Network Programmatic Grant	Vivian Ramsden Family Medicine Medicine University of Saskatchewan	<i>Case management in primary care for frequent users of healthcare services with chronic diseases and complex care needs: implementation and realist evaluations (SHRF contribution \$62,500). SK-based</i>	62,500
SPOR PIHCl Network Programmatic Grant	Cory Neudorf / Nazeem Muhajarine Medicine University of Saskatchewan	<i>Screening for Poverty and Related social determinants and intervening to improve Knowledge of and links to resources</i>	62,500

Overall in 2017-18, SHRF invested \$193,593 in four grants through partner-led programs. SHRF's contributions leveraged investments from the partner organization offering the funding opportunity, as well as other contributing partners at varying rates for each grant. The overall return on SHRF's investment in these partner-led programs is well over a 2:1 ratio.



Measuring Impact and Demonstrating Value

Measuring and demonstrating the impact of health research in Saskatchewan is a central to SHRF's role as the provincial agency that funds health research. It is key to ensuring that SHRF continues to fund high-impact research of the highest quality; that research findings are used to inform decision-making at the health policy, system and patient levels; and that SHRF is transparent and accountable in how it reports publicly on developments in health research across the province.

In 2017-18, SHRF continued to play an active role on the National Alliance of Provincial Health Research Organizations (NAPHRO) Impact Analysis Group (IAG), supporting several projects. One involves developing the definitions and methods to collect data on leveraged dollars and partnerships; another project has SHRF, Alberta Innovates and British Columbia's Michael Smith Foundation for Health Research pilot testing data from ÜberResearch to inform NAPHRO's collective research investments and areas of strength.

SHRF is collaborating on a larger-scale study looking at the longer-term impacts of our research investments in early career awards. SHRF's use of the Return on Investment (ROI) methodology in the evaluation of our Collaborative Innovation Development (CID) program will be used to monetize other intangible impacts and examine what contributing factors are related to high-ROI researchers and projects. We will also be looking into linking other data sources such as peer review rankings, Über Research, patents and policy documents/clinical guidelines.

Impacting Seniors' Health - The Value of Aging-Related Research in Saskatchewan

In April 2017, SHRF released a research impact assessment report on aging-related research funded by SHRF. The purpose of the report was to document the impact that aging-related health research had on health policy, decision-making practices and the health of Saskatchewan seniors. Methods included the use of case studies by interviewing and profiling the work of researchers studying this topic and by interviewing community partners about the awareness and use of health research on aging. The 28-page report was released at a media event and reception in Regina on April 5, 2017. More than 1,000 copies were distributed through partner organizations, post-secondary institutional stakeholders and seniors' organizations like the Saskatoon Council on Aging and Saskatchewan Seniors Mechanism. The entire publication was also made available for viewing or download from SHRF's website.

Following the successful release of this publication, SHRF is now working on a paper that will focus on how research impact is measured, general trends in aging and health in Saskatchewan, how health research and SHRF help address health issues facing seniors, and how we can better use and improve the impact of funded research.

Weechihitotan - The Value of Aboriginal Health Research in Saskatchewan

The Saskatchewan Health Research Foundation (SHRF) has engaged the Indigenous research community to gain a better understanding of how to support community-based health research and communicate the impact of research. SHRF has used the Canadian Academy of Health Sciences' (CAHS) ROI Framework to collect data along the continuum of research, from capacity-building activities to health impacts. This will serve as a follow-up report to on *Weechihitotan: The Value of Aboriginal Health Research in Saskatchewan*, which was published by SHRF in 2015.

Return on Investment (ROI) and Evaluation

Work is underway to update the data from SHRF's Collaborative Innovation Development (CID) ROI Evaluation conducted in 2016. Progress and final reports are being adjusted to better calculate an ROI at the project level, focused on partner, in-kind, leveraged grants and subsequent grants.

SHRF conducted an evaluation of the Research Fellowship program. An evaluation framework and indicators were developed and used in surveying present and past fellows and supervisors. The final report suggests that, overall, the purpose of the Research Fellowship program is being met, with Fellows gaining relevant knowledge and skills to advance their careers and supervisors finding improved research activity, allowing them to conduct more research and apply for grants. SHRF will review this report in full and look to implement recommendations where appropriate.

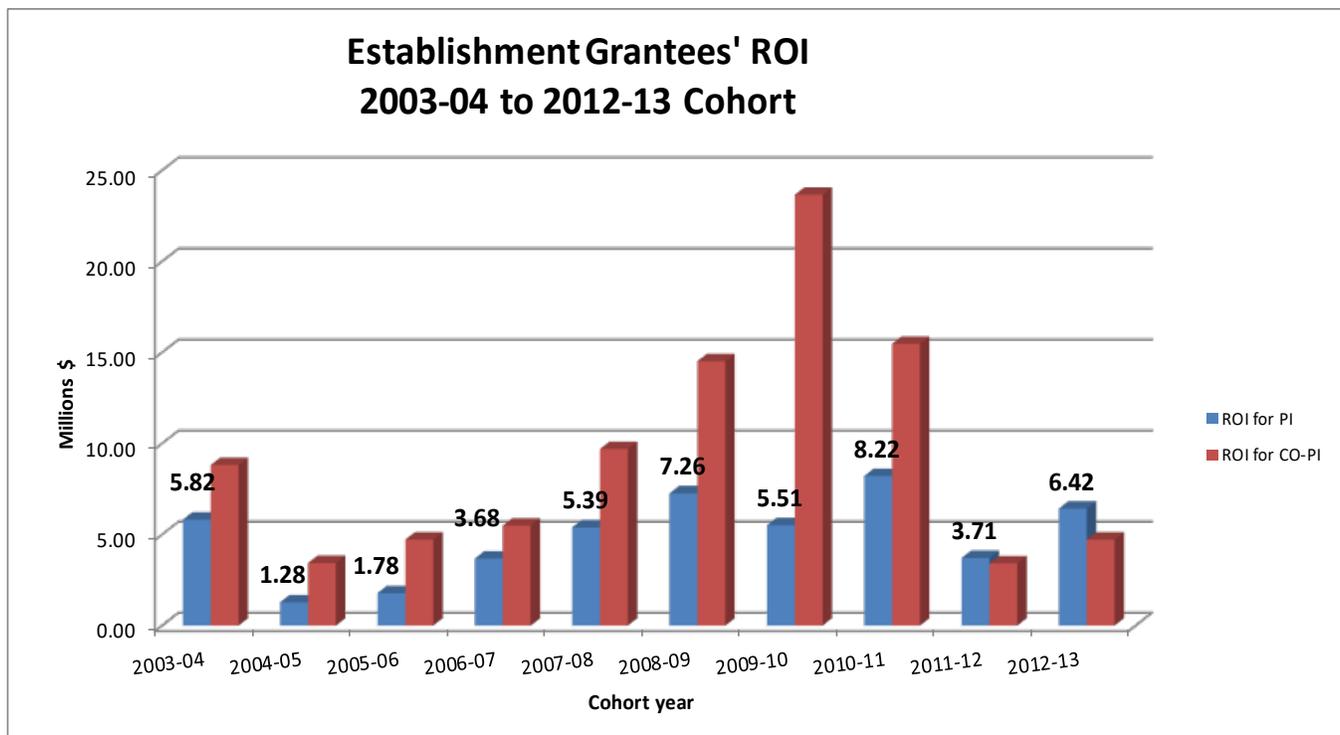
Five-Year Follow-Up

SHRF has followed up with past Establishment grant holders to measure the impact of the program. Following are results from the 2017-18 Five-year Follow-up Study with the 2012-13 Establishment grant cohort.

Top Trends and Themes:

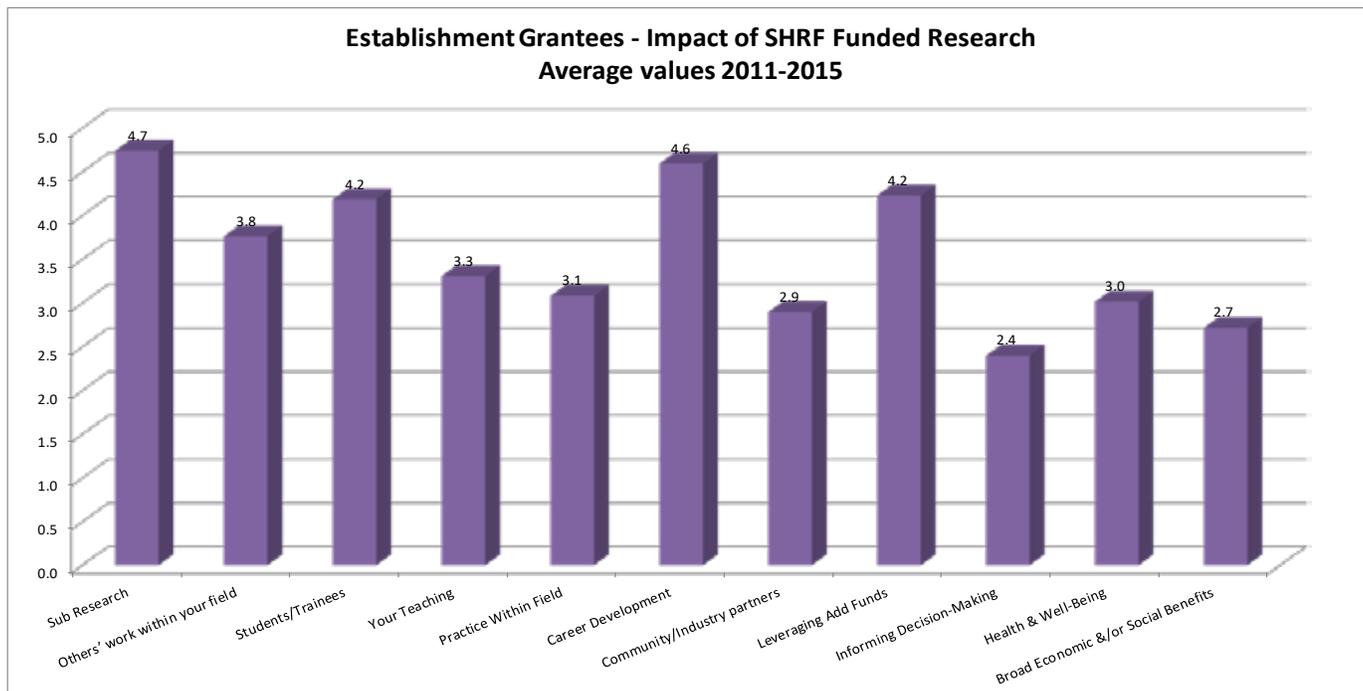
1. High return on investment (ROI) for Principal Investigators (PI)

The ROI for PIs from the 2012-13 cohort was 1:6.42. In other words, for every dollar SHRF invested in Establishment grants, researchers were able to attain \$6.42 dollars in external funding dollars. This speaks to the importance of SHRF investments directly and indirectly leading to the leveraging of federal research dollars. The ROI for co-PIs historically fluctuates much more than the range for PIs.



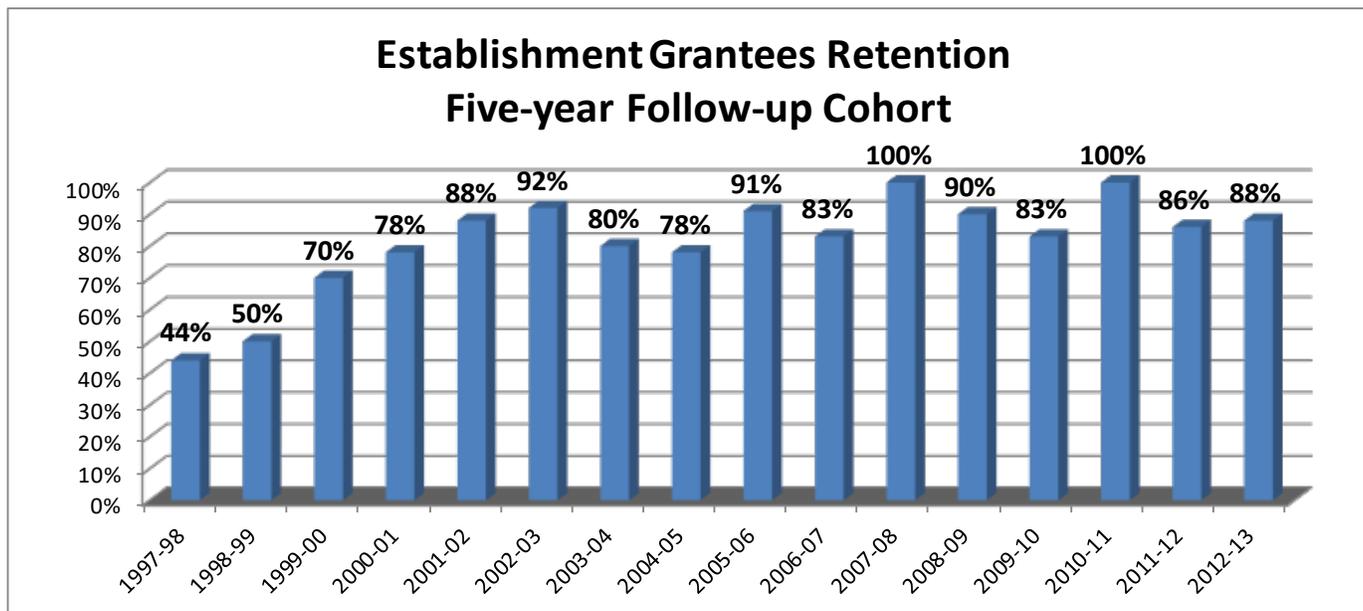
2. Impact on subsequent research, career development and leveraging dollars

Establishment grant recipients from the 2012-13 cohort are consistent with historical data from 2011 to 2015, reporting that the grant has made the biggest impact in the areas of subsequent research, career development, leveraging additional dollars and student/trainees.



3. Retention of Establishment grantees remains high

One of the primary objectives of this grant is to attract and/or retain a new researcher who will establish their research program in Saskatchewan. The retention rate over the past five years has been consistently at levels above 80 per cent.



4. Researchers continue to appreciate the support of SHRF

Comments from funded researchers continue to express gratitude for not only the funding from SHRF, but also the support offered, flexibility allowed to grantees where necessary and how researchers can leverage SHRF funding as a springboard to other funding, collaborations and research opportunities.

Researchers' comments:

Thank you very much for all your support. Words are inadequate to express the gratitude for funding opportunities that you offer. I want to thank the Government of Saskatchewan, all of your staff, and the board for helping us conduct world class research.

Several researchers started following our lead discoveries and the field has significantly grown in the past 5 years partly, but significantly due to our efforts.

I want Saskatoon, SK and U of S to be known for the strong science and research outputs from our group and am very committed to remain as a leader in comparative endocrinology.

It was a great stepping stone to further funding and enabled more equitable distribution of analysis to all parts of the province that did not have the capacity to do this work on their own.

Communications and Outreach

SHRF's communications and outreach activities play an important role in helping achieve the organization's strategic plan and vision. These activities share the success stories and impact that SHRF-funded research has on local and global health, while ensuring that SHRF is transparent and accountable to its key stakeholders, namely health researchers, our various partners and the citizens of Saskatchewan.

Media and Outreach Events

SHRF organized or participated in the following media announcements and other outreach events in 2017/18:

Event	Overview	Date
SHRF Media Conference	Launch of Impacting Seniors' Health - The Value of Aging-Related Research.	April 5, 2017, in Regina
SHRF Reception	A reception for the Seniors' report was held for participating researchers, partners and government officials.	
SHRF Reception	A reception for the Seniors' report was held for participating researchers and partners at the University of Saskatchewan.	April 10, 2017, in Saskatoon
SCPOR Conference	"Share the Vision" day to launch the Saskatchewan Centre for Patient-Oriented Research (SCPOR). SHRF participated in the conference planning and delivered a session on the Sprout grant to approximately 200 researchers, health care practitioners and patients.	May 17, 2017, in Saskatoon
Joint Media Conference	Announcement of renewal for the Saskatchewan Research Chair in Clinical Stroke Research, for a second five-year term. Joint announcement with the Heart & Stroke Foundation and the University of Saskatchewan.	June 13, 2017, in Saskatoon



Event	Overview	Date
SHRF Reception	In conjunction with its September Board meeting, SHRF hosted a reception for funded researchers and other partners. Approximately 30 attended the event at the University of Regina.	September 14, 2017, in Regina
Santé Award Evening	This 14th annual event attracted over 200 attendees, included a presentation of SHRF's Achievement, Excellence and Impact awards and showcased a broad range of funded researchers and SHRF partners.	December 7, 2017, in Saskatoon
SHRF & CIHR Best Brains Exchange	Joint event with CIHR. Forty-four people attended from the provincial government, new provincial health authority and other health system stakeholders. Attendees heard presentations from four external experts and participated in a facilitated plenary discussion.	January 23, 2018, in Regina

Sponsorships

Sponsorships allow SHRF to build relationships with organizations that are strongly aligned with our mission, values and strategic goals. SHRF seeks to sponsor purposeful and effective activities that support our mandate and enhance our reputation with key stakeholders, while promoting the benefit of health research and innovation, building collaboration between researchers and end-users, and strengthening relationships with our partners and other potential supporters.

SHRF sponsored the following events in 2017-18:

EVENT	LOCATION
Saskatchewan Nurse Practitioner Education Conference	Saskatoon
Saskatchewan Seniors Mechanism – Annual Conference	Regina
2020 Health Visions Conference	Saskatoon
12th Annual Forum of the Canadian Academy of Health Sciences	Ottawa
Med.Hack Hackathon	Saskatoon
Canadian Cancer Research Conference	Vancouver
STIC Awards (Science, Technology, Innovation, Collaboration)	Saskatoon
SPARK Night hosted by Innovation Saskatchewan	Saskatoon
Regina Regional Science Fair	Regina
Saskatoon Regional Science Fair	Saskatoon

Publications

Impacting Seniors’ Health – The Value of Aging-Related Research

More than 1,000 copies of this 28-page impact report have been widely distributed to researchers featured in the report, partners such as the Alzheimer Society and community groups like the Saskatchewan Seniors Mechanism. A limited number of print copies remain for distribution, and the full report is accessible on our website at www.shrf.ca/Publications. A postcard has been printed that promotes the electronic version of the report to interested audiences.

Research for Health magazine

The fourth issue of SHRF’s magazine was published on October 24, 2017. Since its release, many of the twenty stories in the magazine have been featured through SHRF’s blog and other websites. Approximately 1,000 copies have been distributed through partner organizations and institutional stakeholders, various provincial organizations such as the Saskatchewan Medical Association and Saskatchewan Seniors Mechanism, researchers featured in the publication, media outlets, at SHRF events such as the Santé Awards Evening, and electronically through SHRF website and social media channels (Twitter and LinkedIn).



Events

Santé Awards Evening

The 14th annual edition of the Santé Awards Evening took place on December 7, 2017, in Saskatoon. SHRF's signature event brought the Saskatchewan health research community together to celebrate achievement, impact and excellence in research, as well as showcase SHRF-funded research and foster connections and collaborations among researchers.

The 2017 event was very successful with several key achievements, including a 45 per cent increase in attendance from 2016 and a 30 per cent increase in event sponsorship. Ratings by attendees were consistent with the 2016 Santé, with 95 per cent rating their overall impressions as Very Good or Good, and 86 per cent of attendees saying they are very likely to attend Santé again.

SHRF engaged Shaw TV as a media partner for the first time, with Shaw providing both pre-event news coverage and on-site interviews of award recipients. Shaw produced a 30-minute program about Santé, which was aired multiple times on their community TV station in Saskatoon, posted to their YouTube channel and shared with Access Communications in Regina, operators of a community TV station for several southern Saskatchewan markets.

This year's SHRF Achievement, Impact and Excellence awards were handed out at Santé and are detailed later in this report. Santé also featured an expanded Showcase area involving participants from two partner organizations – the MS Society of Canada and the Lung Association of Saskatchewan – and 14 funded researchers and teams, with several teams including their community and patient members. The event program featured the MS Clinical Research Chair Dr. Michael Levin, MS Society President (Manitoba and Saskatchewan Division) Erin Kuan and MS patient Lois Miller.

The Santé Awards Evening has become more than just a marquee event for the province's health research community; it has also fostered connections that have led to successful collaborations between researchers.

"Not only does Santé night allow you to hear about all the health-related research going on in Saskatchewan, it is an ideal way to meet other researchers in an informal setting and discuss common research goals and interests. I was able to make some great connections that helped lead to collaborations with our research group at Santé night."

Dr. Richard Huntsman, Pediatric Neurologist – University of Saskatchewan
2014-15 Collaborative Innovation Development (CID) grant recipient

Achievement Award

This annual award is presented to an individual in health research whose exemplary career achievements have inspired us with their drive, leadership and ingenuity. Candidates are nominated by their peers and considered by a panel of national and local experts from a range of fields.

This year's 2017 Achievement Award was presented to Dr. Andrew Potter of the Vaccine and Infectious Disease Organization-International Vaccine Centre (VIDO-InterVac) at the University of Saskatchewan.

A world-renowned expert in the development of vaccines for both human and animal diseases, Dr. Potter has worked at VIDO-InterVac for the past 33 years as a research scientist, director and currently as CEO. He is also a Professor at the Western College of Veterinary Medicine. In addition to his primary research, Dr. Potter has mentored more than 40 graduate students and postdoctoral fellows, contributed to more than 65 patents for human and animal vaccines and therapeutics, published over 210 peer-reviewed papers and has made approximately 400 conference presentations, most as an invited or keynote speaker.

Impact Award

The Impact Award was introduced in 2016 to recognize the importance of measuring the impact of funded health research. The award is presented to one researcher from SHRF's Establishment grant recipients in recognition of the impacts of their work over the past five years and to provide further support to encourage innovative knowledge translation efforts. Researchers from the 2012-13 Establishment grant cohort were eligible for this year's award.

The 2017 Impact Award was presented to Dr. Cory Neudorf of the University of Saskatchewan's College of Medicine for his work over the past five years to build capacity, advance knowledge, inform decision-making, and to provide health, economic and social impacts in Saskatchewan. Dr. Neudorf was selected for this award by a panel comprised of research impact and evaluation experts from across Canada. The award includes a \$3,000 prize to be used for knowledge translation efforts.

Excellence Award

These awards are given to the top-ranked researchers and teams from the past year's funding competitions:

AWARD NAME	RECIPIENT	PROJECT TITLE
Establishment Grant: Biomedical Research (2017-18)	ULADZIMIR KARNIYCHUK University of Saskatchewan	<i>Comparative Analyses of Infection Outcomes in Fetuses Exposed to Pre-Epidemic and Epidemic Zika Virus Strains</i>
Establishment Grant: Socio-Health, Systems, and Clinical Research (2017-18)	LLOYD BALBUENA University of Regina	<i>Neuroticism and Mood Instability as Suicide Prevention Targets</i>
Research Fellowship: Biomedical Research (2017-18)	AYELEN BLANCO IMPERIALI University of Saskatchewan	<i>Nucleobindin Encoded Peptides and the Regulation of Growth</i>
Research Fellowship: Socio-Health, Systems, and Clinical Research (2017-18)	SWATI MEHTA University of Saskatchewan	<i>Therapist-Assisted Internet-delivered Cognitive Behavior Therapy for Persons Following Spinal Cord Injury</i>
Collaborative Innovation Development Grant: Biomedical (2016-17)	JIM XIANG University of Saskatchewan	<i>Beneficial cytotoxic T lymphocyte responses derived from irreversible electroporation (IRE-NanoKnife) of pancreatic cancer for improvement of IRE-ablation cancer therapy</i>
Collaborative Innovation Development Grant: Socio-Health Systems, and Clinical (2016-17)	NANCY GYURCSIK University of Saskatchewan	<i>Exploring the effectiveness of an in-person integrated counselling training module to increase exercise providers' knowledge and beliefs to instruct and educate Saskatchewan adults with chronic non-cancer pain</i>

Outreach to Researchers

SHRF holds information sessions for researchers that are interested in applying for grants and orientation sessions for newly funded researchers after each funding competition. Typically, both types of funding-related events are held in Saskatoon and Regina, though increasingly SHRF is conducting information sessions via webinar format, which have proven popular with potential applicants and research support staff. SHRF records these webinars so they be viewed later, for those researchers unable to attend the live broadcast.

Regardless of the type of event or format, these sessions are an important way for SHRF to stay connected to Saskatchewan's health research community – keeping researchers advised of funding opportunities and changes, answering general questions and gathering feedback from the researchers who apply for SHRF funding. For more specific or individual questions, SHRF's Funding Programs team are easily accessible by phone and email.

In 2017-18, SHRF offered six information sessions – three each in Saskatoon and Regina – that attracted a total of 81 participants. In addition, four information sessions were delivered via webinar which attracted a total live viewership of 95 participants and an additional 64 participants who viewed the recorded version at a later date. SHRF also held four orientation sessions, three in Saskatoon and one in Regina, that reached a total of 52 participants.



Sharing Stories through Social and Traditional Media

SHRF utilizes both traditional media outlets – print, television and radio – as well as digital and social media to share the stories of the success and impact of our funded health researchers. Over the course of the fiscal year, SHRF tracked 24 media stories that mentioned SHRF’s role as a health research funder.

SHRF’s website (www.shrf.ca) provides access to our latest News and Events, our Blog and digital access to our publications, such as past Annual Reports, Impact Reports and both recent and archived issues of our Research for Health magazine.

SHRF uses Twitter and LinkedIn as our primary social media channels to inform health researchers and the research community, current and potential partners, other stakeholders and the general public to share the success stories of our funded researchers.

Some highlights of SHRF’s social media analytics from 2017-18 include:

- Shrf.ca saw close to 30,000 site visits with almost 87,000 pageviews
- Over 310,000 impressions received through SHRF’s Twitter account
- More than 18,000 impressions received on SHRF’s updates posted to LinkedIn

Looking Back, Moving Forward

In 2017-18, SHRF continued to fulfill its mandate to grow and support a vibrant culture of health research and innovation in Saskatchewan. This was accomplished through support for early-career researchers and trainees, high-impact research chairs, seed grants for innovative research teams and additional funding in the emerging area of patient-oriented research. SHRF’s support to researchers goes beyond the dollars granted, with additional grants available for knowledge translation, outreach events to connect researchers to each other and to the broader health environment, and the sharing of their success stories with a wide public audience. These supports help Saskatchewan-based researchers achieve even greater success on a national and international level.

SHRF also connects key players in the health research industry – researchers, federal and provincial governments, health charities and other funding agencies – fostering connections that create new collaborations and partnerships. We are stronger when we all work together. Of particular emphasis in the year ahead will be engaging with Indigenous scholars, communities and populations, to build upon existing strengths in community-based research that will have positive impact on the health of these communities and province of Saskatchewan as a whole.

Saskatchewan Health Research Foundation

Financial Statements

For the year ending March 31, 2018



Report of Management

Management is responsible for the integrity of the financial information reported by the Saskatchewan Health Research Foundation.

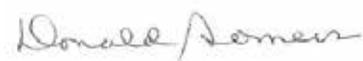
Fulfilling this responsibility requires the preparation and presentation of financial statements and other financial information in accordance with Canadian generally accepted accounting principles that are consistently applied, with any exceptions specifically described in the financial statements.

The accounting system used by the Foundation includes an appropriate system of internal controls to provide reasonable assurance that:

- transactions are authorized;
- the assets of the Foundation are protected from loss and unauthorized use; and
- the accounts are properly kept and financial reports are properly monitored to ensure reliable information is provided for preparation of financial statements and other financial information.

To ensure management meets its responsibilities for financial reporting and internal control, board members of the Foundation discuss audit and financial reporting matters with representatives of management at regular meetings. Foundation board members have also reviewed and approved the financial statements with representatives of management.

The Provincial Auditor of Saskatchewan had audited the Foundation's statement of financial position, statements of operations, change in net financial assets and cash flow. Her responsibility is to express an opinion on the fairness of management's financial statements. The Auditor's report outlines the scope of her audit and her opinion.



Don Somers
Board Chair



Patrick Odnokon
Chief Executive Officer



INDEPENDENT AUDITOR'S REPORT

To: The Members of the Legislative Assembly of Saskatchewan

I have audited the accompanying financial statements of the Saskatchewan Health Research Foundation, which comprise the statement of financial position as at March 31, 2018, and the statement of operations, statement of change in net financial assets and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards for Treasury Board's approval, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Saskatchewan Health Research Foundation as at March 31, 2018, and the results of its operations, changes in its net financial assets, and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Judy Ferguson, FCPA, FCA
Provincial Auditor

Regina, Saskatchewan
June 21, 2018

SASKATCHEWAN HEALTH RESEARCH FOUNDATION

STATEMENT OF FINANCIAL POSITION

As at March 31

	<u>2018</u>	<u>2017</u>
Financial assets		
Cash and cash equivalents (Schedule 2)	\$ 2,245,110	\$ 218,529
Accrued interest receivable	23,280	39,965
Accounts receivable	160,940	208,789
Short-term investments (Schedule 2)	3,400,000	4,500,000
Long-term investments	-	300,000
	<u>5,829,330</u>	<u>5,267,283</u>
Liabilities		
Deferred Revenue (Note 4)	50,677	-
Accounts payable and accrued liabilities	141,559	52,240
Payroll liabilities	21,880	12,881
Grants payable	3,982,572	4,029,615
	<u>4,196,688</u>	<u>4,094,736</u>
Net financial assets (Statement 3)	1,632,642	1,172,547
Non-financial assets		
Tangible capital assets (Note 3)	23,668	36,442
Prepaid expenses	11,207	16,594
	<u>34,875</u>	<u>53,036</u>
Accumulated surplus (Statement 2)	<u>\$ 1,667,517</u>	<u>\$ 1,225,583</u>
Contractual Obligations (Note 5)		
Contractual Rights (Note 6(3)(i))		

(See accompanying notes to the financial statements)

SASKATCHEWAN HEALTH RESEARCH FOUNDATION

STATEMENT OF OPERATIONS

For the Year Ended March 31

	2018		2017
	Budget	Actual	Actual
	(Note 10)		
Revenues			
Government Contributions			
Innovation Saskatchewan	\$ 5,630,000	\$ 5,630,000	\$ 5,630,000
Health Quality Council	-	-	60,000
Non-Government Contributions			
Alzheimer's Society of Saskatchewan	100,000	100,000	100,000
Heart and Stroke Foundation of Canada	100,000	100,000	100,000
Saskatoon City Hospital Foundation	100,000	100,000	100,000
Saskatchewan Center for Patient Oriented Research	-	203,561	-
Donations and Sponsorships	50,000	25,623	16,483
Other Revenue (Note 7)	120,000	312,763	200,506
Total Revenues	6,100,000	6,471,947	6,206,989
Expenses			
Research funding			
SHRF-led awards (Note 6(1))	4,073,000	4,267,669	3,983,817
Partner-led awards (Note 6(2))	300,000	327,713	338,750
Program support	343,549	385,336	283,721
Communication and Outreach	457,807	341,663	332,347
Impact and Evaluation	181,075	25,173	127,636
Leadership and management			
Board	45,950	18,787	27,163
Administrative	847,524	663,672	787,810
Total Expenses (Schedule 1)	6,248,905	6,030,013	5,881,244
Annual (deficit) surplus (Statement 3, 4)	\$ (148,905)	441,934	325,745
Accumulated surplus, beginning of year		1,225,583	899,838
Accumulated surplus, end of year (Statement 1)		\$ 1,667,517	\$ 1,225,583

(See accompanying notes to the financial statements)

SASKATCHEWAN HEALTH RESEARCH FOUNDATION**STATEMENT OF CHANGE IN NET FINANCIAL ASSETS**

For the Year Ended March 31

	2018	2017
	<u> </u>	<u> </u>
Annual surplus (Statement 2)	\$ 441,934	\$ 325,745
Acquisition of tangible capital assets	(4,263)	(22,051)
Disposal of capital assets	2,728	-
Amortization of tangible capital assets	14,309	30,967
	<u>12,774</u>	<u>8,916</u>
Acquisition of prepaid expense	(32,078)	(56,735)
Use of prepaid expense	37,465	65,713
	<u>5,387</u>	<u>8,978</u>
Increase in net financial assets	460,095	343,639
Net financial assets, beginning of year	1,172,547	828,908
Net financial assets, end of year (Statement 1)	\$ <u><u>1,632,642</u></u>	\$ <u><u>1,172,547</u></u>

(See accompanying notes to the financial statements)

SASKATCHEWAN HEALTH RESEARCH FOUNDATION

STATEMENT OF CASH FLOWS

For the Year Ended March 31

	<u>2018</u>	<u>2017</u>
Operating transactions		
Annual surplus (Statement 2)	\$ 441,934	\$ 325,745
Non-cash items included in annual surplus:		
Amortization of tangible capital assets	14,309	30,967
Bond amortization	-	1,124
Net change in non-cash working capital items:		
Accrued interest receivable	16,685	(7,838)
Accounts receivable	47,849	(320)
Prepaid expenses	5,387	8,978
Deferred revenue	50,677	-
Accounts payable and accrued liabilities	89,319	(179,982)
Payroll liabilities	8,999	(5,653)
Grants payable	(47,043)	(290,510)
	<u>628,116</u>	<u>(117,489)</u>
Capital transactions		
Cash (used) to acquire tangible capital assets	(1,535)	(22,051)
	<u>(1,535)</u>	<u>(22,051)</u>
Investing transactions		
Purchase of investments	(5,600,000)	(5,650,000)
Proceeds from disposal and redemption of investments	7,000,000	3,999,000
	<u>1,400,000</u>	<u>(1,651,000)</u>
Increase (Decrease) in cash and cash equivalents	2,026,581	(1,790,540)
Cash and cash equivalents, beginning of year	218,529	2,009,069
Cash and cash equivalents, end of year	\$ 2,245,110	\$ 218,529

(See accompanying notes to the financial statements)



SASKATCHEWAN HEALTH RESEARCH FOUNDATION
NOTES TO THE FINANCIAL STATEMENTS
MARCH 31, 2018

1. Establishment of the Foundation

On January 31, 2003, *The Saskatchewan Health Research Foundation Act* (S.S. 2002, c.S-21.1) came into force establishing the Saskatchewan Health Research Foundation (referred to as The Foundation or SHRF). The Foundation is responsible for organizing, managing and allocating most provincial health research funding in Saskatchewan and for ensuring that supported research fits with the province's health research priorities and leads to benefits for health and the health system in Saskatchewan.

2. Accounting Policies

Pursuant to standards established by the Public Sector Accounting Board (PSAB) and published by the Chartered Professional Accountants (CPA) Canada, the Foundation is classified as an other government organization. The Foundation uses Canadian Public Sector Accounting Standards.

These statements do not include a Statements of Remeasurement Gains and Losses as the Foundation does not have Remeasurement Gains or Losses.

The following accounting principles are considered to be significant.

a) Basis of accounting

The financial statements are prepared using the accrual basis of accounting.

b) Revenue

Historically, the Foundation's main revenue for operations has been contributions from the Ministry of Health – General Revenue Fund. Effective April 1, 2015, responsibility for the Foundation, including the provision of annual grant funding, was transferred from the Ministry of Health to Innovation Saskatchewan. Other revenue comes from partnerships, interest, recoveries and miscellaneous revenue.

Funds not spent during the term of a research grant or award compose recoveries if the grant or award expense was recognized in the prior years.

Government contributions are recognized as revenue when the transfer is authorized and any eligibility criteria are met, except to the extent that contribution stipulations give rise to an obligation that meets the definition of a liability. Contributions are recognized as deferred revenue when contribution stipulations give rise to a liability. Contributions are recognized in the statement of operations as the stipulation liabilities are settled.

c) Measurement uncertainty

The preparation of financial statements in accordance with PSAB accounting principles requires the Foundation's management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of commitments at the date of the financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ from those estimates.

d) Tangible capital assets

The recognition and measurement of tangible capital assets is based on their service potential. Purchases of furniture, office equipment, and computer hardware and software over \$1,000 are recorded at cost as a capital asset. Purchases below these amounts are expensed as incurred. Amortization is recorded on a straight-line basis as follows:

Furniture	10 years
Office Equipment	5 years
Computer Hardware and Software	3 years

Leasehold Improvements length of lease
Normal maintenance and repairs are expensed as incurred.

e) Investments

Investments are valued at amortized cost.

f) New accounting standards

A number of new Canadian public sector accounting standards and amendments to standards have come into effect on April 1, 2017, for the Foundation, and have been applied in preparing these financial statements. The following standards have become effective as follows:

- i. PS 2200 Related Party Disclosures, a new standard defining related parties and establishing guidance on disclosure requirements for related party transactions.
- ii. PS 3210 Assets, a new standard providing guidance for applying the definition of assets and establishing disclosure requirements for assets.
- iii. PS 3320 Contingent Assets, a new standard defining and establishing guidance on disclosure requirements for contingent assets.
- iv. PS 3380 Contractual Rights, a new standard defining and establishing guidance on disclosure requirements for contractual rights.
- v. PS 3420 Inter-Entity Transactions, a new standard establishing guidance on accounting for and reporting on transactions between organizations in the government reporting entity.

The Foundation has adopted, where applicable, these new and amended standards on the effective date. The adoption of these standards resulted in additional disclosure for Contractual Rights in Note 6(3)(i)

3. Tangible Capital Assets

	Furniture and Equipment	Leasehold Improvements	2018 Totals	2017 Totals
Opening cost	\$ 258,635	\$ 13,007	\$ 271,642	\$ 251,379
Additions during the year	4,263	-	4,263	22,051
Disposals during the year	51,887	-	51,887	1,788
Closing cost	\$ 211,011	\$ 13,007	\$ 224,018	\$ 271,642
Opening accumulated amortization	222,193	13,007	235,200	206,021
Amortization for the year	14,309	-	14,309	30,967
Disposals during the year	49,159	-	49,159	1,788
Closing accumulated amortization	\$ 187,343	\$ 13,007	\$ 200,350	\$ 235,200
Net book value of tangible capital assets	\$ 23,668	-	\$ 23,668	\$ 36,442

4. **Deferred Revenue**

The Foundation is holding \$50,000 for The Lung Association and \$677 for the Saskatchewan Centre for Patient Oriented Research (SCPOR) for projects in future years.

5. **Contractual Obligations**

At March 31, 2018, the Foundation had the following obligations:

	2019	2020
Office Lease*	\$ 140,267	\$ 93,511
Postage meter lease	1,159	-
	<u>\$ 141,426</u>	<u>\$ 93,511</u>

*The office lease was renewed in 2017 for two years. The current lease expires October 31, 2019. The postage meter is in contract with Pitney Bowes and will expire October 31, 2018 and will not be renewed.

6. **Research grants and awards expense**

Grants and awards expense is recorded when eligibility has been determined and the grant and or award has been authorized. Awarded funds are sent to the recipients' home institution to manage and disburse. Funds not spent during the term of a research grant or award reduce the respective expense if the expense was recognized in the same year.

(1) **SHRF-led awards:**

The Foundation holds annual funding competitions through which applications are adjudicated by experts based on excellence and relevance. Terms vary and are often multi-year. For SHRF-led multi-year grants and awards, the Foundation assesses eligibility and provides authorization on a yearly basis.

SHRF partners with other organizations to fund excellent health research in target areas and increase funding available through SHRF funding programs. Partnership agreements may be in place before or after the application deadline.

For research chairs, the Foundation receives the partner's contribution on a quarterly basis, expenses the chair awards on an annual basis, and sends the partner and Foundation funds together to the award holder's home institution.

(2) **Partner-led awards:**

Provided that SHRF standards are met, SHRF partners strategically on funding opportunities offered by other organizations. These partnerships improve the ability of Saskatchewan researchers to participate in national and international research initiatives by showing local support and providing matching funding. In this scenario, the Foundation's partner administers the funding competition and, if a grant is authorized by the partner, SHRF provides matching funding to the recipient's host institution in Saskatchewan. Multi-year partner-led grants and awards are recorded by SHRF either in full in the year that authorization is received by the partner or on a year-by-year basis depending on the terms defined in the agreement between the partner organization and SHRF.

Below is a breakdown of these partner-led grant expenses for 2017-18:

i) Pathways to Health Equity for Aboriginal Peoples

SHRF provided partnership funding starting in 2016-17 for a grant funded through this Canadian Institutes of Health Research (CIHR) initiative; in a 3-year commitment, the Foundation provided total partnership funding of \$133,240 to a project on indigenous youth mentorship for diabetes prevention. In 2017-18 SHRF's investment was \$29,120.

ii) Partnership with the Canadian Consortium on Neurodegeneration in Aging (CCNA)

A five-year partnership started in 2014-15 in which the Foundation matches funding of \$100,000 per year from the CIHR on a 1:1 basis to support Saskatchewan researchers and research projects in the area of aging.

iii) Strategy for Patient-Oriented Research (SPOR)

SHRF provided partnership funding in 2017-18 in the amount of \$130,000 for three grants funded through programs as part of the research networks component of this CIHR initiative.

iv) CIHR New Investigator

In 2017-18 SHRF provided partnership funding with CIHR on a 1:1 basis for 3 years in the area of public health policy. SHRF's total of \$18,593 was granted.

v) Emerging Opportunities

Network of Centres of Excellence Team Grant

In 2017-18 SHRF partnered with a national research networks to award a grant investigating early detection of Parkinsons disease. SHRF committed \$50,000 in total for the two year grant.

(3) Other Partnerships

i) Saskatchewan Centre for Patient-Oriented Research (SCPOR)

SCPOR Core Capacity is for the administration of the SCPOR initiative. This is a contractual right and will result in the following economic resources being transferred to SHRF:

Fiscal Year	Core Capacity Funds
2018/19	\$178,000
2019/20	\$182,000
2020/21	\$188,000
Total	\$548,000

During 2016-17, SHRF entered into a partnership agreement with SCPOR, the provincial entity funded through the national SPOR initiative. SCPOR is mandated to build provincial and national capacity for patient-oriented research. SCPOR is a partnership of organizations that support and promote patient-oriented research in Saskatchewan and is funded 50% by CIHR, with the matching support coming from both cash and in-kind contributions from nine Saskatchewan partner organizations, including SHRF.

SCPOR will co-ordinate with SHRF to support a wide range of patient-oriented research funded through competitive opportunities offered by SHRF. Through this agreement, SHRF commits to invest in Patient-Oriented Research a total of \$4.1 million between April 1, 2016, and March 31, 2021. In 2017-18, SHRF invested \$793,780.

7. Other Revenue

In 2017-18 other revenue generated by the Foundation included interest of \$80,226 and recoveries of \$232,357.

8. Related Party Transactions

Included in these financial statements are transactions with various Saskatchewan Crown corporations, ministries, agencies, boards and commissions related to the Foundation by virtue of common control by the Government of Saskatchewan, and non-Crown corporations and enterprises subject to joint control by the Government of Saskatchewan (collectively referred to as "related parties").

Routine operating transactions with related parties are recorded at the agreed upon rates charged by those organizations and are settled on normal trade terms. These transactions and amounts outstanding at year-end are as follows:

	2018	2017
Miscellaneous revenue:		
Health Quality Council	\$ 2,500	\$ 62,500
Innovation Saskatchewan	5,630,000	5,630,000
Saskatchewan Opportunities Corp (SOCO)	500	-
Saskatchewan Polytechnic	-	1,500
Saskatchewan Workers' Compensation Board	-	1,486
University of Regina	31,001	15,306
University of Saskatchewan	220,605	112,896
University of Saskatchewan – SCPOR	204,238	-
Research grant, administrative and occupancy expenses:		
Public Employees Pension Plan (PEPP) – employee benefits	60,224	67,122
Regina Qu'Appelle Health Region	5,000	171,104
Saskatchewan Opportunities Corporation – Innovation Place	148,933	150,416
SaskTel	14,125	9,267
University of Regina	491,412	474,312
University of Saskatchewan	4,021,334	3,667,149
Other	1,267	1,845
Accounts receivable		
University of Saskatchewan	4,210	19
Accounts payable, grants payable and accrued liabilities		
Grants payable		
University of Saskatchewan	3,650,467	3,433,843
University of Regina	435,655	457,793
Regina Qu'Appelle Health Region	19,088	120,959
St. Thomas More – University of Saskatchewan	2,792	22,021
Other	1,316	60

The Foundation pays Provincial Sales Tax to the Ministry of Finance on all its taxable purchases. Taxes paid are recorded as part of the cost of those purchases.



Other transactions with related parties and amounts due to or from them are described separately in these financial statements and the notes thereto.

9. Financial Instruments

The Foundation has the following financial instruments: accrued interest receivable, accounts receivable, investments, accounts payable and grants payable. The following paragraphs disclose the significant aspects of these financial instruments. The Foundation has policies and procedures in place to mitigate the associated risks.

a) Significant terms and conditions

There are no significant terms and conditions associated with the financial instruments, other than investments, that may affect the amount, timing and certainty of future cash flows. Significant terms and conditions for investments are described separately on Schedule 2 of these financial statements.

b) Interest rate risk

The Foundation is exposed to interest rate risk when the value of its financial instruments fluctuates due to changes in market interest rates. As the Foundation seldom disposes of investments prior to maturity, this risk is minimal.

The Foundation's receivables and payables are non-interest bearing. Due to the short-term nature of these, as well as cash and short-term investments, interest rate risk is minimal.

c) Credit risk

The Foundation is exposed to credit risk from potential non-payment of accounts receivable or investment income and principal.

Most of the Foundation's receivables are from registered charities with which the Foundation has partnership agreements. The credit risk is assessed to be minimal based on the history of these organizations honouring their financial commitments to the Foundation in a timely manner.

The Foundation's investments consist of guaranteed investment certificates (GIC's). Therefore, credit risk for investments and related accrued interest receivable is minimal.

d) Fair value

For the following financial instruments, the carrying amounts approximate fair value due to their immediate or short-term nature:

- Accrued interest receivable
- Accounts receivable
- Short-term investments
- Accounts payable
- Grants payable
- Payroll liability

10. Budget

The operating budget was approved by the Foundation's Board on April 6, 2017.

11. Pension Plan

The Foundation is a participating employer in the Public Employees Pension Plan, a defined contribution pension plan. Eligible employees make monthly contributions of 7% of gross salary with the Foundation contributing 7.6% of gross salary. The Foundation's financial obligation is limited to making required contributions. During the year, the Foundation's total contributions were \$60,224 (2016-17 \$67,122).



12. Future Research Funding Cash Commitments (Schedule 3)

This schedule shows the cash commitment that is scheduled to be paid over the next five years. This is an ever changing chart, as new grants are awarded, grants are completed and recoveries are recorded the commitment of total cash being paid out changes.

SCHEDULE 1

SASKATCHEWAN HEALTH RESEARCH FOUNDATION

SCHEDULE OF EXPENSES BY OBJECT

For the Year Ended March 31

	2018		2017
	Budget	Actual	Actual
	(Note 10)		
Advertising and promotion	\$ 24,500	\$ 7,186	\$ 25,969
Amortization	20,500	14,309	30,967
Board expenses	45,950	18,787	27,163
Employee benefits	219,537	135,684	191,348
Employee salaries	971,499	671,029	881,809
Grants and awards	4,395,500	4,617,382	4,322,567
Office expenses	93,780	82,424	73,209
Office space	150,589	135,694	136,357
Professional fees	172,000	98,793	120,465
Publications	37,000	15,358	16,305
Review committee expenses	36,550	28,203	26,283
Saskatchewan Centre for Patient Oriented Research expenses	13,700	170,427	-
Travel and meetings	67,800	34,737	28,802
	<u>\$ 6,248,905</u>	<u>\$ 6,030,013</u>	<u>\$ 5,881,244</u>

(See accompanying notes to the financial statements)

SCHEDULE 2

SASKATCHEWAN HEALTH RESEARCH FOUNDATION

SCHEDULE OF INVESTMENTS

As at March 31, 2018

	<u>MATURITY DATE</u>	<u>CARRYING VALUE</u>	<u>EFFECTIVE RATE</u>
Cash and cash equivalents (Statement 1)			
Cash		\$ 81,729	
TD Waterhouse - Investment Savings Account		<u>2,163,381</u>	0.75
		<u>2,245,110</u>	
Short-term investments (Statement 1)			
B2B Bank GIC	8-Jul-2018	100,000	1.65
Canadian Western Bank GIC	8-Jul-2018	100,000	1.60
Equitable Bank GIC	8-Jul-2018	100,000	1.60
TD Bank GIC	31-Oct-2018	<u>3,100,000</u>	1.54
		<u>3,400,000</u>	
		<u>\$ 5,645,110</u>	

(See accompanying notes to the financial statements)



SCHEDULE 3

SASKATCHEWAN HEALTH RESEARCH FOUNDATION

SCHEDULE OF FUTURE FUNDING CASH COMMITMENTS

As at March 31, 2018

YEAR		SASKATCHEWAN HEALTH RESEARCH FOUNDATION PROGRAMS
2019	\$	3,454,398
2020		1,699,597
2021		701,803
2022		423,438
2023		116,667
	\$	6,395,903

(See accompanying notes to the financial statements - Note 12)



324 - 111 Research Drive, Saskatoon, SK S7N 3R2 | shrf.ca

