# ANNUAL REPORT 2016/17 **A BRIGHT FUTURE**



Stem Cell Network Réseau de cellules souches

# **Our Mission & Mandate**



Supporting and building Canada's stem cell and regenerative medicine research sector has been the *raison d'être* of the Stem Cell Network (SCN) since its inception in 2001. Its work has been supported by the Government of Canada from the beginning. SCN's mandate is *to act as a catalyst for enabling the translation of stem cell research into clinical applications, commercial products and public policy*. In just over 15 years SCN has forged a national community that has transformed stem cell research in Canada, brought research to the point where regenerative medicine is changing clinical practice and established an outstanding international reputation. SCN has pushed the boundaries of what was a basic research area towards translational outcomes for the clinic and marketplace.

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# A Message from SCN's Chair of the Board of Directors and Scientific Director & CEO

On behalf of the Stem Cell Network (SCN), we are pleased to provide both the Government of Canada and the stem cell and regenerative medicine (RM) community with the 2016/17 annual report. The fiscal year was marked by the considerable level of activity undertaken to re-affirm SCN as Canada's national network and funder for stem cell research.

Inside the pages of this annual report, readers will be able to see the results of a very active year. It was one that saw SCN fully operational and able to provide much-needed support to stem cell researchers from across the country. This was made possible in thanks to the federal government's commitment of \$12 million in support of high-quality, innovative and leading-edge stem cell research. We would also like to acknowledge the government's additional support of \$6 million announced at the end of the 2016/17 fiscal year in Budget 2017.

Investors around the world are calling regenerative medicine one of the biggest frontiers of our time. The opportunities are extraordinary, and the potential economic and health benefits remarkable. We agree. It is clear that Canada is well positioned to compete, as is evidenced by the outstanding number and quality of research proposals received through SCN's 2016 funding competition.

In November 2016, with the support of the Minister of Science, the Honourable Kirsty Duncan, SCN announced the results of its funding competitions, with more than \$9 million being invested. Researchers and clinicians like Lauralyn McIntrye (septic shock), Timothy Kieffer and James Shapiro (type 1 diabetes), Anne Marinier (cord blood for treating blood disease) and Judy Illes (evaluation of off-label stem cell interventions) are continuing to build on Canada's regenerative medicine advantage thanks to funding support from SCN. We are pleased to note that 55% of the projects funded are being led or co-led by women, and two projects are being led by early career investigators.

The past year has also been about reconnecting and offering training for the incredible young investigators who are coming up through the ranks. We were pleased to re-constitute SCN's Trainee Communications Committee (TCC) in mid-2016. The 14-member national committee supports SCN in developing and implementing training and career



development workshops to meet the needs of today's young investigators. TCC is chaired by a dynamic PhD candidate from UBC, Shelly Benjaminy. Shelly and the other TCC members are actively working to ensure a diverse and relevant set of workshops are made available in 2017 and beyond.

The future for stem cell research and regenerative medicine in Canada is bright. We have the talent and ability to make a difference in the lives of Canadians and enhance the economic well-being of our country. Now, more than ever, the strategic support offered by SCN is critical for bringing multi-disciplinary researchers together, strategically funding translational research and preparing the next generation of trainees. We look forward to continuing our role as a leader within Canada's stem cell research community.

Sincerely,

Andrew McKee Chair, Board of Directors

Michael Rudiche.

Dr. Michael Rudnicki, OC Scientific Director & CEO

# **INTRODUCTION**

As SCN's Scientific Director likes to say, "We are a nation of leaders and innovators, it is in our DNA." The regenerative medicine research sector is fueled by stem cells; today it is at a tipping point, with the potential to see breakthroughs within a generation. SCN is pleased to continue to power the foundation of scientific excellence that exists within Canada's universities, research hospitals and institutes. This report provides an overview of what has taken place over the fiscal year as the organization has worked to meet its mandate: *To catalyze the translation of stem cell research into clinical applications, commercial products and policy.* 

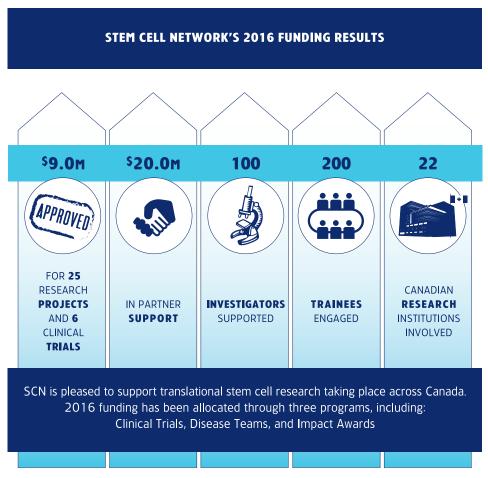


FIGURE 1: 2016 Research Funding Results



Nearly 5,000 full time equivalent positions were supported through SCN funded projects. These include researchers, research associates, postdoctoral fellows, technicians and students.

# RESEARCH

The Stem Cell Network is Canada's only national funder of stem cell research and regenerative medicine. SCN focuses on providing support for translational research where there is a clear path to commercialization, the clinic or policy development.

In 2016, SCN funded a total of 31 goal directed projects (six Clinical Trials, eight Disease Teams and 17 Impact projects) from across Canada that are moving research from bench to bedside in areas such as brain injury, kidney disease and breast cancer. SCN researchers are also working to tackle emerging policy issues relevant to the field, such as gene editing and misleading marketing claims.

This work involves upwards of 100 investigators and 200 trainees based at 22 Canadian research institutions. Regenerative medicine also appears to be a field where women excel, with 55% of the projects funded in 2016 led or co-led by female investigators.

Through the 2016 funding competitions SCN realized partner funding of just over \$20 million. Partner funding for 2016/17 was \$8,633,715 and it is anticipated that the remainder will be realized in the upcoming year and beyond.

Partners provide both in-kind and financial support for research projects. For the 31 projects funded by SCN, there were a total of 59 partners: 15 from industry, 16 from not-for-profits, 26 from institutions and two from other sources (*see Figure 2*).

The amount of partner funding received on SCN's \$9M investment in research was exceptional and likely due to built-up demand within the RM space for research dollars. It also speaks to the high-quality research being done in Canada and the strong interest of many in being part of this important and transformative area.

A key component of SCN's historic success is the scientific and fiscal monitoring of projects to ensure they remain on track. When required, SCN will provide feedback and adjust the flow of funding to match project progress. Therefore, all of the 2016 lead investigators were required to submit a progress report by the end of the fiscal year, March 31, 2017. Reports for both Clinical Trials and Disease Teams were reviewed by SCN's Research Management Committee in May 2017. Overall, the projects reviewed are on track both scientifically and financially.

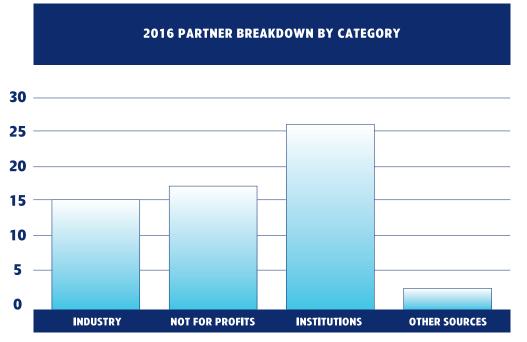


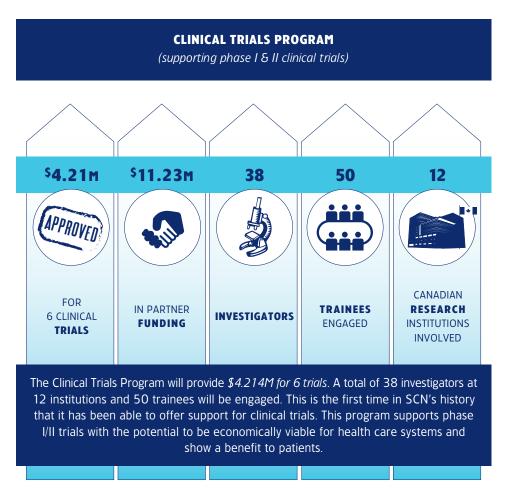
FIGURE 2: 2016 Partner Breakdown by Category

## **CLINICAL TRIALS**

#### **The Clinical Trials Program:**

**\$4.214M for six trials**; 38 investigators (six Principal Investigators and 32 Co-Investigators); 12 institutions; 50 trainees.

Trials will determine the safety and efficacy of new stem cell treatments in humans. This program supports trials with the potential to be economically viable for healthcare systems and show a benefit to patients. Funded trials focus on a spectrum of health issues, including treating fatal illnesses such as septic shock, evaluating a stem cell therapy for type 1 diabetes and expanding stem cells from cord blood for efficacious and cost–effective transplantation. Researchers will also be working in the areas of acute myocardial infarction and liver transplantation.





## TABLE 1: Clinical Trials Summary Table

PRINCIPAL INVESTIGATOR CO- INVESTIGATORS	PROJECT TITLE	SCN FUNDS ALLOCATED
Harold Atkins (OHRI) Gary Levy (UHN)	Using hematopoietic stem cell transplantation to regenerate a naïve immune system tolerant to liver allografts	\$215,700
Sandra Cohen Hôpital Maisonneuve-Rosemont (HMR) Jean-Sébastien Delisle (HMR), Guy Sauvageau (U de M)	Making cord blood hematopoietic stem cell expansion competitive	\$999,968
Timothy Kieffer (UBC) David Thompson (UBC), Garth Warnock (UBC), Graydon Meneilly (UBC), Megan Levings (UBC)	A stem cell therapy for insulin replacement in patients with diabetes	\$500,000
Lauralyn McIntyre (OHRI) John Marshall (U of T), Keith Walley (UBC), Claudia dos Santos (St Michael's Hospital), Brent Winston (U of C), Shane English (OHRI), Alexis Turgeon (Laval U), Geeta Mehta (Sinai Health System), Robert Green (Dalhousie), Alison Fox-Robichaud (McMaster), Margaret Herridge (U of T), John Granton (U of T), Paul Hebert (CRCHUM), Duncan Stewart (OHRI), Shirley Mei (OHRI), Dean Fergusson (OHRI), Kednapa Thavorn (OHRI), Timothy Ramsay (OHRI)	Cellular immunotherapy for septic shock (CISS): a phase II multicenter clinical trial	\$ 1,000,000
James Shapiro (U of A) Peter Senior (U of A)	Clinical trials in stem cell transplantation – solving the supply and the survival problem in type 1 diabetes	\$499,596
Duncan Stewart (OHRI) David Courtman (OHRI)	Enhanced angiogenic cell therapy in acute myocardial infarction (ENACT-AMI)	\$999,546



Dr. Lauralyn McIntyre, Ottawa Hospital Research Institute

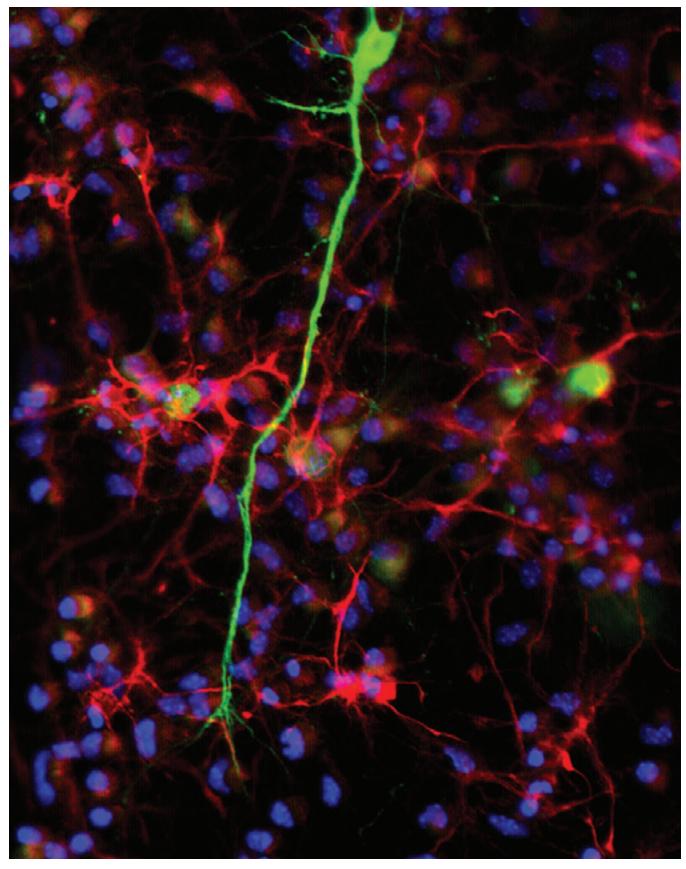
# **Clinical Trials Profile: Dr. Lauralyn McIntyre**

Septic shock is the most severe form of infection seen in intensive care units (ICUs), a "sneaky and unpredictable" condition, according to The Ottawa Hospital's Dr. Lauralyn McIntyre. In response to the infection, the body's immune system becomes overactive, causing organs to fail. Each year in Canada, upwards of 100,000 patients are admitted to ICUs with septic shock (accounting for approximately 30% of all admissions) and 30–40% of patients will die from it. Survivors can experience long-term damage to their ability to function physically and to their quality of life. To date, there have been no treatments developed that will improve either the death rate or the prospects of survivors.

Sepsis accounts for about half of all critical care costs, in Canada, about \$4 billion per year.

Dr. McIntyre is leading a team testing a new and exciting potential therapy for septic shock that uses mesenchymal stem cells (MSCs) to tell the immune system to calm down and let repairs begin. Her team is the first in the world to conduct and complete a phase I trial of the treatment, testing safety and dosage. Now, Dr. McIntyre is leading a multi-centre phase II randomized controlled clinical trial that will involve a larger number of patients. At the same time, she will be focusing on improving the quality of the MSCs and developing less expensive and intensive ways to manufacture the cells.

The next step before MSCs can be approved for use in treating septic shock will be an international phase III trial, conducted in association with industry partners and involving large numbers of patients. If successful, the result would save thousands of lives and significant healthcare savings.



'Noonan Syndrome'

Photo credit: Joseph Mathew

## **DISEASE TEAMS**

#### The Disease Team Research Agreement Program:

\$3.281M for eight projects; 41 investigators (eight Principal Investigators and 33 Co-Investigators); 11 institutions; more than 80 trainees.

Multi-disciplinary teams supported through this program are focused on novel cellular or stem cell related therapeutic approaches to treat disease. Commercialization is an important component for this program, as projects must demonstrate a path to market or clinic. Research supported from this competition will address treatments for diseases such as arthritis, liver failure and type 1 diabetes. In addition, support will be provided to further ongoing research that is looking at existing drugs for the regeneration of neural tissue after a brain injury.

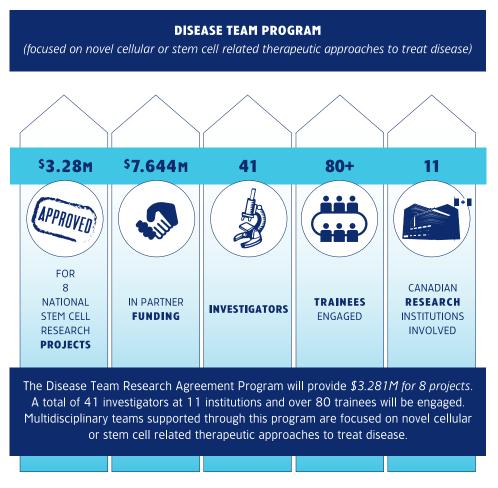


FIGURE 4: 2016 Disease Team Funding Results

#### TABLE 2: Disease Team Summary Table

PRINCIPAL INVESTIGATOR CO- INVESTIGATORS	PROJECT TITLE	SCN FUNDS ALLOCATED
Timothy Kieffer (UBC) James Johnson (UBC), Francis Lynn (UBC), Brad Hoffman (UBC)	Optimizing stem cell derived beta-cell therapy for diabetes	\$500,000
Anne Marinier (U de M) Guy Sauvageau (U de M), Connie Eaves (UBC), Keith Humphries (UBC)	Development of hematopoietic stem cell expanding molecules towards the ideal transplant	\$500,000
Freda Miller Hospital for Sick Children (HSC) Cindi Morshead (U of T), Jing Wang (OHRI), Paul Frankland (HSC), David Kaplan (HSC), Ann Yeh (HSC), Doug Munoz (Queen's), Donald Mabbott (HSC), Wolfram Tetzlaff (UBC)	A stem cell therapy for insulin replacement in patients with diabetes	\$500,000
Andras Nagy Lunenfeld–Tanenbaum Research Inst. Armand Keating (UHN), Mohit Kapoor (UHN), Sowmya Viswanathan (U of T)	Combining gene and mesenchymal stromal cell therapies: steps toward curing arthritis	\$394,623
Massimiliano Paganelli CHU Sainte-Justine	Treatment of chronic liver failure by stem cell-derived mature liver tissue	\$ 199,982
James Shapiro (U of A) Gregory Korbutt (U of A)	Development of a novel stem cell-derived transplant modality for type 1 diabetes	\$496,905
Vahab Soleimani (McGill) Colin Crist (McGill), Simon Tran (McGill), Faleh Tamimi Marino (McGill), Hamed S. Najafabadi (McGill)	Interfering niche-related reprogramming of stem cells during aging	\$200,000
Bruce Verchere (UBC) Francis Lynn (UBC), Timothy Kieffer (UBC), Megan Levings (UBC)	Genetic manipulation of hESC-derived insulin-producing cells to improve graft outcomes	\$490,000



Dr. Anne Marinier, Université de Montréal

## Disease Team Profile: Dr. Anne Marinier

Umbilical cord blood can be a promising source of hematopoietic stem cells (HSCs), used in treating blood diseases. Each unit of cord blood, however, has a low number of HSCs, precluding their widespread use. The development of stem cell expanding molecules is seen as a way to increase the levels of HSCs in units of cord blood, increasing their use in treating and curing malignant and non-malignant blood diseases.

Dr. Anne Marinier of the Université of Montréal has already developed one molecule, UM171, that is being assessed for safety and efficacy as a cord blood expander. Her lab was also able to identify another molecule, UM092, that could complement UM171. She and her team will now focus on identifying the best method of expanding cord blood hematopoietic stem cells for transplantation using these molecules. The team will also use its expansion approach to enhance gene transfer, making gene therapy a widely useable clinical procedure.

One person in Canada is diagnosed with a blood cancer approximately every 25 minutes.

Source: Leukemia & Lymphoma Society of Canada

The work undertaken in this project will result in the production of UMO92, delivering material ready for extended phase II clinical trials. Dr. Marinier has private sector partners who will play key roles in commercializing the novel compound. The outcome will be enhanced access of cord blood to larger numbers of patients, both in Canada and throughout the world, leading to a paradigm shift in the treatment of blood diseases.



Photo credit: Celine Bauwens

## **IMPACT PROGRAM**

#### **The Impact Research Agreement Program:**

**\$1.54M for 17 projects** spanning clinical translation, commercialization and public policy; 27 investigators (17 Principal Investigators and 10 Co-investigators); 15 research institutions; more than 60 trainees.

Diseases such as diabetes, osteoarthritis and kidney disease will all be studied. Commercialization topics include 3D printing of neural tissues and the scalable production of engineered microtissues.

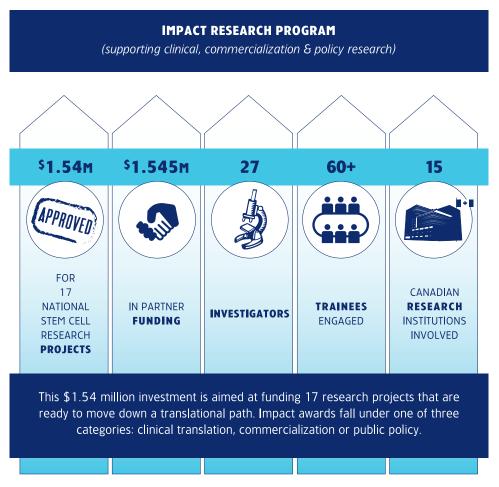
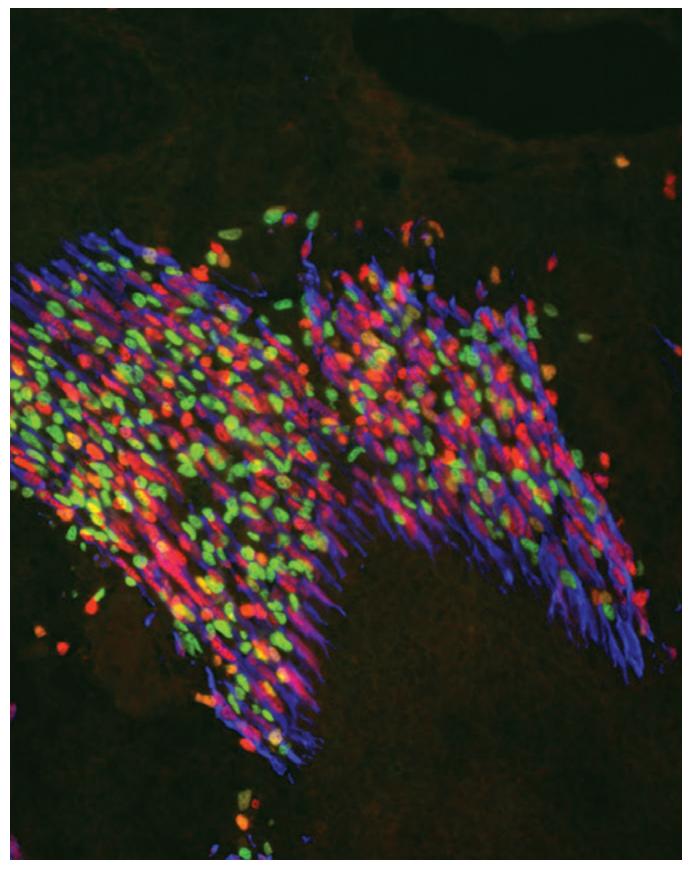


FIGURE 5: 2016 Impact Program Funding Results

SCN supported research has led to approximately 622 patent applications, 94 issued patents and more than 65 licenses granted. SCN supported intellectual property has catalyzed the growth or launch of approximately 12 biotechnology companies.



'Embryonic Muscle Stem Cell'

Photo credit: Fabien Legrand

#### TABLE 3: Impact Program Summary Table

PRINCIPAL INVESTIGATOR CO- INVESTIGATORS	PROJECT STREAM	PROJECT TITLE	SCN FUNDS ALLOCATED
Liam Brunham (UBC) Glen Tibbits (SFU)	Clinical Translation	Using human pluripotent stem cell-derived cardiomyocytes to investigate the mechanisms of ibrutinib-induced atrial fibrillation	\$ 100,000
Timothy Caulfield (U of A) Amy Zarzeczny (U of R)	Public Policy	Stem cells and misleading marketing claims	\$50,000
Colin Crist (McGill) Jean-Philip Lumb (McGill)	Clinical Translation	Activation of muscle stem cells by pharmacological inhibitors of elF2a phosphorylation	\$99,842
Lucie Germain (Laval) Bartha Knoppers (McGill)	Clinical Translation	Treatment of patients with corneal limbal stem cell deficiencies using cultured epithelial corneal autografts	\$ 100,000
Kristin Hope (McMaster)	Commercialization	Methods and compositions for expansion of human hematopoietic stem and progenitor cells	\$ 100,000
Judy Illes (UBC)	Public Policy	Decision-making in translation: urgency, access, and evaluation in off-label stem cell interventions	\$50,000
James D. Johnson (UBC)	Clinical Translation	Imaged-based screening to enhance insulin production in human embryonic stem cells	\$ 100,000
Timothy J. Kieffer (UBC)	Clinical Translation	Biodistribution of differentiated stem cells following subcutaneous transplant	\$ 100,000
Megan Levings (UBC) Lori West (U of A)	Clinical Translation	Garbage to gold: expansion of therapeutic regulatory T-cells from discarded thymus	\$ 100,000

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PRINCIPAL INVESTIGATOR CO- INVESTIGATORS	PROJECT STREAM	PROJECT TITLE	SCN FUNDS ALLOCATED
Joanne Matsubara (UBC) Marinko Sarunic (SFU)	Commercialization	Treating advanced retinal degeneration – rebuilding multiple co-dependent retinal layers with a single injection of stem-cell-derived-graft	\$99,502
Kelly McNagny (UBC)	Clinical Translation	CAR-T cell therapy targeting tumor-specific modifications of podocalyxin in triple negative breast cancer	\$ 100,000
Ubaka Ogbogu (U of A) Amy Zarzeczny (U of R)	Public Policy	Regulating the future: model policies for emerging stem cell research activities, including research on gene-edited and reconstituted embryos	\$ 50,000
lan Rogers Mount Sinai Hospital	Commercialization	Improving efficacy and economics of kidney disease therapies using iPS cells	\$90,811
Mark Ungrin (U of C)	Commercialization	Scalable production of engineered micro tissues	\$ 100,000
Sowmya Viswanathan (U of T) Paula Foster (UWO), Mohit Kapoor (U of T)	Clinical Translation	Iron-labeled mesenchymal stromal cells for clinical tracking in amended phase 1 trial in osteoarthritis patients	\$ 100,000
Stephanie Willerth (U of V)	Commercialization	3D bioprinting of neural tissue from human pluripotent stem cells	\$ 100,000
Peter Zandstra (U of T) Guy Sauvageau (U de M), Julie Audet (U of T)	Clinical Translation	Clinical culture optimization to maximize cord blood derived hematopoietic stem cell expansion	\$ 100,000



Ubaka Ogbogu, University of Alberta

# Impact Program: Public Policy Profile: Ubaka Ogbogu

It has been 12 years since Canada passed legislation governing research on human embryos. Unfortunately, the legislation has not kept pace with the science. Two areas not covered by the legislation and posing pressing questions about their legality and how they fit into current governance frameworks include: the creation and use of genetically modified human embryos for research purposes; and the patterning of human-induced pluripotent stem cells in a manner that may resemble post-implantation embryos.

Assisted Human Reproduction Act (AHRA) was passed by Parliament in 2004. It has not been reviewed since its passage.

Ubaka Ogbogu of the University of Alberta is assessing whether Canada's regulatory framework adequately and appropriately addresses and balances the promotion of scientific and clinical progress with other key policy imperatives. His work will answer two key questions: how, if at all, should Canadian regulations regarding embryo and related research be updated to reflect current research realities and scientific advances; and what specific rules and governance mechanisms are needed to ensure the ethical conduct of embryo-based research activities? Dr. Ogbogu will convene a multi-disciplinary policy workshop to develop a consensus-based model policy and governance framework together with policy briefing notes for specific audiences, including legislators, media and the public.

This research will contribute to much-needed national and international consideration of pressing issues in stem cell research that are currently testing the boundaries of Canada's legal and policy framework. The end result will provide guidance to policy makers as they grapple with these complex issues.



Stephanie Willerth, University of Victoria

# Impact Program: Commercialization Stream Profile: Stephanie Willerth

It may sound like science fiction, but the research of Stephanie Willerth of the University of Victoria is proving to be anything but. A patient's adult cells will be reprogrammed back into their stem cell state, where they can develop into any type of tissue. The stem cells will then be used to create living human neural tissue through a 3D printing platform, so that it can then be screened for potential drug candidates to treat the patient's disease – a new advance in the concept of personalized medicine.

Aspect Biosystems is already commercializing a process to print cells on demand using bioink, the material that surrounds the cells, on its patented microfluidic-based 3D printer technology. Now Dr. Willerth's project will take that technology a step further. Her research has two goals: to determine a suitable and stable fibrin (a protein that plays a role in blood coagulation) bioink formulation for printing stem cell derived neural cell progenitors; and to use the bioink to print neural tissues on Aspect Biosystem's 3D bioprinting platform. Aspect Biosystems will provide support for protecting the intellectual property generated through this project and assist in its commercialization. The model can then be licensed to pharmaceutical companies to use for drug screening applications.

Aspect Biosystems was recognized as the "Most Promising Startup" at the BC Tech Association's 2016 Technology Impact Awards.

Dr. Willerth is one of a new generation of stem cell researchers in Canada, recognized as a Canada Research Chair and a Young Innovator in Molecular and Cellular Bioengineering.

## TRAINING

Conscious of the need to foster the next generation of stem cell researchers in Canada, SCN has worked diligently to provide relevant and leading-edge training opportunities. In this past fiscal year, more than 200 trainees were able to take advantage of SCN opportunities (*see Table 4*).

In an effort to ensure that SCN workshops are on point with the needs of young investigators, SCN is guided by input from its Training and Communications Committee (TCC). This committee comprises young investigators from across Canada. They work collaboratively to develop a training program that includes a robust suite of workshops, including: grant writing; entrepreneurship; ethics; and 'Meet the Experts' sessions. These workshops are offered at the annual Till & McCulloch Meetings (TMM). SCN was pleased to reconstitute the TCC in late 2016. The 14-member committee is chaired by Shelly Benjaminy from UBC and is supported by Kelly McNagny, a global leader in stem cells and inflammatory diseases.

SCN also partners with other regenerative medicine-focused organizations/institutions on training activities. For example, in the fall of 2016, SCN and the Centre for Commercialization of Regenerative Medicine (CCRM) offered a course that explored the manufacturing and regulatory issues surrounding cell and gene therapies. SCN also sponsored a one-day science communication workshop hosted by the Ontario Institute for Regenerative Medicine (OIRM).

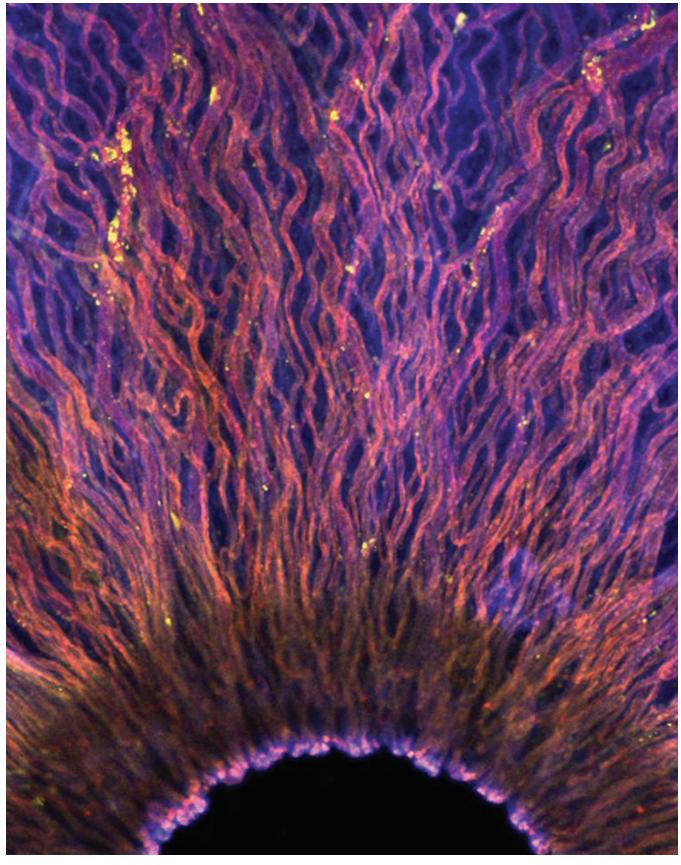
> Training is not only offered through workshops and conferences. It also comes through hands-on job experience. In 2016, 190 trainees received support to work on SCN funded projects. These young investigators are working with Canada's best and brightest science minds. They are contributing to important projects that are investigating novel therapies and treatments relevant to diseases like breast cancer, retinal degeneration and muscular dystrophy.

In recent years, numerous reports have noted the importance of STEM skills for developing a knowledge-based workforce, able to adapt to market needs and compete internationally. SCN is confident that the training opportunities it offers early career investigators will strengthen Canada's competitive edge today and tomorrow.

2017 Genetic Tools Workshop

DYK?

TMM 2016 was held in Whistler, BC and brought together more than 400 people to learn and discuss the latest scientific techniques relevant to stem cells and regenerative medicine. SCN was pleased to host this event in collaboration with CCRM and OIRM.



2016 Cells I See Art Contest Winner: 'Iris' by Sabiha Hacibekiroglu

#### TABLE 4: 2016-17 Training Workshops & Opportunities Supported by SCN

DATE	TRAINING	ATTENDEES	DESCRIPTION
May 31–June 3, 2016	UBC Flow Course	10	Developed skills on flow cytometry and networking.
October 19–22, 2016	UBC Cell Sorting Course	10	Learned how to use cell sorters and make the most of this new technology. The training was hands-on through interactive discussions and practice.
October 22–23, 2016	Entrepreneurship Workshop	20	The workshop, hosted by CCRM, provided trainees with information on how to determine whether scientific findings could lead to commercial products or services and the key steps required in developing a commercialization strategy.
October 24–26, 2016	TMM Annual Meetings	167	Students learned about the latest techniques and trends within the field and heard from accomplished Canadian and international speakers. The students also had the opportunity to present their work.
October 26–27, 2016	Cell & Gene Therapies Workshop	9	CCRM's Cell and Gene Therapies Workshop explored the manufacturing and regulatory issues surrounding cell and gene therapies.
November 1, 2016	Science Communications Workshop	2	This workshop provided participants with a hands-on introduction to effective science communication. Participants were able to refine their skills and knowledge of mainstream media interviews, writing and content production for social media. Participants heard from experts about the methods behind media relations and media production.
April 11–12, 2017*	TPRM Annual Regenerative Medicine Symposium	8	The TPRM Annual RM Symposium covered four broad areas: organ failure; regenerative medicine and innovative technologies; clinical applications of regenerative medicine; and ethics and society.

\*SCN awards provided during fiscal 2016-2017



Nika Shakiba, University of Toronto

# Training Profile: Nika Shakiba, PhD candidate, Biomedical Engineering

Over its 16 years of existence, the Stem Cell Network has trained and supported an estimated 2,500 highly qualified personnel who are now providing the research community with a cornerstone for future discoveries and therapies.

Nika, a trainee who has participated in multiple workshops through SCN training opportunities, including Grant Review, Understanding Stem Cell Controversies and Meet the Experts, has gained valuable skills that will be directly relevant to her long-term goal to remain in academia. As a trainee, she was co-head of StemCellTalks, a science and ethics of stem cell research program for high school students, which she helped to expand to eight cities across Canada. "Stem Cell Network has served as a key node in building my network of collaborators while also fostering the development of key skills through its workshops."

Her research has focused on tracking somatic cells to better understand how some reprogram to an induced pluripotent stem cell state. Throughout her graduate studies, SCN enabled collaborations that have been central to her research, including funding international travel to enable her to work in other countries conducting lab research relevant to her work.

"Stem Cell Network has served as a key node in building my network of collaborators while also fostering the development of key skills through its workshops."

"Above all, my advice to future trainees is to become immersed in all the Stem Cell Network has to offer," she says. "I have experienced first-hand the commitment of the Stem Cell Network to the growth and development of its trainees. These experiences could really shape their future career trajectory."



SCN has been a long time supporter of the Training Program in Regenerative Medicine (TPRM). A unique program to Canada that provides researchers with comprehensive training in all aspects of regenerative medicine.

# **OUTREACH**

Questions such as those listed below are not easily answered by many in the general public.

- Did you know that stem cells have the ability to divide and form into any cell that makes up tissue or organs in the body?
- Did you know that there are 200 different cell types and they all started out as stem cells?
- Did you know that Canada is home to some of the world's top stem cell researchers?

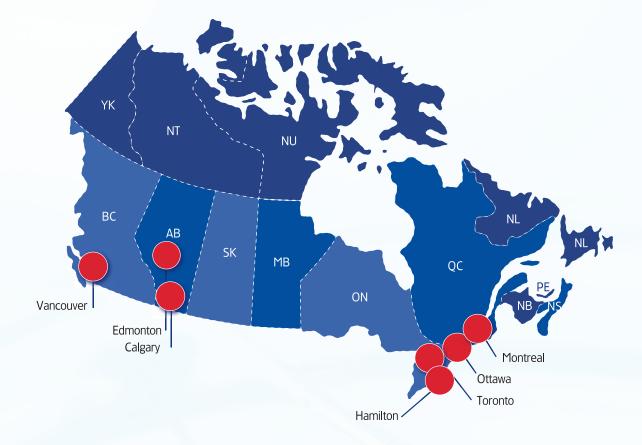
It's for that reason that outreach about stem cells and stem cell science is so critical. It is also why SCN supports research that helps to debunk misinformation about stem cell therapies, such as Tim Caulfield's current work on options for curbing misleading marketing practices on the internet and in other public places. Research that will inform and educate the public is greatly needed and Mr. Caulfield's work has the potential to provide actionable policy advice within a short timeframe.

More broadly, outreach is about connecting with people directly and educating them about stem cell science. Therefore, SCN has maintained its partnership with *Let's Talk Science* to bring knowledge of stem cells to high school and undergraduate students across Canada. This is done through *StemCellTalks*, a national stem cell biology outreach initiative, which allows high school students to spend a day with scientists who are experts in stem cell and regenerative medicine to learn about the field. In 2016/17 SCN provided support for seven Stem Cell Talks (*see Figure 6 for dates and locations*). As a result, 700 students from across Canada learned about stem cells and the potential they have for treating diseases such as cancer, diabetes and multiple sclerosis.





Stem Cell Talks, London



#### FIGURE 6: 2016 Location of Stem Cell Talks Across Canada



SITE	DATE	THEME
Edmonton	March 4, 2016	Diabetes
Toronto	March 11, 2016	Retinal stem cells
Calgary	March 11, 2016	Cancer stem cells
Ottawa	April 7, 2016	Multiple sclerosis
Hamilton	April 15, 2016	Stem cells and cancer
Vancouver	May 13, 2016	Cancer stem cells
Montreal	May 13, 2016	Stem cells (general)

SCN's outreach has gone well beyond Canadian borders in recent years. In 2014, SCN partnered with the Sherbrooke Museum of Nature to produce a traveling, interactive exhibit, entitled: *Super Cells: The Power of Stem Cells*. The exhibit has travelled to Canada, Europe and the United States. In the past year, it spent most of its time in California, where it was hosted by three different museums. In January 2017, the exhibit returned back to Canada to the Musée du Fjord, in Quebec (*see Table 6*). Thousands of students, parents and educators have toured the exhibit and visited the supercells website.

When looking for information, the first place people go is to the internet. Therefore, SCN works hard to ensure a strong social media presence. At the end of 2016/17, SCN had just under 15,000 Twitter followers, 2,700 Facebook likes and 800 subscribers to its monthly newsletter, CellLines. These platforms allow SCN to share research findings, accurate information about the potential of stem cells and events and activities where the public can learn more about stem cells.

SCN's November 2016 funding announcement was widely picked up through social media, with an impressive 47,100 impressions on Twitter and SCN trending on the day of the announcement. Traditional media coverage was also strong, with national profiles running on supported clinical trials.

Varied outreach activities are important for helping to educate Canadians about the power and potential of stem cell research and what it could mean for them, their families and friends in the years to come. As such, SCN will continue to strategically support outreach initiatives and research that will have a meaningful impact.

LOCATION	DATES	ESTIMATED VISITORS
Reuben H Fleet Science Center, San Diego	February to May 2016	27,772
California Science Center, Los Angeles	June to September 2016	570,656
Lawrence Hall of Science, Berkeley	Mid-September to November 2016	19,105
Musée du Fjord, Saguenay	January to May 2017	1,658
	TOTAL	619,191

TABLE 6: Super Cells Traveling Exhibit 2016/17

# CONCLUSION

As is clearly demonstrated through the pages of SCN's 2016/17 annual report, Canada's stem cell and regenerative medicine community is hard at work. The Council of Canadian Academies confirmed in its 2017 evidence-based report and bibliometric analysis of regenerative medicine that the quality of science undertaken by SCN funded researchers is world class.

It is widely understood that innovation arises from high-quality, competitive research. The path from research discovery to the market or the clinic is a long and arduous one. It requires support at every step of the way, from basic research, to developing an application, to testing it, first in the lab and then in humans, and then making it a mainstay of clinical practice.

The innovations we are commercializing today are the result of basic research carried out 10 or 20 years ago. The challenge is to keep the research pipeline stabilized and full, so that we will realize new stem cell based therapies, treatments and technologies well into the future. Now is the time to double down on Canada's scientific strength. Regenerative medicine is at a tipping point. It's time to build on our foundation of scientific excellence and harness the benefits of regenerative medicine for the health of Canadians and the economic prosperity of our nation. The Stem Cell Network looks forward to supporting this vision for many years to come.



2016 SCN Research Funding Announcement

## APPENDIX 1: BOARD OF DIRECTORS \*As of March 31st, 2017

### ANDREW MCKEE

**CHAIR** Co-Founder, 5514KM Canada Wide – Children's Gear

#### **SHARON COLLE**

President & CEO, the Foundation Fighting Blindness

#### **ALLEN EAVES**

Founder & CEO, STEMCELL Technologies, Inc., Professor Emeritus of Hematology, University of British Columbia

#### **JACQUES GALIPEAU**

Assistant Dean, Therapeutics Discovery and Development and Don and Marilyn Anderson Professor of Oncology, Department of Medicine and UW Carbone Comprehensive Cancer Center, University of Wisconsin

#### **DECLAN HAMILL**

Vice President, Legal, Regulatory and Policy, Innovative Medicines Canada

#### **RODERICK MCINNES**

Director, Lady Davis Institute of the Jewish General Hospital, Professor of Human Genetics & Biochemistry, McGill University

#### **STEPHANIE MICHAUD**

President & CEO, BioCanRx

#### **MONA NEMER**

Vice President, Research, Professor, Faculty of Medicine and Director, Molecular Genetics and Cardiac Regeneration Laboratory, University of Ottawa

#### FABIO ROSSI

Co-Director, Biomedical Research Centre; Professor, Department of Medical Genetics, University of British Columbia

#### **MICHAEL RUDNICKI**

CEO & Scientific Director, Stem Cell Network; Senior Scientist & Director of the Regenerative Medicine Program and the Sprott Centre for Stem Cell Research, Ottawa Hospital Research Institute

#### **ROBERT YOUNG**

Professor of Chemistry and Merck Frosst-B.C. Leadership Chair in Pharmaceutical Genomics, Bioinformatics and Drug Discovery, Department of Chemistry, Simon Fraser University

# **APPENDIX 2: PEER REVIEW COMMITTEES**

## **Research Management Committee**

## MICHAEL RUDNICKI

#### CHAIR

CEO & Scientific Director, Stem Cell Network; Senior Scientist & Director of the Regenerative Medicine Program and the Sprott Centre for Stem Cell Research, Ottawa Hospital Research Institute

#### JANET ROSSANT DEPUTY CHAIR

President & Scientific Director, Gairdner Foundation; Chief of Research Emeritus, Hospital for Sick Children

#### **BERNARD THÉBAUD**

Senior Scientist, OHRI & CHEO Research Institute, Professor of Pediatrics at the University of Ottawa

#### **CHERYLE SEGUIN**

Director, Research for the Ontario Institute of Regenerative Medicine, Associate Professor in the Department of Physiology and Pharmacology, Western University

#### **DAVID GLASS**

Executive Director, Muscle Diseases & Aging Initiative at Novartis Institutes, Senior Lecturer, Cell Biology at Harvard Medical School

#### **DENIS-CLAUDE ROY**

Director, Cellular Therapy Laboratory, Scientific Director CRHMR and Professor at the University of Montreal

#### **EVA SZABO**

Assistant Professor, Stem Cell and Cancer Research Institute, McMaster University

### JENNIFER MOLSON

#### PATIENT ADVOCATE

Research Assistant at the Ages Cancer Assessment Clinic, Ottawa Hospital

#### **JOHN A. HASSELL**

Professor, Biochemistry and Biomedical Sciences Department, McMaster University

#### **JUDY ILLES**

Professor, Neurology and Canada Research Chair in Neuroethics, Director, National Core for Neuroethics, University of British Columbia

#### **KEITH HUMPHRIES**

Director, Terry Fox Laboratory of the BC Cancer Agency, Professor in the Division of Hematology of the Department of Medicine at the University of British Columbia

#### **MICHAEL PARR**

President, Chief Scientific Officer, Sitka Biopharma

#### MICHAEL UNDERHILL

Professor, Department of Cellular and Physiological Sciences, University of British Columbia

#### **PETER ZANDSTRA**

Executive Director, Medicine by Design, Chief Science Officer, CCRM, Professor, Stem Cell Bioengineering, University of Toronto

#### **ROSARIO ISASI**

Research Assistant Professor, Miller School of Medicine, University of Miami

#### **RUTH SLACK**

Professor, Faculty of Medicine and University Research Chair, University of Ottawa

#### **TERRY THOMAS**

Chief Scientific Officer, STEMCELL Technologies Inc.

#### TIMOTHY CAULFIELD

Canada Research Chair in Health Law and Policy, Professor, Faculty of Law and School of Public Health, Research Director, Health Law Institute

#### TIMOTHY KIEFFER

Professor, Cellular & Physiological Sciences and Surgery, University of British Columbia

#### WILLIAM STANFORD

Senior Scientist, Sprott Centre for Stem Cell Research, Ottawa Hospital Research Institute, Professor, University of Ottawa, Investigator, Ottawa Institute of Systems Biology, Director, Ottawa Human Pluripotent Stem Cell Facility

## International Scientific Advisory Board (ISAB)

## CHRIS MASON

#### CHAIR

Professor, Regenerative Medicine Bioprocessing in the Advanced Centre for Biochemical Engineering, Founder and CEO, London Regenerative Medicine Network

#### **IRWIN BERNSTEIN**

Professor and Chief, Division of Pediatric Hematology/Oncology, University of Washington School of Medicine, Member in the Clinical Research Division, Fred Hutchinson Cancer Research Center, American Cancer Society Professor

#### **ANDREW BRACK**

Associate Professor of Orthopaedic Surgery Research, University of California

#### **MELISSA CARPENTER**

President, Carpenter Group Consulting, Stem Cell Strategies, USA

#### **ROD DUNBAR**

Professor, University of Auckland's School of Biological Sciences, Director, Maurice Wilkins Centre

#### **BUDD A. TUCKER**

Associate Professor, Ophthalmology and Visual Science

#### **LEE RUBIN**

Professor, Stem Cell and Regenerative Biology, Harvard University, Director, Translational Medicine, Harvard Stem Cell Institute

#### **PAUL SIMMONS**

Professor, Stem Cell Research, Brown Foundation Institute of Molecular Medicine, President, International Society for Stem Cell Research

#### **OLIVIER POURQUIE**

Professor, Department of Genetics at Harvard Medical School, Professor, Pathology, Brigham and Women's Hospital

#### **BART WILLIAMS**

Director, Center for Cancer and Cell Biology, Professor, Program in Skeletal Disease and Tumor Microenvironment, Van Andel Research Institute, Michigan

## International Medical Advisory Board (IMAB)

## JACQUES GALIPEAU

#### CHAIR

Assistant Dean, Therapeutics Discovery and Development, Don and Marilyn Anderson Professor, Oncology, Department of Medicine and UW Carbone Comprehensive Cancer Center, University of Wisconsin

#### **CATHERINE M. BOLLARD**

Chief, Division Allergy and Immunology, Professor of Pediatrics and Microbiology, Immunology and Tropical Medicine, Director, Program for Cell Enhancement and Technologies for Immunotherapy, Children's National Health System

#### **JOHN RASKO**

Director, Department of Cell and Molecular Therapies, Royal Prince Alfred Hospital, Head, Gene and Stem Cell Therapy Program, Centenary Institute, University of Sydney

#### **DANIEL WEISS**

Professor, Medicine, Pulmonary Medicine, Department of Medicine, University of Vermont

#### **MASSIMO DOMINICI**

Associate Professor Medical Oncology, Head of Laboratory of Cellular Therapy, Director, Residency School in Medical Oncology, Department of Medical and Surgical Sciences for Children & Adults, University Hospital of Modena and Reggio Emilia

#### **KATARINA LE BLANC**

Professor, Clinical Stem Cell Research, Senior Consultant, Department of Laboratory Medicine, Division of Clinical Immunology and Transfusion Medicine, Karolinska Institutet, Hematology Center, Karolinska University Hospital Huddinge

#### **DIXON KAUFMAN**

Ray D. Owen Professor and Chief, Division of Transplantation, School of Medicine and Public Health, University of Wisconsin, Director, Transplantation Service Line, University of Wisconsin Hospital and Clinics

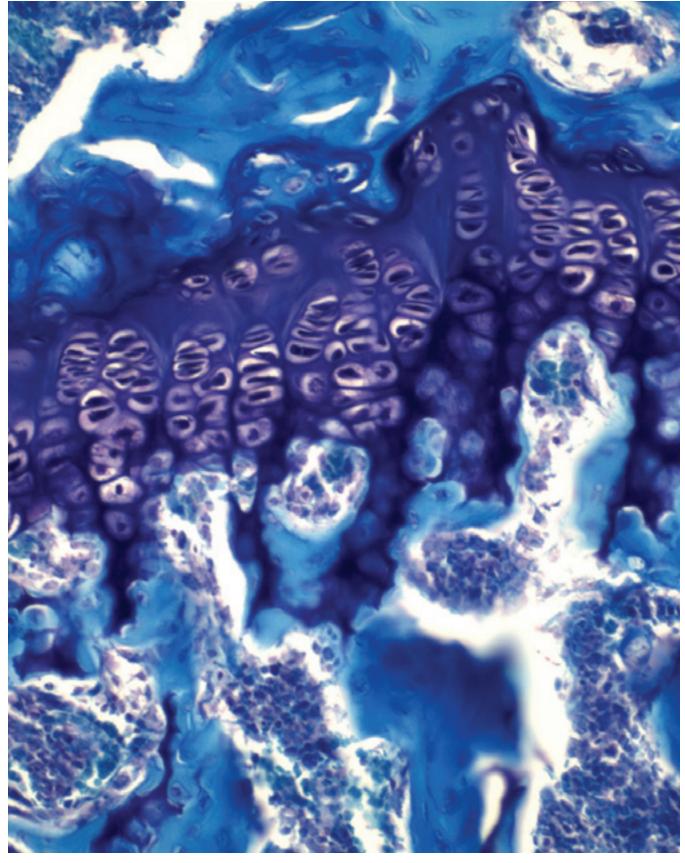
#### **DONALD G. STEIN**

Professor, Department of Emergency Medicine, Director, Brain Research Lab, Emory University School of Medicine

#### MICHAEL RUDNICKI

CEO & Scientific Director of the Stem Cell Network,

Senior Scientist & Director of the Regenerative Medicine Program and the Sprott Centre for Stem Cell Research, Ottawa Hospital Research Institute



'Growing Up'

Photo credit: Jaymi Taiami

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F (613) 228-8284 logankatz.com

AGN Homber/membre

## INDEPENDENT AUDITORS' REPORT

To the Members of the Stem Cell Network:

#### Report on the Financial Statements

We have audited the accompanying financial statements of the Stern Cell Network ("SCN"), which comprise the statement of financial position as at March 31, 2017, and the statements of revenue and expenditures, changes in net assets, and 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 accounting standards for not-for-profit organizations ("ASNFPO"), 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.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we 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 auditors' 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 auditors consider internal control relevant to SCN'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 SCN'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.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of SCN as at March 31, 2017, and its results of operations and its cash flows for the year then ended in accordance with ASNFPO.

#### Other Matter

The comparative figures as at March 31, 2016 and for the year then ended were audited by another firm of licensed public accountants under a report with an unmodified opinion dated June 27, 2016.

Logan Kats LLP

**Chartered Professional Accountants** Licensed Public Accountants

Ottawa, Canada June 27, 2017



1

# STATEMENT OF FINANCIAL POSITION

### MARCH 31, 2017

### RÉSEAU DE CELLULES SOUCHES

BILAN

31 MARS 2017

		2017	2016	
ASSETS				ACTIF
CURRENT ASSETS				ACTIF À COURT TERME
Cash	\$	1,452,411	\$ 880,285	Encaisse
Accounts receivable		162,026	96,635	Débiteurs
Prepaid expenditures		43,785	18,232	Dépenses payées d'avance
		1,658,222	995,152	
RESTRICTED CASH				<b>ÊQUIVALENTS DE TRÉSORERIE</b>
EQUIVALENTS (Note 2)		50,000	50,000	AFFECTÉS (note 2)
PROPERTY AND EQUIPMENT (Note 3)		9,594		IMMOBILISATIONS (note 3)
	\$	1,717,816	\$ 1,045,152	
LIABILITIES AND NET ASSETS				PASSIF ET ACTIFS NETS
CURRENT LIABILITIES				PASSIF À COURT TERME
Accounts payable and accrued				
liabilities (Note 4)	\$	438,696	\$ 152,510	Créditeurs et frais courus (note 4)
Deferred revenue		20,000		Revenus reportés
		458,696	152,510	
DEFERRED CONTRIBUTIONS (Note 5)		1,017,416	696,163	APPORTS REPORTÉS (note 5)
NET ASSETS				ACTIFS NETS
Invested in property and equipment		9,594		Investis en immobilisation
Unrestricted		182,110	146,479	Non affectés
Externally restricted (Note 2)		50,000	50,000	Grevé d'une affectation externe (note 2)
		241,704	196,479	
	s	1,717,816	\$ 1,045,152	

Commitments (Note 6) Economic dependence (Note 9) Financial instruments (Note 10)

ON BEHALF OF THE BOARD:

Engagements (note 6) Dépendance économique (note 9) Instruments financiers (note 10)

AU NOM DU CONSEIL D'ADMINISTRATION :



# STATEMENT OF REVENUE AND EXPENDITURES

# YEAR ENDED MARCH 31, 2017

## RÉSEAU DE CELLULES SOUCHES

# ÉTATS DES RÉSULTATS

## EXERCICE TERMINÉ LE 31 MARS 2017

	2017		2016	
REVENUE				REVENUS
Innovation, Science and				Subvention d'Innovation, Sciences
Economic Development Canada				et Développement Économique
	\$ 5,777,118	\$		Canada (note 5)
Networks of Centres of Excellence				Subvention des Réseaux de centres
Grant (Note 5)	696,163		562,897	d'excellence (note 5)
Contributed services in-kind (Note 8)	66,000		66,000	Apports en nature (note 8)
Services	147,950			Prestations de service
Interest	15,392		1,656	Intérêts
	6,702,623		630,563	
EXPENDITURES				DÉPENSES
Administration and general				Administration et fonctionnement
support (Note 7)	651,669		515,609	général (note 7)
Amortization	2,712			Amortissement
Annual conference (Note 7)	399,294		136,782	Conférence annuelle (note 7)
Business development	45,823		1,767	Développement des affaires
Communication and	101020			Communications et
outreach (Note 7)	388,554		72,711	sensibilisation (note 7)
Research (recovery) (Note 7)	5,000,024		(14,764)	Recherche (recouvrement) (note 7)
SCN board and committees	39,406		3,709	Conseil et comités du RCS
Training program (Note 7)	71,139		75,162	Programme de Formation (note 7)
Workshops	58,777			Ateliers
	6,657,398		790,976	
EXCESS OF REVENUE OVER				EXCÉDENT DES REVENUS SUR LES
EXPENDITURES (EXPENDITURES				DÉPENSES (DÉPENSES SUR LES
OVER REVENUE)	e 15.775	e	(160.417)	REVENUS)
OVER REVENUE)	\$ 45,225	s	(160, 413)	REVENUS)



# STATEMENT OF CHANGES IN NET ASSETS

### YEAR ENDED MARCH 31, 2017

### RÉSEAU DE CELLULES SOUCHES

# ÉTAT DE L'ÉVOLUTION DES ACTIFS NETS

## EXERCICE TERMINÉ LE 31 MARS 2017

				2017			2016		
	Pr E b	rvested in operty and quipment/ westis en robilisation		Unrestricted/ Non affectés		Externally restricted/ Grevé d'une ne affectation externe	Tetal/ Total	Total/ Total	
BALANCES AT BEGINNING OF YEAR	\$		\$	146,479	\$	50,000	\$ 196,479	\$ 356,892	SOLDES AU DÉBUT DE L'EXERCICE
Excess of revenue over expenditures (expenditures over revenue)				45,225			45,225	(160,413)	Excédent des revenus sur les dépenses (dépenses sur les revenus)
Amortization of property and equipment		(2,712	)	2,712				-	Amortissement des immobilisations
Acquisition of property and equipment		12,306		(12,306)					Acquisition dimmobilisations
BALANCES AT END OF YEAR	\$	9,594	ş	182,110	s	50,000	\$ 241,704	\$ 196,479	SOLDES À LA FIN DE L'EXERCICE

# STATEMENT OF CASH FLOWS

# YEAR ENDED MARCH 31, 2017

# RÉSEAU DE CELLULES SOUCHES

# FLUX DE FLUX DE TRÉSORERIE

## EXERCICE TERMINE LE 31 MARS 2017

		2017		2016	
OPERATING ACTIVITIES					ACTIVITÉS D'EXPLOITATION
Excess of revenue over expenditures					Excédent des revenus sur les dépenses
(expenditures over revenue)	2	45,225	\$	(160,413)	(expenditures over revenue)
A Bendersonth Gam					A7
Adjustments for:		0.710			Ajustements pour:
Amortization		2,712		10.00 0.000	Amortissement
Recognition of deferred contributions		(6,473,281)		(562,897)	Apports reportés constatés
Changes in non-cash operating working					Variations des éléments hors caisse du
capital:					fonds de roulement:
Accounts receivable		(65,391)		(32,544)	Débiteurs
Prepaid expenditures		(25,553)		(8,633)	Dépenses payées d'avance
Accounts payable and accured liabilities		286,186		33,677	Créditeurs et frais courus
Government remittances payable		-		(4,381)	Sommes à remettre à l'État
Deferred revenue		20,000			Revenus percus d'avance
		(6,210,102)		(735,191)	
FINANCING ACTIVITIES					ACTIVITÉS DE FINANCEMENT
Proceeds from deferred contributions		6,794,534		500.000	Encaissements d'apports reportés
Treeeus dour dererred contributens		0,00,00		0001000	Charles and a second se
INVESTING ACTIVITIES					ACTIVITÉS D'INVESTISSEMENT
Acquisition of property and equipment		(12,306)		-	Acquisition d'immobilisations
					desidence from the designation will do inside on the li-
					AUGMENTATION (DIMINUTION) DE LA
INCREASE (DECREASE) IN CASH		572,126		(235,191)	TRÉSORERIE
Cash position at beginning of year		880,285		1,115,476	Encaisse au début
		1 102 111		000.307	PROVIDER 1 . PDI
CASH POSITION AT END OF YEAR	Ş	1,452,411	2	880,285	ENCAISSE À LA FIN



## NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

## RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

### EXERCICE TERMINÊ LE 31 MARS 2017

### GENERAL

The Stem Cell Network ("SCN") was established on November 19, 2001 as an independent not-for-profit corporation and accordingly, is exempt from income taxes. The mission of SCN is to be a catalyst for enabling translation of stem cell research into clinical applications, commercial products or public policy.

SCN is one of Canada's Network Centres of Excellence ("NCE") networks. The NCE program is administered and funded by the Natural Sciences and Engineering Research Council ("NSERC"), the Canadian Institute of Health Research ("CIHR"), and the Social Sciences and Humanities Research Council ("SSHRC"), in partnership with Industry Canada. The goal of the federal NCE program is to mobilize Canada's research talent in universities, industry and government to create new economy jobs, stimulate growth and improve the quality of life for Canadians.

As of March 2015, SCN's grant from the NCE had come to an end. SCN had been approved for NCE management transition funds of \$500,000 in order to provide for the winding down of operations in the fiscal year 2016. SCN has used all its allowable carryover of NCE funds in the current fiscal year. Therefore, as of April 1, 2017 SCN is no longer considered an NCE network.

As of March 22, 2016, SCN was approved for Innovation, Science and Economic Development Canada ("ISEDC") funding of \$12,000,000 for the fiscal years 2017 and 2018. As part of the federal budget announcement on March 22, 2017, an additional funding amount of \$6,000,000 has been approved for SCN for fiscal year 2019.

### NATURE ET BUT DU RÉSEAU

RCS de cellules souches («RCS») a été constitué en organisme sans but lucratif indépendant le 19 novembre 2001. Il est par conséquent exonéré d'impôts sur le revenu. Sa mission est de servir de catalyseur favorisant la concrétisation de la recherche sur les cellules souches en applications cliniques, en produits commerciaux et en politiques publiques.

RCS est un des membre des Réseaux de centres d'excellence («RCE»). Les RCE sont administrés et subventionnés par le Conseil de recherche en sciences naturelles et en génie («CRSNG»), l'Institut de recherche en santé du Canada («IRSC»), et le Conseil de recherche en sciences humaines («CRSH»), en partenariat avec Industrie Canada. Le but du programme des RCE est de mobiliser la recherche de talents dans les universités, l'industrie et au sein du gouvernement afin de créer de nouveaux emplois, stimuler la croissance et améliorer la qualité de vie des Canadiens.

La subvention des REC que recevait RCS a pris fin en mars 2015. RCS s'est vu accorder un financement de gestion transitoire des RCE de 500 000\$ pour répondre à la diminution des activités au cours de l'exercice considéré. RCS a utilisé tout son report autorisé des fonds RCE au cours de l'exercie financier. Conséquemment, à partir du 1er avril 2017 RCS n'est plus considéré comme un des membres du RCE.

Une subvention d'Innovation, Sciences et Développement Écomique Canada («ISDEC») a été accordé au Réseau pour les exercices 2017 et 2018 d'un montant de 12 000 000\$. Dans le cadre de l'annence du budget fédéral le 22 mars 2017, un financement additionnel d'un montant maximal de 6 000 000 \$ a été approuvé en faveur du RCE pour l'exercice 2019.



# NOTES TO FINANCIAL STATEMENTS

# YEAR ENDED MARCH 31, 2017

# RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

## EXERCICE TERMINE LE 31 MARS 2017

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

These financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations ("ASNFPO") and include the following significant accounting policies:

#### Revenue Recognition

SCN follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which related expenditures are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

#### Grant

Grant revenue represents funds received from the federal government for specific initiatives administered by SCN. Grant are recognized as revenue when costs are incurred in relation to the specific initiatives. Grant funds that have not been fully spent at year end are reported as deferred contributions.

#### Services

Amounts received for services are recognized as revenue as the related work is performed based on agreed upon hourly rates and collection is reasonably assured.

### Interest

Amounts received for interest income are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

#### 1. SOMMAIRE DES PRINCIPALES CONVENTIONS COMPTABLES

Les présents états financiers ent été dressés selon les normes canadiennes pour les organismes sans but lucratif («NCOSBL») et tiennent compte des principales méthodes comptables suivantes :

#### Constatation des produits

RCS applique la méthode du report pour comptabiliser les apports. Les apports affectés sont constatés à titre de produits de l'exercice au cours duquel les charges connexes sont engagées. Les apports non affectés sont constatés à titre de produits lorsqu'ils sont déjà reçus ou à recevoir et ce, si le montant à recevoir peut faire l'objet d'une estimation raisonnable et que sa perception est raisonnablement assurée.

#### Subventions

Les revenus de subventions comprennent des fonds obtenus de gouvernement fédéral à des fins spécifiquement définies, devant être gérées par RCS. Les revenus de subventions sont constatés à titre de revenus au même rythme que les dépenses encourues à ces fins. Les fonds provenant de ces subventions qui n'ont pas été dépensés à la fin de l'exercice sont présentés dans les apports reportés.

#### Prestations de service

Les montants reçus pour les services sont comptabilisés à titre de produits au fur et à mesure que le travail connexe est effectué, basé en fonction des taux horaires convenus et que perception la collecte est raisonnablement assurée.

### Intérêts

Les montants reçus pour les revenus d'intérêt sont comptabilisés en produits lorsqu'ils sont reçus ou à recevoir si le montant à recevoir peut être raisonnablement estimé et le recouvrement est raisonnablement assurée.



# NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

### RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

### EXERCICE TERMINÊ LE 31 MARS 2017

#### SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### Contributed Services In-Kind

Because of the difficulty of determining their fair value, contributed services are not recognized in the financial statements unless a fair value can be reasonably estimated, the services are used in the normal course of operations and the provider of the services has explicitly defined the value of the services to SCN.

### Research Programs Expenses

Costs relating to research programs are recorded as expenses when they become payable. The research grants are determined to become payable at the time when the board of directors approves the grant and the grant recipient investigator has submitted a signed acceptance of award and related documentation formally acknowledging the grant. Research grants that have been identified as payments in future periods are summarized and disclosed as commitments in Note 6 of these financial statements.

Should the recipients of the grants not fulfill their obligations, the funding will need to be returned to SCN.

#### Allocation of Expenses

SCN allocates salaries and benefits to applicable programs based on an estimate of the percentage of time spent on the program.

#### SOMMAIRE DES PRINCIPALES CONVENTIONS COMPTABLES (suite)

#### Apports en nature

En raison de la difficulté de déterminer la juste valeur, les services en nature ne sont pas comptabilisés dans les états financiers, à moins qu'une juste valeur puisse être raisonnablement estimée, que les services sont utilisés dans le cours normal des activités et que le fournisseur du service a défini explicitement la valeur de ses services au Réseau.

### Dépenses de programmes pour la recherche

Les coûts liés aux programmes de recherche sont comptabilisés en charges lorsqu'ils deviennent exigibles. Les subventions pour la recherche deviennent exigibles au moment où le conseil d'administration approuve la subvention et que le bénéficiaire de la subvention a soumis une acceptation signée et la documentation connexe reconnaissant formellement la subvention. Les subventions pour la recherche ayant été identifiées à titre de paiements au cours des prochains exercices sont résumées et présentées dans les engagements, à la note 6 des états financiers.

Si les bénéficiaires des subventions ne rencontrent pas leurs obligations, le financement devra être retourné au Réseau.

#### Ventilation des dépenses

RCS ventile les coûts des salaires et avantages sociaux aux programmes appropriés, sur la base d'une estimation du pourcentage de temps consacré à ce programme.



# NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

# RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

### EXERCICE TERMINE LE 31 MARS 2017

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, cash held on deposit with a Canadian chartered bank and highly liquid investments with original maturities of twelve months or less, including cashable guaranteed investment certificates. The fair value of cash equivalents approximates the amounts shown in the financial statements.

#### Foreign Currency Transactions

SCN uses the temporal method to translate its foreign currency transactions.

Monetary assets and liabilities are translated at the rate of exchange in effect at year end. Other assets and liabilities are translated at their historic rates. Items appearing in the statement of revenue and expenditures are translated at average year rates. Exchange gains and losses are included in the statement of revenue and expenditures.

#### Property and Equipment

Property and equipment are recorded at cost. Amortization is provided on a straight-line basis using the following annual rates:

Computer equipment	3 years
Furniture and equipment	5 years

Amortization of an asset commences in the month of acquisition. No amortization is recorded in the month of disposal.

#### Financial Instruments

Measurement of financial instruments SCN initially measures its financial assets and liabilities at fair value.

SCN subsequently measures all its financial assets and financial liabilities at amortized cost.



#### 1. SOMMAIRE DES PRINCIPALES CONVENTIONS COMPTABLES (suite)

### Trésorerie et équivalents de trésorerie

Tous les placements très liquides dont l'échéance initiale est inférieure à 12 mois, y compris les certificats de placement garanti encaissables sont classés à titre d'équivalents de tréscrerie. La juste valeur des équivalents de trésorerie sa rapproche des montants présentés dans les états financiers.

#### Conversion de devises étrangères

RSC applique la méthode temporelle pour convertir ses opérations en devises étrangères.

Les éléments monétaires sont convertis au taux de change en vigueur à la fin de l'exercice. Les autres éléments sont convertis au taux de change historique. Les éléments figurant à l'état des résultats d'exploitation sont convertis au taux de change moyen au cours de l'exercice. Les gains et pertes de change sont présentés dans l'état des résultats d'exploitation.

#### Immobilisations.

Les immobilisations sont comptabilisées au coût et sont amorties selon la méthode de l'amortissement linéaire sur leur durée de vie utile estimative, soit :

Équipement informatique	3 ans
Mobilier et équipement	5 ans

L'amortissement d'une immobilisation débute dans le mois où elle est acquise. Aucun amortissement n'est comptabilisé dans le mois de la disposition.

#### Instruments Financiers

Evaluation des instruments financiers Initialement, RCS évalue ses actifs et passifs financiers à leur juste valeur.

RCS évalue ultérieurement tous ses actifs et passifs financiers au coût amorti.

LOGAN KATZ

# NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

### RÉSEAU DE CELLULES SOUCHES

## NOTES COMPLÉMENTAIRES

### EXERCICE TERMINÊ LE 31 MARS 2017

#### SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### Financial Instruments (continued)

Measurement of financial instruments (continued) Financial assets measured at amortized cost include cash, restricted cash equivalents, and accounts receivable.

Financial liabilities measured at amortized cost include accounts payable and accrued liabilities.

#### Impairment

Financial assets measured at amortized cost are tested for impairment when there are indicators of impairment. The amount of the write-down is recognized in the statement of revenue and expenditures. The previously recognized impairment loss may be reversed to the extent of the improvement, directly or by adjusting the allowance account, provided it is no greater than the amount that would have been reported at the date of the reversal had the impairment not been recognized previously. The amount of the reversal is recognized in the statement of revenue and expenditures. The accounts receivable is netted by an allowance for doubtful accounts of \$Nil (2016 - \$Nil).

#### Transaction Costs

Transaction costs are financing fees or costs that are directly attributable to the financial assets or financial liabilities origination, acquisition, issuance or assumption. Transaction costs relating to financial assets or financial liabilities that are carried at amortized cost or cost are netted against the carrying value of the assets or liabilities and then recognized over the expected life of the instrument using the effective interest method. All other transaction costs are recognized in the statement of revenue and expenditures in the period incurred.

#### SOMMAIRE DES PRINCIPALES CONVENTIONS COMPTABLES (suite)

#### Instruments Financiers (suite)

Évaluation des instruments financiers (suite) Les actifs financiers évalués au coût amorti comprennent l'encaisse et les débiteurs.

Les passifs financiers évalués au coût amorti comprennent les créditeurs et les frais courus.

#### Depréciation

Les actifs financiers évalués au coût amorti sont soumis à un test de dépréciation s'il existe des indications possibles de dépréciation. Le montant de la dépréciation est comptabilisé dans l'état des résultats. Lorsque l'ampleur de la dépréciation d'un actif précédemment déprécié se réduit et que la réduction peut être rattachée à un événement postérieur à la comptabilisation de la moins-value, la moins value déjà comptabilisée fait l'objet d'une reprise dans les états des résultats de l'exercice où la reprise a eu lieu. Le solde des débiteurs comprend une provision pour créances douteuses de NéantS (2016 - NéantS).

#### Coûts de transaction

Les coûts de transaction comprennent les frais légaux, comptables, assurances et autres coûts directement attribuables à l'achat, l'émission ou la disposition d'actifs financiers ou passifs financiers. Les coûts de transaction liés aux autres passifs sont comptabilisés en augmentation de la valeur comptable de l'actif ou en diminution du passif et sont ensuite constatés sur la durée de vie prévue de l'instrument selon la méthode du taux d'intérêt effectif. Tous les autres coûts de transaction sont comptabilisés dans l'état des résultats de l'exercice visé.



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NOTES TO FINANCIAL STATEMENTS

# YEAR ENDED MARCH 31, 2017

## RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

# EXERCICE TERMINE LE 31 MARS 2017

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

#### Use of Estimates

These financial statements have been prepared by management in accordance with ASNFPO and accordingly, require management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenditures during the reporting period. Actual results could differ from these estimates. The significant estimates in the financial statements include the estimated useful lives of property and equipment, allowance for doubtful accounts, the potential recovery of research grants awarded, the amount of certain accrued liabilities and the allocation of salaries and benefits to applicable programs.

# 2. RESTRICTED CASH EQUIVALENTS

Restricted cash equvalents are amounts invested in a non-redeemable guaranteed investment certificate (GIC) which is held by SCN's bank as collateral for their credit card account. The non-redeemable GIC bears interest at 0.5% and matures on March 19, 2018.

#### 1. SOMMAIRE DES PRINCIPALES CONVENTIONS COMPTABLES (suite)

### Estimations comptables

Dans le cadre de la préparation des états financiers, conformément aux NCOSBL, la direction doit établir des estimations et des hypothèses qui ont une incidence sur les montants des actifs et des passifs présentés et sur la présentation des actifs et des passifs éventuels à la date des états financiers, ainsi que sur les montants des revenus et des dépenses constatés au cours de la période visée par les états financiers. Les résultats réels pourraient varier par rapport à ces estimations. Parmi les principales composantes des états financiers exigeant de la direction qu'elle établisse des estimations figurent les durées de vie utile estimatives des immobilisations, la provision pour créances douteuses, le recouvrement potentiel des subventions pour la recherche accordées, certains frais courus et la ventilation des coûts des salaires et avantages sociaux aux programmes appropriés.

### 2. ÉQUIVALENTS DE TRÉSORERIE RESTREINTS

Les équivalents de trésorerie restreints sont les amortissements investis dans un certificat de placement garanti non remboursable (GNR) qui est détenu par la banque du réseau comme garantie pour leur carte de crédit. Le CPG non échangeable porte intérêt à 0.5% et arrive à échéance le 19 mars 2018.



NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

# RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

3. IMMOBILISATIONS

EXERCICE TERMINÊ LE 31 MARS 2017

### 3. PROPERTY AND EQUIPMENT

			2017				2016	
	Cost/Coûts	A	Accumulate Amortization mortisseme cumulé	V	Net book value/ Valeur nette		Net book value/ Valeur nette	
Computer equipment Furniture and equipment	\$ 37,979 12,056	\$	28,385 12,056	\$	9,594	\$		Équipement informatique Mobilier et équipement
	\$ 50,035	s	40,441	s	9,594	s	-	

### 4. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

SCN does not have any government remittances owing at year end.

### 5. DEFERRED CONTRIBUTIONS

#### Networks of Centres of Excellence

Funding from the NCE ceased in fiscal year 2016. SCN was allowed to carryover the 2016 fiscal year ending balance to fiscal year 2017.

NCE funds are managed in accordance with the funding guidelines contained in the funding agreement between the granting councils and SCN, whereby the funding transits via the host organization, the University of Ottawa.

The changes in the deferred contributions balance for the period are as follows:

# 4. CRÉDITEURS ET FRAIS COURUS

RCS n'a aucune somme à remettre à l'État à la fin de l'exercice.

#### 5. APPORTS REPORTÉS

#### Réseaux des centres d'excellence

Le financement des RCE a cessé au cours de l'exercice financier 2016. RCS a été autorisé à reporter le solde final de l'exercice précédent à l'exercice financier 2017.

Les fonds des RCE sont gérés conformément aux lignes directrices de subvention contenues dans l'accord de subvention entre les conseils subventionnaires et RCS, tout en transitant via l'organisme d'accueil, l'Université d'Ottawa.

Les variations du solde des apports reportés pour l'exercice sont les suivantes :

		2017		2016	
Balance at beginning of period	s	696,163	s	759,060	Solde au début de l'exercice
NCE restricted contributions received		-		500,000	Apports affectés des RCE reçus
Amount recognized as revenue		(696,163)		(562,897)	Montants constatés aux revenus
Balance at end of period	\$		s	696,163	Solde à la fin de l'exercice



# NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

# RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

# EXERCICE TERMINE LE 31 MARS 2017

### 5. DEFERRED CONTRIBUTIONS (continued)

### Innovation, Science and Economic Development Canada

SCN has been approved for ISEDC funding for \$12 million under the terms of the ISEDC program, until March 31, 2018.

ISEDC funds are managed in accordance with the funding guidelines contained in the funding agreement between ISEDC and SCN, whereby the funding transits directly to SCN.

The changes in the deferred contributions balance for the period are as follows:

#### APPORTS REPORTÉS (suite)

Innovations, Sciences et Développement Économique Canada

RCS à reçu l'approbation d'une subvention de PISEDC d'un montant de 125 millions aux termes du programme ISEDC, venant à échéance le 31 mars 2018

Les fonds d'ISEDC sont gérés conformément aux lignes directrices de financement contenues dans l'accord de financement entre les conseils subventionnaires et RCS, dans le cadre duquel le financement transite direcement vers RCS.

Les variations du solde des contributions reportées pour la période sont les suivantes:

	2017		2016	
Balance at beginning of period	\$	s		Solde au début de l'exercice
ISEDC restricted contributions received	6,794,534	ł		Apports affectés des ISEDC reçus
Amount recognized as revenue	(5,777,118	9		Montants constatés aux revenus
Balance at end of period	\$ 1.017,410	•		Solde à la fin de l'exercice



NOTES TO FINANCIAL STATEMENTS

## YEAR ENDED MARCH 31, 2017

# RÉSEAU DE CELLULES SOUCHES

NOTES COMPLÉMENTAIRES

### EXERCICE TERMINÊ LE 31 MARS 2017

### 6. COMMITMENTS

SCN has agreed to provide funding for research grants related to various programs, trials and studies that are not accrued in SCN's financial statements as they are not yet payable.

The future commitments for SCN related to these research grants are as follows:

### 6. ENGAGEMENTS

RCS a approuvé des subventions pour la recherche pour la réalisation de divers programmes, essais cliniques et études qui ne sont pas comptabilisées dans les états financiers de RCS, puisqu'elles ne sont pas encore exigibles.

Les engagements futurs de RCS liées à ces subventions de recherche sont les suivants :

Clinical trials	\$ 2,568,470	Essais cliniques
Disease team	1,724,967	Études de facilitation
Scientific director's award	123,750	Études fondamentales

#### 7. ALLOCATION OF EXPENSES

Salaries and benefits of \$838,650 (2016 - \$441,712) have been allocated as follows:

### 7. VENTILATION DES DÉPENSES

Les salaires et avantages sociaux d'un montant de 838 650\$ (2016 - 441 712\$) ont été ventilés de la façon suivante :

	2017	2016	
Annual conference	s -	\$ 24,146	Conférence annuelle Administration et
Administration and general support	515,379	393,420	fonctionnement général Communication et
Communication and outreach	169,687		sensibilisation
Research	133,237		Recherche
Training program	20,347	24,146	Programme de formation



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NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

# RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

### EXERCICE TERMINE LE 31 MARS 2017

#### 8. RELATED PARTY TRANSACTIONS

SCN is related to the University of Ottawa (the "University") by virtue of the fact that the University is its host institution under the Networks of Centres of Excellence program.

Under an agreement, the University provides accounting and administrative support services as well as office space and furniture without charging SCN. The value of the in-kind contributions received for services in fiscal 2017 is estimated to be \$66,000 (2016 - \$66,000) and it is recorded in administration and general support expenditures. Effective July 2008, SCN, the University and the Ottawa Hospital Research Institute (OHRI) have an agreement that the CHRI will provide SCN with office space and information technology support services.

With the exception of the in-kind contributions from the University which are reported at fair value, the transactions between related parties are recorded at the exchange amount, which is the amount established and agreed to between the parties.

### 9. ECONOMIC DEPENDENCE

SCN receives ISEDC funds under a two year funding agreement. Revenues pertaining to this grant account for 86% of SCN's revenue.

### 8. OPÉRATIONS ENTRE APPARENTÉS

RCS est associé à l'Université d'Ottawa («l'Université»), étant donné que l'Université est l'établissement note conformement aux exigences du programme des RCE.

Aux termes d'une entent conclue avec l'Université, cette derniere fournit, sans frais pour RCS, des services de comptabilité et de soutiwen administrif, ainsi que des locaux et du mobilier. La valeur estimée de cet apport sous forme de services pour l'exercice dos le 31 mars 2016 est de 66 000\$ (66 000\$ en 2016). Ce montant a été comptablisé 211 poste «Administration et fonctionnement général». Depuis juillet 2008, RCS, l'Université et l'Institut de recherche de l'Hôpital d'Ottawa («IRHO») ont conclu une entente selon laquelle l'IRHO fournit des locaux et da soutien informatique au Réseau.

A l'exception des apports sous forme de services offerts par l'Université qui sont comptabilisés à la juste valeur, les opérations entre apparentés sont comptabilisées à la valeur d'échange, laquelle correspond à la valeur établie d'un commun accord avec les parties concernées.

### 9. DÉPENDANCE ÉCONOMIQUE

RCS recoit des fonds d'ISEDC dans le cadre d'une entente de financement de deux ans. Les revenus de cette concession correspondent à 86% des revenus de RCS.



# NOTES TO FINANCIAL STATEMENTS

### YEAR ENDED MARCH 31, 2017

## RÉSEAU DE CELLULES SOUCHES

# NOTES COMPLÉMENTAIRES

### EXERCICE TERMINÊ LE 31 MARS 2017

#### 10. FINANCIAL INSTRUMENTS

### Risks

It is management's opinion that SCN is not exposed to significant credit risk, interest rate risk or concentrations of risk through its financial instruments.

#### Currency Risk

Currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

SCN holds activities in foreign countries and as such is exposed to the fluctuations of foreign and Canadian currencies.

#### Liquidity Risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabiliities. SCN is exposed to this risk mainly in respect of its accounts payable and accrued liabilities. SCN manages its liquidity risk by monitoring its requirements through use of budgets and cash forecasts.

### Credit Facility

SCN has access to \$50,000, unsecured credit on a credit card, bearing interest at 19.99% per annum, for which the balance is required to be fully paid on a monthly basis. The credit used at March 31, 2017 amounts to \$4,871 (2016 - \$6,014) and is included in the balance of accounts payable and accrued liabilities.

### 11. COMPARATIVE FIGURES

Certain comparative figures have been reclassified to conform with the current year presentation.

#### 10. INSTRUMENTS FINANCIERS

#### Risques

Il est l'avis de la direction que RCS n'est pas exposée à un risque important de crédit, de taux d'intérêts ou à la concentration du risque découlant de ses instruments financiers.

#### Risque de taux de change

Le risque de taux de change fait référence aux conséquences négatives des fluctuations des taux de change sur les flux de trésorerie.

RCS est engagé dans des activités à l'étranger et par le fait même est exposée aux fluctuations de certaines devises étrangères.

#### Risque de liquidité

Le risque de liquidité correspond au risque relié à la capacité de l'Organisation de réunir les fonds nécessaire afin de faire face à une obligation financière figurant ou non au bilan. RCS est exposée à ce risque notamment à l'égard de ses créditeurs et frais courus. RCS gère son risque de liquidité en surveillant ses besoins grâce à l'utilisation de budgets et de prévisions de trésorerie.

### Disponibilités de crédit.

RCS a accès à un crédit non garanti de 50 000\$ sur une carte de crédit, portant intérêt à 19,99% par an, pour lequel le solde doit être entièrement payé sur une base mensuelle. Le crédit utilisé au 31 mars 2017 s'élève à 4 871\$ (1 064\$ en 2016) et est inclus dans le solde des créditeurs et frais courus.

### 11. CHIFFRES COMPARATIFS

Certains chiffres comparatifs ont été reclassifies afin de rendre leur présentation conforme à celle de l'exercie courant.





