



DR. MICHAEL RUDNICKI, Scientific Director

DECLAN HAMILL, Interim Board Chair

CATE MURRAY, President & CEO



## In Conversation with SCN Leadership

### *Looking ahead as SCN begins a new chapter*



On April 6, 2022, the Stem Cell Network launched its new three-year Strategic Plan, *IGNITE*. This new Strategic Plan aligns with SCN's new funding levels and follows the renewed commitment to SCN from the Government of Canada in the 2021 federal budget, which allocates \$45 million to SCN over three years to fuel world-leading stem cell research and accelerate regenerative medicine for the benefit of all.

As Canada takes steps to re-establish the health and economic well-being of Canadians coming out of the COVID-19 pandemic, now more than ever is the time to tap into our research strengths. In the world of health research, that means expanding on 60 years of scientific advances made by the stem cell and regenerative medicine (RM) research community.

In just two decades, SCN has built stem cell research strength in Canada and established an outstanding international reputation. As Canada's only national network supporting stem cell research and regenerative medicine, SCN will continue leading the way in building a vibrant sector that is yielding scientific advancements, fuelling clinical trials, delivering health solutions for patients and enabling company creation and growth. Just as the sector is evolving, so too is the Stem Cell Network.

As SCN charts the next 20 years, members of the Network's leadership team offer their thoughts on what this next chapter will look like and why it matters for the stem cell and regenerative medicine sector in Canada. *IGNITE* was developed in close consultation with our community during the first few months of 2021. Eight consultation sessions were held along with input from SCN's Research Management Committee (RMC) and direction from the SCN Board of Directors. A summary of the consultations was produced into a *What We Heard* report that is available through SCN's website.



## In Conversation with Dr. Michael Rudnicki, Scientific Director

**As an internationally respected scientist, what's the future for stem cell and regenerative medicine research?**

*The future is now.*

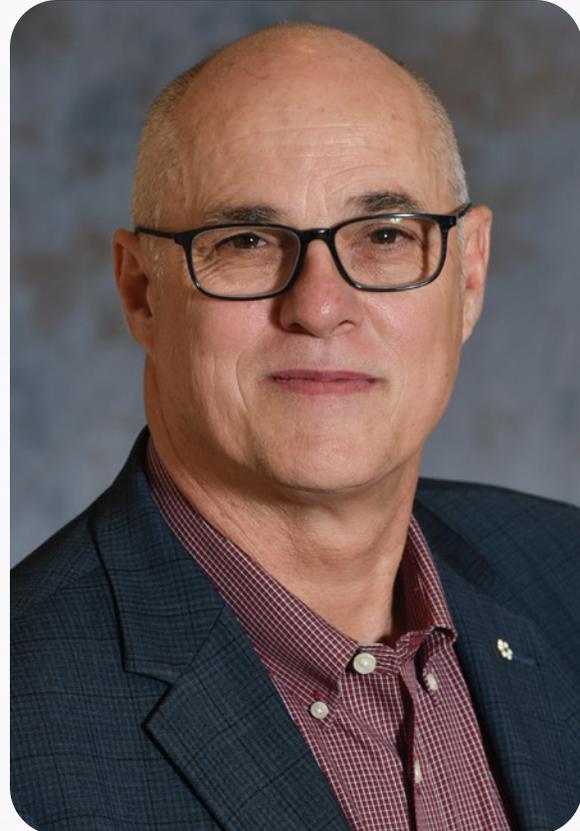
*In our lifetime, we'll see a transformation in medical practice where regenerative therapeutics will be used to treat devastating diseases and trauma for which there are currently no effective treatments.*

**In what specific areas is Canadian know-how having an impact?**

*Important advancements have been made by the Network's researchers in areas such as Type 1 diabetes, retinal degeneration, muscular dystrophies and neurodegenerative diseases such as Parkinson's and multiple sclerosis. But there is so much more to do. It's a crucial time — when regenerative medicine is beginning to fire on all cylinders.*

**What do you believe Canadian stem cell and regenerative medicine science have to offer the world?**

*We are at the tipping point and now beginning to see these new regenerative technologies and therapies impact patient care through the clinical trials we're conducting here in Canada. We are improving and saving lives with these new treatments. In fact, SCN support of its last five clinical trials had a life-saving or life-changing impact for approximately 100 patients and their families. The results we are seeing from these trials is very exciting. I am looking forward to the Network supporting more clinical activity and developing a pipeline of research that will ultimately change the standard of care for chronic and rare diseases.*



*The Stem Cell Network includes outstanding biologists, chemists and engineers. We also have a very talented and globally respected community of policy, legal and ethics scholars. They are leading the way on important research issues such as governance; patient data and privacy; global standards development; and regulatory modernization. They are also pursuing critical questions about access and affordability of advanced therapeutics. Collectively, we are a community of trailblazers dedicated to ensuring Canada can build its regenerative medicine sector and deliver its innovations to Canadians and patients across the globe.*

## In Conversation with Declan Hamill, Interim Board Chair

**You have been with the Network for many years now and recently stepped into the role of Interim Chair. What do you see as its core values and contribution?**

*At its core, the Stem Cell Network is about people. It is about the talented researchers who are innovating every day. It's about the trainees who will be tomorrow's scientific leaders but, ultimately, it's about patients. It is about developing the treatments, therapies and technologies that will allow those living with a disease or illness to have the quality of life we all deserve.*

*SCN's dedicated researchers spend years working to drive stem cell-based innovations forward, and bringing a new therapy to the clinic takes a great deal of commitment and considerable collaboration. SCN has always been an open and collaborative Network that encourages and embraces team-based research and knowledge-sharing. This is what gives us our competitive advantage. What I have observed over the years is that SCN has been tremendously successful at developing research collaborations that are generating both economic and health advances. For example, Quebec-based ExCellThera was founded on the scientific collaborations and work of Stem Cell Network investigators. SCN-supported companies such as ExCellThera, Mesentech, Aspect Biosystems, Morphocell and many others are Canada's future. All have been built with the Network's support, and great scientific collaborations.*

*I see the culture of collaboration SCN has instilled across Canada as being one of its greatest contributions – fuelling important partnerships that result in significant advances in the fight against disease and illness.*



**What kind of role do you believe SCN should be playing in the coming decades?**

*SCN has a proven track record of leadership in this country, and I'm confident it will remain a trusted leader in the coming decades. This should not just be for the research community, but also for our growing biotech community and for governments working in the training, biomanufacturing, regulation and policy spaces that will impact our ability to 'scale up' regenerative medicine (RM) in Canada. Of course, all the Network's endeavours are ultimately for the patients who will receive cell and gene therapies in the months, years and decades ahead.*

## In Conversation with Cate Murray, President & CEO

**SCN's Interim Board Chair noted people are at the heart of SCN. As such, how will SCN support the next generation of talent who will become Canada's future leaders in regenerative medicine?**

*For two decades, integrating trainees into Canada's national stem cell network has been a priority. SCN has a long and successful track record in developing next-generation talent. Many people across our Network credit SCN for enabling their career trajectories and success. I believe it's the training we have offered more than 4,000 talented health research minds that has helped establish us into the collaborative Network we are today.*

*In the coming years, training will remain a central pillar of the Stem Cell Network's mandate. Our trainees are filled with such passion and enthusiasm, and we're lucky to work with many of them who serve as volunteers on SCN's Training and Communications Committee. They're an important constituency for us and helping them build the technical and career skills and professional networks needed to advance their careers is something to which we are fully committed. This Strategic Plan, IGNITE, lays out a robust plan that will advance the knowledge and careers of Canada's next generation. In turn, I know they will drive next generation regenerative medicine advances that our families, friends, colleagues and neighbours are expecting from us.*

**Why has SCN decided to strategically grow the Network?**

*In science you can never stand still. Innovation is the name of the game. If the Network does not grow, we will be left behind and become increasingly dependent on other nations for their research. The field is rapidly advancing. We have the talent to*



*compete, and now we have the resources to deliver on the promise of stem cells and regenerative medicine.*

*In 2020, the Alliance for Regenerative Medicine reported a record-setting year for RM growth internationally with sector financing reaching \$20 billion — doubling from 2019. If Canada is going to be part of the future of regenerative medicine, our national recipe for success must include growth from SCN as Canada's research leader. By broadening our research scope to include areas such as gene therapy, we can remain at the leading edge of regenerative medicine and construct a stronger Network that will build on our many years of success and proud history which began with Drs. Till and McCulloch.*

**Now is the time to grow.**