

Canada's Burgeoning Regenerative Medicine Sector

Investors around the world call regenerative medicine one of the key technology frontiers of our time. Canada is a leader in this field and is poised to gain in a market estimated to grow to \$81 billion by 2023.

Skills for the 21st Century

Since 2001, the Stem Cell Network has provided core skills training to 3,000+ individuals working in Canadian research labs, institutes and hospitals. The training includes skills to advance new lab technologies and methods, as well as core competencies such as management, writing/communications and commercialization.

"Training provided by the Stem Cell Network is critical for STEMCELL Technologies' future business development plans. Over the next decade we need and want to recruit Canadians first. We are pleased to be a partner with SCN in providing essential training opportunities that will better prepare trainees for careers in business."

Terry E. Thomas,
Chief Scientific Officer (retired)
STEMCELL Technologies Inc.

Over 19 years, the Stem Cell Network (SCN) has built a robust stem cell and regenerative medicine community yielding scientific advancements that are catalyzing novel therapies, company creation and a highly-skilled workforce. With support from the Government of Canada, SCN and its partners have made strategic investments in this high-impact sector valued at more than \$216 million.

"We are more than a research funder," said Dr. Michael Rudnicki, SCN's CEO and Scientific Director. "Our ground-up approach supports promising Canadian research along the entire development pathway. By providing expertise, networking and opportunities we help drive stem cell research into the clinic or market. As a result, SCN has enabled 19 clinical trials and facilitated the emergence of numerous biotechnology companies."

One of these biotechs is ExCellThera, a clinical-stage company that is expanding stem and immune cells for use in the fight against blood diseases. More than a decade ago, SCN began funding the basic research that now underpins ExCellThera's therapeutic approach. More recently, SCN has supported Canadian clinical trials to validate the company's lead technology. ExCellThera is actively developing other platforms, including gene therapy, for a range of conditions.

Another Montreal biotech, Morphocell Technologies, seeks to address an unmet need in the treatment of liver diseases. Morphocell's ReLiver™ technology uses lab-grown tissue that performs like a human liver. Developed with the support of SCN, ReLiver™ is being used as a drug testing platform, but has also shown promise to restore liver function and regenerative capacity, which the company plans to validate through human clinical trials.

Canada's future as a leader in regenerative medicine biotechnology will not be gained, but earned. SCN continues to direct resources into key programs aimed at bridging the gap between research and clinical or commercial outcomes. *Learn more about this and SCN's other research and training activities at stemcellnetwork.ca.*