Understanding the impact of regenerative medicine skills training on employability in Canada

The Stem Cell Network (SCN) is committed to building a strong community of highly skilled researchers dedicated to advancing Canada’s standing as a global leader in stem cell research. Since 2001, SCN has provided specialized training to more than 3,000 highly qualified personnel (HQP) — also known as SCN trainees. SCN training activities often take place in partnership with other like-minded organizations. This collaborative approach has been key to delivering on SCN’s training mandate.

An *Impact Analysis of the Stem Cell Network’s Training Program* was conducted between November 2019 and February 2020. It included a targeted survey of trainees using publicly available sources to track the career progression of 1,500 of SCN’s 3,000 trainees. Trainees were categorized by employment areas, gender, citizenship and time period during which the SCN training took place. Overall, this study provides insight about the SCN trainees who are building Canada’s regenerative medicine sector.

**Summary of Findings**

- 58% of SCN trainees have progressed to work in universities, hospitals or research institutes
- 25% of SCN trainees are employed in the private sector, including biotechnology and pharmaceutical companies
- 55% of SCN trainees identify as women

Who are SCN trainees?

SCN trainees are highly trained individuals at the Masters, PhD and postdoctoral levels who have participated in SCN skills training, workshops, lab exchanges and events.
The study’s results reveal the critical impact SCN training programs have on program participants. Well beyond their training, trainees continue realizing program benefits in areas including career skills, complex scientific techniques and the value of a professional, pan-Canadian network of collaborators. This is highly beneficial as trainees pursue their careers in both industry and academia. At the beginning of a new decade, and heading into the Stem Cell Network’s twentieth year, this bodes extremely well for Canada’s regenerative medicine field and the ongoing value of SCN.

**Employment Sector Breakdown**

- University/Hospital & Research Institute: 58%
- Biotechnology & Pharmaceutical: 19%
- Government & Legal: 7%
- Private Sector Companies: 6%
- Non-profit/Charity: 4%
- Medical Practice: 2%
- Self-Employed: 1%

**Canadian Citizenship at Time of Training and Current Location of Trainees**

- Canadian/Permanent Resident: 80%
- Temporary Resident: 20%
- Canada: 82%
- Outside Canada: 18%

The figure on the left shows how many SCN trainees considered themselves Canadian Citizens/Permanent Residents or Temporary Residents. Meanwhile, the figure on the right shows how many SCN trainees currently live and work in Canada and how many are working abroad.
Gender

Gender balance amongst the SCN trainee population is strong and the majority of trainees are finding meaningful employment and choosing to stay in Canada. It should be noted that an inequity continues to exist between men and women at the professorial level. Sustained efforts continue to be required to ensure gender balance is reached within the university system.

- 55% of SCN trainees identify as women
- Of SCN trainees working as university professors, only 37% are women while 63% are men
- Women are more likely than men to be working outside universities:
  - 61% of SCN trainees who work in the pharmaceutical and biotechnology category are female
  - 62% of SCN trainees who work in the government and legal category are female

This figure displays the distribution of gender across all employment sectors.
The training programs and opportunities offered by SCN are excellent. They provide high quality training in skills by experts in the field and networking opportunities. The support from SCN goes beyond the workshop, it provides a supportive community that lasts throughout your career.

— Natasha Chang, PhD, Assistant Professor, Department of Biochemistry, McGill University

Training Value

The targeted survey revealed that participants viewed their SCN training as overwhelmingly positive. The three most valuable outcomes reported were:

1. Technical and soft skill development
2. Professional networking
3. Career inspiration

The Stem Cell Network (SCN) is a national non-profit that supports stem cell and regenerative medicine research, training the next generation of highly qualified personnel and delivering outreach activities across Canada. SCN's goal is to advance science from the lab to the clinic for the benefit of all Canadians. SCN has been supported by the Government of Canada since its inception in 2001. Valued at more than $100 million, in nearly two decades this strategic funding has benefited approximately 175 world-class research groups and 3,000 trainees.

Read the full report, Training Tomorrow's Research Leaders: An Impact Analysis of the Stem Cell Network's Training Program, at stemcellnetwork.ca/about-us/reports