



HEART & STROKE FOUNDATION

**Canadian Partnership
for Stroke Recovery**

RESTORING LIVES THROUGH RESEARCH



There are more than **405,000** Canadians living with long-term stroke disability, a number that's expected to rise by **80%** in the next 20 years.

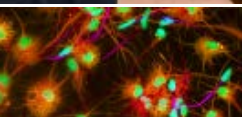


We catalyze innovative, collaborative research to identify new therapies and approaches in stroke recovery.

Here are just a few examples:



iRecover: A tablet to screen patients at the bedside for depression and help them to manage their recovery.



Stem cells: Proof-of-concept research to repair the damaged brain and lay the groundwork for clinical trials.



Tele-rehab: Game-changing projects to deliver Web-based physical and cognitive therapy to people in their homes.



Robotics: Portable technologies to ramp up physical therapy and speed recovery.



Exercise and novel drug therapy: Combination approaches to determine the optimal cocktail to boost physical and cognitive recovery.



Brain stimulation: Magnetic and electrical stimulation techniques to activate brain networks to improve physical and cognitive function.

We support clinical trials with national platforms:

CPSR's **SPReD (Stroke Patient Recovery Research Database)**

is supporting major national and international research efforts. SPReD collects patient data, including demographic, biomarker, genetic and proteomics, and imaging data.

SPReD provides an integrated repository

of data through which CPSR researchers can investigate and test original ideas, ultimately leading to knowledge that can be applied clinically to benefit people recovering from stroke.

Our **Rehab Affiliates network** allows researchers to quickly identify patients for

clinical studies through recruitment at affiliated rehabilitation centres. Through Rehab Affiliates, 30 co-op students, 10 graduate students and five post-doctoral fellows have already been trained and data from trials have been used in publications and grant applications.

We mobilize clinical trials in stroke recovery to ensure widespread adoption of new therapies.

We are forging new relationships to create a national infrastructure for clinical trials.

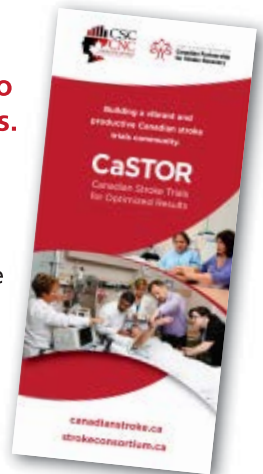
In partnership with the Canadian Stroke Consortium, we co-lead the CaSTOR (*Canadian Stroke Trials for Optimized Results*) initiative. Funded in part by the Canadian Institutes of Health Research, CaSTOR's aim is to catalyze clinical trials to address critical knowledge gaps.

We are a true partnership!

Heart & Stroke Foundation, Sunnybrook Research Institute, Baycrest, Toronto Rehabilitation Institute, University of Ottawa, Ottawa Hospital Research Institute and Memorial University of Newfoundland.

The HSF Canadian Partnership for Stroke Recovery is a unique model that works. All institutional partners make significant operational and financial contributions that, combined with those of the Heart & Stroke Foundation, allow us to collaborate on focused and strategic research priorities.

Our partnership brings together research teams from coast to coast. We leverage investments to accelerate the research process and improve the quality of research.





We are training the next generation of research stars.

A central purpose of the CPSR is to grow and train the next generation of stroke recovery researchers. We do that by identifying and then nurturing the next big research stars.

Through our training program, we provide:

- ❖ salary awards;
- ❖ mentorship;
- ❖ lab exchanges;
- ❖ workshops;
- ❖ networking events; and,
- ❖ the popular Stroke Program in Neurorecovery (SPiN) course, which brings together basic and clinical trainees from across the country for an intensive two-day hands-on program.

There are **127 trainee members** from all parts of Canada involved in the CPSR National Trainee Association, including **37 post-doctoral fellows**, **51 PhD graduate students**, **28 MSc graduate students**, and **11 undergraduates and recent grads**. Of those, **58 per cent** are involved in clinical/applied research and **42 per cent** are doing basic science research.

We are committed to having an impact.



Stroke Engine (www.strokeengine.ca) includes all the latest research evidence on therapies for stroke recovery. Stroke Engine is a leading international tool, used by patients, families and clinicians. This easy-to-navigate website bridges the gap between research findings and clinical practice.

EBRSR.com provides valuable research evidence into stroke recovery. The tool feeds academic research and informs best practices. The EBRSR now includes in-depth reviews of well over 2,000 studies including 1,431 randomized controlled trials. Parts of the EBRSR have been translated into a number of languages.





Stroke in Young Adults, a 59-page resource guide, fills a large information gap for people ages 18 to 45 who experience stroke.

Our Exercise Guides for patients and clinicians summarize, in a concise and user-friendly format, the Canadian Stroke Best Practice Recommendations on how Aerobic Exercise can enhance stroke recovery.



Our **monthly newsletter** provides regular updates on research projects, networking and publications. Our website and social media tools connect researchers and the stroke community.



The **CPSR's Stroke Community Advisory Committee**, which is made up of stroke survivors and family members, helps develop new educational and outreach tools, informs the development of research grants and advises on research direction.

Advances in Stroke Recovery, our annual scientific meeting, draws research scientists and clinicians from across Canada and around the world to probe new research directions.



What makes us different?

We were the first organization worldwide focused on stroke recovery research. Now, we are a model for other countries.

www.canadianstroke.ca



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RESTORING LIVES THROUGH RESEARCH

Our Partners:



HEART & STROKE[™]
FOUNDATION

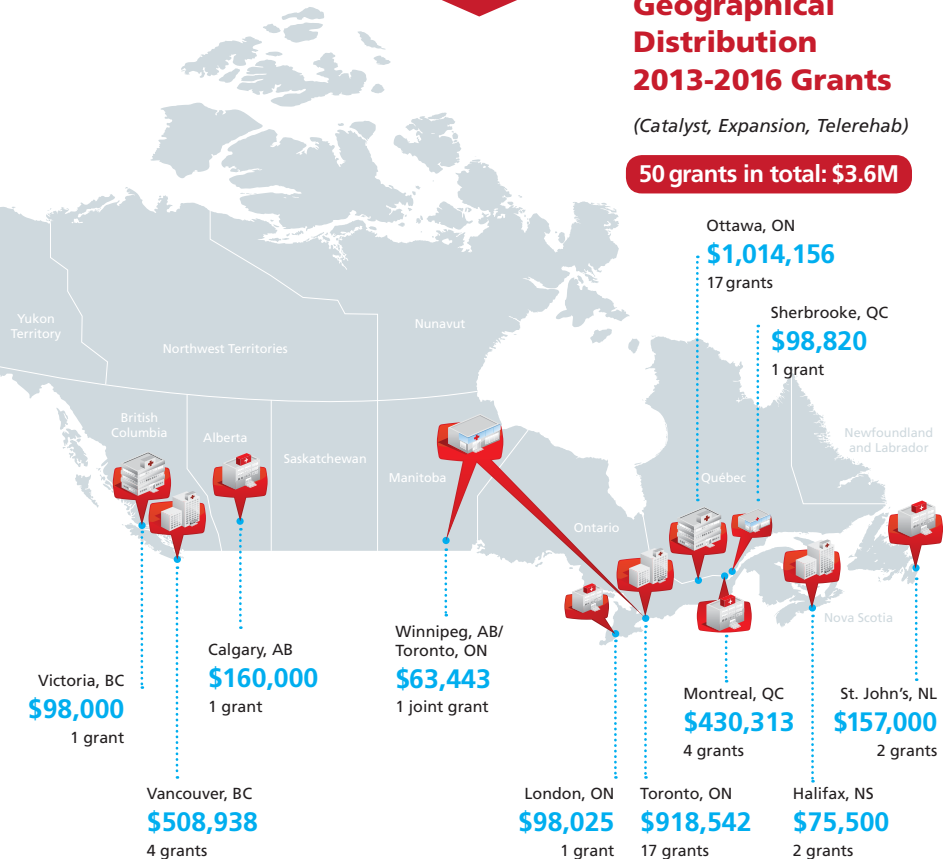
Baycrest
Innovations in aging



Geographical Distribution 2013-2016 Grants

(Catalyst, Expansion, Telerehab)

50 grants in total: \$3.6M





Stroke disability

is a huge public health issue in Canada.



60%

of people who have a stroke report that they need help afterwards.



80%

of people who have a stroke have restrictions to their daily activities.



725,000

is the number of Canadians who will be living with long-term stroke disability by 2038.



Research is crucial to finding new ways to make significant improvements in the lives of people living with stroke.

We need to:



Develop new technologies like robotics and computer-assisted devices;



Discover new drugs and cell therapies to protect and repair the brain;



Improve psycho-social support for patients and families; and



Develop better rehabilitation techniques.

The reality is, even with optimal prevention and treatment, there will be people living with severe disability from stroke.



Greater investment

is required in stroke recovery research.



Advances in research drive recovery and enhance support for survivors, their families and caregivers.



Rehabilitation is key to helping people regain what they've lost after stroke and to recover to the fullest extent possible.



Canada needs to invest in clinical trials to test new technologies and therapies.

85% of our funds are invested directly into research, education and knowledge translation programs.