

# Researcher Map Visualization

User Guide



## Table of Contents

Purpose .....	3
Funded Researcher Database .....	<b>Error! Bookmark not defined.</b>
Navigating the Researcher Map.....	3
Side Navigation Buttons.....	3
Responsive Data Story .....	3
Data Slicers.....	3
Map .....	3
Research awards by Mission Critical Area .....	3
Mission Pillar Research Breakdown.....	4
CIHR Pillars .....	5
Get More Information.....	5
Research Program Breakdown.....	6
Search Bar .....	6
Heart and Stroke Funded Researchers .....	6
Interactive Map.....	6
Under what priority area, or Mission Pillar is our research funded? .....	7
Under which Research Program, or Grant Type is our research funded? .....	7
Who do we fund?.....	8

## Purpose

This document provides further details on each page of the Researcher Map visualization and guidance on how to personalize your experience.






## The Data Source


The data are extracted from Heart & Stroke’s Funded Researcher Database, which houses information about research currently funded by the Heart & Stroke foundation. You will learn where in Canada research is funded, the general subject areas that are funded, as well as the types of grants awarded.

## Navigating the Researcher Map

The following table defines the components of the data visualization as identified in the screenshots of each page below.

### Component Definitions:

	<p><b>Side Navigation Buttons</b></p> <p>The side navigation buttons are present and consistent across all pages of the visualization. The buttons are located on the left-hand side of the page and span the height of the visualization. The red coloured button indicates the current page.</p>
	<p><b>Responsive Data Story</b></p> <p>This data story highlights the funding amounts, number of funded researchers and in what province the research is funded. If no province is specified, the story will display “Canada”. When a province is clicked on the map or selected via the Data Slicer, the story will update accordingly.</p>
	<p><b>Data Slicers</b></p> <p>Data Slicers are present on the right-hand side of all pages in the visualization. The slicers allow users to select specific data to be visualized, such as year, province or institution.</p>
	<p><b>Map</b></p> <p>This map shows where Heart &amp; Stroke funded researchers are located. To see the number of funded researchers in a province, hover over that province with your mouse. Where provinces or territories are in grey, this indicates that Heart &amp; Stroke does not currently fund any researchers in that province or territory.</p>
	<p><b>Research awards by Mission Critical Area</b></p> <p>Heart &amp; Stroke has identified six Mission Critical Areas (MCAs) where we can have the most impact. These include the following:</p> <p><i>Stroke:</i></p> <p>A stroke happens when blood stops flowing to a part of the brain or bleeding occurs in the brain, leading to death of brain cells. The effects of a stroke depend on the part of the</p>

	<p>brain that was damaged, and the amount of damage done. Types of stroke include ischemic stroke; transient ischemic attack (TIA); and hemorrhagic stroke.</p> <p><i>Vascular Cognitive Impairment:</i>  Vascular cognitive impairment (VCI) is a disorder of the mind - the mental ability to be aware, to think and to feel. VCI symptoms can range from forgetfulness to more serious problems with attention, memory, language, and executive functions like problem solving. The most serious form of VCI is called vascular dementia. Vascular dementia can cause difficulty doing even basic things like getting dressed and bathing. Vascular dementia and Alzheimer’s disease share similar signs and symptoms, but they are not the same disease. VCI may be caused by vessel wall disease or tiny clots that block small vessels in the brain, resulting in a lack of oxygen and damage to these brain cells.</p> <p><i>Coronary Artery and Vascular Disease:</i>  Coronary artery disease develops when the major blood vessels that supply the heart with blood, oxygen and nutrients are damaged or diseased. Vascular disease develops when blood vessels of the circulatory system that supply blood, oxygen and nutrients to the rest of the body are damaged or diseased. In coronary artery and vascular disease, normal blood flow is disrupted because blood vessels have become stiffened, narrowed or blocked.</p> <p><i>Heart Failure:</i>  Heart failure is a complex syndrome caused by weakening of the heart such that it is unable to pump blood adequately to meet the needs of the body.</p> <p><i>Heart Rhythm Disorders:</i>  Heart rhythm problems (heart arrhythmias) occur when the electrical impulses that coordinate the heartbeat do not work properly, causing the heart to beat too fast, too slow or irregularly. These may include atrial fibrillation, heart block, supraventricular tachycardia and cardiac arrest.</p> <p><i>Structural Heart Disease:</i>  Structural heart disease can be congenital, which means it was present at birth, or it may develop later in life, most commonly as valvular heart disease. It refers to defects in the heart valves, great vessels, heart walls or chambers.</p> <p>You can learn more about the MCAs and the members we are involved with on the <a href="#">Heart &amp; Stroke website</a>. This pie chart displays funded research by the six MCAs. You can drill down further by using the data slicers on the right-hand side of the page.</p>
	<p><b>Mission Pillar Research Breakdown</b></p> <p>Heart &amp; Stroke funds research that aligns with one of the four Mission pillars: Save Lives, Secondary Prevention, Enhance Recovery and Promote Health. This bar chart displays the</p>

	<p>distribution of funded research among the four Mission pillars. You can drill down further by using the data slicers on the right-hand side of the page.</p>
<p>7</p>	<p><b>CIHR Pillars</b></p> <p>Heart &amp; Stroke funds research across the four Canadian Institutes of Health Research (CIHR) pillars: Biomedical, Clinical, Health Services/Systems, and Social/Culture/Environmental/Population Health.</p> <p><i>Biomedical:</i>  Research with the goal of understanding normal and abnormal human functioning, at the molecular, cellular, organ system and whole body levels, including development of tools and techniques to be applied for this purpose; developing new therapies or devices that improve health or the quality of life of individuals, up to the point where they are tested on human subjects. Studies on human subjects that do not have a diagnostic or therapeutic orientation.</p> <p><i>Clinical:</i>  Research with the goal of improving the diagnosis, and treatment (including rehabilitation and palliation), of disease and injury; and improving the health and quality of life of individuals as they pass through normal life stages. Research on, or for the treatment of, patients.</p> <p><i>Health Services/Systems:</i>  Research with the goal of improving the efficiency and effectiveness of health professionals and the health care system, through changes to practice and policy. Health services research is a multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviours affect access to health care, the quality and cost of health care, and, ultimately, Canadians' health and well-being.</p> <p><i>Social, Cultural, Environmental and Population Health):</i>  Research with the goal of improving the health of the Canadian population, or of defined sub-populations, through a better understanding of the ways in which social, cultural, environmental, occupational and economic factors determine health status.</p> <p>This bar chart displays the distribution of Heart &amp; Stroke funded research among the four CIHR pillars. You can drill down further by using the data slicers on the right-hand side of the page.</p>
<p>8</p>	<p><b>Get More Information</b></p> <p>You can link directly to more information on CIHR's pillars and on the Mission pillars by clicking on this question mark.</p>

<p>9</p>	<p><b>Research Program Breakdown</b></p> <p>There are four types of research programs or grant types awarded by Heart &amp; Stroke: grants in aid, personnel awards, chairs and strategic research. You can read more about each of these on our Heart &amp; Stroke <a href="#">research page</a>. This bar chart displays the distribution of Heart &amp; Stroke funded research by research program or grant type. You can drill down further by using the data slicers on the right-hand side of the page.</p>
<p>10</p>	<p><b>Search Bar</b></p> <p>Our “Who we Fund” page displays currently funded research. This page has a search function, which allows users to search Heart &amp; Stroke funded research projects for any terms of interest. Type your keyword into the search bar, and if your search term appears within the title, purpose, benefit, problem or solution section of the research project, or within a CIHR pillar, MCA, grant type or keywords, the project will be displayed.</p>
<p>11</p>	<p><b>Heart and Stroke Funded Researchers</b></p> <p>This is the searchable list of Heart &amp; Stroke funded researchers that displays the researcher’s name, the project title, the province where the research is funded and the institution where the research is funded. You can search this list using the search bar described above.</p>

Interactive Map

1

2

3

4

Heart & Stroke Funded **\$25.31M** and supported **112** researchers in **Canada** for the 2018/19 Competition

Researcher Map

Mission Pillars

Research Program

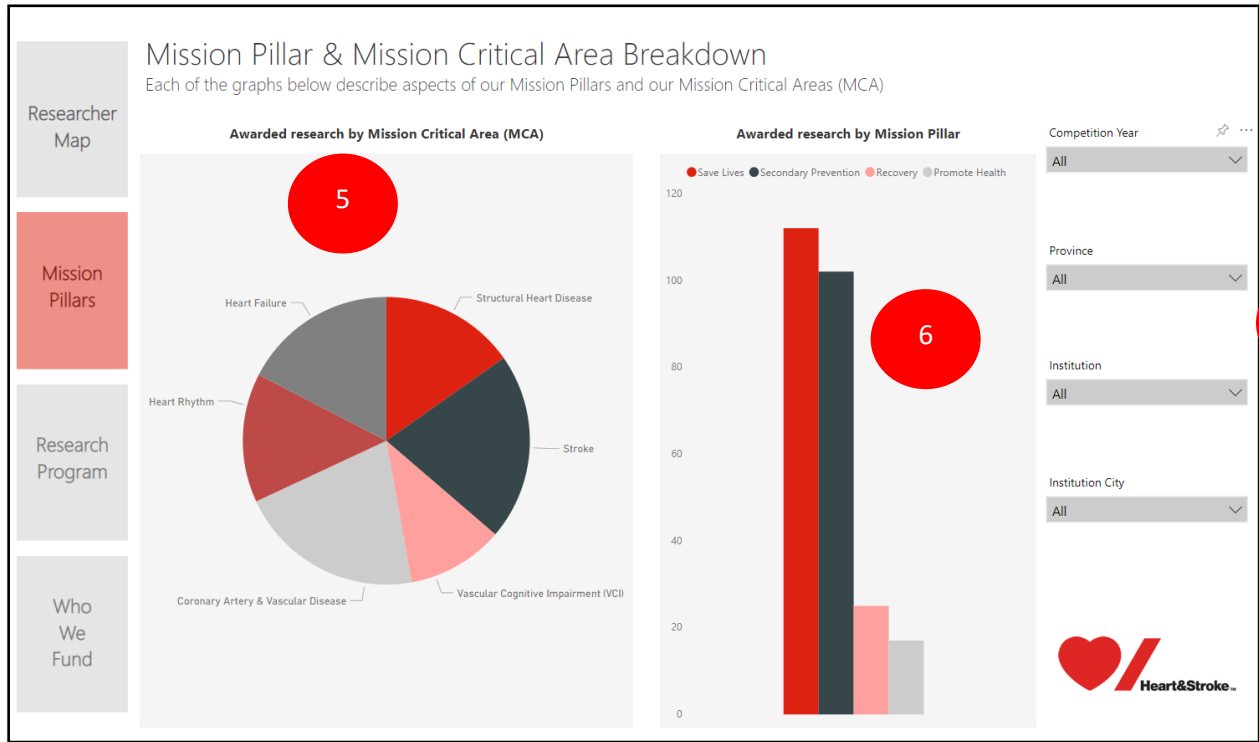
Who We Fund

Province: All

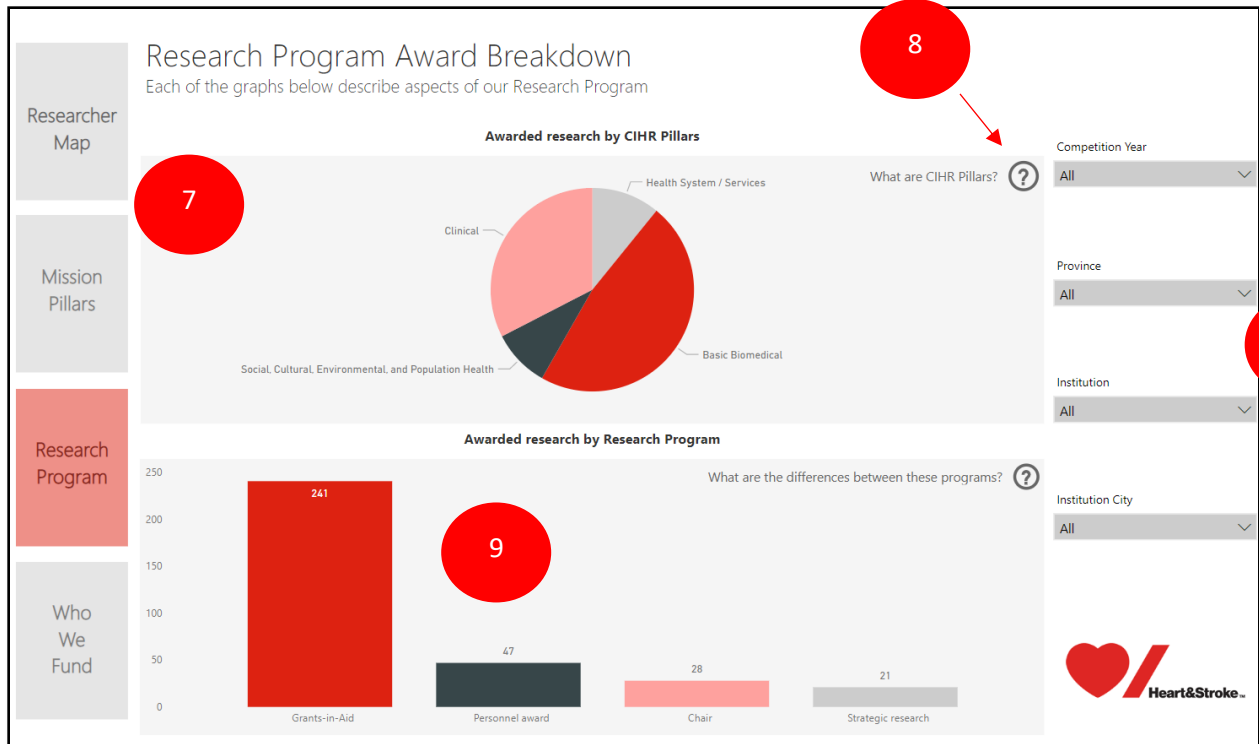
Grey areas currently do not currently receive any funded research from Heart & Stroke

Heart&Stroke

Under what priority area, or Mission Pillar is our research funded?



Under which Research Program, or Grant Type is our research funded?



# Who do we fund?

Researcher Map

## Who & What We Fund

Search for research projects by MCA, Mission Pillar, CIHR Pillars, Research Benefit, Research Problem, or Research Solution

\* Please note that this searching may not display all results.

10

Mission Pillars

Research Program

Who We Fund

Province	Institution	Researcher	Research Project Title
Ontario	Hospital for Sick Children	Jankov, Robert	A novel approach to nitric oxide-based therapy for chronic neonatal lung injury and pulmonary hypertension
Ontario	Sunnybrook Research Institute	Wijeyesundera, Harindra C.	A pan-Canadian network for real world evidence in health technology assessments: applications in trans-catheter aortic valve implantation (TAVI)
Ontario	University of Ottawa Heart Institute	So, Derek	A Randomized Study of Novel Strategies for Antiplatelet Therapy in Patients with Prior Myocardial Infarction - The RAPID TAILOR EXTEND Pilot Study
Quebec	Concordia University	Santosa, Sylvia	Acute and chronic effects of obesity on cardiovascular disease risk factors
Ontario	Sunnybrook Health Sciences Centre	Swartz, Richard	Adherence to Risk Reduction after Stroke/TIA – The Role of Cognitive Impairment and Mood Symptoms
Alberta	University of Calgary	Wong, Stephen	An individualized shared decision-making intervention for atrial fibrillation stroke prevention
Ontario	McMaster University	Chapman, Guillaume	An integrated genomic-biomarker approach for discovery of novel causal mediators of cardio-metabolic diseases
Ontario	University of Toronto	Wong, Kara K.	An investigation of novel approaches to the rehabilitation of gait and balance after stroke: the use of rhythm and dance
Quebec	Institut universitaire de cardiologie et de pneumologie de Québec	Paulin, Roxane	An RV-T cell axis in pulmonary hypertension
Alberta	University of Alberta	Oudit, Gavin	Apelin Analogs as Novel Therapeutic Agents for Heart Failure
Quebec	Lady Davis Institute for Medical Research	Mann, Koren	Arsenic-enhanced atherosclerosis: the role of the macrophage
Ontario	St. Michael's Hospital	Bagai, Akshay	ASSIST-MI CMR Trial: Revascularization Strategies for ST-Segment Elevation Myocardial Infarction Cardiac Magnetic Resonance

Competition Year

All

Grant Type

All

Institution

All

Institution Province

All

1

10

11

3