

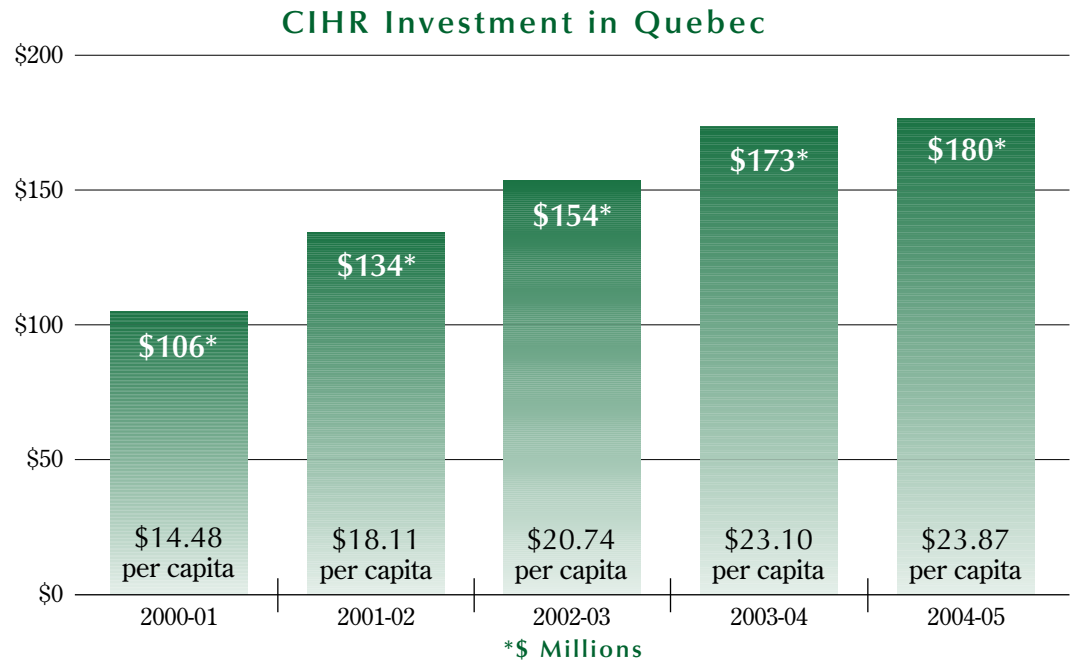
Quebec at a glance

Health researchers in Quebec universities and hospitals are among the world's best. CIHR awarded approximately \$180 million for health research in Quebec in 2004-05, an increase of more than 70% from 2000-01. This funding supports more than 2,200 projects by principal investigators in 25 funded institutions.

About the Canadian Institutes of Health Research

The Canadian Institutes of Health Research is the Government of Canada's agency for health research. Its objective is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system. Composed of 13 Institutes, CIHR provides leadership and support to close to 10,000 researchers and trainees in every province of Canada. For more information visit www.cihr-irsc.gc.ca

Canadian Institutes of Health Research (CIHR) supports health research in Quebec



Funding excellence CIHR-funded health research in Quebec universities

Universities in Quebec are known for their expertise and research achievements in a variety of areas. Two specific areas of international renown are the study of obesity and the study of cancer.

Understanding Obesity

Université Laval

The proportion of people who are obese has considerably increased in recent years. While the adverse health effects of obesity have been well documented, its pathophysiology has yet to be fully comprehended and described. Thus, Canadians of all sizes and shapes will benefit from the diverse and exciting research in this area that is being carried out at Université Laval. Dr. Denis Richard directs the studies of a multidisciplinary group of collaborators at the Research Chair on Obesity. The group conducts basic and clinical research pertaining to the etiology of obesity and its metabolic complications, and works to increase awareness about the prevalence and health consequences of obesity. Dr. Richard specializes in studies of the neurosystems involved in the control of food intake and thermogenesis. His colleague, Dr. André Marette is set to unravel the effect of insulin and exercise on glucose metabolism, and to determine the molecular basis of insulin resistance in obesity and diabetes. Dr. Angelo Tremblay investigates the effects of exercise on components of energy expenditure and energy balance. Other scientists in disciplines as varied as nutrition and surgery are helping to increase our understanding of obesity so that effective steps can be taken to prevent and treat the problem.

Centre of Excellence Links Immunology and Cancer

Université de Montréal

Created in 2002, the Institute of Research in Immunology and Cancer of the Université de Montréal is a centre of excellence for training a new generation of scientists through research based on integrative biology. The Institute is the first research center in Canada, and one of the first worldwide, to apply an integrative biology approach that targets cancer and the immune response. The centre has set up state-of-the-art technological platforms and promotes academic, hospital and biopharmaceutical partnerships. It has attracted researchers of international calibre including nine Canada Research Chairs: Drs. Katherine Borden, Michel Desjardins, Trang Hoang, Sylvain Meloche, Claude Perreault, Guy Sauvageau, Rafick-Pierre Sékaly, Marc Therrien and Pierre Thibault. Dr. Borden is studying the biochemical events that lead to cells becoming cancerous; one goal of Dr. Perreault's lab is to harness the potential of T lymphocytes to cure cancer. Research projects in Dr. Sauvageau's unit focus on the genes involved in the production of blood cells.

Using Molecular Imaging to Understand Cancer

Université de Sherbrooke

Molecular imaging is a new term that describes the use of molecular probes and non-invasive tools to characterize and provide information on tumours, such as growth rate, sensitivity to hormones and peptides, and vascular permeability. At the Université de Sherbrooke, a diverse multidisciplinary team that integrates physicists, chemists, biochemists, physicians, and young researchers is using molecular imaging techniques to increase our understanding of cancer and potential treatments. The team is led by Dr. François Benard, associate professor and head, Metabolic and Functional Imaging Centre, University Hospital of Sherbrooke.

From Cell Biology to End-of-Life Care: A Comprehensive Approach to Cancer Research

McGill University, Montreal

Cancer research at McGill takes a comprehensive approach, running the gamut from the study of genes and DNA to palliative care. Under the leadership of Dr. Michel L. Tremblay, the McGill Cancer Centre and the Cancer Research Division of the Oncology Department are coordinating cancer research in the university's departments and affiliated hospitals. Through its own activities and international collaborations, the centre focuses on new discoveries and knowledge leading to the improvement of the prevention and treatment of cancer. For example, the Molecular Oncology Group, which comprises six laboratories employing more than 100 students and research associates, is involved in the molecular and cell biology aspects of cancer research. Dr. Robin Cohen is the principal investigator in a groundbreaking four-year study of the dying in the relatively new field of palliative care. Very few researchers are working in palliative care – perhaps 100 worldwide. Dr. Cohen and her team are investigating issues related to quality of life for patients and family caregivers, pain, exercise and home care.

Celebrating excellence: CIHR award winners in Quebec

Some of Canada's finest health researchers are in Quebec. CIHR has been proud to recognize their achievements.

Dr. Serge Rossignol

Université de Montréal

Dr. Serge Rossignol, director, Centre for Research in Neurological Sciences, Faculty of Medicine, Université de Montréal and Canada Research Chair on the Spinal Cord, has spent the past 25 years studying the physiological, pharmaceutical and neurobiological approaches used to help people with spinal cord injuries. His work suggests that the spinal cord has intrinsic adaptive mechanisms, leading to the potential for the recovery of locomotion after an injury. In 2004 Dr. Rossignol was a finalist for the CIHR Michael Smith Prize. This award recognizes world-class researchers who demonstrate innovation, creativity, leadership and dedication to health research.

Dr. Samy Suissa

McGill University, Royal Victoria Hospital, Montreal

In 2002 clinical disease researcher Dr. Samy Suissa, Royal Victoria Hospital and professor of epidemiology, biostatistics and medicine at McGill University, was a recipient of the CIHR Distinguished Investigator Award, which acknowledges the outstanding work of Canada's pre-eminent health researchers. Dr. Suissa's areas of expertise include epidemiology and biostatistical methods to evaluate the risks and benefits of drugs prescribed for the treatment of common chronic diseases. His current research will assess the effects of drugs used to treat asthma, chronic obstructive pulmonary disease, diabetes, cardiovascular disease, HIV, and anxiety and depressive disorders.