

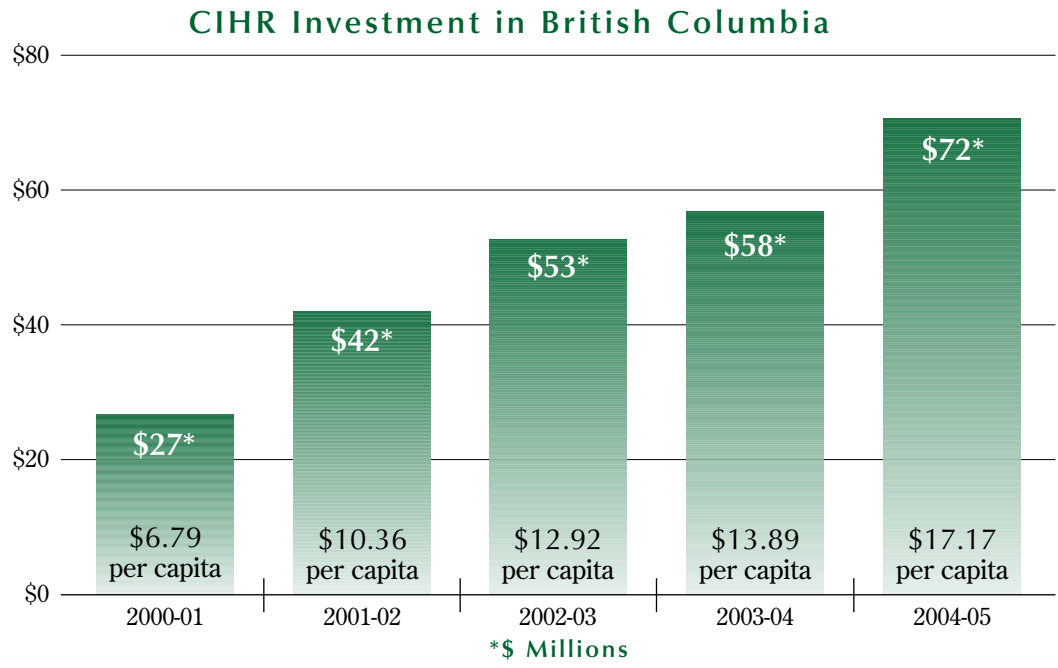
British Columbia at a glance

CIHR awarded approximately \$72 million in funding for health research in British Columbia in 2004-05, an increase of more than 167% from 2000-01. This funding supports more than 770 projects by principal investigators in eight 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 British Columbia



Funding excellence CIHR-funded health research in British Columbia universities

Universities in British Columbia are known for their health research achievements in a variety of areas. Here are some examples.

Healthy Youth in a Healthy Society

University of Victoria

Although injuries, homicides and suicides kill more adolescents than any single disease, until now there has been little research aimed at injury prevention for young people. Health researchers in the Healthy Youth in a Healthy Society project are changing this situation. Dr. Bonnie Leadbeater and her interdisciplinary team are examining issues related to preventable injuries among youth, including dating violence, peer violence, sexual exploitation and family factors contributing to risky behaviours, as well as concerns specific to Aboriginal youth and young people living in poverty or in communities undergoing economic restructuring. This project is an excellent example of the University of Victoria's community-based, interdisciplinary health research.

From Molecules to Miracles

University of British Columbia, Vancouver

As the Canadian population ages, heart disease and joint problems become increasingly common. Each year there are over 70,000 heart attacks in Canada and surgeons perform some 20,000 hip replacements. Health researchers at the University of British Columbia are leading the way in dealing with both of these issues. At the iCAPTURE Centre in the St. Paul's Hospital campus,

26 principal investigators focus on discovering how gene variations intersect with environmental factors to cause diseases of the heart, lungs and blood vessels. Active recruitment has led to the creation of a world-class team of scientists at the centre. One of them is Dr. David Granville, who recently discovered that an antifungal drug and an antibiotic normally used to treat ulcers and acid reflux can reduce the damage caused by a heart attack by an astonishing 60%. Meanwhile, a team of health researchers at the university and at the Vancouver Coastal Health Research Institute aims to reduce the 10% failure rate in hip replacements and make repeat surgery obsolete within 10 to 15 years. Led by Dr. Fabio Rossi, Canada Research Chair in Regenerative Medicine, the University of British Columbia team will create a new fixative mixture seeded with the patient's own stem cells, extracted from adult bone marrow. This "living glue" will form a strong, organic environment to secure artificial joints, vertebrae or other replacement structures.

The Holy Grail of Molecular Biology

Simon Fraser University, Burnaby

The ability to understand, predict and eventually control cell growth, migration and mutation at the molecular level is becoming the Holy Grail for researchers looking to isolate and eliminate the causes of diseases. With interdisciplinary teams of eminent and budding biologists, physiologists, kinesiologists and chemists, Simon Fraser University has become a major player in the search to unravel the molecular makeup of diseases. Principal investigators include Drs. Diane Finegood, Nicholas Harden, Michel Leroux and Glen Tibbits. Their research ranges from investigating the molecular mechanisms that enable the heart to adapt to environmental and pathological changes, to how carbohydrate metabolism is regulated in normal and pathological states such as impaired glucose tolerance and diabetes.

Nursing North of 60

University of Northern British Columbia, Prince George

While the name may be the University of Northern British Columbia, the health research they carry out is applicable to all northern regions in Canada. In fact, a recent study led by the university that examined rural and remote nursing involved research partners from every province and territory. The project, which was led by Dr. Martha MacLeod, a University of Northern British Columbia nursing professor, showed that the number of rural nurses has been declining, and that while they have greater responsibility, they generally have fewer technical and human supports. The results of this study have implications for health policy, rural nurse education, and for communities trying to recruit and retain nurses.

Celebrating excellence: CIHR award winners in British Columbia

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

Dr. Brett Finlay

University of British Columbia, Vancouver

Dr. Brett Finlay has made important contributions to the molecular understanding of salmonella, *E. coli* and *H. pylori* and is a leading SARS researcher. One of his many accomplishments is the development of a vaccine to prevent *E. coli* in cattle, which will reduce the human toll of *E. coli* outbreaks such as the recent one in Walkerton, Ontario. In 2003 Dr. Finlay received the CIHR Michael Smith Prize, which recognizes outstanding Canadian health researchers who demonstrate innovation, creativity, leadership and dedication to health research.

The Canadian Neonatal Network

University of British Columbia, Vancouver

The Canadian Neonatal Network (CNN) has received international recognition and has been described as "the archetype of the knowledge translation network in Canada." Founded in 1995 by Dr. Shoo Lee of the University of British Columbia, CNN is the recipient of the CIHR Knowledge Translation Award, which recognizes an exceptional individual or team involved in a health research project that advances health knowledge through action. CNN conducts multidisciplinary, collaborative health research to improve outcomes and quality of care for newborns in Canada, and translates that research into evidence-based practices. For instance, information from CNN's database enabled one subscribing institution to reduce its infections by 50%. The network's findings on retinopathy of prematurity will halve the number of infants routinely screened and reduce costs in Canada by more than \$1 million each year.