



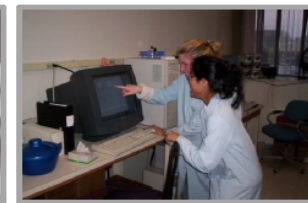
CIHR IRSC

CIHR's Strategic Action Plan on Training

Summer Program in Aging 2016
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The purpose of this presentation is to:

1. Present CIHR's Strategic Action Plan on Training (T-SAP); and
2. Discuss potential implications of the implementation of the T-SAP

CIHR's Commitments to Training

since 2000
CIHR invested

11%
of total investment
in research grants


\$1.2B
to support health
researchers training



- CIHR is very active in the training of health researchers
- Since 2000, CIHR has more than doubled its support for health research trainees
- CIHR Institutes have been at the forefront of training innovation within their communities

in 2014-15
CIHR invested

\$200M
in training the
next generation of researchers



- CIHR invests **≈ \$65M/year** through direct awards to trainees in diverse health research areas in Canada and abroad
- CIHR invests **≈ \$135M/year** to indirectly support trainees through stipends paid off of operating grants and strategic training programs


in 2014-15
CIHR awarded

1900
training awards
in diverse health research
areas in Canada or abroad



- Canada Graduate Scholarships (CGS) for Masters and Doctoral students (including the Vanier-CGS)
- Fellowship programs for postdoctoral fellows (including Banting)
- Awards in targeted areas (e.g., Fellowship in Epigenetics, Fellowships within the Clinical Trials Networks in the U.S., etc.)

Health Research Training: A New Vision for CIHR



**To generate scientific,
professional,
and organizational leaders
within and beyond the
Health Research Enterprise**

Health Research is Evolving

Health research is increasingly complex, interdisciplinary and global.

Career Paths are Changing

51,000 PhDs and 6,000 Fellows in Canada. Most ($\approx 85\%$) do not secure a tenure-track position, yet not enough PhDs according to the OECD.

Expertise in Critical Areas is Lacking

Increased research capacity is required in a number of priority areas to better impact health outcomes and health care systems.

Training Challenges:

Health Research is Evolving

Health research is increasingly complex, interdisciplinary and global

Career Paths are Changing

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Expertise in Critical Areas is Lacking

Data-intensive research • Aboriginal health research • Health-professional scientists • Patient-oriented research • Entrepreneurship and Innovation

Future trainees must be:

Research Leaders of Tomorrow

who can lead high-impact, multi-disciplinary research in a rapidly evolving environment of advancing technologies and globalization

Leaders Across Knowledge Sectors

who can apply their scholarship and talent to lead innovation across different sectors of Canada's knowledge-based economy

Experts in Critical Priority Areas

who can establish and fill Canadian priority areas of specialized expertise and advance the frontiers of science

To equip trainees to lead high-impact, multidisciplinary health research in a rapidly evolving research landscape, CIHR aims to:

Integrate innovation and interdisciplinarity training requirements in our programs, through:

- Embedding training and mentoring in program design, as appropriate
- Creating specific multidisciplinary and multi-sectoral training programs within and across institutions

Accelerate research independence and leadership, through:

- Providing opportunities for trainees in the College of Reviewers
- Developing training modules on emerging professional expectations and new science/policy/practice frontiers

To equip trainees to apply their scholarship and talent to lead innovation across different sectors, CIHR aims to:

Empower trainees to take charge of their training and careers, through:

- Requiring individual career development plans from all trainees
- Offering trainees access to professional skills expected from employers

Provide trainees with opportunities for critical hands-on experience, through:

- Providing flexibility to CIHR-funded trainees for hands-on experience (e.g., co-op-like internships) during graduate training
- Redesigning CIHR fellowship programs to support diverse tenure environments, within and beyond the health research enterprise

Experts in Critical Priority Areas

To equip trainees with specialized expertise in areas of priority as identified in Health Research Roadmap II, CIHR aims to:

Data Intensive Research

Support data intensive research capacity consortia in different fields to advance digital readiness of our research community

Capacity of Health Professional Scientists

Support health professional training platforms that create a network of health professionals engaged in research to integrate real world experience into health innovations

Research with/ by Aboriginal Peoples

Support culture-rich research capacity building approaches linked to CIHR's Pathways initiative and the Indigenous Mentorship Network program to enhance the health and wellness of Aboriginal peoples

Entrepreneurial Skills

Partner on entrepreneurial skills building to strengthen Canada's entrepreneurial environment to move health research along the innovation pipeline

Patient-Oriented Research

Continue to partner with the health system to strengthen Canadian capacity to integrate research evidence to enhance patient experiences and outcomes

To develop an evidence base in order to make informed decisions regarding programing and policies, CIHR aims to:

- Develop and launch and End of Award Report (EAR)
- Develop and launch a Career Trajectory Survey (CTS)
- Develop a new training data reporting centre that will include:
 - Program evaluation findings
 - Data collected from relevant publications
 - Data collected from StatsCan

Questions and Considerations

How can we best implement the T-SAP to influence a culture change in how Canada approaches health research training?

1. Which solutions should be implemented first? Last?
2. Which solution(s) have implications for stakeholders that should be considered? What would be the best approach(es)?
3. Are there additional considerations?



Please provide feedback to:
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**Annex I:
Groups Consulted in the Development of CIHR's
Strategic Action Plan on Training**

Training Strategy Consultations

- CIHR developed an extensive engagement strategy to ensure the inclusion of ideas and dialogue across all health research training stakeholders: Universities, Research Funding Agencies, Trainees, Supervisors, and Employers.

<p>Research Funding Agencies</p> <ul style="list-style-type: none"> • Tri-Council • NAPHRO • HCCC • Genome Canada 	<p>Academic Decision Makers</p> <ul style="list-style-type: none"> • Association of Universities and Colleges Coalition (AUCC) • U15 • Alliance of Canadian Comprehensive Research Universities (ACCRU) • VPRs, HealthCareCAN • Canadian Association of Research Administrators (CARA) • Canadian Association of Graduate Studies (CAGS) • Association of Faculties of Medicine of Canada (AFMC) • Canadian Association of PDF Administrators (CAPA) • Scholarship Liaison Officers (SLO) 	<p>Trainers / Teachers</p> <ul style="list-style-type: none"> • Canadian Association of University Teachers (CAUT) • Selected PIs • University Delegates • Foundation Scheme Grantees 	<p>Trainees</p> <ul style="list-style-type: none"> • Canadian Association of PDF Scholars (CAPS) • Canadian Federation of Students (CFS) • Canadian Alliance of Student Associations (CASA) • CIHR/ Vanier/ Banting-funded Trainees 	<p>Employers (Government Industry / Other)</p> <ul style="list-style-type: none"> • Rx&D • BIOTECCanada • Conference Board of Canada • Health Canada • Public Health Agency of Canada (PHAC) • Industry Canada • National Research Council (IRAP)
<p>Training Innovators</p> <ul style="list-style-type: none"> • STIHR Grantees • NCEs • SPOR Networks • MITACS 				

Membership of CIHR's Working Group on Health Research Training (2015-16)

CIHR	Dr. Danika Goosney	Director General, Science, Knowledge Translation & Ethics, CIHR
CIHR	Dr. Marc Ouellette	Professor, Faculty of Medicine, Université Laval - Researcher, Infectious Disease Research Centre, Centre hospitalier de l'Université Laval - Canada Research Chair in Antimicrobial Resistance - Scientific Director (Institute of Infection and Immunity), CIHR
Trainee & MD/PhD	Mr. Eric Zhao	MD/PhD Trainee - University of British Columbia VP – Internal Elect, Clinical Investigator Trainee Association of Canada (CITAC)
University	Dr. Janice Eng	Associate Dean, Funding, Faculty of Graduate and Postdoctoral Studies, University of British Columbia
University	Dr. Bernard Jasmin	Professor and Vice Dean of Research, University of Ottawa (AFMC Rep)
University	Dr. Reinhart Reithmeier	Professor, University of Toronto - Former Chair of Biochemistry and Special Advisor to the Dean of Grad Studies - Fellow of the Canadian Academy of Health Sciences
University	Dr. Chris Shields	Professor, Department of Kinesiology - Acadia University
University	Dr. Andrew Watson	Associate Dean Research (Graduate Studies and Postdoctoral Affairs); - Professor, Obstetrics and Gynaecology and Physiology and Pharmacology, Western University
University & CHSPRA	Dr. Adalsteinn Brown	Director, Institute for Health Policy, Management and Evaluation – Head of the Division of Public Health Policy - Dalla Lana School of Public Health, University of Toronto – Co-chair of the Canadian Health Services and Policy Research Alliance
University & STIHR	Dr. Sharon Strauss	Scientist, Li Ka Shing Knowledge Institute - Director, Knowledge Translation Program - Division Director, Geriatric Medicine - Professor, Department of Medicine, University of Calgary and University of Toronto
University & NCE	Dr. Chris Mody	Professor and Head, Department of Microbiology, Immunology & Infectious Diseases - Chair, Advanced Education and Training Opportunities Adv. Committee for AllerGen NCE
Expert Organization	Dr. Jessica Edge	Senior Research Associate - Centre for Skills and Post-Secondary Education, Industry and Business Strategy - Conference Board of Canada
Expert Organization	Ms. Sally Rutherford	Executive Director - Canadian Association of Graduate Studies

Canada's training stakeholders are ready for collaborative action

..the federal government work in partnership with provinces, private sector and universities to create new opportunities for short-term domestic and international student mobility
AUC, 2015

Our Government also places a heavy emphasis on inspiring and empowering the great minds of tomorrow. As such, we encourage young people to obtain industry-relevant research and entrepreneurial experience through a variety of initiatives,

Federal Science Technology and Innovation Strategy - 2014

Postdoctoral fellows are questioning whether the classical postdoctoral fellowship as it exists today is failing to prepare them for what is likely their realistic future career path.

CAPS 2009

Institutions will lead to ensure that PhD candidates can get rewarding academic and non-academic careers.
World by 2030, U15, 2015

“...the acquisition of soft skills provides an effective complement to our core business - providing the academic knowledge and the up-to-date methodological and analytical skills required to produce world class graduates”

CAGS, 2014

Humanities Unbound: Supporting Careers and Scholarship Beyond the Tenure Track

Rogers, Katina, University of Virginia Library, University of Virginia 2013
Sponsored by: Andrew W. Mellon Foundation, University of Virginia Library

Annex II: CIHR Institute's Innovative Training Activities

CIHR's Strategy Provides Coherence Across Our Training Approaches



- A number of innovative training approaches have been designed for different research communities
- An opportunity exists to broaden impact of training through sharing best practices and aligning efforts

Examples

Mentorship

- IMHA “Train the Trainer” workshops
- IAPH holistic mentorship model (multiple mentors)
- Mentorship evaluated in the Foundation Scheme

Career Development

- ICRH Young Investigators Forum
- IHDCYH Career Development Workshops
- ICR New Investigator Forum
- Travel Awards for Conferences

Trainee Engagement

- SPOR Working Group on Training
- CIHR Working Group on Training
- Canadian Health Services and Policy Research Alliance Working Group on Training (IHSPR)

Skills Development

- SPOR Capacity Building Framework
- IA Summer Program on Aging for interdisciplinary and networking skills
- INMHA “Alternatives to Careers in the Lab” sessions