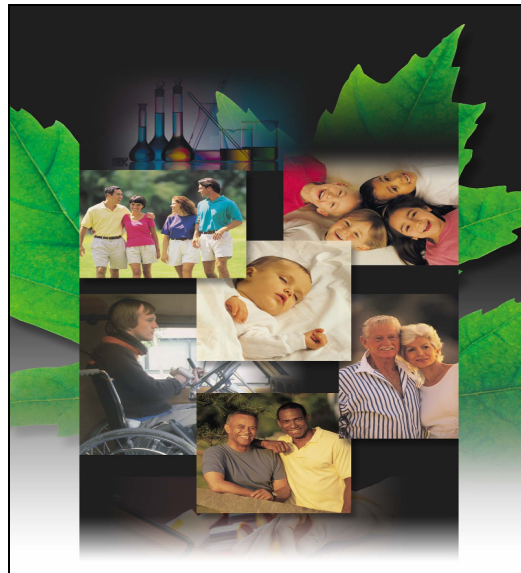


Supporting research to address how sex (biological factors) and gender (socio-cultural experiences) interact with other factors to influence health and create conditions

CIHR Institute of Gender and Health

R e f l e c t i o n s

2001 - 2005



that differ with respect to risk factors or interventions for females and males throughout the lifespan.

Institute of Gender and Health

In 2001, we witnessed the unprecedented creation and exponential growth of a national research institute devoted to the study of gender and health. The launch of the CIHR Institute of Gender and Health (IGH) represented the culmination of directions recommended by research and policy influencing groups in Canada. The Institute fosters research about women's and girls' health, men's and boys' health, and gender, sex and health. No other country has created a national research institute dedicated to gender and health.

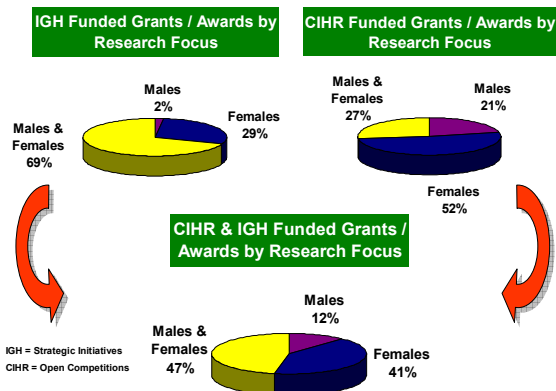
Vision

To transform understanding of the impact of gender and sex on health across the lifespan and ensure its application in health research in Canada.

Mandate

IGH supports research to address how sex (biological factors) and gender (socio-cultural experiences) interact with other factors that influence health to create conditions and problems that are unique, more prevalent, more serious or different with respect to risk factors or effective interventions for women, men, girls and boys.

IGH Objectives	CIHR Expected Results
Generate New Knowledge	Outstanding Research
Foster Research Training and Capacity Building	Excellent Researchers in a Robust Health Research Environment
Provide Evidence and Transfer Knowledge	Translation and Use of Knowledge
Promote International Collaboration and Initiatives	Partnerships and Public Engagement
Advance the Gender and Health Perspective	Partnerships and Public Engagement, Organizational Excellence



"I have done studies only with women until I received the funding of IGH (that allowed me) to work with men." IGH Evaluation Survey 2005 Participant

IGH consultations across the country in 2001, including two national brainstorming sessions; numerous meetings, presentations, and conferences with stakeholders; and, an invitation on the IGH website requesting public input resulted in the identification of five research priorities. In June 2005, IGH conducted a survey of close to 1,000 stakeholders to seek input on strategic directions for the future and feedback on priorities and activities in the first four years. Survey findings reinforced the research community's support for the Institute's five research priorities:

IGH Research Priorities

-  Access and Equity for Vulnerable Populations
-  Promoting Health in the Context of Chronic and Infectious Conditions
-  Gender and Health Across the Lifespan
-  Promoting Positive Health Behaviours and Preventing Addictions
-  Gender and the Environment

"Our funding from IGH has made possible significant health research that would simply not have been possible" IGH Evaluation Survey 2005 Participant

Generating New Knowledge

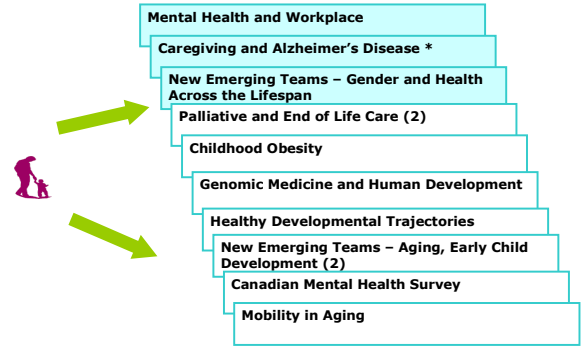
IGH contributes to the generation of new knowledge and outstanding research through strategic research initiatives that offer Requests For Applications (RFAs) and Priority Announcements in the CIHR open competition. Since 2001, IGH has launched 16 strategic initiatives as lead/co-lead Institute, resulting in 33 RFAs. In partnership with one or more of the 12 other CIHR Institutes and national organizations, IGH launched 30 strategic initiatives resulting in 42 RFAs. The five research priorities have guided all strategic research initiatives undertaken by IGH.

CIHR Blueprint Priority 2007 – Address emerging health challenges and develop national research platforms and initiatives

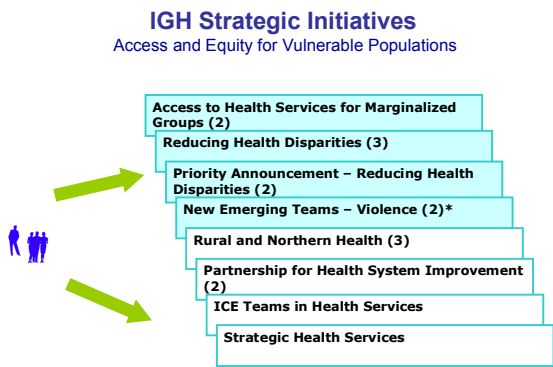


IGH Strategic Initiatives

Gender and Health Across the Lifespan

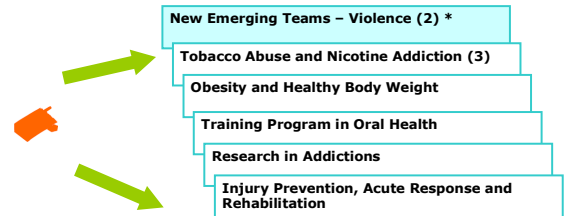


CIHR Blueprint Priority 2007 - Harness research to improve health status of vulnerable populations

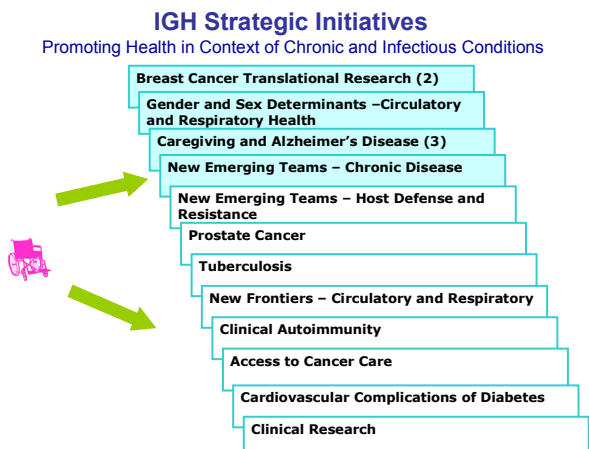


IGH Strategic Initiatives

Promoting Positive Health Behaviour and Preventing Addiction

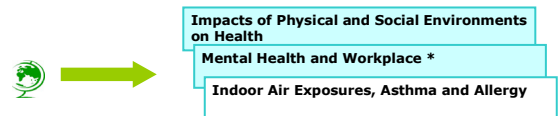


CIHR Blueprint Priority 2007 - Develop and support a balanced research agenda regarding...disease mechanisms, disease prevention and cure, and health promotion



IGH Strategic Initiatives

Gender and Environment



Yellow denotes IGH led or co-led initiatives
White denotes IGH partnered initiatives

These initiatives have attracted numerous applications which have resulted in approximately 400 grants and awards representing CIHR's four themes of health research: biomedical, clinical, health services, and population health.

Examples of IGH Funded Grants

Access and Equity for Vulnerable Populations

- Investigating the discrepancy between immigrant and medical conceptualization of symptoms: The case of Portuguese immigrant men
- Rethinking health inequities: Social and economic inclusion and the case of 'lone mothers'
- Impact of self-sampling for human papillomavirus and targeted recruitment of uptake of cervical cancer screening in marginalized urban women
- The differential impact of witnessing and surviving individual and system violence on the health and well being of Black men and Black women, their families, and communities
- How information helps abused women: A randomized controlled trial in health care settings

Promoting Health in Context of Chronic and Infectious Conditions

- Therapeutic cell genetic immunization for breast cancer
- Gender and sex determinants of cardiovascular disease: From bench to beyond
- Chronic kidney disease: Gender/ genes and glomerular-based diseases
- The experience of hormone therapy for men with prostate cancer and for (male to female) transgendered persons
- In vivo investigations of gender and sympathetically-mediated vascular remodeling

Gender and Health Across Lifespan

- Gender differences in child development: Vulnerability to chronic pain
- Sex/gender influences on musculoskeletal health across the lifespan
- Role of the TGF-beta family in pregnancy and ovarian cancer
- Impact of maternal cigarette smoking on brain structures and mental health in adolescence
- A genetic model of estrogen deficiency for development, reproductive senescence, and infertility

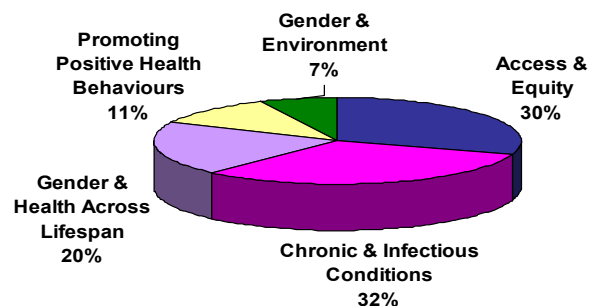
Promoting Positive Health Behaviours and Preventing Addictions

- Multinational study on alcohol and gender
- The social context of smoking: Laying the conceptual and empirical foundation for a theoretical toolkit in tobacco research
- Metabolic and genetic predictors of body weight relapse in obese, postmenopausal women
- Women involved in the sex trade and their intimate partners: Exploring gender relations, health and healthy/unhealthy practices
- Centre of gender, women and addiction

Gender and Environment

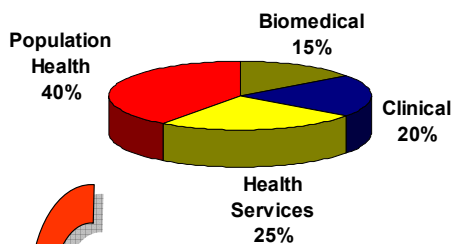
- Towards a collaborative program of research into the multifaceted potential of the school as a setting for health promotion
- Understanding and improving the quality of social environments: Collaborative, transdisciplinary foundations
- Milieu de vie local, milieu familial et milieu de travail: Etude des determinants sociaux et de leurs interactions dans la production des inegalites de santés a l'échelle territoriale
- Workplace interventions to reduce workplace injuries and improve musculoskeletal health
- Health care, technologies, and place

Percentage of IGH Funding by Research Priority 2001-2005

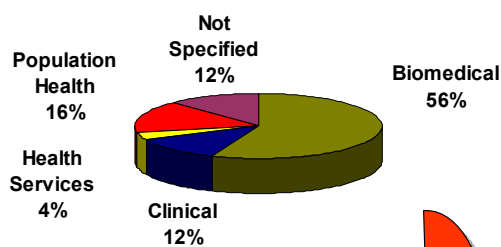


Gender and Health Research Funding by Theme/ Pillar (2001-05)

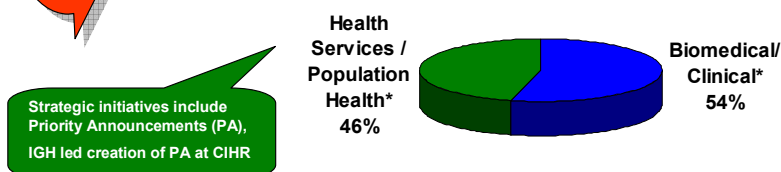
IGH Funded Grants / Awards in Strategic Initiatives by Pillar*



CIHR Funded Grants / Awards in Open Competitions by Pillar



Strategic Initiatives and Open Competition Grants / Awards: Combined Pillar Distribution



Strategic initiatives include Priority Announcements (PA), IGH led creation of PA at CIHR

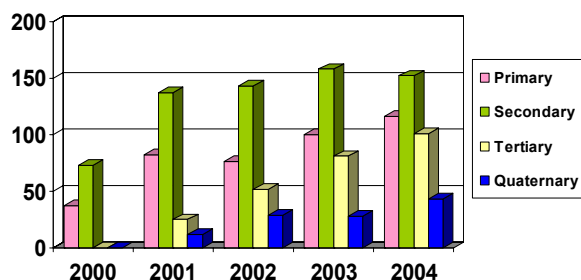
*Also includes a small percentage of grants and awards that did not specify a pillar.

CIHR Investment in Gender/ Sex Research: Affiliation with IGH (2000-2005)

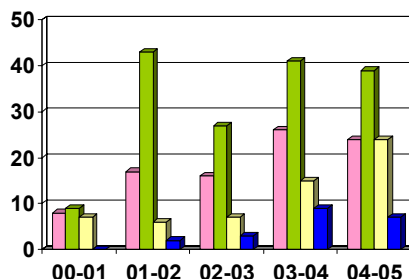
Applications and letters of intent received	1643
Applications funded	414
Total CIHR funding to grants/awards identifying IGH	\$ 108,491,339

The increase in the number of applications received in CIHR Open Competitions identifying the Institute of Gender and Health as their primary, secondary, tertiary, and quaternary institute indicates greater awareness of and association with the Institute among the research community in Canada.

Applications to CIHR Open Competitions Identifying IGH



Funded Grants in CIHR Open Competitions Identifying IGH



Since 2000, 1,643 applications have been submitted to CIHR open competitions identifying IGH as either primary, secondary, tertiary, or quaternary institute. Of these, 414 have been funded by CIHR.

Over the last five years, there has been an increase in the number of applications identifying IGH as the primary Institute.

Research Training and Research Capacity Building

CIHR Blueprint Priority 2007 – Strengthen Canadian health research communities

IGH has had to invest extensive time and energy to identify its research community. Unlike most other CIHR institutes, IGH did not have a readily identifiable research community. IGH now funds thousands of researchers and research trainees despite its initial limited research capacity. With a focus on the next generation of scholars in health research, IGH has contributed over 60% of its strategic initiative budget to foster the success of Canadian graduate students, postdoctoral fellows, new investigators, and mid-career scholars through research training and career awards. IGH has offered 22 types of research training/ career development awards and research capacity building grants since 2001.

IGH Tools for Capacity Building	Number of Grants/ Awards	\$ Awarded
Start-Up (Pilot projects, Idea Grants, Knowledge translation Grants, Opportunity Awards, Program Development and Planning Grants, Research Program Development Grants, Seed Grants, and Small Project Grants)	81	\$2,612,696
Training (Doctoral Awards, Post Doctoral Fellowships, Health Professional Awards, Masters Awards, and Strategic Health Research Training Programs)	65	\$9,170,754
Interdisciplinary Teams (Interdisciplinary Capacity Enhancement (ICE) Grants, New Emerging Teams, and Translation Acceleration Grants)	48	\$38,117,958
Career Development (Mid-Career, New Investigators, Career Transition, and Re-Training)	17	\$1,185,332
TOTAL	211	\$51,086,740

Examples of Research Training and Capacity Building Grants and Awards

Doctoral Award

- *Heat shock protein 27, an estrogen receptor-beta associated protein: Alterations in signal regulation and role in vascular cell function*
- *Mothers-to-be challenging HIV/AIDS: A qualitative study of the experience of women living with HIV/AIDS as they engage with the prevention of mother to child transmission program in Lilongwe, Malawi*

Post Doctoral Fellowships

- *Accuracy of cardiovascular risk perception in first degree relatives of patients with premature atherosclerosis: Does gender matter?*
- *The role of estrogen receptor beta in the mouse granulosa cell response to luteinizing hormone*
- *The influence of gender on the tobacco dependence profiles of adolescents*

New Investigator Awards

- *Interpregnancy weight gain and the risk of adverse maternal and perinatal events*
- *Molecular determinants of Leydig cell differentiation*
- *Sexual assault: Enhancing the interface between health and the law*

Mid-Career Awards

- *Disordered eating in Ontario female youth: A sequential model of health promotion, selective prevention and early intervention*
- *Molecular basis of human placentation: Understanding the pathogenesis of preeclampsia*
- *Genetic testing in cancer – Exploring gender similarities and differences, and the potential for medicalization of women and female offspring*

Career Transition and Retraining Awards

- *Women living with disabilities and/or differences: Gender, the body and health*
- *Changing times in Canada: Are there sex differences in the health status of men and women and are they converging or diverging over time with changing trends in labour, social and economic roles?*

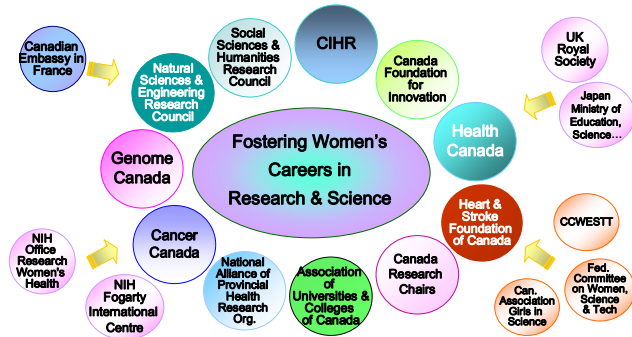
Strategic Training in Health Research Program Grants

- *Strategic research training initiative in reproductive health sciences*
- *Interdisciplinary women's reproductive health research training program*
- *Centre on gender, women and addiction*

Fostering Women's Research Careers

IGH has promoted the recruitment and retention of outstanding women researchers who face gender-based constraints in their research careers. Institute initiatives that foster women's research careers include a National Steering Committee with ten national research funding agencies, conference presentations, international exchange programs, and national roundtable meetings.

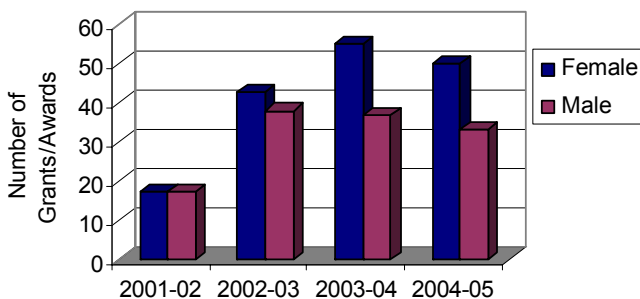
Fostering Women's Careers in Research:
National, Provincial and International Collaboration



Prominent speakers at four national roundtables hosted by IGH have included Dr. Nicole Dewandre (Women and Science European Commission), Dr. Nancy Lane (Cambridge University), Dr. Nancy Hopkins (MIT/Harvard University), and Dr. Arthur Carty (Science Advisor to the Prime Minister). These combined efforts are profiling women's research careers as a key priority for CIHR and other national funding agencies.

A recent analysis of research funding by IGH according to sex of principal investigator reveals an increase in the number of men and women conducting gender and health research.

Strategic Initiatives and Priority Announcement Grants by Sex of PI



IGH now funds thousands of researchers and research trainees despite its initial limited research capacity.

Building Capacity Through Workshops

Over 100 workshops and symposia spanning the five research priorities, funded by IGH between 2001 and 2005, have helped create a Canadian community of researchers committed to gender, sex, and health. IGH Annual National Workshops for graduate students, postdoctoral fellows, and new investigators have helped new researchers to network with peers and learn from leading scholars.

IGH Annual Workshops for Research Trainees and New Investigators

Date and Location	Theme
October 10, 2002 Toronto	Gender, Sex, and Health Research
October 22, 2003 Edmonton	Interdisciplinarity in Gender and Health Research
October 26, 2004 Montreal	Community Based Research – A Pillar Perspective
November 8, 2005 Vancouver	Gender Makes a Difference

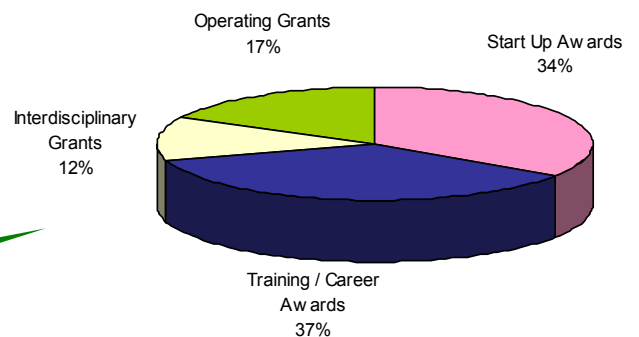
“The main support that the funding and participation in the Awards Symposia/Student Workshop has given me is the feeling that I am part of a strong community doing critical work related to gender, sex and health.” IGH Evaluation Survey 2005 Participant

Interdisciplinary Teams

The interdisciplinary research teams and research training programs each encompass many researchers representing diverse disciplines and numerous research trainees.

“IGH funding is the most important factor in the establishment of an interdisciplinary research training program on women's reproductive health in my organization.” IGH Evaluation Survey 2005 Participant

IGH Investments in Research Capacity



Provide Evidence and Transfer Knowledge

CIHR Blueprint Priority 2007- Sponsor health innovations that contribute to a more productive health system.

Knowledge translation is a key focus of IGH activities. Through translation of research, the Canadian health research community and users in health-related sectors contribute to and receive the latest advances in research.

IGH Funded Knowledge Translation Research

- Effective knowledge translation strategies for breast cancer information
- Therapeutic cell genetic immunization for breast cancer
- Translating target discovery into better health outcomes for women with breast cancer
- Optimal management of older women with distal forearm fractures
- Diffusion and dissemination of evidence-based interventions for prevention and screening of diseases
- Evaluation of a web-based program designed to evaluate the dissemination of best practice models in the primary prevention of disordered eating
- Application des connaissances liées à l'acide folique dans la prévention des anomalies congénitales : Evaluation de l'implantation d'un programme et des effets sur les pratiques professionnelles
- Mailing recommendations to the individual or physician to increase screening for type 2 diabetes in women with previous gestational diabetes: Clinical trial

Research and Knowledge Translation

The Institute funded knowledge translation research through CIHR and IGH led strategic initiatives. Some examples include *Translation Acceleration Grants in Breast Cancer*, *Knowledge Translation Strategies for Health Research*, and *Knowledge Translation Research Syntheses*.

Knowledge translation has been a requirement in all IGH strategic initiatives. Researchers must include a plan for knowledge translation in their applications. Furthermore, IGH encourages investigators to 'think gender and sex' through gender and sex based analysis in all RFAs launched as lead or partner. These requirements will help translate research findings on sex differences and gender influences.

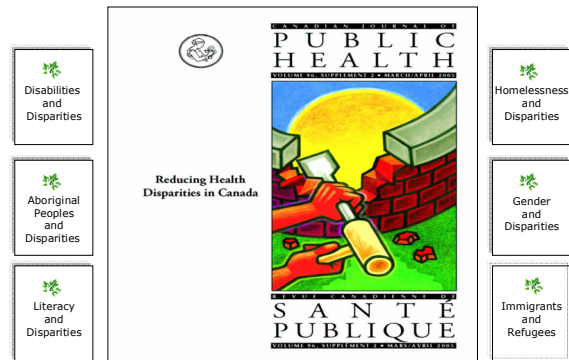
Research - Policy Interface

The IGH delivered briefs and presentations to Senate standing committees and government caucus/ commissions including the *Commission on the Future of Health Care in Canada*, and collaborated with numerous policy influencers at national levels. These efforts have been influential in recent policy decisions.

Research insights can influence policies and programs by bringing researchers and policy makers together. Through two research-policy interface roundtables sponsored by IGH on gender and global health and three roundtables on reducing health disparities, our research priorities are visible on the agenda of national and international organizations.

Synthesis Papers and Policy Documents

IGH has produced 14 synthesis papers summarizing research insights for practice, programs, and policy. Nationally and internationally recognized scholars have produced reports that synthesize research evidence on health disparities, gender and globalization, and gender, sex and health research. Ten of these papers have been published as books and special journal supplements.



KEY ACCOMPLISHMENTS IN KNOWLEDGE TRANSLATION



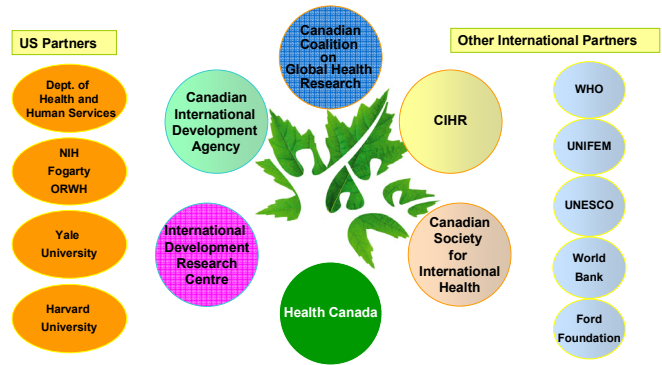
International Collaborations and Initiatives

The IGH has had to invest extensive time and energy to develop partnerships. Unlike most other CIHR institutes, IGH did not initially have any naturally aligned funding partner organizations in Canada or internationally.

As the first national research institute of its kind in the world, IGH has demonstrated leadership and extended influence beyond Canada's borders. Through innovative international collaborations and consultations, IGH has provided unique opportunities to promote Canadian scholarship relevant to gender, sex, and health and the five research priorities in other countries.

Consultations on gender, sex, and global health research led by IGH reached Latin America, Asia, South Africa, and the United States, as well as key policy influencers in Canada.

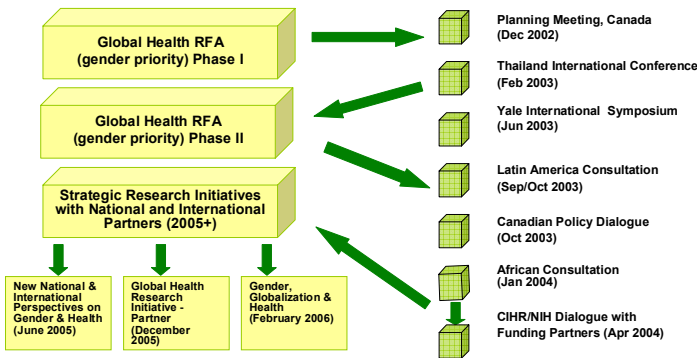
Collaborators in Gender, Sex and Global Health Research



International Think Tank on Gender, Sex and Health

- February 27-28, 2003, in Ottawa
- 76 investigators representing the full spectrum of health research (i.e., biomedical, clinical, health services, population health), policymakers, and funders
- Partners: All CIHR Institutes, Health Canada and Heart and Stroke
- Presentations by world-renowned experts such as Dr. Geoffrey Oldham, Dr. Maria New, and Dr. Carmen Sapienza*
- NIH Office of Research in Women's Health and Fogarty International Center invited

Gender, Sex and Global Health Research



International Think Tank on Reducing Health Disparities



- September 2003, Ottawa
- 103 researchers, representing government, NGOs, foundations in five countries
 - Collaborations in UK, Australia, New Zealand, Mexico and United States
 - Partners: All CIHR Institutes, SSHRC, Health Canada, HSFC, NSH, CPHI, NIH Fogarty International Centre, INS Mexico
- Goals:
- share current knowledge and identify research gaps
 - identify research priorities
 - propose relevant research funding opportunities
- Speakers:
- James Orbinski, Francisco Becerra (Mexico NIH), Anne McClellan (Canada, Minister of Health), Elizabeth Harris (Australia), Ruth Hegyeli (NIH, NHLBI)
- Report on CIHR website: <http://www.cihr-irsc.gc.ca>

Impact in the international arena has also been achieved through: 1) Think tanks on gender, sex and health and on reducing health disparities; 2) workshops; and 3) meetings with international partners from Japan, the UK, France, Australia, Mexico, the US, and with international organizations including UNIFEM, UNESCO, World Health Organization, Ford Foundation, Wellcome Trust, and the World Bank.

Reducing Health Disparities Initiative: IGH Led



PARTNERSHIPS AND PUBLIC ENGAGEMENT

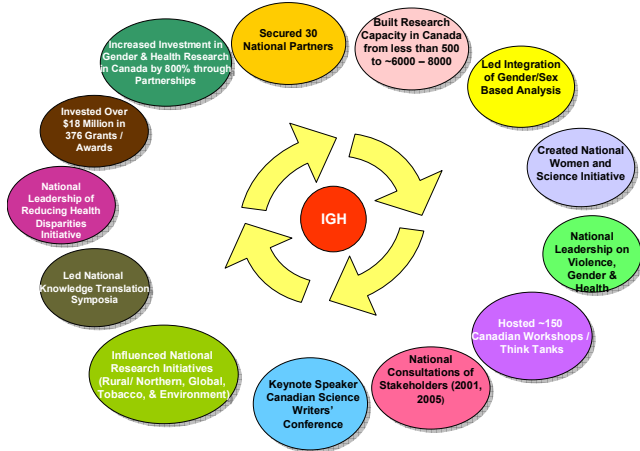
Advance the Gender and Health Perspective

CIHR Blueprint Priority 2007 - Develop national research platforms and initiatives.

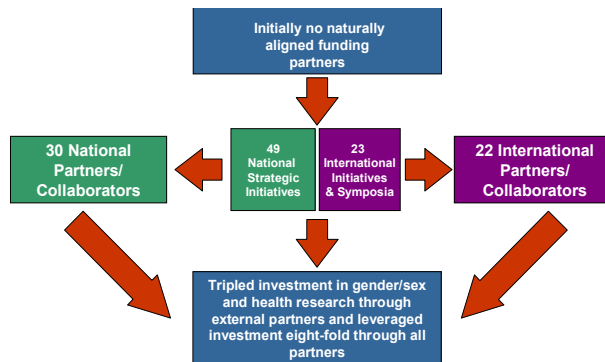
Early in the formation of IGH, nation-wide consultations sought input from academic, program, practice, public, and policy stakeholders on the goals and research priorities of this new Institute. Since then, hundreds of presentations at regional, provincial, national, and international venues have kept researchers, research trainees, research funding agencies, policy influencers, program planners, and practitioners apprised of IGH activities, accomplishments, and opportunities.

Since 2001, IGH has employed several communication tools to reach these stakeholders, including newsletters, flyers, annual reports, and brochures. An online national registry for scholars and students created by IGH offers major networking opportunities.

NATIONAL LEADERSHIP

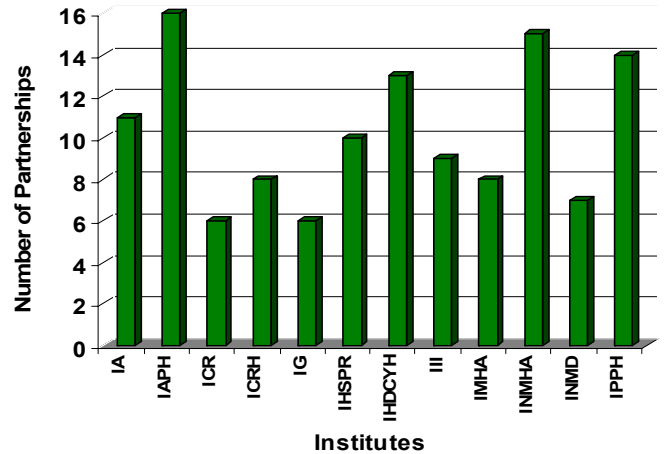


Through successful partnership activities, IGH contributes to the achievement of CIHR's strategic goals and priority directions and elevates its profile.



30 National Partners/ Collaborators	22 International Partners/ Collaborators
Assoc. of Universities and Colleges of Canada	British Council
Alzheimer's Society of Canada	Canadian Embassy in France
Canada Foundation for Innovation	Canadian International Development Agency*
Canada Research Chairs	Commonwealth Fund
Can. Alliance of Prov. Research Organizations	Ford Foundation
Canadian Breast Cancer Research Alliance	Harvard University
Canadian Foundation for Innovation	Instituto Nacional de Salud- Mexico
Canadian International Development Agency*	International Development Research Centre*
Canadian Nurses Foundation	Japan Ministry of Education, Sports, Science, Culture and Technology
Canadian Policy Research Networks	Millennium Project
Canadian Population Health Initiative	NIH- Fogarty International Centre
Canadian Prostate Cancer Research Initiative	NIH - Office Research Women's Health
Canadian Society for International Health	Pan American Health Organization
Canadian Tobacco Control Research Initiative	Rockefeller Foundation
Cancer Canada	Royal Society in UK
Genome Canada	UNESCO
La Fondation Lucie et Andr�e Chagnon	UNIFEM
Citizenship and Immigration Canada	US Dept. of Health & Human Services
Health Canada	Wellcome Trust
Heart and Stroke Foundation of Canada	World Health Organization
International Development Research Centre*	World Bank
Lung Association of Canada	Yale University
National Alliance of Prov. Health Research Org.	
National Ovarian Cancer Association	
National Secretariat on Homelessness	
Natural Sciences & Engineering Research Council	
Ontario Women's Health Council	
Public Health Agency of Canada	
Social Sciences & Humanities Research Council	
Statistics Canada	

Collaborations with CIHR Institutes



IGH has been a leader in developing a more effective and responsive peer review system by mobilizing the creation of a standing peer review committee on gender, sex and health at CIHR. Furthermore, IGH recommends reviewers and guidelines for other committees relevant to its strategic research priorities and initiatives.

Peer Review Committees Assessing Gender/Sex Relevant Applications 2001-05

Total = 32 Committees

Gender/Sex Health Committee	Received	Approved	Success Rate
2002- 2003	50	15	30%
2003- 2004	58	20	34.5%
2004- 2005 (one competition only)	23	5	21.7%

Prior to 2002 extremely low success rates for gender/sex relevant applications
Leader in Cross-theme / Transdisciplinary Peer Review at CIHR

"IGH can be very proud of the work done in the first five years and I look forward to continued participation in the next five!"