

2011
INTERNATIONAL REVIEW
— OF THE —
CANADIAN INSTITUTES OF HEALTH RESEARCH

**Expert Review Team Report
for
Institute of Gender and Health**

**Submitted by: Professor Hilary Graham
Chair, Expert Review Team
February 2011**



TABLE OF CONTENTS

Summary

Section 1 – Institute mandate

Section 2 – Status of this area of research in Canada

Section 3 – Transformative Impacts of the Institute

Section 4 – Outcomes

Section 5 – Achieving the Institute mandate

Section 6 – ERT observations and recommendations

Appendix 1 - Expert Review Team

Appendix 2 - Key Informants

Summary

Note to IRP: *The remit set for the International Review of CIHR is to provide ‘an objective assessment’ of how effectively the Institutes are fulfilling their mandate. However the Expert Review Team (ERT) for the Institute of Gender and Health (IGH) was not furnished with the data necessary to provide this assessment. We lacked standard metrics for key aspects of the mandate – including its contribution to advancing knowledge, to building capacity, and to achieving impacts on health policy and systems. While some supplementary data were provided in advance (on grants and some publications), it was not possible to link these directly to the IGH because the parameters of the data were not clear. A summary of the IRP report for the first quinquennium (2000-2005) was only made available to the ERT on the day of the review meeting, held on 8 Feb 2011.*

The lack of information meant it was not possible to undertake the assessment in the way, and to the standard, that we would have wished.

We understand that the absence of standardised information on inputs (how CIHR support for the Institute was spent, details of the different awards made and researchers supported etc) and outputs (additional resources leveraged, papers published, further grants awarded etc) was an issue for all ERTs and resulted from limitations in CIHR-level procedures. We were also advised by CIHR staff that the guidance given to Scientific Directors was for their Internal Assessment Reports to be approx 25 pages. This gave the Scientific Director of the IGH little opportunity to provide the wider range of data needed for an objective assessment. The lack of such data is therefore not a reflection of, or criticism of, the management of the IGH; in fact, we learned that the IGH is playing a lead role in remedying inadequacies in CIHR evaluation processes.

It should be noted that our assessment is therefore based on the limited material available to us. In particular, it is based on the short IGH Internal Assessment Report and on interviews held on 8 Feb 2011 with the Scientific Director, members of the International Advisory Board (IAB), senior researchers supported by IGH, and stakeholders.

Mandate

- The evidence available to the ERT indicated that the IGH is fulfilling its mandate. It is facilitating innovative research regarding the influence of gender and sex on the health of women and men and is applying research findings to address important health challenges.
- Through its mandate, the IGH is also making a unique contribution to the CIHR and its broader mission. It is contributing to all four pillars of the CIHR (biomedical, clinical, health systems and services, and population and public health), thus helping to make an appreciation of sex/gender issues in health integral to the research programmes of all CIHR Institutes. It is also supporting the CIHR in the urgent task of improving transparency and accountability by leading the development of process and outcome metrics for CIHR-funded research.

Status of research on sex/gender and health in Canada

- Research on sex/gender and health represents a scientific field of growing importance in Canada as it does in other countries; notably Israel, Sweden, Germany, Japan and Britain.
- The IGH has contributed to this development in a range of ways. It has funded initiatives in interdisciplinary research like the productive New Emerging Teams in Reducing Health Disparities and Violence, Gender and Health. It has supported a growing community of

researchers by investing in career awards and in the development of research networks and knowledge transfer (KT) activities.

- Research on sex/gender and health in Canada appears to be at a critical stage of development. Supported by the IGH, a new cadre of researchers is emerging. However, their future careers are uncertain, with a potential 'cliff edge' at mid-career. Apparently, there is a dearth of employment opportunities at this career stage. Disinvestment in the IGH could threaten gains made since it was established in 2000.
- Stakeholders provided persuasive evidence that the research and KT capacity that the IGH provides is particularly important at a time when gender and health is slipping down the policy agenda. This reflects the fact that the priorities of the government determine the themes that will receive the most attention. Nevertheless, the issues the IGH has a mandate to address are ever more important for individual and population health in Canada. It is now incontrovertibly established that all scientific research should consider whether or not the data are impacted by sex/gender. The science of gender-specific medicine has grown to a point where not to do so is indefensible.

Transformative impacts

The IGH has had a range of transformative impacts. These include:

- Helping to establish the study of sex/gender and health as a legitimate concern of mainstream science in Canada.
- Increasing the research capacity in sex/gender and health necessary for scientific excellence in this complex and fast-changing field.
- Fostering an open and participative research culture around sex/gender and health.
- Contributing to the enhanced status of sex/gender issues in the policy community. This is particularly commendable in light of the governments current emphasis on other themes.
- Developing tools and guidelines for stakeholders to enable them to undertake sex-and-gender-based analyses of their activities and impacts.

Outcomes

We were provided with evidence that the IGH is:

- Facilitating and undertaking innovative research regarding the influence of sex/gender on the health of women and men.
- Making a significant contribution to research on sex/gender and health, and thus supporting a field of growing importance in Canada.
- Making a unique contribution to the broader mission of the CIHR, helping to embed an appreciation of sex/gender across its four pillars and to improve systems to assess outputs, impacts and value for money of CIHR-funded research.

Observations and recommendations

- 1** Observation: The ERT was handicapped in its assessment of the IGH by the lack of standard metrics on inputs and outputs.

Recommendation: The CIHR should review international approaches to capturing the return (outcomes and impacts) on its research investments with a view to introducing systems in line with best practice.
- 2** Observation: The IGH is providing high-quality and independent research on sex/gender and health (including the capacity to provide expert advice to stakeholders in and beyond the policy community).

Recommendation: The CIHR should continue to support the IGH.
- 3** Observation: the IGH is playing a key role in developing capacity in research on sex/gender and health, a field which has reached a critical stage of development.

Recommendation: Continuing CIHR support for the IGH should be a priority with particular attention paid to addressing the 'cliff edge' in research careers in sex/gender and health.
- 4** Observation: The status of sex/gender research in Canada is being held back by a lack of appreciation among the wider scientific community of sex/gender and its impact on health.

Recommendation: The CIHR should work with the IGH to institute measures to address this.
- 5** Observation: The IGH strategic plan requires a clearer articulation of goals (where the IGH wants to get to) and means (how it is going to get there).

Recommendation: The IGH develops a more detailed strategic plan.
- 6** Observation: The Scientific Director is pivotal to the achievements of the IGH and is held in the highest regard by IGH researchers and stakeholders. The strong leadership that she provides is particularly important as the IGH reaches a critical stage of development and Canada enters a period of policy retrenchment. Dr Joy Johnson is intelligent, articulate and passionate about her mission, and her impact on leaders of the other institutes within the CIHR is significant and commendable. She has considerable political skills and has a well-demonstrated ability to enlist support for this new, important and expanding science among both the scientific and public communities.

Recommendation: The CIHR should open up an early conversation with Prof Johnson about extending her contract beyond its initial 5-year term. The CIHR should also review her combined workload for the IGH and the CIHR to ensure it is manageable and her Management Team is adequately resourced.

Section 1 – Institute mandate

The limited material available to the ERT to undertake its assessment should be noted (see Summary).

The mission of the Institute of Gender and Health (IGH) is to foster research excellence regarding the influence of gender and sex on the health of women and men throughout life, and to apply these research findings to identify and address pressing health challenges (see IGH Gender 'Internal Assessment for 2011 International Review', pg 1).

The evidence available to the ERT indicated that the IGH is fulfilling its mandate. In our interviews with IGH researchers, IAB members and stakeholders, we were given numerous examples of how the IGH community is advancing theoretical and empirical knowledge, enhancing research capacity and working effectively with stakeholders to embed sex/gender-based analyses in policy and practice.

We would note the following additional points about how the IGH is addressing its mandate:

- The IGH is working across the four pillars of CIHR investment. We were given examples of research spanning and integrating the pillars of biomedical, clinical, health services and population health research. This suggests that the IGH is using its mandate to foster partnerships with other Institutes – and we were given examples of successful collaborations with them.
- The IGH is working to make sex/gender integral to the research programmes of all CIHR Institutes. It recognises that its mandate is unique: the health of everyone is shaped by the complex interplay of sex and gender. We were given examples of how the IGH is catalyzing an appreciation of sex/gender issues across the CIHR's portfolio of Institutes (for example through the cross-institute Reducing Health Disparities initiative, co-led with IPPH, and through the incorporation of a consideration of sex/gender into the research application process).
- The IGH mandate gives it a CIHR-level role, and one that it is delivering with commitment and vision. Examples of this include inputs into the CIHR Roadmap and its key role in the development of patient-oriented research. Additionally, the IGH is establishing monitoring and evaluation procedures within its own domain (for recipients of IGH awards) and, through the Scientific Director, is playing the lead role in the CIHR's Performance Management sub-group).
- The IGH is working with stakeholders and the wider use community to embed an appreciation of sex/gender. It has spearheaded the development of guidelines for gender-and-sex-based analyses within policy settings – an important example of its commitment to KT.

Section 2 - Status of this area of research in Canada

Again, the ERT struggled to provide 'an objective assessment' with respect to this issue. Our assessment rests on the limited material made available to the ERT, together with our expert knowledge of Canada's international standing in some areas of gender and health research.

On the evidence available, we concluded that research on sex/gender and health represents an important scientific field for Canada. For example, its international status has grown over the last 5-10 years in the areas of health disparities, violence and health, gender and smoking and the health of sexual minorities (LGBT health).

We were provided with evidence that the IGH has contributed to the development of sex/gender and health research in Canada in a range of ways:

- The IGH has helped to increase capacity in sex/gender and health research at pre-doc, doctoral and post-doc awards and mid/senior level as well as through team building grants. The session with the Scientific Director and members of the IAB suggested that the last five years had seen a welcome widening of focus, from 'women and health' to sex/gender and health (the later including the health of boys and men, violence and health, and the health of sexual minorities). The last of these is one of the most successful and welcome of its outreach to other topics. We were given examples of how the IGH has contributed to this wider focus, for example by providing an intellectual 'home' for research on the health of boys and men, and the health of LGBT communities. While set in train prior to 2005, the Scientific Director and members of the IAB were of the view that this reframing of the research field had gathered momentum in the 2006-11 period. We had only limited access to publication data; however, the data provided by CIHR supported the view of the Scientific Director and IAB.
- The IGH has become a major hub for a network of researchers working in the field of sex/gender and health. It has made a significant contribution to 'growing the field' both by attracting established researchers (e.g. to New Emerging Team awards) and by supporting early-career researchers (e.g. through New Investigator awards and through its wider capacity-building and KT activities like Café Scientifique, conferences and the summer institute). We were given numerous examples of how a new community of researchers is being nurtured through these investments.
- The IGH provides an important forum for inter-disciplinary initiatives and for the development of intersectional perspectives on health. Internationally, Canada is regarded as among the leaders of intersectional perspectives on health.
- We learned that researchers taking a gendered perspective to areas central to other Institutes often submit their proposals to the IGH peer review panel because of its greater appreciation of issues around sex/gender and sexual orientation. This suggests that the status of sex/gender research in Canada is being held back by the lack of knowledge among the wider scientific community of sex/gender and its impact on health. The relative lack of interest in sex/gender based medicine by the government is another important factor holding up progress for the IGH. This points to the need for CIHR action. For example, it suggests the need for training of members of CIHR award and funding committees, and chairs and deputy chairs in particular, and for the inclusion of 'gender designate' members on committees. Working through the CIHR, the IGH is well-placed to facilitate both these aspects of professional development.

The ERT considers it vital that CIHR sustains a high-quality and independent research capability on sex/gender and health (including the capacity to provide expert advice to stakeholders in and beyond the policy community). Stakeholders provided persuasive evidence that such a capability is particularly important at a time when gender and health is slipping down

the policy agenda – yet the issues the IGH has a mandate to address are ever more important for individual and population health in Canada.

The IGH's policy influence rests on its capacity to continue to generate new knowledge, including in basic science fields. We recommend that basic science is given greater priority in the Institute's strategic plan. A key mechanism would be the appointment of a Deputy Director who is a basic scientist to increase the ease of dialogue with basic scientists and to foster programs in this direction (see Section 6, Recommendations).

Overall impression of the Canadian research landscape in this area

On the evidence available to the ERT, our overall impression is that:

- ***Research on sex/gender and health represents an important scientific field for Canada, and one that is growing in size and influence.*** For example, its international status has grown in the areas of health disparities, violence and health, gender and smoking and the health of sexual minorities (LGBT health).
- ***The IGH has contributed considerably to the development of sex/gender and health research in Canada.*** It has helped to increase capacity in sex/gender and health research at pre-doc, doctoral and post-doc awards and mid/senior level and to foster an interdisciplinary community of researchers working in the field of sex/gender and health. It also provides an important forum for intersectional perspectives.
- ***The IGH is set to play an increasingly vital role in maintaining the legitimacy and status of sex/gender research in Canada at a time of waning policy interest in gender issues.*** The CIHR needs to ensure that a high-quality and independent research capability on sex/gender and health is maintained (including the capacity to provide expert advice to stakeholders in and beyond the policy community).

Note to IRP: some of this narrative is, because of the way we were asked to shape our report, very repetitive. The section above contains information and opinion that was set out in some detail in other sections of the report.

Section 3 - Transformative Impacts of the Institute

The limited material available to the ERT to undertake its assessment should be noted (see Summary).

On the basis of the evidence available to the ERT, we see the IGH as achieving a range of transformative impacts. These include:

- 1 Establishing the study of sex/gender and health as a legitimate concern of mainstream science in Canada.** We learned how the fact that there is a CIHR Institute focused on gender, and the way the IGH fulfills its mandate, have given legitimacy to the study of sex/gender and health within disciplines that have historically neglected it. Without this clear and sustained focus on sex/gender by the CIHR through its portfolio of Institutes, scientific excellence in Canadian health research would be difficult to sustain.
- 2 Increasing the research capacity in sex/gender and health necessary for scientific excellence in this complex and fast-changing field.** We were provided with evidence that the IGH had worked effectively, both through its own initiatives and through partnered initiatives, to produce a cadre of researchers with the potential to become research leaders in the future. It has also opened up avenues for more senior researchers through its mid/senior career Chairs program. However, the ERT has concerns about whether a 'cliff edge' remains: there are a large number of researchers at an early-career stage with little chance of advancing in their research careers in sex/gender and health. This problem is emerging because universities are now failing to offer entry level positions to outstanding young investigators and there are not alternative mechanisms to sustain their careers at this critical juncture. This is a new, developing and "crisis generating" situation and addressing it should be a priority for CIHR if it does not want to lose its investment in Canada's future science base. Tackling this issue requires engaging universities in a partnership.
- 3 Fostering an open and participative research culture around sex/gender and health.** We were impressed by the inclusive way in which the IGH's priorities are set by the IAB. For the 2009-12 Strategic Plan, priority-setting was informed by meetings held by the IGH with researchers in every province and by open invitations for e-submissions from the wider research community as well as through dialogue with stakeholders.
- 4 Contributing to the enhanced status of sex/gender issues in the policy community.** The stakeholders we met emphasised the transformative impacts of the IGH, describing collaborations developed by the IGH that had helped to make engagement with gender inequalities acceptable within their organisations. The Scientific Director's open and welcoming approach to external agencies – with an emphasis on building partnerships - had, in the view of the stakeholders we spoke to, helped to 'detoxify' issues of sex/gender and sexual orientation. This is one of the IGH's most important contributions to gender-specific medicine; most researchers have avoided issues around sexual orientation. We were told that the IGH was 'a huge catalyst' in mainstreaming sex/gender.
- 5 Developing KT tools and guidelines for stakeholders.** We learned of the IGH's role as a leader in sex-and-gender-based analyses, and their work in translating these analyses into tools for policy evaluation and development. The IGH's willingness to support stakeholder organisations over long periods of time enabled trust to be built up, which in turn made organisations more receptive to new perspectives and approaches (examples included intersectional approaches to health, and the health needs of sexual minorities). Stakeholders noted that the IGH is becoming ever more important in maintaining the legitimacy of issues around sex, gender and sexuality at a time when these issues are being marginalised by a policy focus on crime and the economy.

Overall impression

On the evidence available to the ERT, it is our view that the IGH has had important transformative impacts. These include impacts on health science, on research capacity and on how health challenges are addressed within policy-oriented organisations. Transformative effects on the science of sex/gender have yet to be realised.

Section 4 - Outcomes

The limited material available to the ERT to undertake its assessment should be noted (see Summary).

We were provided with evidence that the IGH is:

- Facilitating and undertaking innovative research regarding the influence of sex/gender on the health of women and men. The scope and focus of this research, however, was difficult to evaluate and seemed to privilege public health as opposed to basic laboratory research; the former is evidently important but greater attention to the latter is needed to achieve sustained scientific excellence. One example is the unclear contribution of IGH to the epigenetic project, an area that is ripe for research on sex/gender effects.
- Developing capacity in sex/gender research through supporting the training and careers of early-career researchers as well as by attracting established researchers from other fields.
- Supporting a diffuse research network, linking researchers who are often geographically isolated and/or isolated within their disciplines and departments.
- Applying research findings to address important health challenges by engaging in successful KT (including the development of analysis tools and the provision of expert advice to stakeholders).

Overall impression

On the evidence available to the ERT, it is our view that that the IGH is been successful in achieving outcomes.

Section 5 - Achieving the Institute mandate

We have already noted that we regard the IGH as meeting its mandate (see Section 1).

Looking to 2012 and beyond, we make recommendations about how to sustain and strengthen the Institute in Section 6.

Section 6 - ERT Observations & Recommendations

OVERALL OBSERVATIONS

1 The assessment process

The ERT was handicapped in its assessment of the IGH by the lack of standard metrics on inputs and outputs.

2 The IGH

The IGH is producing high-quality and independent research on sex/gender and health and is playing a key role in developing capacity in research on sex/gender and health, a field which has reached a critical stage of development. Greater priority needs to be given to basic science and to mechanisms to ensure its centrality to Institute programs and initiatives.

The IGH is providing a key RT role, including the capacity to provide expert advice to stakeholders in and beyond the policy community. It has a vital part to play in maintaining the legitimacy and status of sex/gender research in Canada at a time of waning policy interest in gender issues. Its work is significantly enhanced by the talents and effort of the Scientific director, clearly one of the most important assets of IGH.

The IGH is also fulfilling an important role in achieving the wider mission of the CIHR, including its contribution to embedding an appreciation of sex/gender across the CIHR pillars and to the development of performance management systems for research.

There is a risk of a 'cliff edge' in research careers in sex/gender and health between early/mid and mid/senior career stages. The Mid- and Senior Career Research Chairs program has provided an important career pathway for some (six) of these researchers. But other imaginative solutions are needed to retain and support the careers of researchers with the knowledge and skills for sex/gender research.

The Scientific Director is pivotal to the achievements of the IGH and is held in the highest regard by IGH researchers and stakeholders. The strong leadership she provides is particularly important as the IGH reaches a critical stage of development and Canada enters a period of policy retrenchment.

The IGH strategic plan lacks coherence and a clear articulation of goals (where the IGH wants to get to) and means (how it is going to get there). It lays out broad 'research directions': *capacity building* through advancing methods and measures and by building partnerships together with the identification of '*priority topic areas*' like violence and health, and clinical interventions. But the 2009-12 plan provides little sense of how these directions connect, how they will be pursued and where they will take the IGH by and beyond 2012.

3 The CIHR and the wider research community

We heard evidence that there continues to be a lack of appreciation among the wider scientific community of sex/gender and its impact on health. This is a problem in academic communities throughout the world, and has demanded and will continue to demand constant efforts to persuade the general scientific and lay public that males and females have significant and many more differences than had ever been suspected. Dr Johnson understands the importance of data in winning over those who are unaware of the importance of these differences. It is difficult to change entrenched attitudes. This will continue to limit the accuracy and effectiveness of Canadian research and its ability to impact the public health.

RECOMMENDATIONS

- i. The CIHR should review international approaches to capturing the return (outcomes and impacts) on its research investments with a view to introducing systems in line with best practice as soon as possible.
- ii. Attendance at the many international congresses now being planned throughout Europe and Asia will present many opportunities for collaborations with other investigators throughout the world and present opportunities for joint research projects. Canada should have its own International Congress on Gender-Specific Medicine, sponsored by the IGH.
- iii. The CIHR should continue to support the IGH and work with it to establish ways to address the 'cliff edge' facing researchers beyond early-career stage. These will need to include universities and well as research funding agencies, for example in joint mid-career appointments.
- iv. The CIHR should seek additional ways to support the Scientific Director. It was abundantly clear in the interviews conducted by the ERT that Prof Johnson provides exemplary leadership, with a commitment and integrity that is greatly admired by researchers and stakeholders alike. Particularly for stakeholders, their trust in and respect for the IGH rests on the high regard in which they hold Prof Johnson. It was also clear to the ERT that she is providing leadership to the wider community of the CIHR in critical areas of its work, including the development of performance management and patient-oriented research. We would encourage CIHR to have an early conversation with Prof Johnson about:
 - extending her contract beyond its initial 5-year term. We obviously have no information about Prof Johnson's career plans. However, in our view, the interests of the IGH and the CIHR would be best served if Prof Johnson continued in her role as Scientific Director. If this could be agreed at this stage, it would enable Prof Johnson to steer the IGH through its next stage of development – and through a period of policy retrenchment when strong scientific leadership and strong stakeholder links are particularly important.
 - ensuring her combined workload for the IGH and the CIHR is manageable and she has a Management Team with the resources to support her. Among the proposals that the CIHR and Prof Johnson may wish to consider is the appointment of a Deputy Director with a basic science background to supplement the existing strengths of the Management Team. Prof Johnson may also wish to consider ways of establishing greater 'inhouse' expertise in PR/marketing (i.e. in addition to working with the CIHR communication branch) to explore avenues for greater public engagement which we regard as an important and untapped dimension of the IGH. In the experience of the review team, the wider public takes a keen interest in gender-specific medicine and what they can learn from well-communicated studies.
- v. The IGH should develop a strategic plan with more tightly-specified goals, milestones and deliverables, and one that gives greater priority to interdisciplinary research with a stronger basic science component. A strength of the current plan is that it is informed by wide consultations with the research and stakeholder communities. But this consultative approach may have worked against the development of a coherent plan in line with the vision of the Scientific Director.
- vi. The CIHR should find ways to ensure an appreciation of sex/gender influences on health

by the wider scientific community. We recommend that the CIHR give urgent consideration to training of scientific committee members, and chairs and deputy chairs in particular, a professional development process that the IGH is well-placed to facilitate. We also invite the CIHR to consider ensuring that there is a 'gender designate' on every research board to ensure that funding decisions are appropriately informed by an appreciation of sex/gender issues.

Appendix 1 - Expert Review Team

Chair - Professor Hilary Graham

Professor of Health Sciences, University of York
Director - Public Health Research Consortium, UK

Expert Reviewer – Dr. Marianne Legato

Professor of Clinical Medicine
Columbia University College of Physicians & Surgeons
Adjunct Professor of Medicine, Johns Hopkins, USA

International Review Panel – Dr. Marie-Francoise Chesselet

Charles H. Markham Professor of Neurology
Chair of the Department of Neurobiology
David Geffen School of Medicine
University of California Los Angeles, USA

Appendix 2 - Key Informants

Session 1 – Review of Institute

- 1. Dr. Joy Johnson, IGH Scientific Director**
- 2. Dr. Blye Frank, Chair – Institute Advisory Board**
Professor and Head, Division of Medical Education
Head, Department of Bioethics
Dalhousie University
- 3. Dr. Joan Bottorff**
Director, Institute for Healthy Living and Chronic Disease Prevention
Professor, School of Nursing
Faculty of Health and Social Development
University of British Columbia, Okanagan
- 4. Dr. Gillian Einstein**
Associate Professor, Department of Psychology and
The Dalla Lana School of Public Health
Director and Founder, Collaborative Graduate Program in Women's Health
University of Toronto

Session 2 – Consultation with researchers

- 1. Dr. Danielle Julien**
Professor, Department of Psychology
Université du Québec à Montréal
- 2. Dr. Harriet MacMillan**
Professor, Psychiatry & Behavioural Neurosciences and Pediatrics
David R. (Dan) Offord Chair in Child Studies,
McMaster University
- 3. Dr. Karin Humphries**
Director, Evaluation and Research
Cardiac Services British Columbia
Associate Professor, Department of Medicine, Division of Cardiology
University of British Columbia

Session 3 – Roundtable with stakeholders

1. Dr. Beth Jackson

Manager, Innovations and Trends Analysis Division
Public Health Agency of Canada

2. Ms. Linda Piazza

Director Research
Heart and Stroke Foundation of Canada

3. Ms. Cindy Moriarty

Director Programs Management Division
Health Canada