



CIHR IRSC

Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

Discoveries for life

Ethics Performance Measurement Report April 2016- March 2017

Ethics Office

Science Policy Branch



Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

Canada

At the Canadian Institutes of Health Research (CIHR), we know that research has the power to change lives. As Canada's health research investment agency, we collaborate with partners and researchers to support the discoveries and innovations that improve our health and strengthen our health care system.

Canadian Institutes of Health Research

160 Elgin Street, 9th Floor
Address Locator 4809A
Ottawa, Ontario K1A 0W9
www.cihr-irsc.gc.ca

© Her Majesty the Queen in Right of Canada (2018)
Cat. No. MR2-27E-PDF
ISSN 2561-715X

Contents

EXECUTIVE SUMMARY	4
INTRODUCTION.....	8
1. RESULTS HIGHLIGHTS.....	9
2. ADVANCING KNOWLEDGE: CIHR ETHICS LEADERSHIP STRENGTHENED AT A NATIONAL LEVEL.....	11
2.1 INDICATORS	11
2.2 RESULTS.....	11
2.3 DETAILED RESULTS.....	12
3. INFORMING DECISION-MAKING: STRENGTHENED ACCOUNTABILITY FOR ETHICS WITHIN CIHR.....	14
3.1 INDICATORS	14
3.2 RESULTS.....	14
3.3 DEFINITIONS.....	14
3.4 DETAILED RESULTS.....	15
4. BUILDING CAPACITY: STRENGTHENED AND EXPANDED NATIONAL ETHICS KNOWLEDGE BASE.....	18
4.1 SCOPE OF GRANTS AND AWARDS DATA COLLECTION FOR “ETHICS”	18
4.2 INDICATORS	19
4.3 RESULTS.....	19
4.4 DEFINITIONS.....	23
4.5 DETAILED RESULTS.....	25
5. BUILDING CAPACITY: STRENGTHENED ETHICS RESEARCH COMMUNITY IN CANADA.....	26
5.1 INDICATORS	26
5.2 RESULTS.....	26
5.3 DEFINITIONS.....	29
5.4 DETAILED RESULTS.....	30
6. INDICATORS FOR WHICH DATA WILL BE AVAILABLE IN FUTURE	32
CONCLUSION.....	33

ANNEX 1: CIHR ETHICS LEADERSHIP STRENGTHENED AT A NATIONAL LEVEL 34

ANNEX 2: STRENGTHENED ACCOUNTABILITY FOR ETHICS WITHIN CIHR 39

ANNEX 3: STRENGTHENED AND EXPANDED NATIONAL ETHICS KNOWLEDGE BASE 46

ANNEX 3A. OPERATIONAL DEFINITIONS AND INCLUSION-EXCLUSION CRITERIA FOR GRANTS AND AWARDS INVESTMENTS..... 46

ANNEX 3B. DETAILED RESULTS FOR ETHICS-RELATED GRANTS AND AWARDS BY PROGRAM AND YEAR 49

ANNEX 4: STRENGTHENED ETHICS RESEARCH COMMUNITY IN CANADA 68

ANNEX 4A. SELECTED RECURRING OPEN AND PRIORITY-DRIVEN FUNDING COMPETITIONS IN 2015-2016 AND 2017-2018: APPLICATION PRESSURE AND SUCCESS RATES..... 68

ANNEX 4B. FUNDING OPPORTUNITIES WITH ETHICS CONTENT: APPLICATION PRESSURE AND SUCCESS RATES..... 71

EXECUTIVE SUMMARY

This is the second report prepared by CIHR, framed by the CIHR Ethics Action Plan, and detailing the results of the performance metrics set out in the Ethics Performance Measurement Strategy (PM Strategy), as endorsed by the CIHR Standing Committee on Ethics.

This report builds on existing momentum for ethics at CIHR, expanding baseline data for comparisons over time with respect to CIHR's performance in meeting its commitments.

Why is CIHR measuring its performance in ethics?

CIHR has a legislated mandate to:

- promote, assist and support health research that meets the highest standards of ethics,
- foster the discussion of ethical issues and the application of ethical principles to health research, and
- monitor, analyze and evaluate issues, including ethical issues, pertaining to health and health research.

In late 2012, CIHR's Governing Council commissioned an external Task Force on Ethics Reform to review the ethics function at CIHR and make recommendations for improvements. The Task Force submitted its final report in June 2013 with recommendations. In response to the [Task Force Report](#), CIHR developed an [Ethics Action Plan](#) which CIHR's Governing Council endorsed and GC Standing Committee on Ethics finalized and approved in January 2015.

As part of the Ethics Action Plan, the Governing Council's [Standing Committee on Ethics](#) was expanded and refreshed with new Terms of Reference. The Committee's new responsibilities include advising on CIHR's Ethics Action Plan and on a framework that measures and reports the performance of CIHR in ethics.

An [Ethics Performance Measurement Strategy](#) was developed with the advice and endorsement of the CIHR Standing Committee on Ethics to measure progress in meeting CIHR's commitments under the Action Plan.

CIHR's **Ethics Action Plan** has six priorities:

- **Strengthen ethics leadership** through shared accountability mechanisms.
- **Ensure ethics considerations inform decisions** related to priority-setting, programs, policies, processes and partnerships.
- **Nurture and monitor research capacity in ethics** in Canada and its application within priority target areas.
- **Capture and assess the impact of ethics activities** within the Open Programs and strategic initiatives.
- Develop and **implement a new ethics communication strategy**.
- **Review the ethics leadership model and action plan** after five years.

What is CIHR measuring and what are the results?

CIHR's Ethics Performance Measurement Strategy focuses on measuring progress toward strengthening:

- accountability for ethics within CIHR
- CIHR's national ethics leadership
- the ethics knowledge base and ethics research community in Canada and
- the impact of ethics research on decision-making and practices.

Efforts were made to keep performance indicators (and associated data collection requirements) to a manageable number for practical reasons, while still ensuring key performance elements are covered.

What grants and awards did we count? We counted applications for CIHR grants and awards that are directly or indirectly related to ethics. Ethics could be a primary focus or a non-primary focus (a component of a grant or award). We counted Law or Socio-cultural factors only where they were a primary focus. Socio-cultural factors such as marginalization, stigmatization, equity, cultural appropriateness, and loss or devaluation of language and culture, were considered relevant. An application could have Ethics as a *non-primary* focus, and Law or Socio-cultural factors as a *primary* focus (the overlapping areas in the diagram).



Grants and awards related to ethics

Examples of funded research exploring ethical, legal, or socio-cultural aspects of health and health research

- ❖ *Developing a framework for the ethical design and conduct of pragmatic trials to improve the quality and value of health care systems and practices*
Monica Taljaard, Ottawa Hospital Research Institute
- ❖ *An Indigenous collaborative care best practices model: Using participant simulations to promote culturally safe healthcare along the cancer journey*
Patty Chabbert, Canadore College
- ❖ *Harm reduction: Public health reasoning in law and public policy in relation to morally controversial behaviours*
Daniel M. Weinstock, McGill University
- ❖ *Practice, policy, and ethical implications of Canadian nursing roles in medical aid in dying: A knowledge synthesis and qualitative investigation*
Barbara K. Pesut, University of British Columbia

Here are some examples of the progress measured so far:

Desired Outcome:

Strengthened accountability for ethics within CIHR



Performance highlights: CIHR has a continued strong presence of ethics representation on its decision-making and advisory bodies. CIHR took action in response to all seven new issues addressed by its Standing Committee on Ethics. CIHR took action on the same number of new issues that were addressed by the SCE in 2015-2016.

Desired Outcome:

CIHR ethics leadership strengthened at a national level



Performance highlights: CIHR led or participated in over 22 meetings and presentations with national scope and relevance to ethics in 2016-2017.

These meetings included updates on CIHR's activities in ethics at the annual conferences of the Canadian Bioethics Society (CBS) and the Canadian Association of Research Ethics Boards (CAREB).

CIHR also led or co-led discussions at conferences, workshops, meetings and teleconferences, on a range of issues, such as equity in funding, unconscious bias in peer review, ethics in Indigenous research, and ethical aspects of new genetic technologies. For the 2015-2016 report, relevant ethics activities and products of only the Ethics Office and senior management were reported. From 2016-2017 on, the scope of relevant activities has been expanded to be CIHR-wide, and includes the ethics leadership activities of CIHR Institutes.

On the education front, there was substantial increased interest in CIHR's online [“Ethics in Research” workbook and case studies](#). There were 4,066 online visits to the Workbook in 2016-2017, up from 921 visits in 2015-2016.

Desired Outcome:

Strengthened and expanded national ethics knowledge base



Performance highlights: CIHR's investments in ethics-related grants and awards remained similar over this two-year period. CIHR's investments in ethics as a percentage of CIHR's total investments were:

- 0.26% (\$2.64 million) for ethics as a primary focus;
- 0.07% (\$0.69 million) for law as a primary focus; and
- 1.57% (\$16.05 million) for socio-cultural factors related to ethics as a primary focus.

Success rates for ethics-related grants and awards varied across research funding competitions – both above and below overall competition success rates. For example, in the Fall 2016 Project Program open competition, the success rates for ethics-related applications were:

- for ethics as a primary focus: 1 funded out of 10 applications submitted- a 10% success rate.
- for ethics as a non-primary focus: 2 funded out of 9 applications submitted – a 22.2% success rate.
- for law as a primary focus: 3 funded out of 5 applications submitted - 60% success rate.
- for socio-cultural factors related to ethics as a primary focus: 4 funded out of 16 applications submitted – a 25% success rate.

For comparison: The competition success rate for all applications submitted to the Fall 2016 Project Program competition in any area of health research was 16.47% (475 funded out of 2884 applications submitted).

The identification of trends in grants and awards investments and success rates, beyond year to year variability, will require a longer time frame.

In summary:

In 2016-2017, CIHR continued to demonstrate accountability for ethics within its governance and advisory structures within CIHR, and in leadership at the national level. CIHR's investments in ethics-related grants and awards remained similar compared to 2015-2016 investment levels. Success rates for ethics-related grants and awards varied across research funding competitions—both above and below overall competition success rates.

There are now two years of results, which is the start of measuring CIHR's progress towards commitments. However, it is too early to distinguish year to year variability from consistent trends upward or downward. CIHR will continue to monitor and report regularly on its performance in ethics, to demonstrate transparency and accountability.

Introduction

This is the second report prepared by CIHR, framed by the CIHR Ethics Action Plan, and detailing the results of the performance metrics set out in the Ethics Performance Measurement Strategy (PM Strategy), as endorsed by the CIHR Standing Committee on Ethics.

This report builds on existing momentum for ethics at CIHR, expanding baseline data for comparisons over time with respect to CIHR's performance in meeting its commitments.

Why is CIHR measuring its performance in ethics?

CIHR has a legislated mandate to:

- promote, assist and support health research that meets the highest standards of ethics,
- foster the discussion of ethical issues and the application of ethical principles to health research, and
- monitor, analyze and evaluate issues, including ethical issues, pertaining to health and health research.

In late 2012, CIHR's Governing Council commissioned an external Task Force on Ethics Reform to review the ethics function at CIHR and make recommendations for improvements. The Task Force submitted its final report in June 2013 with recommendations. In response to the [Task Force Report](#), CIHR developed an [Ethics Action Plan](#) which CIHR's Governing Council endorsed and GC Standing Committee on Ethics finalized and approved in January 2015.

As part of the Ethics Action Plan, the Governing Council's [Standing Committee on Ethics](#) was expanded and refreshed with new Terms of Reference. The Committee's new responsibilities include advising on CIHR's Ethics Action Plan and on a framework that measures and reports the performance of CIHR in ethics.

CIHR's **Ethics Action Plan** has six priorities:

- **Strengthen ethics leadership** through shared accountability mechanisms and integration of CIHR's ethics mandate.
- **Ensure ethics considerations inform decisions** related to priority-setting, programs, policies, processes and partnerships.
- **Nurture and monitor research capacity in ethics** in Canada and its application within priority target areas.
- **Capture and assess the impact of ethics activities** within the Open Programs and strategic initiatives.
- Develop and **implement a new ethics communication strategy**.
- **Review the ethics leadership model and action plan** after five years.

An [Ethics Performance Measurement Strategy](#) was developed with the advice and endorsement of the CIHR Standing Committee on Ethics to measure progress in meeting CIHR's commitments under the Action Plan.

1. Results Highlights

The Ethics PM Strategy outlines the intended transformative outcomes set out for Ethics at CIHR and indicators for measuring performance against these outcomes. Highlights of the results available for 2016-2017 are reported under key outcome areas.

Key Outcomes	Measuring Performance: Results Highlights for 2016-2017
Advancing Knowledge: CIHR ethics leadership strengthened at a national level	<ul style="list-style-type: none"> ➤ National leadership activities in ethics across the organization, including those of the CIHR Institutes, were reported for 2016-2017, whereas leadership activities of CIHR’s senior management and the Ethics Office were the sole focus of the 2015-2016 report. This expansion of the scope of data collection accounts for a large increase in reported leadership activities, from presentations at two meetings in 2015-2016 to presentations at over 22 meetings in 2016-2017. ➤ CIHR prepared and published 8 products related to ethics in 2016-2017, up from 4 in 2015-2016. ➤ CIHR’s online Ethics Education Workbook attracted a substantial increase in web traffic in 2016-2017. Other education activities included webinars and presentations focused on gender equity issues and unconscious bias in peer review.
Informing Decision-making: Strengthened accountability for ethics within CIHR	<ul style="list-style-type: none"> ➤ CIHR has continued to integrate accountabilities for ethics and ethics stakeholders on the majority of its governance bodies, advisory bodies, and internal committees and working groups. ➤ The Governing Council’s Standing Committee on Ethics (SCE) addressed 7 new issues 2016-2017—all of which involved follow up actions for CIHR or the Secretariat on Responsible Conduct of Research. A similar number of issues were addressed by the SCE in previous years with follow up actions.
Building Capacity: Strengthened and expanded national ethics knowledge base	<ul style="list-style-type: none"> ➤ CIHR’s investments in ethics grants and awards in 2015-2016 and 2016-2017 are reported, and the number of ethics researchers funded through these grants and awards. CIHR’s investments in ethics remained similar over this time period. The identification of trends, beyond year by year variability, will require a longer time frame. ➤ The scope of “ethics” grants and awards covers four categories directly or indirectly related to ethics: ethics as a primary focus; ethics as a non-primary focus (i.e., a component of a grant or award); law as a primary focus; and socio-cultural factors related to ethics (such as cultural appropriateness, vulnerability and marginalization), as a primary focus. Each category is reported separately. ➤ CIHR’s grants and awards investments in ethics in 2016-2017 compared to 2015-2016, as a percentage of CIHR’s total investments were: for ethics as a primary focus, 0.26% vs. 0.37%; law as a primary focus, 0.07% vs. 0.06%; and social cultural factors related to ethics as a primary focus, 1.57% vs.

Key Outcomes

Measuring Performance: Results Highlights for 2016-2017

1.66%. Figures for ethics as a non-primary focus are not provided because there are no data on the amounts of grant and award budgets allocated to ethics components.

- The number of ethics-related grants and awards in 2016-2017 compared to 2015-2016 were: ethics as a primary focus, 34 vs. 49; ethics as a non-primary focus, 24 vs 19; law as a primary focus, 17 vs 11; and for social cultural factors related to ethics as a primary focus, 148 vs. 228. Note that the total number of CIHR grants and awards decreased over this period.
- The number of individuals supported in the roles of principal investigators and co-investigators on CIHR ethics-related grants and awards in 2016-2017 compared to 2015-2016 were: for ethics as a primary focus, 93 vs. 94; law as a primary focus, 40 vs. 26; and socio-cultural factors related to ethics as a primary focus, 660 vs. 823. The number of individuals on ethics non-primary focus grants and awards are not reported because there are no data on how many of these individuals are working on the ethics components.

Building Capacity: Strengthened ethics research community in Canada

- Peer reviewer workload and applicant success rates for ethics applications in 2015-2016 and 2016-2017 are reported. The identification of trends, beyond year by year variability, will require a longer time frame.
- The total number of ethics-related applications submitted to CIHR competitions was 256 in 2016-2017 (vs. 384 in 2015-2016). The total number of peer reviewers who reviewed ethics-related applications was: 547 reviewers in 2016-2017 (17% of all CIHR reviewers) compared to 921 in 2015-2016 (25% of all CIHR reviewers). On average, these reviewers reviewed one or two ethics-related applications as part of a workload that included 11 to 15 applications.
- Success rates of ethics applications were calculated for competitions due in or after 2015-2016 and for which funding decisions were made prior to March 31, 2017. Success rates for ethics-related grants and awards varied across competitions, and within ethics categories—both under and above overall competition success rates.

2. Advancing knowledge: CIHR ethics leadership strengthened at a national level

2.1 Indicators

- a) Number of education sessions/webinars/publications
- b) Number of participants in ethics education events
- c) Percentage satisfaction rate of participants after education session
- d) Number of hits on ethics education webpages
- e) Number of external presentations, meetings (national and international), and public products related to ethics at CIHR

2.2 Results

Note that starting with this second report, the scope of leadership activities includes those with the participation of any of the following: CIHR senior management, Institutes, Ethics Office, and other units across the organization. In the first report, the scope of relevant activities included those of CIHR senior management and the Ethics Office.

a) Education sessions/webinars related to ethics:

- 5 sessions/webinars in 2016-2017
- 4 sessions/webinars in 2015-2016

b) Number of participants in education sessions/webinars related to ethics

- Over 500 participants in 2016-2017
- No data available in 2015-2016

c) Percentage satisfaction rate of participants after education session

- Over 95% participant satisfaction rate, 2016-2017 (evaluation data available for three out of five sessions).
- No data available in 2015-2016

d) Number of hits on ethics education webpages (in both official languages unless reported separately):

All web metrics relate to the CIHR Ethics Education Workbook web pages

- Sessions (visits to pages within a given time frame):
 - 4,066 (0.3% of CIHR total) in 2016-2017
 - 921 (0.07% of CIHR total) in 2015-2016
- Page views:
 - 6818 (0.20% of CIHR total) in 2016-2017
 - 2,563 (0.08% of CIHR total) in 2015-2016
- Average time on page:
 - 3:06 minutes (English); 3:21 minutes (French), in 2016-2017
 - 2:23 minutes (English); 2:25 minutes (French), in 2015-2016

- Downloads of the Workbook PDF:
 - 73 in 2016-2017
 - 81 in 2015-2016
- Clicks on two Ethics Education YouTube Videos (English only):
 - 31 unique events, in 2016-2017
 - 12 unique events, in 2015-2016

e) External presentations, meetings and public products with a national scope and related to ethics:

- National leadership activities in ethics across the organization, including those of the CIHR Institutes, were reported for 2016-2017, whereas leadership activities of CIHR's senior management and the Ethics Office were the sole focus of the 2015-2016 report. This expansion of the scope of data collection accounts for a large increase in reported leadership activities. Therefore, results reported in 2016-2017 constitute the baseline for future reporting.
- Presentations and meetings:
 - Over 22 meetings, in 2016-2017. These meetings include presentations at the annual conferences of the Canadian Bioethics Society (CBS) and the Canadian Association of Research Ethics Boards (CAREB).
 - Two meetings (CBS and CAREB conferences), in 2015-2016
- Public products (not including twitter postings) prepared and published:
 - 8 in 2016-2017
 - 4 in 2015-2016

2.3 Detailed Results

2.3.1 Ethics Education

CIHR's participation in National Health Ethics Week 2016 in April 2016 included two education sessions with invited speakers that were accessible to staff and Institute personnel across the country (with 36 people participating). The topics of these sessions were: criminalization of HIV nondisclosure; and organ transplantation after physician- assisted dying.

In 2016-2017, CIHR Institutes led education sessions on the topics of: unconscious bias in peer review, aimed at peer reviewers (with 447 participating); and sex and gender equity in research guidelines (a series of two webinars), aimed at Canadian journal editors (with over 20 participating).

In addition, the CIHR Ethics Office's Education Workbook with case studies on ethical issues in research is available online for use as an interactive tool, primarily for trainees and new investigators. The number of education sessions using this workbook is unknown—however, the number of hits on these web pages as reported in section 2.3.2 suggests a substantial increase in the use of the workbook for education purposes.

The list of education sessions is provided in Annex 1, in Table 1.

2.3.2 Ethics Education Webpages: CIHR Ethics Workbook

The number of sessions (visits to the Ethics Education Workbook web pages in a given time frame), page views, and time on page, increased substantially in 2016-2017 compared to 2015-2016. Downloads of the Workbook PDF decreased slightly.

While the web traffic to the Ethics Workbook in 2016-2017 represents a small proportion (0.3%) of the total sessions on the CIHR website, this is nonetheless particularly successful because the visits were deliberate (i.e., the average length of time spent on a page was over three minutes). Most of these sessions originated in Canada (78%) and the United States (10.5%), as was the case in 2015-2016. Other international sources of visits in 2016-17 were: the Cameroon (2.2%), Switzerland (1.4%), France (1.2%), and -- with less than 1% each of the total visits-- Côte d'Ivoire, Italy, the Philippines, Australia, Belgium, Bulgaria, Congo - Kinshasa, the United Kingdom, Haiti, Pakistan, Sudan, and Sierra Leone. In addition, two YouTube videos of education sessions using the Workbook were viewed 32 times in 2016-2017, compared to 12 times in 2015-2016.

2.3.3 Meeting and Presentations with National Scope

CIHR led or participated in over 22 meetings and presentations with national scope and relevance to ethics in 2016-2017. These meetings included updates on CIHR's activities in ethics at the annual conferences of the Canadian Bioethics Society (CBS), and the Canadian Association of Research Ethics Boards (CAREB) – which were the two meetings reported in the 2015-2016 report.

In addition to liaison with the CBS and CAREB, leadership activities in ethics of CIHR Institutes and units outside the CIHR Ethics Office are reported. Ethics-related topics at these meetings for diverse audiences included: mitigating unconscious bias in peer review; CIHR's Equity Strategy to address equitable access to CIHR funding; sex and gender equity in research, genetics (various related topics), Indigenous research, data sharing, and patient engagement.

The list of meetings and presentations is provided in Annex 1, Table 2.

2.3.4 Public products

In 2016-2017, CIHR prepared and made available to the public:

- highlights of four SCE meetings
- the Ethics Performance Measurement Report 2015-2016
- a Communiqué from the CIHR Chief Scientific Officer, with an update on CIHR's activities in ethics and the work of the SCE;
- a "Points to Consider" document on human germline gene editing (available online as of March 2017); and
- an article about the Tri-Agency Framework: Responsible conduct of research.

More information about these products is provided in Annex 1, Table 3.

3. Informing decision-making: Strengthened accountability for ethics within CIHR

3.1 Indicators

- a) Percentage of CIHR governance & advisory committees that include ethics stakeholders
- b) Number of issues addressed by SCE that become action items for CIHR
- c) Number of CIHR policies containing an ethics component
- d) Ratio of internal committees and working groups where ethics is present and not present

3.2 Results

- a) **CIHR governance and advisory bodies that include ethics stakeholders:**
 - Governance bodies:
 - 80% (8 out of 10), in 2016-2017
 - 90% (9 out of 10), in 2015-2016
 - Advisory bodies:
 - 71% (15 out of 21), in 2016-2017
 - 56% (15 out of 27), in 2015-2016
- b) **SCE Issues becoming CIHR action items:**
 - 7 out of 7 new issues submitted in 2016-2017 (over four meetings)
 - 7 out of 7 new issues submitted in 2015-2016 (over four meetings)
 - 8 out of 9 new issues submitted in 2014-2015 (over two meetings)
- c) **CIHR research policies with an ethics component:**
 - 10 out of 14 in 2016-2017
 - 9 out of 12 in 2015-2016
- d) **Internal committees and working groups with ethics representation:**
 - 90% (51 out of 57) in 2016-2017
 - 90% (53 out of 59) in 2015-2016

3.3 Definitions

Advisory bodies are defined as CIHR-led bodies which provide advice to CIHR, do not have decision-making authority, and are not part of the formal governance structure of CIHR.

Ethics being present on internal committees and working groups is defined as having a member who is one of the following:

- Staff with ethics as a corporate responsibility at CIHR, as evident in the title of their position or direct corporate reporting.
- Staff who are expected to bring an ethics perspective.
- Staff from the Science, Knowledge, Translation and Ethics Branch, who are expected to represent the Branch, and provide liaison to the CIHR Ethics Office for ethics-related matters as needed.

Ethics component of a policy is defined as content that explicitly refers to ethics or ethical concepts, or compliance with ethical policies.

Ethics stakeholders on governance and advisory bodies are defined as one of the following:

- Staff with ethics as a corporate responsibility at CIHR, as evident in the title of their position or direct corporate reporting.
- Individuals who are expected to bring an ethics perspective, and who may be staff or external individuals.

Governance bodies are defined as bodies that form part of the governance structure of CIHR for decision-making purposes. Subcommittees of decision-making bodies were included as “governance bodies”, since these subcommittees form part of the official governance structure of CIHR with respect to their role of bringing recommendations to the governance body for decision.

Policy is defined as:

- A formal science-related Policy, Statement or Guide that sets out mandatory conditions or expectations applicable to CIHR-funded research. These policies may originate from CIHR, the Tri-Agencies (CIHR, NSERC and SSHRC) or the Federal Health Portfolio (of which CIHR is a part).
- The following were not considered to be science-related “Policies”: federal laws that apply to CIHR-funded research; CIHR strategic frameworks; CIHR education tools such as guides for applicants or peer reviewers; and internal CIHR policies governing such things as financial and human resource management or approval procedures.

3.4 Detailed Results

3.4.1 Governance

CIHR has 10 formal governance bodies: the CIHR Governing Council and its five Standing Committees, the Executive Management Committee and its Extended Executive Management Committee, and the Science Council and its Subcommittee on Implementation and Oversight. Ethics is represented on all of these governance bodies except for two Governing Council Standing Committees (Executive Committee and Audit Committee).

The list of governance bodies and associated ethics representation is provided in Annex 2 in Table 4.

3.4.2 Advisory bodies

CIHR led or co-led 21 advisory bodies in 2016-2017. Ethics stakeholders were present on 15 (71%) of these advisory bodies. The majority of these ethics stakeholders were external individuals who were expected to bring an ethics perspective related to such issues as gender equity, social equity for marginalized populations, access to care for marginalized populations, Indigenous research ethics, and cultural appropriateness.

CIHR's advisory bodies and their ethics representation are listed in Annex 2 in Table 5.

3.4.3 SCE issues that became action items for CIHR

According to its terms of reference, the SCE has a mandate to address issues at the request of Governing Council, the CIHR President, Science Council, and at its own initiative. The SCE held four meetings in 2016-2017: in June 2016, October 2016, December 2016 and March 2017. At these meetings, the following six issues were submitted as agenda items for discussion or decision:

- Ethical imperative of sex and gender considerations in health research and peer review.
- CIHR Strategic Framework on Equity (with respect to equitable access to CIHR funding).
- Equity and Personalized Health (with respect to equitable access to research benefits).
- Consultations on revisions to the *Tri-Council Policy Statement: Ethical conduct for research involving humans* 2nd edition (TCPS 2).
- Indigenous research (and the implications of the Truth and Reconciliation Commission).
- World Health Organization (WHO) Ebola Working Group consultations on draft ethical guidance.

All of these issues resulted in follow up action by CIHR or the Secretariat on Responsible Conduct of Research (SRCR)¹.

In addition, the following issue was presented to the SCE for information in 2016-2017, and became an action item for CIHR:

- Gene drive research.

The Canadian Clinical Trials Coordinating Centre (CCTCC) Accreditation Working Group: Final Recommendations and Joint Management Response were presented to the SCE as an information item (with no follow up expected) in 2016-2017.

¹ The SRCR is supported by the three research funding councils: CIHR, the Social Sciences and Humanities Research Council of Canada, and the Natural Sciences and Engineering Research Council of Canada.

The SCE continued to address in 2016-2017 a number of issues that had been brought to their attention in previous years as discussion or decision items, and which involved follow up actions by CIHR or the SRCR. These issues were: human germline gene editing; patient engagement; disruptive technologies and dual use; evaluation and data; partnerships; communication and engagement; and the role of the SCE (including Terms of Reference).

Issues addressed by the Standing Committee on Ethics since September 2014, and key follow up actions by CIHR and SRCR, are summarized in Annex 2, Table 6.

3.4.4 CIHR Policies containing an Ethics Component

Ten out of 13 CIHR and Tri-Council policies in effect in 2016-2017, and applicable to CIHR-funded research, contained an explicit ethics component. These policies were:

- 1) CIHR Grants and Awards Guide
- 2) CIHR Policy Statement on Official Languages
- 3) Tri-Agency Financial Administration Guide
- 4) Tri-Agency Open Access Policy on Publications
- 5) Tri-Agency Responsible Conduct of Research Framework
- 6) Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans
2nd edition
- 7) Agreement on the Administration of Agency Grants and Awards by Research Institutions
- 8) Conflict of Interest and Confidentiality Policy of Federal Research Funding Organizations
- 9) Health Portfolio Sex and Gender-Based Analysis Policy
- 10) Tri-Agency Statement of Principles on Digital Data Management

In addition, four CIHR policies with very specific procedural objectives do not have ethics components. These policies are:

- 1) CIHR Policy Statement: Electronic Final Reports
- 2) Public Communications Policy of the Federal Research Funding Organizations
- 3) CIHR Policy on the Institutional Electronic Approval of Applications
- 4) CIHR Policy on Complete Applications

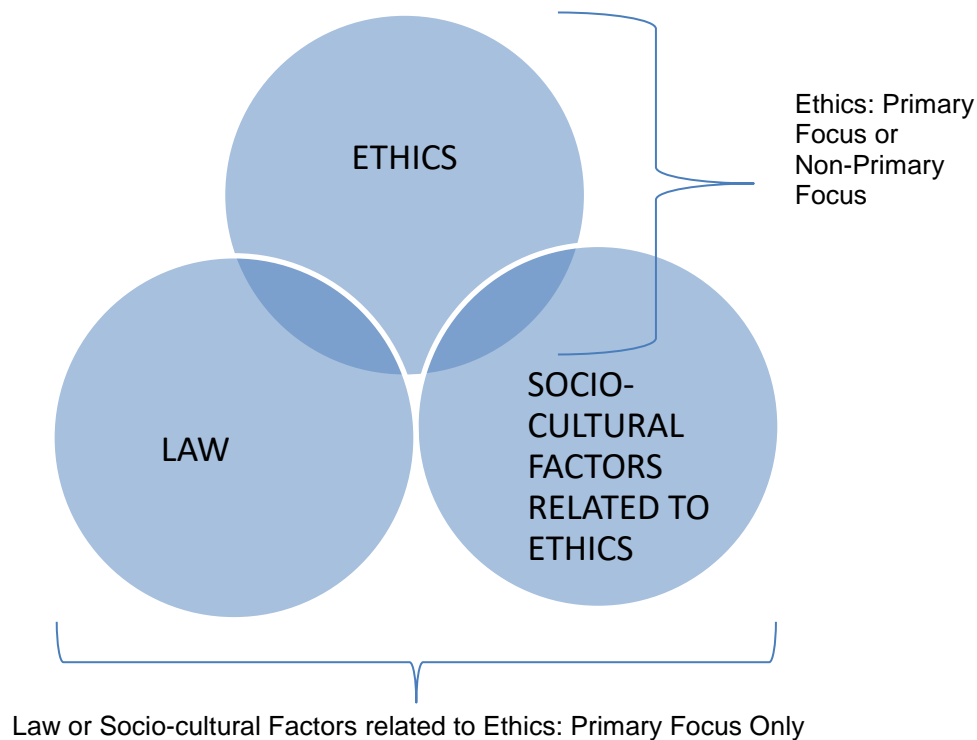
CIHR research policies with ethics components are listed in Annex 2, Table 7.

4. Building capacity: Strengthened and expanded national ethics knowledge base

4.1 Scope of Grants and Awards Data Collection for “Ethics”

The CIHR Standing Committee on Ethics (SCE) at its March 2016 meeting endorsed an expanded scope of grants and awards data collection for the Ethics PM Strategy to include grants and awards that relate directly to ethics, or indirectly to ethics (i.e., law and a subset of socio-cultural factors affecting health), to be reported separately.

Figure 1. Scope of Grants and Awards Data Collection: Directly and Indirectly Related to Ethics



As illustrated in Figure 1, grants and awards with ethics as a primary focus, and as a non-primary focus (i.e., where ethics is a component of a grant or award but not the main focus), were included in the analysis, since ethics is the main focus of the Ethics PM Strategy. Grants and awards exploring law or relevant socio-cultural factors were included only as a primary focus, thus minimizing the counting of grants and awards in more than one category. However, it was possible for grants and awards to fit into the category of Ethics Non-Primary Focus, as well as Law-Primary Focus or Socio-Cultural Primary Focus (the overlapping areas in Figure 1).

The SCE endorsed operational definitions for ethics, law, and social-cultural factors related to ethics; and the Ethics Office further refined these definitions through the development of inclusion and exclusion criteria. These definitions and criteria are presented in Annex 3, Section A.

4.2 Indicators

- a) Percentage of total CIHR expenditures for ethics research (i.e., ethics-related grants and awards)
- b) Number of ethics grants and awards in the investigator-initiated research and priority-driven research opportunities
- c) Number of ethics researchers funded vs CIHR, and by program

4.3 Results

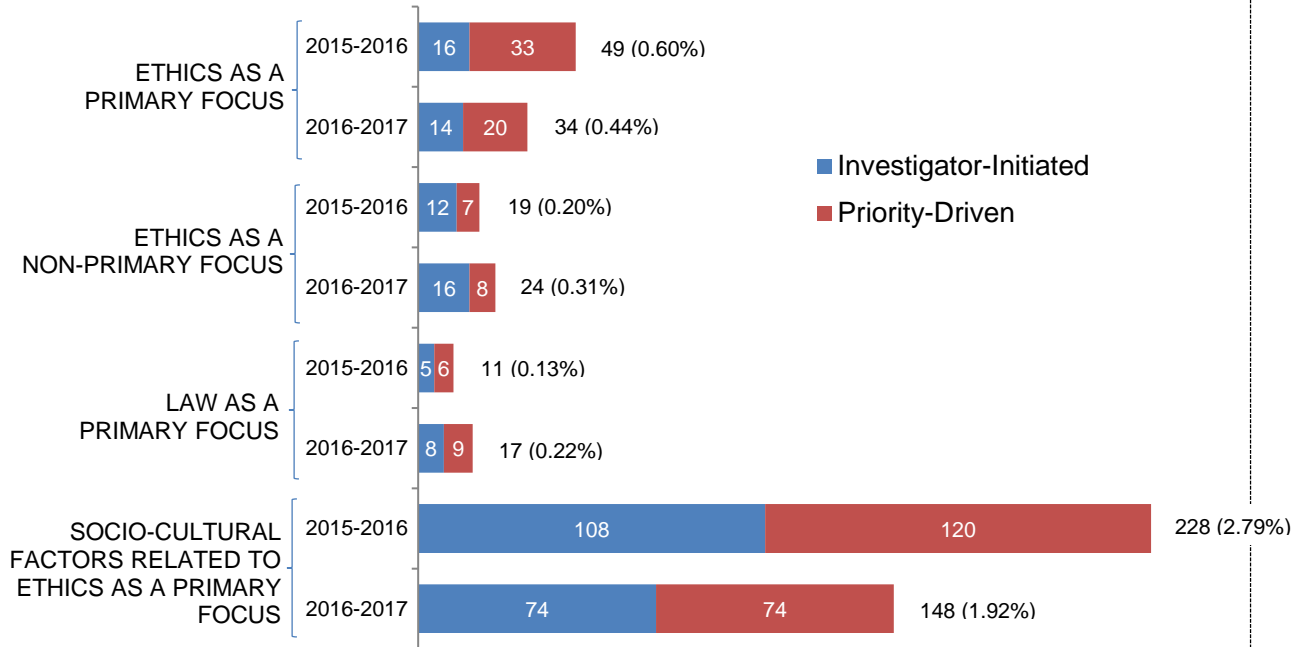
a) Percentage of total CIHR expenditures for ethics-related grants and awards (G & A) by year

Scope	Actively funded G & A (New and Continuing)		Newly-funded G & A	
	2015-2016 % of CIHR Total (\$973 million)	2016-2017 % of CIHR Total (\$1,024 million)	2015-2016 % of CIHR Total (\$226 million)	2016-2017 % of CIHR Total (\$246 million)
Ethics - Primary Focus	0.37% (\$3.58 million)	0.26% (\$2.67 million)	0.32% (\$0.72 million)	0.88% (\$2.16 million)*
Law - Primary Focus	0.06% (\$0.56 million)	0.07% (\$0.69 million)	0.11% (\$0.25 million)	0.12% (\$0.30 million)
Socio-Cultural Factors related to Ethics - Primary Focus	1.66% (\$16.17 million)	1.57% (\$16.05 million)	2.16% (\$4.90 million)	1.90% (\$4.67 million)

Note. Expenditures for “Ethics as a Non-Primary Focus” cannot be reported because there are no data on amounts for grant or award budgets allocated to ethics components. * CIHR’s multi-year directed grant to the Canadian Council on Animal Care (comprising \$1.4 million in 2016-2017) was renewed in 2016-2017 and is therefore classified as a “new” grant.

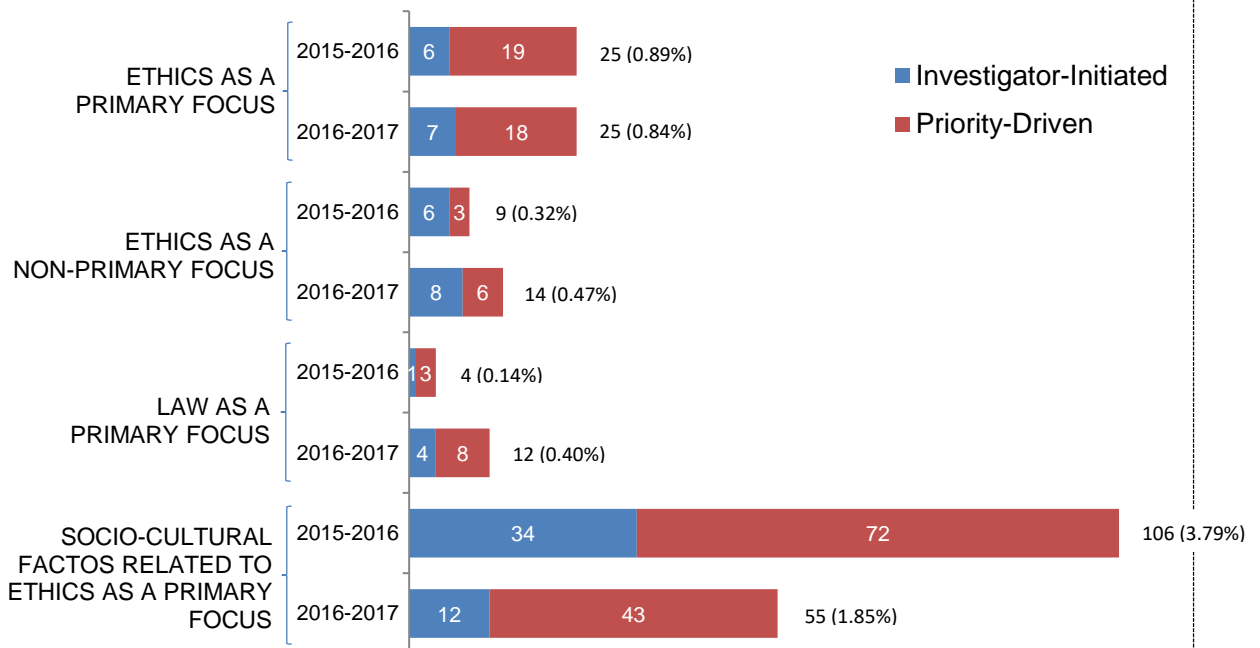
b) Number of ethics-related grants and awards in investigator-initiated research and priority-driven research opportunities

Figure 2. Number of new and continuing ethics-related grants and awards, by funding type and year, and percentage of CIHR total.



Note. CIHR funded a total of 8201 grants and awards (new and continuing) in 2015-2016, and 7725 in 2016-2017.

Figure 3. Number of new ethics-related grants and awards, by funding type and year, and percentage of CIHR total.



Note. CIHR funded a total of 2798 new grants and awards in 2015-2016, and 2981 in 2016-2017.

c) Number of ethics researchers funded vs CIHR, and by program

The “number of ethics researchers” was calculated in two ways:

- a) The number of grant or award recipients in each ethics-related grant/award category who are listed on the application in the roles of Principal Investigators or Co-investigators (or equivalent roles).
- b) The number of grant or award recipients counted under (a) in each ethics-related grant/award category who self-declared ethics or law expertise in their Common CVs. See detailed definitions of “researchers” and “self-declared expertise” in Section 4.4.

C.1a Number and percentage of unique researchers funded through ethics-related grants and awards compared to CIHR overall, by category and year

Year	Category # of researchers (% of CIHR total)		
	Ethics-Primary Focus	Law-Primary Focus	Socio-Cultural Factors related to Ethics – Primary Focus
2015-2016	94 (0.8%)	26 (0.2%)	823 (6.6%)
2016-2017	93 (0.7%)	40 (0.3%)	660 (5.3%)

Note: CIHR funded a total of 12, 483 researchers in 2015-2016, and 12,583 in 2016-2017. The “Ethics-Non Primary Focus” category is not included in this table because it is not known how many researchers on these grants and awards are focused on the ethics components.

C.1b Number and percentage of unique researchers funded through ethics-related grants and awards with self-declared ethics or law expertise, by category and year

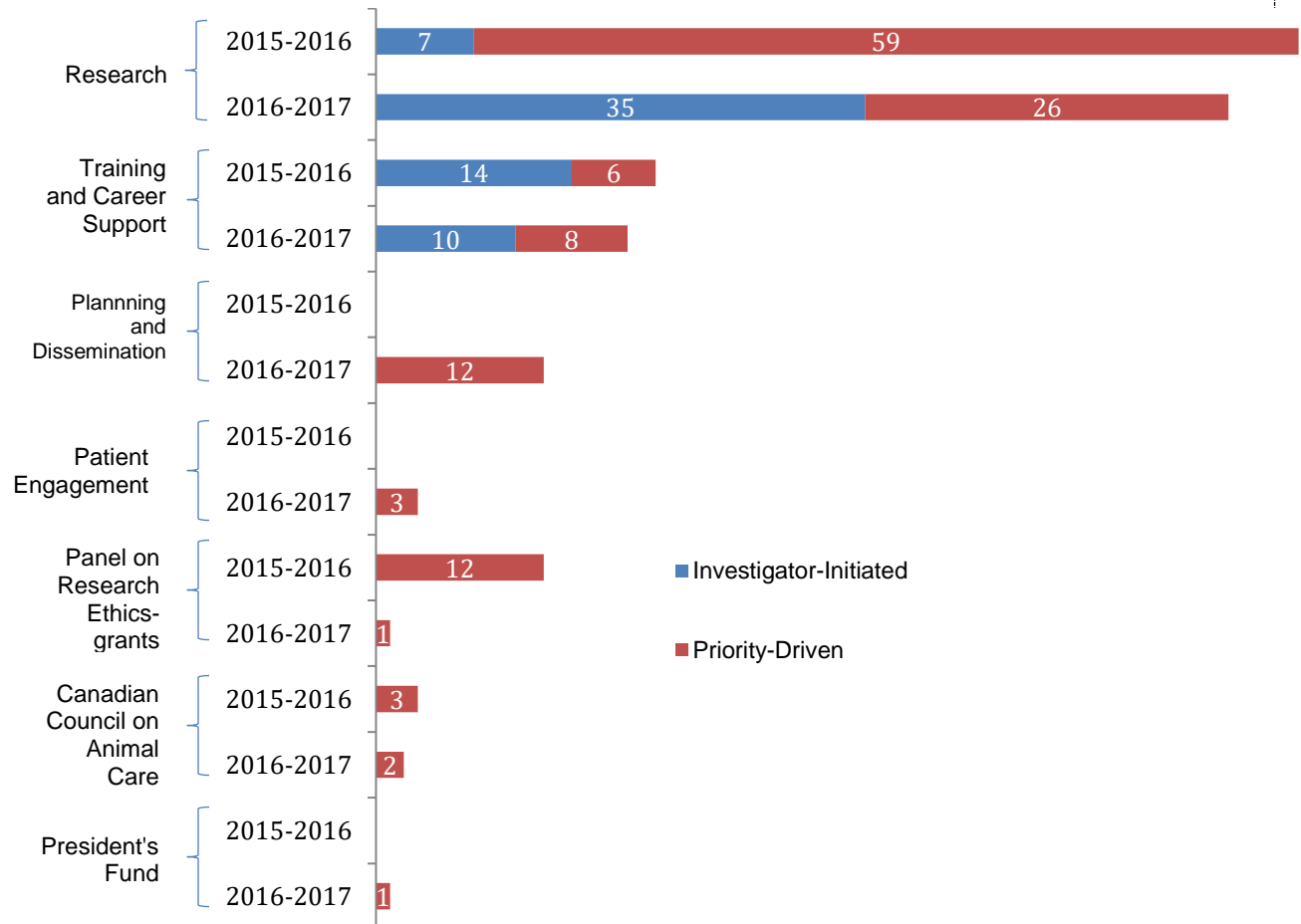
Self-declared expertise	Category # of unique researchers (% of category total)			
	Ethics-Primary Focus	Ethics-Non-Primary Focus	Law-Primary Focus	Socio-Cultural Factors related to Ethics – Primary Focus
	2015-2016			
Ethics	41	16	1	41
Law	2	0	7	22
Ethics/Law Total	43 (46%)	16 (17%)	8 (31%)	63 (8%)
	2016-2017			
Ethics	41	12	1	29
Law	4	1	5	22
Ethics/Law Total	45 (48%)	13 (9%)	6 (15%)	51 (8%)

Note: Researchers who did not use ethics or law expertise keywords tended to use keywords that identified expertise in certain methods (e.g., qualitative research methods) or research areas (e.g., HIV/AIDS). The “Ethics-Non Primary Focus” category is included on the assumption that funded researchers with self-declared ethics or law expertise may be applying this expertise in the work associated with these grants or awards.

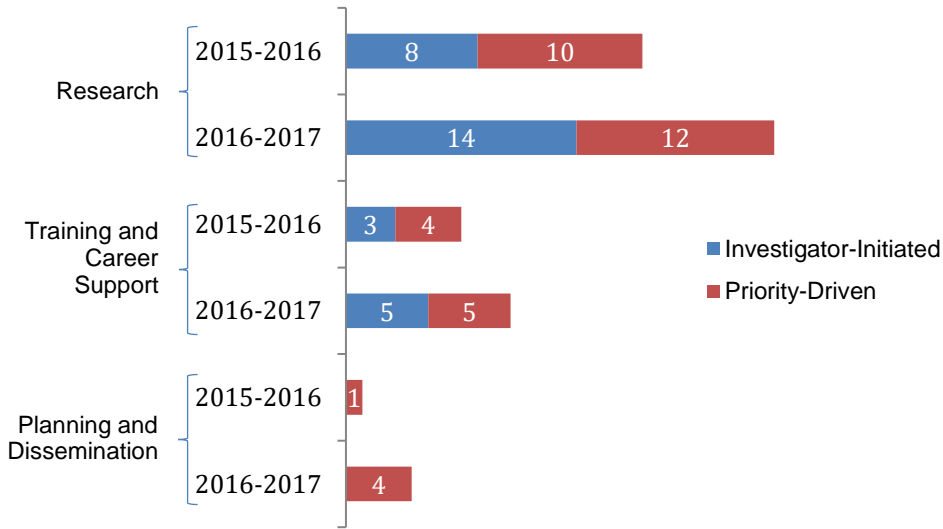
C.2 Number of researchers funded through ethics-related grants and awards, by funding type, program and year

The following counts by program include researchers who are on more than one funded application, thus these are not counts of “unique” researchers. The “Ethics-Non Primary Focus” category is not included in this analysis because it is not known how many researchers on these grants and awards are focused on the ethics components.

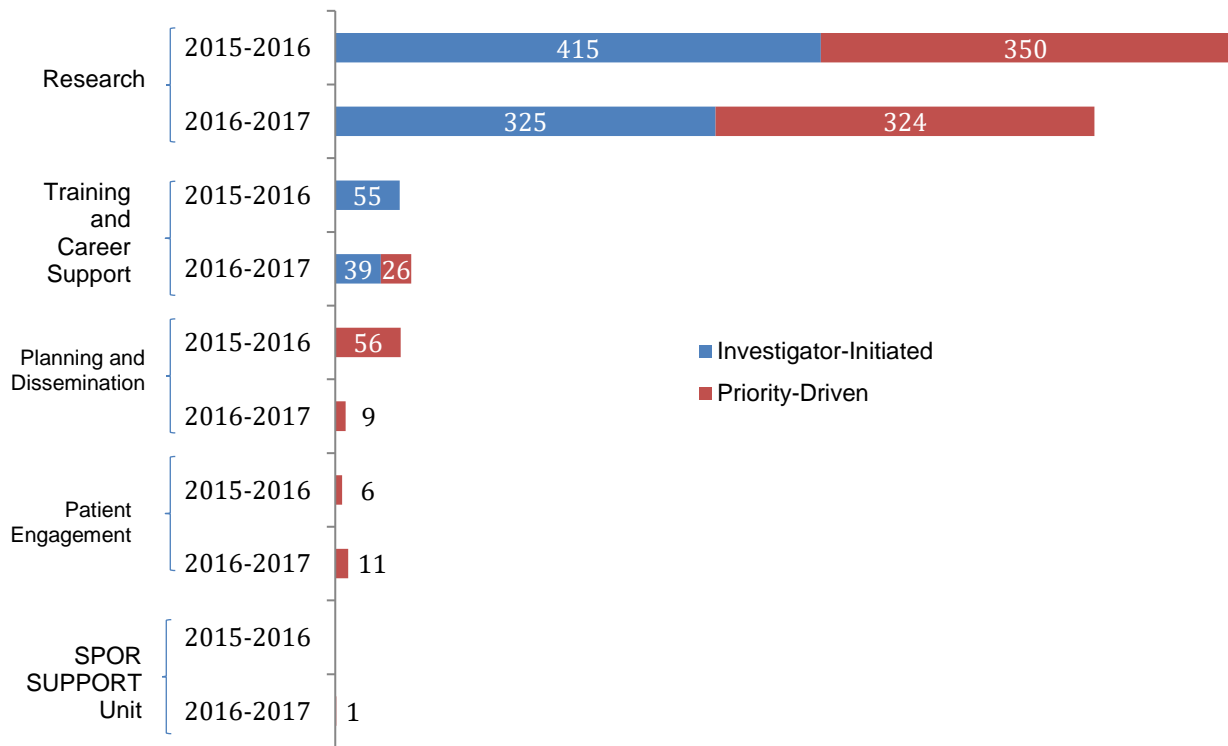
C.2a Ethics-Primary Focus: Number of researchers by funding type, program and year



C.2b Law- Primary Focus: Number of researchers by funding type, program and year



C.2c Socio-Cultural Factors Related to Ethics- Primary Focus: Number of researchers by funding type, program and year



4.4 Definitions

Awards are funded through Investigator-initiated and Priority-driven sources, and refer to funding to researchers and trainees to support training (Master's, PhD, Postdoctoral Fellow) or career advancement (Chairs, salary awards). Travel awards and prizes are also included in this category.

Grants are funded through Investigator-initiated and Priority-driven sources, and include support for the direct costs of research projects; and support for conferences and workshops to establish research priorities; researcher networking and collaborative activities; scientific exchanges between Canadian and international researchers; programs that inform researchers and other stakeholders about aspects of health research; and grants to selected organizations engaged in research-related activities such as the Canadian Council on Animal Care.

Investigator-Initiated funding type (also known as "curiosity-driven" or "open" funding) refers to funding through competitions open to any area of health research.

Priority-Driven funding type (also known as "strategic" funding) refers to funding through initiatives by CIHR and its Institutes to address a specific area of need. Priority-driven research includes grants and awards funded through Signature and Strategic Initiatives, CIHR Institute funding opportunities, Catalyst Grants in specific areas of research such as ethics, and "Priority Announcements" (PAs) on open competitions (which offer additional sources of funding for highly rated applications that are relevant to specific CIHR research priority areas or mandates).

Researchers refer to individuals that received grant or award funding in a given fiscal year and were listed in the application in the roles of:

- Nominated Principal Investigators (always one per funded application),
- Other Principal Investigators (includes Program and Project Leaders), or
- Co-Investigators (includes Program and Project Expert Named) for one or more grants or awards.

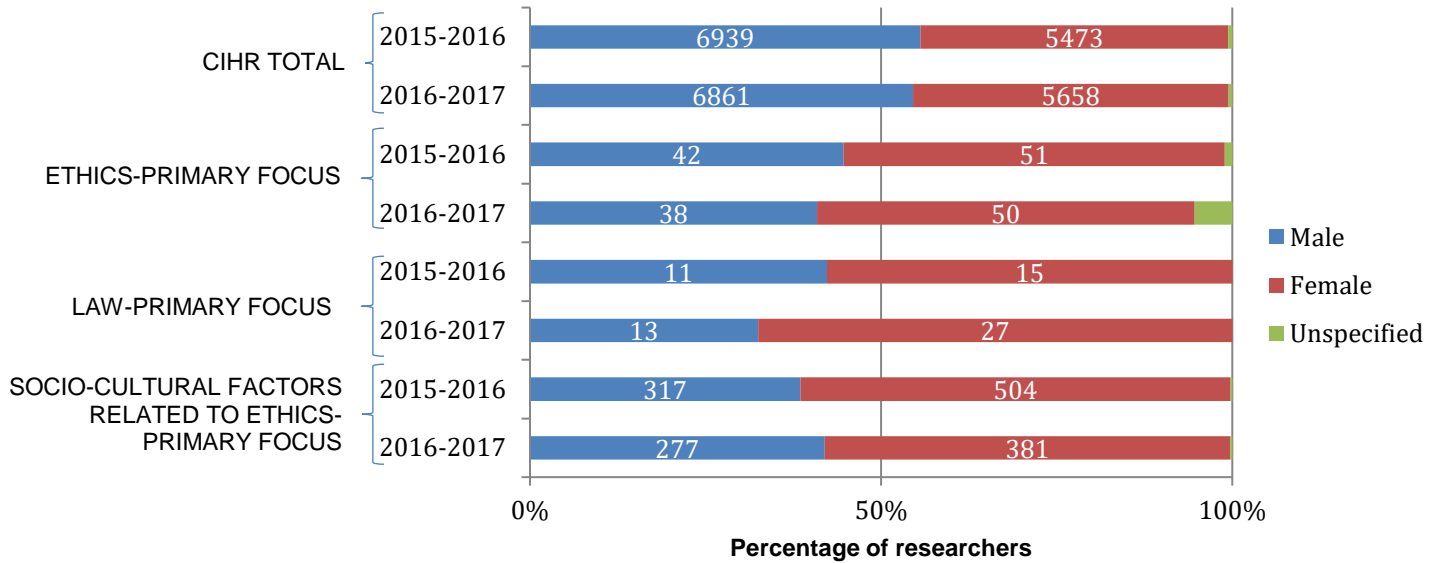
Depending on the particular type of grant or award, recipients may be active researchers, research administrators, etc. Unless otherwise stated, researchers are "unique", meaning an individual is counted only once even if he or she received more than one grant or award.

Self-declared expertise refers to "expertise" keywords entered by applicants into their Common CVs. Not all applicants' Common CVs contain expertise keywords. Based on a validation exercise, "self-declared ethics expertise" was considered present for the purposes of this report if an applicant's expertise keywords included the terms "ethic", "ethique" or "philosoph". "Self-declared law expertise" was considered present if an applicant's expertise keywords included the terms "law", "rights" or "droits". Keywords were not identified that distinguished expertise in "socio-cultural factors related to ethics" from general expertise in socio-cultural research.

4.5 Detailed Results

A small majority of researchers on ethics-related grants and awards funded in 2015-2016 and 2016-2017 are female (see Figure C.2d). Detailed results for ethics-related grants and awards by program and year are provided in Annex 3, Section B.

Figure C.2d Unique researchers on ethics-related grants and awards: Number and percentage by sex and year, compared to CIHR overall



Note. The “Ethics-Non Primary Focus” category is not included because it is not known how many researchers on these grants and awards are focused on the ethics components.

5. Building capacity: Strengthened ethics research community in Canada

5.1 Indicators

- a) Percentage of ethics applications overall (success rates)
- b) Number of funding opportunities of Institutes and Initiatives for which an ethics perspective was offered at the design stage
- c) Number of funding opportunities of Institutes and Initiatives for which an ethics perspective was offered and incorporated as appropriate
- d) Percentage of targeted funding opportunities with an ethics component that lead to ethics researchers being funded as principal investigators or co-investigators
- e) Number of applications sent to ethics reviewers (workload, burden, capacity)
- f) Number of ethics reviewers who were deployed to review an application

5.2 Results

To estimate the “capacity” of a research community, relevant parameters include:

- *the size of the community, as reflected in the number of applications submitted to competitions, and*
- *the strength of the community, as reflected in success rates of its applications.*

Success rates were calculated for open and priority-driven competitions for which application deadlines fell within the period 2015-2016 and 2016-2017, and for which funding decisions were known by March 31, 2017.

“Ethics researchers being funded as principal investigators or co-investigators” was defined as: researchers on applications for which the primary focus is ethics, law, or socio-cultural factors related to ethics.

“Ethics content” in funding opportunities does not include the requirement to comply with ethics guidelines, or funding opportunities for which ethics is a main focus.

a) Percentage of ethics applications overall (success rates)

- Ethics-related applications accounted for a small percentage of applications to CIHR competitions (generally less than 3% of the total applications submitted to a given competition unless ethics was a main focus). Within- ethics category success rates are reported for recurring competitions launched in or after 2015-2016 and for which funding decisions were made prior to March 31, 2017 (see summary table). These competitions include:
 - the large open Project Grant Program competitions for research operating funds held in spring 2016 and fall 2016. Ethics-related applications overall

accounted for less than 2% of the applications submitted for each competition.

- the large open Foundation Grant Program for programmatic research operating funds held in September 2015. Ethics-related applications accounted for approximately 3 percent of all applications submitted. Funding decisions for the Foundation Grant Program October 2016 competition were made after March 31, 2017 and therefore will be reported in the next report.
- Catalyst Grant-Ethics competitions, which provide priority-driven research operating funds for new investigators and experienced investigators new to the ethics field. The purpose of this competition is to build capacity in ethics as it applies to health, with the expectation that this targeted investment will enable researchers to embark on research in health ethics and prepare to become competitive in other CIHR funding opportunities. Only applications with ethics as a primary focus are eligible for funds, and each competition has funding to support a total of 4 grants.

Ethics Category	Selected Research Operating Funding Competitions: Within-Ethics Category Success Rates (# of applications funded / # applications submitted)				
	Project Grant (Open)		Foundation Grant (Open)	Catalyst Grant-Ethics (Priority-driven)	
	Spring 2016	Fall 2016	September 2015	March 2016	February 2017
Ethics as a primary focus	10.53% (2 / 19)	10% (1 / 10)	0% (0 / 7)	15.4% (4 / 26)	19.1% (4 / 21)
Ethics as a non-primary focus	20% (3 / 15)	22.2% (2 / 9)	10% (1 / 10)		
Law as a primary focus	16.67% (1 / 6)	60% (3 / 5)	0% (0 / 1)		
Socio-cultural factors related to ethics as a primary focus	4% (1 / 25)	25% (4 / 16)	9.1% (1 / 11)		
Overall competition success rate	12.90% (492 / 3813)	16.47% (475 / 2884)	13.26% (120 / 905)	15.4% (4 / 26)	19.1% (4 / 21)

- b) Number of funding opportunities of Institutes and Initiatives for which an ethics perspective was offered at the design stage**
- c) Number of funding opportunities of Institutes and Initiatives for which an ethics perspective was offered and incorporated as appropriate**
- d) Percentage of targeted funding opportunities with an ethics component that lead to ethics researchers being funded as principal investigators or co-investigators**

In addition to funding opportunities that have ethics as a main focus, funding opportunities may have ethics content (e.g., a requirement for applicants to consider the ethical aspects of their proposals) to further the objectives of funding applications relevant to ethics, and encouraging the inclusion of ethics expertise on an applicant team. An analysis of the ethics content in funding opportunities was undertaken for 2016-2017, and results from that year constitute baseline data for indicators b), c) and d).

- The Ethics Office provided an ethics perspective at the early design stage of 10 Priority-Driven initiatives in 2016-2017.
- Ethics input from the Ethics Office was incorporated into 15 of the 26 Priority-Driven funding opportunities that had ethics content (not including those with ethics as a main focus). Advice on the ethics content of funding opportunities may also be provided by others, including CIHR staff, Institutes, external experts, and Institute Advisory Board members.
- 8 out of 26 (30.8%) Priority-Driven funding opportunities with ethics content in 2016-2017 resulted in researchers being funded for applications with a primary focus on ethics, law, or socio-cultural factors related to ethics.

e) Number of applications sent to ethics reviewers (workload, burden, capacity)

- The total number of ethics-related applications submitted to CIHR was 256 in 2016-2017 (vs. 384 in 2015-2016).

Ethics Category	Number of applications submitted to CIHR funding competitions launched in 2015-2016 or 2016-2017	
	2015-2016	2016-2017
Ethics Primary	112	63
Ethics Non-Primary	58	35
Law Primary	30	21
Socio-Cultural Primary	184	137
Total	384	256

f) Number of ethics reviewers who were deployed to review an application

“Ethics reviewers” were defined in two ways, as: a) reviewers of ethics-related applications, and b) reviewers of ethics-related applications who have self-declared expertise in ethics or law. For a definition of “self-declared ethics or law expertise”, see section 4.4.

- The total number of peer reviewers who reviewed ethics-related applications was: 547 in 2016-2017 (17% of all CIHR reviewers) compared to 921 in 2015-2016 (25% of all CIHR reviewers). On average, these reviewers reviewed 1 or 2 ethics-related applications as part of a workload that included 10 or more applications to review.

Category	Year	Number of unique reviewers		Average number of applications reviewed	
		Total number reviewing ethics-related applications	Number with self-declared ethics or law expertise (% of category total)	Average number of ethics-related applications reviewed per reviewer	Average number of applications (including ethics-related) reviewed per reviewer
Ethics-Primary	2015-2016	206	31 (15%)	1.58	12.27
	2016-2017	122	22 (18%)	1.34	10.81
Ethics Non-Primary	2015-2016	225	22 (9.8%)	1.12	11.72
	2016-2017	107	11 (10.3%)	1.09	13.68
Law-Primary	2015-2016	98	9 (9.2%)	1.05	13.45
	2016-2017	66	5 (7.6%)	1.00	14.82
Socio-Cultural Factors related to Ethics-Primary	2015-2016	392	22 (5.6%)	1.37	11.53
	2016-2017	252	16 (6.4%)	1.49	12.38

Note. CIHR’s total number of reviewers was 3,678 in 2015-2016, and 3208 in 2016-2017. Reviewers who did not use ethics or law expertise keywords in their Common CVs typically used keywords relating to particular methods (e.g., qualitative methods) or research areas (e.g., population health, health services, etc.). A small number of individuals do not provide expertise keywords in their Common CVs.

5.3 Definitions

Ethics content was defined as explicit reference in the funding opportunity to any of the following:

- Ethics considerations needing to be considered in the design of the research proposal and included in proposal evaluation criteria.
- Ethics being an eligible research area, among other research areas.
- Ethics expertise being appropriate for a research team.
- Ethics being included as a component of a proposed training program.

- Responsibility for “ethically sound” approaches to public engagement and partnerships.
- Reflection on the equity of the applicant’s research agenda and mechanisms capable of assuring the ethical distribution of research benefits.

The standard statement in funding opportunities that applicants must comply with ethical guidelines and Tri-Council policies was not counted as “ethics content” for the purposes of this indicator.

Ethics researchers being funded as principal investigators or co-investigators was defined as applicants whose applications have a primary focus on ethics, law, or socio-cultural factors related to ethics.

Funding opportunities of Institutes and Initiatives means Priority-Driven funding opportunities.

“**Reviewers**” includes individuals who had a role as a reviewer, but does not include virtual Chairs.

5.4 Detailed Results

5.4.1 Application pressure and success rates by competition

Selected recurring funding competitions with success rates are listed in Annex 5A.

5.4.2 Priority-driven funding opportunities with ethics content

A summary of results by funding opportunity type is provided in the following table, and detailed results by competition in Annex 5B.

Number of selected priority-driven funding opportunities with ethics content leading to funded applications for ethics researchers				Number of funding opportunities for which no ethics applications were submitted
	<i>Ethics-Primary focus</i>	<i>Law-Primary Focus</i>	<i>Socio-Cultural factors related to ethics–Primary Focus</i>	
Total number of funding opportunities	5	2	8	14
Number of funding opportunities by type	3- Travel Awards 2- Planning & Dissemination	1- Travel Awards 1- Planning & Dissemination	3- Travel Awards 2- Planning & Dissemination 1- Team Grants 1- Catalyst Grants 1- Training Grants	5 - Team Grants 4 - Operating Grants 2 - Catalyst Grants 1- Mentorship Chair 1- Institute community Support Award 1- Prize

Note. Priority-driven funding applications were included that had ethics content and applications due in 2016-2017 and funding decisions known. Funding opportunities for directed grants, or with ethics as a main focus, were excluded. The total number of selected funding opportunities was 26. The same funding opportunity could result in funded applications in more than one category, thus totals do not equal 26. “Ethics researchers” are defined as: applicants whose applications have a primary focus on ethics, law, or socio-cultural factors related to ethics. “Ethics content” in funding opportunity text does not include the requirement to comply with ethics guidelines or laws.

5.4.3 Ethics Reviewers

Table 5.4a Unique Reviewers and Average Number of Applications Received by Sex and Ethics-Related Category for 2015-2016

Categories		Number of Unique Reviewers	Average Number of Applications Received per Reviewer	
			Category-Specific	Total
All CIHR Reviewers	Females	1,569		9.94
	Males	2,102		9.96
	TOTAL	3,678		9.94
Ethics as a Primary Focus	Females	139	1.60	12.44
	Males	67	1.55	11.91
	TOTAL	206	1.58	12.27
Ethics as a Non-Primary Focus	Females	140	1.12	12.16
	Males	85	1.11	10.98
	TOTAL	225	1.12	11.72
Law as a Primary Focus	Females	57	1.07	14.33
	Males	41	1.02	12.22
	TOTAL	98	1.05	13.45
Socio-Cultural Factors Related to Ethics as a Primary Focus	Females	268	1.39	11.57
	Males	124	1.34	11.44
	TOTAL	392	1.37	11.53

Note: Totals include researchers who did not identify sex and their reviews.

Table 5.4b Unique Reviewers and Average Number of Applications Received by Sex and Ethics-Related Category for 2016-2017

Categories		Number of Unique Reviewers	Average Number of Applications Received per Reviewer	
			Category-Specific	Total
All CIHR Reviewers	Females	1,330		9.66
	Males	1,878		9.75
	TOTAL	3,208		9.72
Ethics as a Primary Focus	Females	88	1.31	11.60
	Males	34	1.41	8.76
	TOTAL	122	1.34	10.81
Ethics as a Non-Primary Focus	Females	67	1.10	13.18
	Males	40	1.08	14.53
	TOTAL	107	1.09	13.68
Law as a Primary Focus	Females	40	1.00	16.83
	Males	26	1.00	11.73
	TOTAL	66	1.00	14.82
Socio-Cultural Factors Related to Ethics as a Primary Focus	Females	167	1.51	12.59
	Males	84	1.44	11.93
	TOTAL	252	1.49	12.38

Note: Totals include researchers who did not identify sex and their reviews.

6. Indicators for which Data will be Available in Future

Data were available for 19 of the 28 indicators in the Ethics PM Strategy. For the remaining nine indicators, data are not yet available. These indicators and status are indicated in the table below. Data requiring end-of-grants reports The indicators for which data are not yet available are listed below:

Expected outcome	Approximate time frame	Indicators	Status
<i>Building capacity:</i> Strengthened ethics research community in Canada	<i>Intermediate</i>	Number of ethics reviewers recruited in the College of Reviewers	College recruitment in progress
<i>Advancing knowledge:</i> Strengthened and expanded national ethics knowledge base	<i>Intermediate</i>	Number of publications in ethics from CIHR-funded researchers	Only four end-of-grants reports for validated grants and awards were received by March 2017.
		Citations of findings of ethics research in scientific and non-scientific publications	To be based on publications listed in end-of-grant reports, or other method.
<i>Informing decision making:</i> Ethics research that informs decision making and practices in health and health research	<i>Long-term</i>	Percentage of ethics grants reporting new method, new theory or replication of findings	To be based on publications listed in end-of-grant reports
		Co-author analysis for ethics researchers being cited on publications	To be based on publications listed in end-of-grant reports.
		Field analysis of citations of ethics researchers	To be based on publications listed in end-of-grant reports.
		Percentage of ethics grants reporting contribution to improved health of Canadians	Only four end-of-grants reports for validated grants and awards were received by March 2017.
		Percentage of ethics grants reporting application of findings	Only four end-of-grants reports for validated grants and awards were received by March 2017.
		Percentage of ethics grants reporting contribution to more effective health services and products	Only four end-of-grants reports for validated grants and awards were received by March 2017.

Conclusion

In this second Ethics Performance Measurement Report, comparative data with respect to how CIHR is meeting its commitments under the Ethics Action Plan is provided over a two-year period. In future years, it will become possible to identify trends (such as in grants and awards investments), as well as impacts of CIHR's investments in ethics as data collection is expanded and enhanced.

Annex 1: CIHR ethics leadership strengthened at a national level

Table 1 Ethics-related education sessions with national scope in 2016-2017

Title of ethics education session	Format (e.g., webinar, teleconference, in-person)	Target Audience	# of Participants	% Satisfaction rate of participants after the education session	Source
National Health Ethics Week 2016: Criminalization of HIV Nondisclosure and the role of “confessional technologies”.	Invited speaker - in person and teleconference	CIHR staff and Institute personnel	15	100% (average satisfaction scores above 3 out of 5)	CIHR Ethics Office-invited speaker
National Health Ethics Week 2016: Organ Transplantation after Physician Assisted Dying	Invited speaker - in person and teleconference	CIHR staff and Institute personnel	21	100% (average satisfaction scores above 3 out of 5)	CIHR Ethics Office-invited speaker
Unconscious bias in peer review	Online learning module	Peer Reviewers	447	94.70%	CIHR College of Reviewers Branch
Two Sex and Gender Equity in Research Guidelines (SAGER) Webinars	Webinar series, with invited speakers	Canadian journal editors	20-25 (One of the webinars was recorded and transcribed, and is online)	(not evaluated)	CIHR Institute of Gender and Health

Table 2 Ethics-related meetings and presentations with national scope in 2016-2017

Broad focus	Title of Meeting	Date, Location	Type of Attendees	Additional information
Liaison with Canadian Bioethics Society (CBS)	CBS Annual Conference: Panel	May 25-28, 2016	CBS members	Presented highlights of CIHR’s achievements and activities related to ethics. Participants include: CIHR SCE, Chief Scientific Officer, Ethics Office
	Teleconference between CIHR-SCE-CBS	November 22, 2016	CBS Board of Directors	Plan the CIHR-CBS panel at the CBS annual conference and Café Scientifique

Broad focus	Title of Meeting	Date, Location	Type of Attendees	Additional information
	Teleconference between CIHR-SCE-CBS	January 12, 2017	CBS Board of Directors	Discuss CIHR-CBS panel at the CBS annual conference and Café Scientifique
	Teleconference between CIHR-SCE-CBS	March 9, 2017	CBS Board of Directors	Plan the CIHR-CBS panel at the CBS annual conference and Café Scientifique
Liaison with the Canadian Association of Research Ethics Boards (CAREB)	Canadian Association of Research Ethics Boards National Conference	May 25-28, 2016	CAREB members (research ethics board members and administrators)	Update on CIHR's activities in ethics from the Chief Scientific Officer
TOPICS FOCUSED ON ETHICS, OR WITH ETHICS COMPONENTS				
Mitigating unconscious bias in peer review	RENASCENT Conference (a program of the Lung Association)	April 26, 2007, Montreal	Early career investigators and trainees	To promote an understanding of unconscious bias, how it relates to peer review, and how to mitigate it. Organized by CIHR College of Reviewers Branch, and Institute of Circulatory and Respiratory Health
CIHR's Equity Strategy (equitable access to CIHR funding)	Various meetings	Various between November 2016 and March 2017	Various (researchers, universities, and all stakeholders in the health research enterprise)	Presentation by the CIHR Science Strategy Unit focused on the development of CIHR's Equity Strategy, with an initial focus on Gender Equity
Sex and Gender Equity in Research	Health Canada Research Ethics Board meeting	Ottawa, June 2, 2016	Policy makers	Webinar led by CIHR Institute of Gender and Health
	Sex and Gender Equity in Research	Memorial University, September 2016	University leaders, students, researchers	Ethics related presentation by the CIHR Institute of Gender and Health
	Sex and Gender Equity in Research	Montreal, Quebec November 3-4, 2016	Research community CIHR Institute Advisory Board on Research Excellence, Policy and Ethics	Conference + presentation, led by the CIHR Institute of Gender and Health
Genetics	5th Annual Canadian Human and Statistical Genetics Meeting	16-19 April, 2016, Halifax NS	Researchers	Sessions on ethical, legal, social aspects of human genome editing, genetic discrimination, data sharing. Support from CIHR Institute of

Broad focus	Title of Meeting	Date, Location	Type of Attendees	Additional information
				Genetics
	Genomics Policy Public Forum	October 2016	Researchers, policy makers	Funded through the Institute of Genetics Community Support Program
	12ième Colloque de l'Association de Thérapie Génique du Québec (ATGQ)	18 November 2016	Researchers, Clinicians, Government representative	Funded through the Institute of Genetics Community Support Program
	Gene Drive Sponsors and Supporters Meeting	March 22, 2017, Washington	Sponsors (funders) and supporters of gene drive research	Gene drive research raises ethical and legal questions. CIHR sent a CIHR Institute of Infection and Immunity as representative to the international meeting
	Stem Cell Network "think tank" on the status of human gene editing	August 31, 2016	Health ethics researchers, Health Canada	Shared SCE's "Human Germline Gene Editing: Points to Consider from a Canadian Perspective". Participants include CIHR SCE and Ethics Office.
	Stem Cell Network "think tank" on the status of mitochondrial replacement therapy	March 24, 2017	Health ethics researchers, Health Canada	Workshop to explore the status of mitochondrial replacement therapy in Canada, and policy and regulatory implications. Participants include CIHR SCE, Ethics Office, Institute of Genetics
Data sharing	Canadian Health Services and Policy Research Alliance Annual Meeting - Data Panel	May 9 2016, Toronto	Researchers, funders, health care organizations, Institutions	Panel of experts discussing data sharing, secondary use of data and data storage. Organized by CIHR Institute of Health Services and Policy Research
	Workshop on Recommendations Related to Amendment of the Statistics Act	July 27 2016, Montreal	Researchers	Developing recommendations to revise the Statistics Canada Act. Organized by CIHR Institute of Health Services and Policy Research
	IHSPR Strategic Advisory Group Meeting	December 13 2016, tele-conference	Researchers, funders, health care organizations	Discussion concerning TCPS 2 with respect to data sharing, secondary use of data and data storage. Organized by CIHR Institute of Health Services and Policy Research
Indigenous research	DNA on Loan: Bio-banking with Indigenous Values	16-17 May, 2016, Wendake, PQ	Researchers, Clinicians, Government representative, Indigenous representative, Elders	A forum to explore the issues surrounding long term storage of biological samples when research involves the Indigenous Peoples of Canada. Organized by CIHR Institute of Aboriginal Peoples' Health, Institute of Genetics and researchers.

Broad focus	Title of Meeting	Date, Location	Type of Attendees	Additional information
	Carleton University Institute on the Ethics of Research Involving Indigenous Peoples	June 6, 2016	Indigenous and non-Indigenous researchers including trainees	CIHR Ethics Office represented on a panel on past history of research encounters and better practices looking forward.
Patient engagement	SPOR SUPPORT Units Council	April 14, 2016	SUPPORT Units Council	CHIR Ethics Office presentation of the new Ethics in Patient Engagement project to develop guidance
	Canadian Association of Research Ethics Boards (CAREB) National Conference: Breakout session on Patient Engagement	May 25-28, 2016	CAREB members (research ethics board members and administrators)	CIHR SCE and CIHR Ethics Office presentation of the new Ethics in Patient Engagement project to develop guidance
EXAMPLES OF LOCAL EVENTS				
Trans-gendered peoples' health	Café Scientifique: Trans-generations: trans history, health, and politics in Montréal and beyond	January 13, 2016	Patients, Public, researchers, Physicians	Organized by CIHR Institute of Genetics, 20-30 participants.
Personalized Medicine in primary care	Café Scientifique	March 23, 2016	Patients, Public, researchers, Physicians	Presentations included ethical aspects of personalized medicine in primary care. Organized by CIHR Institute of Genetics, 20-30 participants.

Table 3 CHIR's ethics-related public products in 2016-2017

Title of Product	Format (html, printed, other)	Publication Date	Target Audience	Additional information
SCE Meetings:				
SCE Meeting Highlights: March 2016	CIHR web site, html	August 8, 2016	General public, research community	
SCE Meeting Highlights: June 2016	CIHR web site, html	November 2016	General public, research community	
SCE Meeting Highlights: October 2016	CIHR web site, html	February 28, 2017	General public, research community	
SCE Meeting Highlights: December 2016	CIHR web site, html	February 28, 2017	General public, research community	
Evaluation:				
Ethics Performance Measurement Report 2015-2016	CIHR web site, html	December 22, 2016	CBS, Health Canada, CAREB, SSHRC, NSERC, research institutions, ethics community	First report on the Ethics PM Strategy, providing baseline data for future comparison
Updates on Ethics at CIHR:				
Communiqué from the CSO	CIHR web site, html	December 22, 2016	CBS, CAREB, Health Canada, SSHRC, NSERC, research institutions, ethics community	Update on SCE's work since March 2016 update
Special Topics:				
Human Germline Gene Editing: Points to Consider, from a Canadian Perspective	Printed, notice of availability on request in Communiqué	December 22, 2016	Policy makers, research community	
Institute of Nutrition, Metabolism and Diabetes (INMD) Connections August 2016-Responsible Conduct of Research for the Government of Canada	Institute newsletter available in both html and pdf	Emailed to newsletter list August 2016; posted to web Sept 2016	INMD Research Community	Article on Tri-Agency Framework: Responsible Conduct of Research (RCR)

Annex 2: Strengthened accountability for ethics within CIHR

Table 4 CIHR Governance bodies and ethics representation

CIHR Governance bodies (2016-2017)	Ethics stakeholders on governance body
1. Governing Council (GC)	<ul style="list-style-type: none"> Individual who is expected to bring an ethics perspective (external individual). <i>A member of Governing Council chairs the GC Standing Committee on Ethics, and is responsible for reporting back to GC on SCE activities, including any recommendations for GC decision.</i>
2. GC Executive Committee	--
3. GC Audit Committee	--
4. GC Stem Cell Oversight Committee	<ul style="list-style-type: none"> Individuals who are expected to bring an ethics perspective (external individuals).
5. GC Standing Committee on Ethics	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR, as evident in the title of their position or direct corporate reporting (ex-officio members) Individuals who are expected to bring an ethics perspective (staff and external individuals).
6. GC Nominating and Governance Committee	<ul style="list-style-type: none"> Individual who is expected to bring an ethics perspective (external individual). <i>In 2016-2017 the GC member who is the Chair of the GC Standing Committee on Ethics was also a member of the GC Nominating and Governance Committee.</i>
7. Executive Management Committee (EMC)	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR, as evident in the title of their position or direct corporate reporting
8. Extended EMC	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR, as evident in the title of their position or direct corporate reporting
9. Science Council (SC)	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR, as evident in the title of their position or direct corporate reporting
10. SC Subcommittee on Implementation and Oversight	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR, as evident in the title of their position or direct corporate reporting

Table 5 CIHR advisory bodies and ethics representation

CIHR Advisory Committees 2016-2017	Is ethics represented? Y/N	If yes, by:
Five (5) CIHR Institute Advisory Boards	Y (X5)	<ul style="list-style-type: none"> Individuals who are expected to bring an ethics perspective (external individuals)
CIHR Ethical, Legal and Social Issues (ELSI) Advisory Committee for the Canadian Longitudinal Study on Aging	Y	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR and Individuals who are expected to bring an ethics perspective, and who are staff and external individuals.
CIHR Working Group on Ethics in Patient Engagement in Research	Y	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR and Individuals who are expected to bring an ethics perspective, and who are staff and external individuals.
Reference Group for the Appropriate Review of Indigenous Health Research	Y	<ul style="list-style-type: none"> Individuals who are expected to bring an ethics perspective, and who are staff, and external individuals (e.g., cultural appropriateness).
CIHR HIV/AIDS Research Advisory Committee (CHARAC)	Y	<ul style="list-style-type: none"> Individuals who are expected to bring an ethics perspective, and who are external individuals (e.g., Indigenous research ethics, gender equality, social equality for marginalized populations)
Institute of Musculoskeletal Health and Arthritis Evaluation Panel	Y	<ul style="list-style-type: none"> Individuals who are expected to bring an ethics perspective, and who are external individuals (e.g., access to care for vulnerable populations)
CIHR Peer Review Expert Panel	Y	<ul style="list-style-type: none"> Individuals who are expected to bring an ethics perspective, and who are external individuals (e.g., equitable access to funding, transparent reporting, responsible conduct of research)
CIHR Peer Review Working Group	Y	<ul style="list-style-type: none"> Individuals who are expected to bring an ethics perspective, and who are external individuals (e.g., ethical issues in Indigenous research)
National Steering Committee for Canada's Strategy for Patient-Oriented Research (SPOR)	Y	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR (ex-officio member)
CIHR External Working Group on Training	Y	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR

CIHR Advisory Committees 2016-2017	Is ethics represented? Y/N	If yes, by:
Drug Safety and Effectiveness Network (DSEN) Steering Committee	Y	<ul style="list-style-type: none"> Staff with ethics as a corporate responsibility at CIHR
Institute of Nutrition, Metabolism and Diabetes Institute Evaluation Panel	N	
Institute of Neurosciences, Mental Health and Addiction Evaluation Panel	N	
Institute of Cancer Research Evaluation Panel	N	
Drug Safety and Effectiveness Network (DSEN) Science Advisory Committee	N	
College Chairs	N	
Tri-Council (TC3) Data Management Plan Advisory Committee	N	

Table 6 Issues addressed by the Standing Committee on Ethics (SCE) and follow up actions by CIHR or the Tri-Agency Secretariat on Responsible Conduct of Research (SRCR)

Fiscal year issue first submitted	Issue	Key follow up actions since initial submission (as of July 2017):
April 2014-March 2015	1) Evaluation and Data	<ul style="list-style-type: none"> Refinements to the Ethics Performance Measurement (PM) Strategy Refinements to the first I Ethics PM report; endorsement of report. Refinements to plans for the 2nd Ethics PM report Considerations of how to measure the impact of ethics research
	2) Communication and Engagement	<ul style="list-style-type: none"> Ongoing liaison with the Canadian Bioethics Society (CBS) and the Canadian Association of Research Ethics Boards CBS an invited guest at the SCE's October 2016 meeting. Regular communiqués with updates Increase in social media and web presence

Fiscal year issue first submitted	Issue	Key follow up actions since initial submission (as of July 2017):
	3) Integration of ethics across CIHR	<ul style="list-style-type: none"> • International scan of how funders stimulate researchers' consideration of ethics • Updates to SCE on activities to integrate ethics • Ethics education project continued
	4) Global Alliance for Genomics and Health (GAGH)	<ul style="list-style-type: none"> • Informed by the SCE, CIHR became a member of GAGH • Recommendations for additions to Tri-Agency policies
	5) Pan-Canadian Clinical Trial on Chronic Cerebrospinal Venous Insufficiency Procedure for Multiple Sclerosis	<ul style="list-style-type: none"> • Informed the Principal Investigator of SCE's advice with respect to disclosure of risks to participants
	6) Strategy on Patient-Oriented Research (SPOR): Patient and Citizen Engagement	<ul style="list-style-type: none"> • Establishment of a working group to develop ethics guidance on the engagement of patients in research
	7) CIHR Partnerships	<ul style="list-style-type: none"> • Incorporation of advice on CIHR's partnership benefit-risk assessment approach and tool
	8) Role of the SCE and Terms of Reference	<ul style="list-style-type: none"> • International scan of ethics committees and mandates • Health Canada (Bioethics and Science Advice Unit) has a standing invitation to attend SCE meetings • Other health portfolio and funders invited as guests to SCE meetings, as relevant • Revisions and updates to SCE terms of reference
	*Innovative Clinical Trials	<i>No follow up action involving the SCE, due to overlap with work underway by others in Canada.</i>
April 2015- March 2016	1) Ethics and Disruptive Technologies	<ul style="list-style-type: none"> • International scan of ethics issues and other funders' activities • Action plan developed and implemented, includes establishment of an advisory group to develop ethics guidance
	2) Electronic consent	<ul style="list-style-type: none"> • SCE comments provided to the Panel on Research Ethics (through the SRCR)
	3) Human germline gene editing	<ul style="list-style-type: none"> • Development in collaboration with the SCE a "Points to Consider" document to inform Governing Council, Science Council and Health Canada

Fiscal year issue first submitted	Issue	Key follow up actions since initial submission (as of July 2017):
	4) Crowdfunding research	<ul style="list-style-type: none"> Request to the Panel on Research Ethics (through the SRCR) to provide an Interpretation of TCPS 2 related to pay-to-participate research. Development of a CIHR Action plan that broadens the issue to partnerships in general, and merges with follow up actions under the Partnership issue.
	5) CIHR Strategic Action Plan on Training	<ul style="list-style-type: none"> CIHR to discuss training with the Canadian Bioethics Society as a collaboration opportunity (not yet initiated)
	6) Global Health: Coalition for Global Health Research (CCGHR) Draft Principles for Canadians involved in Global Health Research	<ul style="list-style-type: none"> Communicated SCE feedback to CCGHR
	7) CIHR Health-related and Health Research Data Framework-Draft	<ul style="list-style-type: none"> Revisions to the draft framework
April 2016-March 2017	1) Ethical Imperative of Sex and Gender Considerations in Research	<ul style="list-style-type: none"> Development of an action plan for training for researchers and peer reviewers, for SCE feedback
	2) World Health Organization (WHO) Ebola Working Group-draft ethical guidance	<ul style="list-style-type: none"> Circulation of the draft document for SCE feedback
	3) CIHR Strategic Action Plan on Equity	<ul style="list-style-type: none"> Consideration of SCE feedback in revisions to the action plan
	4) Equity and Personalized Medicine	<ul style="list-style-type: none"> Scan of consideration of equitable access to research benefits in CIHR initiatives, for SCE feedback
	5) Indigenous research (and the recommendations of the Truth and Reconciliation Commission)	<ul style="list-style-type: none"> Revisions to SCE terms of reference to enhance Indigenous representation
	6) Consultations on revisions to the Tri-Council Policy Statement: Ethical conduct for research involving humans 2nd edition (TCPS 2)	<ul style="list-style-type: none"> Coordination of SCE comments on proposed TCPS 2 revisions to SRCR for the Panel on Research Ethics
	7) Gene drive research	<ul style="list-style-type: none"> Scan to determined extent of CIHR investments in gene drive research to date.
	Canadian Clinical Trials Coordinating Centre (CCTCC) Accreditation Working Group: Final Recommendations and Joint	For information only.

Fiscal year issue first submitted	Issue	Key follow up actions since initial submission (as of July 2017):
	Management Response (The CCTCC Accreditation Working Group was first presented in May 2015 as an information item, and an SCE member was appointed to the Working Group)	

Table 7 CIHR and Tri-Council research policies with ethics components

CIHR and Tri-Council Research Policies in effect in 2016-2017	Summary of Ethics Component
<ul style="list-style-type: none"> • CIHR Grants and Awards Guide 	<ul style="list-style-type: none"> • Expectation that gender and sex will be integrated into research designs when appropriate, as per the Health Portfolio SGBA Policy and TCPS 2.
<ul style="list-style-type: none"> • CIHR Grants and Awards Guide • Tri-Agency Financial Administration Guide • Agreement on the Administration of Agency Grants and Awards by Research Institutions 	<ul style="list-style-type: none"> • Requirement for grant and awards recipients and institutions to comply with applicable ethical, legal and regulatory requirements
<ul style="list-style-type: none"> • Agreement on the Administration of Agency Grants and Awards by Research Institutions 	<ul style="list-style-type: none"> • Requirement for institutions to avoid or mitigate any conflicts of interest
<ul style="list-style-type: none"> • Tri-Agency Open Access Policy on Publications 	<ul style="list-style-type: none"> • Requirement for grant and award recipients to comply with any additional data preservation, retention and protection policies and practices of the grant recipient's institution and research ethics board
<ul style="list-style-type: none"> • Tri-Agency Financial Administration Guide 	<ul style="list-style-type: none"> • Statement that allegations of breaches of Agency policies are addressed in the Tri-Agency Framework: Responsible Conduct of Research
<ul style="list-style-type: none"> • Tri-Agency Responsible Conduct of Research Framework 	<ul style="list-style-type: none"> • Research integrity policy and enforcement
<ul style="list-style-type: none"> • Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans 2nd edition 2014 	<ul style="list-style-type: none"> • Guidance on ethical conduct of research involving humans
<ul style="list-style-type: none"> • Conflict of Interest and Confidentiality Policy of Federal Research Funding Organizations 	<ul style="list-style-type: none"> • Management of conflict of interest in peer review, and confidentiality of peer review information, and enforcement of the policy

CIHR and Tri-Council Research Policies in effect in 2016-2017	Summary of Ethics Component
<ul style="list-style-type: none"> Health Portfolio Sex and Gender-Based Analysis Policy 	<ul style="list-style-type: none"> References to federal policy commitments to major international instruments concerning human rights and gender equality, and the Canadian Charter of Rights and Freedom
<ul style="list-style-type: none"> CIHR Policy Statement on Official Languages 	<ul style="list-style-type: none"> Intention to facilitate equitable access to CIHR programs and services for health research stakeholders in official language minority communities
<ul style="list-style-type: none"> Tri-Agency Statement of Principles on Digital Data Management 	<ul style="list-style-type: none"> Expectations that researchers, research communities and research institutions, will demonstrate data management planning, while respected all commercial, legal and ethical obligations.

Annex 3: Strengthened and expanded national ethics knowledge base

Annex 3A. Operational definitions and inclusion-exclusion criteria for grants and awards investments

A.1 Ethics as a primary or non-primary focus:

Ethics- Operational definition:

The application incorporates ethics as it applies to health (including health research, health promotion and maintenance, clinical care, population and public health, health systems and services, policy and governance). Relevant applications are framed around, and expand upon, ethical principles, concepts or issues. Applications may have ethics **as a primary or non-primary focus**. Both types will be captured, but will be reported separately.

Ethics as a Primary Focus

Additional Inclusion criteria- Ethics primary:

1. Ethics—either explicit use of the word “ethics/ethical” or of an ethics concept such as “informed consent”, “research integrity”, “conflict of interest”, “moral distress”—is the driver and central focus of the application, even where there are other aspects to the application (e.g., policy development).
2. The application has no abstract or summary but the title clearly highlights a central focus on ethics.
3. Applications not withdrawn from the Catalyst Grants-Ethics program.

Ethics as a Non-Primary Focus

Additional inclusion criteria- Ethics non-primary:

1. Ethics, or an ethics concept, is a component of the application but is not the primary focus (e.g., objectives include exploration of ethics issues, planned activities include consultations with ethics experts to address ethical aspects)
2. The abstract or summary states that the team includes expertise in ethics

Additional exclusion criteria- Ethics non-primary:

1. The application mentions that the research has ethical implications, or is in the context of an ethical issue, without plans to explore the ethical aspect(s).

A.2 Law as a primary focus

Law- Operational definition:

The application explores law-related aspects of health and health research as a primary focus beyond compliance with existing legal frameworks. Applications may or may not have an explicit ethical dimension to the project.

Additional inclusion criteria- Law:

1. The application has a primary focus on exploring the implementation of a legal or regulatory framework, or exploring the criminal justice system, where the primary purpose is to revise or evaluate laws or regulations.

Additional exclusion criteria- Law:

1. The application states that there is a legal/regulatory context, but the focus is on policy, practice or tools.
2. The application examines the effects of punishment or penalties on those who break the law.
3. The application examines the role of police services in the health care system, where the focus is on health care delivery or procedures.

A.3 Socio-cultural factors related to ethics as a primary focus:

Socio-Cultural- Operational definition:

The application explores social and cultural dimensions of health and health research as a primary focus. These applications may or may not explicitly reference ethics or involve ethics researchers. The application explores concepts related to ethics such as:

- cultural appropriateness and norms;
- vulnerability, marginalization and stigmatization;
- loss or devaluation of language and culture;
- access to culturally appropriate materials and services;
- equity/inequity.

Note: The meaning of “vulnerability” for the purposes of this data validation process is: “A diminished ability to fully safeguard one’s own interests. This may be caused by limited decision-making capacity or limited access to social goods, such as rights, opportunities and power. Individuals or groups may experience vulnerability to different degrees and at different times, depending on their circumstances” (adapted from TCPS 2).

Additional inclusion criteria- Socio-cultural:

1. A primary focus on:
 - a) exploring (and developing) theories or frameworks of ethics-related concepts and principles
 - b) exploring Aboriginal cultural ceremonies
 - c) involving loss or devaluation of language and culture
 - d) engaging stakeholders to elicit information on cultural appropriateness and norms (including gender norms and identities) -- e.g., in the design or development of an intervention. Exclude projects focused on implementation of an intervention- see 2b.
 - e) engaging groups/individuals in vulnerable circumstances to find out what interventions, research priorities, etc., are appropriate for them
 - f) exploring the causes (e.g., barriers) or consequences (e.g., impacts) of circumstances of vulnerability, marginalization or stigmatization on groups or individuals

- g) designing an intervention focused around ethics-related concepts (e.g., weight bias/stigmatization)
- h) implementing training focused on ethics-related concepts (e.g., culturally appropriate research methods/skills, cultural norms, vulnerability)

Additional exclusion criteria- Socio-cultural:

2. A primary focus on:

- a) exploring causes of disease (including psychological conditions), even if the causes involve social/cultural determinants of health unless the primary focus is on causes of circumstances of vulnerability, marginalization or stigmatization (see 1f).
- b) implementing an intervention (e.g., health care delivery, training, education, networking) or disseminating the results of an intervention, even if targeted to persons or groups in circumstances of vulnerability. Training focused on ethics-related concepts falls under 1h and should be included. Programmatic or Foundation grant applications that include the implementation of an intervention should be excluded unless the primary focus of the application falls under one of the inclusion criteria.
- c) evaluating an intervention/program, even if the evaluation involves exploring the experiences and views of persons or groups in circumstances of vulnerability with regard to the intervention, unless the evaluation is directly informing a (re-)design of the intervention (see 1d). Programmatic or Foundation grant applications that include the evaluation of an intervention should be excluded unless the primary focus of the application falls under one of the inclusion criteria.
- d) exploring a phenomenon/cause/event itself (e.g., climate change) , with a non-primary focus on the impact on, or experiences of, groups or persons in circumstances of vulnerability
- e) “vulnerability” as “risk of disease”, “risk of adverse effects of disease”, or “risk of unhealthy behaviours”
- f) engaging stakeholders, unless focused on 1d (cultural appropriateness/norms) or 1e (appropriateness for those in vulnerable circumstances)

Note:

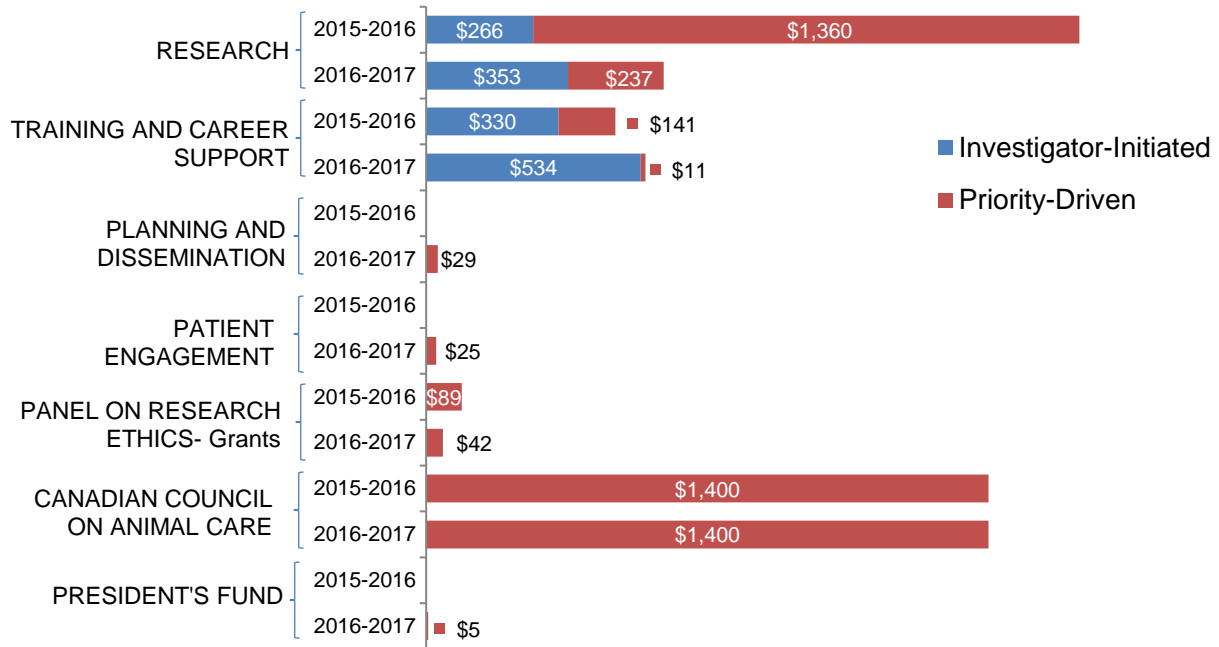
If applications only have title and investigator-provided keywords, and no Abstract or Summary, the applications were classified as “not relevant”, with exception for Ethics Primary (see Ethics). CIHR-funded Canada Research Chair applications were classified as “not relevant” for this reason.

Annex 3B. Detailed results for ethics-related grants and awards by program and year

B.1 Ethics as a Primary Focus

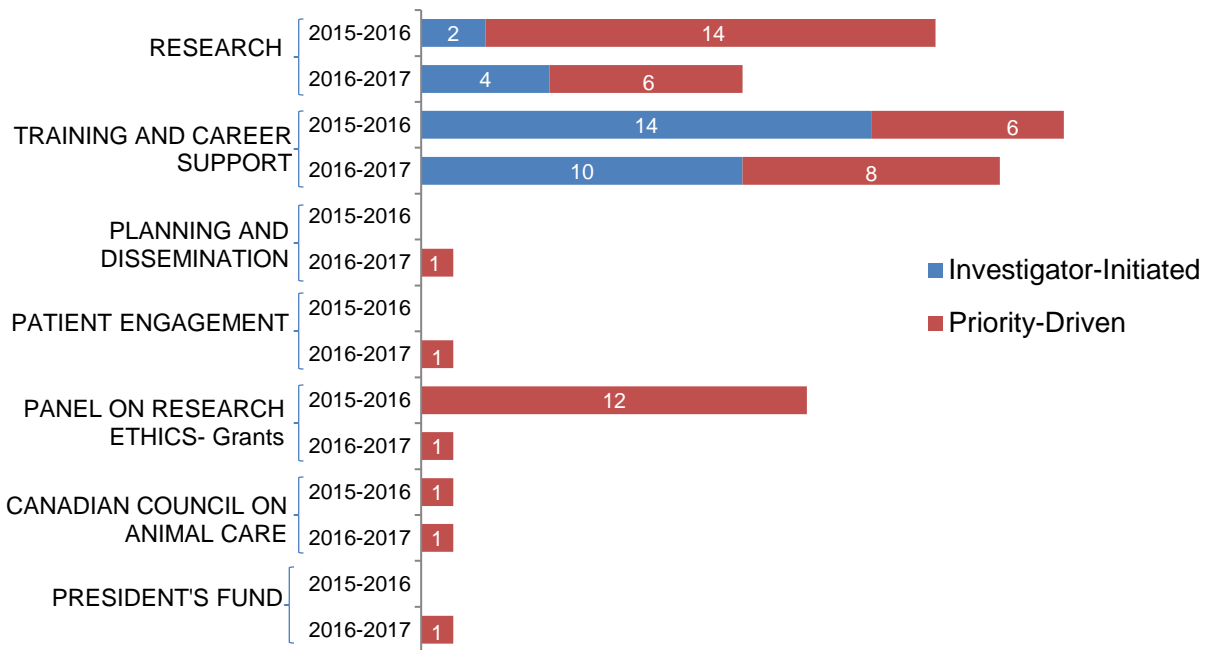
B.1a Ethics-Primary Focus: New and continuing grants and awards

Ethics as a Primary Focus: CIHR Expenditures (in thousands) for new and continuing grants and awards, by program type and year



Note: Panel on Research Ethics (PRE) grants are issued by PRE for travel, education, and support. The Canadian Council on Animal Care (CCAC) grant is a directed grant to that organization.

Ethics as a Primary Focus: Number of new and continuing grants and awards, by program type and year



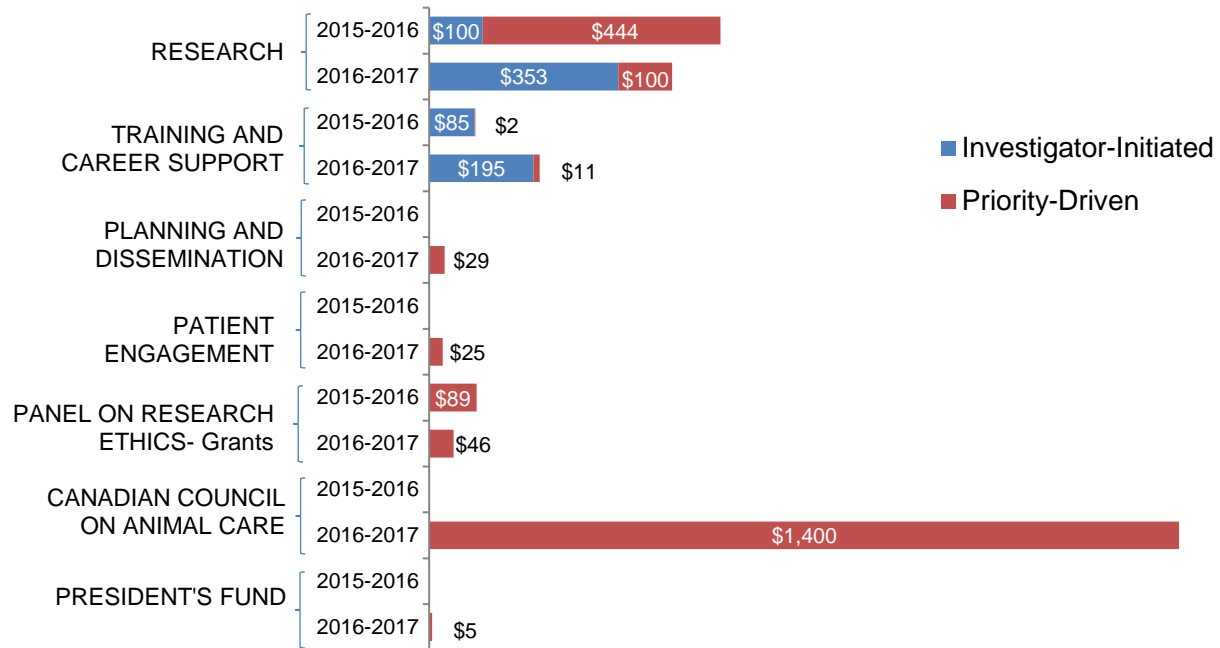
Note: Panel on Research Ethics (PRE) grants are issued by PRE for travel, education, and support. The Canadian Council on Animal Care (CCAC) grant is a directed grant to that organization.

Ethics as a Primary Focus: Number of new and continuing grants and awards, and expenditures, in 2016-2017, by program name.

Programs	#	\$	% of \$
Investigator-Initiated	14	\$887,601.00	33.65%
Research	4	\$353,434.00	13.40%
Operating Grant: Knowledge to Action	1	\$83,333.00	3.16%
Project Grant	3	\$270,101.00	10.24%
Training and Career Support	10	\$534,167.00	20.26%
CIHR Fellowship	5	\$347,500.00	13.18%
Doctoral Award - Frederick Banting and Charles Best Canada Graduate Scholarships	3	\$120,000.00	4.55%
Doctoral: Vanier Canada Graduate Scholarships	2	\$66,667.00	2.53%
Priority-Driven	19	\$534,086	74.32%
Research	6	\$237,463.00	9.00%
Catalyst Grant: Ethics	4	\$99,963.00	3.79%
Operating Grant - Priority Announcement: Ethics	1	\$100,000.00	3.79%
Team Grant: European Research Projects of Neuroscience	1	\$37,500.00	1.42%
Training and Career Support	8	\$11,420.00	0.43%
Travel Awards - Institute Community Support	8	\$11,420.00	0.43%
Planning and Dissemination	2	\$29,000.00	1.10%
Planning and Dissemination Grant– Institute Community Support	2	\$29,000.00	1.10%
Patient Engagement	1	\$25,000.00	0.95%
Patient-Oriented Research Collaboration Grants	1	\$25,000.00	0.95%
Panel on Research Ethics- Grants for travel, education, support	1	\$41,646.00	1.58%
Canadian Council on Animal Care	1	\$1,400,000.00	53.08%
President's Fund	1	\$5,400.00	0.20%
Grand Total	34	\$2,637,530.00	100%

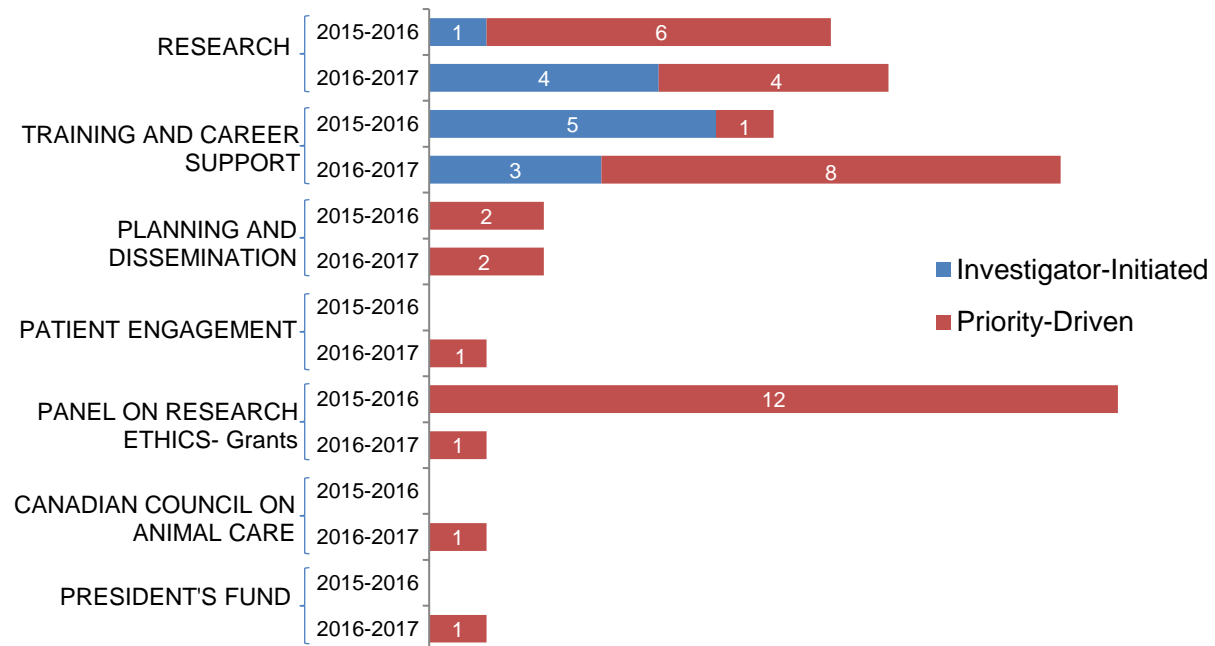
B.1b Ethics-Primary Focus: New grants and awards

Ethics as a Primary Focus: CIHR expenditures (in thousands) for new grants and awards, by program type and year



Note: Panel on Research Ethics (PRE) grants are issued by PRE for travel, education, and support. The Canadian Council on Animal Care (CCAC) grant is a directed grant to that organization.

Ethics as a Primary Focus: Number of new grants and awards, by program type and year



Note: Panel on Research Ethics (PRE) grants are issued by PRE for travel, education, and support. The Canadian Council on Animal Care (CCAC) grant is a directed grant to that organization.

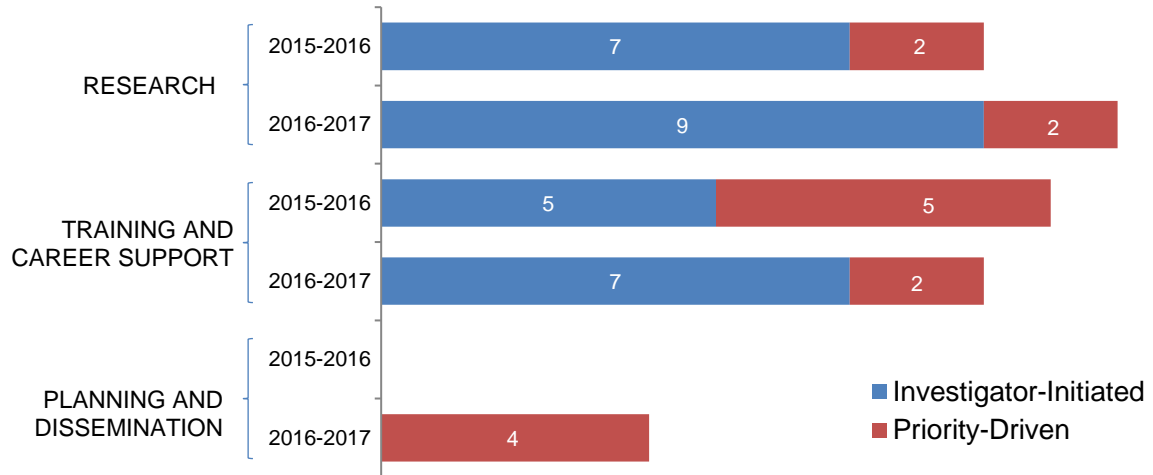
Ethics as a Primary Focus: Number of new grants and awards, and expenditures, in 2016-2017, by program name.

Programs	#	\$	% of \$
Investigator-Initiated	7	\$548,434.00	25.38%
Research	4	\$353,434.00	16.36%
Operating Grant: Knowledge to Action	1	\$83,333.00	3.86%
Project Grant	3	\$270,101.00	12.50%
Training and Career Support	3	\$195,000.00	9.02%
CIHR Fellowship	1	\$110,000.00	5.09%
Doctoral Award - Frederick Banting and Charles Best Canada Graduate Scholarships	1	\$35,000.00	1.62%
Doctoral: Vanier Canada Graduate Scholarships	1	\$50,000.00	2.31%
Priority-Driven	18	\$1,612,429	74.62%
Research	4	\$99,963.00	4.63%
Catalyst Grant: Ethics	4	\$99,963.00	4.63%
Training and Career Support	8	\$11,420.00	0.53%
Travel Awards - Institute Community Support	8	\$11,420.00	0.53%
Planning and Dissemination	2	\$29,000.00	1.34%
Planning and Dissemination Grant– Institute Community Support	2	\$29,000.00	1.34%
Patient Engagement	1	\$25,000.00	1.16%
Patient-Oriented Research Collaboration Grants	1	\$25,000.00	1.16%
Panel on Research Ethics- Grants for travel, education, support	1	\$41,646.00	1.93%
Canadian Council on Animal Care	1	\$1,400,000.00	64.79%
President's Fund	1	\$5,400.00	0.25%
Grand Total	25	\$2,160,863.00	100%

B.2 Ethics as a Non-Primary Focus

B.2a Ethics- Non-Primary Focus: New and continuing grants and awards

Ethics as a Non-Primary Focus: Number of new and continuing grants and awards, by program type and year



Note: Expenditures for “Ethics as a Non-Primary Focus” cannot be reported because there are no data on the amount of grant/award budgets allocated to ethics components.

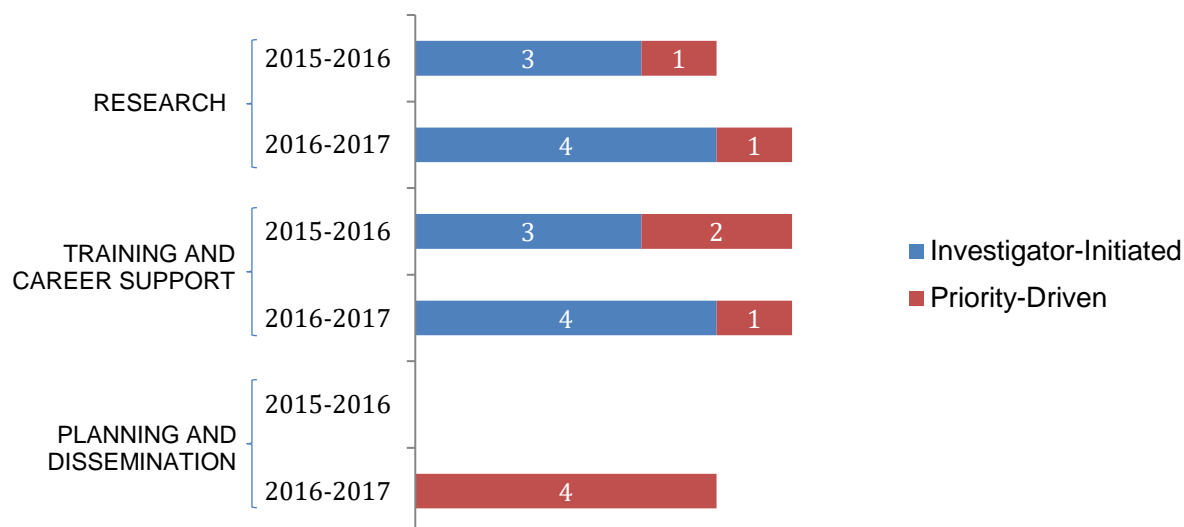
Ethics as a Non-Primary Focus: Number of new and continuing grants and awards in 2016-2017, by program name.

Programs	#
Investigator-Initiated	16
Research	9
Foundation Grant	3
Operating Grant*	3
Project Grant	3
Training and Career Support	7
Banting Postdoctoral Fellowship Program	1
CIHR Fellowship**	1
CIHR New Investigator	1
Doctoral Award - Frederick Banting and Charles Best Canada Graduate Scholarships	2
Master's Award: Frederick Banting and Charles Best Canada Graduate Scholarships**	2
Priority-Driven	8
Research	2
Team Grant: Big Data on Dementia	1
Team Grant: HIV/AIDS Vaccine Discovery and Social Research	1
Training and Career Support	2
Doctoral Award - Frederick Banting and Charles Best Canada Graduate Scholarships	1
Travel Awards - Institute Community Support	1
Planning and Dissemination	4
Planning and Dissemination Grant– Institute Community Support	4
Grand Total	24

Note. Expenditures for “Ethics as a Non-Primary Focus” cannot be reported because there are no data on the amount of grant/award budgets allocated to ethics components. *One Operating Grant was also counted in the Socio-Cultural Factors related to Ethics Grants and Awards. **One CIHR Fellowship and one Master’s Award were also counted in the Law as a Primary Focus Grants and Awards.

B.2b Ethics- Non-Primary Focus: New grants and awards

Ethics as a Non-Primary Focus: Number of new grants and awards, by program type and year



Note: Expenditures for “Ethics as a Non-Primary Focus” cannot be reported because there are no data on the amount of grant/award budgets allocated to ethics components

Ethics as a Non-Primary Focus: Number of new grants and awards in 2016-2017 by Program Name.

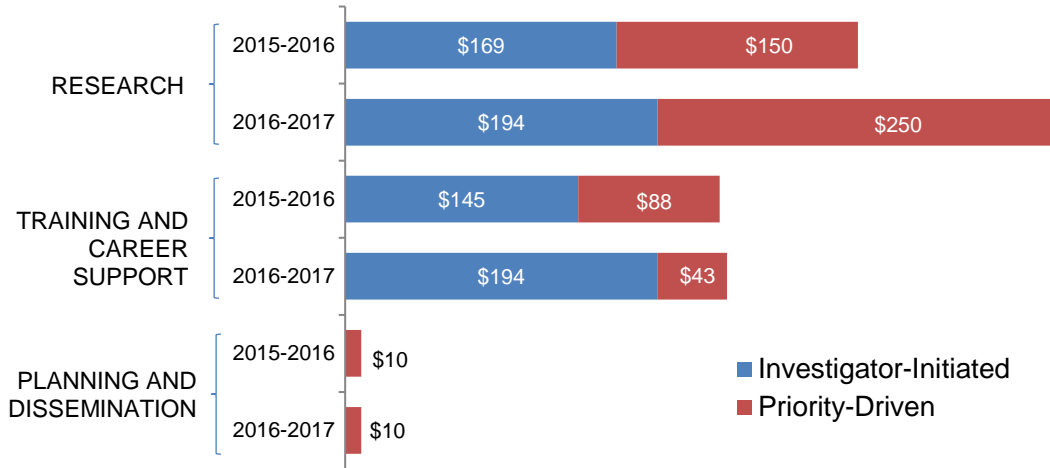
Programs	#
Investigator-Initiated	8
Research	4
Foundation Grant	1
Project Grant	3
Training and Career Support	4
Banting Postdoctoral Fellowship Program	1
CIHR Fellowship*	1
Master's Award: Frederick Banting and Charles Best Canada Graduate Scholarships*	2
Priority-Driven	6
Research	1
Team Grant: Big Data on Dementia	1
Training and Career Support	1
Travel Awards - Institute Community Support	1
Planning and Dissemination	4
Planning and Dissemination Grant– Institute Community Support	4
Grand Total	14

Note: Expenditures for “Ethics as a Non-Primary Focus” cannot be reported because there are no data on the amount of grant/award budgets allocated to ethics components.*One CIHR Fellowship and one Master’s Award were also counted in the Law as a Primary Focus Grants and Awards.

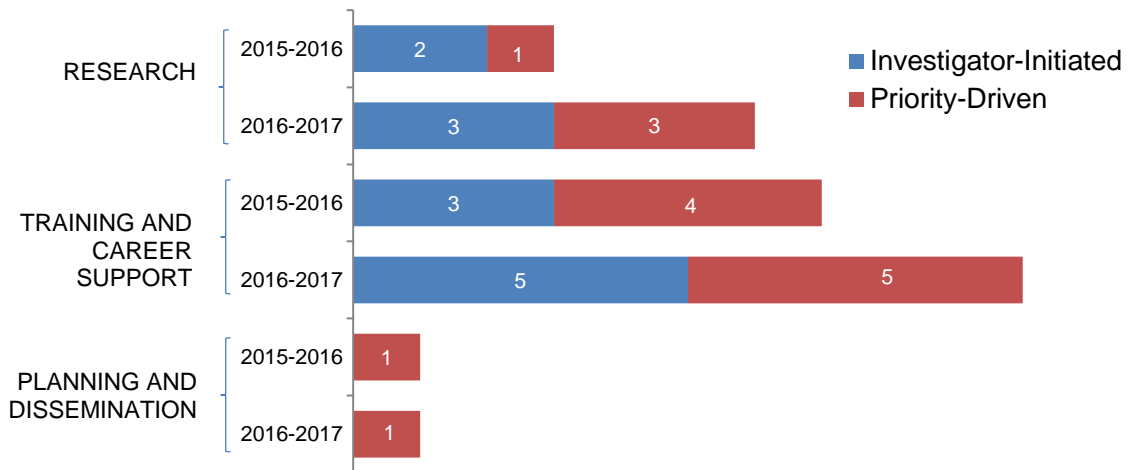
B.3 Law as a Primary Focus

B.3a Law- Primary Focus: New and continuing grants and awards

Law as a Primary Focus: CIHR Expenditures (in Thousands) for new and continuing grants and awards, by program type and year



Law as a Primary Focus: Number of new and continuing grants and awards, by program type and year



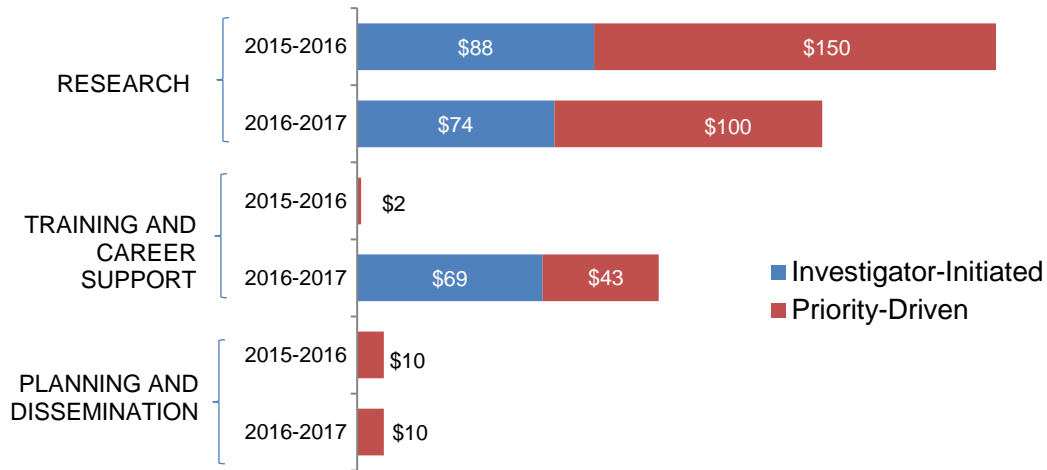
Law as a Primary Focus: Number of new and continuing grants and awards, and expenditures, in 2016-2017, by program name.

Programs	#	\$	% of \$
Investigator-Initiated	8	\$388,491.00	56.16%
Research	3	\$194,324.00	28.09%
Operating Grant	2	\$120,741.00	17.45%
Project Grant	1	\$73,583.00	10.64%
Training and Career Support	5	\$194,167.00	28.07%
CIHR Fellowship*	2	\$109,167.00	15.78%
Doctoral: Vanier Canada Graduate Scholarships	1	\$50,000.00	7.23%
Master's Award: Frederick Banting and Charles Best Canada Graduate Scholarships*	2	\$35,000.00	5.06%
Priority-Driven	9	\$303,251	43.84%
Research	3	\$249,891.00	36.12%
Healthy and Productive Work – Partnership Development Grant	2	\$100,000.00	14.46%
Operating Grant - HIV/AIDS CBR Program - General	1	\$149,891.00	21.67%
Training and Career Support	5	\$43,415.00	6.28%
Best Brains Exchange Travel Award	2	\$7,145.00	1.03%
Doctoral Research Award - PA: Aboriginal Research Methodologies	1	\$33,500.00	4.84%
Travel Awards - Institute Community Support	2	\$2,770.00	0.40%
Planning and Dissemination	1	\$9,945.00	1.44%
Planning and Dissemination Grant– Institute Community Support	1	\$9,945.00	1.44%
Grand Total	17	\$691,742.00	100%

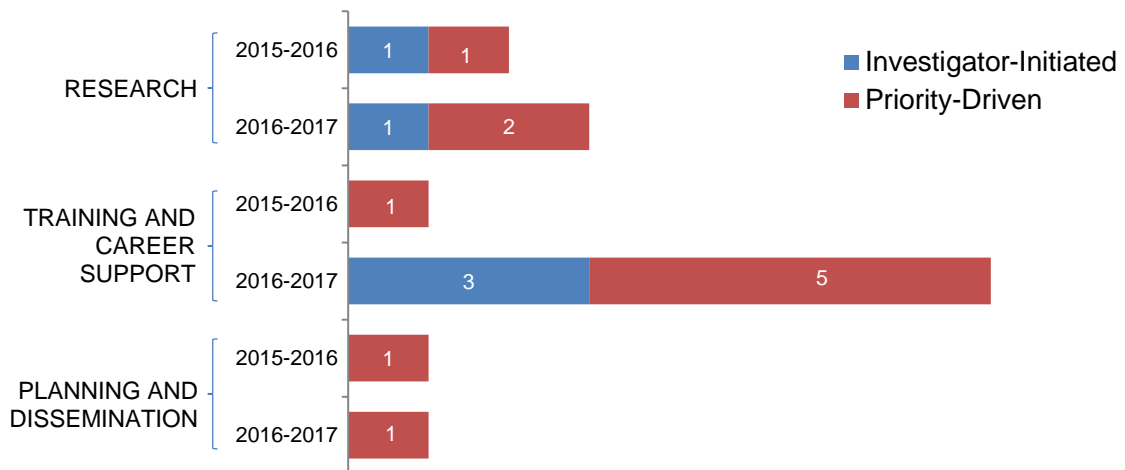
Note. *One CIHR Fellowship and one Master's Award were also counted in the Ethics as a Non-Primary Focus Grants and Awards. PA = Priority Announcement on an open competition to offer additional sources of funding for highly rated applications that are relevant to specific CIHR priorities.

B.3a Law- Primary Focus: New grants and awards

Law as a Primary Focus: CIHR expenditures (in thousands) for new grants and awards, by program type and year



Law as a Primary Focus: Number of new grants and awards, by program type and year



Law as a Primary Focus: Number of new grants and awards, and expenditures, in 2016-2017, by program name.

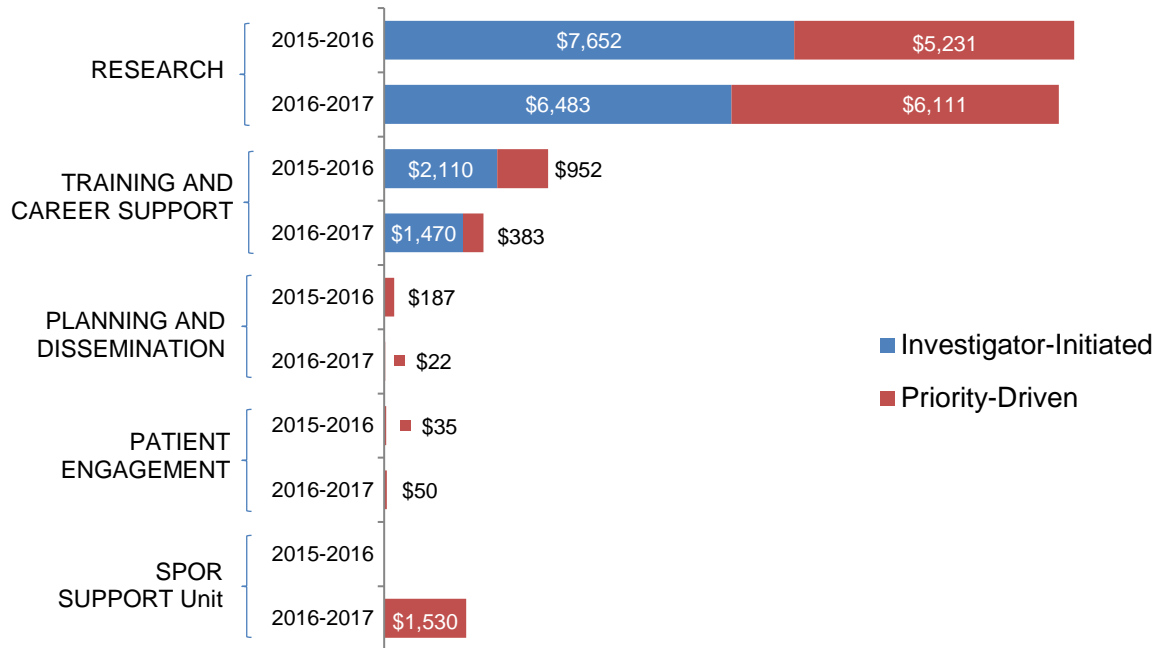
Programs	#	\$	% of \$
Investigator-Initiated	4	\$142,750.00	48.21%
Research	1	\$73,583.00	24.85%
Project Grant	1	\$73,583.00	24.85%
Training and Career Support	3	\$69,167.00	23.36%
CIHR Fellowship*	1	\$34,167.00	11.54%
Master's Award: Frederick Banting and Charles Best Canada Graduate Scholarships*	2	\$35,000.00	11.82%
Priority-Driven	8	\$153,360	51.79%
Research	2	\$100,000.00	33.77%
Healthy and Productive Work – PDG	2	\$100,000.00	33.77%
Training and Career Support	5	\$43,415.00	14.66%
Best Brains Exchange Travel Award	2	\$7,145.00	2.41%
Doctoral Research Award - PA: Aboriginal Research Methodologies	1	\$33,500.00	11.31%
Travel Awards - Institute Community Support	2	\$2,770.00	0.94%
Planning and Dissemination	1	\$9,945.00	3.36%
Planning and Dissemination Grant– Institute Community Support	1	\$9,945.00	3.36%
Grand Total	12	\$296,110.00	100%

Note. *One CIHR Fellowship and one Master's Award were also counted in the Ethics as a Non-Primary Focus Grants and Awards.

B.4 Socio-Cultural Factors related to Ethics as a Primary Focus

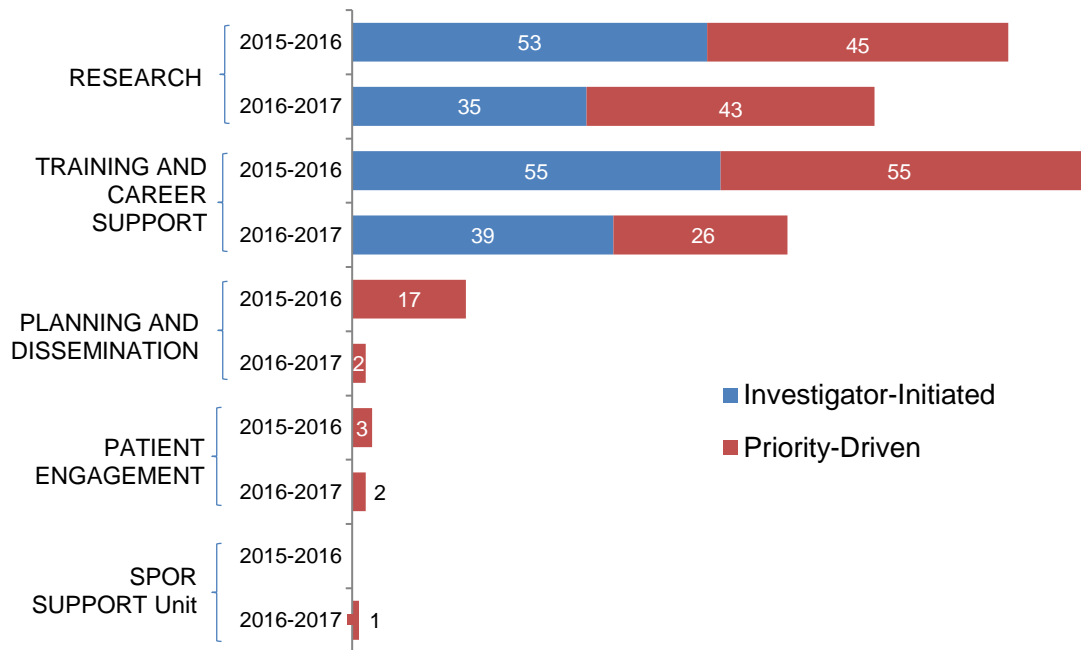
B.4a Socio-Cultural Factors related to Ethics-Primary Focus: New and continuing grants and awards

Socio-Cultural Factors related to Ethics-Primary Focus: CIHR expenditures (in thousands) for new and continuing grants and awards, by program type and year



Note. SPOR SUPPORT= Strategy for Patient-Oriented Research (SPOR) Support for People and Patient-Oriented Research and Trials (SUPPORT)

Socio-Cultural Factors related to Ethics as a Primary Focus: Number of new and continuing grants and awards, by program type and year



Note. SPOR SUPPORT= Strategy for Patient-Oriented Research (SPOR) Support for People and Patient-Oriented Research and Trials (SUPPORT)

Socio-Cultural Factors related to Ethics as a Primary Focus: Number of new and continuing grants and awards, and expenditures, in 2016-2017, by program name

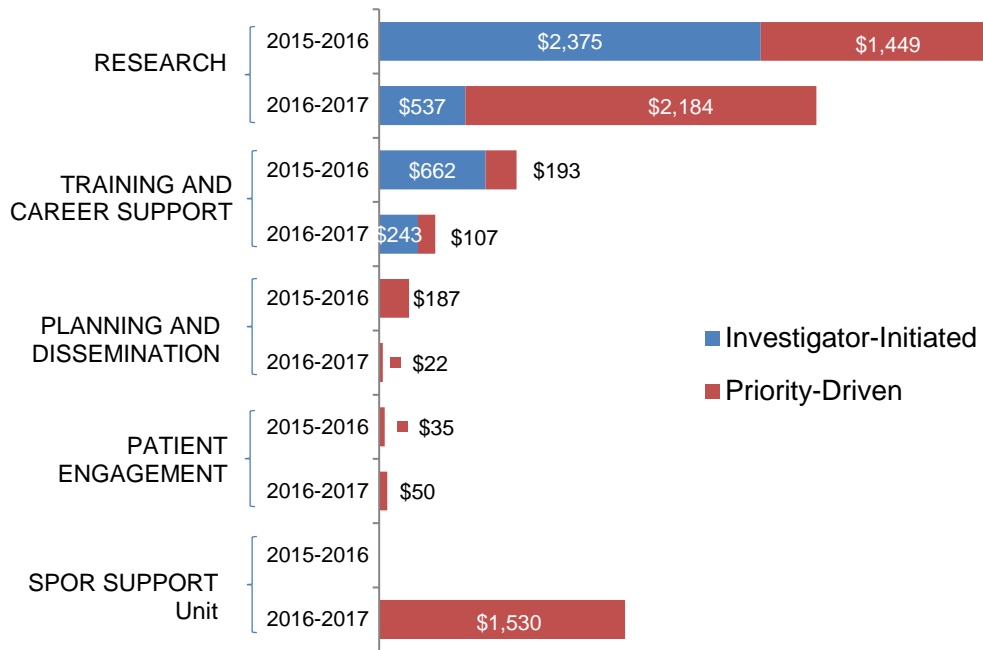
Programs	#	\$	% of \$
Investigator-Initiated	74	\$7,952,091.00	49.55%
Research	35	\$6,482,507.00	40.40%
Foundation Grant	2	\$1,609,380.00	10.03%
Operating Grant*	31	\$4,405,296.00	27.45%
Partnerships for Health System Improvement (PHSI)	1	\$135,273.00	0.84%
Project Grant	1	\$332,558.00	2.07%
Training and Career Support	39	\$1,469,584.00	9.16%
CIHR Fellowship	6	\$302,084.00	1.88%
CIHR New Investigator	8	\$337,500.00	2.10%
Doctoral Award - Doctoral Foreign Study Award (DFSA)	1	\$35,000.00	0.22%
Doctoral Award - Frederick Banting and Charles Best Canada Graduate Scholarships	9	\$315,000.00	1.96%
Doctoral: Vanier Canada Graduate Scholarships	6	\$300,000.00	1.87%
Master's Award: Frederick Banting and Charles Best Canada Graduate Scholarships	7	\$122,500.00	0.76%
New Investigator Salary Award - PA: Knowledge Translation	1	\$50,000.00	0.31%
Peter Lougheed/CIHR New Investigator Canada's Premier Young Researcher	1	\$7,500.00	0.05%
Priority-Driven	74	\$8,095,326	50.45%
Research	43	\$6,111,136.00	38.08%
Catalyst Grant: Indigenous Approaches to Wellness Research- Wellness in Cancer control	2	\$293,286.00	1.83%
Catalyst Grant: HIV/AIDS Community Based Research Program - General Stream	2	\$65,912.00	0.41%
Catalyst Grant: HIV/AIDS Community Based Research Program - Aboriginal Stream	2	\$65,940.00	0.41%
Catalyst Grant: Indigenous Approaches to Wellness Research	8	\$1,186,235.00	7.39%
Collaborative Health Research Projects (NSERC partnered)	1	\$55,500.00	0.35%
Emerging Team Grant: Alliances in Mobility in Aging - full application	2	\$250,000.00	1.56%
Healthy and Productive Work – Partnership Development Grant	2	\$93,489.00	0.58%
Intl Collaborative Indigenous Health Research Partnership Chronic Disease-full application	1	\$22,500.00	0.14%
Operating Grant - PA: Applying the “Two-eyed Seeing” model to Aboriginal Health	2	\$246,400.00	1.54%
Operating Grant - HIV/AIDS Community Based Research Program - Aboriginal	1	\$125,000.00	0.78%
Operating Grant - HIV/AIDS Community Based Research Program - General	4	\$351,631.00	2.19%
Operating Grant - PA: CHVI Vaccine Discovery and Social Research	1	\$63,609.00	0.40%
Operating Grant - Priority Announcement: Aboriginal Ways of Knowing	2	\$211,384.00	1.32%
Operating Grant: Autism Spectrum Disorders Treatment and Care Research	1	\$40,000.00	0.25%
Operating Grant: Cancer Prevention Research Grants	1	\$149,832.00	0.93%
Operating Grant: Health, Wellbeing & Extended Working Life	1	\$125,000.00	0.78%
Operating Grant: Population Health Intervention Research	2	\$242,827.00	1.51%
Team Grant: Community-Based Primary Healthcare - Full Application	1	\$445,221.00	2.77%
Team Grant: Community-Based Primary Healthcare - IAPH	1	\$1,000,000.00	6.23%
Team Grant: Environments and Health: Inter-sectoral Prevention Research - IWK/TEK/TES	1	\$200,000.00	1.25%
Team Grant: Environments and Health: Inter-sectoral Prevention Research	1	\$200,000.00	1.25%

Programs	#	\$	% of \$
Team Grant: Pathways Implementation Research Team – Component 2	3	\$673,723.00	4.20%
Team Grant: Pathways Implementation Research Team – Component 2 – Letter of Intent	1	\$3,647.00	0.02%
Training and Career Support	26	\$382,620.00	2.38%
Doctoral Research Award - PA: Aboriginal Research Methodologies	2	\$94,500.00	0.59%
Doctoral Research Award - PA: Health Services/Population Health HIV/AIDS Research	1	\$2,500.00	0.02%
Doctoral Research Award - PA: Regional Partnerships Program - Saskatchewan	1	\$6,250.00	0.04%
Doctoral Research Award - Priority Announcement: Patient-Oriented Research	1	\$12,500.00	0.08%
Doctoral Research Award -PA: Research in First Nations, Métis &/or Inuit Health	2	\$72,000.00	0.45%
Fellowship - PA: Health Services/Population Health HIV/AIDS Research	1	\$38,333.00	0.24%
Fellowship - PA: Research in First Nations, Métis and/or Inuit Health	1	\$36,000.00	0.22%
New Investigator Award - PA: HIV/AIDS Services/Population Health Research	1	\$50,000.00	0.31%
New Investigator Award -PA: Research in First Nations, Inuit and/or Métis Health	1	\$45,000.00	0.28%
Travel Awards - Institute Community Support	15	\$25,537.00	0.16%
Planning and Dissemination	2	\$21,970.00	0.14%
Planning and Dissemination Grant– Institute Community Support	2	\$21,970.00	0.14%
Patient Engagement	2	\$50,000.00	0.31%
Patient-Oriented Research Collaboration Grants	2	\$50,000.00	0.31%
SPOR (Strategy for Patient-Oriented Research)	1	\$1,529,600.00	9.53%
SPOR SUPPORT Units	1	\$1,529,600.00	9.53%
Grand Total	148	\$16,047,417.00	100%

Note. *One operating grant was also counted in the number of Ethics as a Non-Primary Focus New and Continuing Grants and Awards. PA = Priority Announcement on an open competition offer additional sources of funding for highly rated applications that are relevant to specific CIHR priorities. CHVI = Canadian HIV Vaccine Initiative. IAPH = CIHR Institute of Aboriginal Peoples Health. IWK/TEK/TES= Indigenous Ways of Knowing (IWK)/Traditional Ecological Knowledge (TEK)/Two-Eyed Seeing (TES) approaches. SPOR SUPPORT= SPOR Support for People and Patient-Oriented Research and Trials.

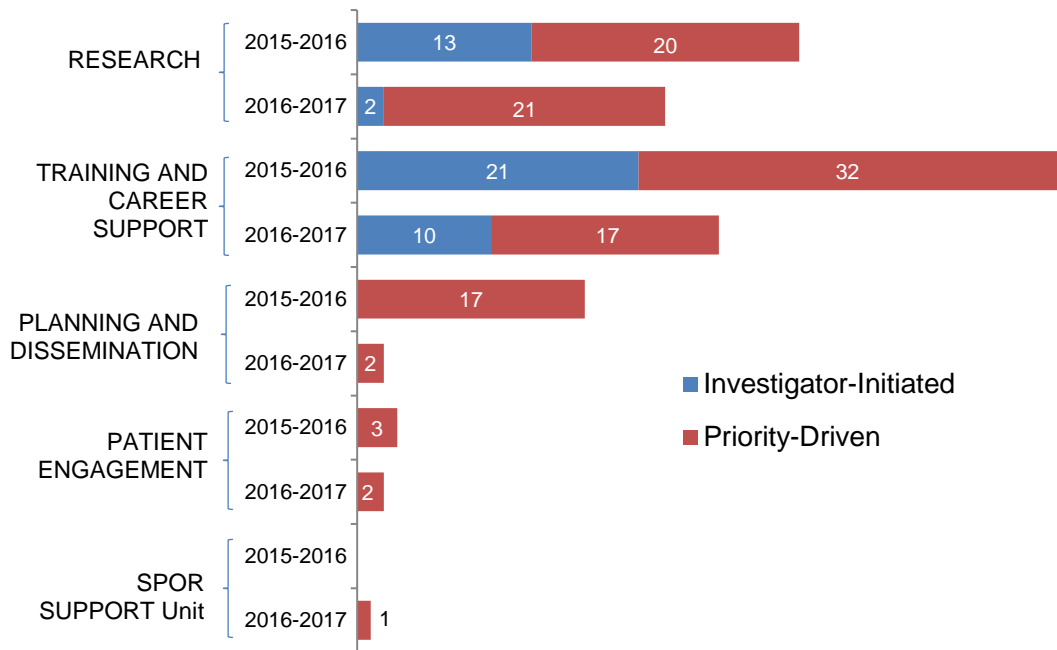
B.4b Socio-Cultural Factors related to Ethics-Primary Focus: New grants and awards

Socio-Cultural Factors related to Ethics as a Primary Focus: CIHR expenditures (in thousands) for new grants and awards, by program type and year



Note. SPOR SUPPORT= Strategy for Patient-Oriented Research (SPOR) Support for People and Patient-Oriented Research and Trials (SUPPORT)

Socio-Cultural Factors related to Ethics as a Primary Focus: Number of new grants and awards, by program type and year



Note. SPOR SUPPORT= Strategy for Patient-Oriented Research (SPOR) Support for People and Patient-Oriented Research and Trials (SUPPORT)

Socio-Cultural Factors related to Ethics as a Primary Focus: Number of new grants and awards, and expenditures, in 2016-2017, by program name

Investigator-Initiated	12	\$779,657.00	16.69%
Research	2	\$537,157.00	11.50%
Foundation Grant	1	\$204,599.00	4.38%
Project Grant	1	\$332,558.00	7.12%
Training and Career Support	10	\$242,500.00	5.19%
Doctoral Award - Frederick Banting and Charles Best Canada Graduate Scholarships	2	\$70,000.00	1.50%
Doctoral: Vanier Canada Graduate Scholarships	1	\$50,000.00	1.07%
Master's Award: Frederick Banting and Charles Best Canada Graduate Scholarships	7	\$122,500.00	2.62%
Priority-Driven	43	\$3,891,616	83.31%
Research	21	\$2,183,509.00	46.74%
Catalyst Grant: Indigenous Approaches to Wellness Research- Wellness in Cancer control	2	\$293,286.00	6.28%
Catalyst Grant: HIV/AIDS Community-Based Program - General Stream	2	\$65,912.00	1.41%
Catalyst Grant: HIV/AIDS Community Based Research Program - Aboriginal Stream	2	\$65,940.00	1.41%
Catalyst Grant: Indigenous Approaches to Wellness Research	8	\$1,186,235.00	25.39%
Healthy and Productive Work – Partnership Development Grant	2	\$93,489.00	2.00%
Operating Grant - HIV/AIDS Community-Based Research Program - General	2	\$75,000.00	1.61%
Team Grant: Environments and Health: Inter-sectoral Prevention Research - IWK/TEK/TES	1	\$200,000.00	4.28%
Team Grant: Environments and Health: Inter-sectoral Prevention Research	1	\$200,000.00	4.28%
Team Grant: Pathways Implementation Research Team – Component 2 – Letter of Intent	1	\$3,647.00	0.08%
Training and Career Support	17	\$106,537.00	2.28%
Fellowship - PA: Research in First Nations, Métis and/or Inuit Health	1	\$36,000.00	0.77%
New Investigator Award -PA: Research in First Nations, Inuit and/or Métis Health	1	\$45,000.00	0.96%
Travel Awards - Institute Community Support	15	\$25,537.00	0.55%
Planning and Dissemination	2	\$21,970.00	0.47%
Planning and Dissemination Grant– Institute Community Support	2	\$21,970.00	0.47%
Patient Engagement	2	\$50,000.00	1.07%
Patient-Oriented Research Collaboration Grants	2	\$50,000.00	1.07%
SPOR (Strategy for Patient-Oriented Research)	1	\$1,529,600.00	32.74%
SPOR SUPPORT Units	1	\$1,529,600.00	32.74%
Grand Total	55	\$4,671,273.00	100%

Note. PA = Priority Announcement on an open competition, which offer additional sources of funding for highly rated applications that are relevant to specific CIHR priorities. IWK/TEK/TES= Indigenous Ways of Knowing (IWK)/Traditional Ecological Knowledge (TEK)/Two-Eyed Seeing (TES) approaches. SPOR SUPPORT= SPOR Support for People and Patient-Oriented Research and Trials (SUPPORT)

Annex 4: Strengthened ethics research community in Canada

Annex 4A. Selected Recurring Open and Priority-Driven Funding Competitions in 2015-2016 and 2017-2018: Application pressure and success rates

Recurring competitions for which ethics-related applications were submitted at least once, and funding decisions are completed		Overall competition success rate % (# of total applications funded / # of total applications submitted)	Ethics Application Success Rates:							
			Application Pressure (AP): % of total applications submitted							
			Within-category (W-C) success rate % (# of applications funded in the category / # of applications submitted in the category)							
		ETHICS-PRIMARY		ETHICS-NON PRIMARY		LAW-PRIMARY		SOCIO-CULTURAL FACTORS RELATED TO ETHICS-PRIMARY		
		AP	W-C	AP	W-C	AP	W-C	AP	W-C	
<i>Open – Research Operating</i>										
Project Grant –	March 2016	12.90% (492 / 3813)	0.50%	10.5% (2 / 19)	0.39%	20% (3 / 15)	0.16%	16.67% (1 / 6)	0.66%	4% (1 / 25)
	Oct. 2016	16.4% (475 / 2884)	.035%	10% (1 / 10)	.031%	22.22% (2 / 9)	0.17%	60% (3 / 5)	.055%	25% (4 / 16)
Foundation Grant	Sept. 2015	13.26% (120 / 905)	0.77%	0% (0 / 7)	1.10%	10% (1 / 10)	0.11%	0% (0 / 1)	1.22%	9.1 % (1 / 11)
<i>Open – Training: Graduate Students</i>										
CIHR Doctoral Research Award	Oct. 2015	12.55% (145 / 1155)	0.26%	33.3% (1 / 3)	0.17%	0% (0 / 2)	0.17%	0% (0 / 2)	1.65%	10.5% (2 / 19)
	Oct. 2016	14.04% (165 / 1175)	0.43%	20% (1 / 5)	0.34%	0% (0 / 4)	0.26%	0% (0 / 3)	1.96%	8.70% (2 / 23)
Doctoral Vanier Canada Graduate Scholarship	Nov. 2015	30.43% (56 / 184)	1.69%	33.3% (1 / 3)	0.54%	0% (0 / 1)	0.54%	0% (0 / 1)	2.72%	20% (1 / 5)
	Nov. 2016	30% (57 / 190)	-	-	1.58%	33.33% (1 / 3)	-	-	1.05%	50% (1 / 2)
<i>Open- Training: Post-doctoral Researchers</i>										
Banting Post-doctoral Fellowship	Sept 2015	10.65% (23 / 216)	2.31%	0% (0 / 5)	0.46%	100% (1 / 1)	0.46%	0% (0 / 1)	0.46%	0% (0 / 1)
	Sept 2016	15.25% (27 / 177)	0.56%	100% (1 / 1)	0.56%	0% (0 / 1)	-	-	1.69%	33.33% (1 / 3)

Recurring competitions for which ethics-related applications were submitted at least once, and funding decisions are completed		Overall competition success rate % (# of total applications funded / # of total applications submitted)	Ethics Application Success Rates:							
			Application Pressure (AP): % of total applications submitted							
			Within-category (W-C) success rate % (# of applications funded in the category / # of applications submitted in the category)							
		ETHICS-PRIMARY		ETHICS-NON PRIMARY		LAW-PRIMARY		SOCIO-CULTURAL FACTORS RELATED TO ETHICS-PRIMARY		
		AP	W-C	AP	W-C	AP	W-C	AP	W-C	
CIHR Fellowship	2015-2016	19.16% (195 / 1018)	0.88%	22.2% (2 / 19)	0.59%	16.7% (1 / 6)	0.39%	25% (1 / 4)	1.18%	0% (0 / 12)
	Nov. 2016	15.28% (160 / 1047)	1.05%	36.36% (4 / 11)	0.10%	0% (0 / 1)	-	-	0.57%	33.33% (2 / 6)
<i>Open- Knowledge Synthesis, and Knowledge Translation</i>										
Knowledge Synthesis Grant-	May 2015	10.07% (15 / 149)	2.01%	0% (0 / 3)	2.68%	0% (0 / 4)	0.67%	0% (0 / 1)	0.67%	0% (0 / 1)
	Jan. 2016	8.29% (16 / 193)	2.07%	0% (0 / 4)	0.52%	0% (0 / 1)	1.04%	0% (0 / 2)	2.07%	0% (0 / 4)
<i>Priority-Driven- Institute Community Support</i>										
Planning and Dissemination Grant- Institute Community Support	Aug. 2015	73.00% (73 / 100)	-	-	-	-	1.00%	100% (1 / 1)	10.00%	100% (10 / 10)
	Jan. 2016	68.35% (54 / 79)	-	-	1.27%	100% (1 / 1)	-	-	2.53%	50.00% (1 / 2)
	Aug. 2016	72.82% (75 / 103)	1.94%	100% (2 / 2)	2.91%	100% (3 / 3)	1.94%	50% (1 / 2)	0.97%	100% (1 / 1)
	Feb. 2017	49.51% (102 / 206)	0.97%	50% (1 / 2)	1.46%	66.7% (2 / 3)	0.49%	0% (0 / 1)	5.83%	41.67% (5 / 12)
Travel Awards- Institute Community Support-	May 2015	58.08% (133 / 229)	-	-	0.44%	0% (0 / 1)	0.44%	100% (1 / 1)	5.68%	92.31% (12 / 13)
	Oct. 2015	84.85% (56 / 66)	-	-	3.03%	50.00% (1 / 2)			6.06%	100% (4 / 4)
	Jan. 2016	59.60% (180 / 302)	1.66%	100% (5 / 5)			0.66%	100% (2 / 2)	6.29%	57.89% (11 / 19)
	July 2016	82.39% (131 / 159)	1.89%	100% (3 / 3)	0.63%	100% (1 / 1)	-	-	3.14%	80% (4 / 5)
	Jan. 2017	78.9% (232 / 294)	0.34%	100% (1 / 1)	-	-	0.68%	0% (0 / 2)	4.42%	92.31% (12 / 13)

Recurring competitions for which ethics-related applications were submitted at least once, and funding decisions are completed		Overall competition success rate % (# of total applications funded / # of total applications submitted)	Ethics Application Success Rates:							
			Application Pressure (AP): % of total applications submitted							
			Within-category (W-C) success rate % (# of applications funded in the category / # of applications submitted in the category)							
		ETHICS-PRIMARY		ETHICS-NON PRIMARY		LAW-PRIMARY		SOCIO-CULTURAL FACTORS RELATED TO ETHICS-PRIMARY		
		AP	W-C	AP	W-C	AP	W-C	AP	W-C	
		<i>Priority-Driven: Research Operating</i>								
Catalyst Grant-Ethics-	March 2016	15.38% (4 / 26)	100%	15.38% (4 / 26)	-	-	-	-	-	-
	Feb 2017	19.05% (4 / 21)	100%	19.05% (4 / 21)						
Catalyst Grant: HIV/AIDS Community Based Research-	April 2015	38.46% (5 / 13)	7.69%	100% (1 / 1)	7.69%	100% (1 / 1)	-	-	7.69%	100% (1 / 1)
	Nov. 2015	0% (0 / 13)	-	-	-	-	-	-	-	-
	June 2016	35.71% (10 / 28)	-	-	-	-	-	-	39.29%	36.36% (4 / 11)
SPOR Operating Grant: SPOR PIHCI Network Quick Strikes-	April 2015	70.00% (7 / 10)	-	-	-	-	-	-	10.00%	100% (1 / 1)
	Dec 2015	46.15% (6 / 13)	-	-	-	-	-	-	7.69%	0% (0 / 1)

Note. Dashed lines indicate that no applications were submitted to the competition. Note that numbers of funded applications by success rates may not match with the numbers of new funded grants and awards in a given fiscal year because the latter are based on when funding was issued.

Annex 4B. Funding Opportunities with Ethics Content: Application pressure and success rates

Selected Priority-Driven Funding Opportunities 2016-2017	Success rate % (# applications funded / # applications submitted)				
	Overall Competition Success Rate	Within-ethics category success rates			
		Ethics-Primary Focus	Ethics-Non Primary Focus	Law-Primary Focus	Socio-Cultural Factors related to Ethics-Primary Focus
A. Ethics content: Eligible research area among other research areas					
<i>Applications submitted for ethics, law, or socio-cultural factors related to ethics—as a primary focus</i>					
1. Travel Award- Institute Community Support- July 2016	82.39% (131 / 159)	100% (3 / 3)	100% (1 / 1)	-	80% (4 / 5)
2. Planning and Dissemination Grant- Institute Community Support- August 2016	72.82% (75 / 103)	100% (2 / 2)	100% (3 / 3)	50% (1 / 2)	100% (1 / 1)
3. Planning and Dissemination Grant- Institute Community Support- Feb 2017	49.51% (102 / 206)	50% (1 / 2)	66.67% (2 / 3)	0% (0 / 1)	41.67% (5 / 12)
4. Operating Grant: Challenge of dementia in Indigenous populations- Sept. 2016	66.67% (2 / 3)	-	-	-	0% (0 / 1)
5. Operating Grant: Social Inclusion of individual with dementia and carers- Sept 2016	23.53% (4 / 17)	0% (0 / 1)	-	-	-
<i>No applications submitted for ethics, law, or socio-cultural factors related to ethics—as a primary focus</i>					
6. Institute Community Support Award- March 2017	25.71% (9 / 35)	-	-	-	-
7. Betty Havens Prize for Knowledge Translation in Aging- April 2016 (open to nominations)	100.00 (1/1)	-	-	-	-
8. Catalyst Grant: SPOR Initiative Innovative Clinical Trials- Sept. 2016	17.54% (10 / 57)	-	0% (0 / 1)	-	-
B. Ethics content-Other: Examples: demonstrate consideration of ethical aspects, ethical approaches, ethics expertise on team, etc.					
<i>Applications submitted for ethics, law, or socio-cultural factors related to ethics—as a primary focus</i>					
9. Operating Grant: Population Health Intervention Research- Nov. 2016	0% (0 / 4)	-	-	-	0% (0 / 1)
10. Team Grant: Pathways Implementation Research Team component 2- Oct. 2016	77.78% (7 / 9)	-	-	-	0% (0 / 1)
11. Travel Awards- Institute Community Support – Jan.	59.60% (180 / 302)	100% (5 / 5)	-	100% (2 / 2)	57.89% (11 / 19)

Selected Priority-Driven Funding Opportunities 2016-2017	Success rate % (# applications funded / # applications submitted)				
	Overall Competition Success Rate	Within-ethics category success rates			
		Ethics-Primary Focus	Ethics-Non Primary Focus	Law-Primary Focus	Socio-Cultural Factors related to Ethics-Primary Focus
2016					
12. Travel Awards- Institute Community Support- Jan. 2017	78.91% (232 / 294)	100% (1 / 1)	-	0% (0 / 2)	92.31% (12 / 13)
13. Team Grant: Environments and Health: Inter-sectoral Prevention Research- July 2016	47.37% (9 / 19)	-	-	-	100% (2 / 2)
14. Catalyst Grant: Indigenous Approaches to Wellness Research- Jan 2017	52.27% (23 / 44)	-	0% (0 / 1)	-	62.50% (10 / 16)
15. Training Grant: Indigenous Mentorship Network Program- Jan. 2017	100% (8 / 8)	-	-	-	100% (1 / 1)
<i>No applications submitted for ethics, law, or socio-cultural factors related to ethics—as a primary focus</i>					
16. Team Grant: Healthy Life Trajectories Initiative (HELTI)- China- April 2016	16.6% (1 / 6)	-	0% (0 / 1)	-	-
17. Team Grant: Healthy Life Trajectories Initiative (HELTI)- India Letter of Intent- Oct. 2016	25.00% (1 / 4)	-	-	-	-
18. Operating Grant: SPOR Primary and Integrated Health Care Innovations Network- National Coordinating Office- April 2016	0% (0 / 1)	-	-	-	-
19. Team Grant: Multi omics for the immune system- May 2016	0% (0 / 4)	-	-	-	-
20. Operating Grant: North America Re: Rare (Repurposing research in rare diseases)- May 2016	100% (3 / 3)	-	-	-	-
21. Team Grant: Canada-Latin America-Caribbean Zika Virus Program- July 2016	12.50% (3 / 24)	-	-	-	-
22. Operating Grant: Health Effects of Alberta Wildfires- Oct. 2016	41.18% (7 / 17)	-	-	-	-
23. Operating Grant: SPOR Innovative Clinical Trial Multi-Year Grant- Oct. 2016	33.33% (6 / 18)	-	-	-	-
24. Team Grant: Perinatal Healthcare System Improvement- Oct. 2016 (requesting a national strategy)	100% (1 / 1)	-	-	-	-
25. Catalyst Grant: Work Stress and Wellbeing Hackathon- Oct.	100% (9 / 9)	-	-	-	-

Selected Priority-Driven Funding Opportunities 2016-2017	Success rate % (# applications funded / # applications submitted)				
	Overall Competition Success Rate	Within-ethics category success rates			
		Ethics-Primary Focus	Ethics-Non Primary Focus	Law-Primary Focus	Socio-Cultural Factors related to Ethics-Primary Focus
2016					
26. SPOR Mentorship Chair in Innovative Clinical Trials- Nov. 2016	83.33% (5 / 6)	-	-	-	-

Note. Priority-driven funding applications were included if applications were due in 2016-2017 and funding decisions were made by March 31, 2017. Funding opportunities for directed grants, or with ethics as a main focus, were excluded from the analysis. "Ethics content" in funding opportunity text does not include the requirement to comply with ethics guidelines, or ethics as a main focus. Dashed lines means no applications were submitted to the competition.