CIHR Virtual Institutes

Health Services and Policy Research
Circulatory and Respiratory Health
Aboriginal Peoples' Health
Cancer Research
Musculoskeletal Health and Arthritis
Nutrition, Metabolism and Diabetes
Neurosciences, Mental Health and Addiction
Human Development, Child and Youth Health
Population and Public Health
Genetics
Aging
Gender and Health
Infection and Immunity
Canada
CIHR Approach: Problem-based, Multidisciplinary, Results-Oriented

CIHR efforts are underpinned by excellence – funding decisions are all made through peer review.

CIHR takes a problem-based and multidisciplinary approach to the health challenges facing Canadians.

Multi-faceted approach encompasses research in across the research continuum:

- Biomedical (Theme 1)
- Clinical (Theme 2)
- Health systems and services (Theme 3)
- Population and public health (Theme 4)

CIHR is committed to facilitating research results into action and to working collaboratively with partners.
Applying to CIHR Funding Opportunities

**Open Operating Grants Program (OOGP)**
- Investigator-initiated research proposals
- Any area of health research
- ~ 70% total funding

**Strategic Funding Opportunities**
- Priority areas identified by Institutes, Branches
- ~ 30% total funding

- e.g. operating grants from the open competition (OOGP)
- e.g. Programmatic Grants in Food & Health and Environments, Genes and Chronic Disease
A number of challenges have been identified:

- CIHR Roadmap Consultations
- Institutes and their communities
- University Delegates
- Surveys
- International Review Panel
- Chairs and Scientific Officers
- Partners

Funding Program Accessibility and Complexity
Applicant Burden/”Churn”
Application Processes/Attributes Do Not Capture the Correct Information
Insufficient Support for New/Early Career Investigators
Researcher and Knowledge User Collaborations Not Fully Valued
Lack of Expertise Availability
Inconsistency of Reviews
Conservative Nature of Peer Review
High Peer Reviewer Workload

CIHR believes that re-designing the Open Suite of Programs and Peer Review System will help address these challenges
To address these challenges, the existing suite of open funding programs is being reorganized into two new schemes:

- **Open Operating Grant Program**
- **Partnerships for Health System Improvement**
- **Knowledge Synthesis**
- **Knowledge to Action**
- **Proof-of-Principle I & II**
- **Industry-Partnered Collaborative Research**
- **New Investigator Program**

**Project Scheme:** projects with a specific purpose and defined endpoint

**Foundation Scheme:** innovative, high-impact programs of research

To support the implementation of the new funding schemes, CIHR will also establish a **College of Reviewers** that will support excellent peer review across the spectrum of health research.
The objectives of the reform to CIHR’s investigator-initiated programs and peer review processes are to:

- Capture excellence across all four research pillars, from knowledge creation to knowledge translation
- Capture innovative, original and breakthrough research
- Integrate new talent to sustain Canada’s pipeline of health researchers
- Improve sustainability of the long-term research enterprise

In meeting these objectives, the Reforms are also meant to address a number of current operational challenges:

- Workload and costs for applicants
- Peer review burden
- Lack of consistency and efficiency of peer review process
- Growing discrepancy between research evolution and committee structure
- Program complexity
Transition Plan

- The transition to the new Open Suite of Programs is a multi-year process that includes gradually phasing-out existing Open programs, phasing-in new programs and piloting key elements of the new design.

- Piloting is an important step to allow CIHR to adjust and refine processes and systems in order to best support applicants and reviewers.

- CIHR is using a number of existing competitions to run the pilots so that we can properly train applicants, orient reviewers, and monitor outcomes in a managed fashion.

  - Fellowships program
  - Knowledge Synthesis (KRS)
  - Partnerships for Health System Improvement (PHSI)
  - Knowledge to Action (KAL)
Design Elements

Multi-stage competition process
- Effective screening of applications
- Decrease applicant burden and reviewer burden
- Focus reviewer attention on specific criteria at each stage

Application-Focused Review
- Avoid “force fitting” applications into standing committees
- Assign appropriate expertise to each application

Structured Review Criteria
- Minimize inconsistent application of review criteria
- Improve transparency of review process
- Decrease peer review burden

Remote (virtual) Screening/Review
- Facilitate access to expertise, including international
- Improve cost-effectiveness of the process
- Minimize group dynamics and committee culture biases
Transition timeline

- **The transition** to the new Open Suite of Programs and peer review processes will occur over a number of years.
- Course corrections and *adjustments may be required along the way* as we learn from the results of the pilots.
The Foundation Scheme is designed to contribute to a sustainable foundation of health research leaders.

It is expected to:

- Support a broad base of research leaders across career stages, areas and disciplines relevant to health;
- Develop and maintain Canadian capacity;
- Provide flexibility to pursue new, innovative lines of inquiry as part of an overall program of research;
- Contribute to the creation and use of health-related knowledge.

The Foundation Scheme will have one competition a year.
A separate stream for New investigators

- New/early-career investigators are eligible to apply to the Foundation Scheme competition as a Program Leader.

- CIHR defines a new/early career investigator as:

  Researchers who at the Stage 1 application deadline are independent researchers and have held a maximum of 5 years of full-time independent research appointment

- New investigators will be assessed with other applicants in Stages 1 and 2. Reviewers will be asked to consider career stage when assessing the application against the specified criteria.

- At Stage 3, new/early-career investigators will be assessed and ranked against other new/early career investigators.
Who was successful in Stage 1 of the Foundation Scheme?

- CIHR invited **467 (34%)** applicants to submit a Stage 2 application
- Anticipated that between 150-210 applications will be funded in the first Pilot
Pillar distribution for Stage 1 of the Foundation Scheme

- Biomedical Clinical Health Systems/Services
- Social/Cultural/Environmental/Population Health

Percent of Applications (%)

- Historical OOGP Data (% of Successful Applications)
- % of Submitted Applications
- % of Successful Applications

Percent of Applications (%)
How did New Investigators do in Stage 1 of the Foundation Scheme?

• The first Foundation Scheme competition received more applications from new/early career investigators than originally expected (41% of applications).

• Peer reviewers expressed some concern about their ability to rank new investigators.

• Almost 20% of applications (87 of 467) that were brought forward to Stage 2 were submitted by new investigators (comparable to what is typically seen in the OOGP; ~15%).

• CIHR is committed to a minimum of 15% of funded Foundation grants will be awarded to new investigators.
What are competition timelines for the Foundation Scheme?

- Decisions for the 2014 first Foundation Scheme pilot will occur in July 2015
- Competition timelines for the 2015 2\textsuperscript{nd} Foundation Scheme pilot are:

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<tr>
<td>Registration Deadline</td>
<td>July 27, 2015</td>
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<tr>
<td>Stage 1 Application Deadline</td>
<td>September 15, 2015</td>
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<tr>
<td>Anticipated Stage 1 Notice of Decision</td>
<td>December 1, 2015</td>
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<td>Stage 2 Application Deadline</td>
<td>February 5, 2016</td>
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<td>May 16, 2016</td>
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<td>July 15, 2016</td>
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<td>Funding Start Date</td>
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The **Project Scheme** is designed to capture ideas with the greatest potential for important advances.

It is expected to:

- Support a diverse portfolio of health-related research and knowledge translation projects at any stage, from discovery to application, including commercialization;
- Promote relevant collaborations across disciplines, professions and sectors;
- Contribute to the creation and use of health-related knowledge.

The Project Scheme will have **two** competitions per year.
When is the Project Scheme being launched?

• Funding opportunity for the 2016 Project Scheme “live pilot” competition was posted in March 2015 to provide the community with time to prepare.

• Key dates include:

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<td>Registration Deadline</td>
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<td>Application Deadline</td>
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<td>Anticipated Stage 1 Notice of Decision</td>
<td>May 16, 2016</td>
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*Project Scheme is designed to capture ideas with the greatest potential for important advances.*
Project Scheme: Supporting Materials

- **Resources available on the Reforms website:**
  - Funding opportunity
  - Application requirements
  - Project Biosketch CV Quick Reference Guide
  - Project Co-Applicant CV Quick Reference Guide
  - Qs and As

- **Additional materials to be posted:**
  - ResearchNet application instructions
  - Peer Reviewer manual
  - Interpretation guidelines
  - Training materials
Changes to the OOGP do not affect strategic funding!
Strategic Funding: Research Priorities and Roadmap Signature Initiatives

CIHR Research Priority Areas

- Enhance Patient-Oriented Care and Improve Clinical Results through Scientific and Technological Innovations
- Support a High-Quality, Accessible and Sustainable Health-Care System
- Reduce Health Inequities of Aboriginal Peoples and other Vulnerable Populations
- Prepare For and Respond To Existing and Emerging Threats to Health
- Promote Health and Reduce the Burden of Chronic Disease and Mental Illness

Roadmap Signature Initiatives are now at varying stages of development and implementation:

- Evidence Informed Healthcare Renewal
- Canadian Epigenetics, Environment and Health Research Consortium
- Community Based Primary Health Care
- Personalized Medicine
- Pathways to Health Equity for Aboriginal Peoples
- Inflammation in Chronic Disease
- Strategy on Patient-Oriented Research: Networks and SUPPORT Units
- International Collaborative Research Strategy for Alzheimer’s Disease
- Environments and Health
- Work and Health
- Integrated Health Services
Newsletters as sources of information
Grant Writing: What won’t change

YOUR GOALS re: REVIEWERS CONCERNS

1. Get the panel excited about the project
   - the question is interesting/important/novel and this proposal is so terrific, it just has to be funded

2. Demonstrate that the project is built on a great foundation
   - progress/published work (yours/others)
   - preliminary data; feasibility of what is proposed

3. Convince the panel that you can do the work
   - your track record
   - your research team
   - resources available (environment)
   - how well you’ve written your story in the grant
Tips for Success

1. Set up an Internal Peer Review Panel
   • #1 thing to set up
   • Key: try for 3 reviewers and have them meet with you
   • They should critically assess the scientific content and presentation
   • This gives experience in reviewing grants and fosters collegiality
   • It always vastly improves your grant

2. Start writing early
3. Write daily
4. Do the “Junk” in the first month (but not only the junk)
More tips for success

- Ask “Who’s the audience?”
- Give the BIG picture. Make the reader care.
- Don’t drown the reader in detail (the reader doesn’t want to know).
- State Why a study needs to be done
- Make it enjoyable for the reviewer!

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<th>Level</th>
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<tbody>
<tr>
<td>1</td>
<td>Summary of Research Plan</td>
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<tr>
<td>2</td>
<td>Research Plan</td>
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<tr>
<td>3</td>
<td>Background/Preliminary Results</td>
<td>~1/2</td>
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<tr>
<td>4</td>
<td>Significance</td>
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an order for grant writing:
Tips for Success (cont’d)

Place yourself in a strong position

- Productivity (number and quality of papers)
- Number of other grants
- The independence issue
- Your research team: each member has a clearly-stated and appropriate role and the expertise required
Thank you for your attention!

Questions regarding the Foundation and Project Scheme Competitions can be directed to: Roadmap-Plan.Strategique@cihr-irsc.gc.ca