Designing for the Future: The New Open Suite of Programs and Peer Review Process

Winter-Spring 2013

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The objectives of today's presentation are to:

- Review why changes to the Open Suite of Programs are necessary;

- Provide an overview of the new design of the Open Suite of Programs and Peer Review process;

- Outline the implementation plan and draft timelines; and

- Answer questions from the community.

The Rationale

The **objectives** *of the reform of* **CIHR's investigator-driven strategy** 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 reform is 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
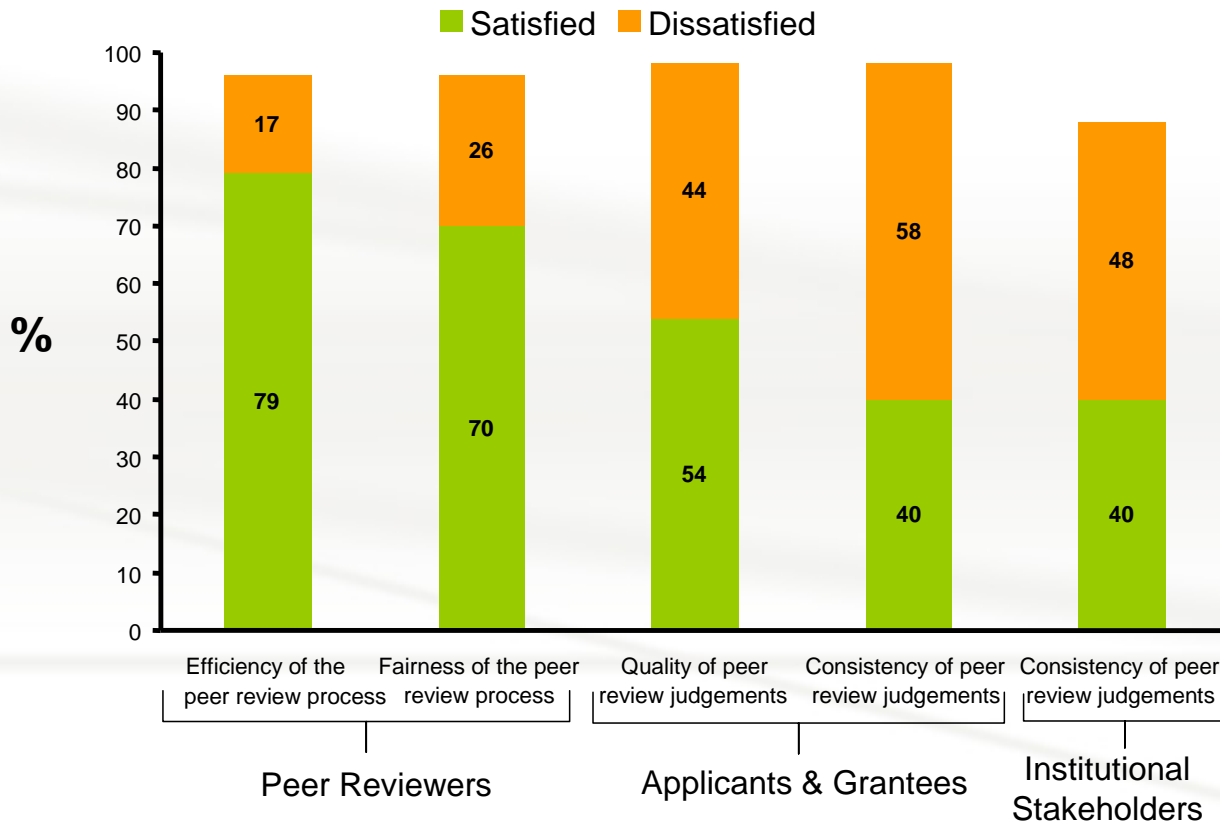
- Program complexity

- Writing grant applications can be extremely costly to researchers and institutions. A study conducted in Australia (NHMRC) last year estimated the total cost of applications to be over $17,000 (Australian dollars) per application submitted.

- On average, a CIHR OOGP application takes some **169 hours** to complete which is comparable to the NHMRC benchmark

- The estimated applicant cost to prepare an OOGP application is **$10,878**. With the costs of administration and peer review included the total cost is approximately **$14,000**.

- Currently, CIHR populates 53 standing peer review committees with over **2,300 reviewers**. These committees represent a number of research areas, disciplines, living systems, populations, etc.

- The number of committees **keeps on growing** over time and requests continue to be made to create new standing committees to review research that is seen as not easily reviewed in the current committee structure.

- It is becoming **increasingly difficult to recruit appropriate reviewers** as the correct expertise often resides with members in conflict, currently applying for funds, or sitting on a different CIHR peer review committee.

Results from the 2010 Ipsos Reid survey indicate a high degree of dissatisfaction amongst Stakeholders in certain areas of peer review.

Stakeholder Satisfaction – Peer Review
(Percent of respondents who provided an opinion)

	Satisfied	Dissatisfied
Efficiency of the peer review process	79	17
Fairness of the peer review process	70	26
Quality of peer review judgements	54	44
Consistency of peer review judgements	40	58
Consistency of peer review judgements	40	48

Peer Reviewers | Applicants & Grantees | Institutional Stakeholders

- There is a high degree of effort currently going into trying to ensure that each application is reviewed by the most appropriate committee.

- Inflow and outflow of applications to standing committees for the last 4 OOGP competitions is illustrated below:
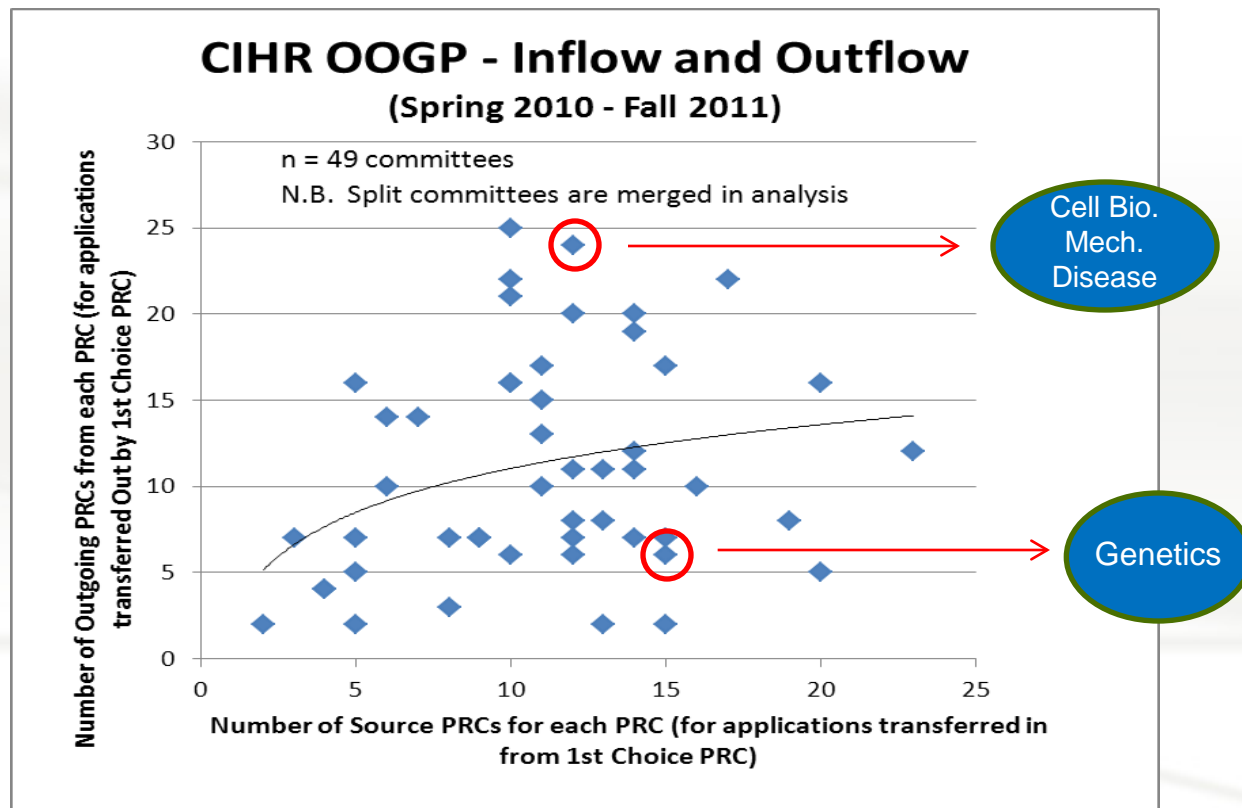
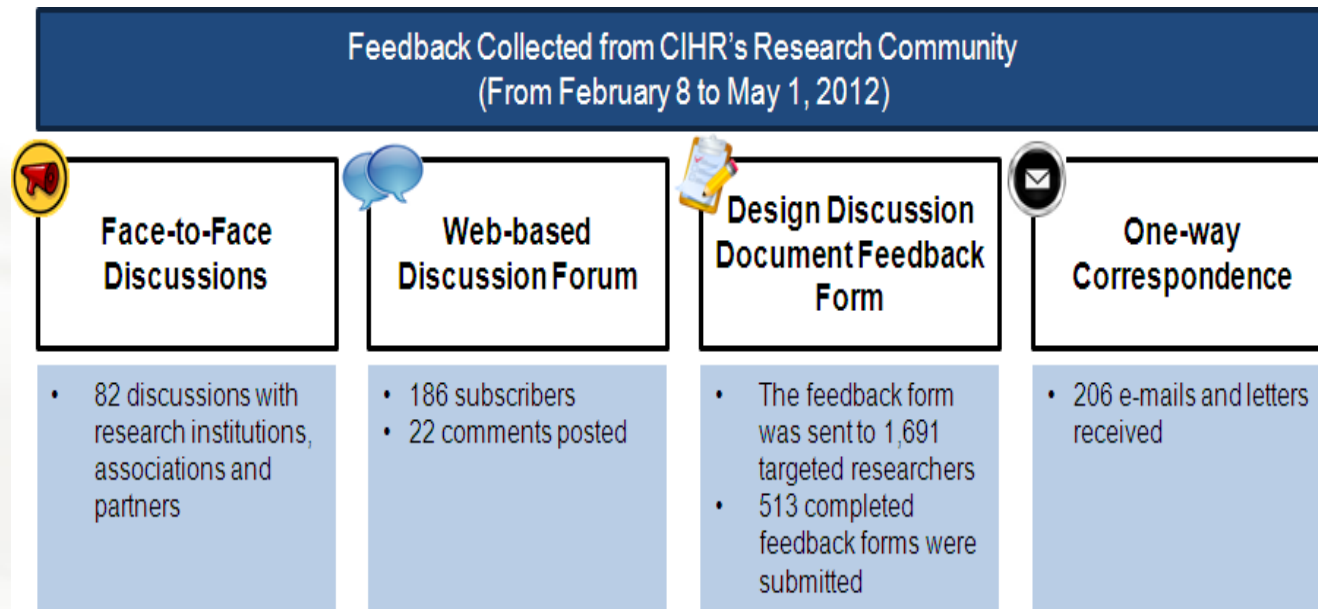Growing discrepancy between research evolution and committee structure
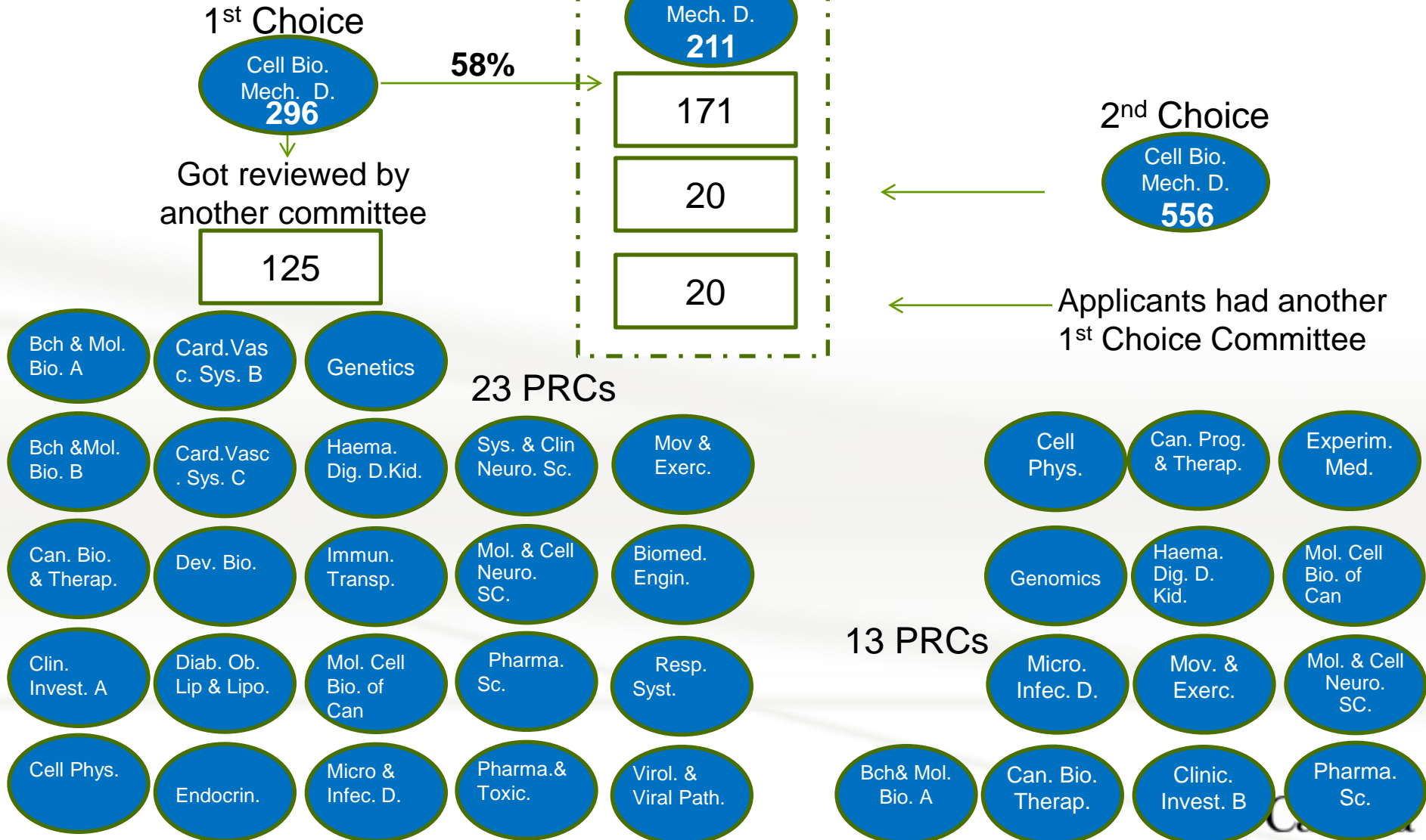
Overview of The Design

- Feedback from the research community on the proposed changes to the Open Suite of Programs and peer review process was collected from February 8, 2012 to May 1, 2012:

Feedback Collected from CIHR's Research Community
(From February 8 to May 1, 2012)

| Face-to-Face Discussions	Web-based Discussion Forum	Design Discussion Document Feedback Form	One-way Correspondence
• 82 discussions with research institutions, associations and partners	• 186 subscribers • 22 comments posted	• The feedback form was sent to 1,691 targeted researchers • 513 completed feedback forms were submitted	• 206 e-mails and letters received

- Work was completed through the summer and the fall to assess all of the feedback and enhance the overall design.

- The updated design was released in December of 2012.

Key elements of the design have been endorsed by CIHR's Governing Council and Science Council:

1. Two separate, complimentary funding schemes

    - Project Scheme
    - Foundation Scheme

2. A peer review process that includes:

    - Application-focused review
    - Multi-stage review
    - Structured review criteria
    - Remote review of applications at the initial stage(s)

3. A College of Reviewers that will support excellent peer review across the spectrum of health research

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CIHR IRSC

Investigator-driven operating grants budgetary envelope (OOGP)
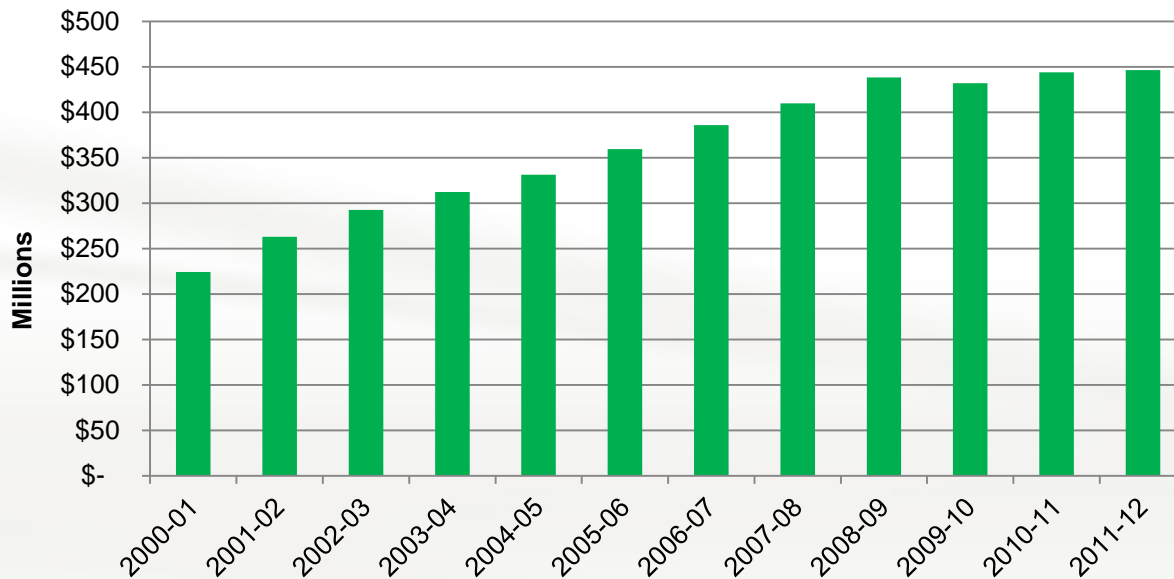
2011-12:
new grants: 802
applications: 4,578
Average multi-year grant size: ~$600k
Success rate: 17.5%

2007-08:
new grants: 816
applications: 3,625
Average multi-year grant size:~$540k
Success rate: 22.6%

CIHR is committed to maintaining approximately the same number of Nominated Principal Investigators that are currently supported in the system today.

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- A number of scenarios were considered to determine a sustainable intake of grantees over the longer term.

- The current planning scenario is:

Steady State Scenario for the new Open Funding Schemes

	Foundation	Project	Total
Proportion of CIHR's Open Funding Grants Budget	45%	55%	**100%**
Annual intake (number of grants)	114	939	**1,053**
Steady-state (number of grants)	750	2,200	**2,950**

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- The expectation is that grant values in both schemes will vary and be commensurate with the needs of each individual program of research or project.

- Modeling predicts a distribution of foundation and project grant values as follows:
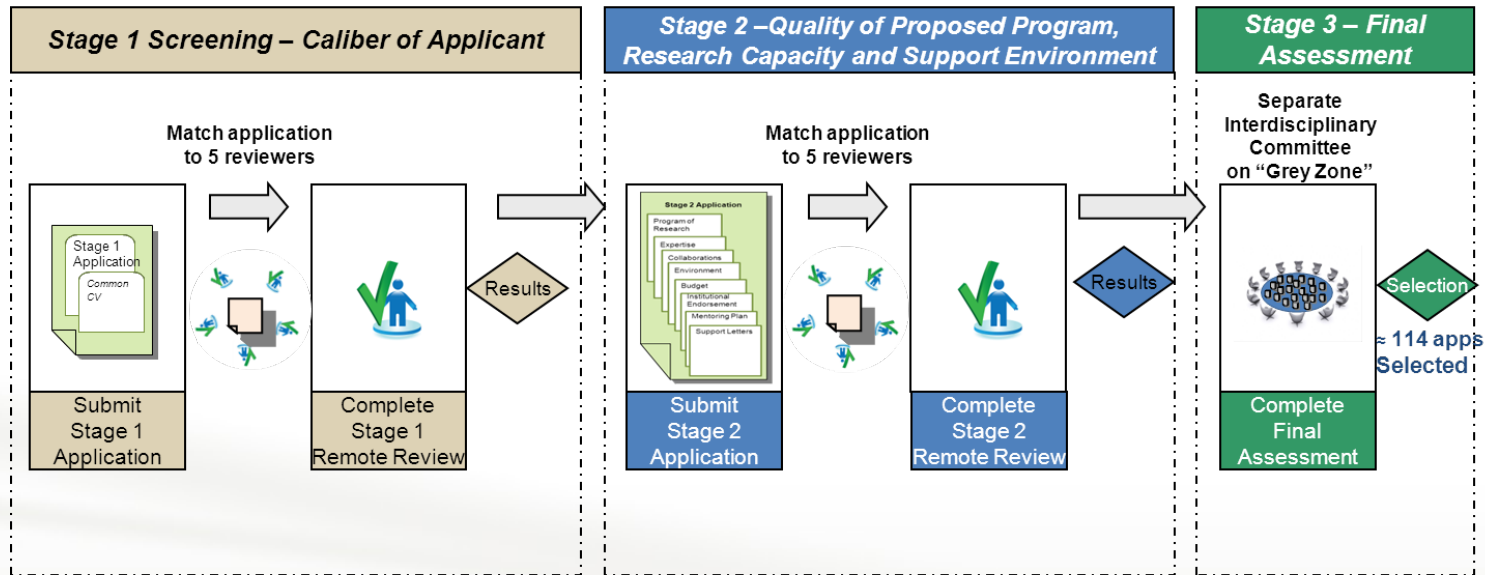

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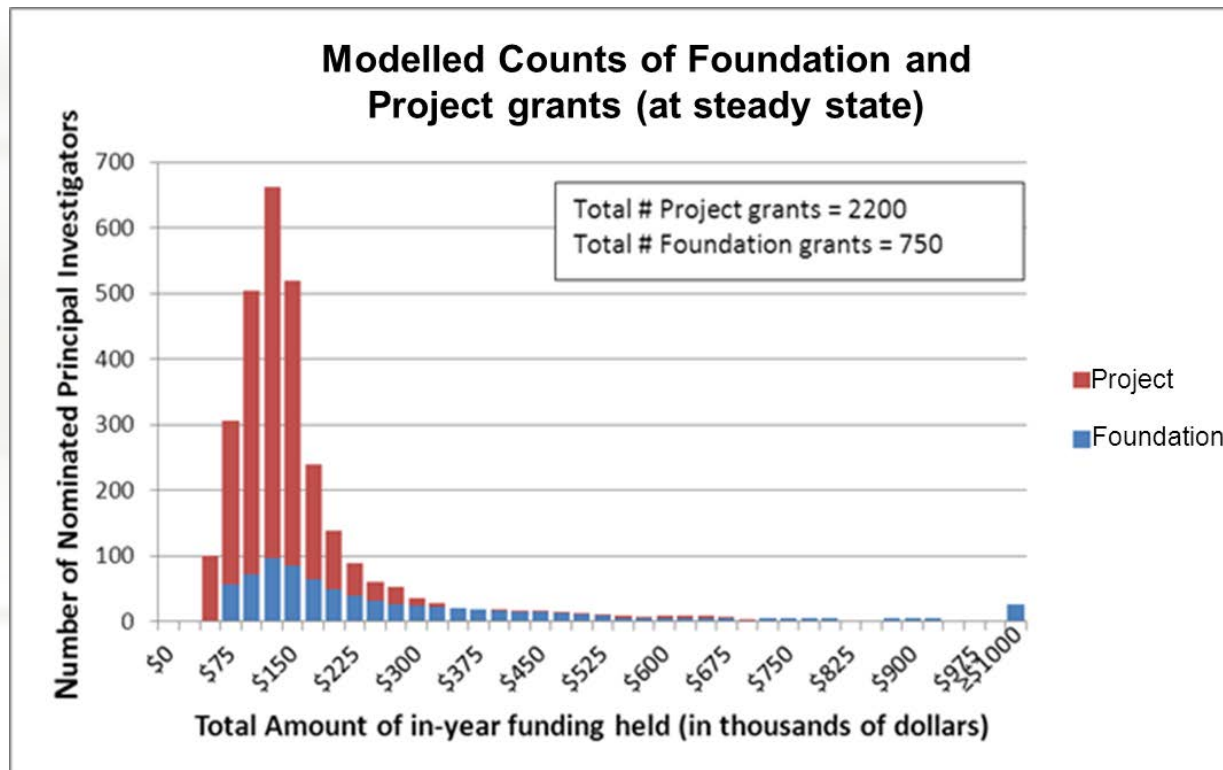
The **Foundation Scheme** is designed to contribute to a sustainable foundation of health research leaders.

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;

- Contribute to the creation and use of health-related knowledge.

The Foundation Scheme will have <u>one</u> competition a year.

Stage 1 Screening – Caliber of Applicant

Match application to 5 reviewers

Stage 1 Application — Common CV

Submit Stage 1 Application

Complete Stage 1 Remote Review

Results

Stage 2 –Quality of Proposed Program, Research Capacity and Support Environment

Match application to 5 reviewers

Stage 2 Application — Program of Research, Expertise, Collaborations, Environment, Budget, Institutional Endorsement, Mentoring Plan, Support Letters

Submit Stage 2 Application

Complete Stage 2 Remote Review

Results

Stage 3 – Final Assessment

Separate Interdisciplinary Committee on "Grey Zone"

Complete Final Assessment

Selection

≈ 114 apps Selected

Vision/Program Direction

Caliber of the Applicant

- Research Leadership
- Productivity
- Significance of Contributions

Quality of the Program
- Research Concept
- Research Approach

Quality of the Research Capacity
- Expertise
- Mentorship

Quality of the Support Environment

Budget

The specific review criteria are still under development. The requirements for enhanced institutional support are also still evolving.
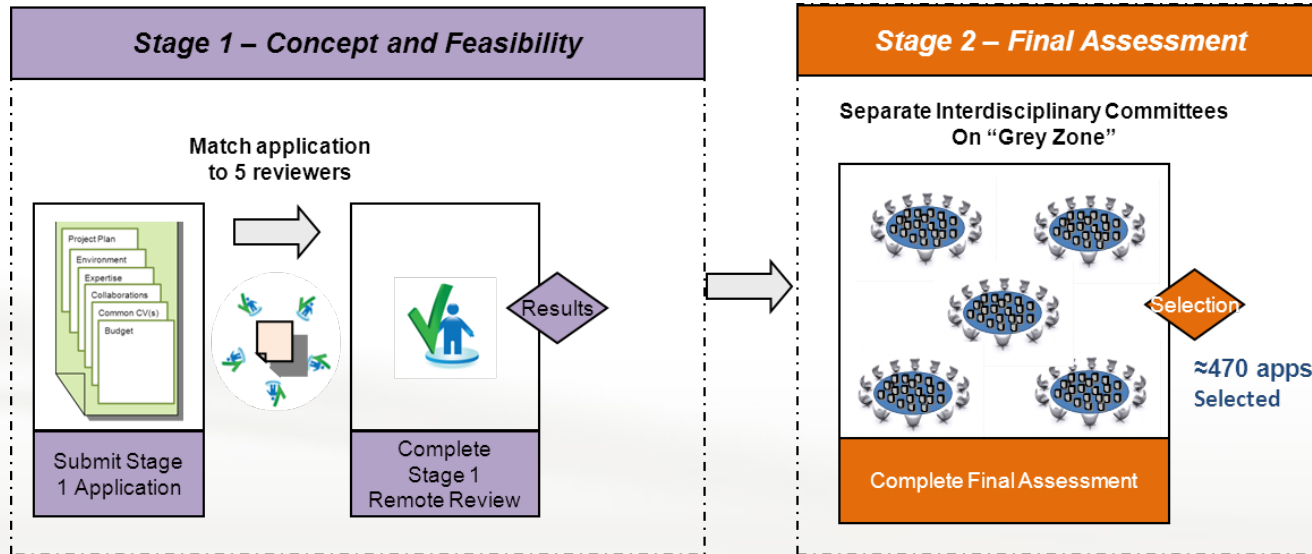
The **Project Scheme** is designed to capture ideas with the greatest potential for important advances

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 <u>two</u> competitions per year

As a result of community feedback, the Project Scheme will use a two-stage process for review.


Stage 1 – Concept and Feasibility

Match application to 5 reviewers

Project Plan
Environment
Expertise
Collaborations
Common CV(s)
Budget

Results

Submit Stage 1 Application

Complete Stage 1 Remote Review

Stage 2 – Final Assessment

Separate Interdisciplinary Committees On "Grey Zone"

Selection

≈470 apps Selected

Complete Final Assessment

Concept
- Quality of the Idea
- Importance of the Idea

Feasibility
- Approach/Methodology
- Expertise
- Quality of the Environment

The specific review criteria are still under development

- To deliver on the vision and objectives, CIHR will work with funding partners to build a College of Reviewers

- It will be a centrally-managed, national resource.

- The College will be made up of faculties of experts from both within and outside Canada.

- Specific roles will be defined to support the peer review processes (e.g. moderators and chairs) and to support the peer review system as a whole (e.g. faculty chair).

- Specific programs will be developed to train and mentor reviewers, and to monitor performance.
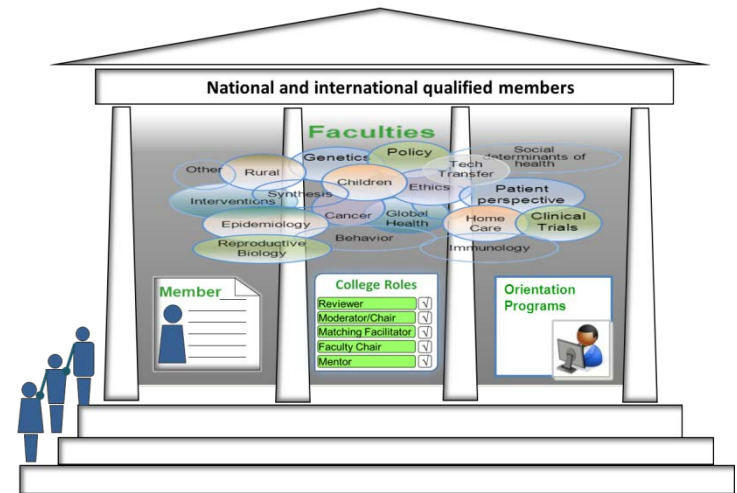
- The recruitment of reviewers to the College will be a staged process

  - The transition period for the College of Reviewers is expected to occur from spring 2013 to 2016.

  - The target is to recruit approximately 8,000 members to the College.

  - CIHR currently has a base of 2,300 active reviewers supporting the OOGP and has accessed approximately 5,800 individuals to participate in peer review across all programs over the last 5 years.

  - The first waves will focus on the recruitment of active and recently active reviewers.

  - Additional waves will allow for the targeted recruitment of reviewers to address gaps in expertise, and to increase the number of international reviewers.

The Project Scheme will require between 500-675 reviewers per competition and the Foundation scheme will require between 275-350 per competition (assumes each application is reviewed by 5 reviewers and each reviewer receives between 15-20 applications).

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Design Element

Multi-stage competition process

- Effective screening of applications
- Decrease applicant burden and reviewer burden
- Focus reviewer attention on specific criteria for each stage of review

Application-Focused Review

- Avoid "force fitting" applications into standing committee structure
- Assign appropriate expertise to <u>each</u> application

Structured Review Criteria

- Minimize inconsistent/inappropriate 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

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Transitioning to the New Schemes

The transition to the new Open Suite of Programs and peer review processes, will occur over a number of years.

The transition strategy includes three phases:

1. Piloting key peer review design elements

2. Gradually phasing-in the new funding schemes

3. Gradually phasing-out the existing Open funding program

Given the scope of the proposed changes, and the intention to learn from the results of the pilots, course corrections and adjustments to timelines may be required.

1. Piloting key peer review design elements

- CIHR will conduct various pilot studies and tests for the new peer review process between early 2013 and mid-2016. Pilots will include:

Design Elements being Piloted	Existing CIHR Program
Some elements of remote review, multi-phased competition process and application binning (completed)	New Investigator Program
Remote review, asynchronous discussion, structured review (two pilots – spring and fall of 2013)	Fellowship Program
First Project Scheme Pilot: Short structured application, new criteria, structured review, remote review, five reviewers per application (fall 2014).	KT Synthesis Program
Second Project Scheme Pilot: all elements of Project Scheme through a strategic program	Strategic Program (TBD)
Matching Pilot: Will be conducted in the background of the next few OOGP competitions and will pilot methods for matching applications to reviewers	OOGP

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2. Gradually phasing-in the new funding schemes

- The phase-in of the new Open funding schemes will occur over the course of several competition cycles.

- The Foundation Scheme will be launched through two "live pilot" competitions with application deadlines scheduled for fall 2014 and fall 2015.

- The first regular Foundation competition application deadline is scheduled for fall 2016.

- The first Project competition application deadline is scheduled for spring 2016.

- We are committed to ensuring that adequate support is available to applicants, reviewers, and academic institutions throughout the transition process to help the research community navigate through this transition period with minimal disruption.

3. Gradually phasing-out the existing Open funding program

- CIHR recognizes the importance of carefully managing the implications for grantees who are currently supported by CIHR's existing Open Suite of Programs.

- CIHR will hold three more Open Operating Grant Program competitions (spring 2013, fall 2013, and spring 2014).

- There will also be a transitional Open Operating Grant Program competition in spring 2015, which will be held in parallel to the first "live pilot" of the Foundation Scheme.

- Other existing open programs will be phased-out after the launch of the first Project Scheme competition.

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