



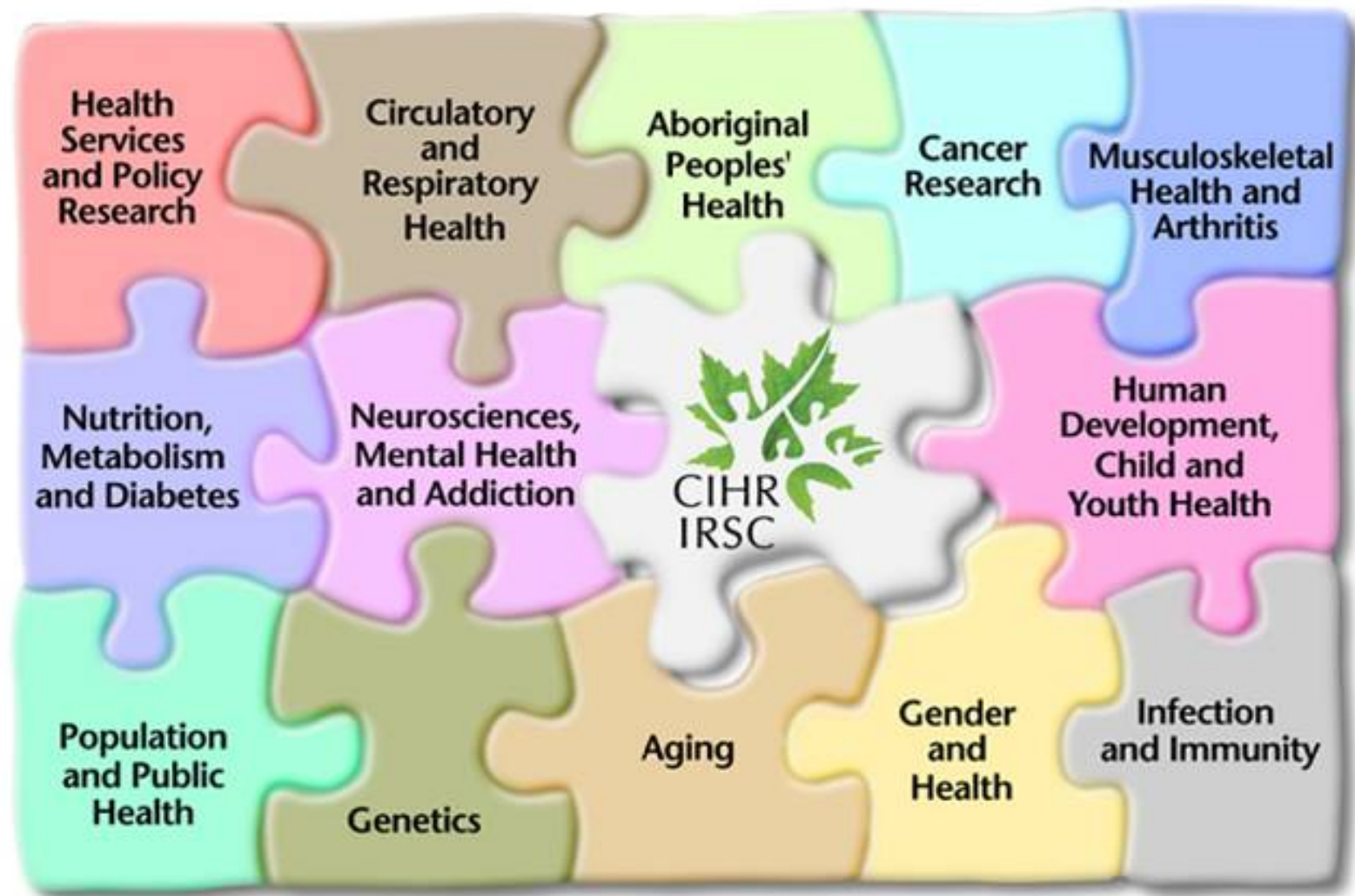
CIHR: The Changing Landscape

**University of Toronto
Grant Writing Workshop
June 18, 2015**

**Philip M. Sherman, MD, FRCPC
Scientific Director**

CIHR Institute of Nutrition, Metabolism and Diabetes

CIHR Virtual Institutes



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

e.g. operating grants from the
open competition (OOGP)

Strategic Funding Opportunities



Priority areas identified
by Institutes, Branches

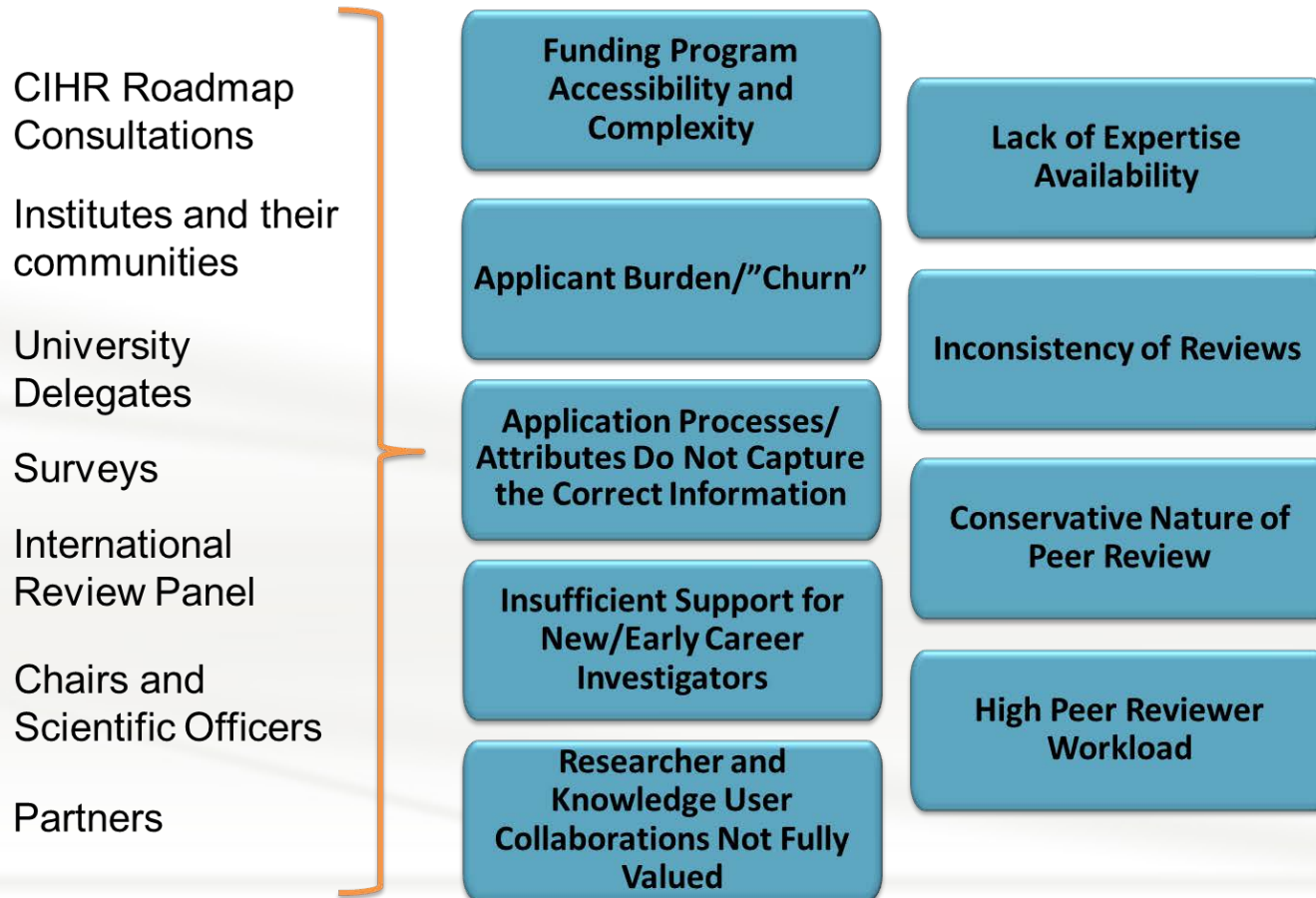


~ 30% total funding

e.g. Programmatic Grants in Food
& Health and Environments,
Genes and Chronic Disease

Open Program: Rationale for Proposed Changes

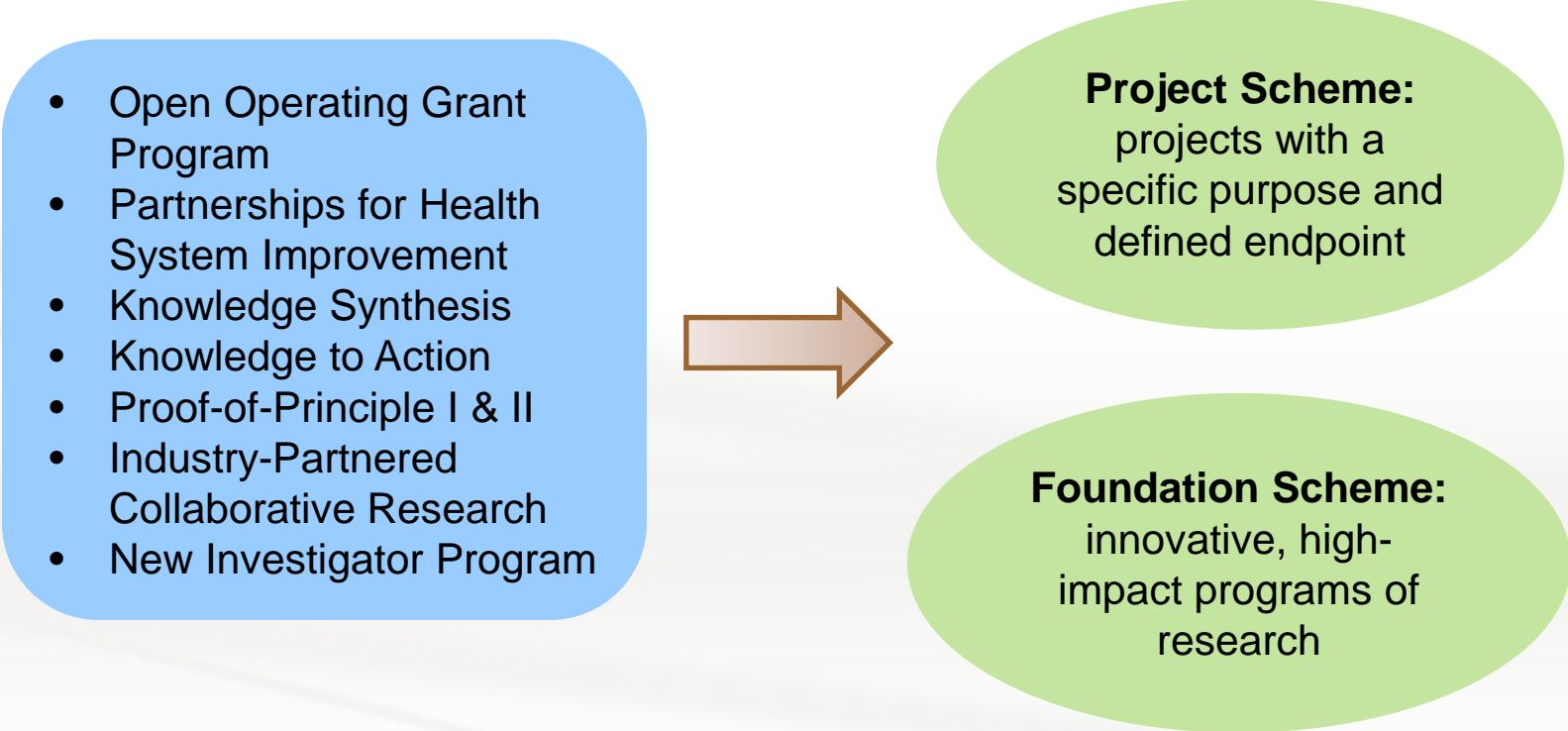
A number of challenges have been identified:



CIHR believes that re-designing the Open Suite of Programs and Peer Review System will help address these challenges

A New Open Suite of Programs

- 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.

What will be achieved through the Reforms?

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

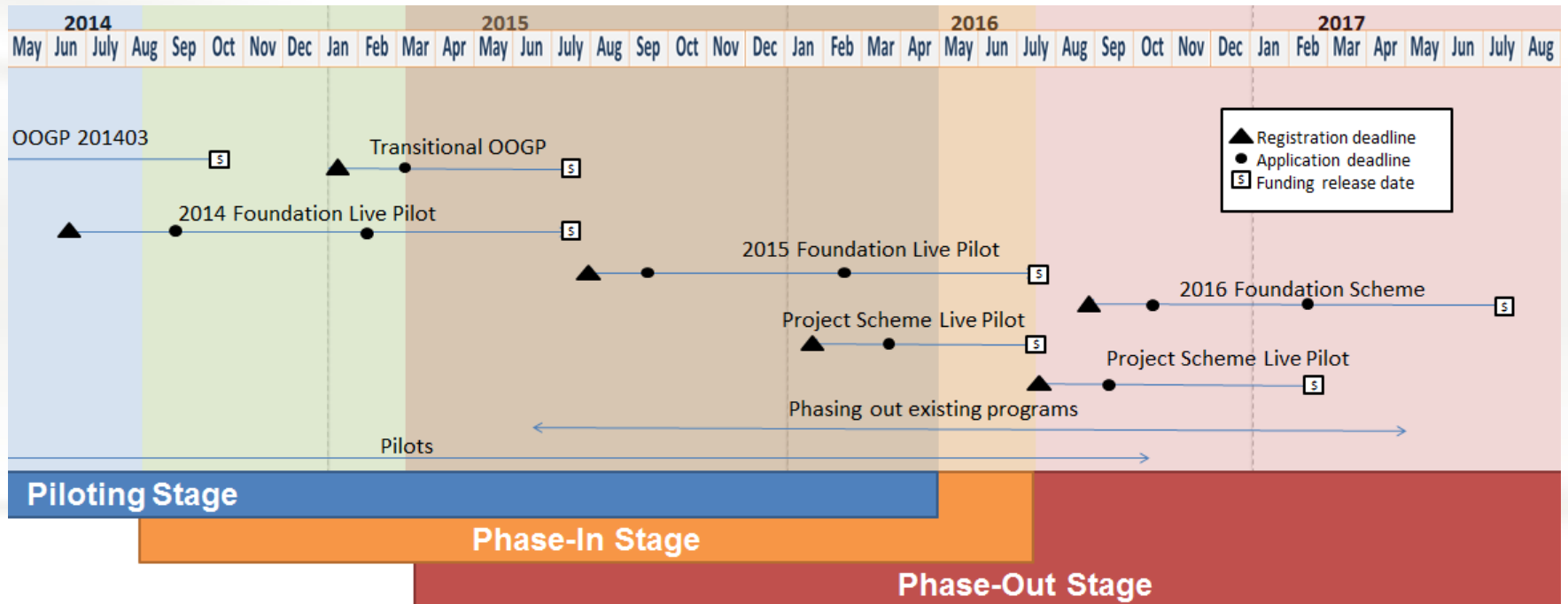
- **Minimize inconsistent application of review criteria**
- **Improve transparency of review process**
- **Decrease peer review burden**

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

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

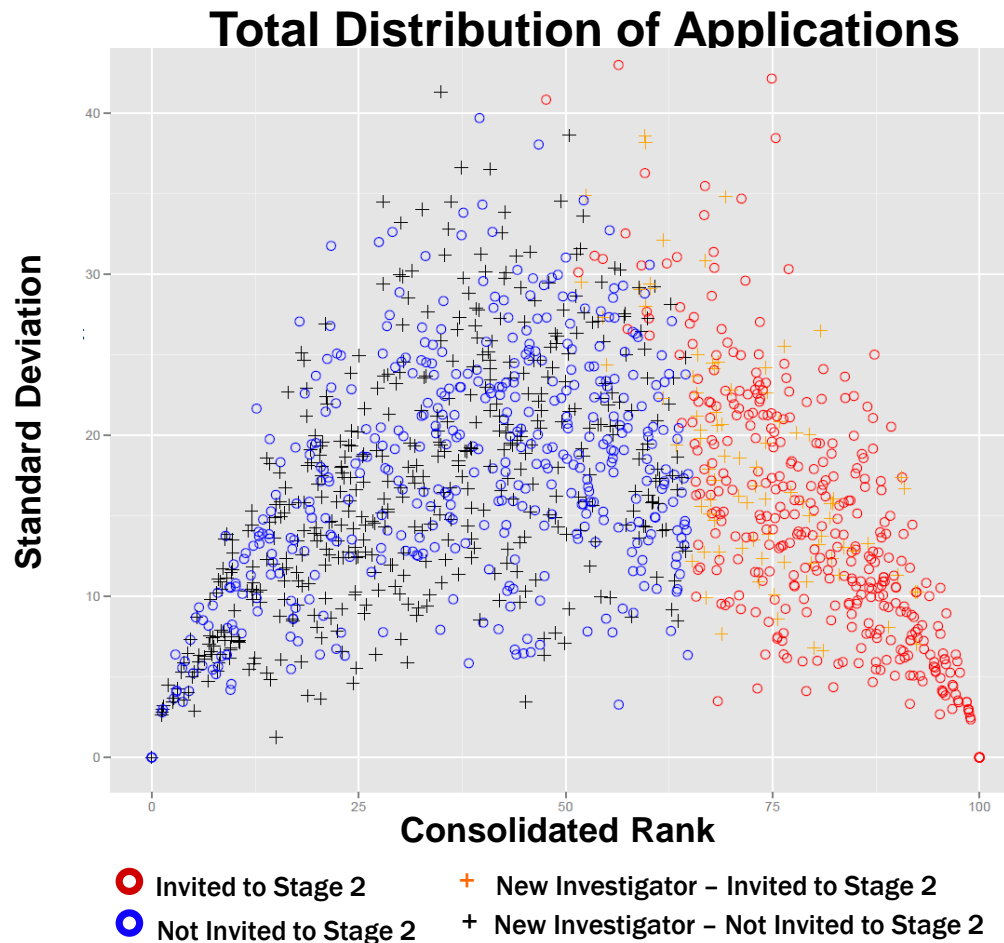
- **New/early-career investigators are eligible to apply to the Foundation Scheme competition as a Program Leader.**
- **CIHR defines a new/early career investigator as:**

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

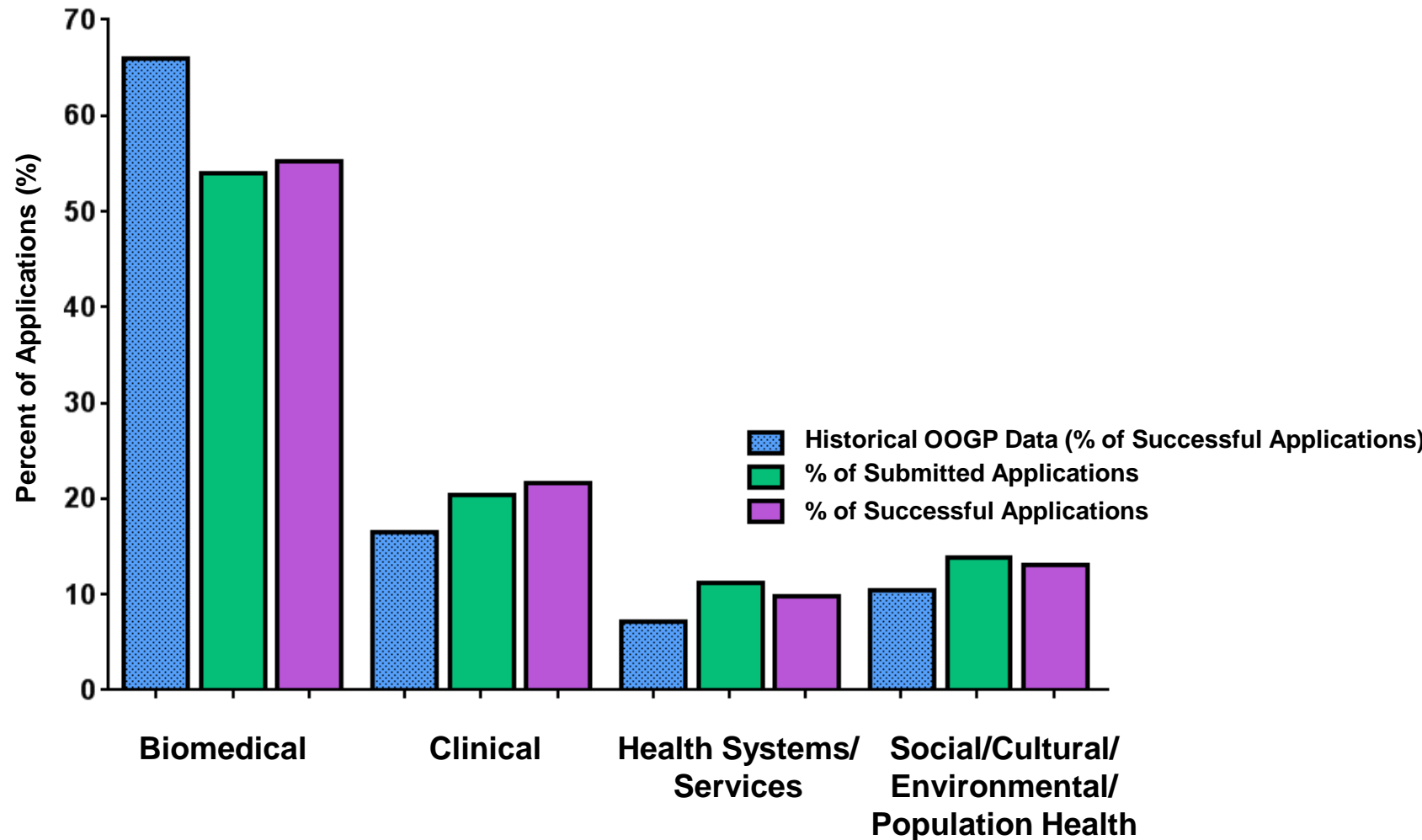
- **New investigators will be assessed with other applicants in Stages 1 and 2. Reviewers will be asked to consider career stage when assessing the application against the specified criteria.**
- **At Stage 3, new/early-career investigators will be assessed and ranked against other new/early career investigators.**

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



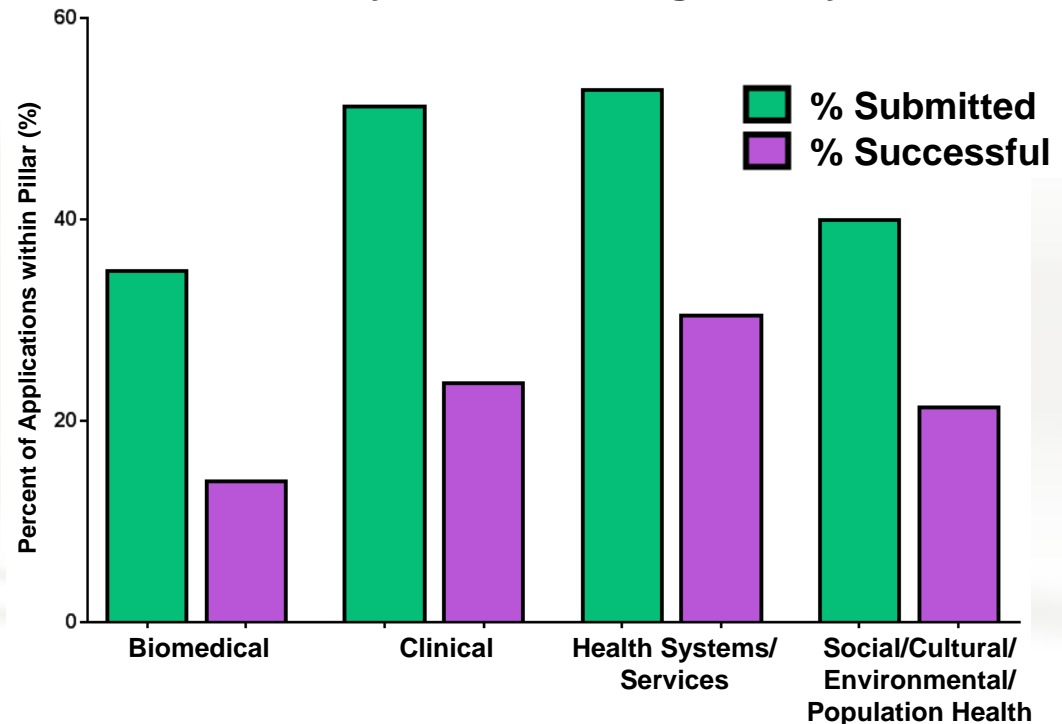
Pillar distribution for Stage 1 of the Foundation Scheme



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.

Distribution of Applications submitted by New/Early Career Investigators by Pillar



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 2nd Foundation Scheme pilot are:

Registration Deadline	July 27, 2015
Stage 1 Application Deadline	September 15, 2015
Anticipated Stage 1 Notice of Decision	December 1, 2015
Stage 2 Application Deadline	February 5, 2016
Anticipated Stage 2 Notice of Decision	May 16, 2016
Anticipated Stage 3 Notice of Decision	July 15, 2016
Funding Start Date	July 1, 2016

The Project Scheme

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:

Registration Deadline	January 18, 2016
Application Deadline	March 1, 2016
Anticipated Stage 1 Notice of Decision	May 16, 2016
Anticipated Stage 2 Notice of Decision	July 15, 2016
Funding Start Date	July 1, 2016

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



Strategic Funding



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

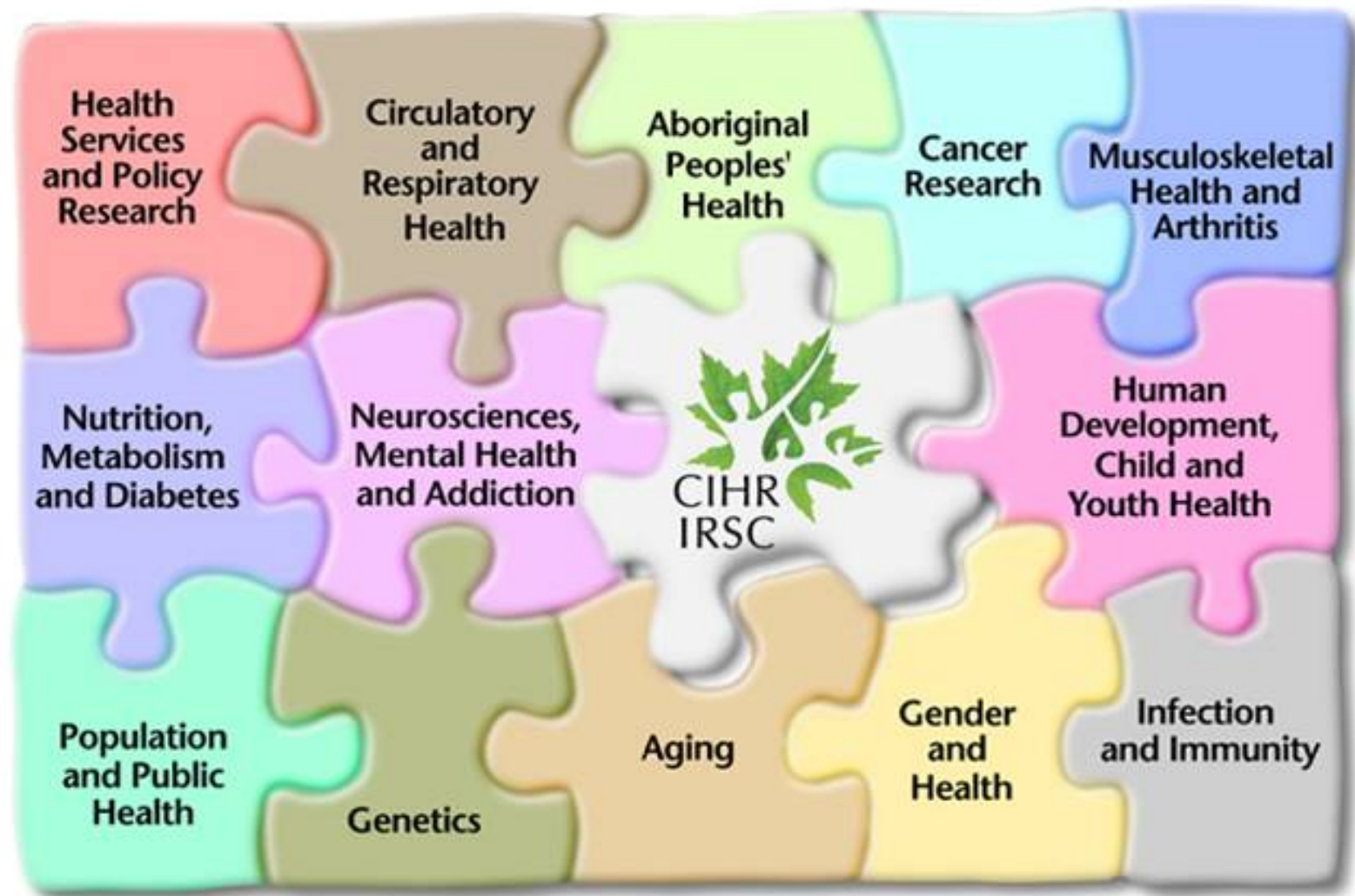
Prepare For and Respond To Existing and Emerging Threats to Health

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**

CIHR Virtual Institutes



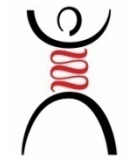
Newsletters as sources of information

INMD Partners

Canadian Association
of Gastroenterology



L'Association Canadienne
de Gastroentérologie



Crohn's and Colitis
Foundation of Canada

Fondation canadienne des
maladies inflammatoires
de l'intestin



CANADIAN DIABETES ASSOCIATION | **ASSOCIATION CANADIENNE DU DIABÈTE**

Canadian Association for the Study of the Liver
CASL ACEF Association Canadienne pour l'étude du foie

Canadian Digestive Health Foundation

20 YEARS
TOGETHER ADVANCING NUTRITION
Canadian Foundation for Dietetic Research

HEART & STROKE FOUNDATION OF CANADA | **FONDATION DES MALADIES DU CŒUR DU CANADA**
Finding answers. For life.
À la conquête de solutions.

Canadian Nutrition Society
Société canadienne de nutrition

Cystic Fibrosis Canada
*Breathing life into the future**

CANADIAN LIVER FOUNDATION | **FONDATION CANADIENNE DU FOIE**

CSEM SCÉM
Canadian Society of Endocrinology and Metabolism
La Société canadienne d'endocrinologie et métabolisme

JDRF Juvenile Diabetes Research Foundation International
dedicated to finding a cure

Canadian Lipoprotein Conference

CANADIAN SOCIETY OF NEPHROLOGY
SOCIÉTÉ CANADIENNE DE NÉPHROLOGIE

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)



SUCCESS

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!

an order for grant writing:

Level 1

- Summary of Research Plan

Level 2

- Research Plan
- ~1/2 the allotted pages

Level 3

- Background/Preliminary Results
- ~1/2 the allotted pages

Level 4

- Significance

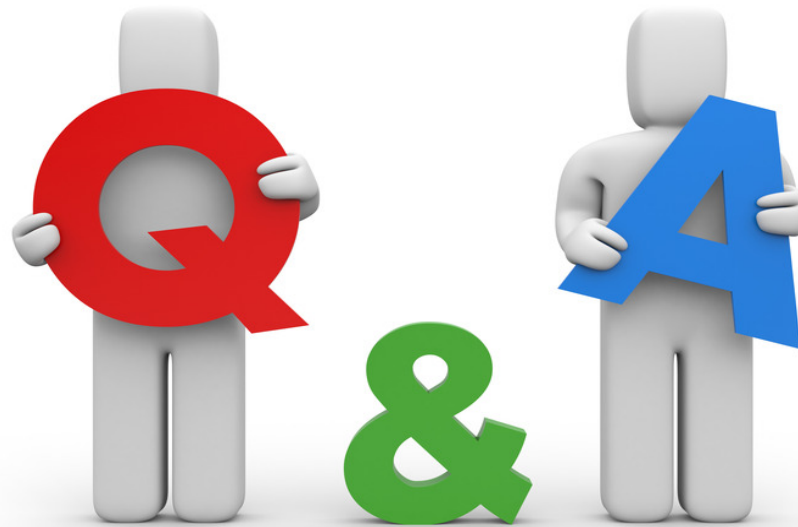
Tips for Success (cont'd)

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**