CIHR 2018 UD F2F
University Delegate Community
Points for Discussion
Jennifer J McGrath, PhD MPH (on behalf of UDs)
April 27, 2018

1. Points for Discussion
   - Funding, Budget, Allocation
   - Researchers Across Lifespan
   - Foundation Scheme
   - Committees & College
   - Reviewers & Chairs
   - Other

2. Funding, Budget, Allocation
   - Where will budget increase be allocated?
     - Can budget supplement buffer across-the-board award cuts?
   - Closed system: Budget = $$$ x Applications
   - What is acceptable funding success rate?
   - Traffic control: Limit applications, grants held, time-delay to apply
   - Priority driven research areas: higher success rates without critical mass
   - SPOR success metrics: Is SPOR working?
     - Do not understand what it does (unlike conventional research)
     - Insufficient transparency (compare with CHRP & fulfilling mandate)
     - Eliminate need for matching funds; Fund excellence (not where money is)
   - Small grant envelope (<50$k)

3. Researchers Across Lifespan
   - Inequity in trainee funding [Vanier exceeds some professor salaries]
   - Number of trainee awards
   - ECI survey
   - Mid-career gap (these are the future senior leaders)
   - Renewals
   - Figure-head labs & Mechanism to downsize
   - Mentorship plan (evaluation of ability to mentor)
   - Smooth the distribution
   - Value of report by committee (distribution brackets)
Foundation Scheme
Maximize reviewer resources (still two systems that drain resources)
Working group constrained within limits
Dovetail with Project Scheme to streamline reviewer resources
Reward system (NSERC Accelerator)
Merit based on application
Exploitation of eligibility criteria (Chairs as co-Ps): Eliminate workarounds
Planning strategy to exit Foundation Scheme, especially ECIs

Committees & College
Review of committee mandates & future plans
Can College achieve more rigorous review body? (NSERC Recs)
Removing reviewers from College
Term limits
 Explicitly defined rules (reviewer when applicant)
 Expectation of awardees to contribute as reviewer
 Incentives for reviewing (time extension, grant funding)

Reviewers & Chairs
Reviewer bias training
More time needed for reviewer (>4-6 weeks)
Definition of ability to review (Low, Med, High)
Committees too large (# applications, # members)
Chair flags concerns
Ethics hotline

Diversity
Diversity questionnaire (applicant checklist)
Diversity in representation (e.g., Institute Directors)
Applaud diversity aims for committees
Diversity excellence
**Other**

Rethink/refresh 13 Institutes  
Facilitate planning (Timing of Announcements; Notice of Award vs. Notice of Decision; Exit strategy for Foundation)  
Open Access to CIHR data (demographics, application metrics)  
Alignment across Tri-Council Agencies to eliminate duplication  
Financial (Unspent monies; Frais indirect for teaching buyout)  
UD Funds  
PubMed CAN

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## Agenda

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
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<tr>
<td>08:30 – 08:40</td>
<td>Welcoming Remarks</td>
<td>Adrian Mota</td>
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<td>08:40 – 09:10</td>
<td>CIHR Update</td>
<td>Adrian Mota</td>
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<td>09:10 – 09:30</td>
<td>Investigator Initiated Research Funding Strategy</td>
<td>Kelly Taylor</td>
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<td>09:30 – 10:15</td>
<td>Breakout Session - Investigator Initiated Research Funding Strategy</td>
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<td>10:15 – 10:30</td>
<td>Health Break</td>
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<td>10:30 – 10:55</td>
<td>Future Evaluation of Peer Review in the Project Competition</td>
<td>Adrian Mota</td>
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<td>10:55 – 11:00</td>
<td>Breakout Session - Future Evaluation of Peer Review in the Project Competition</td>
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<td>11:00 – 11:15</td>
<td>lunch</td>
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<td>11:30 – 12:00</td>
<td>Future of the Foundation Program</td>
<td>Terry Snutch/Kelly Taylor</td>
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<td>12:00 – 12:30</td>
<td>Breakout Session - Future of the Foundation Program</td>
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<td>12:30 – 12:45</td>
<td>Health Break</td>
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<td>12:45 – 13:15</td>
<td>Equity and Diversity Questionnaire</td>
<td>Adrian Mota</td>
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<td>13:15 – 13:50</td>
<td>Open Dialogue</td>
<td>All participants</td>
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<td>13:50 – 14:05</td>
<td>Wrap-up</td>
<td>Adrian Mota</td>
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<td>14:05 – 14:15</td>
<td>Meeting Adjournals</td>
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Discussion

Before we get started…

- Is there anything you would like to discuss today that is not on the agenda?
- Do you have any other questions or comments?

CIHR Update
Adrian Mota, Associate Vice-President, Research, Knowledge Translation and Ethics

- No update on President; Privy Council appointment

Update on the President

<table>
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<th>Announcement</th>
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<td>Awaiting announcement from Privy Council Office</td>
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<th>Budget announcement</th>
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<td>Separation of the role of the President of CIHR from that of the Chair of CIHR’s Governing Council (GC)</td>
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<th>Current status</th>
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<tr>
<td>Revisions to the CIHR Act have been proposed as part of the Budget Implementation Act (Bill C-74) tabled on March 27, 2018</td>
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<td>Bill C-74 was debated at Second Reading from April 16-19, 2018</td>
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<th>Next steps</th>
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<td>Legislative change will come into force once the Bill is approved by the House of Commons and Senate</td>
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<td>CIHR plans to implement changes upon arrival of the new President</td>
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Tri-Council Fund

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<th>Budget announcement</th>
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<td>$275 million over 5 years and $65 million per year ongoing, for international, interdisciplinary, and high-risk Fund to be administered by SSHRC, on behalf of the granting agencies</td>
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<th>Current status</th>
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<td>This initiative is still under development, and being discussed by the Canada Research Coordinating Committee (CRCC)</td>
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<td>The granting agencies are conducting an internal review of existing programs to help inform the development of the Tri-Council Fund</td>
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<th>Next steps</th>
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<td>Development of TB submission</td>
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<td>Allocation of $35 million in 2018-19</td>
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- Opportunities to streamline resources (e.g., Common CV) across Tri-Council agencies (more holisitc solution)
Building a Grants Management Solution for the Future

What are we doing today?

Each agency has a variety of systems that are used for you to use throughout the grants management lifecycle.

Where are we looking to possibly go?

Who will be involved?

- Interest in involving Research Community to inform next steps; transition team for Tri-Agency solution
What is next?

- The transition team will continue their work on planning the way forward for a Tri-Agency solution.
- Once a decision is known, it will be shared with all of you.
- Any feedback of how the current systems are or are not working is welcomed!

Thank you!

For more information or any feedback please send to: operations@cihr-irsc.gc.ca

CIHR CCV Templates

- The CIHR Biosketch CCV template was introduced as an application requirement for the Project Grant.
  - Positive feedback received from applicants and reviewers.
  - In a continued effort to simplify and streamline the CV process, CIHR is reducing the number of templates used.
  - The CIHR Biosketch CV:
    - is shorter than the CIHR Academic CV;
    - consists of seven sections which focus on pertinent information relevant to the specific research proposal, and not the full history of the applicants career;
    - is used to assist peer-reviewers in determining whether an applicant has the necessary skills and experience required to conduct the proposed research described in the application.

College of Reviewers

Membership base of 4,457 reviewers (and counting)

- College – membership of 4457 reviewers; beginning targeted recruitment (send nominations to college@cihr-irsc.gc.ca)
- College of Reviewers in Peer Review – 78% of Project Reviewers are College Members; 98% of Foundation Reviewers are College Members (unclear if this is circular; are individuals invited to College once they reviewers??)
Support for Researchers

- Observer Program: Opportunity for Early Career Researchers to observe face-to-face peer review and gain valuable insights on the review process.
- Review Quality Assurance: Published review quality definition and criteria, along with a checklist to assist reviewers with applying the review quality criteria to their reviews.
- Learning Materials: 17 learning modules are available on our website to support reviewers.
- Membership Progression Program: College membership opportunity for new or less experienced reviewers to gain reviewing experience in a supported manner.
- Mock Peer Review Kit (in development): A tool kit to support learning through peer review simulation exercises.

- Support for Researchers (address performance management): Observer Program; Review Quality Assurance, Learning Materials (positive reception of bias training materials); Membership Progression Program (how to bring in less experienced reviewers; shadowing); There is a Mock Peer Review Kit in development.

DISCUSSION

- Early Career Survey – survey intended to do an environmental scan to determine how other funding agencies support ECIs; feedback expressed frustration from period of reforms and impact on career.
- Q: Anticipate success rate for Project scheme is 15%, is this an accepted target? A – Recognize that Peer Review is less able to distinguish excellence when success rate is below 20%. Success rate number is limited by amounts, number of applications, and many other factors. Need to consider how to approach (philosophical perspective) – if it is about funding the best, then perhaps budgets should not be cut; but, if about number of individuals funded, then establish limits.
- About 20% of applicants submit more than 1 application; submitting more than 1 does increase likelihood of the individual being funded, but, it does not increase likelihood of both being funded (second application success is 3.2%). (This becomes directly related to changing the denominator and success rates.) Raises questions about what limits to impose; Need to think strategically about what we are trying to achieve.
- Goal of diversity questionnaire is to augment CIHR’s ability to track diversity and enhance through targeted strategies; limitation is that currently, only capture M/F.
- Q – Common CV is not the biggest problem to focus. Instead, success rate and how to manage is. A – Recognize importance of strategy of how to spend funds.

Investigator-Initiated Research Funding Strategy (Kelly Taylor)
- Five teams under Director General, Program Design & Delivery

Objectives

- Items for consideration: Strategic (3) & Operational (6)
- Strategic Considerations: (1) Budget allocation (Open vs Strategic), (2) Equity/Diversity/Inclusion (Gender, Indigenous, Language, Career Stage, Region), (3) CIHR Use of Panel Structures and Mandates
Recommendation #5:

“We recommend that CIHR decide on and widely communicate about its investment strategy.”

Context

- Discussions to date:
  - Executive Management Committee (EMC)
  - Research, Knowledge Translation, & Ethics Management Team (RKTE-MT)
- Moving forward:
  - Continued environmental / data analysis
  - Consultations
  - Draft Document

Strategic Considerations (1-3)

- CIHR’s budget allocation
  - Investigator Initiated vs. Strategic Research
  - Project vs. Foundation
- CIHR’s support for Equity, Diversity & Inclusion
  - Gender – Indigenous – Language
  - Career Stage – Region
- CIHR’s use of panel structures and mandates
  - Appropriate funding based on panel structure/creation
  - Multi-disciplinary grant review

Operational Considerations (1)

**CIHR’s approach to restrictions on number of applications per competition**

<table>
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<th>Number of applications per competition</th>
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<td>Most recent data analysis</td>
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Only 3.2% of additional applications submitted by NPIs to OOGP and Project competitions since 2009 (through 2015) have been funded.
Success Rate of NPIs

NPIs who submitted more than one application to the same competition have consistently had higher rates of having at least one application funded than NPIs who submitted only one application.

Average Success Rate
NPIs who submitted multiple applications received funding at a rate 10.3% higher than NPIs who submitted only one application.

Operational Considerations (2)

**Financial Modelling: Capping Mechanisms**

CIHR's approach to other strategic capping mechanisms

Considerations:
- Projects funded per competition;
- Number of applications per individual;
- Total funding for individuals;
- Grant values and/or duration.

Operational Considerations (3)

**Large Grant Pools**

CIHR's use of large grants and their impact on funding scenarios

Current operationalization:
- Defined as being in the top 2% of total grant value
- Budget Envelope (Fall 2017): $18.6M (18.5 used to fund 9 large grants)

Historical considerations:
- Evolution of large grant awards (ranging from $5M (2014) to $11-12M (DGSP) to $18M+ (PJT))
- Option 1: no limitations
- Option 2: established maximum grant value
- Option 3: hybrid approach
- Where do we go with priority announcements?
- How can these be used strategically so they are immense value to community?
- Q – What drives the effectiveness of these programs?

- How to balance bridge grants versus applications (every 7.5 would be 1 application funded).

Next Steps
- Completion of environmental scan / continued data gathering/analysis
- Consultation Plan
- IIR Funding Strategy Document
- Endorsement and Approval Plan
- Implementation Plan / Communications Strategy
DISCUSSION

Table 1
- What benefits/disadvantage do you see with CIHR’s use of bridge grants?
  - Bridge funding is useful (group did examine data available posted online); sustains labs
  - Would like to see metric of those who received bridge funding, how many re-applied? Were they successful?
  - Would like to see negative correlation between success rate and number of bridge grants

Table 2
- What is the impact of retaining or removing across-the-board cuts?
- Not well liked; but do fund more people (higher success rate); satisfies community desire for success rate
- Problem cannot do research that committee approved you to do; this has implications for renewal
- Slowly phase-out across-the-board cuts; take into account inflation
- Need to address trainee awards and funding

Table 3
- Proportion of strategic vs. open; Move everything into Open and guide strategy through priority announcements; Maybe not 100%, but much higher than 70%
- This avoids problems of random deadlines or competitions with very few applications; would like greater consistency in system
- How to reign in budget requests; Graduated success rate (success rate goes down as budget goes up); small grants competition
- Non-medical universities need better chance of getting into funding

Table 4
- What are the pros/cons pertaining to the approaches on the number of applications per competition and capping mechanisms? Do you have any other considerations to share?
- Multiple grant submission; need more data to truly evaluate (e.g., how many times has grant been submitted; what is career stage of NPI)
- Pros: may have grant that is close to getting funded, which give opportunity to start new grant (identifying best panel); allows researchers to play catchup post-reform challenges; permits greater stability for research program if they can stagger
- Cons: puts pressure on review system; some folks seem to abuse system; diluting quality of grants (especially if they are not getting mentorship)
- Cap at 2 seems optimal
- Consider NIH system: number of times permitted to resubmit; Or triage twice they are out (Role of SO notes; when triaged, don’t see any SO notes)
- (Kelly) – 2 applications per competition is 4 per year (fall/spring)

Table 5
- What gaps, or areas do you see as the current top priority, in the strategic consideration of Equity, Diversity, & Application?
- Additional data would inform discussion
- Geographic representation missing from committees; French
reviewers are used to review outside of area of expertise; Question whether all of those who declare ability to review in French have language expertise/literacy
- Other hidden biases: disability, size of university
- Recommended solution: reviewer training

**Table 6**
- What are pros/cons pertaining to approaches on number of applications per competition and capping mechanisms? Do you have any other considerations to share?
  - Administrative methods should be used to limit the number of resubmissions (but recognize game of changing title)
  - If successful, have a gap before you are permitted to apply again
  - Limit number of grants one can hold
  - Issues related to NPI and being on other grants; play to rule as to whether you can apply or not
  - Make it difficult for the people who have a lot of money to get more money; two-tiered system; have a more graduated system (harder at higher level)

**Table 7**
- What are gaps in this Investigator Initiated Research Funding Strategy as a whole?
  - Are programs supporting individuals or projects?
  - How does funding of agencies impact junior progression at universities?
  - We have lost goal of reforms for Projects to emphasize novelty and innovation.
  - Issue about scoring on panels; do not do online so there is no immediate feedback about how ratings translate into rankings in real-time; 0.5 is too large to change status; narrow window for voting; problem is this allows a few individuals to “tank” an application; this is also biased at extremes of distribution

**Other**
- Only NPI has access to funds; it is not necessarily the case that people are trying to game the system – but rather trying to build community and lend expertise; Suggestion to not include as co-PI, but only as collaborator to still permit mentoring process; Justification for why a Foundation Researchers role is and how funds would be used
- Concern is that not everyone is equitable and fair
- Encourage greater transparency, predictability, stability
- Prioritize that success rate is 25%; this helps to resolve competing priorities
- Encourage international research; policies discourage collaboration when other countries require funds for researchers; changing policies would enhance partnerships
Future Evolution of Peer Review in the Project Competition

Adrian Mota, Associate Vice-President, Research, Knowledge Translation and Ethics
April 27, 2018

Overview
- Competition history, results, and status update (Information)
- Evolution of Panel Mandates (Discussion)
  - Survey Outcomes
  - Transfer Data Outcomes
- Feedback on changes to date and on-going requirements

Context from June 2017 UD meeting
- Health research community concerns regarding the Project Grant peer review process.
- Significant revision of process required – need to maintain elements of the Fall 2016 Project Grant Competition.
- Consultation efforts underway to inform planning for future competition delivery.
- Fall 2017 Project Grant competition announcements
- Support for continued evolution of the program (e.g. panel mandates with multi-disciplinary applications)

Fall 2017 Project Grant Competition
- A single phased peer review process
- Face-to-face peer review committee (PRC) meetings reinstated.
- Role of Chairs and Scientific Officers
- Application Management:
  - 48 peer review committees with unique mandates established.
  - Committee mandates of CMZ, GSH, MID, PB1 updated in consultation with scientific community.
  - Applicants selection of committees (first and second choices)
  - Application form retained
  - Applicants permitted to respond to previous reviews.
- Peer Review Process
Now ask applicants to justify panel selection
- Asking committee to focus on top 50% of applications
- Panel last summer focused on increasing transparency via CIHR internal data; looked at shift of scores going into panel and then final score; this supports decision to continue to focus on top 50% (BUT, panel will be given latitude to discuss applications below this line AND to always discuss all ECIs, regardless of where they fall)

- Updating panel mandates is a community effort
- These panels distribute the funding across science
- Implement process focused on refinement

Evolution of peer review, committee mandates, and interdisciplinary research
- Immediate:
  - Engagement with:
    - College Chairs
    - UOs
    - Fall 2017 Chairs and SOs
    - Science Council
  - Monitoring and analysis of application transfer and data from the Fall 2017 competition survey
  - Post Fall 2017 competition debrief
  - College Chair meetings with Project Chairs

- Intermediate:
  - Revision of committee mandates based on outcome of short term activities
  - Ongoing consultation activities
  - Updates, Communication, and Distribution of Revised committee mandates

- Long term:
  - Cycling and monitoring of the immediate and intermediate activities
  - Modification to systems, surveys, and/or processes as lessons learned and best practices emerge
  - Implementation of a recurring process to update mandates

Data to Inform the Discussion

The Funding Policy and Analytics unit at CIHR has recently undertaken two analyses focused on applications to the Project program, and their fit within the PRC mandates:

Surveys to applicants and reviewers from the Fall 2017 Project competition
  - Quantitative assessment of relationship between application topic and PRC mandates.
  - Qualitative assessment of open ended responses.

Application transfers within the Fall 2017 Project competition
  - Quantitative assessment of the number of transfers, and the proportion of applications that ended up in their panel of choice.
  - Qualitative analysis of transfer comments from Chairs and Scientific Officers.
Two key messages to CIHR

What Panels Said:
- CCV light on data; Reviewers want definitive decision on attachments – to read or not to read? Want clarity.
- Liked 2\textsuperscript{nd} SO; this also helped with continuity
- Liked 3\textsuperscript{rd} reviewer; also helpful from data perspective to look at stability of scores
- Education of panels; clinical focus not always necessary and should not have same impact for basic research; there were some comments by reviewers that raised this as concern
- Move to electronic format during peer review committee meetings (live & realtime)
- Struggled with funding overlap and budget inflation

Key feedback themes

Application
- CCV: CCV format for Co-Applicants should include more information
- Attachments: the decision to read or not to read the attachments should not be left at the discretion of the reviewers

Peer Review
- 2\textsuperscript{nd} SO: highly appreciated
- 3\textsuperscript{rd} full reviewer: highly appreciated
- Member recruitment: reduce competition within CIHR programs
- Adjudication criteria: adjust emphasis
- Streamlining: increase percentage of streamlined applications beyond 35%
- Systems: transition to electronic based voting

Budget
- Overlap in funding: CIHR should not encourage having several sources funding the same ideas/research projects
- Overall Budget Cut: because of the across the board cut, some applicants have purposely inflated their budget

Surveys
Quantitative Analysis

Fall 2017 Project competition surveys
Three surveys distributed – goal of assessing panel mandates (effectiveness)

1. Applicant and community surveys:
   I. Which mandates apply to your application/area of research?
   II. Quantify the level of overlap.
   III. Should expertise from this PRC be sought for review of your application?
   IV. Did the application include a focus on (Interdisciplinarity, qualitative data, social sciences, engineering, proof of principle studies)

2. Reviewer surveys:
   I. Quantify the level of overlap with the panel mandate
   II. Did the application include a focus on (same options as above)
Response Rates

Applicants of 33% of the applications submitted to the Project competition responded to the survey, whereas only 10% of Project reviewers completed the survey.

- Bias with response from reviewers (far fewer); see next slide too.

- Are panels appropriate? How do we best reflect interdisciplinary? multidisciplinary?

- Recognize likely flaw in question (may have been interpreted to mean how many “more than 1” committees would be required to review)

\[\text{Response Rates}\]

Composition of the applicant survey response pool closely mirrored the overall applicant demographics from the Project competition.

\[\text{Applicants – Relevant PRC mandates}\]

Many applicants felt that multiple panels were relevant to their research focus.

\[\text{Applicants – Required expertise}\]

When asked to indicate which panels were required for review, however, the number of panels selected was much smaller.

NB: Selecting 0 panels seems to make little sense. Perhaps respondents misunderstood the question. (Writing we were asking about expertise required beyond the assigned panel.)
Applicants

Approximately 22% of respondents could not say that they felt as though their research could be adequately reviewed in what they considered their primary PRC.

- Q – Did this vary by committee?  A – Could not determine because did not have responses across all committees (question raised about whether we can mandate that these surveys are completed)

Reviewers

Reviewers generally felt that applications assigned to them had a high level of overlap with the panel mandate.

Applicant / Reviewer Comparison

Applicants and reviewers diverged greatly about the focus of specific applications:
- Interdisciplinary (65% vs. 37%)
- Natural sciences and engineering (17.5% vs. 29.1%)
- Social sciences and humanities (10.5% vs. 7.4%)

Qualitative Methodology

- Open-ended responses from surveys administered to both applicants and reviewers were assessed.
- Survey responses that did not have substantive content related to the process of peer review were excluded.
- Coding was performed by three analysts who conducted parallel coding of 10% of the data to ensure consistency.
Results – Reviewers

PRC Mandate
- Reviewers generally considered that there was an appropriate overlap between applications and PRC mandate (e.g., 37% of comments noted appropriate overlap whereas 13% noted a lack of overlap).
- In some cases, PRC mandate was considered too broad to adequately assess applications. In other cases, PRC mandate was considered too narrow, which created a gap for certain applications, making them difficult to allocate.

Reviewer Expertise
- While 12% of comments by reviewers note that they considered themselves to have sufficient expertise to review applications, 22% of comments made reference to a lack of expertise on their PRC to appropriately assess all applications (across a total of 11 committees).
- Limits to the expertise of some reviewers on “interdisciplinary” panels were also identified. E.g., on the Public, Community & Population Health PRC, applications with a social science/qualitative focus are not always easily reviewed by social scientists.

Peer Review Process
- The majority of reviewers considered that committee-based design with face to face discussion is the best approach to peer review. Several recommendations for how to improve the process were offered; however:

Results – Applicants

PRC Mandate
- Many applicants considered that there was an appropriate overlap between their application and the mandate of their selected PRCs (18% of total comments).
- Nearly as many comments (16%) made reference to a gap in the PRC mandates, making it difficult to choose an appropriate PRC.
  E.g., As an integrative biomedical discovery researcher working with humans, I feel there is a gap in three type of studies. The mandates of the PRCs that are typically relevant – appear to address “basic” animal models, cellular or molecular studies OR studies directly related to clinical care or intervention. There are few options that appear to address the critical translation of basic research in humans.

Interdisciplinary Applications
- Many applicants with interdisciplinary projects generally considered it a challenge to select an appropriate PRC to adjudicate their application.

Peer Review Process
- While applicants consider that committee-based design is the best approach to peer review, many made reference to some type of challenge in the system (10% of comments), including lack of transparency regarding panel membership and bias towards certain “types” of research.

Comparisons and Next Steps

- Correlations to funding success
  E.g.: Are applications flagged as being interdisciplinary or having a focus on qualitative methods, social sciences, natural sciences or proof of concept less likely to be funded?

- Link applicant and reviewer responses by application number and compare answers.

- Evaluate the relationship between PRCs that are frequently selected together.

- Focus on individual panels. E.g.: Which panels receive more applications that applicants felt required expertise from multiple panels?

- Data visualization shows how proximal committees are selected (to facilitate identifying clusters)
- Reminder – the last box (Spring 2018) represents inclusion of applicant justification to be in specific panel

- Unclear if there are some applications that are misrepresented: are weaker applications homeless?
- No proper control (same application evaluated in both the requested and final committees).
Need to understand why grant is being transferred; need more information than “doesn’t fit in mandate”; have made attempt to qualitatively evaluate Chair’s comments

Transfer Reasons

In general, applications were transferred as a result of:

General
• Lack of overlap between the primary focus of the proposal and the PRC mandate
• Lack of overlap between methodology (model system and tools) and/or study population (children and youth, adults, elderly, etc.) and the PRC mandate
• CIHR policy that prioritizes transfer to the applicant’s 1st and 2nd suggested PRCs before going to any other PRC

Application-specific
• The difficulty to assign/evaluate proposals (limited information in the proposal)
• Fit of the various aims of proposal within multiple PRC mandates
• Lack of consensus among Chairs/SOs regarding the primary focus of the application

Panel-specific
• Lack of expertise on PRCs related to not only study topic but also study methods

Emergent Trends by PRC

• In order to identify emergent themes or trends related to a particular PRC, transfer comments were subset by their transfer origin PRC.
• For purposes of analysis, themes/trends are classified as appearing 2 or more times in the transfer comments.
• Given these criteria, 29 of 64 PRCs analyzed demonstrated trends regarding proposal focal areas of science that were not covered by particular PRC mandates during the 2017 PJT Fall Competition.
  E.g., Applications that lack a mechanistic component were frequently transferred out of the Molecular & Cellular Biology of Cancer PRC
• Results will be useful in refining PRC mandate descriptions, and providing applicants with further guidance on which panels to submit to.
Next steps in the PRC transfer analysis

1. Examine the likelihood of success based on the more detailed reasons for transfer that emerged in the qualitative component of the analysis.

2. Take a more focused look at individual PRCs:
   E.g., Which PRCs had the most transfers, specifically in terms of applications that were reviewed outside of the applicants’ PRC selections?

Data Limitations

Survey data
1. Low response rate from reviewers (n = 133).
2. Due to inaccurate and incomplete data entry by respondents, the number of applications with both applicant and reviewer data is small (n = 169), limiting analysis on an application-specific level.

Transfer data
1. Do not serve as the best proxy for assessing interdisciplinary, social science, etc. applications are adjudicated appropriately within the current panel structure.
2. Comments regarding reason of transfer are brief and provide limited information for qualitative analysis.

The utility of the quantitative analysis (in terms of asking the “right” questions) hinges on the qualitative analysis, which is based on limited information.

Collection and analysis of data to inform future development

Fall 2017 and Spring 2018 Project Grant competitions Chair/SO/Reviewers feedback regarding committee mandates
Direct feedback on committee mandates

- Over the course of the Fall 2017 and Spring 2018 Project grant competitions, received feedback from 19 additional committees:
  - Behavioural Sciences - B (BBB) (Clinical Behavioural Sciences);
  - Biochemistry & Molecular Biology - A (BMA): isochromy & Molecular Biology - B (BMB); Biomedical Engineering (BME); Cell Biology & Mechanisms of Disease (CBM); Developmental Biology (DEV);
  - Endocrinology (E); Haematology, Digestive Disease & Kidney (HDK);
  - Genomics (GMX); Health Policy & Systems Management Research (HPM);
  - Health Services Evaluation & Interventions Research (HSE); Immunology & Transplantation (IT); Knowledge Translation Research (KTR); Medical Physics & Imaging (MPI); Systems & Clinical Neurosciences (NSA);
  - Molecular & Cellular Neurosciences (NSB);
  - Nutrition, Food & Health (NUT); Public, Community & Population Health - (PH1); Virology & Viral Pathogenesis (VVP)

Feedback categories

- Proposals of minor changes to the mandate wording (GMX, VVP), submissions of drafts of revised mandates (PH1) or notices of actively working on a draft for the change in mandate (E, MPI).
- Suggestions of splitting of committees based on specific topics (e.g. BME, CBM, HDK)
- Suggestions of select topics be excluded from the mandate and included in other committees (BBB, DEV, GMX, HPM, HS1, IT, KTR)
- Suggestions of creation of new mandates for specific research topics (BMA, BMB, NSA)
- Suggestions of eliminating detailed mandates and instead allowing the applicant to submit to one general committee (e.g. Neurosciences) and then allowing Chairs/SOs to determine the creation of subcommittees at every competition (e.g. subsequent division into NSA – NSD according to need)

To discuss

1. Are the panels, as they are currently constructed and with their current mandates, the right environment to assess the types of applications being submitted?
2. What process can be put in place to ensure PRC mandates are updated to reflect changes in the research landscape?
   a. How can we improve data collection to support identification and resolution of problems?
   b. Can Scientific Directors be asked to act as stewards of the mandates of PRCs within their areas of science?
3. How do we most effectively adjudicate interdisciplinary applications?

DISCUSSION

- Ideally for most accurate information - need to compare scores/ratings of a transferred application by original and transferred panel
- Administratively, CIHR attempts to manage requests for this sort of more granular information (e.g., Chairs writing explanation for transfer) – which cuts into reviewer time
- Chairs raise concern that have very little information to go on when only working with abstract (some not written with great detail); this led to decision to ask applicant to justify choice; should applicant be exclusively allowed to determine panel?
- Do not sacrifice time given to reviewers for only a small percent of these challenging cases determining best
- Use panel to give greater input at end of session; Schedule time to comment on policy: what is mandate of committee? did it work? Consider how to better use panel to help answer questions.
- Create opportunity for Chairs and SOs that were local clusters (from visualization) to discuss as group and work through some of these issues
- There is not a shared understanding of what the panel mandates are; it is often historical based on members; applicants look at membership to try to find someone who will understand; Education as mandates get refreshed
- Thorough reworking of the mandates is requested; they can be very confusing; mandates are not always as they appear
- Are some issues actually related to Grantsmanship; information available as to what grants are funded by committee; write sharper, more precise abstract at Registration phase
- Traditionally, people are more likely to look up peer review committee members – rather than using mandate
- Consider developing a “reviewer profile” to showcase the sorts of expertise of reviewers by committees; what do reviewers look like?
- CIHR does not have program officers; but do have many individuals in agency that know nature of panels and can provide guidance
- All modern science is multidisciplinary – but much less is interdisciplinary
- How can revision of committee mandates be informed by data? (combined with content expertise from the field)
- How can incremental changes be made without disrupting system?
- Do we see different applicant pressure since the return to the reforms? Anticipate that they system will stabilize – need a few more competitions to track this; Are there panels that have more pressure than others (or less?) and can this be used to spawn development of new committees? CIHR uses caution to ensure no panels are too small
Terry – from UBC (Michael Smith Lab)

(Don’t have these slides...Terry requested these not be shared until reviewed & approved; perhaps they will be shared at later date??)

- Practical goal of program was to take the research leaders out of the system to even the playing field (they hold more grants, more money) and could reduce burden for them too (apply less often)
- Rod McInnes struck this committee to give input about how to proceed
- Nine members (Lara Boyd, Maria Mathews, Lorraine Deydey, Peter McPherson, Graman Collingridge, Louise Potvin, Marie-Eve Tremblay, Sam Weiss, Jeff Latimer)
- Provided list of committee activity meeting dates; plan to have report and recommendations to Science Council in next month (then revise & resubmit) and ultimately send to Governing Council for approval in 2018
- Graph depicting competitions since 2010 to show % of CIHR Open Program funds held by those in the 85th percentile of earners “top earners”: (nearly flat line from 2010 to 2016 – between 35-40% entire time)
- Graph depicting proportion of grants by number of grants held (1, 2, 3+) – across fiscal year (similar to graphs long ago to convey same point)
- Since 2014, there has been downward trend in number of applicants 2014 (1375) to 2015 (910) to 2016 (600) to 2017 (303); this may be a function of CIHR casting too wide a net at launch
- BUT, failure rate is high; Stage 1: 2014-68%, 2015-71%, 2016-62%, 2017-38%
- Who is applying? Trend that is LESS aligned with originally targeted pool; Mid-late investigators recognize disadvantage of funding of new ideas – so they are not applying; ECIs are no longer eligible; CIHR is trying to correct and reach steady-state
- Eligibility moving forward (limit to mid-later career stages); Do not exclude new researchers to Canada who held previous
international funding; Different reasons for *why* applying by Pillar; Certain pillars get greater percentage of funding from Strategic funds (misconception about eligibility); Cannot include strategic funds in the awarded Foundation Grant budget

- Challenges of process: Peer review process seem horrid/terrifying to applicants; and poses burden to reviewers; redundancy in sections of applications; short turnover between S1 & S2 (3-4 weeks); very long delay until final decision (“kids are born faster”)
- Project number of applicants associated with this program moving forward; anticipate it will be quite low (225-300 range)
- Based upon historical figures – expect different distribution by pillar (1-67%; 2-10%; 3-10%; 4-10%)
- Current working recommendations –

REDACTED until reviewed by Governing Council (sorry)

- Q – Did mandate include recommending scope of Foundation? A – Yes, we considered whether the Foundation program should continue. Agreed it should be continued; but should be modified. (NOTE: evidently committee did not receive input from groups who recommended phase out, eg. UD face to face last year).
- Q – Was there discussion about including this with Peer Review process of Project Scheme? A – Yes, we discussed this. At length. But, CIHR cannot award you something you did not apply for.
- Q – Could we have two streams within same structure? A – But Foundation is taking several project grants and string together; We discussed but don’t think it is going to work that way.
- Q – Will you address renewals? A – Yes, I will talk about how to escape from Foundation.
- Q – Is money still disproportionately going to Pillar 1? A – Yes, but this is traditional for CIHR; Usually 60-65% is Pillar 1; largely comparable to OOGP
- Q – What percent of applicants who have 4 more grants? Is there consideration of geography? A – Did not consider geography (not part of mandate). For those in the 85th percentile (top earners): ~25-35% hold 3+ grants. In 2015 & 2016, this was changed, where 30-50% only holding 1 grant.
- MUCH discussion about graph depicting change over time of the number of grants held by those within those at 85th percentile (top earners) – and how to interpret these data.
- Q – Why does Foundation get 2% inflation increase, but
Project doesn’t? A – Because people are locked in for 7 years and budget was based on grants held when applying, this was decided. In Project, when you go for renewal, you can ask for more to incorporate inflation more readily.

- Expected outcomes if implement suggestions: review reviewer burden; shorten time between application and decision; eliminate redundancies; streamline CCV
- Y1 (2014 #150 funded) and Y2 (2015 #120 funded) of Foundation Scheme were overfunded (cast net too wide; too much money went into these); this has been adjusted Y3 (2016 #76 funded); anticipate 35-40 to be funded this year (2017) to strike better balance.
- Percentage of Investigator Initiated budget for Foundation – simulation: 15% ($92.2M)~31 grants, $3M Each to 30% ($184.5M) ~61 grants, $3M;

REDACTED; MUCH DISCUSSION on these numbers and what this means for success rates and implications on Project Scheme
- Q – Decisions about Foundation have implications, particularly if you limit the number of applications one can hold? A – Cannot limit success; Do not anticipate that any restrictions can be put into place.
- Foundation was imperfect because we tied individuals to a baseline (not what they asked for).
- Q – There are several assumptions being made about how many project grants these Foundation awardees would actually hold in new Project scheme.
- Recommend

REDACTED
- “Funding Cliff” starts in 2022 (129), 2023 (87), 2024 (63); committee felt it was a mistake to allow so many in first two years
- First ECIs will face this cliff within 18 months; those exiting the Foundation program need to build research programs and likely require time and experience to aid transition to Project Grant program. Recommend

REDACTED
- Q – This may raise issues about

REDACTED
- Q – There are a number in the Foundation Scheme that are
advanced and skilled. Q – But there are also many ECIs, and they need transition options.
- Mid-to-late career does not have a simple solution for the exit strategy. Recommend REDACTED
- Similar strategy is recommended for REDACTED
- MUCH DISCUSSION about soft landing and transitions and stagger mechanisms.
- Anticipate attrition as researchers downsize their labs as the progress across the researcher lifecourse (cannot impose age restrictions)
- Q - What was the original plan? A – It was originally planned to maintain a higher proportion of Foundations.

DISCUSSION
Questions:
1) Have top scientists been successful?
2) Streamlining review process: Has review burden decreased?
3) Streamlining review process: Has applicant burden decreased?
4) Has program taken 85th percentile scientists “out of the system”?
5) Do you agree with peer review criteria being weighted 60:40 between career and proposed program?
6) How should we deal with applicants who request more than baseline or who have no previous CIHR funding?
7) The report has proposed mechanisms for a “soft landing” for ECI and Mid-Senior Investigators. Are there other mechanisms you would suggest?

- Another comment raised about assumptions about Foundation holders will take all funds and be successful if applying for project grants REDACTED
- Committee spent time wondering if this was how to identify leaders
- Still unclear why this cannot be dovetailed with the Project Scheme; can still award excellence and identify leaders
- There are research programs that are submitted to Project Scheme; Committees are capable of reviewing different types of grants; Flaw in logic as to why these cannot be integrated
- Several suggestions were raised by UD F2F last year about ways to integrate Foundation into Project Scheme; to what extent did working group consider these “outside of the box” ideas?
- Is it worth having Foundation given the goal steady-state numbers REDACTED? What about the number of inputs into the system (committee formation, reviewer recruitment, coordination, travel to Ottawa)
- Disappointed that working group mandate did not consider option to phase out Foundation. Is there any avenue for input?
- Is there an administrative mechanism that could be used for Foundation (that abides with rules to not award funds without peer review)? (There was aversion to this process when Rod & Adrian toured Canada.)
- Not taking into account the shift in the culture of science. More calls to have smaller amounts (small grant envelope). Interest in allocating resources to trainees. Limiting number of applications per individual. Losing flexibility to adjust to funding climates.
- How is CIHR evaluating the output of Foundation? What is the strategy to (a) train reviewers to be less biased about reputation, and (b) determine return on investment (ROI)?
- Straw poll - <10% voted for continuing Foundation. (NOTE UDEC member states they only saw 1 negative vote).

- Why start with applicants? Why not start with reviewers or other groups? Decided to initiate process with applicants.
- This will be a new requirement for all applicants (one time questionnaire, not every new application)
- There is an opt-out option for every item;
- All applicants, except collaborators are to complete
- Data collected will only be presented in aggregated fashion
- Data privacy – institutions do not have access to this information; only a small pool of individuals at CIHR will have access to this information in aggregate (there is a consent form that specifies this information)

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**Equity and Diversity Questionnaire**

Adrian Mota, Associate Vice-President, Research, Knowledge Translation and Ethics

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**New Requirement: Equity and Diversity Questionnaire**

- Through its Equity Strategy, CIHR is committed to ensuring that its programs, funding opportunities, and peer review processes result in the fair treatment of all participants.
- On May 15, 2018, we will begin collecting data on applicant diversity in an effort to identify and address bias in all of our funding programs.

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**What is the Questionnaire?**

- New requirement for all CIHR applicant types (except collaborators)
  - Must be completed by all application participants before the application can be submitted by the NPA
  - One-time completion
  - Option to choose “I prefer not to answer” for each question
- Simple and Straightforward
  - Five questions on the applicant’s age, gender identity, Indigenous identity, visible minority identity, and disability
  - Accessible via a link or a ResearchNet account
- Secure
  - Securely stored and may not be viewed or edited by others
  - Will only be used in an aggregated form
- Snapshot of planned questionnaire

- Why did CIHR come up with these questions and this terminology? They looked at what other federal governments are doing. These questions reflect sensitive matters and they have received considerable consultation for wording specifics & crafting questions. Sought out diversity and patients, to get input.

- Definitions are included for some of these items (Language is from federal template)

- Will use data to measure equity performance

- Request support to let community know about this questionnaire (in ResearchNet); give heads-up

- Mandatory to complete to apply for grant funding
- Will bring back discussion about Foundation to President. Can also decide if would like to write letter to provide input?
- Comment about sustainability of Foundation scheme.
- SPOR – will be a full agenda item for one of the next UD meetings online. There is a working group that has more information that will be important to have present for the discussion.
- Future evolution: scale, electronic voting, response to reviews (real time), have implications for both timeline and grants management (ResearchNet 2.0); legacy systems are dated
- UDs thanked Adrian for his impressive role & wish him luck