Are you in a funding rut?
Today’s Agenda:

• Necole Sommersel, Research Manitoba
• Barb Hewitt, SSHRC
• Andrea Craig, NSERC
• Jodi Smith, CIHR
• Michelina Violi, NIH
New Federal Initiatives: Tri-Agencies

- **SSHRC**: $215.5M over 5 yrs
  - $3.8M to develop a strat plan to do research with Indigenous communities
  - $82M over 10 yrs for co-creation of a permanent Inuit Health Survey
  - New fund to support international, interdisciplinary, fast-breaking, high-risk research: $275M over 5 yrs
- **NSERC**: $354.7M over 5 yr
  - Consolidation of Partnership programs
- **CIHR**: $354.7M over 5 yrs
  - Consolidate eHealth Innovations Partnership and Proof of Principle
2018 Operating Grants:

• The 2018 Operating Grant category is for New Investigators, and has been broadened to apply to applicants in Health, Social Sciences and Humanities, and Natural Sciences and Engineering.

• Purpose
  – To defray the normal direct costs of research (e.g., personnel costs, supplies and expendable materials, experimental animals, equipment).
  – These funds are also intended to help establish independent health research programs within the province; to support the research productivity necessary for obtaining longer term and more substantial funding from national and other external agencies.
2018 New Investigator Requirements:

Investigators and co-applicant(s) must be within the first FIVE YEARS of their initial faculty appointment at the Assistant Professor (or equivalent) level in North America, as of the application deadline.

- **NOTE**: Special eligibility for clinician scientists is in place whereby the start of an independent research career is defined as the date at which s/he received funding for a research project in which s/he was a principal investigator on a funded peer-review grant.

Grants will be capped at the following maximum amounts and terms for each category:

- Health - $65,000 per year for two years
- NSE - $25,000 per year for two years
- SSH - $20,000 per year for two years
- The amount of funds that may be used for equipment is limited to $10,000.00 (for small equipment), over the two years of the grant.
2018 **New Investigator Operating Grants (Cont.):**

Up to **FIVE** grants will be awarded in each category per competition year;

Each investigator is limited to **ONE** (individual or joint) Operating Grant application per competition.

Investigators may only apply to **ONE** category per competition (health, social sciences and humanities, or natural sciences and engineering)

Investigators **MAY NOT HOLD** more than one Research Manitoba New Investigator Operating Grant (as either applicant or co-applicant), within their eligibility period.

Applicants **MAY** concurrently hold a New Investigator Operating Grant and hold/be eligible for Tri-Council funding as long as the funds are not paying for the same parts of the research project (no overlap in funding).
For **ALL** applicants:

An updated Canadian Common CV (i.e., no older than six months), will be required for submission for **all applications** (including co-applicants on Operating Grants and supervisors on Master’s Studentship applications).
For Operating Grant Applicants

New Investigator applicants will be required to answer four questions on gender and sex-based analysis (also required by CIHR) **when appropriate**:

1. Are sex (biological) considerations taken into account in this study? (Y/N);
2. Are gender (socio-cultural) considerations taken into account in this study? (Y/N);
3. *(If the respondent answers "yes" for one or both questions #1 and/or #2)* Please describe how the sex and/or gender considerations will be considered in your research proposal. (maximum of 2,000 characters);
4. *(If the respondent answers "no" for one or both questions #1 and/or #2)* Please explain why sex and/or gender are not applicable in your research proposal (maximum of 2,000 characters).

**Sufficient justification must be made as either how the sex and/or gender considerations will be considered in your research proposal, or why sex and/or gender are not applicable in your research proposal.**
2018 Application Deadlines:

APPLICATION DEADLINE IS **JUNE 8, 2018** (4:00PM CST) for the Master’s Studentship Award Programs

(Reference letters due June 22, 2018 by 4:00PM CST)

APPLICATION DEADLINE IS **JULY 31, 2018** (4:00PM CST) for the New Investigator Operating Grants

(Reference letters due August 14, 2018 by 4:00PM CST)
Research Funding Programs:
Necole.Sommersell@researchmb.ca

Detailed program information can be found in the Program Guide for each funding opportunity page on the Research Manitoba website:
www.researchmanitoba.ca
SSHRC Research Grants

Barbara Hewitt, PhD
Roadmap:

• SSHRC Research Grants overview
• Good SSHRC Proposals
• Common Pitfalls
• Resources
What is SSHRC?

• Social Sciences and Humanities Research Council of Canada
• Research and research training in SS&H
• In Canada and abroad
• Inter- and Cross-Disciplinary
SSHRC Eligibility

• What, not who
• Projects, not programs
• People, not equipment
• Social objectives/impacts
• No clinical trials or clinically-oriented research
• No basic science or mechanisms
SSHRC Grant Types

• Insight
  • To build knowledge and understanding
  • Support new approaches to research
  • Insight Development Grant
  • Insight Grant

• Partnership
  • Build links between academic and non-academic institutions
  • Partnership Engage Grant
  • Partnership Development Grant
  • Partnership Grant
## SSHRC Insight Competitions

<table>
<thead>
<tr>
<th>Insight Development</th>
<th>Insight</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Research in its initial stages (new questions, methods, theoretical approaches)</td>
<td>• Stable support for long-term initiatives</td>
</tr>
<tr>
<td>• $7,000-75,000</td>
<td>• Stream A</td>
</tr>
<tr>
<td>• 1-2 years</td>
<td>• $7,000-100,000</td>
</tr>
<tr>
<td>• Emerging and established scholar envelopes</td>
<td>• Stream B</td>
</tr>
<tr>
<td>• Individuals or teams</td>
<td>• $100,000-400,000</td>
</tr>
<tr>
<td></td>
<td>• 2-5 years</td>
</tr>
<tr>
<td></td>
<td>• Individuals or teams</td>
</tr>
</tbody>
</table>
# SSHRC Partnership Opportunities

<table>
<thead>
<tr>
<th>Partnership Engage</th>
<th>Partnership Development</th>
<th>Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>• $7,000-25,000</td>
<td>• $75,000-200,000</td>
<td>• Two-stage</td>
</tr>
<tr>
<td>• 1 year</td>
<td>• 1-3 years</td>
<td>• LOI is $20,000</td>
</tr>
<tr>
<td>• PI and one public,</td>
<td>• Foster new research with new or existing</td>
<td>• $500,000-2,500,000</td>
</tr>
<tr>
<td>private or non-profit</td>
<td>partners</td>
<td>• 4-7 years</td>
</tr>
<tr>
<td>partner</td>
<td>• Test new partnership approaches</td>
<td>• Support new or existing formal partnerships</td>
</tr>
</tbody>
</table>

- University of Manitoba
## SSHRC Success Rates

<table>
<thead>
<tr>
<th>IDG</th>
<th>IG</th>
<th>PEG</th>
<th>PDG</th>
<th>PG LOI</th>
<th>PG</th>
<th>UM SR</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>41</td>
<td>100</td>
<td>23</td>
<td>73</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>39</td>
<td>51</td>
<td>41</td>
<td>33</td>
<td>18</td>
<td>National SR</td>
</tr>
</tbody>
</table>

IT'S NOT DENIAL
I'M JUST VERY SELECTIVE ABOUT THE REALITY I ACCEPT
SSHRC Deadlines

• Insight Development Grants:
  Early February

• Insight Grants:
  Mid-October

• Partnership Engage Grants:
  Four intakes annually (Sept, Dec, Mar, June)

• Partnership Development Grants:
  End November

• Partnership Grant LOI and Full Application:
  Mid-February and Early November
Characteristics of Good SSHRC Proposals
SSHRC Proposals Must

• Follow guidelines exactly
• Highlight importance of proposed research (Challenge)
• Provide complete plan for work proposed (Feasibility)
• Show reviewers you know the field well (Capability)
Strong SSHRC Proposals

• Provide new insight(s) into important problems or issues
• Tie all components to stated objectives
• Consider the audience
• Are written clearly and concisely
• Weave a compelling narrative
• Take time to develop
Check online requirements. Begin pilot study prn.

12 months

8-4 months

Legible draft for review by colleague or RF. Revisions.

2 months

Prescreening of application through ORS or Panel. Revisions.

3-2 weeks

Process final draft through Dean’s office and ORS.
SSHRC Pitfalls
Weaker SSHRC Proposals

• No pressing issue
• Vague and/or unfocused proposal
• Dense prose, use of jargon
• Failure to present a logical and persuasive argument
• Lack of clear methods and methodology
• Little to tie theory to methods
• Padded budget
• Lip service for student training section
SSHRC Realities

• Very little success at SSHRC the first time
• Pay attention to reviewer feedback
• Be persistent and resubmit
• Resubmissions must be substantively re-worked – small changes generally not enough
Don’t go it alone
Resources

• Pay attention to the instructions and all SSHRC guidelines
• Use in-unit and ORS Review Panels for additional feedback
• Talk to the RGO and Research Facilitator throughout the process
• ORS Funding Database
  http://pasweb.cc.umanitoba.ca/extapp/ors/pubapp/umfo.php

• SSHRC RGO and RF contact info:
  http://umanitoba.ca/research/ors/contact_us.html

• SSHRC Policies and Guidelines
Putting your best foot forward: Applying to Natural Sciences and Engineering Research Council of Canada (NSERC) when your home discipline is not the NSE

Andrea Craig, Research Grants Officer (NSERC)
A207 Chown (Chown Boardroom)
16 May 2018, 1:00 – 4:00 p.m.
Overview:

- Important early considerations: **eligibility** and **agency mandate**
- Culture and optics
- Characteristics of good/great applications
- Common pitfalls
- A selection of NSERC programs in brief
Research (in general):

- looks at underlying science or mechanisms/design
- develops new tools and/or technologies, advances knowledge

**Discovery Grants program is a standalone** for basic science operating; most NSERC programs are *partnerships projects with industry*

- **Industry/company/partner/supporting organization:** *typically* for-profit company operating from a Canadian base which produces goods or services within Canada or carries out R&D in Canada

No clinical trials or clinically-oriented research
Mandate and Subject Matter Eligibility

Make sure you’re eligible **before** you write the application

<table>
<thead>
<tr>
<th><strong>Self</strong></th>
<th>• Tenure, tenure-track, or contract of no fewer than 3 years</th>
</tr>
</thead>
</table>
| **Partner (as appropriate)** | • program-specific  
|                    |   • for the most part, companies that:  
|                    |   • operate from a Canadian base,  
|                    |   • produces goods or services, or carries out R&D, in Canada  
|                    |   • has a credible plan for exploiting research results in Canada |
| **Subject matter** | • must be primarily in the natural sciences and engineering, other than the health sciences; and  
|                   | • intended objective(s) of the research must primarily be to advance knowledge in one or more of the natural science or engineering disciplines |
Mandate and Subject Matter Eligibility

Selecting the Appropriate Federal Granting Agency


If the intended outcome of the research is to improve or have an impact on human health, this is CIHR and not NSERC


<table>
<thead>
<tr>
<th>NSERC Eligible</th>
<th>NSERC Ineligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies using cancer cells to investigate mechanisms of apoptosis (programmed cell death) in normal cells</td>
<td>Identification or validation of a target for therapy, or measuring the response to a therapy</td>
</tr>
<tr>
<td>Studies aimed at understanding the contraction, fatigue, load or recovery cycle of muscle in healthy subjects</td>
<td>Research aimed at developing a new diagnostic technology based on known biomarkers</td>
</tr>
<tr>
<td>Research involving the fundamental biochemistry of drug delivery mechanisms (e.g., liposome microsphere preparation)</td>
<td>Testing or optimizing of new drug delivery mechanisms</td>
</tr>
<tr>
<td>Modifying gene expression or replication processes and studying the impact of different hormonal levels in</td>
<td>Gene replication or cell death studies in stem cells that have been transformed into cancer cells to learn about cancer treatment or</td>
</tr>
</tbody>
</table>
New to NSERC?

Whether Early Career or Established Researcher – learn NSERC culture and apply it in your application (talk the talk)

Or: How I learned to love Times New Roman Size 12

NSERC Presentation Standards
http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/pdfatt2_eng.asp

- 12 pt Times New Roman font
- Single spaced
- Black text, no colour images
- ¾” margins
- Your name outside set margins, top right of every page
- Number pages
- No appendices
**NSERC Culture / Optics**

### Why bother?
- First impressions matter
- You’ll seem familiar with programs and policies
- Reviewer expectations
- *Helps you get funded*

### Wear your NSERC hat
- Tailor your image – highlight your NSE accomplishments
- DG is most important to blend in

### Applications are not interchangeable
- General presentation: font, margins, composition
- Words and terms: Aims vs. Objectives, Rationale vs Background, “Hypotheses”, “Pitfalls”
- Use NSERC’s headers
What does a **good** NSERC application look like?

- Follows program guidelines
- Proposes research that will advance the field
- If there is an industry partner involved, they are:
  - Eligible
  - Appropriate users or beneficiaries of the research results
- Has a credible plan to train students
What does a great NSERC application look like?

• Addresses program objectives explicitly
• Is clear and easy to follow
• The research plan:
  • makes sense logistically
  • is feasible
  • methodology is articulated and appropriate
• If there is an industry partner, they are (their rep is) involved all through the life of the project
• Training plans are well defined; students will be exposed to a breadth of people, places, techniques
What will sink an NSERC application?

- Project outcomes do not support NSERC’s mandate
- Lack of, or poorly described, student training opportunities
- Straightforward analysis and/or collection of data without interpreting the underlying mechanisms
- Industry partner only appears “at the end”
Basic Science Operating
Discovery Grant

Research Focus
• Broad and varied
• Program, not a project (no defined term, though funded in 5y cycles; no deliverables)

Mandatory
• Highly individual grant
• NOI 1 August annually
• Eligibility of self
• Eligibility of subject matter

3-yr Success Rate
• Early Career Researcher: 70%
• Established Researcher: 65%
• See next slide

Tips
• Have an early draft
• Contact your Faculty’s Grants Facilitator or me about it as soon as you can

Fatal
• Real or perceived overlap with other agencies
• A project instead of a program

Resources
• NSERC webinars or information sessions
• NSERC Peer-Review Manual
• UManitoba Grants facilitators
### EG: Average Award Amounts (2017-2018)

and Success Rates (Early Career*/Established Non-Renewing)

<table>
<thead>
<tr>
<th>Field</th>
<th>Early Career</th>
<th>1st Independent Researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>1501 – Genes, Cells &amp; Molecules</td>
<td>$29,705/28,847</td>
<td>54/45%</td>
</tr>
<tr>
<td>1502 – Biological Sys. &amp; Functions</td>
<td>$27,500/28,857</td>
<td>66/31%</td>
</tr>
<tr>
<td>1503 – Evolution and Ecology</td>
<td>$26,611/25,333</td>
<td>67/51%</td>
</tr>
<tr>
<td>1504 - Chemistry</td>
<td>$26,625/28,133</td>
<td>62/34%</td>
</tr>
<tr>
<td>1506 – Geosciences</td>
<td>$26,556/26,458</td>
<td>62/39%</td>
</tr>
<tr>
<td>1508 – Mathematics &amp; Statistics</td>
<td>$19,446/19,436</td>
<td>83/57%</td>
</tr>
<tr>
<td>1510 – Electrical &amp; Computer Engineering</td>
<td>$26,182/26,563</td>
<td>61/36%</td>
</tr>
<tr>
<td>1512 – Mechanical Engineering</td>
<td>$23,448/24,053</td>
<td>78/31%</td>
</tr>
</tbody>
</table>

* Early Career – within three years of 1\textsuperscript{st} independent researcher appt.

## NSERC Culture / Optics

### Discovery Grant-specific considerations

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A full, separate program of basic science focused research</td>
<td>“My basic science program is <em>part of my overall [health] program</em>”</td>
</tr>
<tr>
<td>Understanding that the award amounts are small and intended to be a leveraged grant-in-aid</td>
<td>“How can I expect to carry out this program with an award that small?”</td>
</tr>
<tr>
<td>A program with no end</td>
<td>A project for the present</td>
</tr>
<tr>
<td>5-year funding cycles</td>
<td>Fewer than 5 years of funding requested</td>
</tr>
<tr>
<td>Students (&quot;HQP&quot;) of all kinds are discussed and woven throughout the application</td>
<td>Technicians and post-docs; few other HQP discussed</td>
</tr>
<tr>
<td>Publications in, and recognition from, the NSE community</td>
<td>No track record in the NSE</td>
</tr>
</tbody>
</table>
## Discovery Grant programs (Evaluation Group 1501; operating):  

<table>
<thead>
<tr>
<th>Topic</th>
<th>Authors/Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurements of Protein Dynamics to Elucidate Protein and Enzyme Function</td>
<td>J. O’Neil, Chemistry</td>
</tr>
<tr>
<td>Regulation of neuronal gene expression by secretory leukocyte protease inhibitor</td>
<td>S. Hannila, Human Anat. &amp; Cell Sci.</td>
</tr>
<tr>
<td>The influence of bacterial lipid composition variation on transporter function and folding</td>
<td>D. Bay, Medical Microbiology</td>
</tr>
<tr>
<td>Structural and mechanistic studies of multifunctional proteases in virus replication and host immune evasion</td>
<td>B. Mark, Microbiology</td>
</tr>
</tbody>
</table>

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Some titles for flavour

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**NSERC Culture / Optics**
# Equipment

## Research Tools & Instruments Grant

**Research Focus**
- Equipment (not infrastructure) supports Discovery or NSERC Partnerships (E.g. CRD, other) project

**Mandatory**
- Hold or be applying for: Discovery, CRD, specific Chairs
- Can be on *one* RTI application (PI or Co-I)

**3-yr Success Rate**
- 33% (National)
- 22% (UManitoba)

**Tips**
- Have an early draft
- Contact your Faculty’s Grants Facilitator or me about it as soon as you can

**Fatal**
- No particular urgency to request
- Equipment doesn’t primarily support NSE work

**Resources**
- NSERC webinars or information sessions
- Grants facilitators
- Assessment forms
Equipment

Research Tools & Instruments Grant

Total RTI Awarded at UM since 2000

568 applications
169 awarded:
- Science: 66
- Engineering: 46
- Agricultural and Food Sciences: 35
- Environment, Kinesiology, Arts: 19
- Medicine, Dentistry, Nursing, Pharmacy: 3
# Let’s Meet

## Connect Grants

<table>
<thead>
<tr>
<th>Research Focus</th>
<th>Mandatory</th>
<th>3-yr Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Level 1 - $5k travel to explore new partnership with a company</td>
<td>• Travel and subsistence costs only (Level 1)</td>
<td>• Level 1: 100%</td>
</tr>
<tr>
<td>• Level 2 - $5k+ for larger-scale meeting or workshop</td>
<td>• Discuss plans with regional office (Level 2)</td>
<td>• Level 2 (and 3*): 100%</td>
</tr>
<tr>
<td>• PI can be researcher or administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Activities must take place in Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Application Checklist <a href="http://www.nserc-crsng.gc.ca/_doc/Professors-Professeurs/ConnectChecklist_e.pdf">http://www.nserc-crsng.gc.ca/_doc/Professors-Professeurs/ConnectChecklist_e.pdf</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
First Date

Engage Grants

- Fosters new partnership between one researcher and a company
- Work solves company ‘problem’

Research Focus

- Must hold/have held peer-reviewed NSERC funding within past 6y
- If home is health-oriented faculty, must have been awarded DG within past 6y

Mandatory

- 86%

3-yr Success Rate

- 6-month projects – small application, quick turnaround
- Joint application w/ Mitacs
- All IP arising belongs automatically to the partner

Tips

- Requires the expertise of someone other than the PI
- A former research relationship exists

Fatal

- Checklist and proposal template: http://www.nserc-crsng.gc.ca/_doc/Professors-Professeurs/EGUniversitiesChecklist_e.pdf

Resources

- University of Manitoba
Partnership

Collaborative Research & Development Grants

- Mutually beneficial collaboration between academic team and partner
- Collaborative work
- Training opportunities
- IP Agreement
- 76% 3-yr Success Rate
- Partners can be multinational or foreign*
- Eligible in-kind contributions matched with cash from NSERC
- 1-5yr project, no $ min/max
- Joint application w/ Mitacs
- Project is analysis
- Partner cannot directly exploit research results
- Poor scientific merit and/or feasibility
- UManitoba Grants facilitators
- NSERC program officer

Tips

Mandatory

Fatal

Resources

University of Manitoba
**CIHR / NSERC Partnership**

**Collaborative Health Research Projects (CHRP)**

<table>
<thead>
<tr>
<th>Research Focus</th>
<th>Mandatory</th>
<th>3-yr Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Health and NSE communities together to improve health/services/system</td>
<td>• One CIHR researcher, one NSERC researcher, one knowledge/technology user (KTU)</td>
<td>• &lt; 20%</td>
</tr>
<tr>
<td>• 3-year project</td>
<td>• Competitive LOI late May</td>
<td>3-yr Success Rate</td>
</tr>
<tr>
<td>• No budget maximum</td>
<td>•</td>
<td>%</td>
</tr>
<tr>
<td>• Make sure team really represents CIHR and/or NSERC</td>
<td>• Project outcomes are in too early or too late stage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Unclear logistics</td>
<td></td>
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<tr>
<td></td>
<td>• Poor integration</td>
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</tbody>
</table>

**Tips**

- Project outcomes are in too early or too late stage
- Unclear logistics
- Poor integration

**Fatal**

- NSERC webinars or information sessions
- NSERC Peer-Review Manual
- UManitoba Grants facilitators

**Resources**
NSERC Culture / Optics

*Some titles for flavour*

<table>
<thead>
<tr>
<th>CHRP program (partnership)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing novel integrated point-of-care systems for chronic kidney disease biomarkers</td>
</tr>
<tr>
<td>measurements <em>(F. Lin, Phys &amp; Astro; C. Rigatto, Int. Med)</em></td>
</tr>
<tr>
<td>Development of magnetic nanoparticles to break through the blood-brain barrier *(D.</td>
</tr>
<tr>
<td>Miller, Pharmacology &amp; Therapeutics; S. Liu, Textile Sciences)*</td>
</tr>
</tbody>
</table>
Training (with 30% non-NSE)

Collaborative Research and Training Experience Program (CREATE)

- **Training** within an NSE context
- **Training** at the interface between NSE-health or NSE-SSH

**Research Focus**
- Competitive NOI early May
- Innovative and unique
- LoS from VPRIO

**Mandatory**
- 13 funded in 2016, 18 funded in 2017 (across Canada)
- 18% since 2008

**3-yr Success Rate**
- Facilitate student mobility
- Value-added, multi-disciplinary experience
- Mitacs

**Tips**
- A project focused on the research instead of a program focused on training

**Fatal**

**Resources**
NSERC Culture / Optics

*Some titles for flavour*

<table>
<thead>
<tr>
<th>CREATE program (training)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSERC CREATE program for water and sanitation security in First Nations (H2O CREATE) (<em>A. Farenhorst, Soil Science</em>)</td>
</tr>
<tr>
<td>CREATE program in visual and automated disease analytics (VADA) (<em>P. Irani, Computer Science</em>)</td>
</tr>
</tbody>
</table>
# Deadlines

<table>
<thead>
<tr>
<th>Program</th>
<th>NOI Deadline</th>
<th>Full Application Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovery</td>
<td>1 August</td>
<td>mid-October</td>
</tr>
<tr>
<td>Connect, Engage, CRD</td>
<td>Rolling – no particular</td>
<td></td>
</tr>
<tr>
<td></td>
<td>deadline</td>
<td></td>
</tr>
<tr>
<td>CHRP</td>
<td>Competitive NOI end of May</td>
<td>early October</td>
</tr>
<tr>
<td></td>
<td>Full application (on invitation)</td>
<td>early October</td>
</tr>
<tr>
<td>CREATE</td>
<td>Competitive NOI early May</td>
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Canadian Institutes of Health Research Grants

Jodi Smith, Research Facilitator, Health Sciences
CIHR Overview

• support excellence across the four pillars of health research:
  • biomedical
  • clinical
  • health systems services
  • population health

• **Mandate**: “excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system.”
13 CIHR Institutes

- Aging
- Cancer Research
- Circulatory and Respiratory Health
- Gender and Health
- Genetics
- Health Services and Policy Research
- Human Development, Child and Youth Health
- Indigenous Peoples’ Health
- Infection and Immunity
- Musculoskeletal Health and Arthritis
- Neurosciences, Mental Health and Addiction
- Nutrition, Metabolism and Diabetes
- Population and Public Health
CIHR Budget

- Budget: ~$1 billion/year
- Investigator-driven research
  - Projects created by individual researchers and teams
- Priority-driven research
  - Initiatives created by government to investigate health issues that are of strategic importance to Canada

*from cihr-irsc.gc.ca
Project Grant

• capture ideas with the greatest potential to advance health-related fundamental or applied knowledge, health research, health care, health systems, and/or health outcomes.
  • projects with a specific purpose and a defined endpoint.
  • new, incremental, innovative, and/or high-risk lines of inquiry; or knowledge translation approaches
• 2 competitions per year (March and September)
• September 2018 competition:
  • Registration deadline approximately mid-August, 2018
  • Application deadline approximately mid-September, 2018
  • RFHS has an internal review process for Project grants (open to researchers in other faculties)
Project Grant Fall 2017 Results

- 512/3415 funded, 33 bridge grants; success rate 15%
- Envelop was $372 million; average grant: $720,534 over 4.38 years

- 123/512 grants awarded were to a new/early career investigator
- 22 awarded for Indigenous health
- Pillar 1 (biomedical): 328/2216; 14.8%
- Pillar 2 (clinical): 92/629; 14.63%
- Pillar 3 (health systems/services): 45/280; 16.07%
- Pillar 4 (social/cultural/environmental/population health): 46/287; 16.03%

- There was an across the board budget reduction of 23.5%
Project Grant tips

• Include comments to which you are responding in the Response to Reviewers section
• Only black font
• Show the creativity and novelty of your research
• Clear objectives
• Use language in the instructions (e.g. “potential challenges and mitigation strategies” rather than “potential pitfalls”)
• Note page limits (e.g. Research Proposal is 10 pages including Figures/Tables)
CIHR Funding Opportunities

- Foundation
- Catalyst
  - For research in various areas
  - Supported by Institutes
- Planning and Dissemination
  - Support events and activities relevant to an institute’s mandate
  - 2 competitions/year (~January & July)
- Collaborative Health Research Projects (CHRP)
  - NSERC/CIHR collaboration
  - Artificial Intelligence: Health and Society (CIHR/NSERC/SSHRC)
CIHR Funding Opportunities

- Operating grants
  - Joint programs (institutes, other granting agencies)
  - e.g. Canadian Microbiome Initiative 2; CIHR Clinical Trials Network in HIV/AIDS (2018); Research Network on Lyme Disease
- Team grants: CIHR/Institutes & external sponsor
  - Support cooperation/collaboration, teams of researchers
  - e.g. E-Rare-3 Joint Transnational Call (2018); GENDER-NET Plus; NEURON 2018
Research Grants Officers

Health Sciences

• Jenna Silva (until January 2019)
• Jackie Cooney-Birch (after January 2019)
• Michelina Violi
Research Facilitators

- Jodi Smith, Research Facilitator, Health Sciences
- Elyssa Warkentin, Research Facilitator, SSHRC
- Research Facilitator, SSHRC (TBD)
- Chantal Basset, Research Facilitator, NSERC
- Dustin Lippert, Research Facilitator, NSERC
- Kristen Kindrachuk, Research Facilitator, NSERC
Thank you!

Questions?
Exploring Funding Opportunities in the United States

Michelina Violi, Research Grants Officer (Health)
Office of Research Services
Ph: 204-789-3428
Michelina.Violi@umanitoba.ca
Presentation Outline

• CIHR grants vs. National Institutes of Health (NIH) grants.
• Demystifying how to search for funding opportunities at the NIH and Department of Defense (DoD) and other US agencies.
• Registering for eRA Commons, Grants.gov and other US systems
• Applying for NIH grants
• Timelines for the application process
CIHR vs. NIH: Similarities and Differences

**CIHR**
- 13 institutes dedicated to a specific area of focus.
- invests approximately $1 billion/year to support health research in Canada.
- Total budget available for the investigator-initiated programs (Project Grant and Foundation Grant) is approximately $575M.

**NIH**
- 27 Institutes and Centers, each with a specific research agenda, often focusing on particular diseases or body systems.
- invests nearly $32.3 billion/year in medical research worldwide.
- • More than 80% of the NIH's funding is awarded through competitive grants.
Funding Mechanisms

Both CIHR and NIH have investigator-initiated and targeted funding mechanisms

**CIHR**
- Open Operating funding and targeting funding (Catalyst, Operating, Team and other grants)

**NIH**
- Programs such as R01, R21 and U01 can be investigator-initiated or solicited via a Request for Application in a targeted area.
Review Criteria and Process

**CIHR- Project Grant**
- Concept: 25% (significance and impact of research)
- Feasibility: 75% (approaches and methods 50%, expertise, experience and resources, 25%)
- Each application assigned 1 primary and 2 secondary reviewers
- Rating scale: 4.9 (outstanding) to 0.0 (poor) used to rank applications

**NIH- R01**
- There are no set weights for each criterion: significance, investigator(s), innovation, approach and environment
- Each application assigned 1 primary and at least 2 secondary reviewers
- Rating scale: 1 (exceptional) to 9 (poor), then multiplied by 10 to get %
Investigator-Initiated Grant Success Rates

**CIHR**

*Project Grants – Fall 2017*
- Average grant: $720,534 over 4.38 years, success rate: 14.99%

*Foundation Grants – 2016*
- Average grant: $2,942,229 over 7 years (mid/senior investigators), success rate: 12.7%

**NIH**

*R01 2017*
- Average grant: $495,010 USD between 3-5 years, success rate: 16.3%

*R21 2017*
- Average grant: $222,029 for up to 2 years, success rate: 13.5%
Did you know?

• Grants.gov is the funding database where all the US government advertises all of its major funding opportunities?

• This includes NIH, DoD, USAID, USDA among others
Funding Agencies in Grants.gov
**Where to begin the search?**

[https://www.grants.gov/web/grants/search-grants.html](https://www.grants.gov/web/grants/search-grants.html)
Opportunity found – now, what? How to apply

• Start Early!

• UM Institution Registrations required (provided by ORS):
  
  Data Universal Number System (DUNS)
  
  System for Award Management (SAM)
  
  NATO Commercial and Government Entity (NCAGE)

• PI registrations required prior to grant submission:
  
  Grants.gov
  
  eRA Commons (for NIH applications)
  
  ASSIST (for NIH, FDA, CDC and VA applications)
  
  eBRAP (for DoD applications)
Eligibility – Can Canadians apply to NIH opportunities?

- Review Funding Opportunity Announcement (FOA) for Eligibility *(pay attention to exceptions)*
- Foreign Institutions may or may not be eligible

Table of Contents

Part 1. Overview Information
Part 2. Full Text of the Announcement

Section I. Funding Opportunity Description
Section II. Award Information
Section III. Eligibility Information
Section IV. Application and Submission Information
Section V. Application Review Information
Section VI. Award Administration Information
Section VII. Agency Contacts
Section VIII. Other Information

Section III. Eligibility Information

1. Eligible Applicants

- **Foreign Institutions**
  - Non-domestic (non-U.S.) Entities (Foreign Institutions) are eligible to apply.
  - Non-domestic (non-U.S.) components of U.S. Organizations are eligible to apply.
  - Foreign components, as defined in the NIH Grants Policy Statement, are allowed.

- **Foreign Institutions**
  - Non-domestic (non-U.S.) Entities (Foreign Institutions) are not eligible to apply.
  - Non-domestic (non-U.S.) components of U.S. Organizations are not eligible to apply.
  - Foreign components, as defined in the NIH Grants Policy Statement, are not allowed.
eRA Commons Account

- eRA Commons Account required for all NIH applications.
- Contact ORS to find out if you have an account.
- eRA Commons account and user name remains the same even if you change institutions.
- Accounts can only be created by institutions not PI’s.
Grants.gov

https://www.grants.gov/web/grants/applicants.html
ASSIST – Applying for NIH grants

https://public.era.nih.gov/assist/
Applying for NIH grants

- Two applications portals are available for applying to the NIH:
  - Grants.gov
  - ASSIST

- ASSIST is the recommended portal for the following reasons:
  - Multi-user access on same application
  - Leverages eRA Commons accounts and will pre-populate info
  - Pre-submission validations and application preview
  - Track application status in a single system
  - Ability to copy data to different application package
  - Supports all NIH competing applications
  - Integrated NIH messaging (tips, system alerts)
NIH resources

https://grants.nih.gov/grants/oer.htm
NIH Application Deadlines

- NIH Applications are accepted 3 times (cycles) per year depending on the type of grant (ie. R01, R21, P01, etc.) so if you miss one deadline, you can submit at the next cycle deadline.

NIH Application forms

• There is no standard set of forms for NIH applications.
• Application forms are found in the Funding Opportunity Announcement (FOA). It is imperative you use the forms linked to the FOA as they change frequently.
• Use of the wrong form type will have your application automatically rejected.
NIH FOA details

**VIEW GRANT OPPORTUNITY**

PAR-18-789

**Genetic analysis of non-human animal models to understand the genomic architecture of substance use disorders and addictive behaviors (U01 Clinical Trial Not Allowed)**

Department of Health and Human Services
National Institutes of Health

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Print Synopsis Details
NIH Application Forms

VIEW GRANT OPPORTUNITY

PAR-18-789
Genetic analysis of non-human animal models to understand the genomic architecture of substance use disorders and addictive behaviors (U01 Clinical Trial Not Allowed)
Department of Health and Human Services
National Institutes of Health

Select Grant Opportunity Package

PLEASE READ BEFORE APPLYING!
If you view and complete your application package using Grants.gov downloadable PDF forms, you MUST have Adobe Reader installed. You may receive a validation error using incompatible versions of Adobe Reader. To prevent a validation error, it is now recommended you uninstall any earlier versions of Adobe Reader and install the latest compatible version of Adobe Reader. If more than one person is working on the PDF forms, ALL applicants must be using the same Adobe Reader version. Click for more information on Adobe Reader Compatibility. Click for more information on Adobe Reader Compatibility.

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Print Package List
Department of Defense (DoD) Opportunities

- Must register for eBRAP the DoD submission portal before applying

https://ebrap.org/eBRAP//Login.htm
Suggested Timelines for Grant Proposal Development

Things to consider when applying to US funding opportunities:

• Begin preparing your applications well in advance of the deadline (expect a longer lead time: applications are complex).
• Use available resources: research facilitators, research grants officers, colleagues who can peer-review.
• Remember to use set indirect costs (institutional costs) of 8%.
• Required sub-site agreements if working with collaborators at other institutions (must be in place well in-advance of agency deadline). ORS can help facilitate this.
Achieving Funding Success

- Research funding is highly competitive.
- Your proposal reflects your abilities as a researcher.
- Highly conceptualized presentation of objectives, well-laid out methodology and expected outcomes are critical.

- Contact ORS as early as possible in the process.
  - Some applications may require additional institutional actions (e.g., institutional registration, creation of new agency accounts, institutional certifications, etc.) so the more time the better.
Grant or Contract?

• A **grant** is unrestricted funds.  
  researchgrants@umanitoba.ca

• A **contract** is anything where the University is accepting risk, or has an obligation. Some examples include:
  - Ownership, IP
  - Publication requirements
  - Indemnity
  - Funds contingent on a deliverable or milestone
  researchcontracts@umanitoba.ca

For example, NIH prime awards are grants but NIH sub-recipient awards are contracts.
ORS Internal Deadlines

• NIH and DoD must be submitted to ORS, with FAAF, 10 business days in advance of agency deadline.

Contact ORS as soon as possible in the process:
• Allows sufficient time for any additional institutional actions and registrations
• If sub-sites are included in proposal, additional documentation is required including collaboration agreements with the other institutions.
Questions?