Canada Graduate Scholarship Competitions 2021
2021 Canada Graduate Scholarship Timeline

October 5, 2020
• Institutional deadline for students to submit their application through the appropriate agency’s portal

October 2020
• Applications are reviewed for completeness and eligibility by the FGSR Awards Advisors
• Each application is reviewed by a minimum of two members of the Graduate Scholarship Committee (GSC)

November 2020
• The GSC convenes and ranks applications
2021 Canada Graduate Scholarship Timeline cont’d…

November 21, 2020
• Deadline for FGSR to forward university nominations to NSERC, SSHRC, and CIHR agencies for the national competition.

April 2021
• National results released by the agencies.
Application Resources/Information

CGS-Doctoral:
• Competition overview selecting the appropriate agency

Agency-specific doctoral awards:

- CIHR
- NSERC – Postgraduate Scholarship – Doctoral Program
- SSHRC – Doctoral Fellowship
Application Resources/Information (cont’d)

FGSR:

• Internal U of A deadlines and process
• Application requirements for each agency
• Administrative details (ex. months in program)
• Transcript questions
Additional Help

• Seek advice from members of your faculty/department (supervisor, grad chair/coordinator, etc.)

• UofA Academic Success Centre

• UofA Centre for Writers
Contact Information

CIHR Contact Centre
support-soutien@cihr-irsc.gc.ca

NSERC Contact Centre
schol@nserc-crsng.gc.ca

SSHRC Contact Centre
fellowships@sshrc-crsh.gc.ca

FGSR Awards Services:
Phone: 780-492-9460
Email: grad.awards@ualberta.ca
https://www.ualberta.ca/graduate-studies/awards-and-funding
Overview of Tri-Council Awards

**CIHR**
Frederick Banting & Charles Best CGS-D
$30,000/yr + $5,000 research allowance 3 yrs

**NSERC**
Alexander Graham Bell CGS-D ($35,000 3 yrs)
Post-graduate scholarships - doctoral (PGS-D) ($21,000 3 yrs)

**SSHRC**
Joseph Armand Bombardier CGS-D ($35,000 3 yrs)
Doctoral Fellowship Program ($20,000 1-4 yrs)
Overview of Tri-Council Awards

NEW THIS YEAR ➔ HARMONIZATION

• CIHR, NSERC, SSHRC all have same deadline
• Institutional quota for CIHR
• On-line application system for SSHRC
How to Write a Strong Research Proposal

READ & CONSULT

• Instructions!
• Literature in your field/background
• Ask for examples of other students’ proposals
• Interact with your supervisor
Research Project Summary
• Should clearly describe the applicant’s role on the project.
• Should be written in general scientific language, which is an important skill to acquire for future success in the research environment as applications are being reviewed by multi-disciplinary committees.
• Should be specific, focused, include feasible research question(s), objective(s) and provide a clear description of the proposed methodology.
• **Maximum 1 page**, including references. (Refer to the *General Application Process* section at top of this document for formatting instructions).
Outline of proposed research (attachment – two pages maximum)

In the Outline of proposed research page of your application, provide the requested information according to the guidelines and format standards outlined in the NSERC Online Presentation and Attachment Standards.

Applicants must complete this section themselves.

Provide a detailed yet concise description of your proposed research project for the period during which you are to hold the award. Be as specific as possible. Provide background information to position your proposed research within the context of the current knowledge in the field. State the significance of the proposed research to a field or fields in NSE. State the objectives and hypothesis, and outline the experimental or theoretical approach to be taken (citing literature pertinent to the proposal) and the methods and procedures to be used.

The inclusion of sex (biological), gender (socio-cultural) and diversity considerations in research design makes research more ethically sound, rigorous and useful. Describe how these aspects will be addressed in the research design, where applicable. Throughout the description of your research project, address the methodology and rationale for including sex, gender and diversity considerations in your research. This is one of the elements that can strengthen your proposal and will be taken into consideration by the committee members during their review. For more information, refer to questions 5 to 7 of the Guide for Applicants: Considering equity, diversity and inclusion in your application.
How to Write a Strong Research Proposal

PARTS OF THE PROPOSAL

• Introduction/background
• Research question/hypothesis
• Milestones/aims/approaches/methods
• Expected outcomes/significance
• Bibliography/references
How to Write a Strong Research Proposal

INTRODUCTION/BACKGROUND

• Reviewers are very busy & will only devote a small amount of time to each proposal → grab their attention right from the start

• Use clear, concise language → NO JARGON!!

• Introduce the problem you are investigating up front

• Describe progress in the area, from the literature, but also any preliminary work you may have done

• Explain significance
RESEARCH QUESTION(S)/HYPOTHESIS

• State your research question/hypothesis/goals in a clearly defined statement

• Set it apart from the other sections of your proposal so the reviewer can find it easier

• Be specific

• Make sure a non-specialist can understand it
How to Write a Strong Research Proposal

METHODS/APPROACH

• Clear, non-specialist language – explain any field-specific approaches

• Demonstrate feasibility (state references, talk about preliminary work, work of others in your group); keep time-lines in mind

• Consider what will happen if your approach fails/weaknesses in your methods/unexpected results → alternate approaches/mitigation strategies

• Use confident, enthusiastic language
How to Write a Strong Research Proposal

SIGNIFICANCE/EXPECTED OUTCOME(S)

• Always good to end with final statement about the importance/significance of your work → IMPACT

• Don’t overstate significance – be realistic about where and who your work will impact the most

• Keep it “tight” – concise and brief
How to Write a Strong Research Proposal

**BIBLIOGRAPHY**

- Use the reference/bibliography style that is typical for your field of study

- Check instructions for your Tri-Council area → is an extra page allowed, is there a specific format requested?

- Keep in mind very limited space – reference only most important sources
How to Write a Strong Research Proposal

BIBLIOGRAPHY


Writing Tips:

• Begin by setting up necessary headings (see formatting instructions)

• Populate sections in point form as you work

• Use language appropriate to a non-specialist audience

• Have a clear title

• Begin with a powerful statement

• Leave some white space!
Research Problem and Background: In 2015, the Fundão Tailings Dam in Brazil failed, releasing more than 30 million m³ of mine waste that destroyed fish and wildlife habitats and resulted in 19 fatalities (Ramos 2017). This tailings dam failure was published on a global scale, clearly demonstrating the serious and life-threatening risks associated with these massive structures. Tailings dams are constructed to manage and store the waste generated during mining activities. The waste is referred to as tailings and generally consists of different combinations of sand, fines, and water (McRoberts 2008). Following the closure of a mine, tailings dams will remain on site, eventually becoming part of the landscape. In general, these structures are designed by geotechnical engineers with consideration of failure mechanisms that can occur during the mine’s active life which is significantly shorter than the life of the tailings structure. This is problematic as failure of these structures can still occur long after the closure of a mine site, causing fatalities and large degrees of contamination. The objective of the proposed research is to determine and assess the long-term risks associated with tailings dams as they transition into landscapes and to aid the development of suitable monitoring techniques for risk management. The purpose of this research is to close the knowledge gap surrounding the decommissioning of tailings dams to improve public safety and environmental protection by reducing the probability of failure. It is expected that this research will result in the production of a risk assessment tool for mine owners and regulators. Ultimately, this will allow the long-term risks associated with tailings dams to be evaluated such that they can be designed and managed to account for these risks.

Research Methods: The research will be conducted through three main stages to further the understanding of the long-term behavior of tailings dams. The research will be conducted in collaboration with the Alberta Energy Regulator (AER), and coal and oil sand mines in Alberta will be used as case studies. The first stage involves identifying failure modes and associated monitoring practices as a tailings dam transitions into a landscape following mine closure. This stage will include the development of a fault tree to visually illustrate the causes, effects, and consequences of the various failure modes of a tailings dam after mine closure. Stage two will involve analysis of the failure modes identified in stage one which will consider different geometries, boundary conditions, initial conditions, and external/external forces that may induce failure. The third stage will involve developing a risk assessment tool based on failure consequence and probability for post-closure tailings structures. This series of charts will be developed for mine operators and regulators for use and guidance in risk management.

Summary of Research: The proposed research has significant implications for future tailings dam recycling as the study aims to develop tools that assist regulating with risk management of tailings structures over time. While this research is being conducted in collaboration with the AER, it is highly significant from a national and international perspective as there are over approximately 3500 tailings dams worldwide (Davies and Rice 2001). As a result, this research will serve as a case study for other regulatory bodies within Canada and worldwide. Ultimately, the findings of this research will help reduce the risks associated with tailings dams to the public and the environment following mine closure. It is vital in areas where mines operate in the vicinity of urban centres and the risk of fatalities following a dam failure is high.

References:
How to Write a Strong Research Proposal

Review/Feedback:

• If there are instructions for reviewers on-line → read them & use them to guide construction/wording of your proposal

• Go over your proposal outline early on with your supervisor/supervisory committee; incorporate any feedback

• Solicit feedback on your first draft from MULTIPLE people, with different backgrounds

• Proofread, spell-check, ensure that proposal is free of typos and grammatical errors
How to Write a Strong Research Proposal

Final Tips:

• Give yourself as much time as possible

• Remember it’s only a PROPOSAL, it is not written in stone & things may change over the course of your degree as your research develops
How to Write a Strong Research Proposal

QUESTIONS?
How to Get Strong Reference Letters

What reviewers use reference letters for:

• To get a fuller picture of you, your abilities, your accomplishments BEYOND what is in the application

• To place accomplishments (awards, contributions) in context

• Additional information not found in application
How to Get Strong Reference Letters

**Before you ask for a letter:**

- Figure out how it will be submitted (through appropriate application portal & associated instructions)

- Tri-Council Doctoral Awards all on-line now → need to generate an invitation for them through the application portal on-line

- Ask them in person, or by email, before you generate the on-line invitation that will be sent
How to Get Strong Reference Letters

Which referees to ask?

- People that know you (i.e., not a professor you have never approached)
- Supervisors/advisors/professors → someone that held a position “above” you
- Academics generally best; but can depend on project
How to Get Strong Reference Letters

How to help your referees

- Ask if they are willing to write you a letter FAR in advance

- Follow up with them to send them reminders (most are very busy and have many deadlines)
How to Get Strong Reference Letters

How to help your referees

- Give them information about yourself → your CV, a copy of your research proposal if possible

- Offer to meet with them (if you didn’t when you asked them for a letter) if they like

- Give them information/explain the competition you are requesting a letter for (prestige, value, duration, what it will mean to your grad program)
How to Get Strong Reference Letters

- Be sure to say Thank-you!
- Tell your reviewers about your successes!
How to Get Strong Reference Letters

How to ask for a reference letter

Straightforward advice for job candidates in search of a professorial recommendation
By ADAM CHAPNICK | MAR 09 2009

https://www.universityaffairs.ca/career-advice/career-advice-article/how-to-ask-for-a-reference-letter/
How to Get Strong Reference Letters
SO, YEAH, DR. G., I WAS HOPEING TO GET A RECOMMENDATION FROM YOU FOR MY GRAD APPS...
AND YOU ARE..?

OH, I'M DEE... I WAS IN YOUR INTRO CLASS LAST SEMESTER?
I HAD A HUNDRED STUDENTS IN THAT CLASS...

YOU SAID YOU REALLY LIKED MY FINAL PROJECT..? YOU GAVE ME AN A+?
UH, SORRY, I STILL DON'T REMEMBER YOU...

UM, DOES IT MATTER?
NOT REALLY. HERE'S A LETTER. JUST PUT YOUR NAME DOWN ON THE BLANK SPACES.

www.phdcomics.com
Who Should Write Your Letter?

Someone who:
- has familiarity with skills required
- has good writing skills
- has a high opinion of you*
- has position of value*
- knows you

You?
<table>
<thead>
<tr>
<th>Scholarship Relative Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Masters</strong></td>
</tr>
<tr>
<td>Personal Characteristics and Interpersonal Skills</td>
</tr>
<tr>
<td>Academic Excellence</td>
</tr>
<tr>
<td>Research Potential</td>
</tr>
<tr>
<td><strong>PhD</strong></td>
</tr>
<tr>
<td>Relevant Experience and Achievement</td>
</tr>
<tr>
<td>Research Ability and Potential</td>
</tr>
<tr>
<td><strong>Postdoc</strong></td>
</tr>
<tr>
<td>Relevant Experience</td>
</tr>
<tr>
<td>Research Ability and Leadership Potential</td>
</tr>
</tbody>
</table>
Criteria - Academic Excellence

- Transcripts
- Scholarships
- Duration of Previous Studies
- Comments from University to describe an International transcript
- Impact of a publication

Criteria - Communication, Interpersonal & Leadership Abilities

- Awards for posters, oral presentations, reports, publications, book reviews
- Professional and extra-curricular interactions
  - Teaching, supervision, project management, departmental/university committee involvement, work experience, elected positions, community involvement
Criteria - Research Ability/ Potential

• Academic training and relevant work experience
• Research artifacts (publications, patents, reports, posters)
• Research proposal (feasibility, merit, and significance)
• Critical thinking, originality, enthusiasm for research, autonomy, initiative, application of knowledge
• Ability to complete projects
What can you do?

• Provide scholarship criteria
• Relevant details – 5 W’s/meet each criteria
• Provide CV/relevant materials (application)
• Why are you qualified? Why do you want this? What does leadership mean to you?
• Highlight your non-academic activities – on and off campus
• Allow time
• Follow-up
• Provide details of where and when to send

http://www2.lse.ac.uk/internationalRelations/Frequently%20asked%20questions%20(FAQS)/FAQincomingstudents.aspx
Good Reference Letters

• Specifics or details

“He is a dedicated student, and his grades have been consistently exemplary. He always shows great initiative and diligence; he is able to develop intelligent plans and implement them successfully.”

“outstanding academics and very productive in her research”

• Longer letter*

http://www.letter-samples.com/scholarship.html
http://www.australia.edu/Student-Life/helpful-student-tutoring-guide.html
Good Reference Letter Continued

• Development of person into peer
• Provides insights into **all** criteria
  • Competencies - Problem solving abilities, analytical skills, creativity, research skills, etc.
  • Communication, responsibilities, attributes
• Show candidate as “role model”
• Show enthusiasm for candidate

https://career.berkeley.edu/letter/letterguidelines.stm
The Magic Behind Reference Letters is You!

Research Proposals
Tri-Council – Doctoral Applications

Dr. Bonnie Stelmach
Professor
Department of Educational Policy Studies
Research Proposal—50%

• Quality of proposal
  • Focused and feasible
  • Clear description of methodology
  • Significance & contribution to research

• Ability to communicate theoretical, technical, and/or scientific concepts clearly and logically
Reviewers are REAL people
Inspire
Persuade
Teach
An Investigation into Work Intensification Among School Principals
Not Waving But Drowning: Work Intensification Among School Principals
Work intensification refers to the increasing amount of effort an employee must invest during the working day that oftentimes results from increased economic pressure and other societal changes (Green & McIntosh, 2001; Green, 2004). This has been identified as an increasing trend among school principals in Canada (James, 2020).
How many times have you asked a colleague how they were doing, to have them reply, “I’m crazy busy!”? According to a recent national survey, 87% of school principals experience overwork, or work intensification, on a daily basis (Barton, 2019). Most surprising is how many (89%) keep these feelings secret and work extra hard to compensate. Principals are not waving but drowning (Smith, 1972).
ENGAGE Your Reader

• Is your title memorable?

• 1st and last sentence
  • Ask a question: Have you ever known what was the right thing to do, but were unable to do it because of factors outside your control?
  • State a fact/statistic: Work intensification was among the top three trends school principals face in their job (ABC Psychology Study (2018)).
  • Introduce a counterintuitive finding: Sleeping with your dog may enhance chronic pain sufferers’ quality and quantity of sleep.
  • Start/end opening paragraph with a purpose statement: The purpose of my proposed research is to ....
Objectives Section
(Purpose/Hypothesis/Research Question(s))

• As a reviewer I want to read this section and know:
  • What this research is about
  • What question drives this research proposal
  • The context from which this study emerges
  • That this research addresses an important challenge, problem, persistent issue
  • Who will benefit from this research
  • Why this study is intellectually exciting
Context Section

• Appropriateness of the literature review
• Is the literature review up to date?
• Is the literature cited relevant to the study?
• Does the literature review ARGUE for your proposed study?
• Does the literature review identify gaps in scholarship in a diplomatic, respectful way?
Methodology

• Most important section
• How are you going to address your research question?
• Hypotheses?
• Theoretical and/or conceptual framework
  • Explain the framework
  • Justify the framework—why is it appropriate for addressing your research question?
  • HOW will the framework be used as a lens through which to understand your data (if you’re collecting data)
• What steps will you take to conduct your study (e.g. methods of data collection or path of argumentation?)
Contribution to Advancing Knowledge (Significance)

• What happens if this problem isn’t studied?
• Who benefits (besides you!) from this study?
• Why does this matter to Canada?
• How does your research change the conversation?
• What is the practical, theoretical, methodological potential of your work (don’t have to hit all three!)
• Don’t embellish 😞
Research Questions/Objectives

Context (or Literature Review)

Methodology (methods, theoretical framework, phases)

Significance/Contribution to Advancing Knowledge

Program of Study
Characteristics of a Good Proposal

• Document – neat, well organized, easy to read
• Fresh insight into an important problem
• Writing that shows excitement, commitment
• Evidence that the applicant knows the field (strong lit review)
• Feasible work plan (methodology)
• “The best proposals teach” (Porter, 2005, p. 343)

Common Mistakes

• Not reading the Tri-Council instructions carefully!
• Writing that is vague, unfocussed (takes too long for reviewer to figure out what it’s about)
• Dense academic prose (highly technical, esoteric...manage the curse of knowledge)
• No white space (LESS is MORE from reviewers’ perspective!)
• Jargon and/or acronyms (excludes reader)
• Research plan/methodology has a “trust me I know what I’m doing” feel – not enough description of how study will be conducted
• Sloppiness—typos, grammatical errors, etc.