Overview of Master’s Awards

Frederick Banting and Charles Best Canada Graduate Scholarship
• Canadian Institutes of Health Research (CIHR CGS-M): $17,500/year; for 1 year

Alexander Graham Bell Canada Graduate Scholarship
• Natural Sciences and Engineering Research Council (NSERC CGS-M): $17,500/year; for 1 year

Joseph-Armand Bombardier Canada Graduate Scholarship
• Social Sciences and Humanities Research Council (SSHRC CGS-M): $17,500/year; for 1 year

Other Tri-Agency Awards:

Michael Smith Foreign Study Supplement
• Up to $6,000 for a period of research study abroad
Eligibility Criteria

• Canadian Citizen or Permanent Resident of Canada
• Graduate program with a significant research component
• Completed no more that 12 months of full-time studies in the graduate program as of December 31, 2020
• Have at least a 3.5 GPA in each of the last two completed years of study (full-time equivalent)
• Have not received any other Tri-Council funding for a master’s program
Application Process


  **Deadline: December 1, 2020 (6:00 PM Mountain Time, 8:00 PM Eastern Time)**

- You may select up to 3 eligible Canadian institutions for your proposed study.

- **If not yet admitted** to a graduate program, you must also apply for admission at University of Alberta no later than **February 8, 2021** or by the department program deadline, which ever comes first, in order to be considered for the CGSM at the University of Alberta.

- **After December 1, 2020**: FGSR reviews CGSM applications for eligibility and completeness

- **Feb-Mar**: The Graduate Scholarship committee conducts their review and makes decisions.

- Decisions are announced via Research Portal on **April 1, 2021**.
Application Components

• A completed application form

• An outline of proposed research (one page max, plus one page for citations)

• CV (to be completed on the Canadian Common CV online system)

• Two letters of reference (to be uploaded online by referees before December 1st)

• **Official and up-to-date transcripts** from all post-secondary institutions attended, including University of Alberta transcripts (scanned and uploaded).
A Note about Transcripts…

- Students are required to upload all of their original, up-to-date transcripts to the Research Portal.
- Detailed instructions regarding transcript requirements (and definitions of “official” and “up-to-date”) are available on the CGSM Application Instructions web page.
- If your transcripts are uploaded incorrectly OR your transcript record is incomplete, the application could be marked as ineligible.
- You are required to provide a complete academic history of your post-secondary education:
  - All transfer credit transcripts (even if they were transferred to this university).
  - OFFICIAL University of Alberta transcripts.
  - All transcripts of incomplete work/non-degree study/qualifying years, etc.
  - In almost all cases, FGSR will not release transcripts back to student, even if we have them on file.
Selection Criteria

**Academic excellence**
- As demonstrated by past academic results, transcripts, awards and distinctions
- Weight: 50%

**Research Potential**
- As demonstrated by the applicant’s research history, their interest in discovery, the proposed research, its potential contribution to the advancement of knowledge in the field, and any anticipated outcomes
- Weight: 30%

**Personal Characteristics and Interpersonal Skills**
- As demonstrated by the applicant’s past professional and relevant extracurricular interactions and collaborations
- Weight: 20%
Questions?

**For program-related info:**
FGSR Awards Services
grad.awards@ualberta.ca
FGSR Virtual Counter: Talk to an Advisor
uab.ca/gradstudies

**Tri-Agency Contact Info:**
Available on the CGSM Application Instructions webpage or
on the CGSM Program Information webpage.

**For Research Portal issues/questions:**
Contact the Research Portal Helpdesk.
# Tri-Council CGS-M Scholarship Workshop


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<td>To view instructions and other resources, select <a href="https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM_eng.asp">Canada Graduate Scholarships – Master’s program resources</a>.</td>
<td></td>
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</tbody>
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THE APPLICATION

• Created through research portal:
  

• Same portal for CIHR, NSERC, SSHRC applications
THE APPLICATION

• Application overview
  o Title
  o Field
  o start date
  o # mos grad studies completed
  o host institution
  o summary of proposal
THE APPLICATION

• Activity details:
  o Themes (for health-related research)
  o CIHR PIN (register with CIHR: https://cihr-irsc.gc.ca/e/38201.html)
  o Certification requirements (biohazard, animals, humans)
  o Sex- and gender-based analysis
    ▪ Are sex (biological) considerations taken into account?
    ▪ Are gender (socio-cultural) considerations taken into account?
    ▪ Describe how sex and/or gender considerations will be considered in your research study
  o Key words and field of study
THE APPLICATION

• **Outline of Proposed Research:**
  
  o Detailed description of proposed research project
  o One page
  o One page bibliography
  o If degree output is an artistic creation rather than a thesis, does not involve a thesis, a major research paper/essay or a major research project, clearly indicate the research component of your proposed work
  o You must provide a detailed description of a proposed research project even if your project has not been determined yet (you may change research direction during the course of the award)
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
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
How to Write a Strong Research Proposal

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


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 2013, the Fundão Tailings Dam in Brazil failed, releasing more than 20 million m³ of mine waste that destroyed fish and wildlife habitats and resulted in 19 fatalities (Samarco 2017). This tailings dam failure was publicized 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 wastes are referred to as tailings and generally consist of different combinations of sand, fines, and water (McRoberts 2008). Following the closure of a mine, tailings dams will remain on the 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 often 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 significant 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 in the development of suitable monitoring tools 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 tailings dam owners and regulators, ultimately allowing 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 Methodology: 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 sands mines in Alberta will be used as case studies. The first stage involves identifying failure modes and associated monitoring practices as tailings dams transition into landscapes 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 influence failure. The third stage will involve developing a risk assessment tool based on the failure consequences and probability for post-closure tailings structures. This series of tools will be designed for mine operators and regulators for use and guidance in risk management.

Significance of Research: The proposed research has significant implications for future tailings dam decommissioning and the study aims to develop tools that assist regulators 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 5000 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 environment following mine closure throughout Canada and on a global scale. This 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
Merit Review of Indigenous Research – things to consider:

• Emphasis in proposed research on lived experience → written & oral literature

• Community involvement as partner in knowledge co-creation often essential features of research
  
  o Community products recognized as scholarly works

• May start academic path later in life or experience interruptions
  
  o Take into account life experience & degree of difficulty overcoming obstacles as measures of merit

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
THE APPLICATION

• Canadian Common CV (CCCV):
  • [https://ccv-cvc.ca/](https://ccv-cvc.ca/)
  • Select CGS-Master’s from CV drop-down menus
  • determine the best section to list specific information and what type of information will positively affect adjudication
  • most applicants don’t have academic and career experience to fill out all sections
  • Mandatory sections are marked with an *, non-mandatory sections can be left blank
THE APPLICATION

- **Canadian Common CV (CCCV)….. Cont’d:**
  - All degrees, diplomas and other types of certification should be recorded in the CCV
    - Completed or in progress
    - Include degrees from which you have withdrawn
    - Include courses completed outside of a degree
  - If fast-tracked into a PhD program:
    - enter Masters and Doctoral program info separately
    - select “in progress” for both
    - do not list date for “degree received” or “degree expected” for Masters
  - There is a “Leaves of Absence & Impact on Research” section:
    - Eg. administrative responsibilities, maternity or parental leave, child-rearing, illness, disability, cultural or community responsibilities, socio-economic context, family responsibilities or a pandemic
    - Specify dates
Tri-Council CGS-M Scholarship Workshop

SELECTION CRITERIA:

Academic Excellence

As demonstrated by past academic results, transcripts, awards and distinctions

Indicators of academic excellence:

- academic record
- scholarships and awards held
- duration of previous studies
- type of program and courses pursued
- course load
- relative standing (if available)
Tri-Council CGS-M Scholarship Workshop


**SELECTION CRITERIA:** Research Potential

As demonstrated by the applicant’s research history, their interest in discovery, the proposed research, its potential contribution to the advancement of knowledge in the field, and any anticipated outcomes.

**Indicators of research potential:**

- quality and originality of contributions to research and development
- relevance of work experience and academic training to field of proposed research
- significance, feasibility and merit of proposed research
- judgment and ability to think critically
- ability to apply skills and knowledge
- initiative and autonomy
- research experience and achievements relative to expectations of someone with the applicant’s academic experience
SELECTION CRITERIA:

Personal characteristics & interpersonal skills

As demonstrated by the applicant’s past professional and relevant extracurricular interactions and collaborations

Indicators of personal characteristics and interpersonal skills:

- work experience
- leadership experience
- project management including organizing conferences and meetings
- ability or potential to communicate theoretical, technical or scientific concepts clearly and logically in written and oral formats
- involvement in academic life
- volunteerism/community outreach
THE APPLICATION

• Canadian Common CV (CCCV)..... Cont’d:
  • When finished, and all sections have a green checkmark, click **SUBMIT**
  • Click “I agree” with consent statement
  • PDF version and confirmation number will be generated
  • Confirmation number is needed to upload CCV to CGS-M application in research portal
THE APPLICATION

Reference Assessments:

• VIDEO TUTORIAL HERE: https://www.nserc-crsng.gc.ca/Students-Etudiants/Videos-Videos/cgsm-besc_eng.asp
  • Two required
  • Individuals that know you well enough that they can provide a meaningful commentary
  • enter required information for each reference in the Invitations section of application
  • References will receive a system-generated email containing the link to their reference assessment
  • You can check the status of the request in this section
  • You cannot complete & submit application until references complete assessments ➔ FOLLOW UP!!
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)

• 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 your (ie. 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 → 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!
THE APPLICATION

Final Steps:

• Verify all mandatory sections have been completed:
  o Application form
  o Two reference assessments
  o Transcripts
  o Research proposal and bibliography
  o CCV

• Export application & attachments to PDF
• Review PDF (CCV and assessments will not be included)
• Click SUBMIT
• Accept terms & conditions
• Application status will change to “Successfully received by Institution”
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How to Get Strong Reference Letters