

NSERC CGS-M Application Workshop

Part One: Writing the Research Statement

Talk Show - 15 November 2018

Note that **only** domestic students
(Canadian citizen or permanent
residents) can apply to the NSERC
CGS-M scholarship...

Note that **only** domestic students (Canadian citizen or permanent residents) can apply to the NSERC CGS-M scholarship...

...however, the OGS scholarship is open to **ALL** students and has a similar application (but later deadline).

NSERC CGS-M

- deadline is **DECEMBER 1st, 2018**
- if you haven't already—ask your references NOW!
- note that this is the NSERC-official deadline, but U of T has set their deadline to December 3rd, 2018

NSERC CGS-M

- deadline is **DECEMBER 3rd, 2018**
- 1 year scholarship worth \$17,500
- must (a) be applying to a master's or direct-entry PhD, OR
(b) be in the first year of a direct-entry PhD

Ontario Graduate Scholarship

- similar application to NSERC CGS-M

Ontario Graduate Scholarship

- similar application to NSERC CGS-M
- 1 year award worth \$15,000

Ontario Graduate Scholarship

- similar application to NSERC CGS-M
- 1 year award worth \$15,000
- Master's OR doctoral students may apply

Ontario Graduate Scholarship

- similar application to NSERC CGS-M
- 1 year award worth \$15,000
- Master's OR doctoral students may apply
- deadline is **MAY 6th, 2019** for domestic students (U of T)

Ontario Graduate Scholarship

- **for international students:**
 - undergrads: ask the university you're applying to
 - grad students: the department has a scholarship equivalent to OGS offered *through* the department—ask Margaret for details

NSERC CGS-M

- application includes:
 - completed online application

NSERC CGS-M

- application includes:
 - completed online application
 - outline of proposed research (**this workshop!**)

NSERC CGS-M

- application includes:
 - completed online application
 - outline of proposed research (**this workshop!**)
 - Canadian Common CV (**next workshop!**)

NSERC CGS-M

- application includes:
 - completed online application
 - outline of proposed research (**this workshop!**)
 - Canadian Common CV (**next workshop!**)
 - official transcripts (if you haven't yet—order this now!)
 - even first-year grad students who will have no marks entered on the transcript **must** order one

NSERC CGS-M

- application includes:
 - completed online application
 - outline of proposed research (**this workshop!**)
 - Canadian Common CV (**next workshop!**)
 - official transcripts (if you haven't yet—order this now!)
 - 2 references (again—**ask now!**)

NSERC CGS-M

[http://www.sgs.utoronto.ca/
currentstudents/Pages/CGS-
M.aspx](http://www.sgs.utoronto.ca/currentstudents/Pages/CGS-M.aspx)

Selection Criteria

- Academic excellence - 50%
- can demonstrate this through transcript and CCV (next workshop)

Selection Criteria

- Academic excellence - 50%
- **Research potential - 30%**
 - quality and originality of contributions to research/development
 - significance, feasibility, and merit of proposed research
 - research experience and achievements
 - etc. (http://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM_eng.asp)

Selection Criteria

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:

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, autonomy and independence;
 - Research experience and achievements relative to expectations of someone with the candidate's academic experience.
- 30%

Selection Criteria

- Academic excellence - 50%
- **Research potential - 30%**
- Personal characteristics and interpersonal skills - 20%
 - can also be displayed in the research statement (e.g. communication skills)

Outline of Proposed Research

- maximum of one page for the outline of proposed research
- one additional page for references (NOT the same for NSERC CGS-D!)

Outline of Proposed Research

- maximum of one page for the outline of proposed research
- one additional page for references (NOT the same for NSERC CGS-D!)
- be specific and provide background information

Outline of Proposed Research

- maximum of one page for the outline of proposed research
- one additional page for references (NOT the same for NSERC CGS-D!)
- be specific and provide background information
- you must provide an outline of a research project *even if you have not decided on a thesis topic*
 - however: NSERC won't hold you to what you say

Outline of Proposed Research

Outline of proposed research (maximum of one page)

Provide a **detailed description** of your proposed research project for the period during which you will 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 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. State the **significance of the proposed research to a field** or fields in the health sciences, natural sciences and/or engineering, or social sciences and/or humanities, as appropriate.

http://www.nserc-crsng.gc.ca/ResearchPortal-PortailDeRecherche/Instructions-Instructions/CGS_M-BESC_M_eng.asp

Presentation Standards

- described in NSERC CGS-M instructions
- LaTeX template available on GitHub:

<https://github.com/emilydeibert/Resources>

- TIP: you don't have to write the full citation (e.g. Matzner et al. 2018), you can just write [1] and then include the full citation on the next page

Who are you writing this for?

- NOT ASTRONOMERS!
- target audience: technically-minded people but NOT experts in your field
- avoid jargon, define necessary terms, provide context
- explain why this is significant to a non-astronomer

How to Frame the Proposal

1. Provide Context

How to Frame the Proposal

1. Provide Context

- establish research area generally
- provide information needed to understand the rest of the proposal
- what has already been established in this area of research?

How to Frame the Proposal

1. Provide Context
2. Establish the “Research Gap”

How to Frame the Proposal

1. Provide Context

2. Establish the “Research Gap”

- what *hasn't* been established in this area of research?
- what don't we know? what can't we do yet?
- there may be multiple levels to the problem

How to Frame the Proposal

1. Provide Context
2. Establish the “Research Gap”
3. Explain Why the “Gap” is Significant

How to Frame the Proposal

1. Provide Context

2. Establish the “Research Gap”

3. Explain Why the “Gap” is Significant

- what is the significance of this project?
- what scientific/(social)/(economical) importance does this issue have?
- convince us that the gap exists and needs to be filled for a reason

How to Frame the Proposal

1. Provide Context
2. Establish the “Research Gap”
3. Explain Why the “Gap” is Significant
4. Explain How You Will Fill the Gap
 - multiple levels to defining/narrowing down the gap
 - move from high-level problem down to what you will accomplish
 - goals = broader, address the gap specifically
 - objectives = more narrow, how you will accomplish goals

How to Frame the Proposal

1. Provide Context } **define**
2. Establish the "Research Gap"
3. Explain Why the "Gap" is Significant } **contextualize**
4. Explain How You Will Fill the Gap } **justify**

Examples!