Welcome to Graduate Studies at McGill in the Department of Natural Resource Sciences

Fall 2023

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The Department's Graduate Programs

- Agricultural Economics (MSc)
- Entomology
- Microbiology
- Renewable Resources
 - Forest Science
 - Micrometeorology
 - Soil Science
 - Wildlife Biology
 - Options in Neotropical Environment
- GPC: Simone Clamann simone.clamann@mcgill.ca
- GPC (Ag. Econ.): Erin Minnett erin.minnett@mcgill.ca



Graduate studies

- Graduate student joins the research group of a professor (supervisor).
- Receive a degree (MSc, PhD) and develop skills and a research portfolio.
- Professors run independent research programs
 - Funded by external sources (grants, research contracts)
 - Grants cover research stipend, salary of research employees (RA), research expenses (material), University overhead (gas, electricity, support staff, etc).
 - Produce scientific contributions (papers, presentation) and highly qualified personnel (HQPs).



Responsibilities

McGill

- Provide the **framework** for you to get through your program in a timely fashion
- Provide mechanisms to support you
- Provide you with opportunities to develop your professional skills (SKILLSETS, Graphos...)

Yours

- Your own Ethics in research
- Be informed
- Use your <u>McGill email</u>
- Talk to your supervisor about expectations and parameters of:
 - Your work environment
 - Meeting frequency
 - Intellectual property
 - Traveling to conferences
 - Authorship



Hierarchy of Help

- Your Supervisor
- Supervisory Committee
- GPC (Clamann, Gregus)
- Graduate Program Director (Faucher)
- Chair, Graduate Committee (Head)
- Department Chair (Driscoll)
- NRS Graduate Student Committee
- Associate Dean, FAES (Charron)
- Associate Dean, GPS (Steele)
- Dean GPS (Nalbantoglu)

Other services

- Ombudsperson (Hewlin)
- Services for Students
- Dean of Students (Beech)

Stay informed and deal with problems early...

Don't let them fester!



Brian Driscoll: brian.driscoll@mcgill.ca
Jessica Head: jessica.head@mcgill.ca

The role of the GPD

- Management of graduate activities pertaining to graduate students (admission to graduation)
- Oversees program design and practice (guidelines for comprehensive exams, thesis)
- Help mediate student-supervisor conflicts
- Sign progress reports (myProgress), thesis submission forms (myThesis)
- Facilitates timely completion



Introduction to graduate programs

- Residence time vs time limitation
 - 3 semesters and 3 years for MSc
 - 6 semesters and 6 years for PhD
 - COVID-19: extension possible (case-by-case, when you reach time limitation)
- PhD level:
 - PhD1: entering directly after BSc
 - PhD2: entering after a MSc, or fast-track (for most PhD 2 is your first year)
- https://mcgill.ca/gps/students
- https://mcgill.ca/study/2019-2020/university regulations and resources/graduate



Financial support

- Amount, duration and source described in funding letter.
- Research Stipend (from supervisor).
- Internal Awards (e.g. Woods)
- External Awards (e.g. NSERC CGS-M)
- Graduate Excellence Awards (GEA, awarded by department <u>at time of offer</u>, paid to student fees account)
- Teaching Assistantship (unionized position)
- Research Assistantship (unionized position)



Financial support

- Stipend must be paid as promised (minus internal/external awards or scholarship received after the letter of offer was sent).
- Supervisor cannot withhold/delay payment of stipend (monthly instalments).
- Scholarship must be supplemented to match the funding package that was promised (F2021 admission and later).
- TAship is on top of what was promised. Supervisor cannot prevent you from doing TAship.
- Supervisors should provide financial support after the duration of the funding package (e.g. yr 4 for PhD). **Financial support duration should match expectations.** Negotiate with your supervisor.



Course requirements

- MSc
 - Thesis courses (3 X 12 for 36 cr: NRSC 691, 692, 693)
 - Seminars (NRSC 643, 644, 651, total 3 cr)
 - Complementary courses (2 X 3 cr): 500, 600 or 700 level
- PhD
 - PhD: Seminars (NRSC 751, 752, 753, 754)
 - Comprehensive exam (1st term of your second year)



Suggested courses - MSc

MSc Microbiology

BINF 511 - Bioinformatics and Genomics

BINF 531 - Statistical Bioinformatics

BTEC 501 - Bioinformatics

BTEC 505 - Selected Topics in Biotechnology

BTEC 535 - Functional Genomics in **Model Organisms**

BTEC 555 - Structural Bioinformatics

BTEC 621 - Biotechnology Management

FDSC 535 - Advances in Food Microbiology

MICR 772 - Molecular Microbiology

MICR 773 - Advanced Environmental Microbiology

PARA 665 – Advanced Bioimaging

MSc Renewable Resources

AEMA 610 - Statistical Methods

AEMA 611 – Experimental Design 1

AEMA 614 - Temporal and Spatial Statistics

BREE 529 - GIS for Natural Resource Management

BIOL517 - Cognitive Ecology

BIOL610 - Scientific Manuscript Writing

ENVB 500 - Advanced Topics in Ecotoxicology

ENVB 506 - Quantitative Methods in **Ecology**

ENVB 529 - GIS for Natural Resource Management

ENVB 530 - Advanced GIS

PARA 635 - Cell Biology and Infection GEOG 501 - Modeling Environmental Systems

GEOG 505 - Global Biogeochemistry

GEOG 535 - Remote Sensing and Interpretation

SOIL 510 - Environmental Soil Chemistry

SOIL 535 - Ecological Soil Management

WOOD 640 - Recent Advances: Tree **Ecophysiology**

WILD 605 - Wildlife Ecology

MSc Entomology

AEMA 610 - Statistical Methods

AEMA 614 - Temporal and Spatial **Statistics**

ENTO 615 - Forest Entomology

ENVB 506 - Quantitative Methods in **Ecology**



Key to timely completion (what to do this term)

- Meet with your supervisor(s) ASAP
 - Letter of understanding: upload in myProgress
 - Financial Support
- Strike a supervisory committee (first term)
 - Your supervisor + one other professor in NRS (minimum)
 - Develop your research project objectives.
 - Upload report in myProgress (I will sign it there).
 - Disclosure of Conflict of interest: https://www.mcgill.ca/apo/forms/conflict-interest-reporting
- Take the Research Proposal Seminar (NRSC 643/751)
 - 5-page research proposal
- Check your progress and deadlines on <u>myProgress</u>.



Format: Student View \$ View Save as PDF Process New Academic History	orv					
Student View \$ View Save as PDF Process New Academic History	e.r.					
■ Doctor of Philosophy Degree Requirements		Catalogue Term: FALL 2019				
Click here to access McGill's Graduate Program Requirements webpage						
A minimum grade of B- is required for all courses in this program. Residency requirements for Ph.D.2 admits is two years; for Ph.D.1 admits is three years.						
An online academic integrity tutorial at McGill University must be completed within the first semester of each p	program to which	n you have been admitted.				
■ Microbiology		Catalogue Term: FALL 2019				
☐ PHD COMPREHENSIVE EXAMINATION	Still Needed:	1 Class in NRSC 701				
☐ SEMINAR COURSES						
Course requirements are specified by the staff in the discipline, but are flexible and depend largely on the study	dent's backgroun	d, immediate interests, and ultimate objectives.				
Graduate Seminar 4	Still Needed:	1 Class in NRSC 751				
Graduate Seminar 5	Still Needed:	1 Class in NRSC 752				
Graduate Seminar 6	Still Needed:	1 Class in NRSC 753				
Graduate Seminar 7	Still Needed:	1 Class in NRSC 754				
☐ DEGREE PROGRESSION MILESTONES	Still Needed:	See Degree Progression Milestones section				
■ Degree Progression Milestones		Catalogue Term: FALL 2019				
Ph.D. Supervisory Committee	Still Needed:	Supervisory committee formed and approved.				
Ph.D. Study Plan	Still Needed:	Complete and approve plan for degree progress, including timing of courses and academic milestones (e.g., comprehensive examination, progretacking).				
Ph.D. Comprehensive Examination	Still Needed:	This milestone is only met upon successful completion of the comprehensive exam.				
□ PROGRESS TRACKING						
McGill requires annual progress tracking toward the degree. Each milestone is only met when the student's progress has been judged satisfactory. If necessary, additional progress review milestones may be added to the student's requirements until degree completion.						
Ph.D. 2 Progress Tracking	Still Needed:	Academic Progress Review 2				
Ph.D. 3 Progress Tracking	Still Needed:	Academic Progress Review 3				
Ph.D. 4 Progress Tracking	Still Needed:	Academic Progress Review 4				
Ph.D. 5 Progress Tracking	Still Needed:	Academic Progress Review 5				
Ph.D. 6 Progress Tracking	Still Needed:	Academic Progress Review 6				
Ph.D. Thesis	Still Needed:	Due after a successful pass of the Oral Defense. Students must submit their final thesis through Minerva-eThesis. This milestone is only met wifinal thesis has been approved by the student's supervisor(s) and GPS. Students must adhere to published deadlines.				
Diamod Milachanas						
Planned Milestones PhD Supervisory Committee		Due Date: 31-DEC-19 Status: Required 10-JUL-19				
PhD2 Progress Tracking PhD Study Plan		Due Date: 31-DEC-19 Status: Required 10-JUL-19 Due Date: 31-DEC-19 Status: Required 10-JUL-19				
PhD Comprehensive Examination		Due Date: 31-DEC-29 Status: Required 10-JUL-19 Due Date: 31-DEC-20 Status: Required 10-JUL-19				
PhD3 Progress Tracking		Due Date: 31-DEC-20 Status: Required 10-JUL-19				
PhD4 Progress Tracking PhD5 Progress Tracking		Due Date: 31-DEC-21 Status: Required 10-JUL-19 Due Date: 31-DEC-22 Status: Required 10-JUL-19				
PhD6 Progress Tracking		Due Date: 31-DEC-23 Status: Required 10-JUL-19				
PhD Thesis (Final) Additional Completed Milestones		Due Date: 15-AUG-24 Status: Required 10-JUL-19				



...key to timely completion

- Regular advisory committee meetings (at least one progress report per year)
- PhD: comprehensive exam in the 1st term of your second year (PhD3)
- Play smart with your selection of experts (discuss with supervisor)
 - Supervisory committee
 - Comprehensive examination for PhD
 - Thesis evaluation committee
 - https://mcgill.ca/gps/thesis/thesis-guidelines/examination
- Set yourself small goals with hard deadline.
- Celebrate small victories



Milestones MSc Programs

Milestone	Expected time of achievement	Note
Supervisory committee	End of first term	
Program of study Master's	End of first term	
Academic Integrity	First term (fall)	
Progress tracking	Every year (fall term)	Min. 2
Thesis	End of second year	Aug. 15



Comprehensive examination for PhDs

- Written proposal (10 pages, expend the 5-page proposal from NRSC 751), submitted 2 weeks before comp.
- Oral presentation (15-20 min + 2 rounds of questions)
- Tested on:
 - Proposal
 - Knowledge in three areas of expertise linked to research proposal
- Meet with your comprehensive exam members about their expectations.



Milestones – PhD Programs

Milestone	Expected time of achievement	Note
Supervisory committee	End of first term	
Program of study PhD	End of first term	
Academic Integrity	First term (fall)	
Progress tracking	Every year (fall term)	Min. 3
Comprehensive Exam	First term of second year	PhD3
Thesis	End of third (or fourth) year	Aug. 15

NOTE: Comprehensive exam does not count as a supervisory committee report



THESIS

https://mcgill.ca/gps/thesis/thesis-guidelines

Process:

- 1. Write thesis (2-4 months)
- Supervisor (and co-supervisor) review the thesis (1 month)
- 3. Modify thesis (1 month)
- 4. Fill submission form and submit thesis to GPD in myThesis (2 weeks before deadline)
- 5. Initial submission (mythesis)
- 6. Evaluation (4-6 weeks)
- 7. Defense (PhD): https://mcgill.ca/gps/thesis/thesis-guidelines/oral-defence
- 8. Correction
- 9. Final submission (electronic), approved by your supervisor.



Monograph vs manuscript format

- One or the other, <u>cannot be a mixed format</u>
- Manuscript: the body of the thesis are composed of manuscripts (accepted, submitted or ready for submission).
- Manuscript chapter should be identical to the manuscript accepted, submitted or ready for submission, including the title page with authors anf affiliations.

- For both types:
 - Introduction chapter (include hypotheses and objectives) and a literature review chapter
 - General discussion chapter (for both monograph and manuscript format) and a separate conclusion chapter



myThesis

- Indicate expected submission date.
- Nomination of examiner: ask them before entering their names.
- No contact with potential examiners after they are nominated.
- Start the process early.

NOTIFICATION OF INTENT TO SUBMIT

The **Supervisor(s)** are notified that their graduate student completed the 'Intent to Submit Thesis' page on myThesis.

NOMINATION OF EXAMINER(S)

INTENT TO SUBMIT THESIS

The Graduate Student completes their 'Intent to Submit Thesis' page on myThesis approximately 2 months prior to their expected initial thesis

submission date.

At any point after completing their 'Intent to Submit Thesis' page, the student can complete and submit their list of potential examiners. The student should discuss potential nominees with the supervisor(s) before completing the submission.

The deadline for **students** to submit a list potential examiners is indicated on the 'Intent to Submit Thesis' page.

APPROVAL OF EXAMINER(S)

The **primary supervisor** receives a notification to access their student's "Nomination of Examiners' page on myThesis and to indicate their preferred nominee(s). Once the page is approved by the primary supervisor, the **Unit head** receives a notification to approve the nominated examiner(s).

The supervisor or Unit head can request changes through myThesis during this process.

INVITING THE EXAMINER(S)

After the **supervisor** and **Unit head** approve the nominated examiner(s), the Unit head sends the invitation(s) through myThesis. The **examiner** (s) can accept or refuse the invitation through a link. The student, supervisor(s), and Unit head are informed when all required examiners have accepted their invitations.

When an examiner declines, the **Unit head** is invited to select another choice through myThesis.

SUBMITTING THE INITIAL THESIS

After the examiner(s) accept(s) their invitation, the **studen** can submit their initial thesis through the 'Thesis Submission' page on myThesis.

2 weeks before deadline

APPROVAL OF THESIS SUBMISSION

The supervisor(s) are notified of their student's initial thesis submission. Upon their approval, the Unit head is notified to accept the submission. When the supervisor(s) and Unit Head approve, GPS is notified to review and approve the thesis submission.

The student, supervisor(s), and Unit head are informed of approvals or requests for changes throughout this process.

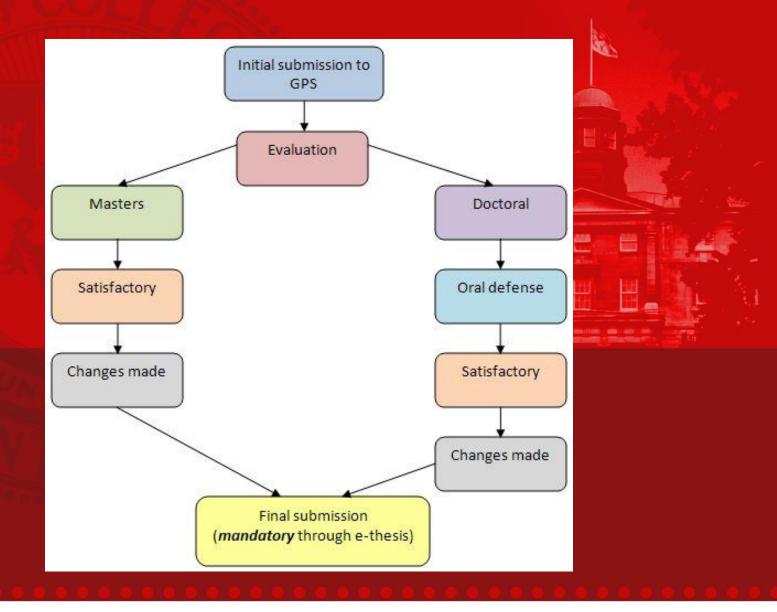
WHEN THE THESIS SUBMISSION PACKAGE IS APPROVED, THE THESIS IS OFFICIALLY READY FOR EXAMINATION!

Once the thesis proceeds to the examination stage, no further action will be required on myThesis.

myThesis will also not reflect updates on the examination process after the approval of the thesis submission by GPS.



https://www.mcgill.ca/gps/thesis/thesis-guidelines/initial-submission





THESIS deadlines

- https://mcgill.ca/gps/thesis/deadlines
- Deadline to submit to to me is 2 weeks before initial submission deadline.

Initial Submission	Final Submission	Additional Session	Thesis Evaluation (Reduced tuition)	Graduation				
Apr 16 – Aug 15	Aug 16 – Dec 15	Summer	Fall	February				
Aug 16 – Dec 15	Dec 16 – Apr 15	Fall	Winter	June				
Dec 16 – Apr 15	Apr 16 – Aug 15	Winter	Summer	October				
Initial and Final Submission in the same term								
Max May. 15*	Apr 16 – Aug 15	Summer	None	October				
Max Sept. 15*	Aug 16 – Dec 15	Fall	None	February				
Max Jan. 15*	Dec 16 – Apr 15	Winter	None	June				

^{*} Reasonable submission date to expect submission of final thesis (PhD) by the deadline, not guaranteed



Fast tracking to PhD

- Need one year in MSc
- Strong performance
- Research project expandable to PhD (expend your proposal)
- New admission in Slate
 - Letter of recommendation from supervisory committee (to GPD)
 - Proposal (to GPD)



National/provincial Scholarships

• Tri-council (CIHR/NSERC/SSHRC): internal deadline

• CGS M: December 1

CGS D: October 1

FRQNT (October 3)

- https://www.mcgill.ca/gps/funding/opportunities
- Information sessions held in the fall for NSERC and SSHRC (GPS announcement).



Other support

- GREAT (Graduate Research Enhancement and Travel) awards
 - For conferences
 - Requires matching contribution from supervisor
 - Discuss with supervisor request from supervisor
- Graduate Travel Mobility Award
 - for travel for field work and/or learning methodologies or research techniques
- Doctoral Internship Program (up to \$2000/month for 3 months)



Tools

- Mypath: https://www.mcgill.ca/mypath/
- Library Workshops
- Skillsets: https://www.mcgill.ca/skillsets/
- Graphos: https://www.mcgill.ca/graphos/





Some not so trivial requirements

- Very important to meet all deadlines!!
 - Registration (thesis course)
 - Health plan (mandatory)
- Field and lab work certification/safety training
- Student status for international students (student permit)
- Permanent Residency (upon completion of your program)
- Travel Registry (https://www.mcgill.ca/mcgillabroad/safetyabroad/registry)





Avoid Isolation

Get involved

Be informed

Seek help

Widen your horizons

Explore the city

Meet people

Celebrate small victories

http://www.mcgill.ca/gps/

https://www.mcgill.ca/macdonald-studentservices/









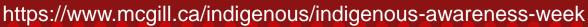


Fellowships

- Tomlinson-University (\$25,000 for outstanding students)
- Schulich- Faculty/NRS (\$25,000 for outstanding students)
- Sustainable Agriculture doctoral fellowship (\$25,000)
- F. Grey Woods (\$25,000 sustainable management on the West Island)
- Tomlinson forest ecology (\$12,000)
- New Sun Joy Harvie Maclaren Graduate Award (\$12,000; native or western Canada)
- Elizabeth and Andre Rossinger fellowship (\$8500 Canadian rural sustainability
- Margaret Duporte fellowship (\$7500 entomology) Blair Postgraduate fellowship (\$5000 PhD small farms in southern Quebec
- Walter M Stewart (\$4000 Quebec universities)
- Rotary Club of Montreal international agriculture award (\$3200)
- Hugh Bailey Prize (\$700 agriculture)
- Macdonald Class 44 Rowles Scholarship (\$600 for students in financial need)
- E. Melville Duporte award (\$450 entomology)
- https://www.mcgill.ca/internalawards/faculty/agricultural-and-environmental-sciences









TEIYA KASAHARA 笠原 貞野

(TRANS)ITIONING INWARD: MAKING ART WITH INTENTION





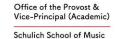
Oct 7th 6 - 7:30PM

Catered Reception 5 - 6PM

Tanna Schulich Hall, Elizabeth Wirth Music Building









Workshop offered by the Library

On Friday, October 18, at 1 pm, we have "Systematic and Scoping Reviews for Mac" (2.5 hours). If you are thinking about starting, have just started, or are in the midst of a systematic or scoping review, this workshop will facilitate the execution of your project.

On Monday, October 21, at 1:30 pm, "Predatory publishing: What is it and how to avoid it" (60 minutes) will address how to identify a legitimate journal/publisher, what resources are available to help researchers on campus as well as the common myths and perceptions surrounding Open Access.

Due to popular demand, our "Prepping for your Lit Review: Organizing, Summarizing, and Critiquing Studies" (90 minutes) is back again this semester. Given on Thursday, November 7, at 1 pm, this workshop will help students learn how to efficiently keep track of authors' relevant points, and critically comment on the literature so that their own voices shine through when writing their review.

On Wednesday, November 20, we have "Introduction to the fundamentals of data management" (60 minutes). Come learn best practices for the research data cycle and topics such as data storage options, file keeping, project organization and more.

