# Neuroscience and Mental Health Institute (NMHI)

# Neuroscience Graduate Program Manual

2024-2025

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### Preface: The purpose of the Graduate Program Manual

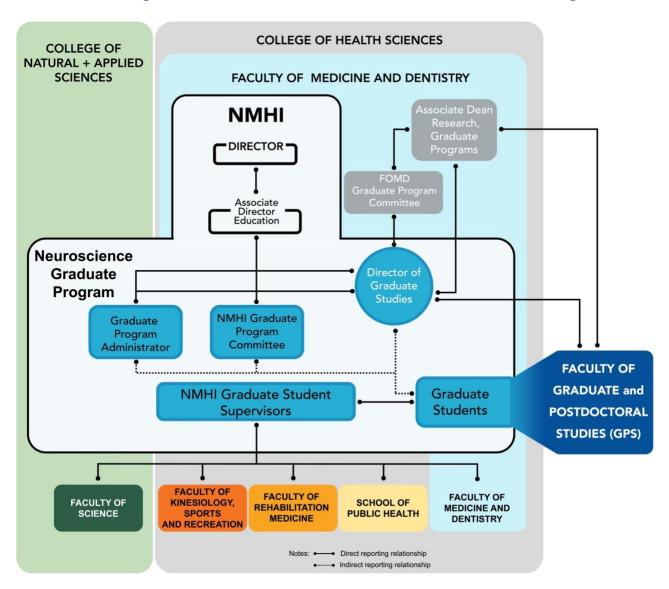
This manual outlines the regulations governing graduate studies within the NMHI at the University of Alberta. Regulations exist at three levels: The <u>Faculty of Graduate & Postdoctoral Studies</u> (GPS), the <u>Faculty of Medicine and Dentistry (FoMD)</u>, and the <u>NMHI</u> itself. The guidelines in this manual encompass and, in some cases, supersede the corresponding regulations at the other two levels. Beginning in 2024, the regulations for graduate programs within the FoMD have been harmonized. It is essential for both students and supervisors to familiarize themselves with the regulations and standards across all three levels.

In addition to the guidelines, students in the NMHI are governed by the University of Alberta policies including the most updated version of those listed below:

- University of Alberta Code of Student Behaviour
- University of Alberta Discrimination, Harassment and Duty to Accommodate Policy

Responsibility for achieving a work, study, and living environment free of harassment and discrimination rests with every individual to whom this Policy applies. All members can reasonably expect to pursue their work and studies in a safe and respectful environment. Neither the University nor any associated individual shall practice or condone any discriminatory or harassing conduct that adversely affects the pursuit of work and study or life on campus. Individuals who are aware of acts of discrimination or harassment are encouraged to take appropriate steps to stop the discriminatory or harassing behaviour. Advice and assistance may be sought from anyone in a position of authority, such as a supervisor, instructor or administrator. More formal advice and assistance may be sought from the Office of Safe Disclosure and Human Rights (OSDHR), Office of the Student Ombuds (OSO), the Association of Academic Staff University of Alberta (AASUA), the Non-Academic Staff Association (NASA), Human Resource Services (HRS) and Organizational Health and Effectiveness (OHE), the Office of the Dean of Students and Student Accessibility Services (SAS).

Section 1: Organization of the Neuroscience Graduate Program



The Neuroscience and Mental Health Institute NMHI at the University of Alberta is a multi-faculty, interdisciplinary teaching and research Translational Science Institute. The NMHI offers a graduate program that is designed for students who desire a broad training in various experimental and theoretical aspects of neuroscience while maintaining a research program that may be more specialized. This can be achieved by drawing on the expertise of our members from various departments, faculties and colleges at the University of Alberta who have research interests in neuroscience.

The Neuroscience graduate program is organized and delivered by NMHI and supervised by the <u>Faculty of Medicine and Dentistry (FoMD)</u>. Faculty members that teach and supervise students in the Neuroscience program belong to 5 different faculties which are part of two Colleges: College of Health Sciences (Faculty of Kinesiology, Sports and Recreation, FoMD, School of Public Health and Faculty of Rehabilitation Medicine) and College of Natural + Applied Sciences (Faculty of Science). NMHI also houses faculty members from additional Colleges but in small numbers.

The ultimate authority for the program rests with the UofA's The <u>Faculty of Graduate & Postdoctoral Studies</u> (GPS). GPS is the authority delegated by the General Faculties Council (GFC) to set policy, standards and procedures laid out in the UofA Calendar. The Faculty of Medicine and Dentistry (FoMD) provides a second level of oversight of the Neuroscience graduate program setting further graduate program requirements through the leadership of the Associate Dean Research, Graduate Programs (currently Dr. Alan Underhill) and the FoMD Graduate Program Committee.

At the NMHI the Neuroscience graduate program is administered and monitored by the Associate Director, Education (currently Dr. Elena Posse de Chaves), the Director of Graduate Studies (currently Dr. Kelvin Jones), the Neuroscience Graduate Program Committee (NGPC) (currently formed by Drs. Jacqueline Cummine, Bradley Kerr, Nikolai Malykhin and Anna Taylor); and the Graduate Program Administrator (GPA) (currently Ms. Amber Lapointe).

### NMHI Graduate Program Contacts

### **Graduate Program Administrator:**

Amber Lapointe, nmhiedu@ualberta.ca

### **Director of Graduate Studies:**

Dr. Kelvin Jones <a href="mailto:neurogrd@ualberta.ca">neurogrd@ualberta.ca</a>

### **Neuroscience Graduate Program Committee:**

Dr. Jacqueline Cummine, jcummine@ualberta.ca, Deputy Graduate Director

Dr. Bradley Kerr, bjkerr@ualberta.ca

Dr. Nikolai Malykhin, nikolai@ualberta.ca

Dr. Anna Taylor, ataylor1@ualberta.ca

### **Associate Director of Education:**

Dr. Elena Posse de Chaves, elena.chaves@ualberta.ca

### Section 2: Expectations and Responsibilities

### Responsibilities of the Associate Director of Education (ADE)

- The ADE represents the NMHI in matters related to educational programming at the University level.
- The ADE works collaboratively with the Honors in Neuroscience Undergraduate Program and the NGPC.
- The ADE oversees the undergraduate and graduate neuroscience curriculums, ensuring proper coordination of undergraduate and graduate neuroscience courses, providing support to the NMHI Undergraduate Coordinator and the Director of Graduate Studies.
- The ADE is a member of the NGPC.
- In consultation with the Director of Graduate Studies and the NGPC the ADE initiates and coordinates:
  - appointment of a Deputy Graduate Director from the NGPC,
  - graduate student recruitment activities,
  - activities to support program progression and career development of graduate students.

### Responsibilities of Director of Graduate Studies

The Director of Graduate Studies oversees all aspects of the program and advises graduate students and faculty in all matters related to graduate studies. The Director of Graduate Studies is supported by, and shares duties with the NGPC.

Duties and responsibilities of the Director of Graduate Studies include, but are not necessarily limited to the following:

- works with the NGPC and GPA, to ensure the effective day-to-day operation of the graduate program.
- admits applicants to the graduate program (together with NGPC).
- approves the appointment of supervisors, supervisory committees, and examiners.
- ensures that the Supervisor has arranged appropriate financial support for the student's stipend and research project where applicable.
- chairs examining committees (Candidacy Exam, Thesis Defense) (together with NGPC).
- provides advice (together with NGPC) to graduate students on the rules and procedures of the GPS, FoMD and NMHI and ensures that the regulations and requirements are met.
- monitors the academic progress of graduate students and acts as an advisor concerning any changes to a student's status or program (together with NGPC).
  - conducts annual student status assessment to ensure that critical program deadlines are met (e.g. progress reports, candidacy exams, program expiry) (together with GPC).
- mediates resolution of conflicts between student and Supervisor as they arise. Directors of Graduate Studies are the first "port-of-call" in any dispute.
- provides advice and support for the Neuroscience Graduate Student Association (NGSA).
- makes decisions on graduate and research student awards together with NGPC.
- manages the graduate curriculum together with NGPC.

### Responsibilities of the Neuroscience Graduate Program Committee (NGPC)

The NGPC works in collaboration with the Director of Graduate Studies on issues related to the development, implementation, and management of the Neuroscience Graduate Program.

The areas of responsibility are:

- To act as the Graduate Admission Committee, reviewing student applications to the graduate program, and making decisions regarding acceptability for admission.
- To oversee the graduate program
- To chair examining committees (Candidacy Exams, Theses Defenses).
- To review, and advise the Director of Graduate Studies on membership of supervisory committees, candidacy examining committees and final examining committees.
- To conduct annual student status assessments to ensure that critical program deadlines are met (e.g. progress reports, candidacy exams, program expiry).
- To set mandatory course requirements for graduate training and provide oversight for selection of optional courses.
- To make decisions on graduate and research student awards.
- To manage the graduate curriculum.

### Responsibilities of the Graduate Program Administrator (GPA)

The GPA provides administrative support for the graduate program, faculty, and graduate students. The GPA assists the Director of Graduate Studies and the GPC.

The GPA responsibilities with respect to graduate students include:

- Handling many of the day-to-day details (forms, processes, letters) for graduate student activities, such as:
  - Admissions
  - Funding/Fellowships
  - Registration to program and courses
  - Entering and changing grades
  - Scheduling of Thesis Proposals, Candidacy exams, MSc and PhD Defenses,
- Helping students with questions about graduate program requirements, procedures, etc.
- Helping students identify appropriate resources, or referring them to the Director of Graduate Studies, if problems arise.
- Advising prospective and current students on available course offerings (final approval given by the Director of Graduate Studies).
- Keeping students informed of deadlines, changes in regulations, etc.
- Is the main NMHI contact for the NGSA

Alumni Support: Maintains contact with graduates.

### Responsibilities of the Supervisor

All supervisors must be members of the NMHI with active research programs. New investigators, members who hold an MD degree (with no thesis), or members who have not graduated a student will normally be required to appoint a co-supervisor for their students. The co-supervisor must first be approved by the Director of Graduate Studies.

### The Supervisor:

- provides an environment for the student that is conducive to perform research and to stimulate the student's intellectual growth.
- is expected to mentor the student by guiding and directing them in their program through regular one-on-one and/or lab group meetings and to provide timely constructive feedback on written work, presentations, and manuscript preparations and submission.
- ensures that the student meets all the administrative requirements of the NMHI, FoMD and GPS.

Note: in accordance with GPS regulations, it is the supervisor's responsibility and not the student's to arrange supervisory committee meetings and examinations.

- offers the research support necessary for completion of the thesis research.
- ensures that appropriate financial support for the Student's stipend is in place and makes recommendations for the Student to apply for scholarships where applicable.
- provides the NMHI graduate committee with an annual written report on the student's performance as requested. This written report is part of the GPS Progress Report system.
- with the Student, establishes a realistic timeline for completion of various phases of the program.
- establishes, with input from the Student, the Supervisory Committee and meets with that committee within six months of the student commencing the graduate program.
- ensures that the student meets with the Supervisory Committee at least once a year.
- informs and communicates to the Graduate Program Director, student, and Supervisory Committee members of any circumstances that arise with regard to the Student's graduate program.
- collaborates with the Student to prepare the Thesis proposal prior to submission to the Supervisory Committee.
- ensures that all members of the Supervisory Committee have signed the Preliminary Acceptance of Thesis approving the suitability of the thesis for examination before submission to the final examining committee for the final oral examination.
- maintains open communication with the student concerning any problem; and in the event of a conflict in the supervisor-student relationship, discusses the issues with the student and graduate coordinator in a timely fashion (see <u>Resolving Conflicts in Supervisor-Student</u> Relationships in the Calendar).

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### Supervisory Committee

Supervisory committees for MSc and PhD students will be formed in accordance with GPS regulations. Supervisory committees must be appointed by six months into the student's first year in the program and a supervisory committee meeting must be held within the first 6 months of the student's first year.

### A. Supervisory Committee Composition

The Committee will consist of the supervisor(s) and at least 2 other full-time faculty members (at least 1 of whom is a NMHI member).

The supervisor/student will suggest names of potential committee members to the Director of Graduate Studies for approval, names will be forwarded to the GPS for the final approval. The supervisory committee members are ex-officio members of the thesis final examining committee. Attention should be paid to the qualifications of the committee members as examiners to ensure the composition and size of the examination committee will be appropriate.

### B. Responsibilities of the Supervisory Committee

- Meet with the student at least once a year to determine the student's progress and to advise on academic and research matters. A Report of Supervisory Committee Meeting form must be submitted to the NMHI office after each supervisory committee meeting.
- Signs the "Preliminary Acceptance of Thesis" examination prior to final submission to the examining committee
- Take part in examinations required by NMHI and the GPS (e.g., Thesis Proposal evaluation, Candidacy Examination and Final Oral Examinations).

### Responsibilities of the Graduate Students

Graduate students should:

- Make themselves aware of the contents of the graduate portions of the Calendar and take responsibility for their own programs in that the Calendar sets out the requirements for the various programs
- Be aware of possible scholarship opportunities, and seek advice and assistance from the department in making applications, etc;
- Be aware of the supervisor's and any NMHI expectations
- Inform the supervisor regularly about progress, and provide the supervisor with an annual report for distribution to the supervisory committee;
- Maintain open communication with their supervisor and Director of Graduate
   Studies/member of NGPC concerning any problem; and in the event of a conflict in the
   supervisor-student or advisor-student relationship, discuss with the supervisor and thee
   Director of Graduate Studies in a timely fashion (see Resolving Conflicts in Supervisor Student Relationships in the Calendar);

 Make research results accessible (beyond their appearance in a thesis) to an appropriate audience.

To remain in **good standing** students must meet program requirements on schedule including:

- Complete ethics training requirements by the end of the first term in the program.
- Attend at least one supervisory committee meeting per calendar year.
- Achieve satisfactory performance at their committee meetings and maintain a minimum GPA of 3.0 in coursework.
- Provide an Annual Report at the time scheduled by GPS and send a copy to the Graduate Administrator
- Attend a yearly meeting with a member of the NGPC.
- Attend the required number of seminars and provide a spreadsheet indicating attendance details (in-person versus virtual attendance criteria are given below)
- Students in the PhD program must pass the Candidacy exam by the deadline set by GPS
- Students are required to maintain a minimum cumulative grade point average (GPA) of 3.0 throughout their graduate program. Failure to maintain the required cumulative GPA will result in a recommendation by the Director of Graduate Studies to GPS that the student be placed on academic probation or required to withdraw.

### Section 3. The MSc Program

The time required to complete the MSc will vary with the individual candidate, but the normal period is about two years to both complete the coursework (1st year), the research training (1st and 2nd years) and complete a final draft of the thesis document. The maximum time to complete the thesis-based MSc program as set by GPS is four years. The minimum length of time is set by the FoMD to be 1 year.

#### **ACADEMIC YEAR 1 ACADEMIC YEAR 2** SPRING/ SUMMER SPRING/ SUMMER **FIRST** SECOND **FIRST** SECOND SEMESTER SEMESTER SEMESTER SEMESTER • Complete PD Supervisory committee meeting Progress report Option to Transfer to PhD Complete Supervisory • Prepare Thesis Ethics (INT D committee appointment and first meeting (6 months) 710) Change of Degree PhD Thesis category to provisional PhD proposal awarded **ACADEMIC YEARS 3-4** Time period reserved to allow completion of the MSc program and graduation under special circumstances

### Structure of the MSc Program

### 3.1. MSc Program Requirements

Requirements to complete the MSc graduate program include didactic coursework, professional development and ethics, seminar attendance, NMHI Research Day attendance, annual meetings with the student's supervisory committee, one-on-one meeting with a member of the NGPC, submission of a thesis, and final defense.

## MSc Program: Major Requirements



#### Coursework\*\*

Complete a total of **3 units** of graded graduate coursework from Critical reading/Thinking and Background Knowledge core competencies.

#### Passing Grades

Students are required to maintain a minimum cumulative program grade point average of 3.0 (B) throughout their program.



#### **Ethics**

Complete the course INT D 710 by the end of the first term of registration in their degree program.

Registration is automatic.



#### Professional Development

Submit an Individual
Development Plan
(IDP) within 12 months of
starting the program.

Complete **8** hours of PD activities inspired by the career plan.
PD activities must be approved by NMHI.



#### Seminar Attendance

Attend 20 seminars/ year.
At least 10 of the seminars
must be Neuroscience
seminars hosted by the NMHI.
A minimum attendance of 4:1
in person to online seminar
ratio is expected Students are
also required to attend other
NMHI-hosted seminars.

#### Research Day Participation\*\*

Students are expected to share their work in the form of a poster or oral presentation during the NMHI Research Day (NRD).



### Progress Report

All MSc students are required to submit a progress report at least once annually to the GPS using the standardized Progress Report form. Reports are due within 12

months of the student's original program start date.

The student and supervisor(s) will receive reminders to complete the progress report in advance of any deadlines.



#### MSc Thesis and Final Examination

All MSc students shall present and orally defend a thesis embodying the results of their research

- \*\* Students cannot meet their graduate student quota of 3 (MSc) credits through lab rotation courses (e.g., NEURO 501) or graduate-level reading courses (e.g., NEURO 550)
- It is mandatory each student attends NRD as participation is a requisite for continuation on the NMHI graduate program.

### A. Coursework Requirements

Students are required to complete a minimum of **3 units** of graded graduate coursework and a thesis. An exception to course requirement may be made for clinical trainees, such as medical residents, who may be exempt with the consultation and approval of the Director of Graduate Studies. Students are expected to have completed undergraduate courses in both Cellular Neurobiology and Systems Neuroscience (e.g., equivalent to ZOOL 342 and PHYSL 372). Those lacking this background will be required to take these courses as 'extra to degree' in addition to the required 3 units of graded graduate coursework.

To satisfy the FoMD requirements for program core competencies, MSc students must complete at least 3 units of graduate-level coursework that fulfills the competencies in Critical Reading/Thinking, or Background Knowledge. This requirement cannot be met through lab rotation courses (e.g., NEURO 501) or graduate-level reading courses (e.g., NEURO 550). Students can meet this requirement by selecting courses from the pre-approved list of Neuroscience courses or, in consultation with their supervisory committees, by choosing other didactic courses that are relevant to their research programs but not on the approved list. A list of Neuroscience pre-approved courses can be found in Appendix 1 and the University calendar.

Students have the option, in consultation with their supervisor, to complete coursework beyond the minimum requirement of 3 units. This additional coursework may include a lab rotation course, such as NEURO 501 (one term; 3 credits), which involves rotation through a laboratory outside of the primary supervisor's lab. Students may also take a graduate-level reading course provided it is with a faculty member other than their supervisor. If a student successfully transfers from the MSc to the PhD program (section 3.3 below), this additional coursework will count toward the 6-unit coursework requirement for the PhD.

### B. Passing grades

Students are required to maintain a minimum cumulative program grade point average of 3.0 (B) throughout their program. Failure to maintain the required cumulative GPA will result in a recommendation by the Director of Graduate Studies to GPS that the student be placed on academic probation or required to withdraw.

### C. Ethics

Students must meet the <u>GPS Ethics and Academic Citizenship Requirement</u> through the completion of the six hour, online, non-credit course <u>INT D 710</u>: <u>Ethics and Academic Citizenship</u> by the end of the first term of registration in their degree program.

The course provides foundational knowledge of ethical principles and relevant university policies, including: academic integrity, plagiarism, research ethics, conflict of interest, workplace ethics, and health.

If a student does not complete the above noted course by the end of their first term of registration in their degree program, their registration in subsequent terms will be restricted until such time as

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the course(s) is completed and/or a plan for completion is submitted by the student to the Faculty of Graduate Studies and Research. Note: GPS will send students reminders to complete the requirement prior to the end of their first term (if not completed already).

### D. Professional Development

Students are required to fulfill the Professional Development requirement which has two components and must be completed as specified by GPS.

- 1. Students must submit a completed <u>Individual Development Plan</u> (IDP) within 12 months of start of the Master's program.
- Students must complete <u>eight hours of professional development activities</u> inspired by the career plan. This must be approved by NMHI and completed at the time of completion for Master's students".

Progress and fulfilment of the PD hours (eight) is the students' responsibility but will be monitored in the GPS Annual Progress Report.

### E. Seminar Attendance

All graduate students are required to attend 20 seminars per year anywhere on campus and at least 10 of the seminars must be selected from the list of formal Neuroscience seminars hosted by the NMHI. The majority of seminar attendance should be 'in person' rather than online. A minimum of 4:1 in person to online ratio is expected. The NMHI also hosts a number of seminars where students will be required to attend in addition to the mandatory minimum of 10 weekly seminars per year.

Students must track their individual seminar attendance and include this report in their yearly report which is sent to GPS. Participation in these seminars is a requisite for continuation in the NMHI graduate program.

### F. Research Day Attendance

Every year students must participate in the Neuroscience and Mental Health Institute Research Day (NRD). Students are expected to present their work in the form of a poster or oral presentation. It is mandatory each student attends NRD as participation is a requisite for continuation on the NMHI graduate program.

### G. Progress Report

Student progress must be reported to the Faculty of Graduate & Postdoctoral Studies (GPS) at least once annually using the standardized Progress Report form. Reports are due within 12 months of the student's original program start date.

Completion of the progress report is mandatory. If a report is not submitted within the required 12-month period, the student's registration for subsequent terms will be temporarily restricted as a last resort until a plan for completion is established. In such cases, GPS will assist the student and supervisor(s) in the completing the report and will remove registration restrictions promptly.

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Both students and supervisors will receive reminders to complete the report ahead of deadlines, with opportunities to request assistance or extensions.

For students requiring closer academic monitoring, progress reports should be submitted more frequently, up to once every four months.

A student who receives two consecutive evaluations of "In Need of Improvement" or one "Unsatisfactory" rating will normally be required to withdraw from their program. This recommendation will be made by the Director of Graduate Studies to the Dean of GPS.

### 3.2. MSc Thesis and Final Examination

For students in a master's degree program, the thesis, at a minimum, should reveal that the student is able to work in a scholarly manner and is acquainted with the principal works published on the subject of the thesis. As far as possible, it should be an original contribution.

Typically, the final oral exam for MSc students is scheduled at the end of the second year. GPS allows MSc students to complete all degree requirements in 4 years.

### A. Purpose of the Examination

The purpose of the MSc final examination is to assess the student's knowledge of the literature relevant to their research area, understanding of the procedures used to collect and analyze their data, understanding of the significance of their research in the context of their research area, and knowledge of the limitations and pitfalls of their chosen methodology.

### B. MSc Thesis Document

The thesis should be prepared following <u>Thesis Preparation</u>, <u>Requirements & Deadlines</u> as outlined by GPS.

University of Alberta has several services to assist students with academic writing. Please consult the Academic Success Centre.

### C. Examination Committee Composition

At least half of the examiners must have a MSc degree or higher.

- The chair is a member of the NGPC who is not the supervisor and is appointed by the Director of Graduate Studies. The Chair is not an examiner.
- The supervisor(s) and supervisory committee members are ex-officio members of the examining committee.
- The committee must include one university examiner or one specialized knowledge examiner.

A **university examiner** is a member of the University of Alberta community who is knowledgeable in the field and comes fresh to the examination. They must not be (or have been) a member of the supervisory committee or have been connected with the thesis research in a significant way. The examiner should not have been associated with the student, outside of usual contact in

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courses or other non-thesis activities within the University, nor be related to the student or supervisor(s). A university examiner should not be a former supervisor or student of the supervisor(s). Eligibility for university examiners is described in detail in the <u>University Calendar</u>.

A **specialized knowledge examiner** is a person who has knowledge or professional expertise that is relevant to the thesis research (such as a health practitioner or an Indigenous community member) and does not have a full-time academic appointment at a university that confers graduate degrees. A specialized knowledge examiner comes fresh to the examination. They must not be (or have been) a member of the supervisory committee or have been connected with the thesis research in any way. The examiner should not have a close personal association with the student or the supervisor.

### D. Role of the Examination Committee

The committee will review the thesis document and conduct an oral examination to test the student's knowledge of the thesis subject and of related fields. The final decision of the examination committee will be based both on the quality of the thesis document and on the student's performance in defense of that document.

### E. Preparing for the Examination

Students must submit a completed thesis to the supervisory committee with sufficient time so that each member can sign the form indicating their decision on its suitability for defense at least **five weeks** prior to the examination. The "<u>Preliminary Acceptance of Thesis</u>" form available on the NMHI website, that the thesis is acceptable for examination. The supervisory committee members can each sign a different form; all signatures do not have to be on the same form. The Preliminary Acceptance of Thesis form(s) must be submitted by the student to the Graduate Program Administrator (GPA).

The supervisor arranges the date, time and place of the exam and communicates it to the GPA. The supervisor also provides the name of the University or Special Knowledge examiner confirming that the eligibility requirements for these examiners are met.

Once the GPA receives all the signatures as supplied by the student, they inform the supervisor. It is then the responsibility of the supervisor to arrange the date, time, and place of the exam at least **4 weeks** prior to the exam and to send the information to the GPA.

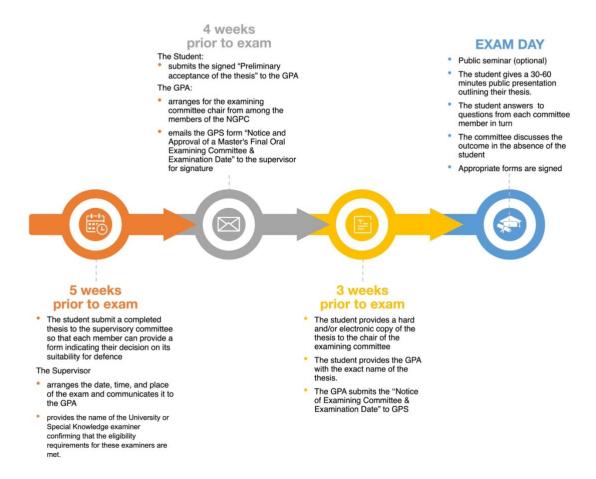
The GPA will arrange for the chair from among the members of the NGPC. The GPA will then inform the supervisor and student of the chair. The GPA will email the supervisor the GPS form "Notice and Approval of a Master's Final Oral Examining Committee & Examination Date." The supervisor must sign the form and return to the GPA.

It is the student's responsibility to provide a hard and/or electronic copy of the thesis to the chair of the examining committee **three weeks** prior to the date of the exam.

The GPA submits the "Notice of Examining Committee & Examination Date" to GPS **three weeks** prior to the date of the exam and a chair for the exam must be arranged,

The student must provide the GPA with the exact name of the thesis as soon as it is known and at least a few days prior to the exam.

# **MSc Final Thesis Defense Process**



### F. Format of the Examination

A formal public seminar is not required for an MSc degree but can be scheduled if the student and/or supervisor like to hold one prior to the exam. It would be attended by the supervisory committee and other interested individuals. If a seminar takes place, the GPA can work with the student and supervisor to find an appropriate room. Please provide the NMHI office with a seminar title and abstract at least 3 weeks in advance so the seminar notice may be circulated. If the student does not present a public seminar the final examination will be preceded by a 30-minute presentation attended by the supervisory committee. Following the seminar, the examining committee and the candidate shall proceed to the oral component of the final examination, which will be held in a closed session and conducted in accordance with GPS regulations.

### G. Possible Outcomes of the Examination

The decision of the examining committee will be based both on the content of the thesis and on the student's ability to defend it. One of the following outcomes of the final examination is appropriate:

- Adjourned
- Pass
- Pass subject to revisions
- Fai

There is no provision for a final examination to be 'passed subject to major revisions.

A majority of examiners must agree to an outcome of Adjourned. All or all but one of the examiners must agree to an outcome of 'pass', 'pass subject to revisions' or 'fail'. Usually, the chair of the examining committee is not an examiner and does not vote. If the examining committee fails to reach a decision, the Department will refer the matter to the Dean of GPS, who will determine an appropriate course of action.

For further details on examination outcomes, consult <u>Section 8 of the GPS Graduate Program</u> Manual.

### H. Time Limit for Submission of Theses to GPS

Following completion of the final oral examination at which the thesis is passed or passed subject to revisions, the student shall make the appropriate revisions where necessary and submit the approved thesis to GPS within 6 months of the date of the final oral examination. The Neuroscience and Mental Health Institute may impose earlier deadlines for submitting revisions.

If the thesis is not submitted to GPS within the 6 month time limit, the student will be considered to have withdrawn from the program. After this time, the student must apply and be re-admitted to GPS and register again before the thesis can be accepted.

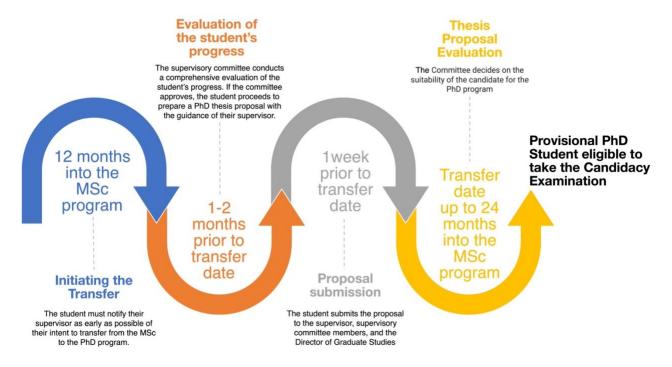
If the final oral examination is adjourned, the 6 month time limit will take effect from the date of completion of the examination where the thesis was passed with or without revisions.

In order to be eligible for convocation students must submit their thesis to the GPS for approval before the deadline dates set out in the Academic Schedule of the Calendar. Students must also ensure that they are registered in the appropriate Thesis course in their last semester prior to convocation.

### 3.3. Change of Program: Transferring from the MSc to the PhD program

Students currently enrolled in the MSc program who wish to transfer to the PhD program without first completing the MSc must follow a defined procedure. The recommended timeframe for initiating this transfer is **12 months** after starting the graduate program, with a maximum limit of **24 months**. Additional information can be found in the GPS Change of Program policy. The details of the process for transfer are consistent across graduate programs in the FoMD and the details may be found online.

# Transfer from the MSc to the PhD program



### A. Initiating the Transfer

- The student must notify their supervisor as early as possible of their intent to transfer from the MSc to the PhD program. This will allow for the formation of a supervisory committee or adjustment of an existing committee to meet GPS requirements.
- The supervisory committee will conduct a comprehensive evaluation of the student's progress. If the committee approves, the student will proceed to prepare a PhD thesis proposal, which will be the basis for the PhD Thesis Proposal Meeting. This process should be completed 1-2 months prior to the meeting.

### B. PhD Thesis Proposal and Meeting

The student, with guidance from their supervisor, will prepare a PhD thesis proposal document that includes:

- A summary of relevant literature and an introduction to the research topic.
- Presentation of preliminary results, hypotheses, and a detailed description of the project, including methods.
- The document should be hypothesis-drive and supported by preliminary data generated by the student. The student must show an appreciation of the appropriate experimental design for their proposed research and the technical difficulties associated with the project.
- The proposal should not exceed 5 single-spaced pages, excluding figures, tables, and references.

The proposal must be submitted to the supervisor, supervisory committee members, and the Director of Graduate Studies at least one week before the scheduled PhD Thesis Proposal Meeting. Typically, the thesis proposal meeting is conducted without a chair from NMHI.

During the meeting, the student will present a 20-min oral presentation followed by a 40-minute question period focused on the proposal. The committee will evaluate whether the proposed work is of sufficient scope and originality to warrant a PhD and the student's suitability for the program.

#### C. Evaluation and Possible Outcomes

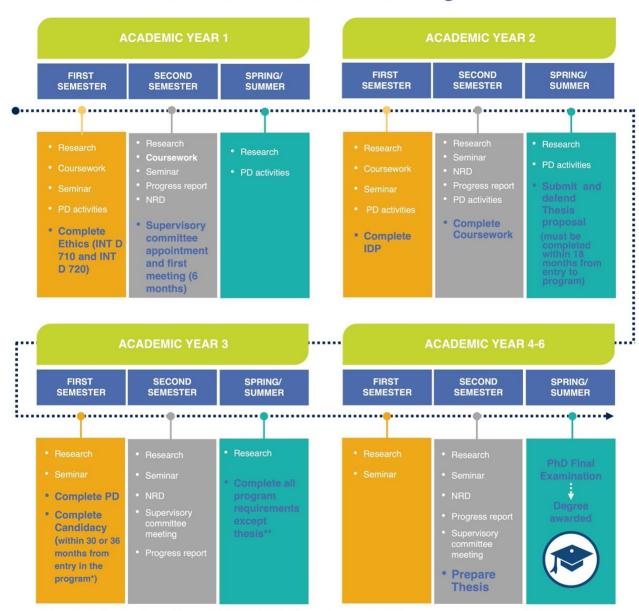
- Proceed unconditionally If the proposal and defense are successful, the student may transfer to the PhD Program. The Graduate Program Administrator (GPA) will submit necessary forms to GPS and the student will be designated as a 'Provisional PhD Student', eligible to take the Candidacy Examination. Students transferring from the MSc to the PhD program must complete six credits of approved graduate coursework, which includes an additional 3 credits beyond the MSc requirements. These credits should be completed within 12 months of the transfer date.
- Repeat evaluation If the committee feels that significant improvements are needed, the student may revise and resubmit the proposal. A second meeting will be scheduled, with the timeframe for resubmission determined by the Director of Graduate Studies.
- Complete and defend an MSc thesis If the repeat evaluation is unsuccessful, or if the student decides not to make a second attempt, the student has the option to remain in the MSc program, complete and defend a Master's thesis.
- Withdraw If performance during the repeat evaluation is unsatisfactory and the committee recommends withdrawal, the student may choose to complete the current academic year before withdrawing.

### D. Documentation and Notifications

Following the conclusion of the thesis proposal examination, a Report of Supervisory Committee form must be completed, signed, and returned to the NMHI office. The outcome must be clearly articulated with constructive feedback and timeline if the decision is to proceed with a repeat evaluation. If the outcome was Proceed unconditionally, a Change of Category form must be completed and submitted to the NMHI.

### Section 4: The PhD Program

## Structure of the PhD Program



\*Direct PhD Entry or Early MSc to PhD Transfer: Students who enter the PhD program directly, or transfer from an MSc to a PhD within the first 18 months of their graduate program, are required to complete the Candidacy Examination within 30 months of their program start date. Later MSc to PhD Transfer: Students who transfer to the PhD program between 18 and 24 months from the start of their graduate program must complete the Candidacy Examination within 36 months of their program start date.

<sup>\*\*</sup>Students who change from a master's program to a doctoral program, without the need to complete the master's program as part of an acceleration or fast-track, have four years to complete the doctoral program progress requirements from the term of initial registration in the master's program.

### 4.1. PhD Program Requirements

Requirements to complete the PhD graduate program include coursework, ethics and professional development, seminar attendance, NMHI Research Day attendance, annual meetings with the student's supervisory committee, one-on one meeting with a member of the NGPC, a thesis proposal, candidacy exam, submission of a thesis, and final defense.

### PhD Program: Major Requirements\*\*\*



#### Coursework\*

Students without prior MSc in Neuroscience must complete 6 units of graded graduate coursework.

Students with a prior MSc in Neuroscience must complete 3 units of graded graduate

PhD students must take at least one didactic, lecture-based course. Lab rotation courses (i.e. NEURO 501) and reading courses (i.e. NEURO 550) are optional.

Students are required to maintain a minimum cumulative program grade point average of 3.0 (B) throughout their program.



#### Ethics\*\*\*

Complete the the six hour, online, non-credit course INIT D 710: Ethics and Academic Citizenship and the two hour, online, non-credit course INIT D 720 - Advanced Ethics and Academic Citizenship by the end of the first term of registration in the degree

program.



### Professional

Submit an Individual Development Plan (IDP) within 18 months of starting the program. Complete 8 hours of PD activities inspired by the career plan. PD activities must be approved by NMHI.



#### Seminar and Research day

Attend 20 seminars/ year. At least 10 of the seminars must be Neuroscience seminars hosted by the NMHI. A minimum attendance of 4:1 in person to online seminar ratio is expected Students are also required to attend other NMHIhosted seminars. Students are expected to share their work in the form of a poster or oral presentation during the NMHI Research Day (NRD). Participation in the NRD is mandatory and a requisite for continuation on the NMHI graduate program.



#### Thesis Proposa

Submit a thesis proposal document, which will be evaluated by the supervisory committee, and defend the proposal orally. Recommended that this process be completed 12 months into the graduate program; the maximum time allowed for completion is 24 months.



#### Progress Report

All PhD students are required to submit a progress report at least once annually to the GPS using the standardized Progress Report form. Progress reports are due in GPS at minimum once every 12 months of the student's original program start date.

The student and supervisor(s) will receive reminders to complete the progress report in advance of any deadlines



### Candidacy

Students who enter the PhD program directly, or transfer from an MSc to a PhD within the first 18 months of their graduate program, are required to complete the Candidacy Examination within 30 months of their program start date.

Students who transfer to the PhD program betwee 18 and 24 months from the start of their graduate program must complete the Candidacy Examination within 36 months of their program start date.

The candidacy examination must be passed **no less than 6 months** prior to taking the final examination



### Doctoral Thesis and Final Exam

All PhD students shall present and orally defend a thesis embodying the results of their research.

#### Notes:

\*\*\* Doctoral Program Three-year Progress
Requirement. All program requirements, other than
the thesis, must be completed within 3 years of the
commencement of a student's program. Students who
change from a master's program to a doctoral
program, without completing the master's
program, have four years to complete the doctoral
program progress requirements from the term of initial
registration in the master's program.

\* Students cannot meet the requirement for 6 units (i.e. 2 x 3-credit courses) solely by taking a combination of lab rotation and reading courses (e.g., NEURO 501 and NEURO 550).

The following limitations apply to reeading courses: 1. The course must be taken with a Faculty member other than the student's supervisor(s). 2. The course can be from any department, but it must be approved by the NMHI Director of Graduate Studies.

\*\* If a student does not complete the above noted courses by the end of their first term of registration in their degree program, their registration in subsequent terms will be restricted until such time as the course(s) is completed and/or a plan for completion is submitted by the student to the GPS. GPS will send students reminders to complete the requirement prior to the end of their first term.

### A. Coursework Requirements

PhD students who do not have a prior MSc in Neuroscience must complete **6 units** of graded graduate coursework. Students who have completed an MSc in Neuroscience are required to complete **3 units** of graded graduate coursework. The specific program of study for each student will be determined by their supervisory committee, and additional coursework may be required based on the student's background and research focus.

Lab Rotation Course, NEURO 501: PhD students may choose to complete a lab rotation course as part of their graduate program. <u>NEURO 501</u> (one term; 3 units) involves rotation through one laboratory taken outside of the laboratory of the primary supervisor.

Graduate-Level Reading Course, NEURO 550: Students have the option to take NEURO 550 (one term; 3 units). However, the course must be taken with a faculty member other than the student's supervisor(s).

Didactic, Lecture-based Courses: To fulfill the coursework requirements, PhD students must take at least one didactic, lecture-based course. Students cannot meet the requirement for 6 units (i.e. 2 x 3-credit courses) solely by taking a combination of lab rotation and reading courses (e.g., NEURO 501 and NEURO 550). At least 3 credits must be from a traditional, lecture-based course. Students can meet this requirement be selecting courses from the pre-approved list of Neuroscience courses or, in consultation with their supervisory committees, by choosing other didactic courses that are relevant to their research programs but not on the approved list. A list of Neuroscience pre-approved courses can be found in Appendix 1 and the University calendar.

Coursework completed towards the requirements of a prior MSc program will not be credited towards the PhD program. However, coursework completed at the University of Alberta while enrolled in the MSc program will be credited for individuals who successfully transfer to the PhD program.

### B. Academic Standing

Students are required to maintain a minimum cumulative program grade point average of 3.0 (B) throughout their program. Failure to maintain the required cumulative GPA will result in a recommendation by the Director of Graduate Studies to GPS that the student be placed on academic probation or required to withdraw.

### C. Ethics

Students must fulfill the <u>GPS Ethics and Academic Citizenship Requirement</u> by completing the six-hour, online, non-credit course <u>INT D 710: Ethics and Academic Citizenship</u> and the two-hour, online, non-credit course <u>INT D 720 - Advanced Ethics and Academic Citizenship</u> by the end of their first term of registration.

*INT D 710:* Ethics and Academic Citizenship provides foundational knowledge of ethical principles and relevant university policies, including: land acknowledgement, academic integrity, plagiarism, research ethics, conflict of interest, and workplace ethics and self-care.

*INT D 720 Advanced Ethics and Academic Citizenship* provides advanced examination of ethical principles, including: Indigenization, academic citizenship, research and scholarship, and ethical principles in university teaching.

Doctoral students who completed their Master's degree at the University of Alberta and previously passed *INT D 710 Ethics and Academic Citizenship* are only required to take *INT D 720 - Advanced Ethics and Academic Citizenship*.

If a student does not complete the above noted courses by the end of their first term of registration in their degree program, their registration in subsequent terms will be restricted until such time as the course(s) is completed and/or a plan for completion is submitted by the student to the Faculty of Graduate Studies and Research. Note: GPS will send students reminders to complete the requirement prior to the end of their first term (if not completed already).

### D. Professional Development

Students are required to fulfill the Professional Development requirement which has two components and must be completed as specified by GPS.

Students must submit a completed <u>Individual Development Plan</u> (IDP) within 18 months of the start of the doctoral program.

Progress and fulfilment of the PD hours (eight) is the students' responsibility but will be monitored in the GPS Annual Progress Report.

### E. Seminar Attendance

All graduate students are required to attend 20 seminars per year across campus, with at least 10 of these seminars selected from the list of formal Neuroscience seminars hosted by the NMHI. The majority of seminar attendance should be 'in person' rather than online, with a minimum ratio of 4:1 for in-person to online attendance. The NMHI also hosts additional seminars that students must attend, beyond the mandatory minimum of 10 NMHI seminars per year.

Students must track their individual seminar attendance and include this report in their yearly progress report, which is submitted to GPS. Participation in these seminars is required for continuation in the program.

### F. Research Day Attendance

All students are required to participate annually in the Neuroscience and Mental Health Institute Research Day (NRD). Students are expected to present their work either as a poster or an oral presentation. Participation in the NRD is mandatory and is a requisite for continuation in the NMHI graduate program.

### G. Progress Report

Student progress must be reported to the Faculty of Graduate & Postdoctoral Studies (GPS) at least once annually using the standardized Progress Report form. Reports are due within 12 months of the student's original program start date.

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Completion of the progress report is mandatory. If a report is not submitted within the required 12-month period, the student's registration for subsequent terms will be temporarily restricted as a last resort until a plan for completion is established. In such cases, GPS will assist the student and supervisor(s) in the completing the report and will remove registration restrictions promptly. Both students and supervisors will receive reminders to complete the report ahead of deadlines, with opportunities to request assistance or extensions.

For students requiring closer academic monitoring, progress reports should be submitted more frequently, up to once every four months.

A student who receives two consecutive evaluations of "In Need of Improvement" or one "Unsatisfactory" rating will normally be required to withdraw from their program. This recommendation will be made by the Director of Graduate Studies to the Dean of GPS.

### H. Doctoral Program Three-year Progress Requirement

All program requirements, aside from the thesis, must be completed within three years of the commencement of the doctoral program. Students who transfer from a master's program to a doctoral program, without completing the master's program, have four years to complete the doctoral program progress requirements, starting from the term of initial registration in the master's program.

In exceptional circumstances, a student who has failed to meet the three-year progress requirement may be considered for an extension in accordance with <u>GPS extensions policies</u>.

### 4.2. PhD Thesis Proposal

The following regulations apply to students who entered the PhD program directly, having completed a Master's program – or equivalent – at the University of Alberta or another institution. For students at the University of Alberta who are transferring from the Masters to the PhD program see section 3.3 Change of Program above.

A PhD Thesis Proposal Meeting must be scheduled within the first 18 months after the start of the program. PhD students are required to submit a thesis proposal document, which will be evaluated by their supervisory committee, and defend their proposal orally before the committee.

### A. PhD Thesis Proposal and Meeting

The student, with guidance from their supervisor, will prepare a PhD thesis proposal document that includes:

- A summary of relevant literature and an introduction to the research topic.
- Presentation of preliminary results, hypotheses, and a detailed description of the project, including methods.
- The document should be hypothesis-drive and supported by preliminary data generated by the student. The student must show an appreciation of the appropriate experimental design for their proposed research and the technical difficulties associated with the project.

• The proposal should not exceed 5 single-spaced pages, excluding figures, tables, and references. (Details available in the <u>Calendar</u>.)

The proposal must be submitted to the supervisor, supervisory committee members, and the Director of Graduate Studies at least one week before the scheduled PhD Thesis Proposal Meeting.

During the meeting, the student will present a 20-min oral presentation followed by a 40-minute question period focused on the proposal. The committee will evaluate whether the proposed work is of sufficient scope and originality to warrant a PhD and the student's suitability for the program.

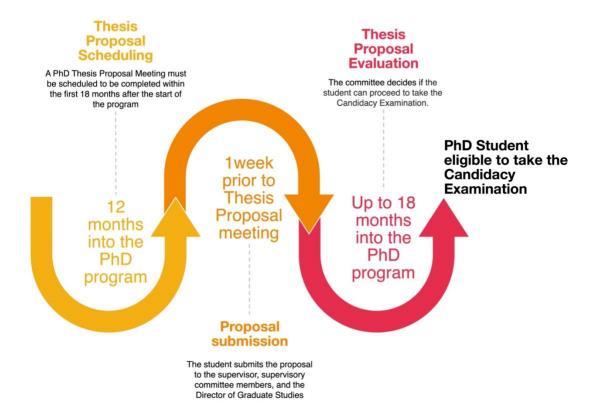
### B. Evaluation and Possible Outcomes

- Proceed unconditionally If the proposal and defense are successful, the student may transfer to the PhD Program. The Graduate Program Administrator (GPA) will submit necessary forms to GPS and the student will be designated as a 'Provisional PhD Student', eligible to take the Candidacy Examination. Students transferring from the MSc to the PhD program must complete six credits of approved graduate coursework, which includes an additional 3 credits beyond the MSc requirements. These credits should be completed within 12 months of the transfer date.
- Repeat evaluation If the committee feels that significant improvements are needed, the student may revise and resubmit the proposal. A second meeting will be scheduled, with the timeframe for resubmission determined by the Director of Graduate Studies.
- Complete and defend an MSc thesis If the repeat evaluation is unsuccessful, or if the student decides not to make a second attempt, the student has the option to remain in the MSc program, complete and defend a Master's thesis.
- Withdraw If performance during the repeat evaluation is unsatisfactory and the committee recommends withdrawal, the student may choose to complete the current academic year before withdrawing.

### C. Documentation and Notifications

Following the conclusion of the thesis proposal examination, a <u>Report of Supervisory Committee</u> form must be completed, signed, and returned to the NMHI office. If the decision is to proceed with a repeat evaluation, the outcome must be clearly articulated, with constructive feedback and a defined timeline.

# Preparation for the PhD Thesis Proposal



### 4.3. PhD Candidacy Examination

The PhD Candidacy Examination is a critical milestone in a students' doctoral journey, designed to assess their readiness to undertake advanced research. This examination must be held within three years of commencement of the program in accordance with the <a href="Degree of PhD">Degree of PhD</a> of the University Calendar. This examination consists of three components: the Candidacy Research Proposal, the Oral Presentation, and the Oral Defense.

### A. Purpose of the examination

The Candidacy Examination serves as an important learning opportunity, helping students to consolidate their understanding and advance their thinking in the subject area related to their research. The examination is intended to establish that the student has:

- Proficient knowledge of their research subject area.
- The ability to develop, pursue, and complete original scientific research at an advanced level, which requires a strong understanding of experimental design, critical thinking abilities, and communication skills.

### Topic:

The Candidacy Research Proposal should be related to the student's field of study and PhD Thesis Proposal. The Candidacy Research Proposal can be developed around the focus of the Thesis Proposal, or the Candidacy Research Proposal can be developed entirely de novo (i.e., in the student's field of study but different from the PhD Thesis Proposal) with the approval of the Supervisory Committee. The key point is that the Candidacy research proposal must include substantial new work. A significant proportion of the proposal should be novel, not part of their own PhD Thesis Proposal or any work ongoing in the lab of their Supervisor or described in grant proposals of the Supervisor.

### B. Expectations for Time of Completion

**Direct PhD Entry or Early MSc to PhD Transfer:** Students who enter the PhD program directly, or transfer from an MSc to a PhD within the first 18 months of their graduate program, are required to complete the Candidacy Examination within 30 months of their program start date.

**Later MSc to PhD Transfer:** Students who transfer to the PhD program between 18 and 24 months from the start of their graduate program must complete the Candidacy Examination within 36 months of their program start date.

### C. Steps in the Candidacy Research Proposal Process

There are five distinct steps in the process and each of these involves the student, and Supervisor, with additional support from the Supervisory Committee, the Director of Graduate Studies, the Graduate Program Administrator, and finally the Candidacy Examination Committee. If everything proceeds according to schedule, the entire process should take 7 weeks to complete, and every effort should be made to ensure that the process does not extend beyond 9 weeks. It is the <u>Supervisor's responsibility</u> – not the student's – to ensure adequate time for scheduling examinations.

- 1. Pre-approval Stage: 1-Page Proposal Summary
- Initiation: The process begins with the student preparing a 1-page Proposal Summary, which outlines the key aspects of their proposed research. The summary must include: title, hypothesis(es), background, research goals, methods, and expected outcomes (details in the Calendar).
- Iterative Feedback: The student submits the 1-page Proposal Summary to their Supervisory Committee. The committee has 1 week to review the Proposal Summary. This is an iterative stage, where the student will receive feedback and be asked to revise the summary until the committee agrees that it represents a project of appropriate scope and significance.
- Approval: Once the Supervisory Committee approves the Proposal Summary, the
  student is given the green light to proceed to the full proposal. This approval is
  communicated to the Director of Graduate Studies and Graduate Program Administrator
  who will facilitate completion of forms to specify the date of the exam, the composition
  of the Candidacy Examination Committee (See <a href="GPS Size and Composition of Examining Committees">GPS Size and Composition of Examining Committees</a>), and completion of the <a href="Candidacy Examination Timeline">Candidacy Examination Timeline</a> form.

### 2. Development of the Full Candidacy Research Proposal

• **Timeline**: The student has **4-weeks** from the approval of the 1-page Proposal Summary to write and submit the full Candidacy Research Proposal. This document

- should expand on the approved summary and must include a detailed description of the research problem, relevant background information, experimental design, and methods.
- **Format**: Detailed formatting guidelines are available in the University <u>Calendar</u>. In summary, the proposal should not exceed 10 pages, with and additional allowance of up to 5 pages for tables and figures. A complete list of references must be included; there is no page limit for the references section.

### Format of the Candidacy Research Proposal

- A cover page with the title of the proposal, the student's name, and the date, time, and location of the examination.
- A 1-page research summary (updated from the original 1-page Proposal Summary submitted for pre-approval). See <u>Procedures, Requirements and</u> <u>Timeline</u> for additional information.
- The research proposal can be no longer than 10 pages. Up to 5 additional pages can be included for Tables and Figures.
- A complete list of citations with titles (this is not included within the 10-page limit).

### Formatting Guidelines:

- Use 8.5" x 11" page format.
- All margins should be set at 2 cm (top, bottom, left, and right).
- Text should be in single-spaced 12-point Times New Roman font, allowing for 48 lines per page.
- Condensed fonts or line spacing are not permitted.
- Page numbers must be clearly displayed at the bottom of each page.
- Any text exceeding the specified limits will be ignored, except for references.
- Tables and Figures should be legible when viewed at 100%.

### 3. Review by the Candidacy Examination Committee

- Evaluation: Upon submission, the Candidacy Examination Committee will have 2
  weeks to review the full proposal. During this period, the committee will assess the
  candidate's creativity, critical thinking, experimental design, and the potential impact of
  the proposed research.
- Preparation for the Examination: The Graduate Program Administrator will arrange
  the oral examination, ensuring that all required forms are submitted at least 3 weeks
  prior to the exam date.

### 4. Oral Presentation and Defense

This part of the process is chaired by a member of the Neuroscience Graduate Program Committee, selected in collaboration with the Graduate Program Administrator. The examination will begin with a review of the student's progress, including coursework, awards, publications, and presentations. The student's supervisor is responsible for providing this review, ensuring that the student's achievements and progress are clearly communicated to the examination committee.

- **Presentation**: The student will deliver a 20-minute oral presentation summarizing their Candidacy Research Proposal.
- **Defense**: Following the presentation, the student will undergo an oral defense, where they will respond to questions from the Candidacy Examination Committee. The questions will focus on the proposal's content, the rationale behind the experimental design, and the student's broader understanding of the research field.

### 5. Outcomes and Designation as a PhD Candidate

The details for outcomes of a Doctoral Candidacy Examination are set by GPS and are available in the University Calendar.

- Pass: Upon passing the Candidacy Examination, the student is formally designated as a "PhD Candidate", signifying their readiness to pursue and complete their doctoral research.
- Conditional Pass
- Adjourned
- Fail and repeat the candidacy
- Fail with a recommendation to terminate the doctoral program or for a change of category to a master's program.

If the Examining Committee fails to reach a decision, the department will refer the matter to the Dean, GPS, who will determine an appropriate course of action.

When the decision is Conditional Pass or Fail, chairs may refer to the decision process flowchart found on the GPS website.

**Adjourned**: A majority of examiners must agree to an outcome of Adjourned. The candidacy examination should be adjourned in the event of compelling, extraordinary circumstances such as a sudden medical emergency taking place during the examination or possible offences under the Code of Student Behaviour after the examination has started.

**Pass:** All or all but one of the examiners must agree to an outcome of Pass. If the student passes the candidacy examination, the department should complete the Report of Completion of Candidacy Examination form and submit it to the GPS.

**Conditional Pass:** A Conditional Pass is appropriate when the student has satisfied the committee in all but a very discrete area of deficiency that can be addressed through a reasonable requirement (e.g., coursework, literature review, upgrading of writing skills). Reworking of the entire candidacy proposal is not an acceptable condition and the examiners should consider the options available for a student that has failed the examination.

A majority of examiners must agree to an outcome of Conditional Pass. If the candidacy examining committee agrees to a conditional pass for the student, the chair of the examining committee will provide in writing within five working days to the Dean, GPS, the graduate coordinator and the student:

- the reasons for this recommendation,
- the details of the conditions,
- the timeframe for the student to meet the conditions, but which should be no less than six weeks and no more than six months.
- the approval mechanism for meeting the conditions (e.g., approval of the committee chair or supervisor, or approval of the entire committee, or select members of the committee), and
- the supervision and assistance the student can expect to receive from committee members

Conditions are subject to final approval by the Dean, GPS. At the deadline specified for meeting the conditions, two outcomes are possible:

- All the conditions have been met. In this case, the department will complete the Report of Completion of Candidacy Examination form and submit it to the GPS; or
- If the conditions are not met by the deadline, the outcome of the examination is a fail and the committee must be reconvened to make the recommendation as described in the following section.

Fail: All or all but one of the examiners must agree to an outcome of Fail.

The options available to the examining committee when the outcome of a student's candidacy exam is "Fail" are

Repeat the Candidacy: Repeating the Candidacy is not an option after a second failed examination. A majority of examiners must agree to an outcome of Fail and Repeat the Candidacy. If the student's first candidacy exam performance was inadequate but the student's performance and work completed to date indicate that the student has the potential to perform at the doctoral level, the examining committee should consider the possibility of recommending that the student be given an opportunity to repeat the candidacy exam. Normally, the composition of the examining committee does not change for the repeat candidacy exam.

If the recommendation of a repeat candidacy is formulated by the examining committee and approved by the GPS, the student and graduate coordinator are to be notified in writing of the student's exam deficiencies by the chair of the examining committee. The second candidacy exam is to be scheduled no later than six months from the date of the first candidacy. In the event that the student fails the second candidacy, the examining committee shall recommend one of the following two options to the department:

Change of Category to a Master's Program: All or all but one of the examiners must agree to an outcome of Fail and Change of Category to a Master's Program. This outcome should be considered if the student's candidacy examination performance was inadequate and the student's

performance and work completed to date indicates that the student has the potential to complete a master's, but not a doctoral, program; or

**Termination of the Doctoral Program**: All or all but one of the examiners must agree to an outcome of Fail and Terminate the Doctoral Program. If the student's performance was inadequate, and the work completed during the program is considered inadequate, then the examining committee should recommend termination of the student's program.

If the candidacy examining committee agrees that the student has failed, the committee chair will provide the reasons and the recommendation for the student's program to the department. The Graduate Program Director will then provide this report, together with the NMHI's recommendation for the student's program, to the Dean, GPS, and to the student.

For failed candidacy examinations, an Associate Dean, GPS, normally arranges to meet with the student (and others as required) before acting upon any department recommendation.

# Steps in the Candidacy Research Proposal **Process**

### 8-10 weeks before examination

#### The student:

seeks advice on the content of their proposed Project and Summary

- determines tentative availability of the committee members and potential university examiners
- submits the name of the university examiner to the Director of Graduate Program for approval



#### 7 weeks before examination The student

- submits a 1-page outline of the research topic to the Supervisory Committee members for approval
- The Graduate Program Administrator (GPA)
- facilitates completion of forms to specify the date of the exam, the composition of the Candidacy Examination Committee, and completion of the Candidacy Examination Timeline form

### 6 weeks before examination

The Student:

the student is given the green light to proceed to the full proposal
has four weeks from this date to prepare the full proposal



### 3 weeks before examination



### 2 weeks before examination

submits a completed proposal to the Committee and the Graduate Program Administrator four weeks after the start of the proposal preparation



#### **Examination Day**

- gives a 20 minutes presentation outlining their proposal
- answers to questions from each committee member in turn

#### The Supervisory Committee:

- discusses the outcome in the absence of the student
- Appropriate forms are signed

# 4.4. Doctoral Thesis Final Examination

The final exam for PhD Students is **normally held at the end of the fourth year** in the graduate program. PhD Students have a maximum of six years from their first term of registration to complete all degree requirements. Master's students who are transferred to a doctoral degree must complete all degree requirements within 6 years from their first term of registration as a Master's Student.

# A. Purpose of the Examination

The purpose of the final PhD examination is to assess the student's knowledge of the literature relevant to their research area, understanding of the procedures used to collect and analyze their data, understanding of the significance of their research in the context of their research area and knowledge of the limitations and pitfalls of their chosen methodology. The PhD thesis must include the results of original investigations and analyses and be of such quality as to merit publication; furthermore, it must constitute a substantial contribution to the knowledge of the student's field of study.

#### B. Doctoral thesis Examination Committee

The examining committee consists of the ex-officio examiners, one external examiner, and either one university examiner or one specialized knowledge examiner.

The **ex officio members** of the committee are the supervisor(s) and the supervisory committee members.

A university examiner is a member of the University of Alberta community who is knowledgeable in the field and comes fresh to the examination. They must not be (or have been) a member of the supervisory committee, or have been connected with the thesis research in a significant way. The examiner should not have been associated with the student, outside of usual contact in courses or other non-thesis activities within the University, nor be related to the student or supervisor(s). Eligible University of Alberta community members include current or retired Academic Staff members, Academic Colleagues, Postdoctoral Fellows, or Executive Members/Academic Administrators who will be appointed or re-appointed as Academic Faculty members on the conclusion of their term (current or retired categories A, B, C, D, and E, as defined in the University of Alberta's Recruitment Policy (Appendix A) Definition and Categories of Academic Staff and Colleagues). A university examiner should not be a former supervisor or student of the supervisor(s). Except in special circumstances (fully justified in writing to the Dean of the department's Faculty), a university examiner should not be an active collaborator of the supervisor(s) (see Conflict of Interest Guidelines). University examiners who have served on a student's candidacy examination committee are eligible to serve on the student's doctoral final examination committee if the other conditions of being a university examiner remain unchanged.

A **specialized knowledge examiner** is a person who has knowledge or professional expertise that is relevant to the thesis research (such as a health practitioner or an Indigenous community member) and does not have a full-time academic appointment at a university that confers graduate degrees. A specialized knowledge examiner comes fresh to the examination. They must not be (or have been) a member of the supervisory committee, or have been connected with the

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thesis research in any way. The examiner should not have a close personal association with the student or the supervisor. Except in special circumstances (fully justified in writing to the Dean of the department's Faculty), a specialized knowledge examiner should not be an active collaborator of the supervisor(s) (see Conflict of Interest Guidelines).

At least half of the examiners must hold a doctoral degree or higher.

The chair is a member of the NGPC who is not the supervisor and is appointed by the GPA. The chair is not an examiner.

It is the responsibility of the Supervisor to inform the NMHI office of the external examiner and the university examiner.

The exam chair will be appointed by the NMHI office from among the members of the NMHI graduate committee.

#### C. Role of the Examination Committee

The committee will review the thesis document and conduct an oral examination to test the student's knowledge of the thesis subject and of related fields. The final decision of the examination committee will be based both on the quality of the thesis document and on the student's performance in defense of that document.

# D. PhD Thesis Document

The thesis should be prepared following <u>Thesis Preparation</u>, <u>Requirements & Deadlines</u> as outlined by GPS.

University of Alberta has several services to assist students with academic writing. Please consult the <u>Academic Success Centre.</u>

# E. Preparing for the Examination

**Eight to nine weeks** before the examination the Supervisory Committee chooses the external examiner and the university examiner (or specialized knowledge examiner). The supervisor may contact potential examiners to ascertain their availability and willingness to participate, but must have no further contact with the external examiner after the thesis has been distributed to the examining committee. Any messages received after distribution of the thesis should be referred to the Director of Graduate Studies. Preliminary arrangements for date, time, and place of the exam are done with the potential examining committee.

The Supervisor provides the CV for the external examiner along with the completed "Approve External Reader or Examiner for Final Doctoral Oral Exam" form required by GPS as well as the 'FoMD PhD External Examiner Conflict of Interest Checklist'.

The GPA forwards documents to the graduate program advisor in FoMD for Faculty Approval. Once approved by FoMD, the external examiner form is sent directly to GPS.

The GPA will notify the supervisor when the external has been approved.

The student should not communicate with the external examiner at any point before the final examination.

At least **six weeks** ahead of the exam date an official invitation letter is sent to the external examiner from the NMHI signed by the Director of Graduate Studies. In the letter of invitation, the external examiner is requested to prepare and send to the Director of Graduate Studies, at least one week in advance of the examination, an evaluation of the thesis placing it in one of the following categories:

- the thesis is acceptable with minor or no revisions,
- the external examiner wishes to reserve judgment until after the examination, or
- the thesis is unacceptable without major revisions.

In all cases, the external examiner is asked to provide a written commentary (approximately two to three pages) on the structure, methodology, quality, significance and findings of the thesis for the reference of both the student and supervisor.

At least **six weeks** ahead of the exam date the student submits their final draft thesis to their supervisory committee for review. The supervisory committee has 2 weeks to read the thesis.

**Six** to **four weeks** before the date of the exam the supervisory committee is required to recommend, on the '**Preliminary Acceptance of Thesis**' form, that the thesis is acceptable for examination. The committee members do not have to all sign the same form. The student sends to the GPA the signed "Preliminary Acceptance of Thesis" form(s) and a copy of the final thesis.

Once the signature forms have been received, the GPA will inform the supervisor that the date, time, and place of the exam can be confirmed.

The GPA arranges for the examining committee chair from among the members of the NGPC and informs the supervisor and student of the chair of the committee.

At least **four weeks** ahead of the exam the GPA sends the official final draft of the thesis to the external examiner.

Once the examination has been set and the chair arranged, the administrator will email the supervisor the GPS form 'Notice of Examining Committee & Examination Date.' The supervisor is required to sign and return the form back to the administrator for the Director of Graduate Studies' signature.

The Supervisor provides a hard copy or PDF of the thesis, whichever is preferred to the rest of the members of the examining committee, including the chair.

At least **three weeks** prior to the exam the GPA must provide GPS with the 'Notice of Examining Committee & Examination Date' form.

At least **two weeks** ahead of the exam the student sends the title and picture for an NMHI poster for advertisement of the public seminar.

#### F. Examination Seminar

The examination will be preceded by a 30 minute to one hour public seminar and question period that will be attended by the examining committee and other interested individuals. The student must provide a seminar title and short abstract to the NMHI office at least 2 weeks in advance of the exam so that the seminar notice can be circulated. The seminar is usually held in the same room as the exam if the room is appropriate.

# G. Format of the Examination

After a brief break following the public seminar the examining committee and the student reconvene for the formal final examination. After initial introductions are made, the student leaves room while the committee discusses the student's performance in the program and establishes the order of questioning.

It is generally agreed that the most time should be allotted to the external and university examiners and the least to the supervisor. In this way new and challenging questions are asked in place of reiteration of questioning already utilized to develop the student and enhance the research. Examiners should avoid discussions among themselves that exclude the student. They should not lecture but should ask detailed questions about the thesis and occasional broad, disciplinary questions. Typographical and stylistic errors should not take up examination time.

At the close of the examination the student is asked if they have any final questions or comments before they are asked to withdraw.

For the adjudication, no final verdict should be rendered without each examiner having given an opinion. Two opinions will be sought: (1) on the acceptability of the thesis; and (2) on the acceptability of the defense.

The Student is invited back into the room and the Chair announces the decision and provides feedback on the committee's discussions regarding the strengths and weaknesses of the thesis and the thesis defense.

# H. Decision of the Doctoral Final Examining Committee

The decision of the examining committee will be based both on the content of the thesis and on the student's ability to defend it. The final examination may result in one of the following outcomes:

- Adjourned
- Pass
- Pass subject to revisions
- Fail

There is no provision for a final examination to be "passed subject to major revisions". If the Examining Committee fails to reach a decision, the NMHI will refer the matter to the Dean, GPS, who will determine an appropriate course of action.

# I. Time Limit for Submission of Doctoral Theses to GPS

Following completion of the final oral examination at which the thesis is passed or passed subject to revisions, the student shall make the appropriate revisions where necessary and submit the approved thesis to the GPS within 6 months of the date of the final oral examination. The NMHI may impose earlier deadlines for submitting revisions.

If the final oral examination is adjourned, the 6-month time limit will take effect from the date of completion of the examination where the thesis was passed with or without revisions. To be eligible for convocation, all doctoral students must submit their thesis to the GPS for approval before the deadline dates set out in the Academic Schedule of the Calendar. Students must also ensure that they are registered in the appropriate thesis course in their last registration prior to convocation.

There are thesis submission deadlines for each convocation period and registration requirements when submitting your thesis. We recommend you submit your thesis **a minimum of 3-5 working days before any deadline**, as corrections may be required. Please review the various deadlines below for more details.

After the supervisor has approved the thesis revisions and signed the Thesis Approval/Program Completion form, the form is given to the Director of Graduate Program to complete the program completion section and will send it to the GPS. GPS must receive this form by the listed deadlines in order to avoid future registration and fees.

If the thesis is not submitted to the GPS within the 6-month time limit, the student will be considered to have withdrawn from the program. After this time, the student must apply, be readmitted to the program and register again before the thesis can be accepted.

# J. Submission of Final Thesis

'To be eligible for convocation, all students in a thesis degree program must present and defense a thesis embodying the results of their research' – GPS. The NMHI has a permanent library of thesis documents from our students. We would be most appreciative if you were able to provide us with a bound copy of your thesis (book binding for Neuroscience is dark green) to add to our growing display.

Please visit <u>GPS's website</u> for academic requirements for your thesis preparation, requirements & deadlines.

- Neuroscience Students will be required to submit a hard copy of the thesis to the Neuroscience and Mental Health Institute office.
- Students may choose to have additional copies printed for Supervisors or personal use but this is not required.
- Please submit your 'University of Alberta Thesis/Dissertation Non-Exclusive License' and decide if you will be restricting access to your thesis which will be required before submitting your thesis to GPS.

# Final Doctoral Thesis Defense Process



- The Supervisory Committee chooses the external and the university examiners
- The Supervisor provides the CV for the external examiner along with the completed "Approve External Reader or Examiner for Final Doctoral Oral Exam" form required by GPS as well as the 'FoMD PhD External Examiner Conflict of Interest Checklist'.
- The Graduate Program Administrator forwards the documents to FoMD for Faculty Approval
- The supervisor makes preliminary arrangements for date, time and place of the examination

# 6 weeks prior to exam

- The student submit a completed thesis to the supervisory committee so that each member can provide a form indicating their decision on its suitability for defense
- The supervisory committee has 2 weeks to read the thesis
- The Supervisor arranges the date, time, and place of the exam and communicates it to the GPA

# 6-4 weeks prior to exam

- The supervisory committee is required to recommend, on the 'Preliminary Acceptance of Thesis' form, that the thesis is acceptable for examination.
- The GPA will inform the supervisor that the date, time, and place of the exam can be confirmed.
- The GPA arranges for the examining committee chair from among the members of the NGPC and informs the supervisor and student of the chair of the committee
- The GPA: emails the GPS form "Notice and Approval of a Master's Final Oral Examining Committee & Examination Date" to the supervisor for signature

#### 4 weeks prior to exam

- The Supervisor provides a hard copy or PDF of the thesis, whichever is preferred to the chair and the rest of the members of the examining committee, except the external examiner
- The GPA sends the official final draft of the thesis to the external examiner
- The GPA emails the supervisor the GPS form 'Notice of Examining Committee & Examination Date.' The supervisor is required to sign and return the form back to the administrator for the Director of Graduate Studies' signature.
- The GPA submits the "Notice of Examining Committee & Examination Date" to GPS

#### 3-2 weeks prior to exam

- At least three weeks prior to the exam the GPA must provide GPS with the 'Notice of Examining Committee & Examination Date' form.
- At least two weeks ahead of the exam the student sends the title and picture for an NMHI poster for advertisement of the public seminar.

#### **EXAM DAY**

- The student gives a 30-60 minutes public presentation outlining their thesis.
- The student answers to questions from each committee member in turn
- The committee discusses the outcome in the absence of the student
- Appropriate forms are signed



# Section 5. Convocation

The University of Alberta holds two convocations each year. A spring convocation in June and a fall convocation in November.

Students must complete all the following steps before the convocation deadlines (early October and mid-April; varies from year to year) to be eligible for convocation.

- Apply for convocation within Bear Tracks: All applications for convocation are subject to review and approval by the GPS. Applying to convocate on Bear Tracks does not guarantee convocation.
- Ensure the Department has sent the appropriate program completion form to the GPS.
- Prepare and submit your thesis to the GPS.
- Note that convocation approval requires payment of all outstanding fees to University of Alberta.
- GPS Guidelines for Convocation
- Office of the Registrar information regarding convocation

# Section 6. Neuroscience Graduate Student Association (NGSA)

The Neuroscience Graduate Student Association (NGSA) is the graduate student group within the NMHI. If you are interested in joining the NGSA, elections are typically held in June. Please feel free to reach out to <a href="mailto:neurosci.gsa@gmail.com">neurosci.gsa@gmail.com</a>. Watch for exciting events arranged by the NGSA such as the NMHI Research Day, Brain Awareness Week and public lectures

# Section 7. NMHI Events & Outreach

# NMHI Research Day

One day each year is designated as Neuroscience and Mental Health Institute Research Day (NRD) which highlights graduate student research within the institute and facilitates interdisciplinary interactions among students and faculty. Students display their research by preparing posters and/or presentations followed by a keynote presentation from a distinguished scientist from outside of the University of Alberta. It is mandatory each student attends NRD as participation is a requisite for continuation on the NMHI graduate program.

# **Brain Awareness Week**

Brain Awareness Week (BAW) is the global campaign held every March to increase public awareness of the progress and benefits of brain research. NRD is generally held on the Friday before BAW events begin.

# Run for Brain Research

The run for brain research also known as the Neuroscience, Education, Research and Development (NERD) Run is an annual event hosted by the NMHI to increase support and awareness of neuroscience research.

# The Synaptic Post

The Synaptic post is an NMHI weekly newsletter created to keep students, NMHI members and the greater University community up to date on our events and research accomplishments. Please ensure that you are receiving the newsletter as this is the tool to keep you best informed on the upcoming events, seminar series and other opportunities.

# The Faculty of Graduate Studies and Research

GPS sends out a newsletter to keep all graduate students up to date with any news and events. Watch for opportunities to complete your Individual Development Plan (IDP) hours, Professional Development (PD) hours as well as new and upcoming awards as well as campus activities.

# Section 8. Financial Information

Full-time graduate students receive a stipend guaranteed to be not less than a minimum determined annually by the <u>Graduate Students Collective Agreement</u>. The minimum full-time GRAF stipend for 2024-2025 are \$25,197/year and \$24,089/year for doctoral and master students, respectively. The source of funds may be either from the supervisor, and/or from a funding agency external to the Department. Graduate Supervisors supporting students from restricted funds are encouraged to exceed the minimum rates when possible. The supervisor is responsible, together with his/her student, for making every attempt to secure external student financial support for the completion of the program. International students are also responsible for payment of the differential fee; some supervisors choose to contribute to the payment of this fee and international students should consult with their supervisor in this regard. It is a further responsibility of the student to maintain the highest possible standards of performance during the program of study in order to ensure continuing financial support.

A limited number of graduate research assistantships are available through the NMHI. In addition, graduate teaching assistantships and research assistantships may be available through one of the faculties or departments participating in the graduate program in Neuroscience or from research grants held by individual investigators. Other funding is provided by scholarships awarded to students by federal and provincial agencies such as the Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC), Alberta Innovates Health Solutions (AIHS) and the Provincial Government of Alberta. Many private foundations also have scholarship programs to support graduate students. Students are expected to apply for external funding.

A number of University of Alberta and private scholarships are available to NMHI graduate students. Students are responsible for researching <u>scholarship eligibility and deadlines</u> on GPS's website. Emails are sent out as reminders to students to ensure that they submit their applications to the NMHI (internal deadlines) to be reviewed by the graduate committee.

#### Fees

Graduate student fees and tuition are regulated by the University. It is the student's responsibility to track all fees and pay all amounts owing by the specified deadlines.

# Section 9. Resources

The Faculty of Medicine & Dentistry provides additional support services for all students to assist and support their academic journey.

<u>The Office of Advocacy & Wellbeing</u> is a resource committed to help with the health and well being of our students both academic and personal well-being.

<u>Sexual Assault Centre</u> Phone: 780-492-9771 Location:2-705SUB, The University of Alberta Sexual Assault Centre provides a safe place on campus where unconditional support, confidentiality, respect and advocacy are available for those affected by sexual assault. The Sexual Assault Centre strives for a campus community free of sexual violence. The Sexual Assault Centre offers services for survivors of sexual assault or stalking and their supporters regardless of gender.

<u>Peer Support Centre</u> Phone: 780-492-HELP (4357) (Primary) 780-492-4268 (Administration line) Location: 2-707 SUB, University of Alberta Webpage: www.su.ualberta.ca/services/psc/ The Student Support Centre is operated by student volunteers who are all trained to provide telephone, appointment or drop-in crisis intervention, suicide prevention, and supportive listening.

Free Drop-In Mental Health Workshops Learn strategies to deal with common mental health concerns like depressions, anxiety, relationship break-ups, and more with workshops through Counselling and Clinical Services.

# APPENDIX 1: List of courses of the Neuroscience Graduate Program

- CELL 502 The Birth and Death of a Cell
- EDPY 500 Introduction to Data Analysis in Educational Research
- EDPY 505 Quantitative Methods I
- NEURO 501 Graduate Research Project
- NEURO 510 Cellular and Molecular Aspects of Normal Aging and Neurodegenerative Disorders
- NEURO 511 Clinical and Basic Science Aspects of Age-related Neurodegenerative Disorders
- NEURO 520 Neuroplasticity
- NEURO 525 Neuroimaging in Neuroscience
- NEURO 572 Current Topics in Autonomic Neuroscience
- NEURO 603 Graduate Colloquium in Neuroscience
- NEURO 621 The Art of Grant Writing
- NEURO 698 Undergraduate Research Mentoring
- NEURO 699 Undergraduate Research Mentoring
- PHYSL 544 Current Topics in Neuroscience
- PMCOL 575 Signal Transduction Systems as Pharmacological Targets
- PMCOL 612 Drugs and the Nervous System
- PSYCH 574 Advanced Topics in Neuroscience
- PSYCH 576 Cognitive Neuroscience
- PSYCI 511 Biological Aspects of Psychiatry

# MSc Program: Student's and Supervisor's Yearly Responsibilities

YEAR 2 YEAR 1	First term Complete Ethics Requirements Committee Committee Term Second Term Term Term To months	Supervisor Responsibility: Participates in the supervisor and completes the seminar series. Fills out the annual GPS progress report. Participates in at least one supervisory committee meetings AT LEAST ONCE per academic year.  Supervisor Responsibility: Arranges supervisory committee meetings AT LEAST ONCE per academic year.  Student Responsibility: Arranges supervisor and completes the "Conversation check list with a new graduate student", initiates course work and research work.  Student Responsibility: Consults with the student and completes the "Conversation check list with a new graduate student", initiates course work and research work.  Student Responsibility: Consults with the supervisor for establishing the Supervisory Committee.  Student Responsibility: Consults with the supervisor for establishing the Supervisory Committee.  Student Responsibility: Completes course work. May discuss with supervisors and supervisory committee and meets with that committee within six months of the student commencing the graduate program.  Student Responsibility: Arranges supervisory committee meeting. Considers the option to transfer to PhD.  Student Responsibility: Arranges supervisory committee meeting. Considers the option for transferring of student to PhD.  Student Responsibility: Provides the supervisory committee meeting. Supportis student in preparations of PhD thesis proposal at least one wee in advance of the evaluation gives a 20 minutes presentation summarizing the thesis program with a copy of the PhD thesis proposal at least one wee in advance of the evaluation gives a 20 minutes presentation summarizing the thesis program Administrator (GPA) (4 weeks prior to exam). Provides a hard and/or electronic copy of the PhS with a program of the opening of the desired of the evaluation promitting committee and the Deponsibility; such is the least of the evaluation of the Responsibility. Summittee and the program of the evaluation of the Responsibility cannot be a son and and/or electronic copy of the PhS with th
	Exam	Supervisor Responsibility: makes sure that all arrangements for the exam are in place
	Years 3-4	Time period reserved to allow completion of the MSc program and graduation under special circumstances

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# PhD Program: Student's and Supervisor's Yearly Responsibilities

	Every Year Recular	Student Responsibility: Performs research work. Attends the seminar series. Fills out the annual GPS progress report. Participates in at least one supervisory committee meeting. Participates in Neuroscience Research Day.
	Activities	Supervisor Responsibility: Arranges supervisory committee meetings AT LEAST ONCE per academic year.
		Student Responsibility: Meets with the supervisor and completes the "Conversation check list with a new graduate student". Initiates course work and research work
L	First term	Supervisor Responsibility: Meets with the student and completes the "Conversation check list with a new graduate student". Submits signed check list to GPA. Discusses the research project with student.
<b>SEAR</b>	First term Complete Ethics Requirements	Student Responsibility: students are automatically registered in Bear Tracks to complete INTD 710 and INT D 720 in their first term of study.
Ι.	6 months	Student Responsibility: Consults with the supervisor for establishing the Supervisory Committee.
	Supervisory Committee	Supervisor Responsibility: establishes, with input from the Student, the Supervisory Committee and meets with that committee within six months of the student commencing the graduate program.
	18 months	Student Responsibility: Finalizes the Individual Development Plan (IDP) and engages in PD activities.
	집	Supervisor Responsibility: Consults and reviews IDP & PD activities (yearly).
2 <i>A</i> /	18 months Thesis	Student Responsibility: Provides the supervisory committee and the chair with a copy of the PhD thesis proposal at least one week in advance of the evaluation. At the examination gives a 20 minutes presentation summarizing the thesis proposal.
/3J	Proposal	Supervisor Responsibility: Supports student in preparations of PhD thesis proposal. Supervisor reviews the Thesis proposal prior to submission to the Supervisory Committee.
	Second	Student Responsibility: Completes course work.
	Term	Supervisor Responsibility: Arranges supervisory committee meeting. Schedules the Candidacy Examination.
8	30 or 36 months	Student Responsibility: Prepares the 1-page summary and full proposal. Prepares for the exam. At the examination gives a 20 minutes presentation summarizing their thesis.
: ЯА	Candidacy Exam	Supervisor Responsibility: Arranges the examining committee. At least 8 weeks in advance of the evaluation, provides the Graduate Program Administrator with the name of the university examiner as well as the date, time, and place of the exam. Signs the GPS form "Notice of Examining Committee & Examination"
3V	Three-year Progress Requirement	Student Responsibility: Completes all program requirements, other than the thesis.
9	Research and Completion	Student Responsibility: Makes substantial progress towards the completion of the doctoral thesis. Publishes their results. Writes the thesis
-4 SAA	Doctoral Final	Student Responsibility: submits final draft thesis to their supervisory committee for review (6 weeks prior to exam). Submits the signed Preliminary Acceptance of Thesis form(s) to the Graduate Program Administrator (GPA) (4-6 weeks prior to exam). Sends to the GPA the signed "Preliminary Acceptance of Thesis" form(s) and the final draft of the thesis (4-6 weeks prior to exam). Provides the GPA the title and picture for an NMHI poster for advertisement of the public seminar (2 weeks prior to exam). Presents a public seminar and defends their thesis (exam day).
∃J,	Exam	Supervisor Responsibility: chooses the external and the university examiners and provides the external examiner's CV along with the completed "Approve External Reader or Examiner for Final Doctoral Oral Exam" form as well as the 'FoMD PhD External Examiner Conflict of Interest Checklist* to the GPA (8-9 weeks prior to exam). Arranges the date, time, and place of the exam and communicates it to the GPA (8-9 weeks prior to exam). Provides a copy of the thesis to the members of the examining committee, including the chair (4-6 weeks prior to exam). Revises the thesis before it is submitted to the supervisory committee for preliminary acceptance. Attends the final examination.