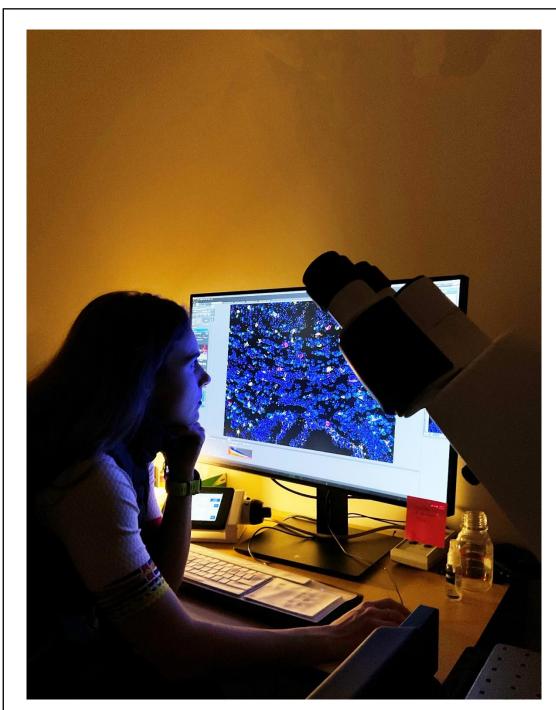
The University of British Columbia Graduate Program in Neuroscience Handbook

Last update: November 2023



Rocio Hollman, PhD Student, Bamji Lab, 2022 Photo credit: Serena Hollman

The Graduate Program in Neuroscience acknowledges with gratitude and respect that ts members learn, study and work on the traditional, ancestral, and unceded territories of the xwməθkwəyəm (Musqueam), selílwitulh (Tsleil-Waututh), and skwxwú7mesh (Squamish) Coast Salish peoples.

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Graduate Program Director's Welcome

On behalf of all the faculty and staff in our program, a very warm welcome to the Graduate Program in Neuroscience! I am thrilled that you have chosen the University of British Columbia for your graduate degree in the Neurosciences.

For the next few years, the Graduate Program in Neuroscience will be your academic home. It is our mission to foster a diverse, equitable, inclusive, and collaborative training environment that nurtures academic excellence as well as skills that translate to careers outside of academia.

We hope that you will take advantage of the full range of training opportunities that our program has to offer—core courses and electives, laboratory research, workshops and career events, participation in governance, and networking opportunities.



As the Graduate Program Director, you can expect me to:

- Provide guidance on how to progress toward your degree.
- Be knowledgeable about applicable UBC Faculty of Graduate & Postdoctoral Studies (G+PS) policies and procedures.
- Ensure that minimum funding requirements are fulfilled.
- Assist and provide resources in times of distress or mental health problems, and have knowledge of available UBC resources for mental health and wellness.
- Listen to and assist students and supervisors in addressing conflicts in a confidential, impartial, and collaborative manner.
- Continuously learn from you, and improve myself and our program.

I invite you to read the Student Handbook and familiarize yourself with our guidelines and procedures, and to get in touch with us if you have any questions. The best ways to reach us is through email at ubc.neuroscience@ubc.ca (Emily Palmer, Graduate Program Coordinator).

I'm always happy to hear your ideas and comments. If you need to speak to me about anything, my office is on the third floor of the Djavad Mowafaghian Center for Brain Health (3401, DMCBH), and Emily has access to my calendar for appointment booking. I look forward to meeting you!

Sincerely,

Dr. Catharine Winstanley

Director, Graduate Program in Neuroscience

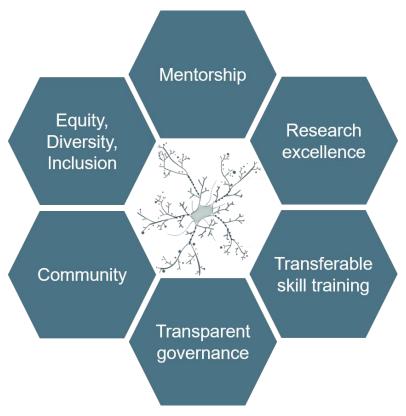
Professor, Dept. Psychology

(All) in sanley

Faculty of Arts, University of British Columbia

1. Foundational Pillars of the Graduate Program in Neuroscience

The Graduate Program in Neuroscience (GPN) places learners in the centre of the training and research process. Aligned with the Faculty of Medicine Strategic Plan 2021-2026, the GPN aims at "educating, developing and mentoring future and current [...] researchers who can work together effectively to serve evolving health needs". The program rests on the following foundational principles:



- Mentorship: a supportive and resilient trainee-supervisor relationship is the foundation for our trainees' creativity and training success
- Research excellence: our faculty members are world experts in their fields and the research environment at UBC and affiliated sites is state-of-the-art
- Transferable skill training: we acknowledge trainees' diverse goals and career plans and offer opportunities to learn skills that transfer outside of academia
- Transparent governance: our governance structure follows terms of reference and can be viewed on our webpage
- Community: we believe in peer support and networking, and offer a range of inclusive, community-building activities
- Equity, Diversity, Inclusion (EDI): we strive to make our program's training and research environments and our admissions, award adjudication, and governance equitable, diverse, and inclusive

2. Justice, Equity, Diversity, and Inclusivity

2.1 GPN Zero Tolerance for Discrimination and Harassment

The Graduate Program in Neuroscience is committed to promoting, providing, and protecting an inclusive, positive, supportive, and safe learning environment and workspace for all its members. The program continuously engages with diversity in all decision-making processes during admission and award adjudication. Our community strives to treat those, who are historically, persistently, or systemically marginalized, equitably. The GPN's Equity, Diversity, and Inclusion Committee (see *Section 6, Governance*) aims at bringing awareness of the importance of EDI to our program, and works jointly with the GPN Director on embedding EDI principles into the review process for all admissions and award adjudication decisions.

Any acts of harassment, discrimination, bullying or violence, and sexual misconduct, including gendered insults, are not acceptable in our classrooms, research laboratories, and all other areas in which our members interact. Examples of unacceptable behaviours include, but are not limited to, public humiliation, verbal abuse or taunting, creating an intimidating or hostile learning atmosphere, threatening behaviour, unwelcome physical contact, physical violence or violent gestures, offensive comments or behaviour regarding gender, race, ethnicity, religion (or lack thereof), sexual orientation, age, or disability.

The inherent power differential between trainees and supervisors may invoke feelings of intimidation or anxiety to perform well. This is not unique to graduate training but is common in many situations of training and job performance. The distinction between being intimidated and feeling pressure to function well should be understood by students and supervisors.

2.2 Reporting Mistreatment and Unprofessional Conduct

If you have experienced inappropriate behaviour as a graduate student in our program, or have witnessed such behaviour, we ask that you report it so that we may take steps to correct the problem and offer support. Please don't stay silent. You are not alone.

The following resources are available to you—either within the program, within the Faculty of Medicine, or across UBC—to report mistreatment or unprofessional conduct. Please feel free to choose the resource that feels right to you.

- Please talk to the Director of the Graduate Program in Neuroscience, Dr. Catharine Winstanley (<u>catharine.winstanley@ubc.ca</u>). Any communication will be treated as confidential.
- The Faculty of Medicine Graduate & Postdoctoral Education group offers direct support through their Grad & Postdoc Wellbeing Support Coordinator (Alisha Lettman, alisha.lettman@ubc.ca,) and their embedded counselor (Asmae El Bouhali, asmae.elbouhali@ubc.ca) for a confidential conversation and to discuss resources.
- Consider filing a report at https://mistreatmenthelp.med.ubc.ca/
- Reach out to the Faculty of Medicine Respectful Environment, Equity, Diversity and Inclusion Office, https://redi.med.ubc.ca/
- You can contact the Graduate Student Society (advocacy@gss.ubc.ca).
- You can contact the UBC Office of the Ombudsperson for Students (see "How We Can Help"), https://ombudsoffice.ubc.ca/.

• UBC-wide confidential emotional support and coaching are available through Counselling Services (https://students.ubc.ca/health/counselling-services) and/or the UBC Student Assistance Program (https://students.ubc.ca/health/ubc-student-assistance-program-sap).

2.3 Resources and Policies for EDI at UBC

Moreover, UBC offers resources to navigate issues pertaining to EDI. Trainees should familiarize themselves with UBC's Student Code of Conduct (https://students.ubc.ca/campus-life/student-code-conduct), and the Respectful Environment Statement (https://hr.ubc.ca/working-ubc/respectful-environment).

The UBC Equity & Inclusion Office administers Policy #3, the UBC Policy on Discrimination and Harassment (https://equity3.sites.olt.ubc.ca/files/2016/08/policy3.pdf), which covers human rights-based discrimination and harassment.

UBC's Inclusion Action Plan (https://equity.ubc.ca/about/inclusion-action-plan/) emphasizes the importance of EDI and lays out specific goals and actions to achieve a truly inclusive academy.

3. Mental Health and Wellbeing

Resources for Mental Health and Wellbeing

If you find yourself struggling with mental health, please do not hesitate to reach out to your supervisor, peers, support network, and the GPN leadership, if you feel that your wellbeing and performance are impacted. We are not trained to offer counseling, but are dedicated to help you identify resources.

Graduate students can struggle with issues related to self-doubt, perfectionism, work-life balance, strained supervisory relationships, financial stress, and many more. Talking to a professional can help you work through these problems and take steps toward your goals, in line with your values, strengths, and priorities. If you're feeling persistently stressed, anxious, or sad, it can help to speak with a counsellor. The Faculty of Medicine office of the Associate Dean, Graduate & Postdoctoral Studies offers counselling services just for graduate students. Counselling sessions are free of charge and accessible without the additional hurdle of going through the Student Assistance Program: https://grad-postdoc.med.ubc.ca/current-students/student-wellbeing/counselling/ You can also email the embedded counsellor, Asmae El-Bouhali, directly (asmae.elbouhali@ubc.ca).

Alternatively, you can call or email UBC Counselling Services at (604) 822-3811 (https://students.ubc.ca/health/counselling-services).

Finally, there are university and community resources available to support you.

For immediate mental health support:

- Here2Talk: 1-604-642-5212 (if residing outside of Canada)
- UBC Student Assistance Program: a free, 24/7 wellness resource for students.
 Phone (toll-free): Within North America 1 833 590 1328, Outside North America 1 604 757 9734.

Website: https://www.advantageengagement.com/1545/login_company_vip.php with password UBCV

If you are in emergent distress:

- Call Crisis Center BC: 1-800-784-2433
- Call or visit VGH Access and Assessment Centre: 604-675-3700 (7:30 am to 11:00 pm)
- Visit your nearest hospital emergency room. In case of an emergency: Call 911

Faculty members assisting a student in distress are encouraged to submit an Early Alert report (https://facultystaff.students.ubc.ca/systems-tools/early-alert). If a faculty member informs you that an Early Alert has been filed for you, please consider it as an indicator of their care and concern, and not as a personal failure. An Early Alert report will not show up on your transcript. It is a confidential service that faculty can use to simply ask a counselor to follow-up with a student.

4. The Neuroscience Graduate Student Handbook

This handbook contains important information, policies and procedures for all students and faculty in the program. It was developed by the Graduate Program Director and Program Coordinator in consultation with students and faculty in the program, and the handbook was reviewed by the GPN Executive Committee. The following sources were used as inspiration for this handbook, and we acknowledge the work of these other graduate programs who have made their handbooks publicly available:

- The University of Victoria Graduate Program in Neuroscience Handbook (https://www.uvic.ca/medsci/neuroscience/assets/docs/ngp_handbook.pdf)
- The UBC Graduate Program in Zoology Handbook (https://www.zoology.ubc.ca/system/files/assets/media-file/file/2022-07/New%20Handbook%202022 June.pdf)
- The UBC Graduate Program in Rehabilitation Sciences Handbook (https://med-fom-rehab.sites.olt.ubc.ca/files/2020/07/Graduate-Student-Handbook-CURRENT.pdf)

All students receive a copy of this handbook upon entry into the program and are invited to use it as a reference guide as needed. Please note that all policies and procedures are in alignment with those laid out by the UBC Faculty of Graduate and Postdoctoral Studies (abbreviated G+PS). In case of disagreement between this handbook and G+PS guidelines, G+PS guidelines supersede GPN guidelines. This handbook is updated annually and the most recent version will be posted to the GPN webpage.

5. Information Sources and Who To Ask

5.1 Who is Who

Graduate Program Coordinator

Emily Palmer

Email: ubc.neuroscience@ubc.ca

Phone: (604) 822-7375

Emily is your point of contact for all administrative issues arising during your time in the GPN, including forms, registration, awards, program transfers (including when you are not sure who to contact). Please always contact Emily first; she will forward or redirect your question or comments if needed.

Graduate Program Director

Dr. Catharine Winstanley

Email: catharine.winstanley@ubc.ca

If you have questions or concerns that are of a personal nature or concern your progress or relationship with your supervisor or peers, do not hesitate to contact Catharine.

Graduate Program Associate Director

Dr. Mark Cembrowski

Email: mark.cembrowski@ubc.ca

Phone: (604) 822-3463

Djavad Mowafaghian Center for Brain Health – Staff

A team of highly-qualified staff (https://www.centreforbrainhealth.ca/staff/) oversees the centre's operations, but you will typically not need to contact them, unless your research lab is located in the DMCBH, or unless you have a research story / have won an award / received new funding. In that case, please email communications@brain.ubc.ca, and the centre's talented communications team will disseminate your story or success on their social media sites. For all questions related to the program, please email Emily first. If your question pertains to centre operations, Emily will forward your email to the right person.

Finances: Salaries / Reimbursements or Advances

Unlike some other graduate programs, we are a cross-departmental program and as such, not responsible for your graduate stipend pay. At UBC, hiring and salary payments are handled by departments, not by research centres or programs. For any questions related to finance, such as stipend/salary/award/teaching assistantship payments as well as reimbursements for expenses please contact your supervisor's department's finance manager. Throughout this handbook, we will refer to the department, which with your supervisor is primarily affiliated, as your home department. If you are unsure who to contact, please ask your supervisor or email Emily.

Space / Access: Lab / Office / Common spaces / Access / Mail

If you have any issues related to your space, either your office or lab space, common spaces, how to access them, and where to get your mail: who to contact will depend on the building you work in. Typically, your supervisor will be able to direct you. Even though our program is located in the DMCBH, we cannot answer your questions re. space and access, but Emily can help direct you in case you do not know who to contact in your department or centre.

Graduate Student Society (GSS)

The GSS (https://gss.ubc.ca) is an organization of graduate students dedicated to serving the academic, social and cultural interests of it's over 10,000 members. It coordinates orientation sessions for new students during late August/early September, and organizes many social events.

Neuroscience Trainee Association (NTA)

The NTA (https://neuroscience.ubc.ca/connect-and-engage/neuroscience-trainee-association/) is dedicated to bringing together students across campus and organizes regular events and social activities, including cross-program socials, Pub Nights and BBQs; they also organize a peer mentorship program. Follow them on social media for information on events and activities:

@UBC NeuroTA on Twitter and @ubc neurota on Instagram.

Graduate and Postdoctoral Studies (G+PS)

The Faculty of Graduate and Postdoctoral Studies (G+PS) coordinates and maintains the quality of all Master's and Doctoral programs at the University, administers awards and scholarships, as well as policies, procedures, and guidelines for graduate students across the campus (see also *Section 6.2*). If you have policy questions, check with the GPN Coordinator before contacting G+PS.

5.2 Where should I go for...

The following overview summarizes the information already provided. For each item, start at the top of each list provided and work your way down if your issue is not solved.

Procedural rules

- 1. This Handbook
- 2. GPN website (https://neuroscience.ubc.ca)
- 3. UBC Graduate Studies website (https://www.grad.ubc.ca)
- 4. Contact the GPN coordinator

Forms

- 1. Forms page, GPN website (https://neuroscience.ubc.ca/current-students/forms/)
- 2. UBC Graduate Studies website (https://www.grad.ubc.ca/forms)
- 3. Several key links provided later in this Handbook, including in the Appendices
- 4. Email signed forms to ubc.neuroscience@ubc.ca

Information about Appointment, Pay or Reimbursements

- 1. Check Workday profile and pay slips
- 2. Contact your supervisor's department's finance manager

Award information

- 1. Check your Student Services Centre (SSC) account
- 2. UBC Graduate Studies website
- 3. Contact the GPN coordinator

Leaves of Absence

- 1. Supervisor
- 2. Contact GPN Coordinator and cc GPN Director

Information on Postponing Tuition Payments

1. Apply for tuition deferral (https://students.ubc.ca/enrolment/finances/paying-tuition)

Problems or Conflicts with your Supervisor

- 1. Your Supervisory Committee members
- 2. Contact GPN Director

Problems or Conflicts Involving Peers

- 1. Supervisor
- 2. Contact GPN Director

Further detailed information on academic advising, including conflict resolution, can be found in *Section 14*.

How we stay in touch with you: our program publishes a biweekly newsletter, distributed through our email list. We also publish all communication from UBC, G+PS, and from within our own program through this email list. It is our main way of communicating directly with our trainees! As a graduate student in our program, you should automatically receive these emails. If you believe that you are not on our email list or change your preferred email address, please contact the GPN coordinator.

6. Graduate Program in Neuroscience Governance

6.1 Faculty of Medicine Graduate and Postdoctoral Education

The GPN is administered by UBC's Faculty of Medicine (FoM). We are one of 28 graduate programs within Medicine. All graduate programs are overseen by the Associate Dean Graduate Education and Postdoctoral Studies within the Faculty of Medicine (currently Dr. Miriam Spering). The Associate Dean functions as liaison between G+PS and the Graduate Program Directors / Graduate Advisors of each program. The Associate Dean's office plays the following important roles in the function of our graduate program:

Allocation of university-level graduate awards, such as the 4-Year Fellowship

- Adjudication of awards, such as the FoM Graduate Student Awards
- Evaluation of our courses and curriculum
- Offering development and career advancement workshops across programs
- Providing resources for mental health and wellbeing (section 3, Mental Health)

6.2 Faculty of Graduate and Postdoctoral Studies (G+PS)

At the university level, all graduate programs are overseen by the Faculty of Graduate and Postdoctoral Studies (G+PS) under the Dean of Graduate Studies (currently Dr. Susan Porter) and three Associate Deans, who are responsible for Academic (Dr. Laura Sly), Funding (Dr. Julian Dierkes), Graduate Programs and Program Development (Dr. Michael Hunt). G+PS monitors and improves the process that leads to a graduate degree at UBC. Typically, as a student, you will have no direct interaction with the Dean or Associate Deans, unless you serve on the Graduate Council (https://www.grad.ubc.ca/about-us/governance/graduate-council) as a Graduate Student Representative.

However, the G+PS plays the following important roles in the function of our graduate program:

- **Student funding**: G+PS mandates a minimum, guaranteed funding policy for PhD students, which has to be adopted (or exceeded) by all graduate program. It also oversees the university budget for graduate awards and scholarships and advocates for graduate funding from the province.
- **Supporting graduate program excellence**: G+PS offers administrative training to program directors/advisors, assists in external reviews of graduate programs, and provides resources to improve graduate supervision.
- Degree progression: Many workshops are offered throughout the year to help students progress through their degrees, such as "Candidacy to Completion" or "Graduate Pathways to Success" (https://www.grad.ubc.ca/strategic-priorities/supporting-student-development-success)
- **Progress and degree monitoring**: G+PS is involved with and regulates most administrative events and milestones in the lifetime of a graduate student, i.e., formation of the supervisory committee, the comprehensive examination, and the doctoral thesis completion, submission and defence. The G+PS also approves leaves of absence, transfers from one degree type to another (e.g., MSc to PhD), program withdrawals and extensions.
- **Student experience**: G+PS offers assistance and support for mental health, wellbeing, campus services such as housing, and other student needs. G+PS also maintains an alumni database.

You are encouraged to regularly check out the G+PS website and take full advantage of the fantastic resources offered there, for example, the Graduate Student Game Plan, a step-by-step guide from arriving to UBC to graduation (https://www.grad.ubc.ca/current-students/professional-development/graduate-game-plan).

6.3 The GPN Leadership

The GPN's leadership consists of the Graduate Program Director (Dr. Catharine Winstanley), the Graduate Program Associate Director (Dr. Mark Cembrowski), and the Graduate Program

Coordinator (Emily Palmer). The Director is a regular faculty member in the program who is responsible for the administration of graduate studies within the program, i.e., oversees admissions, award adjudication, students' supervision and progress through the program, curriculum development and delivery, and acts as a liaison between students / supervisors and the G+PS. The Director position is a "0.4 FTE" (0.4 full-time equivalent) position, meaning that the Director spends approx. 40% of her entire work time at UBC dedicated to the program. The Associate Director provides expertise for major strategic initiatives and assists in all matters related to student progress. The Coordinator maintains all student records and provides all necessary forms as well as information regarding processes within the program. The Coordinator position in the GPN is a full-time staff position.

6.4 The GPN Executive and Program Committees

Our program is committed to a governance structure (see **Appendix 1**) that promotes clarity, transparency, and inclusivity. Our **Executive Committee** votes on new faculty members to the program, can terminate faculty membership, oversees the work of the Director, approves the budget, and advises the Director on program developments and strategic decisions. The Executive Committee consists of three ex officio members (meaning these members are permanent and do not change)—the Director of the Undergraduate Program in Neuroscience, the former Director of the GPN, the Director of the Center for Brain Health—and five regular faculty members who represent a range of departments, disciplines, and career levels.

Four program committees support our operation, and each committee consists of faculty and student representatives. The Terms of Reference for each committee can be found in **Appendix 2**.

- Admissions Committee: members of the admissions committee evaluate each application
 for admission to our program and create a shortlist of applicants that fulfill university, G+PS
 and GPN requirements, are a good fit for our program, and are likely to be able to find a
 supervisor. The admissions committee also recommends candidates for 4-Year Fellowships.
- Awards Committee: the purpose of this committee is to evaluate, score, and rank award and scholarship applications by GPN trainees. All awards are adjudicated based on the assessment criteria advertised for each award. In addition, the committee will use GPN-internal information on applicants' diversity status to inform decision making with the aim to be equitable, fair, and inclusive in the process. The awards committee adjudicates applications for federal awards (Canada Graduate Scholarship Masters and Doctoral, Vanier), university and faculty awards (Affiliated Masters and Doctoral Awards) and internal awards (DMCBH trainee awards). It makes recommendations to G+PS or the Faculty of Medicine regarding eligible applicants and decisions on FoM awards.
- **Curriculum Planning Committee**: this committee is responsible for planning and revising our curriculum, consisting of core courses NRSC 500 and 501.
- Equity, Diversity & Inclusion (EDI) Committee: members of the EDI committee help create opportunities that raise awareness for EDI and recommend changes to our program structure and governance that enhance EDI.
- International Student Acceleration and Advisory Committee (ISAAC): members work to support and empower international students in their graduate journey through community

building and bridging activities. The committee also adjudicates applications for emergency funds for international students in the GPN.

6.4.1 Student Membership on Program Committees

The graduate students in the GPN are represented on each GPN program committee. The admissions, awards and curriculum committee are composed of faculty members and two student representatives, and the EDI committee has six student representatives. Student representatives are appointed as positions come available; each position is fixed-term for 24 months (or until graduation, whichever occurs earlier). Student representatives receive a small honorarium of \$300 per year, paid out at the beginning of the new academic year.

When a position comes available, the GPN Coordinator will invite applications. To apply, students are asked to send a short statement of interest, and a CV with relevant experience. The minimum requirement to serve on the curriculum committee is completion of Neuroscience core courses (see *Section 11*). The other committees do not have minimum requirements, but relevant experience with selection (admissions), adjudication (awards) and EDI-related topics (EDI) is beneficial. For details, please see the Terms of Reference for each committee (Appendix 2).

7. Research Ethics for Graduate Students

7.1 Responsible Conduct of Research (RCR) Course

All graduate students in the Faculty of Medicine (so all graduate students in the GPN) must participate in the mandatory RCR course at the beginning of their graduate studies at UBC (https://grad-postdoc.med.ubc.ca/current-students/research-conduct-course/). This course is designed to give students a better understanding of norms and rules for responsible research conduct, provides the ability to know where and how to ascertain these, and improves the ability to make judgments on the ethics of the types of actions and decisions inherent in research.

Every stage of the research we conduct as members of the GPN is susceptible to conflicting interests, threats and biases, introduced, for example, by low statistical power due to small sample sizes, poor quality of data, p-hacking or HARKing (hypothesizing after the results are known). As a graduate program, we acknowledge the enormous pressure—career pressure, pressure from funding agencies, institutional and societal pressure—that our students and faculty members are under, and we encourage an open dialogue about ethical conduct of research.

Some of the best practices (field-dependent) that we would like to suggest are:

- Ensuring that a thesis research question is appropriate and justified
- For experimental research, designing experiments that are free from bias
- For behavioural research, choosing an appropriate sample that is sufficiently large (conducting a prior power analysis)
- Behavioural studies are conducted carefully with proper controls
- Keep a lab logbook and note down any occurrences or changes to testing or observation protocols
- Understand the statistics to be used from the start, ensuring that additional classes or workshops are taken to acquire relevant knowledge
- Be very careful and detail-oriented when analysing, graphing and otherwise portraying data
- Get independent advice from supervisor, supervisory committee, mentor as well as others in the scientific community
- Consider preregistering your study!

7.2 Obtaining Ethics Approval for Research Studies

All researchers at UBC must obtain the appropriate research ethics board approvals prior to commencing any new research studies.

For the use of any biohazardous materials, biosafety approval must be obtained: https://ors.ubc.ca/compliance-reporting/compliance-requirements/biosafety

For the use of human subjects the appropriate approvals by the Behavioral Research Ethics Board or the Clinical Research Ethics Board must be in place. UBC's Behavioural Research Ethics Board (BREB) is responsible for reviewing behavioural or social sciences/humanities research, or research that may involve the study of patients or health care providers: https://ethics.research.ubc.ca/behavioural-research-ethics

UBC's Clinical Research Ethics Board (CREB) reviews research that involves surgery, clinical interventions, exercise programs, and/or the analysis of clinical data: https://ethics.research.ubc.ca/clinical-research-ethics

Depending on the location of your research, additional approval by the Hospital Ethics Board may be required, e.g., BC Cancer REB, Children's and Women's REB, or VCHRI approval https://ethics.research.ubc.ca/about-human-research-ethics/ethics-boards

8. The MSc in Neuroscience Program

The key to success in graduate education lies in your ability and willingness to be proactive – to take responsibility for your own graduate school experiences. Pursuit of a graduate degree is an important investment in your personal growth and future career. In the GPN, we offer two types of graduate degrees, a Master's of Science and a doctoral degree.

A Master's student typically enters the program with a Bachelor's degree and normally spends two years of full-time study at UBC, though it may take additional time. The G+PS stipulates that the maximum allotted time for an MSc degree is 5 years, and a minimum enrollment of at least 12 consecutive months is required. A period of a leave of absence does not count toward completion. In order to extend the graduate program beyond 5 years, a formal extension request is required and there must be sufficient rationale for doing so (see https://www.grad.ubc.ca/faculty-staff/policies-procedures/extension).

8.1 MSc Degree Milestones

8.1.1 Coursework

In the first year, the student usually takes the required course work (see *Section 11*). In the GPN, these courses consist of the two core courses Neuroscience I (NRSC 500) and Neuroscience II (NRSC 501) as well as two electives. Whereas NRSC 500 and 501 are typically taken in year 1, electives can be taken at any time in year 1 or 2.

Generally, across many Master's programs at UBC, including Neuroscience, the minimum course requirements are 30 course credits. Of these, at least 24 must be numbered 500 to 699 (including a 12-credit research thesis). A maximum of 6 credits at the undergraduate level in courses numbered 300 to 499 may be counted toward the requirements of a Master's degree. Please note: students must be perpetually enrolled in NRSC 549 (thesis course) throughout the entire duration of their Master's degree. Course requirements for the MSc program are the

same regardless of the student's home department (a student's supervisor's primary department).

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
Year 1	NRS		+ Ele 6C 549		NRS	SC 501 NRS	+ Elec C 549		Con	nmittee NRS	meet C 549	
Year 2			ctive * 6C 549		Con	nmittee	tive * / meeti C 549	_	col	NRSC mpletic nd MSc	n of th	nesis

^{*} The two required electives (3 credits each) can be taken at any time during the Master's degree.

8.1.2 MSc Research

In the first year of study, the student also begins research under their supervisor's direction. The supervisory committee (see *Section 10*) gives ongoing advice and guidance, and may recommend further course work. By the start of the second year, a provisional thesis research proposal should be approved by the supervisory committee. Typically, a second committee meeting is held in the second year.

Toward the end of the second year (or in the third year), a written thesis will be completed and submitted to the supervisory committee for evaluation (see *Section 8.3*, below). Following a successful oral defense and submission of the finalized thesis to the Faculty of Graduate Studies, the student is eligible for graduation.

The G+PS offers the Graduate Game Plan (https://www.grad.ubc.ca/current-students/professional-development/graduate-game-plan), a tool that can help you plan your degree from admission to completion in detail. For a Master's student in our program, the key milestones, following a two-year timeline, are the following:

- End of Year 1: course work completed; supervisory committee established and has met once to approve the thesis proposal
- End of Year 2: research work completed; second committee meeting to prepare writing the thesis
- Graduation: thesis written and submitted; oral defense successfully completed

8.2 Degree Progress

8.2.1 Annual Committee Meetings

G+PS requires that graduate students meet with their full committee at least once a year. All new students are encouraged to form their committee within the first term of graduate studies, and to meet with their committee within the first six months of starting the program.

8.2.2 Annual Progress Report

Each graduate student in the GPN has to submit an annual progress report by June 30 of each calendar year. Please note that submitting this report is mandatory for all Master's and PhD students in our program. Students who have not submitted their progress report by August 15

(despite reminders) are not eligible for awards in the following year (July 1 – June 30), and may be asked to withdraw if there is concern about lack of progress. In addition, fellowship holders must submit an annual progress report to G+PS (the due date depends on the type of award). Please see here for forms for both types of progress report: https://neuroscience.ubc.ca/current-students/forms/

Please note that these progress reports are important tools for us as a program to learn more about how your research is progressing. We ask for these reports so that we can support you during your thesis work, ensure that you are being paid fairly and that you receive the direct supervision you deserve. These reports are also often early indicators of potential issues between you and your supervisor and/or committee and help us to address problems before they escalate (see also *Section 14* on Academic Advising in the GPN).

8.3 MSc Thesis Requirements and Oral Defense

8.3.1 Thesis Requirements

MSc students are required to conduct research towards their degrees. Although research conceived and conducted independently is encouraged, the minimum requirement for an MSc degree is to successfully complete directed research. It is the responsibility of the supervisor, with assistance of the supervisory committee, to provide and co-develop a suitable project that can be completed within two years.

The project should be of publishable quality, but need not extend beyond the equivalent of a single paper, and does not need to be published. It may constitute part of a larger body of work, shared between several students and projects.

Consult the G+PS pages for further information on thesis preparation and formatting (https://www.grad.ubc.ca/current-students/dissertation-thesis-preparation). These pages also contain a sample thesis: https://www.grad.ubc.ca/sites/default/files/doc/page/sample_thesis.pdf

8.3.2 Thesis Approval and MSc Examination

After approval by the supervisor, copies of the thesis must be distributed to the members of the student's supervisory committee for approval, with at least two weeks allowed for reading and comments. After the thesis has been approved by the committee, the exam may be scheduled.

For the MSc examination / oral defense, the presence of two supervisory committee members (of which one can be the supervisor) and an external examiner constitutes quorum. One of the two supervisory committee members, but not the supervisor, will serve as Chair. Often, the Chair is elected early on in the supervisory process, or the supervisor may nominate a Chair. Additional members of the supervisory committee can attend as observers.

The external examiner is selected by the supervisor. The external examiner (external = external to the supervisory committee) may be a faculty member of any rank, who is a G+PS member or has been approved by the GPN. This person must be at arm's length from the supervisor (meaning they have not published together in the past 6 years, and have never been in a supervisory relationship) and cannot be from the same department as the supervisor. The supervisor informs the student of the identity of the external examiner at least two weeks before the defense. The student, in communication with their committee and the external examiner, will schedule the examination and ensure that all committee members receive a final copy of the Master's thesis at that time.

The MSc examination serves as the graduate program's review of the candidate and their research. The Chair represents the GPN. Detailed instructions for the Chair are available on our webpage, under "Master's Thesis Resources—Instructions for the Chair (https://neuroscience.ubc.ca/current-students/forms/). An audience is welcome and encouraged. The examination typically proceeds as follows:

- **Presentation:** The student will present a brief summary of their thesis (not to exceed 30 minutes in length).
- Questioning: Each examiner then asks questions for 15-20 min, with the option of a brief second round for follow-up questions. Questions start with the external examiner; the supervisor goes last.
- **In-camera session:** Following the examination, the candidate and audience members are asked to leave the room and the committee will hold an in-camera session.
 - Each member of the examining committee gives an opinion of the student's performance (pass/fail) during the examination and for the written thesis.
 The examining committee may recommend that the thesis is acceptable in the form presented, or it may request changes be made to the thesis before the title page is signed. The supervisor is responsible for ensuring that such changes are made.
 - **Pass:** If the examination and thesis are a pass (two out of three examiners assign a passing grade), a written grade will be determined, and the Thesis Approval Form can be signed (see below).
 - **Fail:** A fail will be assigned if at least two of the three examiners assign a failing grade, and it must be accompanied by a written summary outlining the reasons for this decision. There is no recourse for a student who fails the exam.
- **Signing:** The Chair will then recall the student and announce the decision and grade. The Chair may suggest at this time that the Thesis Approval Form be signed by the committee or may ask that the student first makes required revisions.
 - The Thesis Approval Form (https://www.grad.ubc.ca/forms/masters-thesis-approval) confirms the committees' approval for submission of a defended thesis. It will either be submitted to the Graduate Program Coordinator immediately following the MSc Examination, or as soon as all required changes to the thesis have been made. The Program Coordinator will then submit the Thesis Approval Form to G+PS.
 - The Chair will also complete a Master's Examination Grade and Chair Report (https://neuroscience.ubc.ca/current-students/forms/) and submit it to the Graduate Program Coordinator in a timely manner.
- **Submission:** Once all members of the Examining Committee have signed the Thesis Approval Form, the candidate will submit the thesis electronically as a single PDF file to Faculty of Graduate Studies through the UBC online information, cIRcle.

Our webpage offers a checklist to help you prepare for your MSc examination, see here: https://neuroscience.ubc.ca/current-students/forms/

8.4 Transfer from MSc to PhD

8.4.1 Transfer without having completed the MSc program

Transfer from the Master's to the doctoral program in Neuroscience – without having completed all the requirements of the MSc degree program first – may be permitted after no less than 12 months and no more than 24 months of study in the Master's program with the following requirements fulfilled:

- Coursework: completion of 12 credits with marks of 80% or higher, of which normally at least 9 credits must be at the 500 level or above and at least 9 credits must be of First Class standing
- Research ability and potential: clear evidence of research progress and ability; this can include an approved thesis proposal, participation in ongoing research activities in the supervisor's group and demonstration of skill and ability, conference participation, etc.

In order to transfer into the PhD program, the students' committee must approve the transfer before the student informs the GPN Director, i.e., in order to transfer, a committee must have been formed, and at least one committee meeting must have occurred. Most often, the decision to transfer is made after the first committee meeting. Note: a transfer directly into the doctoral program would ideally happen immediately after completion of the first year; it is not always permitted beyond the first year of study and will not be permitted after the completion of the second year in a Master's program. Retroactive transfers are not possible. Once a student has transferred from the MSc to the PhD program, they must usually complete the comprehensive exam within 18 months from their entry into the PhD program (see below, Section 12).

In exceptional cases, a student may transfer between closely-related programs (e.g. from a MSc in Neuroscience to a MSc in Rehabilitation Sciences degree) with an academic justification. Such a transfer can be very complicated, and we advise careful perusal of the information provided on the G+PS webpage (https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-degree-or-program). Please note that all transfers (within and across programs) require the approval of the Dean of the G+PS, meaning that any transfer requests are forwarded by us to the G+PS for approval.

Because the approval is ultimately done by the G+PS, deadlines to submit transfer requests are strict. Signed and completed transfer to PhD form must be submitted to the GPN Coordinator by:

- December 1 for a transfer start of January 1 the following year (winter term 2 session)
- April 1 for a transfer start date of May 1 (summer session)
- August 1 for a transfer start date of September 1 (fall session)

If a student started their Master's degree on September 1 of a given year, the latest a transfer request must be received is by August 1 of their year 2 (23 months after start).

Students transferring from a Master's to a PhD degree without completing the Master's will be eligible for the PhD Minimum Funding Package (see below, *Section 13*) effective the date of transfer to the PhD program. Consistent with UBC academic policies, the start of the PhD program for these transfer students will be the date of first registration in the Master's program. Hence, a student who transfers to a PhD after one year of Master's study will be provided with a Minimum Funding Package for the next three years (https://www.grad.ubc.ca/awards/minimum-funding-policy-phd-students).

8.4.2 Transfer after having completed the MSc program

Students may choose to complete their MSc degree first before transferring to the PhD program. In this case, a new application to the PhD Neuroscience program is required, and the student must go through the regular admissions process. However, the application fee may be waived. If you are considering going this route, please talk to the program coordinator to have your application fee waived.

9. The PhD in Neuroscience Program

A PhD student in the Neurosciences will normally spend a minimum of four years of full-time study at UBC. The maximum time allowed for completing a doctoral degree at UBC is six years. Students typically enter the PhD program with an MSc degree from a recognized university, or directly from a BSc degree, if they have significant prior research experience.

9.1 PhD Degree Milestones

Similar to MSc students, during their first year, the PhD student will normally complete their course work (two core courses NRSC 500 and NRSC 501), establish a supervisory committee, and begin research in their supervisor's laboratory. The student's supervisory committee gives ongoing advice and guidance, and may recommend further course work, although this happens less commonly for PhD than for MSc students. In the second year, the student will complete any remaining course work and hold at least one supervisory committee meeting.

G+PS recommends successful completion of the comprehensive exam, which includes approval of the thesis research proposal, by the end of the second year, and by the end of the third year (36 months after entering the program) at the latest. Students transferring from the MSc to the PhD program must usually complete the comprehensive exam within 18 months from their entry into the PhD program. An extension beyond these limits may be considered, provided sufficient rationale, yet is not guaranteed. *Section 12* below outlines the requirements of the comprehensive examination in detail.

In the third and fourth years, the student will continue their research work and is expected to have one supervisory committee meeting every year to monitor and guide research progress. Students typically begin preparation of their PhD thesis during their fourth or fifth year in the program, after having gained approval to begin writing from their supervisory committee.

Once the thesis has been approved by the supervisory committee and the external examiner, the student presents their thesis work during a doctoral defense, evaluated by their supervisor, two members of their committee, two university examiners, the external examiner, and the academic community.

	Sept Oct Nov Dec	Jan Feb Mar Apr	May June July Aug			
Year 1	NRSC 500 + NRSC 649	NRSC 501 + NRSC 649	Committee meeting #1 NRSC 649			
Year 2	NRSC 649	Committee meeting #2 NRSC 649	NRSC 649			
Year 3	NRSC 649	Committee meeting #3 NRSC 649	Comprehensive Exam NRSC 649			
Year 4	NRSC 649	Committee meeting #4 NRSC 649	NRSC 649			
Year 5	NRSC 649	Permission to write meeting + NRSC 649	NRSC 649 until completion of thesis and dissertation defense			

Please note: students must be perpetually enrolled in NRSC 649 (PhD thesis course) throughout the entire duration of their PhD degree. Permission to advance to candidacy should be sought at committee meeting #2 or #3 at the latest, at which time a comprehensive examination committee must be formed and a pre-comprehensive meeting must be held (see *Section 12*).

The G+PS offers the Graduate Game Plan (https://www.grad.ubc.ca/current-students/professional-development/graduate-game-plan), a tool that can help you plan your degree from admission to completion in detail. For a PhD student in our program, the key milestones, following a five-year timeline, are the following:

- End of Year 1: course work completed; supervisory committee established and has met once to approve the overall thesis plan
- End of Year 2: research program established; second committee meeting to discuss advancement to candidacy (earliest time)
- End of Year 3: comprehensive exam passed, advancement to candidacy
- End of Year 4: research program nearing completion, graduation timeline established
- End of Year 5: permission to write meeting, thesis writing underway or completed, graduation

9.2 PhD Degree Progress

9.2.1 Annual Committee Meetings

G+PS requires that graduate students meet with their full committee at least once a year. Students who have not had a supervisory committee meeting within the previous 12 months are not eligible for awards. All new PhD students are encouraged to form their committee within the

first two terms of graduate studies, and have to meet with their committee within the first year of starting the program.

9.2.2 Annual Progress Report

Each graduate student in the GPN has to submit an annual progress report by June 30 of each calendar year. Please note that submitting this report is mandatory for all Master's and PhD students in our program. Students who have not submitted their progress report by August 15 (despite reminders) are not eligible for awards in the following year (July 1 – June 30), and may be asked to withdraw if there is concern about lack of progress. In addition, fellowship holders must submit an annual progress report to G+PS (the due date depends on the type of award). Please see here for forms for both types of progress report: https://neuroscience.ubc.ca/current-students/forms/

Please note that these progress reports are important tools for us as a program to learn more about how your research is progressing. We ask for these reports so that we can support you during your thesis work, ensure that you are being paid fairly and that you receive the direct supervision you deserve. These reports are also often early indicators of potential issues between you and your supervisor and/or committee and help us to address problems before they escalate (see also *Section 14* on Academic Advising in the GPN).

9.3 PhD Thesis Requirements and Oral Defense

9.3.1 Thesis Requirements

A doctoral dissertation is a substantial piece of scholarly work that contains a significant contribution of new knowledge to the field of study. It presents the results and an analysis of the student's original research, and should be significant enough to be publishable in the refereed literature. G+PS outlines specific requirements of a doctoral dissertation for both scope (https://www.grad.ubc.ca/current-students/dissertation-thesis-preparation/structure-theses-dissertations).

Please also consult the G+PS pages for further information on thesis preparation and formatting (https://www.grad.ubc.ca/current-students/dissertation-thesis-preparation). These pages also contain a sample thesis: https://www.grad.ubc.ca/sites/default/files/doc/page/sample_thesis.pdf

9.3.2 Thesis Approval and PhD Examination

After approval by the supervisor, copies of the final draft of the PhD thesis must be distributed to the members of the supervisory committee for approval. A minimum of two supervisory committee members, in addition to the supervisor, must approve of the written PhD thesis before it can be submitted to G+PS (see here: https://www.grad.ubc.ca/current-students/final-doctoral-exam/submitting-dissertation-external-examination, and required form to be filled here: https://www.grad.ubc.ca/forms/graduate-program-approval-doctoral-dissertation-external-examination-form).

It is recommended that the timeline for reading the thesis and providing comments is agreed upon with the committee beforehand to avoid conflict. Often, the supervisory committee will have substantive comments that must be addressed before the thesis can be submitted to G+PS. A buffer should be built into the timeline to allow for several rounds of revision to the thesis. Please also pay close attention to the mandatory timelines and deadlines for thesis approval, completion, submission and defense: https://www.grad.ubc.ca/current-students/final-doctoral-exam/doctoral-exam/addressed process that requires careful planning. G+PS offers several tools and checklists to help you prepare for this (see here: https://www.grad.ubc.ca/current-students/final-doctoral-exam/tools-planning-doctoral-exam).

The procedures for the doctoral examination are described in detail on the webpages of the G+PS. Briefly, the examination consists of two parts:

- External Examination: an arm's-length expert in the subject of the dissertation reviews the
 document and decides whether or not it is ready to proceed to the final oral defense. This
 decision is expressed as a recommendation to the Dean of Graduate and Postdoctoral
 Studies, and is typically supported with a detailed analysis of the document's strengths and
 weaknesses, guided by UBC's expectations as laid out in the instructions to the external
 examiner
 - (https://www.grad.ubc.ca/sites/default/files/doc/page/docexams_xx_instructions.pdf). Reading these instructions can help you understand what to expect, and prepare your thesis for external examination.
- Oral Defense: an examining committee that combines UBC faculty members from the supervisory committee with arm's length colleagues (and also, possibly, the External

Examiner) hears the candidate present a synopsis of the work and then questions the candidate. The committee's task is to determine whether the candidate's written work, oral presentation, and interactions meet the standards of excellence required for a doctoral degree.

The full evaluation protocol for the final oral defense can be found here: https://www.grad.ubc.ca/current-students/final-doctoral-exam/final-oral-defence

9.4 Transfer from PhD to MSc

Students may apply to transfer from the PhD to the Master's program. Transfers may be approved if they meet the following conditions:

- Ideally, the transfer is initiated early in the student's doctoral program. The deadline to transfer is at the end of the third year for PhD students.
- The transfer should be justified on the grounds of its appropriateness for the student's personal or professional goals. These should be discussed by the student and their supervisor.
- A transfer requires the full agreement of both student and graduate program.
- Students must complete all the requirements for the master's program in order to be awarded their degree.

Please note that transfers between programs involving a change of discipline must be treated as new admissions. Please also note that transfers from doctoral to Master's programs may have implications for student funding. To apply for a transfer, the following form must be filled out and submitted to the G+PS via the GPN for approval:

https://www.grad.ubc.ca/forms/transfer-doctoral-masters-program.

10. Supervisory Committee

10.1 Purpose and Responsibilities

According to G+PS, the purpose of a supervisory committee is "to be available for help at every stage of the student's program, from selection of coursework to formulation of the research proposal by establishing the methodology and discussing the results, to presentation and publication of the thesis or dissertation" (https://www.grad.ubc.ca/faculty-staff/policies-procedures/supervision). Together with the student's supervisor, "it is the responsibility of the supervisory committee to provide constructive criticism and assessment of the student's ideas as the program develops, thereby broadening and deepening the range of expertise and experience of the graduate student". When it comes to completing a PhD thesis and submitting it for external evaluation and defense, the committee is also required to approve the final version of the thesis before the examination can take place (see above, Section 9.3.2.2).

10.2 Working with your Supervisor

Your supervisor is part of your supervisory committee. According to the G+PS, they are "the key person in your graduate degree program. The principal role of the supervisor is to help students achieve their scholastic potential. The supervisor will provide reasonable commitment, accessibility, professionalism, stimulation, guidance, respect and consistent encouragement to

the student. Supervisors should be available to help their graduate students at every stage, from formulation of their research projects through establishing methodologies and discussing results, to presentation and possible publication of dissertations. Graduate supervisors must also ensure that their students' work meets the standards of the University and the academic discipline".

The G+PS outlines the responsibilities of a supervisor in detail (see here: https://www.grad.ubc.ca/handbook-graduate-supervision/supervisor-responsibilities). At the beginning of your relationship with your supervisor, the GPN and G+PS require that each student and supervisor arrange a meeting to discuss their expectations and fill out and sign a form on student-supervisor expectations (see **Appendix 3** and https://neuroscience.ubc.ca/current-students/forms/).

At the start of the student-supervisor relationship, and each year after that, we also ask that each student and supervisor discuss and fill out an Individual Learning Plan (see Appendix 3 and https://neuroscience.ubc.ca/current-students/forms/). The goal of the Learning Plan is to help you plan and reflect upon the activities that will be undertaken during the academic year, and to consider how these activities will contribute to the degree and program requirements as well as to your professional goals.

In Section 14 below, we will discuss in more detail how conflicts in your relationship with your supervisor can be avoided, mitigated, and resolved. The student-supervisor expectation form is a critical tool that can be used to avoid conflict.

10.3 Committee composition and member selection

With support from their supervisor, students choose their supervisory committee members and schedule their initial committee meeting during the first year of study. When you first enter the program, please discuss your potential committee members with your supervisor. In general, it is your responsibility to contact prospective faculty and request that they act as committee members, but it is a good idea to do so in close collaboration with your supervisor. Be aware that not all faculty are able to honour every request for committee membership. There are also some rules and restrictions around who can serve on a supervisory committee:

- G+PS membership: all supervisors, co-supervisors, and supervisory committee members
 must either be members of G+PS (at least half of the supervisory committee members, so
 the supervisor plus one member), or must be approved to serve in their role (see below,
 Section 10.3.2)
- **Departmental affiliation**: only one faculty member from the same department as the supervisor can serve on the supervisory committee

10.3.1 Committee Size

In the GPN, PhD supervisory committees must have at least three members (excluding the supervisor). MSc supervisory committees must have at least three members (including the supervisor). Please note that this rule deviates from what the G+PS suggests. In our program, we chose to increase the size of the committee by one member for the following reasons:

• **Broader expertise**: the requirement of adding an additional committee member can help prevent colleagues with closely related interests from always forming the same supervisory committee; an extra member adds perspective and interdisciplinary expertise.

- Shared workload: G+PS requires that at least two committee members approve a final PhD thesis before it can be submitted for external evaluation and defense, and at least one (maximum two) committee members (in addition to the supervisor) attend the oral PhD defense. An additional committee member means that the workload can be shared: two faculty members can read the thesis for acceptance, and the third can attend the defense.
- **Scheduling flexibility**: similarly, with three faculty members on a PhD supervisory committee, the student has one more option when trying to find a time that suits everyone for the comprehensive exam (see below, *Section 12*), which only requires that two members of the supervisory committee (plus the external committee member) be present.
- Collaboration across sites: with the diversity of program locations (i.e., across UBC campus and Vancouver General Hospital), an additional committee member helps prevent departmental silos and loss of program integrity.

10.3.2 Adding non-G+PS Committee Members

To add committee members who are not G+PS members, special permission is required. For service on PhD supervisory committees, the GPN and G+PS must approve (see form here: https://www.grad.ubc.ca/forms/recommendation-non-gps-member-join-supervisory-committee and in Appendix 3); for service on MSc committees, GPN approval suffices (https://neuroscience.ubc.ca/current-students/forms/ and Appendix 3). To be eligible, the non-member should normally be actively engaged in research, experienced with graduate education, and hold appropriate qualifications. Please note that it is in your best interest to select someone who has the appropriate experience, because this person will be guiding and evaluating your work.

Suitable nominees can be found among the following: clinical faculty, adjunct faculty, professors of teaching, senior instructors, visiting faculty, honorary faculty, UBCO faculty, affiliate professors, faculty members from other universities, and off-campus professionals who are academically qualified to advise graduate students. More details can be found on the G+PS webpage (https://www.grad.ubc.ca/faculty-staff/policies-procedures/supervision).

Please note that in exceptional circumstances, postdoctoral fellows can serve on PhD committees. However, G+PS commonly approves this only if (a) the postdoc's experience and skill set relevant to supervision is unique and cannot easily be found elsewhere at UBC, and (b) the postdoc is not also supervised by another member on the supervisory committee. G+PS will carefully evaluate conflicts of interest and power-over relationships in supervisory committees.

To seek approval of G+PS, you must submit the following information along with the correct form:

- Nominee's current CV: note that this is not required for UBCO faculty in the Research Professoriate Stream
- **Brief statement from nominee**: this can be an email assenting to serve on your committee and accepting committee membership responsibilities
- Memo from your supervisor indicating the particular qualifications that make the nominee suitable for your committee.
- **Details of the composition of your committee**: please list everyone on your committee with departmental affiliation and G+PS membership status (to the best of your knowledge)

This information is important for us to evaluate whether a faculty member, who is not a G+PS member, can serve on your committee, given the constraint that at least half of the committee must hold G+PS membership.

10.3.3 Adding non-UBC Committee Members

We recommend discussing with your supervisor whether selecting a committee member from another university might be appropriate and useful. There are advantages and disadvantages to this approach. Sometimes, faculty members from other universities (and countries) are less familiar with the PhD requirements at UBC in particular, and in North America in general. They might not know what a comprehensive exam is, and extensive briefing might be necessary to ensure that they are able to appropriately evaluate your work. Approving an external member also takes time and administrative effort.

But advantages are plenty. In the following, GPN faculty member Mark Cembrowski, PhD, shares reasons for selecting a supervisory committee member external to UBC for his students' PhD committees:

"Generally, I try and use external committee memberships as a means of building our students' network beyond what is available at UBC. This approach gives our lab members relatively casual access to individuals that are driving the state of the field, and opens up opportunities for collaborations and knowledge sharing beyond what we could capture locally. As our students eventually look to positions after grad school, this gives strong external advocates for them".

A note for including UBC-O faculty as supervisors, co-supervisors or supervisory committee members: as per a decision by the UBC Senate in January 2018, members in good standing of the College of Graduate Studies from the UBC Okanagan campus may co-supervise UBC-V Master's and doctoral students and/or serve on Master's and doctoral student supervisory committees without requiring approval from G+PS. Approval for UBC-O Faculty in these roles is the responsibility of the GPN. Note that sole supervision or co-supervision of UBC-V Master's and doctoral students by UBC-O Faculty does require G+PS approval, upon GPN recommendation.

10.3.4 Committee Chair

One member of the committee will act as the Chair. Whereas the G+PS advises that the supervisor automatically chairs the supervisory committee, the GPN recommends that a different member of the supervisory committee be selected as the Chair and additionally suggests strongly that the Chair is a GPN member. The Chair can be decided by the committee at the first meeting. The Chair represents the GPN on the supervisory committee and will monitor and report on the student's progress (see below, Section 10.4 for reporting duties). The Chair will perform normal duties on the committee, but in addition, they are responsible for ensuring that the student is being supervised adequately and fairly. If the Chair has any concerns in this regard, they should be communicated immediately to the GPN Director.

10.4 Committee Meetings

The supervisory committee, whether Master's or doctoral, must meet at least once a year to monitor and direct the student's progress. Generally, it is the student's responsibility to organize the committee meetings. This includes finding a suitable time for all members of the committee and booking an appropriate meeting space. Many faculty have significant travel schedules, so committee meetings are best arranged well in advance (2-3 months). Doodle or similar

scheduling tools are useful and often necessary to find a suitable time. It is a good idea to check with your supervisor first, and then use their availability to inform selected times for a Doodle poll.

Forming your committee and scheduling your first committee meeting can be a difficult task at times. We provide a checklist on your webpage to help you plan and navigate your committee meetings (https://neuroscience.ubc.ca/current-students/forms/; see also Appendix 3).

The following are general guidelines for conducting a supervisory committee meeting. The committee is given considerable latitude to alter this format as they see fit.

- Progress report: the student provides the committee with a written review of their progress one week prior to the meeting. We recommend that this progress report includes notes on required coursework, project progress, and any publications or presentations. A form is available (https://neuroscience.ubc.ca/current-students/forms/; see also Appendix 3) to help with this. The progress report should be approved by the supervisor before sending it to the committee. Please copy the GPN Coordinator (ubc.neuroscience@ubc.ca) on your email to the committee.
 - Even though this report is not mandatory, we highly recommend providing your committee with a progress update, and using the provided form. In case of conflict (see below, *Section 14*), detailed documentation of progress and documentation of timely communication with your committee will help us assist you better.
- **Meeting procedure**: at the committee meeting, the Chair calls the meeting to order, and the student is asked to present their recent progress (in a short 20-25 minute presentation), and then a general discussion of the project ensues
- Reporting: be sure to print out the Committee Report form
 (https://neuroscience.ubc.ca/current-students/forms/; see Appendix 3) and bring it with you to the meeting. Fill out the form, get all signatures, and return the completed form to the GPN Coordinator ubc.neuroscience@ubc.ca.

10.5 Adding a Co-Supervisor

For various reasons, it might be advisable or beneficial to add a co-supervisor to the supervisory committee. Typically, this would happen at the suggestion of your supervisor, for example, if your thesis work falls into an area outside of your supervisor's primary expertise, or if your project is part of a collaboration between your supervisor and another faculty member. If you jointly decide to add a co-supervisor to your committee, the co-supervisor must fulfill all the same requirements as every other supervisory committee member, i.e., must be approved by GPN and/or G+PS if they are not already G+PS members (see *Section 9.3.2*). A co-supervisor has the same roles and responsibilities as your supervisor (see

https://www.grad.ubc.ca/handbook-graduate-supervision/supervisor-responsibilities). Please inform the GPN Coordinator ubc.neuroscience@ubc.ca if you add a co-supervisor.

11. Neuroscience Curriculum and Course Requirements

11.1 Neuroscience Core Courses Neuroscience I and II

To fulfill our mandate of providing a broad education in the neurosciences to students from all academic backgrounds, the program offers two core courses. Neuroscience I (NRSC 500) is

dedicated to cellular and molecular neuroscience, and Neuroscience II (NRSC 501) focuses on systems neuroscience (https://neuroscience.ubc.ca/current-students/nrsc-500-501/). Both courses are team-taught, meaning that each lecture is given by a different content expert in the field. Each course is worth six credits.

11.1.1 Succeeding in NRSC 500 and 501

NRSC 500 and 501 can seem daunting, and students often note the heavy course load in their first year of graduate studies in the GPN. Indeed, each 6-credit course requires intense preparation, attending three lectures per week, and completing multiple assignments. In the following are some tipps and tricks on how to successfully pass these courses by some of our recent course graduates, who emphasize the importance of early preparation and peer learning:

"Things that helped me most in NRSC 500/501 were study groups with other students before exams and assignments to talk through big ideas, as well as summarizing the big ideas of each lecture as soon as possible after the lecture".

- Hallee Shearer, MSc student, Curriculum Committee member

"I would recommend starting on assignments, such as the mock CIHR grant and critiques early, and doing the legwork to come up with a solid idea, especially for the grant. Try looking at review papers in major journals for unanswered questions in a particular area of research. This will help direct your brainstorming and literature review. For the critiques, don't be afraid to be original with your positive and/or negative comments. This assignment gives you the opportunity to think critically and assess whether the authors "made you care" about their work, and if not, what was left out in the impact or logic. The last piece of advice is to ask for help if you need it. The neuroscience program is diverse and everyone has their own strengths and weaknesses, so reach out if you need guidance. This isn't undergrad, you won't be able to memorize and regurgitate, these courses are to help prepare you for your own research, so they are what you make it!"

- Leah Kuzmuk, MSc student, Admissions Committee member

"NRSC 500 and 501 were both very intense courses that provided me with a basic understanding of the diverse areas of neuroscience. Writing the CIHR-style grants is a great exercise that will help you later when preparing for your comps or when applying for fellowships and awards. My advice is to find a topic that really excites you and to consult with a module leader early on".

- Philipp Kreyenmeier, PhD student, 501 TA

"After several years of being a TA for 501 and taking the course myself, I can say that the most important thing is to be present—not only by attending classes but by making sure you engage with the lecturer, ask questions, and participate. Being present also requires preparation. Be sure to review the class topic beforehand, either by going over the slides or the suggested readings (if any). And if you find that material overwhelming, watch a YouTube video about it! Just getting familiarized with the concepts and "the big picture" goes a long way. In addition, one of the most important things necessary to succeed in 500 and 501, and to make your path through the neuroscience program, is comradery. These classes might be the only opportunity you will get to interact with most of your peers. Make sure you pay attention when folks introduce themselves and their research topic. Going through the challenge of these courses will be much easier when you and your peers are there to help each other".

- Lucy Aceves, PhD student, 501 TA

11.1.2 Waiving NRSC 500 or 501

Under exceptional circumstances, the requirement to take NRSC 500 and 501 can be waived for incoming PhD students. In order to have either or both of these courses waived, all of the following criteria must be fulfilled:

The student already holds an MSc degree in Neuroscience.

• As part of their previous degree, the student has taken classes that are comparable in breadth and depth to NRSC 500 and 501.

The decision to waive NRSC 500 and/or 501 lies with the Graduate Program Director. Typically, the admissions committee will review student transcripts and flag potential candidates for waiving core courses. The GPN Coordinator will then work with these incoming students to determine whether courses taken so far are comparable to NRSC 500/501 by requesting a syllabus for these courses.

PhD students, for whom the core courses are waived, are not required to make up the course requirement by taking other courses, however, their supervisor or supervisory committee might suggest additional course work.

NRSC 500 and 501 are generally not waived for incoming MSc students. Under exceptional circumstances, where an incoming MSc student has already taken higher level (400 or 500-level) courses that are equivalent to NRSC 500/501, one core course may be replaced by another 500-level graduate course, but these instances are very rare.

11.2 MSc Course Requirements

Master's students are required to complete a minimum of 30 credits, made up of a 12-credit research thesis (NRSC 549) and 18 credits of coursework. Of these 18 credits, only six credits may be at the 300-400 level.

Typically, Master's students take Neuroscience I (NRSC 500) and Neuroscience II (NRSC 501), worth six credits each, plus two electives. Three credits of a Directed Studies course may be taken instead of one of the electives (such as PSYC 340B, PSYC 488, BIOL 448, CPSC 448, BMEG 554, ZOOL 500) with the permission of the hosting department.

Elective coursework is initially set through consultation with the student's supervisor, but the supervisory committee may also have suggestions. The program aims for flexibility so that the individual needs of our students with different interests in neuroscience can, as far as possible, be accommodated.

In general, Master's students at UBC must obtain a minimum of 60% in any course to be granted pass standing, but only six credits of pass standing can be counted towards a Master's program without penalty. For all other courses, a minimum of 68% must be obtained. If a student repeats a failed required course, a minimum mark of 74% is required. A student whose grade does not improve by repeating the course or taking an alternate course may be required to withdraw from the graduate program. For more information, visit https://www.grad.ubc.ca/current-students/managing-your-program/satisfactory-progress-masters-students.

11.3 PhD Course Requirements

In contrast to some other graduate programs at UBC, PhD students in Neuroscience are required to take classes (NRSC 500 and 501), even if they enter with a Master's degree. This requirement is in place in recognition of the many different academic backgrounds of our incoming students, and to ensure that all students have a solid foundation in the Neurosciences. However, an exception is made when a PhD student enters with an MSc in Neuroscience (see above, Section 9.1.2).

As for Master's students, a minimum mark of 68% must be obtained in all courses taken by a student enrolled in a doctoral program at UBC. When repeating a failed required course, a minimum mark of 74% must be obtained. In the GPN, we require a minimum mark of 80% in each of NRSC 500 and 501 in order to advance to candidacy. If a student achieves a mark lower than 80% in either NRSC 500 or NRSC 501, the comprehensive examination will include an additional examination of basic neuroscience knowledge. The student will be informed in writing of their unsatisfactory progress, and of the procedure for the comprehensive examination.

Typically, the Chair of the comprehensive examination will ask questions pertaining to the class where the low mark was achieved (see below, *Section 10.2.2*). If the student fails this additional oral examination once, the comprehensive examination can be repeated. If the student fails a second time, they would be given the choice to either transfer to the MSc program (if the comprehensive examination is conducted before the end of the third year of PhD) or to withdraw from the program.

Procedures around unsatisfactory progress are outlined in detail on the webpage of the G+PS: https://www.grad.ubc.ca/faculty-staff/policies-procedures/academic-progress-grading-practices. Please also note that PhD students must be perpetually enrolled in NRSC 649 (PhD thesis) until degree completion.

12. Neuroscience Research Colloquium

DMCBH sponsors a weekly colloquium series featuring neuroscientists from throughout North America, and occasionally further afield. One of the main justifications for running this series is that it directly benefits the trainees and graduate students, allowing you to hear the latest research from leaders in the field. Although currently there is no formal tracking of your attendance, you are expected to turn up to around 75% of these each year. If your lab is at the main Point Grey campus at UBC, you should attend these in person. If not, there is a Zoom option. Some of these talks may be directly related to your own research, while others may be on completely different topics. However, you never know what you may learn or find useful! Some of the most remarkable scientific discoveries have been made by individuals who were curious about numerous topics, and able to see links and similarities across disciplines. Don't shut yourself off to potential new sources of inspiration, just because you don't think it's directly relevant to what you're most passionate about. You can find the schedule here: https://www.centreforbrainhealth.ca/neuroscience-research-colloquium/

Six slots in the calendar each year are also reserved for speakers suggested and hosted by trainees. If there's a scientist you'd love to host, make sure you let the NTA know when they are soliciting nominations. Look out for an email about this some time between January and March each year. You will be responsible for inviting the visiting speaker, filling in their itinerary, and organizing (but not paying for!) a dinner with you, the speaker, and two other faculty members on the evening of their talk. the DMCBH Administrative Support staff will make the speaker's travel arrangements. This is an excellent networking opportunity, as well as a way of ensuring the colloquia series showcases the science you most want to hear about.

13. The Comprehensive Examination

13.1 Purpose of the Comprehensive Examination

In order to be admitted to candidacy and to continue in the doctoral program, each doctoral candidate must successfully pass a comprehensive examination (the "comps exam"). The purpose of this exam is to ensure that the candidate has comprehensive knowledge in their area of specialization and in related fields of neuroscience and can communicate their grasp and understanding of their chosen field of study and research in English (see UBC Calendar: UBC Calendar: UBC Calendar: <a href="https://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,342,617).

As part of the examination, the committee will determine whether the student has developed strong analytical, problem-solving and critical thinking abilities, breadth and in-depth knowledge in the neurosciences, the required academic background for the specific doctoral research to follow, the potential ability to conduct independent and original research, and the ability to communicate knowledge of the discipline.

13.2 Examination Format

In the GPN, the comprehensive examination includes two examination formats: a written and an oral examination.

13.2.1 Written Examination

The written examination requires that the candidate prepares a 10-page research grant proposal according to the format requirements (https://cihrirsc.gc.ca/e/documents/Project_Grant_Application_Intructions_EN.pdf) of the Canadian Institute of Health Research for Operating Grant applications (p. 12-13). The topic of the research grant proposal is decided upon by the candidate and their supervisor and is normally based on the candidate's immediate area of scientific interest. However, the research proposal must go beyond the specific aims of the thesis research, taking into consideration additional research topics and papers suggested by the examination committee. This is in recognition of the purpose of the comprehensive exam (https://www.grad.ubc.ca/faculty-staff/policiesprocedures/comprehensive-examination-candidacy), which is to test the candidate's grasp of the chosen field of study as a whole. The candidate should therefore prepare a written document that both incorporates an in-depth discussion of specific aims of their thesis research as well as contextualize that research, reflecting broad knowledge of the discipline. The research grant proposal is used as a vehicle for the comprehensive examination; it forms the basis of the oral examination but is evaluated independently, i.e., passing the oral examination does not necessarily indicate acceptance of the research grant proposal. The key criterion to be applied to the written examination is whether the candidate has a viable and well-considered research program, broadly contextualized within their field of research, and likely to lead to the generation of a high-quality Ph.D. thesis.

13.2.2 Oral Examination

The scope of the oral exam will be discussed and mutually agreed on by the candidate and the examining committee in a preliminary meeting, the pre-comprehensive exam meeting (see below). In the oral examination the candidate may be questioned on any aspect of the research grant proposal and will be asked to elaborate upon or defend issues arising from the literature review and the research plan outlined in the proposal. The range of questioning may include

topics that are not discussed directly in the proposal but that are deemed relevant by individual members of the examining committee as discussed in the pre-comprehensive meeting. During the oral examination, the candidate demonstrates to the examining committee that they have a thorough understanding of those areas of neuroscience relevant to their research proposal, can expand on and defend those ideas verbally in English, and have attained sufficient intellectual understanding of the subject matter to proceed with primary research likely to lead to a competent Ph.D. thesis.

Note: Students who fail to achieve first-class standing (a minimum of 80%, or A–) in either of the two core courses, NRSC 500 or 501, will be required to answer questions regarding these core courses at their comprehensive examination. Students for whom NRSC 500 and/or 501 have been waived (see *Section 11.1.2*) are exempt from this rule, because the assumption is that they have already satisfactorily completed core course requirements in a different program.

13.3 Examining Committee

Typically, the comprehensive examining committee consists of all three members of the supervisory committee (excluding the supervisor), an external examiner to be identified by the student and their supervisor, and the committee chair (coordinated by the GPN program). In the case of co-supervision (see *Section 8.5*), the comprehensive examining committee excludes the co-supervisors and consists of the two members of the supervisory committee, who are not co-supervisors, the external examiner, and the committee chair. This is possible because G+PS requires that only two members of the supervisory committee must be present at the comprehensive examination.

The external examiner (external = external to the supervisory committee) may be a faculty member of any rank, who is a G+PS member or has been approved by the GPN. Please note that at least half of the members of the examining committee must be G+PS and GPN faculty members (this rule also holds for the supervisory committee, see above). For considerations to include examiners from outside of UBC, see Section 9.3.3 above.

Whereas supervisors (and co-supervisors) are not required to attend the comprehensive exam, they can be invited with the strict understanding that their role is only to observe. They must not ask questions or speak on behalf of or defend the candidate in any way.

13.4 Timeline and Preparation for the Comprehensive Exam

13.4.1 Pre-Comprehensive Exam Meeting

The purpose of the pre-comprehensive exam meeting between the candidate and the examining committee (excluding the Chair) is to set up parameters for the comprehensive exam. The candidate will submit a title and one-page summary (subject to modification) of the research proposal at least one week before this initial meeting (see Timeline below). At the meeting, the Examining Committee and the candidate will discuss and mutually agree upon the guidelines, scope and level of understanding required to complete the written and oral components of the examination satisfactorily.

Among the issues to be clarified are the research topics associated with the proposal that each examining committee member feels the candidate should concentrate on as they prepare for their exam. The candidate will act as secretary at the meeting, and will provide each member of the committee and the GPN office with a written summary of the discussion no later than one

week following the meeting; any discrepancies in interpretation should be resolved at this time. The date and time of the oral examination will also be determined at the time of the precomprehensive exam meeting and communicated to the committee and GPN office. Each member of the examining committee will supply the candidate with a short reading list of research papers (typically five on average) for their suggested topic within two weeks of the precomprehensive exam meeting.

13.4.2 Due Date of Research Grant Proposal

The due date for the research proposal will be set at this meeting and will be no later than three months following the pre-comprehensive meeting. The approximate date of the oral component of the comprehensive examination will also be determined at the preliminary meeting, and in all cases will be within 14 days of the candidate submitting a copy of the completed grant application to each member of the examining committee. Because the available time window for the oral examination is very narrow, the candidate and the committee are encouraged to find an exact date and time for the oral exam at the time of the pre-comps meeting.

The supervisor may provide guidance and feedback to the candidate in the preparation of the research grant proposal. However, the research proposal should be written by the candidate. As with CIHR grants, if the candidate fails to meet the deadline for submission of the research grant proposal (by more than a grace period of 12 hours, which can be applied in exceptional situations such as documented, severe illness) the comprehensive examination will be automatically postponed for six months, and the process will start over with a new precomprehensive exam meeting, during which new or additional topics of study and preparation have to be agreed upon. The candidate is encouraged to submit their research grant proposal with a margin of at least one day to avoid this situation.

13.4.3 Timeline

Normally, the comprehensive exam takes place once all coursework has been completed, and by the start of the third year of enrolment in the PhD program. The G+PS mandates that the comprehensive exam has to be completed within 36 months of starting a graduate program.

The following timeline must be followed to prepare for the comprehensive examination. Please note that the time window for the oral examination ends within 3 months and 2 weeks of the precomprehensive exam meeting. The committee must be given two weeks to review the research grant proposal.

Timeline leading up to the pre-comprehensive exam meeting:



Timeline leading up to the comprehensive exam:



13.4.4 Timeline Troubleshooting

Occasionally, a supervisory committee member may decide to leave the committee after the pre-comprehensive committee meeting, or opt out of the comprehensive exam. Typically, this happens if a major change in topic has occurred and if the supervisory committee member no longer feels that their expertise is relevant. Even though these situations are relatively rare, it is a good idea to attempt to avoid them or be prepared for them. It is vital to have regular (at least annual) supervisory committee meetings leading up to the pre-comprehensive committee meeting, and to ensure that all committee members are aware of any changes to the thesis topic or field of research.

Should a supervisory committee member decide to leave after the pre-comprehensive committee meeting, the candidate should immediately notify the GPN coordinator to determine next steps. Usually, the comprehensive examination can still go forward with the original timeline, because only three examiners (in addition to the Chair) are needed, and one of them is the external examiner. The student and supervisor can replace the supervisory committee member without requiring that this member also participates in the comprehensive examination (even though this would be desirable).

Should an additional examiner or a new external examiner be needed for the comprehensive exam, the GPN coordinator and director will consult with the student and supervisor to have this committee member replaced as soon as possible. The student would then be asked to meet with the new committee member one-on-one to determine the scope of work for the written and oral examinations.

If an examiner is not able to participate in or misses the comprehensive examination, the exam can still go ahead as long as three examiners and the Chair are present. (The missing member can optionally submit their questions by email.) If fewer than three examiners are present, the examination may be rescheduled once, within a 1-week grace period. Contact the GPN coordinator immediately, if this problem occurs.

In the unlikely event that the comprehensive exam has to be re-scheduled beyond three months of the pre-comprehensive exam meeting, the candidate may choose to confirm by email that the outcomes of the original pre-comprehensive meeting are up-to-date. The email is to outline (a) the student's thesis proposal goal and aims, (b) the topics suggested to them by their committee, and (c) a detailed reading list that was originally supplied to them by their committee. Confirmation is required by all members of the comprehensive exam committee that the topics / readings are still up to date, and that the student can move forward with writing their thesis proposal and studying for their comprehensive exam.

Please note that rescheduling is not recommended, and that the decision to allow rescheduling the comprehensive examination without a full pre-comprehensive meeting is at the discretion of the GPN Program Director and can only occur once. Under exceptional circumstances that necessitate rescheduling, the candidate must immediately reach out to the program for guidance.

13.5 Oral Exam Procedure

A comprehensive exam is typically scheduled for two hours. The Chair calls the meeting to order and then assure that each member of the committee has had sufficient opportunity to read the proposal (two weeks), and reminds all members of the committee of the scope and purpose

of the examination. The Chair then determines the order in which the examining committee questions the candidate, usually starting with the external examiner, and specifies that the approximate length of time for each examiner is 15 minutes in the first round of questions, and no more than 10 minutes in the second round.

The exam then commences with a 20-minute presentation by the candidate, in which they are asked to provide an overview of their research grant proposal. Following are typically two rounds of questions, in which each committee member has the opportunity to ask questions related to (a) the candidate's project and progress based on their thesis proposal and the oral presentation, (b) the additional readings provided, and (c) the broader Neuroscience context of the proposed PhD project.

In case the candidate failed to achieve a mark of 80% or higher in NRSC 500 or 501, the Chair will ask questions regarding course content, and the committee will assess, based on the answers, if the student has gained sufficient basic neuroscience knowledge to advance to candidacy (exception: students exempt from NRSC 500/501).

Committee members are encouraged to ask questions until they are able to fully assess the candidate's advancement to candidacy, within a reasonable time frame as provided above. After the final round of questions, the candidate is excused from the room and the committee deliberates the candidate's advancement to candidacy. The examination is pass/fail: each examiner (including the chair) is asked to rate the student's performance.

13.6 Comprehensive Examination Outcome

If all members of the committee rate the student's performance in the oral part of the examination as a "pass", the student is called back to the room and informed of the committee's decision. At this time, the student should also be given constructive feedback on specific areas of strength and weaknesses. If a minority of members of the examining committee rate the student's performance as a "fail", the student should be informed that they have attained a conditional pass, and that further examination on a subset of the topics covered is required. Because this situation is rare, the committee is given considerable latitude in designing such remedial work as it sees fit. If the majority of members (50% or more) rate the student's performance as a "fail", the student has failed the first sitting of the comprehensive examination, and they must re-sit the exam within six months' time. If the student fails the second sitting of the comprehensive examination, they must withdraw from the program. No student is permitted to sit this examination more than twice.

Similarly, the committee rates the thesis proposal as "pass" or "fail". If the research program is sufficiently well designed, the research proposal is accepted (pass). If it is not sufficient, then the examining committee may suggest re-evaluation of the thesis proposal by the supervisory committee (conditional pass or fail). The candidate is admitted to candidacy following obtaining a passing grade in the comprehensive examination and acceptance of the thesis proposal by either the examining or supervisory committees.

Following the comprehensive exam, the candidate either fills out an Advancement to Candidacy Form (in case of a pass) https://www.grad.ubc.ca/forms/recommendation-advancement-candidacy and sends it to ubc.neuroscience@ubc.ca, or, in case of a fail, schedules a new exam.

13.6.1 Adjournment or Failure of the Comprehensive Examination

Candidates are allowed one examination adjournment or retake, provided that they have the opportunity to complete the examination within the first 36 months of their program. An adjournment would typically happen if the candidate takes ill during the examination and is unable to continue, or if the candidate is unable to maintain focus or concentration. If the candidate is allowed to resume the adjourned examination at a later date, they will be informed immediately by the Examining Committee as to the conditions for resuming the examination. These conditions include:

- **Time frame**: typically, an adjournment should occur within one week, or as soon as the candidate is well again; it has to occur within 6 months
- Potential dates: the committee will agree on a date that works for all committee
 members, and inform the student, provided that this date is within the agreed-upon time
 frame
- **Nature of the re-examination**: typically, the examination would resume where it was left off (e.g., continuation of questioning)
- **Committee**: the examination committee membership usually remains unchanged for the subsequent examination.

Similar steps are followed if the candidate fails their first attempt at sitting the comprehensive examination. If this occurs, the Examining Committee (or Graduate Program Director) must inform the student in writing of the outcome, and of the consequences of a potential second failure. The committee will then outline the conditions of the retake, including the time frame / date, nature of the retake, and committee membership. A retake must be scheduled within 6 months of the first comprehensive examination.

13.7 Role of the Chair

The Chair represents the GPN on the examining committee, and serves the functions of monitoring and reporting. The Chair also represents the candidate and ensures that the examination process is fair. The comprehensive exam Chair is typically the GPN program director, but can be any faculty member within the program. If the GPN Director is not available to chair an exam, or has a conflict of interest, the Chair is selected by the GPN Director and coordinator.

At the comprehensive exam, the Chair has the prerogative of asking questions. In the event that the student has not achieved a score of first class (80% or above) in either NRSC 500 or 501, they will be required to answer questions regarding these core courses at the comprehensive exam. These questions, if applicable, will typically be asked by the comprehensive exam Chair.

Throughout the examination, the Chair should ensure that questioning is fair and relevant, and that the candidate has adequate opportunity to demonstrate their knowledge of the field. During the deliberation process, the Chair votes along with the other committee members.

After the comprehensive exam, the Chair fills out the <u>Chair Report for Comprehensive Exams form</u> (https://neuroscience.ubc.ca/current-students/forms/) and emails it to ubc.neuroscience@ubc.ca. If the Chair report includes suggestions for improvements, especially if the thesis proposal is only rated as a "conditional pass", the candidate and their supervisor should be cc'ed on this email.

13.8 Comprehensive Examination Meeting Format

Meetings maybe conducted in-person or over Zoom. Hybrid meetings (where some people are in-person and other people are attending remotely) are not allowed.

Best practices for students:

- When seeting up a Zoom meeting make the Chair an alternate or co-host and set up a break-out room for the deliberation component of the meeting
- Ensure the Chair has your phone number to troubleshoot issues if needed
- Remind all members about the meeting within a week of the exam date with location information

Students who hold an appointment (such as a RAship or TAship) are eligble for a licensed UBC Zoom account: https://it.ubc.ca/services/teaching-learning-tools/zoom-video-conferencing

13.9 Resources

https://www.grad.ubc.ca/faculty-staff/policies-procedures/comprehensive-examination-candidacy

https://neuroscience.ubc.ca/current-students/the-comprehensive-exam/

13.10 How to Prepare for the Comprehensive Exam

Listed here are some best-practice ideas, shared by successful students in our program:

- Meet with your supervisory committee to confirm that you are ready for the comprehensive examination
- Do a dry-run of the comprehensive examination with your peer group and supervisor
- Select a friendly faculty member to act as a neutral observer; inform your examining committee that you will have an observer at the exam
- Work with your supervisor to select an examining committee member from outside the program or department

In the following, Anne-Sophie Sack, PhD candidate in the Snutch Lab, shares how she prepared for her comprehensive examination in the spring of 2022.

"The most difficult part of preparing for my comprehensive exam was to determine what was relevant to study. In order to avoid feeling overwhelmed, I created 'study guides' for myself based on the topics selected by each examiner (guiding questions) and on my project (research proposal questions). I used these questions to practice for my exam by quizzing myself and updated the lists regularly. I also used these to create supplementary slides (see below) for my comprehensive exam and found this particularly useful as both a study tool to test myself while I prepared the figures as well as for use during the exam itself.

Guiding questions:

During the pre-comprehensive meeting, I asked my committee members which topics and related papers they considered important for the comprehensive exam. For each topic, I outlined what I thought were relevant questions in the field, with a particular emphasis on my project. For instance, this included basic information such as classifying cell types in the brain region I am studying (based on morphology, electrophysiology, immunohistochemistry markers etc.), listing the different disease models currently used in the literature (including their advantages and disadvantages), and outlining relevant pathways. Further,

more complex questions such as the different hypotheses for how subsets of neurons could contribute to a behavioral or computational process (for instance how do immature and mature granule cells contribute to pattern separation), methodological approaches such as understanding how researchers differentiate between similar subclasses of channels (including why these channels are similar and what this means for their contributions to excitability), as well as questions based on how my project contributes to the field. I used this approach for each section and organized my notes accordingly.

Using these questions as guides, I began reading the suggested research papers, and additional papers I identified, to address each topic. I created separate documents with summaries of important research papers and additional notes such as how a suggested paper was relevant to my project, what this paper means for the field, and whether there are any controversies or open questions. At the end of each section, I practiced answering the guiding questions and reviewed the findings of certain key papers. I found it very useful at this stage to discuss these topics with other lab members when possible.

Research proposal questions:

After I finished writing my research proposal, I reviewed the proposal critically and created another list of questions that were directly related to my project. For instance, this included identifying the weakest points of my proposal, which statements might require further explanation or defending, and to try to anticipate questions that might be raised during my exam.

Supplementary slides:

In addition to my research proposal presentation, I created supplementary PowerPoint presentations for each section that I could use for anticipated questions (those from my research proposal and/or the guiding questions). For instance, I created flowcharts of the current drug targets in a disease, a chart showing the timeline of a particular process with relevant distinguishing properties at each stage, and a diagram comparing firing properties and synaptic inputs of different types of neurons. I also included figures from key papers when necessary to highlight certain findings that I might need to support my answers during the exam. Lastly, I practiced my presentation and anticipated questions out loud several times. I questioned myself as I was answering practice questions, which often prompted me to explore another area".

14. Funding for Graduate Students

Graduate education challenges students and requires their full attention. As a central element of their education, graduate students also contribute significantly to research in their respective laboratories, as well as to the education of undergraduate students. Other work or financial commitments can be a major obstacle for graduate students, which is why scholarships and financial support are a key priority for UBC's G+PS. The minimum funding package recognizes the important contributions that graduate students make to the University, and provides needed resources for the students to cope with living in the most expensive city in Canada. Funding has a substantial impact: graduate students with insufficient funding have longer completion times, greater likelihood of attrition, and lower satisfaction regarding their graduate student experience.

14.1 Minimum Guaranteed Funding Guidelines

All full-time students, who are offered admission to the MSc or PhD neuroscience program, must be provided with a minimum funding package for each of the first two years of their Masters (\$22,500 per year) or each of the first four years of their PhD (\$26,000 per year). The funding package may consist of any combination of internal or external awards, teaching-related work, research assistantships, and graduate academic assistantships.

Whereas the minimum stipend is only guaranteed for two (MSc) or four years (PhD), financial support beyond this period is possible and depends on the ability of the supervisor to support the student and/or on existing scholarships and awards. Students will discuss this topic with their supervisor upon entry into the program, and following completion of their first year of studies.

We recommend that any agreement of financial support beyond two / four years should be confirmed in writing and signed by both the supervisor and the student before the start of the 3rd / 5th (and subsequent) years. The document should indicate the annual stipend and the term for which the stipend will be provided.

As per G+PS guidelines: The Minimum Funding Package is inclusive of vacation pay and benefits, if applicable. It does not include the International Tuition Award. Students must apply for scholarships as required by their graduate program to continue to qualify for the Minimum Funding Package. Students may be required to disclose their sources of university or scholarship funding, as well as other income sources to their graduate program and must inform their program immediately of new funding sources (see here for details: https://www.grad.ubc.ca/awards/minimum-funding-policy-phd-students).

Effective September 2023, the GPN introduced a new top-up policy for students who obtain external awards or funding. Whereas the minimum stipend is still inclusive of external awards above a value of \$4,000, the supervisor must pay a top-up to the student, depending on the value of the award. For example, a student obtaining a 4-Year Fellowship (valued at \$18,200) will be (a) topped up to the minimum stipend of \$26,000 (+\$7,800) and (b) receive an additional top-up of \$4,000 for a total stipend of \$30,000 (cost to the supervisor: \$11,800). Awards at or below a value of \$4,000 are paid to the student in full, on top of the minimum stipend, and without additional top-ups. Full information can be found on our webpage (https://neuroscience.ubc.ca/faculty/faculty-forms/). We encourage all students to speak to their supervisors about top-ups, and to inform the programs if top-ups are not paid.

14.2 Sources of Funding

14.2.1 Research Assistantships

A research assistantship (RAship) is usually paid from one of the supervisor's grants. Generally, the understanding is that the student's thesis work is part of the supervisor's research program, hence, salary payment through a grant is an eligible expense for the supervisor. Congruently, the expectation is usually that the planned thesis work is sufficient to fulfill the requirements of an RAship. Sometimes, a supervisor might ask a student to conduct additional studies that are not part of the student's thesis, but are part of the supervisor's research program. It is important to discuss what the expectation is for work performed outside of the student's thesis work, if any, at the start of the relationship (see student-supervisor expectation form in **Appendix 3**). We generally recommend that graduate students may be hired for additional wages for work unrelated to their degree, but that these wages should not be counted towards their minimum level of support.

However, it is important to note that all students and other members of each lab, whether paid as an RA or not, are expected to contribute to the shared chores of a lab and to fulfil weekly requirements of the supervisor. This includes weekly meetings, seminars, one-on-one meetings, requirements to document work, share code, and engage in peer-supervision activities. Again,

we highly recommend that the extent of these chores are outlined clearly in the studentsupervisor expectation document.

14.2.2 Teaching Assistantships

Teaching assistantships (TAships) are available for full time (typically 192 hours per term) or part time (96 hours per term). The maximum time allowed for TA work is determined through the CUPE (the union representing TAs at UBC) collective agreement (https://cupe2278.ca/). The current rules are that the total time commitment for an academic term cannot exceed 192 hours. The average number of hours per week is 12 and the maximum hours per week is 24. One-day duties cannot exceed eight hours without the TAs consent. In general, if you choose to pursue a teaching assistantship, be sure to find out the following:

- How your TA duties will fit in with your graduate program work (coursework and research).
- Your supervisor's expectations around time spent outside of the lab, and whether your TA salary will be part of your graduate student stipend (typical), or considered an add-on. The student-supervisor expectation document (see Appendix 3 and https://neuroscience.ubc.ca/current-students/forms/) should clearly outline mutual expectations regarding TAships.
- The expectations of the instructor you are working for, and whether you will be expected to lecture, lead tutorials or discussion groups, hold office hours, invigilate exams, mark papers, or supervise students.
- Whether there are any conflicts with schedules (work or times you will be away) for which you need to make alternative arrangements.

Whereas many graduate programs are affiliated with a department and can therefore make a certain number of TA positions available, students in Neuroscience only have limited access to TAships. Some of the TA opportunities are listed below. Applications usually open in the late spring or early summer for the following academic year.

- NRSC 500 and 501: each year, these two core courses require four part time TAs. The
 prerequisite for TAing these courses is that the applicant has already passed these courses
 successfully (with first-class standing). Therefore, this opportunity is only available for
 students in Year 2 and higher. The application deadline is in May of each year, and an email
 will go out to our own GPN student mailing list to announce this opportunity.
- **Undergraduate Program in Neuroscience**: the new undergraduate program now has multiple TA opportunities available; the application deadline is typically in early May of each calendar year. This opportunity is also announced via our mailing list.
- **Biology**: the biology program typically has a fairly large number of TA positions available; see here: https://www.biology.ubc.ca/ (click on the tab "Teaching Assistants" for updated information, or email TAship-application@biology.ubc.ca). Be sure to apply to TA a course that falls within or close to your area of expertise.
- **Data Science**, Statistics, and Computer Science are other programs at UBC that might offer TA positions of interest to you.

Teaching assistantship rates are set by collective bargaining between the University and the Teaching Assistants' Union, a local of the Canadian Union of Public Employees. TA

appointments are coordinated and administered at the departmental level. For more information on TA and RA positions see the UBC policy on student service appointments (https://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,343,624). Please also note that the Centre for Teaching, Learning and Technology (CTLT) offers free workshops for graduate students (https://ctlt.ubc.ca/programs/all-our-programs/instructional-skills-workshops/). Participation in these workshops is highly recommended for anyone interested in building a teaching portfolio.

Moreover, UBC offers a Prize that includes a certificate and \$1,000 for TAs with outstanding performance (https://grad-postdoc.med.ubc.ca/killam-graduate-teaching-assistant-awards/). Several trainees in our program have won this award; contact the GPN coordinator for more information.

14.2.3 Awards and Fellowships

All graduate students are required to apply for all financial awards for which they are eligible. There are awards and fellowships at the national, provincial, university, faculty and program level; the most important awards are listed below and a full list can be found here: https://www.grad.ubc.ca/scholarships-awards-funding/award-opportunities. As a general guideline, https://www.grad.ubc.ca/scholarships-awards-funding/award-opportunities. As a general guideline, https://www.grad.ubc.ca/scholarships-awards-funding/award-opportunities.

National awards

- Canada Graduate Scholarships (CGS) for Canadians and permanent residents at the Masters (CGS-M) and doctoral level (CGS-D); adjudicated at the program, university and federal level in the fall/winter of each year
- Vanier Scholarship: \$50,000 per year for up to three years to top doctoral students; adjudicated at the program, university and then federal level, highly competitive

University-level awards

- Killam Doctoral Scholarships: most prestigious doctoral award at UBC; 25 stipends of \$30,000 per year for two years plus travel allowance; these awards are part of the Affiliated Fellowships competition (see next item)
- Affiliated Fellowships, offered by G+PS, are open to students regardless of citizenship or visa status; these fellowships are typically adjudicated at the same time as the CGS-M/D competitions and range from small awards to the large Killam awards
- Four-Year Doctoral Fellowships (4YF at \$18,200 per year for four years, plus a full tuition waiver). Allocations of awards are made by G+PS via the Faculty of Medicine to each program; whereas these awards are university-level awards, they are adjudicated at the program level. During the admissions procedure, suitable candidates are identified by our admissions committee, and fellowships are offered to top students upon acceptance of admission.
- BC Graduate Scholarship (limited to Canadian citizens or permanent residents, \$15,000 for one year): same adjudication process as for 4YF; these scholarships are given to highly-ranked incoming students.
- Indigenous Graduate Fellowship: fellowship for doctoral (\$18,200 per year) or Masters (\$16,175) students who self-identify as Indigenous. These awards are adjudicated at the university level (G+PS); the program provides a list of ranked candidates to G+PS.

- BPOC Excellence Awards: these small \$1,500 entrance awards are allocated to programs and adjudicated at the program level for students who self-identify as Black or a person of colour.
- Friedman Award for Scholars in Health: prestigious travel / research award that is adjudicated jointly by G+PS and the Faculty of Medicine Office of Graduate and Postdoctoral Education.
- Dissertation awards: G+PS adjudicates a number of dissertation awards, most notably, the Governor General's Gold Medal Award, see here: https://www.grad.ubc.ca/scholarships-awards-funding/award-opportunities
- UBC Public Scholars Award: a program for students who seek to build connections, community and capacity in linking their work to an arena of public interest (https://www.grad.ubc.ca/awards/ubc-public-scholars-award)

Faculty-level awards

 Faculty of Medicine Graduate Awards are adjudicated by the Office of Graduate and Postdoctoral Education each fall; a list can be found here: https://grad-postdoc.med.ubc.ca/graduate-student-awards/

Program-level awards

- The GPN and the DMCBH hold a joint annual trainee awards competition in the late spring that is open to domestic and international graduate students; a number of named awards are available as well as awards in an "open" category.
- Starting September 2023, PhD are also eligible for the Graduate Support Initiative (GSI), a program for funding graduate students through entrance scholarships, multi-year funding packages, tuition awards and scholarship top-ups. Approximately \$6.5 million in GSI funding is awarded each year across all UBC graduate programs. GPN PhD students are eligible for a tuition off-set award if they are in years 1-4 of the program on Sept 1 of the year and do not hold 4YF funding. Amounts vary year-to-year based on funds available to the program. For students who fast-track to the PhD program, the calculation of years in the program is based on the date of transfer. This amount will be added to your SSC account, and is listed as 'Faculty of Medicine Graduate Award'.

A list of award opportunities can be found here: https://www.grad.ubc.ca/scholarships-awards-funding/award-opportunities. Students will also receive email announcements of award competitions throughout the year from the GPN as they are announced by G+PS.

14.2.4 Travel Awards

All graduate students are eligible for the Graduate Student Travel Fund, once per degree program from G+PS. The fund provides one-time travel/research dissemination support to a maximum of \$500 per graduate student who presents a talk or poster at a conference or symposium. Details can be found here: http://grad.ubc.ca/awards/graduate-student-travel-research-dissemination-fund

Please note that many research centers also provide additional travel funds for graduate students, usually once per degree program. If your supervisor is affiliated with a UBC or Vancouver Coastal Health research centre, ask if you might be eligible for a travel award. Here are some examples:

- BC Child and Family Research Institute: https://www.bcchr.ca/about-us/training-opportunities
- UBC Institute for Computing, Information and Cognitive Systems (ICICS): https://icics.ubc.ca/support-programs/member-support/
- International Collaboration on Repair Discoveries (ICORD): https://icord.org/funding-opportunities/trainee-travel-awards/

14.3 Award Adjudication in the GPN

The GPN adjudicates many of the awards listed in the previous section. For some awards, such as the DMCBH trainee awards, we are responsible for the entire adjudication process. For other awards, such as G+PS or federal awards, we are responsible for a program-level adjudication to determine our top students, whose application will then go on to the next stage (either within the university, the province, or Canada-wide).

As a program, we are committed to transparency in our decision-making and adjudication processes. To ensure this, we have put the following measures in place, and we encourage all applicants for awards or fellowships to familiarize themselves with our decision structures and procedures.

- Our awards committee consists of a mix of faculty and student representatives and follows
 published terms of reference (see Appendix 2). Internal quality control is provided by asking
 each member of the committee to evaluate each application, if the number of applications
 allows this. At a minimum, each application is always adjudicated by at least two committee
 members.
- The adjudication criteria for each award are published. The information you receive as an applicant are the same as the information we provide to our awards committee. Ensuring that your application addresses all adjudication criteria is usually the first step to a successful application.
- We provide samples of successful applications in the GPN office. Please contact the GPN coordinator if you'd like to view sample applications. Please note: every application is different, and someone else's success does not ensure your success. It is important to find your own voice when writing your application.

Resources for writing a successful award application are available on the website of the G+PS (https://www.grad.ubc.ca/scholarships-awards-funding). The G+PS also offers award writing workshops, which we advertise through our biweekly newsletter or mailing list.

14.4 Tuition Fees

Tuition fees for graduate students are paid in three installments annually. If you do not pay these fees on time, your records will be placed on "financial hold", all registration activities will be blocked, and you will be charged a penalty fee. Students often find it challenging to make their initial tuition payment while waiting to be paid for a TA or RA appointment. Students with these appointments are paid via salary every two weeks, and the first cheque arrives after tuition is due. The situation is outside of the graduate program's control.

One solution is to apply for a tuition deferral through UBC Enrolment Services. If you cannot provide the proof of compensation that the application asks for, please contact the Finance administrator in your home department.

Note that there are student fees in addition to tuition fees. These include AMS and GSS fees, Medical and Dental Extended Health Plans, Sports and Athletics, U-Pass/Compass Card, etc. Information can be found at http://grad.ubc.ca/prospective-students/tuition-fees-cost-living/graduate-student-fees.

Tuition and fees for the year are subject to adjustment and UBC reserves the right to change them at any time without notice. Tuition fees are outside of the control of graduate programs. The most up-to-date tuition fees for both Canadian and international students can be found on the UBC Vancouver Academic Calendar (https://www.calendar.ubc.ca/vancouver/).

An International Tuition Award of up to \$3,200 is given to all international students (both MSc and PhD) who do not have an external scholarship that contributes to tuition payment.

Further information can be found at http://grad.ubc.ca/awards/international-tuition-award. You do not need to apply for this award, but you must be register for courses (such as NRSC 549 or 649) in order for the system to permit the award to be assigned to your SSC account.

14.5 Resources for Dealing with Financial Hardship

Even though minimal funding guidelines are in place to prevent hardship, financial crises can occur. Unfortunately, as a graduate program, we do not have the budget to support students in need. We always suggest that you talk to your supervisor first if you find yourself in a situation where you do not have enough funds to pay tuition, rent, or food. If you believe that you are not receiving the current minimum stipend, please contact the GPN coordinator so we can contact your supervisor on your behalf and help remedy the situation. Should your supervisor experience a temporary funding problem, the GPN offers emergency funds (\$5,000 one-time fund) to supervisors so they can bridge gaps between grants and pay the stipend to their graduate students. Ask your supervisor to contact us. To be eligible, your supervisor would need to demonstrate financial need (e.g., all research accounts overspent, major grant not renewed, etc.).

We can also suggest additional sources of income and point you to opportunities for TAships and awards and scholarships. It is always good for us to know when you are struggling, including financially, so we can try to assist you. The G+PS offers a cost-of-living calculator that might be used as an additional resource, especially when discussing your stipend with your supervisor: https://www.grad.ubc.ca/prospective-students/tuition-fees-cost-living/cost-living#calctable

Here are some other potential sources of emergency funding for graduate students at UBC:

- Emergency funds from the Graduate Student Society: https://gss.ubc.ca/student-funds/
- UBC offers emergency funding and financial advice in times of crisis: https://students.ubc.ca/enrolment/finances/funding-studies/financial-emergencies

15. Academic Advising in the GPN

15.1 Conflict Resolution

All graduate students and faculty members of the GPN have a responsibility to maintain professional and respectful relationships with other students, staff, members of the GPN, the university community and the general public.

Therefore, we encourage all our members to first deal directly with individuals to resolve disagreements, dissatisfactions, issues and conflicts, whenever possible. If for whatever reason the situation cannot be resolved directly, graduate students and faculty may consult the appropriate resources (see *Section 2.2* above) or follow the chain of authority outlined below.

14.1.1 Chain of Authority for Conflict Resolution



In this chain of authority, the graduate student initiates the conversation. An example could be the following: a PhD student in their second year believes they are not currently receiving the funding they anticipated under the Minimum Funding Policy. As a first step, the student should reach out to their supervisor. If the issue is not resolved, they should then speak with the GPN Director. In this particular example, involving the supervisory committee might not be helpful and this step can be skipped. The Graduate Program Director will discuss the issue with the student and the supervisor. If no solution is found, the GPN Director, together with the student and supervisor, can consult with the Associate Dean of Funding in the Faculty of G+PS, and ultimately with the Dean of G+PS.

Whereas most conflicts can be resolved within our own program, we do have access to expert help at the G+PS and reach out to case managers and Associate Deans frequently. We are here to help! If you have a conflict that you cannot resolve with the help of your supervisor or committee, please contact us.

15.1.2 Conflict Prevention

Several measures are in place in our program and in the Faculty of G+PS, designed to help prevent conflict in the first place. The most important tool is the student-supervisor agreement, which we ask you to fill out with your supervisor during one of your first meetings when you join the program (see **Appendix 3** and https://www.grad.ubc.ca/faculty-staff/information-supervisors/supervising-graduate-students.

Other important tools:

- Handbook of Graduate Supervision by G+PS: This handbook clarifies the roles of student and supervisor, and provides in-depth advice on issues that can potentially lead to conflict, such as time management, learning styles, and communication (https://www.grad.ubc.ca/handbook-graduate-supervision).
- Lab Manual / Lab Culture Document: this powerful document was developed by colleagues in the Cell Department and provided by Dr. Annie Ciernia (see at the very bottom

of this page: https://neuroscience.ubc.ca/current-students/forms/). We highly recommend that all labs use this document. If you feel that your lab would benefit, please ask for time in a lab meeting so it can be jointly filled out.

 Annual committee meetings and annual progress report: as outlined in Section 7.2 (for Master's) and Section 8.2 (for PhD), annual committee meetings and annual progress reports are mandatory for Master's and PhD students, and are probably the most important tools to promote healthy communication with your supervisor and committee, to facilitate progress, and to prevent conflict.

15.2 Leave of Absence

Leaves of absence can be granted for personal, health, professional, or other reasons when a student is best advised to have time completely away from their academic responsibilities (see https://grad.ubc.ca/current-students/managing-your-program/leave-absence). The leave period is not counted as part of the time period for completion of the degree. Leaves are normally for one year or less. A leave will begin on the first day of a term, for a period of four, eight or 12 months. International graduate students should consult International Student Advising before pursuing a leave of absence to understand the impact on their ability to stay in Canada, their study permit, and later post-graduation plans.

Your supervisor cannot prevent you taking leave, but may be able to provide additional support. Whether and what form the additional support takes should be discussed between you and your supervisor. Therefore, you should always talk to your supervisor and supervisory committee first before requesting a leave.

A request for a leave of absence (https://www.grad.ubc.ca/forms/request-leave-absence) must then be submitted to the GPN in writing and must be approved by G+PS. Leave policies are set by UBC (https://www.grad.ubc.ca/faculty-staff/policies-procedures/leave-status).

While on a leave of absence, graduate students are expected to not undertake any academic or research work related to the program for which they have taken a leave of absence. Access to the UBC's facilities and resources, including faculty supervision, while on a leave of absence may be limited. Research assistant stipends should be suspended by the supervisor's lab/ primary department for the duration of a leave of absence, as no academic progress should be made while on leave.

15.2.1 Parental Leave and Accommodation

A graduate student who is bearing a child or who has primary responsibility for the care of an infant or young child immediately following a birth or adoption of a child is eligible for parental leave. A request for a four, eight, or 12-month parental leave should be made both through the student's primary department (where the student is appointed) and through G+PS: https://www.grad.ubc.ca/forms/request-parental-accommodation The leave period is not counted in the time period for completion of your graduate degree.

Moreover, graduate students with substantial parenting responsibilities for a newborn or newly adopted child under the age of six during their course of study may apply for an eight-week parental accommodation period through G+PS (https://www.grad.ubc.ca/forms/request-parental-accommodation.

Please discuss funding during your leave with your supervisor. As per the UBC calendar: "A graduate student granted a parental accommodation period retains the full value of any fellowship or other award for which the terms and conditions are established by the Faculty of Graduate and Postdoctoral Studies and will experience no change in this funding during the parental accommodation period. Payments will continue on the usual schedule. There will be no change to the total amount granted or to the completion date of the scholarship".

15.3 Vacation Policy

Graduate students at UBC are entitled to three weeks (15 working days) of vacation per calendar year (September 1 – August 31). Details are outlined in the UBC calendar: https://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,342,1453

Please note that vacation policies are among those topics that should be discussed with your supervisor when signing the student-supervisor agreement. Often, vacation regulations are handled more flexibly within reason, as long as the student's progress is satisfactory.

15.4 Program Extension

There are time limits for completing graduate degrees: five years for a Master's degree, and six years for a doctoral degree. Requests for extensions must be fully justified and supported. But there are many valid reasons for a program extension. In general, a program extension will be granted if it is justified by extenuating circumstances not of the student's making (e.g., delays due to the COVID-19 pandemic, or problems accessing necessary equipment or infrastructure). If you find yourself in a situation where you feel that an extension might be needed and justified, please contact the GPN Coordinator so we can assist you.

In general, G+PS rules around extensions are as follows: A request for a one year's extension will be received favorably if it is fully justified and supported by the student's supervisor and the graduate program. A second year's extension requires a compelling rationale from the graduate program and an explanation of the special circumstances that would justify an exception. In order for the GPN to approve your extension request, you must also show that you have had a committee meeting within the past 12 months.

In addition, the following rules apply:

- Extensions will not be granted beyond two years.
- Extensions must correspond with the beginning and end of term.
- Increased tuition fees are assessed for students on extension.

To apply for an extension, you must fill out an extension request form (https://www.grad.ubc.ca/forms/request-extension-time-allowed-degree-completion) along with a detailed month-by-month timeline that outlines how the additional time will be used to complete the program.

15.5 Program Withdrawal

Students may wish to discontinue their programs for personal reasons, or may be required by UBC to withdraw from their programs. The procedure for withdrawing depends on the reason for the withdrawal. Withdrawal may be processed for one of the following reasons:

Voluntary withdrawals

- Required to withdraw for academic reasons
- Required to withdraw for non-academic reasons
- Withdrawal for non-registration

If a withdrawal is necessary, you will be fully supported by the GPN and G+PS, therefore, we do not provide all available information here. For more details on the different reasons for withdrawal, please consult https://www.grad.ubc.ca/current-students/managing-your-program/withdrawing-program.

15.6 Readmission and Reinstatement

Similar to Withdrawal, the reasons and rules around readmission and reinstatement are manifold and can be found here: https://www.grad.ubc.ca/current-students/managing-your-program/readmission-reinstatement.

16. Career Development

Traditionally, the Graduate Program in Neuroscience aimed at educating the next generation of scientists. However, we acknowledge that our students will have different career goals, including careers in health and medicine, education, communication, industry or politics, and the declared goal of the GPN is to prepare you for a successful career inside or outside of academia.

There are many different facets to becoming a successful researcher or professional. One must develop a wide range of intellectual and interpersonal skills as well as a strong knowledge base. Some aspects of the training are not found in textbooks, journals, and courses, or in the work documented in a thesis. A researcher must learn to develop new ideas and new approaches to succeed. They must be able to respectfully engage with other researchers, research participants, or patients, and communicate their findings. They must also learn how to be an effective and supportive team member, mentor and, at the PhD level, take ownership of their research efforts.

We have developed an individual learning plan (see Appendix 3 and https://neuroscience.ubc.ca/current-students/forms/) with the goal to enable a discussion between student and supervisor on training goals and ways to achieve them. The learning plan supports you in developing and articulating your learning experience and skill development and should be discussed and revised with your supervisor annually.

16.1 The Individual Development Plan (IDP)

Across UBC, graduate students are encouraged to have an individual development plan (IDP) early in their graduate program. An IDP helps trainees to assess current skills, interests and strengths, make a plan for developing skills to meet academic and professional goals, and communicate with supervisors, advisors, and mentors about evolving goals and related skills. It is also a tool that helps trainees to actively prepare for their career by exploring career paths, establishing career goals, and identifying skill gaps, culminating in an action plan to achieve their career goals. The IDP is a document that will be revised again and again, as skills and goals change or evolve. There are many sources for an IDP, such as https://myidp.sciencecareers.org/. The Canadian Institute of Health Research (CIHR) has also

developed an online IDP and resources (https://cihr-irsc.gc.ca/e/50516.html) and more information on this resource can be found on the G+PS resource webpage (https://www.grad.ubc.ca/current-students/professional-development/resources).

16.2 Graduate Pathways to Success

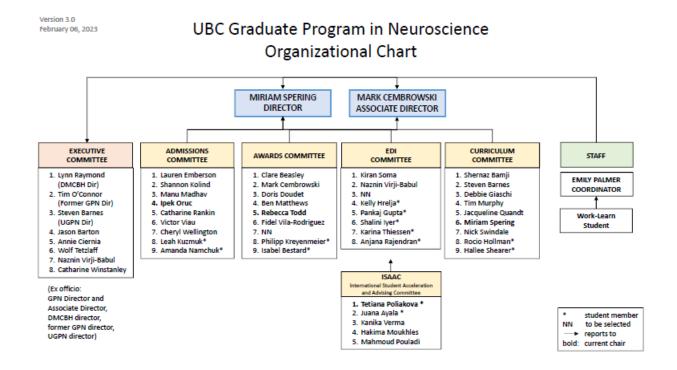
Complementing individual learning and development plans, the Faculty of Graduate Studies at UBC has also developed an award-winning portfolio of workshops and other resources to enhance students' academic experience and prepare them for their careers (https://www.grad.ubc.ca/current-students/professional-development/graduate-pathways-success).

16.3 Public Scholars Initiative

Finally, and among many other initiatives, we would like to highlight a unique opportunity at UBC, the Public Scholars Initiative (PSI). This is an innovative program supporting doctoral pathways that encourage purposeful social contribution, mutually beneficial forms of collaborative research with partners from diverse economic sectors, and broader career readiness for students (https://www.grad.ubc.ca/psi).

Overview of Appendices

Appendix 1: Governance Structure



Appendix 2: GPN Program Committee Terms of Reference



Graduate Program in Neuroscience Executive Committee TERMS OF REFERENCE

Committee Mandate

The purpose of the Graduate Program in Neuroscience (the "Program") Executive Committee (the "Committee") is to oversee the program and to function as a sounding board for the Program Director on initiatives and ideas. The Committee also votes on new faculty.

2. Membership Composition, Appointment and Tenure

The Committee consists of three ex officio members—the Program Director (the "Director"), the DMCBH Director, and the Program Past Director—as well as five regular members, who are all faculty in the Program. All members are voting members.

- (a) Appointment: Vacant positions are filled as they become available. The Director, in consultation with the Committee, will select and appoint a new member. In appointing a new member, the Director and the Committee will take into consideration principles of equity, diversity and inclusion to ensure as far as possible that the committee is balanced across gender, minority status, and academic career levels.
- (b) Term duration: Committee tenure for regular faculty representatives is normally a fixed-term for three years.¹⁾ Membership for ex officio members is for the duration of their term (and for the Past Director, for the duration of the term of the current Director).

¹⁾ To allow rolling membership during the initiation period of the new Committee in 2022-2025, the Director will communicate directly with two of the five regular members to agree on a shorter term.

3. Member Responsibilities

Committee members contribute time, knowledge, skill and expertise to the fulfillment of the Committee mandate, and attend meetings to the best of their abilities. Any committee member missing three consecutive meetings without reasonable cause or explanation will be deemed to have resigned from the Committee. The following sets out examples of matters that fall within the mandate of the Committee:

- (a) Evaluate and vote on applications of new faculty members
- (b) Set the minimum annual stipend for Masters and doctoral students
- (c) Review the annual budget and spending forecast
- (d) Discuss curriculum changes within the Program
- (e) Discuss and determine the best course of action with difficult student / supervisor cases
- (f) Determine supervisors' roles, duties and responsibilities



- (g) Suggest candidates for the positions of GPN Director and GPN Associate Director
- (h) The Committee can vote on a motion of no confidence for the GPN Director and suggest to the Faculty of Graduate and Postdoctoral Studies that a new Director be appointed.

This list of activities is not exhaustive and the Committee has flexibility to deal with issues that are not listed in the Terms of Reference.

4. Committee Meetings and Processes

Meetings are called by the Director once a quarter, four times per calendar year, and scheduled by the Program Coordinator. All meetings are closed and attended only by members of the Committee, the Program Coordinator, and invited guests. Meetings are either held in person or via videoconference (zoom).

- (a) Agenda: A meeting agenda (which includes the date, time, and location) and supporting materials are, as much as possible, distributed at least one week before the next meeting date.
- (b) Quorum: Attendance by 50% of the Committee is required to establish quorum. If quorum is not attained within 15 minutes after the hour set for the meeting, the Director will adjourn the meeting, unless the meeting agenda does not contain items that require a vote.
- (c) Program faculty members, who are not Committee members, may at times attend meetings at the invitation of the Director to consult on specific topics of interest.
- (d) Voting: Each committee member is entitled to one vote. Voting is decided by a majority of the votes of the members present at the meeting, and who cast a vote. In case of a tie vote, the motion is defeated / the membership application is rejected.
- (e) Conflict of Interest: Members have a duty to advise of any conflict of interest when discussing student or supervisor matters or when voting on new faculty member applications. In case of a COI, a member will be excluded from the discussion and/or vote.
- (f) Code of conduct: Committee meetings constitute a safe space in which members behave in a respectful and kind way toward each other and when discussing faculty colleagues or student matters.

5. Accountability and Reporting structure

- (a) Minutes: The Program Coordinator will record minutes of each meeting. Minutes are approved as the first order of business at the following meeting.
- (b) Reporting: The Director reports to the Committee on any major changes to and initiatives in the Program. At the invitation of the Committee, the Chairs of the Admissions, Awards, EDI and Curriculum Committees might be invited to attend and report to the Committee.
- (c) Amendments: Any Committee member may recommend necessary amendments and changes to the Committee's Terms of Reference and Mandate for consideration by the Committee.
- (d) Agenda and material storage and access: Agendas and minutes of meetings, as well as supporting materials and attachments, will be stored in a digital repository on a server



maintained by UBC Med IT, available to the Director and Program Coordinator. Agendas and minutes will also be made accessible on the CWL-password protected Program intranet.

These Terms of Reference were approved by the Committee on April 28, 2022.



Graduate Program in Neuroscience

Awards Committee

TERMS OF REFERENCE

Purpose

The purpose of the Graduate Program in Neuroscience (GPN) Awards Committee is to evaluate, score, and rank award, scholarship and fellowship applications by GPN trainees. All applications are adjudicated based on the assessment criteria advertised for each award or scholarship. In addition, the committee will use GPN-internal information on applicants' diversity status to inform decision making with the aim to be equitable, fair, and inclusive in the adjudication process.

2. Membership

The GPN Awards Committee consists of seven GPN faculty representatives and two GPN student representatives. One of the seven faculty members serves as the committee's Chair.

- Term duration: The Chair position rotates every year. Faculty membership is fixed-term for five years; student membership is fixed-term for two years.
- Selection or appointment: Vacant positions are filled as they become available. The GPN
 Director will call for self-nominations from all GPN faculty or GPN students and then
 select and appoint a new member. In appointing a new member, the Director will take
 into consideration principles of equity, diversity and inclusion to ensure that the
 committee is balanced across gender, minority status, and academic career levels.
- Responsibilities: Members read student applications in full and assess each application
 along a simple set of criteria on a scale from 1 = poor to 5 = excellent. Each member is
 asked to read and assess <u>every</u> application. During a committee meeting, members
 discuss the top-ranked applications to make a final recommendation for a ranking to the
 GPN Director.
- Code of conduct: Committee meetings constitute a safe space in which members behave in a respectful and kind way toward each other and when discussing student applicants. Sexist or racist remarks on application profiles are not acceptable. Student representatives ought to be treated as full committee members with equal rights and responsibilities.



3. Meetings and Procedures

Meetings are scheduled by the GPN coordinator and application materials are made available to members at that time, along with a detailed spreadsheet populated with relevant information from the applications. The committee typically assesses award applications three times per calendar year.

- Winter (January): Canada Graduate Scholarship Masters (tri-council) Scholarships,
 Affiliated Master's Fellowships
- Spring (early May): Faculty of Graduate and Postdoctoral Studies (G+PS) Spring Awards, DMCBH Endowment and DMCBH General Awards
- Fall (October): Faculty of Graduate and Postdoctoral Studies (G+PS) Fall Awards, Canadian Graduate Scholarship Doctoral (tri-council) Scholarships, Affiliated Doctoral Fellowships

The committee meets within two weeks before the GPN deadline for these awards.

- Quorum: A simple majority of the members of the Committee constitutes a quorum.
- Decision Making: Top-ranked applications are briefly discussed and re-ranked based on the discussion, as per the following rule: each applicant receives a score calculated as the average of all individual committee members' scores, which must be submitted to the GPN coordinator before the meeting date.
 - Following a brief discussion, each committee member re-scores the candidate as either -1 (goes down one point), 0 (stays at current score), or +1 (goes up one point), where 1 is the lowest and 5 is the highest possible score. Applicants will then be ranked according to their final score.

4. Minutes

Minutes of each meeting, particularly of the discussion, are recorded by the GPN Coordinator and kept on file.

5. Reporting

The committee Chair reports to the GPN Director after each award cycle meeting and submits the committee's final scores.

2

Version 1.0, March 30, 2022

Graduate Program in Neuroscience

Admissions Committee

TERMS OF REFERENCE

1. Purpose

The purpose of the Graduate Program in Neuroscience (GPN) Admissions Committee is to assist the GPN in selecting candidates for Masters and PhD degree programs in Neuroscience. The selection is based on evaluating application materials submitted by a large pool of applicants to the GPN each winter.

As a program, we aim to admit a diverse cohort of motivated students who are likely to benefit the most from the excellent mentoring relationships and training environment that our program has to offer. We do so by adopting principles of "holistic admission", meaning that our admissions process emphasizes the applicant as a whole person, and not selected attributes such as academic achievements. Through a holistic review of applications, we hope to increase the quality and diversity of students, and honor the many and unique ways in which their knowledge, skills and strengths are manifested.

2. Membership

The GPN Admissions Committee consists of seven GPN faculty representatives and two GPN student representatives. One of the seven faculty members serves as the committee's Chair.

- Term duration: The Chair position rotates every two years. Faculty membership is fixedterm for six years; student membership is fixed-term for two years.
- Selection or appointment: Vacant positions are filled as they become available. The GPN leadership (Director and Associate Director, with the assistance of the Executive Committee) will call for self-nominations from all GPN faculty or GPN students and then select and appoint a new member. In appointing a new member, the GPN will take into consideration principles of equity, diversity and inclusion to ensure that the committee is balanced across minority status and academic career levels to the extent possible.
- · Responsibilities:
 - Before the admissions committee meeting: Each committee member reviews an
 assigned number of applications and rates them according to the admission
 criteria for our program using a spreadsheet that is made available for scoring.

- The review process starts with the statement of interest in an effort to mitigate bias (see detailed instructions).
- At the committee meeting: Members briefly discuss applications that are in the mid-range of scoring (between 8-14 points) and where scores between two members differ significantly (greater than 3 points). Each member briefly presents the application to be discussed, and contributes to the overall discussion. Based on the discussion, scores can be adjusted and candidates might thus move up or down in the ranks.
- Code of conduct: Committee meetings constitute a safe space in which members behave in a respectful and kind way toward each other and when discussing student applicants. Sexist or racist remarks on application profiles are not acceptable. Student representatives are full committee members with equal rights and responsibilities.

3. Meetings and Procedures

Meetings are scheduled by the GPN Coordinator and application materials are made available to members at that time, along with a detailed scoring spreadsheet populated with relevant information from all student applications. The committee typically assesses applications in early January each year, within approx. six weeks of the application deadline for our program (typically December 1).

- Decision making: The committee does not make final admission decisions and as such, voting is not necessary. In case of conflict between members, different opinions or ratings are documented and an applicant's score can be adjusted up or down based on the discussion. The final decision as to whether a candidate is admissible or not will be with the GPN leadership and further depend on whether a candidate is able to secure a supervisor or not (see below).
- Instructions: The committee receives detailed evaluation instructions that are updated each year based on experience with the admissions process in the previous round. Briefly:
 - The admission committee's work is part of a larger-scale admissions process that starts with extensive screening and filtering, done at the program level by the GPN Coordinator. Before the admissions committee meets and reviews applications, the program ensures that each application meets the general entrance requirements for UBC and for our program.
 - After the screening process, the GPN Coordinator refers student applications to the Admissions Committee for evaluation. The committee evaluates each application based on the selection criteria for our program in two steps:

- 1. Each application gets evaluated and scored by two committee members. Members read assigned student applications (typically 15-20 applications per person; consisting of application form, academic record, letter of interest and three reference letters) in full, starting with the student's statement of interest. Each application component is assessed along a set of simple criteria and awarded points (ranging from 3 to 6 points per component). Scoring criteria are holistic, and encompass writing and communication skills, perseverance and motivation, research experience and achievements, and academic performance. Point scores are entered into a scoring sheet by each committee member. A total score for each applicant (max 16) is automatically tallied in this score sheet, and applicants are ranked based on their final score.
 - A "notes" section for each applicant will be present in the score sheet, allowing the committee members to note any exemplary components related to: (a) Fit with the program, (b) Fit with a supervisor, (c) Funding, (d) Diversity criteria. Wherever possible, committee members will use information on applicants' diversity status to inform decision making with the aim to be equitable, fair, and inclusive in the admissions process.
- At the committee meeting, the committee discusses applications that fall in the middle of the scoring range, and applications where scores differ significantly. During this discussion, the Committee Chair will prompt the committee to comment and discuss any additional "notes" components, and the GPN Coordinator will document the discussion.

4. Minutes

Minutes of each meeting, particularly of the discussion, are recorded by the GPN Coordinator and kept on file.

5. Reporting

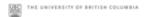
The committee Chair reports to the GPN Director and GPN Associate Director after each admissions committee meeting. The GPN leadership reports the process and outcome to the Executive Committee.

3

Version 1.1, November 22, 2022

Terms of Reference for are in-progress for the GPN EDI, and Curriculum committees.

Appendix 3: Important Forms and Documents



Graduate and Postdoctoral Studies www.grad.ubc.ca

170-6371 Crescent Road 170-6371 Crescent Road Phone 604 822 2848 Vancouver, BC, Canada V6T 1Z2 Fax 604 822 5802

Graduate Student / Supervisor Expectations

The document is for students and their supervisors. Ideally, supervisors and students will discuss the document, retain copies of the document, and have a copy of the document placed in a student's file. Discussion of expectations can foster open communication between supervisors and students and prevent misunderstandings that might otherwise arise. This document is not a replacement for University rules. To the extent that any statements in this document contradict University of British Columbia policies, rules, or regulations, the University of British Columbia policies, rules and regulations prevail. Ultimately, successful completion of a graduate program of study is the student's responsibility.

Mutual understanding of expectations between students and their supervisors is critical to the success of a graduate program. This document is intended to be read and discussed by students and their supervisors at the onset of the students' programs. This document may be re-visited and modified over time as necessary, with any revised versions held by students and supervisors and kept on students' files. Students undertaking work at the master's level will find some of the points outlined are specific to doctoral students.

Name of Supervisor and Date:	

As your supervisor, you can expect me to:

- Demonstrate commitment to your research and educational program, and offer stimulation, respectful support, constructive criticism, and consistent encouragement.
- Assist with identification of a research topic that is suitable for you and manageable within the scope of your degree.
- Have sufficient familiarity with your field of research to provide guidance as a supervisor.
- Assist you in gaining access to required facilities or research materials for your projects.
- Discuss your financial support issues and assist with scholarship applications and/or providing advice on academic employment opportunities.
- Provide guidance in the ethical conduct of research and model research integrity.
- Discuss with you the implications of engaging with activities/work unrelated to your thesis topic.
- Provide information about my availability for meetings and expectations about preparation for meetings.
- Assist you in planning your research program, setting a time frame, and adhering as much as possible to the
- Encourage you to finish up when it would not be in your best interest to stay longer.
- Be accessible for consultation and discussion of your academic progress and research at a minimum of once a term. [On average, our meetings will be held _
- Minimize my expectations for activities/work that may interfere with your thesis completion.
- Institute a supervisory committee (with appropriate input from you) and prepare for committee meetings, which will occur on a regular basis (at least once a year) to review your progress and provide guidance for your future work.
- Support you in your preparation for the comprehensive examination and admission to candidacy which will be completed within 36 months of program initiation.
- Act as a resource about managing program requirements, deadlines, etc.
- Attend your presentations in appropriate venues and join in associated discussion.

- Submit recommendations for external examiners and university examiners for the doctoral dissertation within the time frames required by the Faculty of Graduate and Postdoctoral Studies.
- Acknowledge your contributions, when appropriate, in published material and oral presentations [Discuss policy
 regarding authorship, etc. of papers] in accordance with good scholarly practice and the University of British
 Columbia scholarly integrity policies.
- Provide reasonable expectations about work day hours and vacation time in accordance with University of British Columbia policies.
- Clarify my preferred style of communication with students about areas, such as student independence, approaches
 to conflict, direct questioning, and mentoring.
- Explain my expectations for mode of address, professional behaviour (e.g. punctuality), when to seek assistance, response to constructive criticism, and academic performance expectations.
- · Assist you to overcome any cultural difficulties with norms and expectations.
- Respond thoroughly (with constructive suggestions for improvement) and in a timely fashion to submitted, written
 work
- Promote a research environment that is safe and free from harassment.
- Assist in managing conflict or differences among members of the supervisory committee.
- Make arrangements to ensure adequate supervision if I am absent for extended periods, e.g. more than a month.
- Encourage you to present your research results within and outside the University. [Approximately how often?
- Provide mentoring in academic writing.

supervisor signature

Other:

 Provide advice and mentorship with respect to career opportunities, which may be assisted by resources, skills, professional development, and other avenues.

www.grad.ubc.ca/forms	page 2 of 4	last updated: 2020-05-21

supervisor print name

date

170-6371 Crescent Road Vancouver, BC, Canada V6T 1Z2 Phone 604 822 2848 Fax 604 822 5802

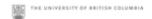


Name of Student and Date: _	
-----------------------------	--

As your student, you can expect me to:

- Take responsibility for my progress towards my degree completion.
- Demonstrate commitment and dedicated effort in gaining the necessary background knowledge and skills to carry out the thesis.
- At all times, demonstrate research integrity and conduct research in an ethical manner in accordance with University
 of British Columbia policies and the policies or other requirements of any organizations funding my research.
- In conjunction with you, develop a plan and a timetable for completion of each stage of the thesis project.
- As applicable, apply to the University or granting agencies for financial awards or other necessary resources for the research.
- Meet standards and deadlines of the funding organization for a scholarship or grant.
- Adhere to negotiated schedules and meet appropriate deadlines.
- Keep you and the Faculty of Graduate and Postdoctoral Studies informed about my contact information.
- Meet and correspond with you when requested within specified time frames.
- Report fully and regularly on my progress and results.
- Maintain my registration and ensure any required permits or authorizations are kept up to date until the program is completed.
- Be thoughtful and reasonably frugal in using resources.
- Behave in a respectful manner with peers and colleagues
- Conform to the University and departmental/school requirements for my program.
- Meet at regular intervals with my supervisory committee (no less than yearly).
- Progress to my candidacy defense (including completion of my comprehensive exam) within 36 months of the initiation of my program.
- Keep orderly records of my research activities.
- Develop a clear understanding concerning ownership of intellectual property and scholarly integrity (refer to UBC policy on Patents and Licensing, the scholarly integrity policy SC6, and the University Industry Liaison Office).
- · Take any required training programs that are discussed and agreed.
- Work at least regular workday hours on my research project after course-work has been completed.
- Discuss, with you, the policy on use of computers and equipment.
- Complete my thesis and course work within timelines specified by the Faculty of Graduate and Postdoctoral Studies and suitable for my discipline.
- Finish my work and clear up my work space when program requirements have been completed.
- · Return any borrowed materials on project completion or when requested.
- Explain to you my comfort with modes of communication (e.g. formal or informal, use of questioning) and independent activities.
- Make it clear to you when I do not understand what is expected of me.
- Describe my comfort with approaches to our academic relationship, e.g. professional versus personal.
- Contribute to a safe workplace where each individual shows tolerance and respect for the rights of others.
- Respond respectfully to advice and criticisms (indicating acceptance or rationale for rejection) received from you and members of my supervisory committee.

www.grad.ubr.ca/forms page 3 of 4 //ast updated: 2020-05-21



student signature

Graduate and Postdoctoral Studies www.grad.ubc.ca 170-6371 Crescent Road Vancouver, BC, Canada V6T 1Z2

date

Phone 604 822 2848 Fax 604 822 5802

•	Inform you in a time!	v manner about an	v of my presentations	to facilitate attendance.
-	millorini you iii a timei	y ilialilici about ali	y or mry presentations	to racilitate attenuance.

- · Discuss, with you, my career plan and hopes for professional growth and development.
- Other:

student print name



Recommendation for non-members of G+PS to serve on a student's MSc in Neuroscience supervisory committee

Student Information				
Given Name:	Family Name	:		
Student Number:	Email:			
Supervisor(s):				
Names of other committee n	nembers:			
For a non-member of the Faculty of committee, special approval is required from a divisor or department the engaged in research, experienced that of the members of the superv Postdoctoral Studies. We recommend that the following supervisory committee: Nominee's Name: Nominee's Email:	uired. For service on mas ead suffices. To be eligibl with graduate education, isory committee must be	ter's committees, the appro e, the non-member should n and hold appropriate qualifi e members of the Faculty of	oval of the graduate normally be actively ications. Note that at least Graduate and	
Employer:				
Position: Clinical	Partner Other	UBC position (specify)		
Rationale for joining the stud area):	ents committee (are	a of expertise and fit wi	th student's research	
I agree to serve on this s and their supervisor by broade and by offering advice about, a supervisory committee, I will p planning the research, and pre	ening and deepening t and assessment of the participate in guiding t	he range of expertise an student's work. As part	d experience available, of the student's	
SER FOR				
Signature Updated May 2022	Name	Program	Date (yyyy/mm/dd) 1	
Completed by the nominee: I agree to serve on this sand their supervisor by broade and by offering advice about, a supervisory committee, I will planning the research, and pressure. Signature	tudent's supervisory ening and deepening t and assessment of the participate in guiding t eparing their thesis.	committee and provide he range of expertise an student's work. As part he student in selecting a	support to the student d experience available, of the student's my required courses,	

Completed by the student'	s supervisor:		
Please provide information serve on the supervisory co		ications that make the	nominee suitable to
, ,			
Approval of research super	visor		
EDW COL			
Signature	Name	Program	Date (yyyy/mm/dd)
Please return this form and	the nominee's current	CV to ubc.neurosciend	ce@ubc.ca
Approval of GPN Director/	Department Head		
STO KOL			
Signature	Name	Program	Date (yyyy/mm/dd)
•		•	
Important: This form is for I those transferring from the		•	

Important: This form is for MSc supervisory committees only. Doctoral students (including those transferring from the MSc program) must have all non G+PS members approved by G+PS https://www.grad.ubc.ca/forms/recommendation-non-gps-member-join-supervisory-committee

Graduate and Postdoctoral Studies

170-6371 CRESCENT ROAD VANCOUVER, BC, CANADA V6T 1Z2 FAX: 604.822.5802

TEL: 604.822.2848

RECOMMENDATION FOR NON-G+PS MEMBER TO JOIN SUPERVISORY COMMITTEE

STUDENT INFORMATION:	Student Number:
Given Name:	Family Name:
Email: Degree: PhD D	MA DED Program:
https://www.grad.ubc.ca/faculty-staff/policies-procedures/non-members	faculty-graduate-postdoctoral-studies-supervisory
http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,350,773	
For a non-member of the Faculty of Graduate and Postdoctoral Stur approval is required. For service on doctoral committees, the discip Studies must approve; for service on master's committees, the app suffices. To be eligible, the non-member should normally be active and hold appropriate qualifications. Note that at least half of the n the Faculty of Graduate and Postdoctoral Studies.	olinary Faculty and the Faculty of Graduate and Postdoctoral proval of the graduate program advisor or department head by engaged in research, experienced with graduate education,
We recommend that the following person be approved to serve a	s a member of this student's supervisory committee:
Nominee's name: No	minee's email:
Employer: UBC UBC CWL:	UBC Employee #:
Position: Clinical Partner	BCO [CV not required]
Other UBC position (specify):	
Employer: Other university or organization Uni/Org. name: Title or position held:	
We are requesting approval for: Additional students in program (a	
For additional students for five years, ensure that this is addressed Please attach ALL of the following: Indication (from the graduate program) of the particular qualification Statement from nominee assenting to serve on committee and access Nominee's current CV Names of the other committee members (please list):	ns that make the nominee suitable
Approval of Research Supervisor:	
Approval of Research Supervisor.	
Signature Name (please print)	Program Date (yyyy/mm/dd)
Approval of Graduate Advisor or Head of the Grad	uate Program:
Signature (must be different from above) Name (must be different from above	re) Program Date (yyyy/mm/dd)
Graduate Studies use only: Signature of Dean/Associate Dean or designate	Date of approval Recorded Notification sent



Neuroscience Graduate Program The University of British Columbia 3402-2215 Wesbrook Mall Vancouver, BC Canada V6T 1Z3 Phone 604 822 7375 ubc.neuroscience@ubc.ca

Committee Meeting Checklist

An annual committee meeting is an important part of your research. Schedule your initial committee meeting during your first year of study. Annual committee meetings are required for each year of the program. Please use the follow checklist to help create a committee and schedule committee meetings.

Suggested Timeline

September-December Meet with your supervisor to discuss committee

January-February Schedule meeting Spring Hold meeting

Getting Started

Task	Completed
Read Graduate and Postdoctoral Studies Supervision policy:	
https://www.grad.ubc.ca/faculty-staff/policies-procedures/supervision	
Meet with your supervisor to discuss potential committee members and	
when you should schedule your first exam	
Identify several potential committee members	
Contact potential committee members to ask if they would be on your	
committee	

Schedule Your First Meeting

Task	Completed
2-3 months before:	
 Start scheduling in advance of when you want the meeting 	
 Arrange a time and location for the meeting (Try <u>Doodle</u> or <u>When2Meet</u>) 	
Book a room location	
1 week before:	
Complete and email the "Progress Update for Supervisory Committee" to	
each committee member and the Program Coordinator	
 Ask your supervisor what you should bring with you (Example: 	
presentation slides, committee report, etc.)	
1 -2 days before meeting:	
Send an email reminder with date, time and location to all committee	
members	
 Print the committee report (available here: 	
https://neuroscience.ubc.ca/current-students/forms/)	

Updated: July 11, 2022





During the Meeting

Task	Completed
Take notes	
Complete committee report and get all signatures	

After Meeting

Task	Completed
Return the completed committee report to the Program coordinator via email <u>ubc.neuroscience@ubc.ca</u>	*
Follow up with committee members as required	
Think about when to plan your next committee meeting – it should be in the next 12 months	o o
If you are a PhD student, start thinking about your comprehensive exam (See the Comprehensive Exam checklist for more information)	



Updated: July 11, 2022



Student name:

Progress Update for Supervisory Committee

This form is to be completed by the graduate student, and circulated to their supervisory committee and Program Coordinator **1 week prior** to the supervisory committee meeting. Your supervisor should review and approve of this report before it is circulated.

Students should retain this file for future reference, and include activities since the start of their program on each iteration. Sections not yet relevant should be left blank.

Student email:	
Student number:	
Program (MSc/PhD):	
Date of initial registration:	
Financial support (amount, source	:e):
Meeting	
Date/ Time / Location	
Date/ Time / Location	
Dates of prior meetings:	
Sup	pervisory Committee Members
Supervisor	
Co-Supervisor	



Chair			
Member			
Member			
Member			
Other information:			
Leaves of absence, etc.			
Academic Development			
UBC courses taken, and marks obtained:			
obe courses taken, and marks obtained.			
Date of comprehensive exam (PhD):			
out or comprehensive exam (1 no).			
Other course or contifications and data obtained.			
Other courses or certifications, and date obtained:			
Responsible Conduct of Research	:		
This is a required course for all NRSC students. Please indicate the date you completed the			
course, or when you intend to complete the course.			
Professional Development			
Workshops attended, with date:			



Conferences attended, with date:
Publications & Presentations
Publications from work conducted in this program, indicating whether they are published, submitted, in revision, etc.:
Poster presentations, with date and location:
Oral presentations, with date and location:
<u>Awards</u>
Awards and honours:
Progress Report
Title of project:



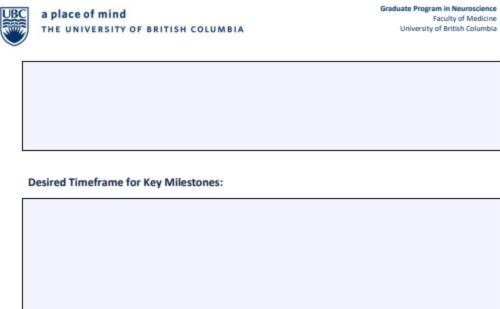
Background and rationale: Maximum 1 page.
For each Aim
Aim
Status: Completed/in progress/proposed
Methods/Experimental Design:
metrious/experimental Design.
Results/Main Findings:



Aim
Status: Completed/in progress/proposed
Methods/Experimental Design:
Results/Main Findings:
Aim
Status: Completed/in progress/proposed
Methods/Experimental Design:
Results/Main Findings:
Aim



Status: Completed/in progress/proposed Methods/Experimental Design: Results/Main Findings: References **Research and Academic Timeline** Please provide anticipated timeline for key milestones, such as desired timeframe for comprehensive examination or final oral examination (defence), research milestones, etc. You may wish to use a visual aid (graphic timeline or table).





Committee Report

Supervisory Committee	e Meeting: day month year
Please indicate meeting type:	
First Committee set-up	
Annual Progress meeting	
Pre-comprehensive meeting	
Transfer to PhD	
Last Name:	First Name: UBC Student #:
Date of Entry: Masters (dd/mm/yy)	Date of Entry: PhD (dd/mm/yy)
PHD comprehensive exam (if applicable)	
Date completed (dd/mm/yy):	Anticipated date (dd/mm/yy):
	sible Conduct of Research course? Yes No search project? Yes No
	a members for MSc student: four for PhD student 50% must be members of GAPS

Supervisory Committee: Minimum of three members for MSc student; four for PhD student. 50% must be members of G+PS <u>Approval of non-members</u> (complete & sign form, attach nominee statement & CV for Program Director/ G+PS approval)

Name (please print)	Role	Signature	G+PS member?	
1.	Supervisor		Yes No	
2.	Co-supervisor		Yes No	
3.	Committee Chair		Yes No	

Last updated March 3, 2022

4.	Member	Yes	No	
5.	Member	Yes	No	
6.	Member	Yes	No	
7.	Member	Yes	No	

Please return completed form to:

<u>Ubc.neuroscience@ubc.ca</u> or GPN office, 3402-2215 Westbrook Mall, DM Centre for Brain Health, Vancouver, BC, V6T 1Z3 Keep a copy for your reference.

Last updated March 3, 2022

Learning Plan for Masters and PhD students in the Graduate Program in Neuroscience

This Learning Plan supports you in developing and articulating your learning experience and skill development. The plan should be completed by you in consultation with your supervisor, discussed at supervisory committee meetings, reviewed annually and revised as needed.

The goal of the Graduate Program in Neuroscience is to prepare you for a successful career inside or outside of academia. There are many different facets to becoming a successful researcher or professional. One must develop a wide range of intellectual and interpersonal skills as well as a strong knowledge base. Some aspects of the training are not found in textbooks, journals, and courses, or in the work documented in a thesis. A researcher must learn to develop new ideas and new approaches to succeed. They must be able to respectfully engage with other researchers, research participants, or patients, and communicate their findings. They must also learn how to be an effective and supportive team member, mentor and, at the PhD level, take ownership of their research efforts.

The Learning Plan is designed to help you plan and reflect upon the activities that will be undertaken during the academic year, and to consider how these activities will contribute to the degree and program requirements as well as to your professional goals.

Please take some time to think about your learning goals and activities first and then meet with your supervisor to discuss. The completed form should be submitted to the Graduate Coordinator at ubc.neuroscience@ubc.ca by October 15 of your start year in the program.



_	Graduate Program in Neuroscience Learning Plan
Date:	
Program/	year:
Trainee's	Name:
Superviso	r's Name:
Superviso	r home department:
	Part A Learning Plan: Outline of Goals, Skills & Requirements

COURSE REQUIREMENTS

Please list the required courses that the student will complete or has already completed and the marks obtained (where applicable). This includes core courses NRSC 500 and 501, electives if applicable, and any other courses required by UBC or the Faculty of Medicine, such as the mandatory Responsible Conduct of Research Course (RCR, https://grad-postdoc.med.ubc.ca/current-students/research-conduct-course/), the TCPS2 tutorial Course on Research Ethics (https://ethics.gc.ca/eng/education-tutorial-didacticiel.html), Biosafety Training (https://srs.ubc.ca/health-safety/research-safety/biosafety/biosafety-training/), etc. MSc students must complete 18 credits and PhD students must complete 12 credits to graduate.

COURSE	Term taken	Mark
NRSC 500		
NRSC 501		
RCR		

COURSE	Term taken	Mark
.0		

Neuroscience

OTHER USEFUL WORKSHOP/SKILLS RECOMMENDATIONS:

ADDITIONAL LEARNING GOALS

For the following section, please think about some activities and goals that you would like to complete and achieve within the coming year. Examples of activities and goals could include, but are not limited to: performing a literature review, acquiring a specific technical skill, learning statistical methods, completing course work, giving a conference presentation, participating in a professional development workshop or event, completing the comprehensive examination.

The list is meant to promote reflection and discussion about the activities that you will undertake during a given academic year, and how they will contribute to your mastery of some of the degree-level expectations. Please be as specific with regards to steps and training as you can, and please reach out to the program at ubc.neuroscience@ubc.ca if you are unsure of some of the resources available to you.

The first table has been filled for you as an example.

	Description	Timeline	Completed
Goal	To improve scientific writing		
Steps/ Training	 Independently work through materials provided on the UBC webpage for STEM Writing Resources for Learning (https://scwrl.ubc.ca/) Complete at least one workshop through the UBC Centre for Writing and Scholarly Communication (https://writing.library.ubc.ca/graduates/workshopsand-retreats/) 		
Outcomes	Ability to independently write a manuscript		



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2	Description	Timeline	Completed
Goal			
Steps/Training			
Outcomes			

	Description	Timeline	Completed
Goal			
Steps/Training			
Outcomes			

	Description	Timeline	Completed
Goal			
Steps/Training			
Outcomes			

	Description	Timeline	Completed
Goal			
Steps/Training			
Outcomes			

Feel free to add more if required.

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Part B.	Consent				
TRICOUNCIL CONSENT for HIGHLY QUALIFIED PERSONNEL (HQP)					
	,				
applications submitted for consideration to NSI only include my name, type of HQP training and of the project or thesis and, to the best of my s	d status, years supervised or co-supervised, title upervisor's knowledge, my position title and ation is submitted. I understand that NSERC will				

that assess my supervisor's contributions to the training of highly qualified personnel (HQP),

Part A and B of this form has been reviewed by both the Trainee and Supervisor.

Trainee Signature:	Supervisor Signature:	
Date:	Date:	

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including confidential peer review.

Neuroscience