Why GRADUATE STUDIES in NEUROSCIENCE?

The multidisciplinary graduate program in Neuroscience is educating the next generation of leaders who will build on the progress in reducing the impact of neurological disorders. Top students from across North America and beyond come to the Centre to learn in a collaborative environment where they can learn from the best minds in the field. The Neuroscience graduate program is firmly rooted in research because our objective is to produce highly-trained graduates who will continue our efforts to prevent and treat neurological diseases. The program offers studies spanning the full spectrum of neuroscience research, from cellular/molecular to clinical studies.

Why QUEEN’S?

At the forefront of discovery and innovation is the Centre for Neuroscience Studies (CNS) at Queen’s University. A hub of multidisciplinary research and teaching aimed at improving the understanding of the brain, how it works and how new therapies and diagnoses can play an important role in the prevention and treatment of diseases like Parkinson’s, Alzheimer’s, Stroke, Obesity, Fetal Alcohol Spectrum Disorder, Schizophrenia, Behavioral Disorders, and Depression.

“Right from the day I started at the Centre for Neuroscience Studies, it felt like family. The camaraderie and support you get is amazing.”
– Alicia Peltsch, PhD

The Centre for Neuroscience Studies (CNS) welcomes applications from students from a variety of different academic backgrounds. It offers an interdisciplinary program recruiting expertise from a wide range of research areas and backgrounds, ranging from the use of cellular/molecular and genetic approaches to those that emphasize neuronal systems, whole organism and clinical studies.

Program STRUCTURE

PhD (4 years, full time): Course work, research project, seminar series, thesis, defense, and a comprehensive examination in 2nd year.

Research AREAS

- Cellular/Molecular Neuroscience
- Systems Neuroscience
- Cognitive/Behavioural Neuroscience
- Clinical Neuroscience
- Computational Neuroscience

Visit the Neuroscience website to learn more about faculty members and their research areas. When you find a faculty member with similar research interests to yours, contact him/her and tell them about your interest in graduate work and related experience.
DOCTOR OF PHILOSOPHY (PHD)

ACHIEVE YOUR ACADEMIC GOALS

YEAR I
- Key priorities include your relationship with your supervisor, completing required health and safety, animal, human research ethics training and any required coursework, developing your research proposal, and finishing part 1 of your PhD thesis form.
- Look to Student Academic Success Services for a variety of supports.

YEAR II
- Priorities include pursuing research, completing your comprehensive exam, and writing your Annual Report.
- Find your way through the academic process with the help of Expanding Horizons workshops and SGS Habitat.
- Complete AODA training in accessible customer service.

YEAR III
- Continue to research, write your dissertation and finish your Annual Report. Check out the SGS Dissertation Boot Camp or Dissertation on the Lake.
- Consider publishing elements of your research. Learn from the Expanding Horizons Publishing workshop.
- Use conference presentations to create and refine dissertation material.

YEAR IV & TRANSITIONING
- Present your research to Neuroscience graduate students and faculty.
- Complete and defend your dissertation.
- Continue to pursue publication options.
- Complete PhD Thesis Form Part 2 at least 4 months prior to defense, and your Annual Report.

MAXIMIZE RESEARCH IMPACT

YEAR I
- Think about audiences for your research.
- Complete ROMED online module on research ethics if doing research with human or sensitive topics.
- Apply to CiHR, NSERC, OGS, and other funding.
- Attend conferences in your field such as the Society for Neuroscience (SfN) or the Canadian Association for Neuroscience (CAN).

YEAR II
- Present your work at graduate conferences, through professional associations, or topic conferences.
- Expand your research audience through social media.
- Apply for the Graduate Dean’s Travel Grant for Doctoral Field Research.

YEAR III
- Continue to present at conferences.
- Consider participating in the 3 Minute Thesis (3MT) competition.
- Contact the Queen’s Media Centre for guidance on speaking to news outlets about your work.

YEAR IV & TRANSITIONING
- Continue to attend conferences and connect with scholars in your field and with community partners.
- Continue public outreach through social media and the Queen’s Media Centre.
- Set up a meeting with the School of Graduate Studies for a Grad Chat to discuss your research interests.

BUILD SKILLS AND EXPERIENCE

YEAR I
- Serve on departmental, faculty or university committees.
- Consider positions in student services, the SGPS, or media outlets like the Queen’s Journal, CFRC and the SGS Blog. Look in the AMS Clubs Directory.
- Use a Teaching Assistant or Research Assistant position to develop your skills and experience.

YEAR II
- Hone skills for non-academic employment by continuing involvement on committees and in community.
- Start keeping an eportfolio of your skills, experiences and competencies.
- For help with teaching, get support from the Centre for Teaching and Learning. Enroll in SGS901 or the PUTH Certificate for more professional development in teaching and learning.

YEAR III
- Find opportunities for extra training through CTI, Expanding Horizons, Mitacs, or other sources to boost your skills. Investigate internships from Mitacs and other sources.
- Prepare for work or studies in a multi-cultural environment by taking OHC and Four Directions Aboriginal Student Centre’s Training Certificate.

YEAR IV & TRANSITIONING
- Practice articulating the skills you have been developing in settings outside the university, such as casual conversation, networking, and interviews. Get help from a Career Services workshop.
- Consider joining one of the many professional associations like the Society for Neuroscience (SfN), or the Canadian Association for Neuroscience (CAN).
- Continue targeted networking with people working in careers of interest, through QueensConnects and apply for post-doc fellowships and positions.
- Set up a meeting with the School of Graduate Studies for a Grad Chat to discuss your research interests.
- Build connections with faculty outside of your department. Pursue interviews for faculty positions and apply for post-doc fellowships and positions.
- Apply to jobs or make plans for other adventures. Get help from Career Services with job searching, resumes, or interviews.

ENGAGE WITH YOUR COMMUNITY

YEAR I
- Explore how you can connect with your community through experiential opportunities on- and off-campus.
- Consider volunteering with different community organizations, such as the Neuroscience Outreach Program.
- Attend the seminar series put on by the Centre for Neuroscience Studies.

YEAR II
- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.

YEAR III
- Do some targeted networking with people working in careers of interest, through QueensConnects on LinkedIn, the Queen’s Alumni Association professional associations, and at conferences. Get help from a Career Services workshop.

YEAR IV & TRANSITIONING
- Consider networking with people interested in specific areas of neuroscience, through QueensConnects and apply for post-doc fellowships and positions.
- Set up a meeting with the School of Graduate Studies for a Grad Chat to discuss your research interests.
- Build connections with faculty outside of your department. Pursue interviews for faculty positions and apply for post-doc fellowships and positions.
- Apply to jobs or make plans for other adventures. Get help from Career Services with job searching, resumes, or interviews.

LAUNCH YOUR CAREER

YEAR I
- Finding career fit starts with knowing yourself. Take a Career Services career planning workshop or meet with a career counselor for help. Check out books like So What Are You Going to Do With That? or Planning a Scientific Career in Industry.
- Explore different careers of interest by reading alumni profiles on the SGS website, and using QueensConnects on LinkedIn to connect with Queen’s alumni or find alumni in various careers through Ask an Alumni. For more information check out Career Cruising.
- Investigate requirements for professional positions or other opportunities related to careers of interest.

YEAR II
- Start building your teaching portfolio including student evaluations, and seeking mentorship.
- Explore different careers of interest by reading alumni profiles on the SGS website, and using QueensConnects on LinkedIn to connect with Queen’s alumni or find alumni in various careers through Ask an Alumni. For more information check out Career Cruising.

YEAR III
- Participate in hiring committees and attend job talks. Research academic careers of interest. Craft your CV and job application materials.
- Start focusing on non-academic areas of interest. Research organizations of interest and start putting together your industry resume and begin your job search plan.

YEAR IV & TRANSITIONING
- Participate in hiring committees and attend job talks. Research academic careers of interest. Craft your CV and job application materials.
- Start focusing on non-academic areas of interest. Research organizations of interest and start putting together your industry resume and begin your job search plan.

WHERE CAN I GO?
A PhD in Neuroscience can take your career in many directions. In Canada, less than 40% of all PhDs will work in post-secondary education – the majority will work in industry, government, or non-profits.
- Post-doctoral study or academia
- Outreach education
- Scientific writing
- Medical industry
- Pharmaceutical companies
- Medical school

Visit careers.queensu.ca/gradmaps for the online version with links!

WHAT WILL I LEARN?
A graduate degree in Neuroscience can equip you with valuable and versatile skills, such as:
- Knowledge and technical skills
- Effective communication skills in multiple forms for diverse audiences
- Information management: prioritize, organize and synthesize large amounts of information
- Time management: meet deadlines and manage responsibilities despite competing demands
- Project management: develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions
- Creativity and innovation
- Perseverance
- Independence and experience as a collaborative worker
- Awareness, an understanding of sound ethical practices, social responsibility, responsible research and cultural sensitivity
- Professionalism in all aspects of work, research, and interactions
- Leadership: initiative and vision leading people and discussions
Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
- A Master's degree in Neuroscience, or in a field with a strong neuroscience and research component.

ADDITIONAL REQUIREMENTS
- Statement of Interest.
- Current CV.
- If English is not a native language, prospective students must meet the English language proficiency requirements in writing, speaking, reading, and listening. The School of Graduate Studies requires the following minimum scores: TOEFL (paper-based): 550, (2) TOEFL iBT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30), for a total of 88/120 (applicants must have the minimum score in each test as well as the minimum overall score), or (3) IELTS: 7.0 (academic module overall band score), or (4) PTE Academics: 65.

KEY DATES & DEADLINES
- Application due: To be eligible for internal awards, applications must be submitted by February 1st. Applications received after the deadline will be accepted based on supervisor availability.

Before you start your application, please review the Graduate studies application process.

What about FUNDING?

PhD students in Neurosciences are offered a minimum funding of $23,000 per year. As part of the minimum funding package, you may serve as a Teaching Assistant, but it is not guaranteed. The Centre for Neuroscience offers numerous academic awards. Applicants to the Centre for Neuroscience program with external funding awards will have a greater opportunity of being accepted to the program.

Apply for external funding from OGS, CIHR/NSERC and other sources. Queen’s will automatically issue a $5,000 top-up to Master’s winners of federal government tri-council awards. See the School of Graduate Studies’ information on awards and scholarships for more.