

Pathology & Molecular Medicine

PhD Map

Applying to and Navigating Graduate Studies



GRAD MAP FOR PhD STUDENTS →

Why GRADUATE STUDIES in PATHOLOGY & MOLECULAR MEDICINE?

Graduate students and their work are an important part of an ongoing research process that provides the community with ways of understanding natural, cultural, imaginative, social and technological phenomena. The faculty, staff and trainees in Pathology & Molecular Medicine are engaged in world-class research and teaching, attracting and mentoring the best students, the finest educators, dedicated support staff, and internationally-competitive researchers. We value curiosity, creativity, commitment, and collegiality.

The department is a distinguished academic centre engaging a wide range of research endeavours including anatomical sciences, bacteriology, biochemistry, cancer biology, cardiovascular sciences, cell biology, developmental biology, immunology, molecular biology, neuroscience, pharmacology, physiology, reproductive biology, toxicology and virology. The breadth and depth of our research has a strong foundation in multi-disciplinary discovery. The faculty and trainees collaborate with numerous research institutions locally, nationally and internationally.

Queen's is a great setting to learn first-hand how the fast pace of molecular genetic research is changing clinical practice, leading to exciting new diagnostic and treatment approaches for cancer and other diseases.

Why QUEEN'S?

With a focus on cancer – 12 of our 20 investigators are cancer biologists – our department members deliver comprehensive diagnostic laboratory and clinical services to Southeastern Ontario through the Kingston General Hospital, offering great training for the next generation of biomedical research scientists and laboratory physicians.



Program STRUCTURE

PhD (4 years): Course work, research making novel contributions to the field of study, and a thesis.

Research AREAS

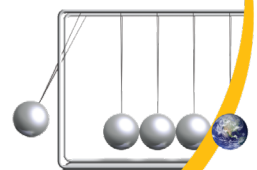
- Cancer Research and Developmental Biology
- Human Genetics and Cytogenetics
- Hemostasis, Thrombosis Research, and Vascular Biology

Visit the [Pathology and Molecular Medicine website](#) to read faculty profiles and learn more about faculty members' 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, area of research interest and related experience.

Please include a current CV, contact information for 2-3 references who would be familiar with your academic performance and any research experience and an unofficial transcript. The email correspondence is also an opportunity for you to find out if the faculty member is accepting new graduate students to supervise. Consider meeting with your potential supervisor at departmental events for prospective students.



School of Graduate Studies
Create an impact
www.queensu.ca/sgs



Pathology & Molecular Medicine PhD Map *

DOCTOR OF PHILOSOPHY (PhD)

YEAR I

YEAR II

YEAR III

YEAR IV
& TRANSITIONINGACHIEVE YOUR
ACADEMIC
GOALS

- Key priorities include completing any required coursework and training, and developing your research proposal.
- Meet early with your supervisor to set expectations and discuss roles, responsibilities, program requirements, resources, research/occupational goals, timelines, and any required accommodation plans.
- Look to [Student Academic Success Services](#) for a variety of supports.

MAXIMIZE
RESEARCH
IMPACT

- Think about audiences for your research.
- Complete CORE online module on research ethics if doing research regarding sensitive topics.
- Apply to CIHR, NSERC, OGS, and other funding.
- Attend conferences in your field.

BUILD
SKILLS AND
EXPERIENCE

- 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.

ENGAGE
WITH YOUR
COMMUNITY

- Explore how you can connect with your community through experiential opportunities on- and off-campus.
- Consider volunteering with different community organizations, such as the [Canadian Cancer Society](#), [Kingston General Hospital](#) and the [Canadian Breast Cancer Foundation](#).

LAUNCH YOUR
CAREER

- Finding a career fit starts with knowing yourself. Take a [Career Services workshop](#) or meet with a career counsellor for help. Check out books like *So What Are You Going to do With That?* or *Planning a Scientific Career in Industry* from the [Career Resource Area](#) for advice on various career options.
- Start reading publications like [University Affairs](#) and the [Chronicle of Higher Education](#). Browse non-academic labour market websites.
- Stay on the lookout for special events like School of Graduate Studies Career Week to explore your career pathways.

- Priorities include completing your comprehensive examination and pursuing research.
- Find your way through the academic process with the help of [Expanding Horizons](#) professional development workshops, the Pathology and Molecular Medicine Graduate Coordinator and the [SGS website](#).

- Present your work at graduate conferences such as [Canadian Cancer Research Conference](#), 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](#).

- Hone skills for non-academic employment by continuing involvement on committees and in the 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 SGS902 or the PUTL Certificate for more professional development in teaching and learning.

- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.
- If pursuing research abroad or outside Kingston, investigate options such as the Jeremy Nesheim Graduate Travel Award which supports travel to an expert laboratory to learn new methods.

- Start building your teaching portfolio, including student evaluations, and seeking mentorship.
- Explore different careers of interest by using [Queens Connects](#) on LinkedIn to connect with Queen's alumni. For more information check out [Career Cruising](#).
- Investigate requirements for professional positions or other opportunities related to careers of interest.

- Continue to research and write your dissertation. Check out the [SGS writing camps](#), such as Dissertation Boot Camp.
- Consider publishing elements of your research. Learn from the Expanding Horizons publishing workshop.
- Use conference presentations to create and refine dissertation material.

- 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.
- Set up a meeting with the School of Graduate Studies for a [Grad Chat](#) to discuss your research interests.

- Investigate internships from [MITACS](#) and other sources.
- Find opportunities for extra training through CTL, Expanding Horizons, MITACS, or other sources to boost your skills.
- Prepare for work or studies in a multi-cultural environment by taking the Intercultural Awareness Training Certificate hosted by QUIC and Four Directions Indigenous Student Centre.

- Do some targeted networking with people working in careers of interest, through [Queens Connects](#) on LinkedIn, the [Queen's Alumni Association](#), professional associations, and at conferences. Get help from a Career Services workshop.

- 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.

- Plan date of thesis submission for examination.
- Present your research to graduate students and faculty or at conferences and work with supervisor to prepare for defence.
- Review submission and examination guidelines.
- Secure necessary oral defence accommodations.
- Discuss career pathways, references letters, and publication options with your supervisor.

- 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.
- Consider putting an article in [The Conversation](#).

- 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.

- Join professional associations like the [American Society of Hematology](#), the [American Association for Cancer Research](#), the [Canadian Cancer Society](#).
- Continue targeted networking with people working in careers of interest. Join groups on LinkedIn reflecting specific careers or topics of interest in pathology and molecular medicine.

- 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, and interviews.
- If considering jobs abroad, research possible immigration regulations. If you are an international student interested in staying in Canada, consider speaking with an [International Student Advisor](#).

WHAT WILL I LEARN?

A graduate degree in Pathology and Molecular Medicine 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 discussion

WHERE CAN I GO?

A PhD in Pathology & Molecular Medicine 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.

- Health Care (Hospital clinical labs)
- Pharmaceutical companies
- Academic labs
- Scientific supply companies
- Administration in academic, health care or government settings
- Teaching positions in academic institutions or the private sector
- Technical positions in academic institutions or the private sector
- Marketing positions in private sector companies

Taking time to explore career options, build experience, and network can help you have a smooth transition to the world of work after graduation.

Graduate Studies FAQs

How do I make the most of my time at Queen's?

Use the Grad Map to plan for success in five overlapping areas of your career and academic life. Everyone's journey is different - the ideas on the maps are just suggestions to help you explore possibilities. For more support with your professional development, take advantage of the SGS professional development framework and the new [Individual Development Plan \(IDP\)](#) process to set customized goals to help you get career ready when you graduate.

Where can I get help?

Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming environment offers the programs and services you need to be successful, both academically and personally. Check out the [SGS website](#) for available resources.

What is the community like?

At Queen's, graduate students from all disciplines learn and discover in a close-knit intellectual community. You will find friends, peers and support among the graduate students enrolled in Queen's more than 130 graduate programs within 50+ departments & research centres. With the world's best scholars, prize-winning professional development opportunities, excellent funding packages and life in the affordable, historic waterfront city of Kingston, Queen's offers a wonderful environment for graduate studies. Queen's is an integral part of the Kingston community, with the campus nestled in the core of the city, only a 10-minute walk to downtown with its shopping, dining and waterfront. For more about Kingston's history and culture, see Queen's University's [Discover Kingston](#) page.

Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS

- Honours BSc or equivalent in life sciences, biochemistry, biology, or equivalent program with first class standing, or MSc, or equivalent research experience.
- We consider all of your grades, but pay particular attention to the last two years of science-related courses.

ADDITIONAL REQUIREMENTS

- If English is not a native language, prospective students must meet the [English language proficiency requirements](#) in writing, speaking, reading, and listening. The following minimum scores are required: (1) TOEFL iBT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30). Applicants must have the minimum score in each test as well as the minimum overall score, or (2) IELTS: 7.0 (academic module overall band score and a 7.0 for each test band), or (3) PTE Academics: 65, or (4) CAEL CE -70 (minimum overall score).

KEY DATES & DEADLINES

- **Application due:** February 1st to be considered for internal funding.
- **Notification of acceptance:** Quickly pending confirmation of a supervisor.

Before you start your application, please review the [Graduate studies application process](#).

What about FUNDING?

Minimum funding guarantee for PhD students: \$23,000 annually. For internal, provincial and national competitive award winners, the funding package increases by 2.5%, 5% and 10% respectively.

Apply for external funding from CIHR, NSERC, OGS, the Heart & Stroke Foundation, CBCF, the Department of Defence, the American Cancer Society and other sources. Queen's will automatically issue a one time \$10,000 award to incoming PhD students who have won federal government tri-council awards. For more information, see the School of Graduate Studies' information on [awards and scholarships](#).



Queen's
UNIVERSITY

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