

Student Guide to Undergraduate Research

May 2023



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This guide was produced by the Principal's Undergraduate Research Leaders 2023 (Hayley Galsworthy, Sylvie Garabedian, Melody Garas, Sanchit Kaushal, Lisa Lavalle, and Victoria Yu) under the supervision of Klodiana Kolomitro and with special thanks to Katrina Carbone, Cory Laverty, Karen Sims, and Dale Lackeyram for providing feedback.



INTRODUCTION

Welcome to the guide on **undergraduate research** at Queen's University!

Engaging in research as an undergraduate student can be an incredibly rewarding experience, allowing you to pursue topics of interest, develop your academic and professional skillsets, and make meaningful contributions to the institution, community, and beyond. Developed by students, for students, this guide highlights the benefits of undergraduate research, provides insight into the wide variety of research opportunities available at Queen's University, and offers practical advice on how to get started. We hope that our insights and firsthand experiences will help you make the most of your undergraduate experience.

BENEFITS TO UNDERGRADUATE RESEARCH

Critical Thinking and Problem Solving

Involvement in research allows students to ask and answer insightful questions, while critiquing the questions and solutions provided to them. Inquiry-based learning provides you with the essential tools and mindset needed to solve pressing issues and societal challenges.

Communication

Research necessarily involves communicating and disseminating your findings in a way that your audience understands. At the undergraduate level, this often happens through poster presentations, slideshow presentations, a written report or thesis, film, art, among others. Regardless of the medium, communicating with your audience is a key skill that conducting research helps reinforce.

Application

Conducting research can allow you to bear witness to how theories and concepts learned during coursework can be applied to real life scenarios. Rather than passively learning content, research provides students with hands-on learning opportunities that actively engages you in applying the process.

Independence and Teamwork

The research environment allows you to learn how to work independently and within a team of researchers. For instance, in capstone projects or thesis projects, you have individual responsibilities that contribute to the success of the entire research team.

Explore Research Interests

Conducting research provides the opportunity to pursue your interests in a way that also expands your perspectives on them. When working with a multi- or inter-disciplinary team, you might have the opportunity to experiment in different fields of study or different topics (e.g., asking the same question from different perspectives) to discover what excites you, inspires you, and what you would like to pursue further.

Contributions

Research opportunities available to undergraduates can be very fulfilling, giving you the opportunity to contribute to work that has impact and meaning outside of the university environment with the potential to significantly advance the field of study itself, and impact the community.

Research-Specific Skills

By participating in research, you will learn and develop skills specific to your field of research. For instance, learning how to use specific programs (e.g., statistical software, analytical equipment) relevant to the research required in your field, while also demonstrating your ability to learn something new.

Building Connections

Being a part of a research team/network means working with and learning from others who share similar interests to you and can help guide you in this new exploration. Participating in research is a great opportunity to form connections and network with your peers, supervisors, mentors and hopefully champions for your future career path.

Contributing to Queen's Strategy

One of the Principal's strategic goals is to enhance "the interdependence of research and teaching, with emphasis on greater integration of research in the undergraduate experience, an increase in the ratio of graduate to undergraduate students, and a program to attract, support, and more effectively integrate postdoctoral fellows." To achieve this goal, Queen's University is committed to continue to provide students with enriching research opportunities and promote resources that will support access to such opportunities.

EXAMPLES OF TYPE OF RESEARCH

We define research as the creation or utilization of knowledge and/or the contribution of new perspective to existing knowledge. The table below offers examples of types of research; the list is not meant to be exhaustive, but rather offer some examples of research used across various disciplines and faculties.

| Type of Research | Description | Example |
|----------------------|--|---|
| Applied Research | Designed to find practical solutions for existing problems. | Applying research about a human health condition to develop a platform to help practitioners and/or patients better assess their health in real time. |
| Action Research | Aims to understand and assess actions of the past, in terms of their effectiveness of achieving their intended goals. | Collecting feedback through a survey at the end of the term to understand which learning tools students preferred in an inter-disciplinary course. |
| Causal Research | Explores causality or cause-effect relationships between different variables. This is where the idea of causation vs correlation is explored in more depth. | Exploring whether remote work increased employee retention, or if a new government policy facilitated the change it was designed to create. |
| Comparative Research | Aims to identify similarities and differences between two objects of interest. | Conducting a genomic analysis to understand the origins of homologous structures in species. |
| Indigenous Research | Is conducted by or with First Nations, Inuit, Métis or other Indigenous societies and individuals in a culturally appropriate manner (Bergier, n.d.). The techniques employed may vary not only among projects but also communities, social, and cultural groups and may include one of the many different approaches to knowledge gathering, such as storytelling, circle sharing and ceremonies. | Examining the role that the arts and Indigenous cultural practices played in the Truth and Reconciliation Commission (Prof. Dylan Robinson research project). |

| Type of Research | Description | Example |
|------------------------|--|---|
| Critical Theory | Aims to reveal, examine, or challenge, power dynamics and inequities in society. | Exploring how inadequate access to technology can present disadvantages for some students. |
| Ethnography | Aims to gain a deeper understanding of the culture, conventions, and social dynamics of a particular group or community. | Observing a classroom to gain a better understanding of the students' interactions with their instructor as they relate to teaching and research integration. |
| Experimental Research | Aims to expand our knowledge and understanding of a topic using experimental methods. Experimental research is often hypothesis-driven and may, for example, use controlled experiments to determine causal relationships between environmental (real life) factors and an observed outcome. | Experimental petrology in geology relies on lab experiments to replicate real-life rock formation to deduce the pressure-temperature at which rocks formed. |
| Meta-Analysis Research | Aims to compile and review findings and data from many independent published studies into an overview of the current state of knowledge or to test questions that can only be addressed with large datasets across studies. | Assessing whether the impact of public policy on education outcomes varies across nations. |

With any of the above types of research, the choice of the methodological approach is based on what is most appropriate for the situation. This often includes through quantitative methods (which rely on statistical or numerical analysis of data collected through surveys, polls, etc.), qualitative methods (which involve collecting non-numerical data through interviews, observations, field notes, etc.), or in most cases, mixed methods which combine the two approaches.

RESEARCH OPPORTUNITIES INTERNAL TO QUEEN'S

After deciding if you are interested in getting involved in research as an undergraduate student, one of the first steps is to find opportunities of interest and for which you are eligible. This section outlines the ways in which you can identify existing opportunities internal to Queen's University.

Volunteering with a Faculty Member or Graduate Student

There are research groups on campus that look for undergraduate volunteers to assist with ongoing projects or research tasks. You can find more information about the different research groups by visiting department websites or the Queen's Research Discovery Network to find faculty who are conducting research in areas you are interested in exploring. If you are interested in volunteering with a specific research team or faculty member, you should look for a point of contact (e.g., graduate student, faculty member, research coordinator, research group director) to introduce yourself and inquire about available opportunities (see section: How to Cold Email).

Undergraduate Student Summer Research Fellowships (USSRF)

The USSRF provides an experiential learning opportunity for students enrolled in a bachelor's degree program at the time of application. Students can complete the USSRF at one of two campuses: Queen's University (Kingston, ON) and Bader College (United Kingdom). To be eligible for the award students must be eligible to work in the location of the campus.

Queen's University

- Value: \$7120 + Supervisor Contribution (minimum \$2860) = \$9800 award
- Up to 16-week fellowship (35 hr./week) as a research assistant

Bader College

- Value: \$5300 + room & board and reimbursement for return travel
- 8-week fellowship (35 hr./week) from May 1st to June 30th

You can read more on the [USSRF webpage](#).

Queen's University Internship Program (QUIP)

QUIP provides second and third-year students with a 12-16-month paid work experience professionally supervised. These positions help students apply their learning and explore various practices and technologies. The program is open to domestic and international students in the Faculty of Engineering and Applied Science, Faculty of Arts and Science, and Faculty of Health Sciences.

Read about how to [build experience](#).

Summer Work Experience Program (SWEP)

SWEP is another opportunity for undergraduate students to engage in a challenging and rewarding summer work experience. *“To be eligible, students must be currently registered in their first full-time Queen’s undergraduate degree program AND be returning to the same full-time degree program in the fall.”* The department, faculty members, and sponsor organizations are responsible for selecting candidates and making job offers. Positions are usually full-time and run a maximum of 16-weeks between May 1 and August 31, with a remuneration of \$17.17/hour plus vacation pay. [Explore details here.](#)

NSERC—Undergraduate Summer Research Awards (USRA)

NSERC provides \$9800 of funding for approximately 75-100 undergraduate students to carry out research in the summer. Awards are partially funded by the three federal granting agencies: [Natural Sciences and Engineering Research Council](#) (NSERC), Canadian Institutes of Health Research (CIHR), and Social Sciences and Humanities Research Council (SSHRC). Funding from NSERC is available for self-identifying Indigenous students (unlimited), self-identifying Black students (unlimited) and a limited number for students who do not self-identify with either group (typically about 75 per year; with the allocation varying between natural science and engineering departments). Stay tuned to the website of the home department for the faculty member you would like to work with to learn about their application process and deadlines. To be eligible, students must be enrolled in a bachelor’s program at the time of application and with their application supported by the faculty supervisor. You must be a Canadian citizen, a permanent resident of Canada or a Protected Person under subsection 95(2) of the Immigration and Refugee Protection Act (Canada), as of the deadline date for applications at the institution.

Queen’s MyCareer

The Queen’s MyCareer website includes several employment opportunities internal to Queen’s, but also includes job postings from external companies. As an applicant, you can filter the search for keywords applicable to your professional interests. Career Services also offers advising opportunities with a career coach, assistance in writing compelling resumes and cover letters, and navigating the application process. [You can learn more information by exploring MyCareer website.](#)

Mitacs*

Mitacs is an organization that supports collaboration between business and not-for-profit sectors and research institutions, driving collaboration and innovation at home and abroad through paid internships and student mobility opportunities. The Accelerate program provides the opportunity for students to hold paid research internships at companies interested in conducting research with university researchers. To apply, students must have a faculty supervisor interested in supporting the project. Globalink is a program that provides student mobility opportunities in collaboration with international researchers. For the Globalink Research Award, students with a supervisor at Queen’s may be funded to travel for work with a faculty supervisor at an international institution. Queen’s students may also travel to Germany with the RISE-Globalink program for a 10-12 week project. *Mitacs is an external granting agency that usually operates through matching funding provided by the home institution and the partner organization

Research Centres and Institutes

There are over 20 research centres and Institutes at Queen's. They promote multidisciplinary collaborations and student engagement. For more information you can [visit this website](#) as there might be opportunities for student engagement in undergraduate research.

RESEARCH OPPORTUNITIES EXTERNAL TO QUEEN'S

This section outlines some examples of research opportunities external to Queen's.

Ontario Public Service

Ontario Public Service is a Summer Employment Opportunities (SEO) program that can help develop new skills via working with one of the ministries, provincial agencies, or community groups serving Ontarians across the province. Each year, there are thousands of full-time positions for students and new graduates, with contracts ranging from 7-18 weeks (about 4 months) between May and September. Many of the said full-time positions include research-related positions within the government.

[Read more here.](#)

Federal Student Work Experience Program (FSWEP)

Nationally, you can find summer positions that the Government of Canada has to offer and gain meaningful experience working on projects and initiatives that impact the lives of Canadians. Many of the summer positions include research-related positions.

[Learn more here.](#)

Google Search

Google is an underutilized resource for job searching. Other institutions often look for students to participate in research over the summer as it helps attract a more diverse student pool to graduate studies. Simply search "Undergraduate Research + University of Interest."

Examples of undergraduate research information and opportunities at other institutions include:

- [University of Ottawa](#)
- [University of Waterloo](#)
- [York University](#)
- [McGill University](#)

Exploring industry is another avenue for finding research opportunities. One example of such an opportunity is working within the Research and Development (R&D) department at a company. To begin your search, consider identifying companies of interest or using job search tools (e.g., Glass Door, Indeed, or LinkedIn) to explore positions that align with your research interests and job criteria.

CHARACTERISTICS OF A GOOD RESEARCH SUPERVISOR

1. **Expertise:** A good research supervisor conducts research in a field that aligns with your areas of interest. Given the duration of a research project that can span several months, it can be challenging to engage in research that is not of interest to you. However, sometimes it is worth exploring different paths which could help you gain skills that may increase your success in getting the research position you really want.
2. **Active Engagement:** A good research supervisor should be actively involved in the research process. As much as it is important for you to enjoy the research you are doing, it is also important to ensure that the research group values your unique skillsets and expertise.
3. **Commitment to Mentorship:** A good research supervisor is a mentor to students. Great supervisors are interested in the student's goals and provide the necessary resources and support to achieve their desired goals. Moreover, a great supervisor will also be your champion and advocate for helping you achieve those goals.
4. **Clear Expectations:** A good research supervisor has clear expectations for the research, you and other members of the team. Examples might include reviewing a code of conduct, co-developing a manifesto, or providing opportunities for identifying learning goals.
5. **Flexible and Adaptable:** A good supervisor is flexible and adaptable to accommodate the needs and circumstances of their team. Projects can be complex and iterative, with unexpected obstacles arising throughout the process.
6. **Professional Development:** A good supervisor is not only committed to ongoing learning, but provides and promotes opportunities for their students to engage in workshops, training sessions, conferences, and informal presentations to elicit feedback and encourage skill development.
7. **Regular Meetings:** A good supervisor will offer regular meetings with you and other members of the team. Although this depends on the size of the research team, they are available to you in a timely manner when you need them. Regular communication is important to ensure research, institution, or community event updates are being shared.
8. **Has an Inclusive Approach:** A good supervisor has an inclusive approach to their research, practice, and mentorship. They actively strive for diverse ideas, approaches, and composition of their research group composition (remember not all diversity is visible!).

If you are interested in working with a supervisor (e.g., research project, honors thesis, volunteering on a research project), consider reaching out to current and past students to ask about their experience on the research team.

HOW TO ENGAGE WITH A MENTOR OR SUPERVISOR

Doing Coursework

Coursework is often the first opportunity to discuss research opportunities with faculty members and graduate students. We encourage you to be proactive, take initiative, and ask questions before, during, and after instructional time. Some courses have dedicated time with a teaching assistant (i.e., tutorials, labs, seminars), often an upper-year undergraduate student or graduate student in a master's or doctoral program.

While these students may not always be a primary investigator on a research project, they are likely involved in multiple research projects, and in some cases they may 'supervise' undergraduate students to work with them on components of their graduate projects. Consider sending an email and asking any of the following questions:

- What do you enjoy about research?
- Have you ever worked with undergraduate students in a research capacity? If so, what type of work do they primarily lead?
- What does a typical day look like for you?
- With whom do you primarily collaborate with on research projects?
- How did you find research opportunities when you were an undergraduate student? What type of research were you involved in?
- What tips do you have for someone who is interested in pursuing research?

During lectures or after class, don't hesitate to ask your instructor about their experiences working with and mentoring undergraduate students. You can ask:

- How have you engaged undergraduate students with the research that you do?
- Do you have any openings for undergraduates in your lab this year?
- Would you support a [name the grant program/award] project this summer?

How to Send a Cold Email

A cold email refers to an email sent to an individual or organization without any prior relationship or connection. It is usually an unprompted communication that aims to introduce yourself, initiate discussion, or ask questions about something in particular. When seeking new research opportunities, you might find a researcher, faculty member, or graduate students who engages in research you are interested in doing, but you have never had a connection or conversation with them. Thus, sending a cold email may feel daunting. That said, cold emails can be very effective in securing a research position or building connections that may lead to future opportunities. We have curated advice below that may help you format a cold email.

Subject: Use an email subject that tells them quickly and clearly what you are emailing about; e.g., Looking for undergrad research experience

Introduction: Ensure that you introduce yourself early in the email (e.g., name, program, what your interests are, your personal experiences with research/experiences that are relevant to them). Be sure to confirm their preferred pronouns and salutation by reviewing faculty websites, personal websites, and professional social media accounts.

Sample Email Template:

Dear [NAME],

I hope this email finds you well (or any other e-mail greeting). My name is [Your Name], and I am currently a student in [year of study and program]. I came across your work in [Research Area] and it is a topic that I am interested in learning more about. I was wondering if there might be any opportunities available for me to get involved in your research.

Intentions: In the first paragraph of your email, be sure to make your intentions clear. Are you interested in a volunteer research opportunity? Are you looking for a paid position over the summer? By clearly stating this information, you are likely to be offered opportunities that are tailored to your interests and availability.

Sample Email Sentence:

I was hoping to ask if you have any available opportunities for a [volunteer/paid] research position that I could join.

Tailor the Message: Tailor the message specifically to the person or organization you are emailing. In order to do so, you may need to engage in preparation activities. For example, skim abstracts, articles or grey literature that they may have published, read their research papers or other forms of research dissemination (i.e., reports, newsletters, blogs, etc.), or conduct background research on their field of research. By having a strong foundation, you can confidently talk about their research and what interests you. This will prove to be helpful not only for the cold email but also for the interview to follow.

Samples Email Sentence:

Your recent work on [specific topic] is especially intriguing to me because [insert your reasons].

Conclusion: Close the email out by clearly stating a few actionable next steps. For example, you may request a meeting to chat about their research and potential opportunities for their ongoing projects. You could also consider attaching a resume or curriculum vitae to highlight the qualifications and experiences you could not speak to within the email. At the end of the email, close with gratitude to leave a positive impression.

Sample Email Template:

I was wondering if you would be available for a brief meeting to discuss your research and potential opportunities for me to get involved. I have attached my cover letter and resume/CV to this email to provide more information about my qualifications.

Thank you for taking the time to consider my request. Please let me know if you have any availability in the next few weeks for a meeting. I look forward to hearing back from you.

*Regards,
[YOUR NAME]*

How to Follow-Up on the Cold Email

Individuals or organizations are often busy and may have specific times when they check and respond to emails. If you do not receive a response, don't take offense—sometimes, emails get lost in an inbox or they are over capacity. It would be advisable to send a follow-up email, in a week or so.

Sample Follow-Up Email Template:

*Dear [NAME],
I hope you are doing well. I am sending an email to follow up on the prospect of [summarize your original email in 1-2 sentences]. I am still very interested and excited about [insert] and look forward to hearing from you soon.*

*Regards,
[YOUR NAME]*

An Alternative to the Cold Email

Alternatively, if you are feeling brave, try walking by their office to see if you can catch them. If the opportunity arises, introduce yourself and let them know you were wondering about research opportunities with them. You might not catch them in the office, but maybe you'll find one of their graduate students who can give you some pointers.

How to Prepare for a Meeting (or Formal Interview)

Congratulations on securing the interview! Sometimes this is presented as a meeting with a potential supervisor rather than a formal interview. Either way, at this stage, you want to impress them, but you also don't need to have all the answers already. While it's important that you have a good familiarity with their research and current research activities/interests, don't feel like you need to read every paper they have ever published! That being said, you do want to be confident in knowing why you want to talk to them. Have questions ready and be ready to answer a question like "What are you interested in?" To address that question you might think about your goals and aspirations, relation to your extra/co-curriculars, to your existing research or work (if applicable), or to your coursework.

Prior to the interview, you are encouraged to gather more information on the following:

1. The professor's most popular and cited studies or other examples of impact, such as film, books/book chapters, journalistic writing
2. Search the Queen's Gazette to see if they have published articles about them or been referenced elsewhere on the Queen's website
3. Relevant work to the job posting or to the area of research that you cold emailed them about specific questions about their research or methodologies that you came up with while learning their research or talking to their graduate students or your TAs

After the information-gathering and reflection phase, it's time to practice answering common research interview questions. Here are some categories that you may be asked questions from:

Prior Research and Academic Experiences (it's OK if many of these do not apply to you!)

- What do you think are your most significant academic or research accomplishments?
- What has been the impact of the research you have conducted so far?
- Why have you chosen this area or field, or research question? What is its significance to society?
- What skills do you have to offer that are relevant to this research position? (remember it might only be your keen desire to learn – and that's ok!)
- How do you think the skills that you have learnt during your undergraduate coursework will translate to a research setting?
- Do you have prior experience with ___? (Could be a particular statistical software, technique relevant to that type of research, etc.)

Research and Professional Interests

- What do you hope to get out of this research position?
- What are your goals? Where do you see yourself in 5 years?
- Why do you want to work in this research environment? Why does this research interest you?

General Interview Questions

- What's one time you demonstrated a specific skill (e.g., initiative, collaboration, teamwork)?
- Why do you think that you are the right fit for the job?

Asking Follow-Up Questions

An interview is also a great opportunity for you to get to know the potential supervisor. While they need to identify if you will be a good fit for their research projects, you also need to identify if their work style and approach to mentorship aligns with what you desire. There are sample questions below that you might ask at the end of the interview:

- What traits and skillsets would enable a student to thrive in this research setting?
- What is the expected workload or time commitment?
- How frequently do you anticipate we will meet one-on-one and/or with other research team members?
- How many students are you currently supervising?
- Can you provide examples of the type of work your students are currently completing?
- Do you offer any collaborative opportunities with other students?
- What kind of exposure and learning will I undergo regarding specific research techniques and methodologies?
- What are examples of employment your students have obtained upon completion of their degree(s)?



FACULTY-SPECIFIC RESEARCH OPPORTUNITIES

Please note that this list is not exhaustive. There are other opportunities to engage in research within your faculty, but what is provided here could be a good starting point.

Faculty of Arts and Science

Arts & Science Undergraduate Research Fund (ASURF)

Arts and Science Research Fund (ASURF) was implemented in 2017 to foster and support undergraduate research. The funds raised by the \$3.75 opt-out student fee are matched by the Faculty of Arts and Science. Approximately \$64,450 was awarded to 27 undergraduate students in 2022 to support their engagement in undergraduate research.

NSERC – Undergraduate Student Research Award (USRA)

See the description under the “Research Opportunities Internal to Queen’s” section.

Global Skills Undergraduate Research Opportunity

The Global Undergraduate Research Opportunity enables Queen’s University students—specifically Indigenous students, low-income students, and those with disabilities—to receive financial support for in-person mobility experiences. The program aims to provide thousands of postsecondary students across Canada with invaluable international study and work experiences, strengthening their global skills and competencies.

Research Mentorship Courses

Different faculties have their own research mentorship/self-directed courses. Through these courses, you secure your own supervisor and can conduct a research project and receive course credit. Some examples would be BIOL 538, PSYC 570/575, GNDS 530, GNDS 594, FILM 395.

Final Year Thesis or Research Paper

Students can often complete an undergraduate thesis in the final year of the program. Students work closely with a supervisor or co-supervisors and their research group during their final year thesis.

Performing Research Conference - DAN School of Drama and Music

Every year, the DAN School of Drama and Music hosts the Performing Research Conference, where DAN school undergraduate students present their research projects/assignments.

The Other Kingston Project - Gender Studies

The Other Kingston Project aims to uncover and communicate the significance of marginalized and silenced experiences in Kingston by retelling stories through anti-colonial, anti-racist, anti-sexist, and anti-homo / transphobic methods of research.

[For more information, check out the website.](#)

Smith School of Business

The Smith School of Business offers undergraduate research opportunities as a part of the curriculum as well as extra-curricular opportunities through Research Assistantships and Undergraduate Student Summer Research Fellowships (USSRF).

Curriculum-based Opportunities

For research opportunities integrated into the Commerce Curriculum, explore the following courses: Please note that not all courses are designed to integrate the traditional research methodology. However, all courses listed will give you an opportunity to learn more about research, do a literature review, and/or participate in solving a real-world problem.

1. COMM 404: Discovering New Knowledge – Introduction to Research in Business (3.0 Units)
2. COMM 501: Independent Studies in Business (3.0 Units)
3. COMM 502: Problems in Business (6.0 Units)
4. COMM 503: Business Research (9.0 units)

Extra-Curricular Research Opportunities

The Smith School of Business also offers students the opportunity to be involved in extracurricular research through the **Smith Research Impact Hub**. The impact hub, composed of undergraduate and graduate (MSc/PhD) students is the one-stop hub for research information at Smith. The Hub publishes a biweekly newsletter featuring professors, students and research-related topics designed to support you and encourage you to learn more about research happening at Smith. Research Assistantships are also available. You may contact the Smith Research Impact Hub at bus-research.impact@queensu.ca or directly reach out to professors you would be interested in working with.

Lastly, the **Smith Research Office** (smith.research@queensu.ca) is allocated funding under the Undergraduate Student Summer Research Fellowship (USSRF) program. For more information, contact smith.research@queensu.ca.



Other Resources:

To learn more about Research (undergraduate and graduate) happening at Smith, [visit the Research Website](#).

To learn more about current faculty engaged in research, please [visit the Meet Our Faculty Page](#).

Faculty of Education (Bachelor of Education)

Professional Studies (PROF) Courses

During PROF courses, students will be able to research various topics within education by creating poster projects, research papers, reflections, and presentations. Specifically, PROF 410/411 introduces teacher candidates to action research through one of their assignments for the year. Teacher candidates have the chance to study their own teaching to improve practices in the classroom. Teacher candidates formulate a problem of practice based on what they observed during their previous practicum and develop an action plan to implement changes to their pedagogy and practice. At the end of their practicum, teacher candidates write a report reflecting on the success of the intervention.

Concentrations and Program Tracks

Concentrations and program tracks provide pathways for teacher candidates to develop their professional interests. With choices across a wide spectrum of educational topics, the concentrations allow for in-depth, rigorous, and critical examination of a particular field of study. As a result, a candidate will be well-prepared to be a leader in the area and to work within a collaborative teaching team. Concentration and program tracks are made up of two courses – EDST and FOCl – which provide students with opportunities to develop a better understanding of the relevant issues through discussions, readings, and research-based assignments.



[Learn more information about program tracks.](#)

[Learn more information about concentrations.](#)

Faculty of Health Sciences

Bachelor of Health Sciences Program

Third- or fourth-year students in the Bachelor of Health Sciences program interested in pursuing a research project should contact the Research Course Coordinator (hsciresearch@queensu.ca) and also identify up to five faculty members with whom they may be interested in being supervised by. [Please visit this website for further details.](#)

Queen's Health Sciences Summer Internship Program for Educational Research

The Queen's Health Sciences Summer Internship Program for Educational Research is facilitated by the Office of Professional Development and Educational Scholarship (OPDES) to support students in developing research skills. This program includes a stipend of \$5,000 for up to 310 hours of work.

NSERC Undergraduate Student Research Award

See the description under the "Research Opportunities Internal to Queen's" section. Undergraduate Courses Related to Research

- HSCI 270 – Fundamentals of Health Research Methodology (3.0 Units)
- HSCI 383 – Advanced Research Methodologies (3.0 Units)
- BMED 390 – Integrative Laboratory Studies (3.0 Units)
- PHGY 290 – Investigation of Human Physiological Responses (3.0 Units)
- MICR 290 – Antibiotic Resistance Lab (3.0 Units)

School of Nursing Research Projects QNHR

Three clusters of research have been identified within QNHR 1) populations with complex health conditions 2) practice environments and 3) health care quality. To get involved with each of those you can contact Principal Investigators directly via e-mail.

Queen's Cancer Research Institute (QCRI) 2023 Summer Studentships

These studentships are open to full-time undergraduate Bachelor of Science students in the Faculties of Health Sciences and Arts & Sciences who wish to participate in a summer research project.

Rehabilitation Therapy Research Volunteers

Faculty members and graduate students who are engaging students in research will share opportunities on [this webpage](#).

Summer Studentships in Undergraduate Medicine

Summer Studentships provide funding of (~\$5000) to first or second-year medical students to engage in a research project during the summer months. Applications are shared around January each year (limited positions available), and students are asked to submit a research proposal. Students are also welcome to email any faculty member to inquire and independently arrange research projects.

Medical Student Scholar Academic Enrichment Program (MSSC AEP)

The purpose of the MSSC AEP is to provide interested students with the opportunity to engage more deeply in critical thinking and scholarly endeavors. Some examples of scholarly endeavors include participating in journal clubs, undertaking a research project or critical evaluation of curriculum, and delivering a research presentation.

Faculty of Engineering and Applied Science

Natural Sciences and Engineering Research Council (NSERC) Undergraduate Student Research Awards

See the description under the “Research Opportunities Internal to Queen’s” section.

Charles Allan Thompson Undergraduate Student Research Awards: Summer 2023

This award encourages students’ engagement in research in engineering. There are four awards available to domestic and international upper year students, with a value of \$6000 plus host institution contributions to a total of \$9,999.90 (including vacation pay). The work term is 16-weeks from May 1-August 31 and a GPA of 3.7 or higher is recommended to apply.

McDonald Institute Summer Cross-Disciplinary Internship Program

The McDonald Institute Summer Cross-Disciplinary Internship Program provides the opportunity for full- or part-time students registered in non-physics majors to participate in astroparticle physics research. The program links students with leading astroparticle physics researchers in Canada for opportunities to expand research collaborations, knowledge, and research-based skills. There are four positions available at a value of \$12 000 + \$500 from supervisor towards student opportunities. The application is done in collaboration between the prospective student and supervisor to co-develop a research proposal for submission.

SNOLAB

- Provides opportunities for students to participate in research at SNOLAB in Sudbury, Ontario, including research focusing on astroparticle physics.
- Work terms vary from 4 to 16 months, and include Fall, Winter, and Summer terms.
- Value of the salary depends on the year of study and start of work term.
- Applications occur on a rolling basis depending on the term of interest.

4th Year Thesis Course

Students work closely with a supervisor or co-supervisors and their research group to complete an undergraduate thesis in the final year of the program.



EngSoc Design Teams

There are many research opportunities within design teams, and some examples include Queen’s Genetically Engineered Machine Team, Hyperloop, Queen’s Rocket Engineering Team (QRET), Queen’s Space Engineering Team (QSET), and Queen’s Biomedical Innovation Team (QBiT).

Faculty of Law (JD Degree)

Substantial Term Paper

During their upper years, students must write a substantial term paper that demonstrates their ability:

- to conduct advanced legal research;
- to write clearly and concisely;
- to articulate and develop a thesis; and
- to engage in sustained analysis of the law in a particular area.



LAW 490 (Individual Supervised Project)

“LAW 490 involves a student writing a research paper on a topic to be agreed upon with the faculty member. They are standalone research projects that provide students an opportunity to research topics that are not otherwise offered as a course.”

Practice Skills Courses

Practice Skills Courses give students significant opportunities to undertake legal research and to develop skills in drafting, client interaction, negotiation or mediation, or offers students clinical legal experience. Examples include Negotiations, Alternative Dispute Resolution, Advanced Legal Research, Law Journals and Clinical Courses.

Clinical Externships

Upper-year students can earn academic credit while working for community legal aid clinics serving Kingston, Belleville, Hastings and Prince Edward Counties, Cobourg and Northumberland County. The placements provide students with opportunities to research legal issues under close supervision by clinic lawyers.

Internship with the Federal Government

Queen's Law offers a series of internships in partnership with offices of the federal Department of Justice in Ottawa. Each term, upper-year students earn academic credit while gaining practical experience in legal research and communication skills through work such as preparation and presentation of legal opinions, briefing notes, policy memoranda or litigation reports.



SUMMARY

Engaging in research as an undergraduate student can be a rewarding experience that not only enhances your academic and professional skills, but also allows you to contribute to the community. This guide was developed to provide you with practical resources on how to get involved in undergraduate research, but the effort must be ongoing once you land an opportunity.

Consider sharing your research by:

- Submitting a poster presentation to your faculty's teaching and learning showcase;
- Hosting a workshop for your target audience with key takeaway messages from your research;
- Creating an infographic to share on social media;
- Writing a memo to update your participants of your research findings; or,
- Turning your research findings into a performance or board game.

Queen's University also offers many formal opportunities to share your research:

Inquiry @ Queen's Undergraduate Research Conference

I@Q is a research conference that allows undergraduate students to present research projects and course assignments to faculty, staff, and students. The conference takes place in March, but the Call for Proposals is often released in the Fall semester. [Check out the website for more information.](#)

Queen's Art of Research Photo Contest

The goal of the Art of Research photo contest is to provide a creative and accessible method of sharing the research being done at Queen's University. Each year, community members are welcomed and encouraged to submit their photographs to compete in the competition, as well as bring their research to light. [You can learn more about the opportunity to submit a photo here.](#)

Queen's Science Undergraduate Research Journal (QSURJ)

The QSURJ is an online peer and faculty-reviewed journal led by undergraduate students. The journal seeks to enrich the undergraduate student experience via engagement in the scientific community. The journal accepts a wide range of work from original research to review articles. [To submit a journal or learn more about the publication, check of the website.](#)

Ultimately, by sharing your research, you can make a meaningful impact and inspire others to pursue their academic and professional goals. We encourage you to share your research using multiple avenues to reach wider audiences (e.g., academics, experts in the field, practitioners, and students).

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