

CHOOSING YOUR RESEARCH SUPERVISOR

KEY QUESTIONS TO CONSIDER

Deciding to pursue graduate studies is a crucial point in a student's journey. It involves taking many steps, asking lots of questions, and making important decisions, including choosing a research supervisor. The mentorship your supervisor provides will set you on the right path, with the ultimate goal of helping you successfully complete your degree.

Although you are responsible for your own progress, your research supervisor plays a very important role as a collaborator and as a mentor providing you an adequate framework.

Effective supervision is the key to successfully completing a research master's or PhD project, and the Faculty of Graduate and Postdoctoral Studies facilitates the implementation of favourable conditions for the student's success. In addition to open communication, it's important to establish a reciprocal relationship and way of working together that helps you stay on schedule and is productive and satisfactory for both you and your research supervisor.

To ensure you receive the best supervision possible during your graduate studies, we have compiled in this guide a series of important questions and subjects to reflect upon to help you choose your research supervisor.

This guide is a supplement to the rules that apply to the supervision of graduate studies, in accordance with <u>Règlement des études</u> and <u>Politique d'encadrement des étudiants à la maîtrise avec mémoire et au doctorat.</u>

Here are some questions to consider to help you get started:

- 1. Your project and the research environment
- 2. Supervisors and supervisory procedures
- 3. Financing
- 4. Ethics and intellectual property

YOUR PROJECT AND THE RESEARCH ENVIRONMENT

You have chosen to pursue graduate studies and have a good idea of your research topic. You are now ready to select a research supervisor to guide you. Choosing a research supervisor is an important—probably the most important—step when starting your graduate studies.

You will need to take time to reflect, ask questions, and talk things over to make the best possible choice. There is no canonical or definitive definition of the ideal research supervisor. Graduate studies are different for everyone and can be broken down numerous ways. While there is no single definition that applies to everyone, a good research supervisor is someone who provides guidance and helps you with the structure, process, and content of your research. They create a stimulating research environment for you to work in.

So, how do you choose your research supervisor?

Key questions to guide you

• About the type of research project and the supervisor's expertise

What type of research do you want to do? Do you have a well-defined theme or topic? Do you have a clear idea of how you want to approach this theme or topic?

Have you come up with a research problem? Is it in a relatively new field or in a fairly well-known field?

Are your research concerns similar to those of the supervisor you're considering? Do they mesh with the supervisor's skills? Has your research supervisor shown an interest in your project? Does your research supervisor conduct his or her own research in the same field as your research topic?

Does your research topic fit in with your supervisor's research projects? What are the supervisor's particular research interests? Will your research supervisor be able to guide you and help with the form and process of your research? Do you know what their theoretical and methodological approaches are? Would it be useful to have cosupervisors? Would it be a good idea to have a supervisory committee?

There is no guaranteed, surefire way to choose your research supervisor. But it's not a decision that should be made hastily. It's better to start off on the right foot by taking time to think it over, let things percolate, come up with a clear idea of what you want your research project to be, and choose a research supervisor whose scientific expertise matches your interests and who shares your research style and intellectual and scientific interests. The best advice is to find a supervisor who is genuinely interested about the research topic you want to tackle.

About your supervisor's research and the research environment

Does the research supervisor belong to a research centre or group? Are the research projects carried out there funded? Does the research supervisor have a research team? Do you know any students who are part to their team? Do students help with research activities? Do students write and present articles and papers at scientific conferences? Is it important for you to be part of a research team? Do you see it as a form of support that increases your chances of completing your thesis? Should you therefore develop other knowledge and skills? Is there any specific, theoretical, methodological, or technical knowledge that you will need to acquire?

Choosing a research supervisor is often more than just finding someone to help you work on a specific research problem—you're also choosing a research environment, a specific well-defined location that includes researchers, students, laboratories, furnished spaces, and physical and technical infrastructures. The importance of this environment should not be underestimated—we understand today that research is usually not conducted in isolation, but rather as part of a larger whole that provides graduate students with chances to brainstorm, discuss, and get support as well as more opportunities to obtain funding and complete their research dissertation or thesis.

2. SUPERVISORS AND SUPERVISORY PROCEDURES

Professors have different levels of experience with supervising graduate students. They are often self-taught and generally supervise according to their own style. There are newer professors just starting their university career who want to supervise graduate students; and then there are experienced supervisors who have mentored a large number of students. Given that, here are some questions to help you make your decision.

Key questions to guide you

About the research supervisor's experience

How much experience does this research supervisor have? How many graduate students has the supervisor previously supervised? How many students are they currently supervising? How does this number compare with other professors in the same unit or discipline? Is the number of students the professor has supervised an important criterion for you?

If a professor supervises a large number of students, it may mean that he or she is a leading researcher so if he or she is your supervisor, you would have the chance to interact with a large number of other students they are supervising. On the other hand, the supervisor may be less available to give you regular one-on-one attention.

On the flip side, if the professor only supervises a small number of students you will likely be able to communicate regularly, but you may have fewer opportunities to interact with other students.

About how long it will take to complete your graduate studies

How long does it take for students to complete their degree with this supervisor? How does this compare to the average for graduate studies? For graduate students, do they finish in four or five years? How many students take five or more years to complete their PhD? How many students have not completed their PhD? Will the research supervisor's availability over the next few years allow you to complete your graduate studies within a reasonable time frame?

It can be hard to obtain accurate answers to these questions, but talking to other students and asking these questions can provide you with valuable information.

About the style of supervision you need

What are your supervision needs? What type of supervision are you looking for? Do you have any preferences when it comes to supervision? Do you prefer strict, structured supervision or supervision that gives you a bit more freedom? What degree or level of supervision would you like to have? Do you have any personal characteristics or circumstances that you would like to bring to your supervisor's attention? Will your prospective supervisor be reasonably available until you finish your studies? What other major administrative responsibilities do they have? How might this affect their availability? Are they often required to travel outside the University? Have they appointed a colleague to answer students' questions while they are away?

It is very important to know the answers to these questions. The supervision style of certain professors may not be right for you. You may need a supervisor who sets clear goals and identifies steps to take to get there or you may prefer a more flexible supervisor who gives you a lot of autonomy. There aren't really good or bad supervisors, just good or bad matches. What's more, you may have family responsibilities, extenuating circumstances, health problems, or special needs to consider. If you anticipate problems that may affect your work or progress, you may want to discuss them with your supervisor. Keep in mind that supervisors can't help you find solutions to problems they don't know about.

• About concrete supervision methods

Have you and your research supervisor agreed on roughly when and how often you'll meet to see how the research project is coming along, what form the meetings will take, and the expectations for what you'll have prepared for these meetings? Have you discussed how you'll follow up on the meetings, for example by setting deadlines for submitting texts, corrections and feedback? Have you each outlined your expectations in the event of absence, unforeseen circumstances (periods of unavailability, international travel, illness, study or research sabbatical), and summer holidays?

These questions may seem minor, but they have a big influence on a graduate student's daily life and progress.

Far from being trivial, they address the key factors of what makes a solid, transparent, and fruitful relationship between a supervisor and the student. Based on experience, we know that the clearer these methods are articulated, the steadier the student's progress.

3. FINANCING

Everyone understands the significant financial problems graduate students can face, but these problems are not insuperable—far from it. There are indeed wide varieties of financing resources and possibilities that allow graduate students to overcome the burden of financial stress.

These funding sources range from scholarship programs from major granting agencies to all kinds of paid work as research or teaching assistants, not to mention the Faculty of Graduate and Postdoctoral Studies "Appui à la réussite" scholarship program. These funds can be combined and some can be used as leverage to obtain others. For example, a student who is part of a funded research project not only receives additional income as a research assistant, but also increases his or her chance of obtaining scholarships from federal or provincial granting agencies.

That's why it's so important for students looking to pursue graduate studies to have as much information as possible about different sources of funding and to take the time to discuss it with their potential supervisor to determine what type of funding could be available.

Key questions to guide you

Will any funding be available to you during your graduate studies? Are you familiar with the various scholarship programs available, including the Faculty of Graduate and Postdoctoral Studies "Appui à la réussite" scholarship program and programs from major granting agencies? What are the opportunities for you to work as a research or teaching assistant? Have you discussed this with your research supervisor? Have you clarified his or her expectations about the steps you will need to take to apply for scholarships?

If you receive a scholarship, can you keep the financial support initially provided via your research supervisor?

Have you discussed possibly attending national and international conferences or symposia, and have you checked whether funds are available for these research activities? In the event that your funding, research fund, or grant doesn't cover everything, have you discussed possible solutions?

Graduate studies are a long-term commitment with significant financial implications. Funding often determines whether a student successfully completes their master's or PhD or is forced to drop out due to a lack of financial resources. While your research project and environment are extremely important, and quality supervision, essential, we can also affirm that adequate financial support is often times an important condition that facilitates the success of your graduate studies.

4. ETHICS AND INTELLECTUAL PROPERTY

Research and innovation are two of the University's fundamental missions. They must be able to develop freely and responsibly. Actors affected by these missions must respect principles and values that guarantee the integrity, relevance, and usefulness of research and innovation, *especially* in a context where information and communication technologies offer unprecedented opportunities for scientific collaboration at the international level.

This raises important ethical issues related to how research is conducted, intellectual property, the confidentiality of research data, and how access to it is controlled. These questions primarily concern researchers, but they also affect graduate students. That's why it's important to go over such questions and discuss them with your potential supervisor.

Key questions to guide you

If your research project involves human subjects, have you discussed the requirements for getting the project approved by Université Laval's human research ethics committee (CERUL)? Have you discussed the intellectual property of your research data and results? Is your research project part of a funded research program or a contractual agreement? Does it have confidential aspects? Might a confidentiality agreement be necessary? Have you discussed the possibility of publishing scientific or professional articles? Have you agreed on the order of authors for the research articles?

When it comes to ethics and intellectual property, the basic rule is that it's always better to prevent potentially harmful problems for researchers and students who are involved in a research or innovative project. Prevention is better than cure, as the saying goes, and issues can be prevented by clearly spelling out desirable and expected conduct that complies with the requirements of responsible research practice.

IN CONCLUSION

At the Faculty of Graduate and Postdoctoral Studies, we encourage our students to take the time they need to properly select a research supervisor.

It is a crucial step and an excellent way to start your higher education off on the right foot.