## FAQs about summer research awards in Physics

#### These FAQs relate to three summer research awards:

- A. **NSERC USRAs** Canadian and permanent resident students only <a href="https://www.mcgill.ca/science/research/undergraduate-research/nserc">https://www.mcgill.ca/science/research/undergraduate-research/nserc</a> <a href="https://www.physics.mcgill.ca/ugrads/usra/">https://www.physics.mcgill.ca/ugrads/usra/</a>
- Canadian and permanent resident students who identify as **Black or Indigenous** are especially encouraged to apply.
- Contact: Prof Simon Caron-Huot.
- B. McGill Science SURAs Canadian/permanent resident + international students. International students need to confirm their eligibility to work in Canada (see eligibility requirements, with links to International Student Services)

https://www.mcgill.ca/science/research/undergraduate-research/surahttps://www.physics.mcgill.ca/ugrads/usra/

- Contact: Prof. Simon Caron-Huot.
- C. TSI Undergrad Research Awards Students enrolled in an undergraduate program in astronomy, physics, planetary science, astrobiology, or related fields at a Canadian university. Will do research with TSI-affiliated professors. https://tsi.mcgill.ca/?page=summer-undergraduate-research-award
- Contact: Carolina Cruz-Vinaccia.

# Frequently asked questions:

1. Can I apply for more than one?

**Yes.** Department of Physics: NSERC Undergraduate Summer Research Awards (mcgill.ca) Canadian/PR students applying for an NSERC USRA apply for a McGill SURA at the same time. International students apply for the McGill SURA. The SURA and USRA forms are not very complicated. The common parts of these applications (the essays and transcripts) are what take the most effort.

The TSI Undergrad Research Award has a separate application from the USRA/SURA.

**NOTE**: a student can hold only one award at a time, but if you win more than one you will get to choose which one you keep.

Also, see question #10 below.

#### 2. Can U1 students apply?

**Yes.** Students must be in a BSc program for at least one of the two terms immediately before the award. When you apply you submit your transcripts showing your fall grades and enrollment in the winter term. To receive the award you will provide transcripts showing winter grades.

**NOTE:** U1 students who don't have a lot of courses behind them will need to convince a supervisor that they have some relevant skills and/or are keen to learn.

 Can I use my CEGEP transcripts if I don't think my first semester or first year at McGill grades will be good enough?

**No.** McGill transcripts only.

### 3. I'm graduating this winter. Can I apply for a summer research award?

Yes, with conditions. For USRA/SURA you must be enrolled in a BSc at the time of *applying*, and at the time of *holding* the award you cannot be already enrolled in a graduate program. <a href="https://www.nserc-crsng.gc.ca/students-etudiants/ug-pc/usra-brpc\_eng.asp#a2">https://www.nserc-crsng.gc.ca/students-etudiants/ug-pc/usra-brpc\_eng.asp#a2</a>. International students should confirm their eligibility to work after graduation. Contact International Student Services <a href="https://www.mcgill.ca/internationalstudents/myiss">https://www.mcgill.ca/internationalstudents/myiss</a> and the ISS Work and Permits webpage <a href="https://www.mcgill.ca/internationalstudents/work">https://www.mcgill.ca/internationalstudents/myiss</a> and the ISS Work and Permits webpage <a href="https://www.mcgill.ca/internationalstudents/work">https://www.mcgill.ca/internationalstudents/work</a>. Also, you can only hold a maximum of three USRAs during your undergrad career, so if you are a senior student who has held three awards already you are not eligible for the USRAs.

• <u>TSI Undergrad Research Awards:</u> Yes, you can apply even if you're graduating this winter. Contact Carolina Cruz-Vinaccia.

#### 4. I don't have a straight-A average. Should I bother applying?

**Yes** (with input from project supervisors).

- <u>USRA/SURA:</u> The general minimum for NSERC USRAs is listed as a CPGA = 3.0 but there
  is no official GPA cut-off. The evaluation is based on a combination of grades, the
  interest statement, and how well students fit with projects.
- <u>TSI Summer Research Award:</u> there's no GPA cut-off and grades are only one of several criteria that the selection committee evaluates. Personal statement and CV are relatively much more important; the committee considers motivation for applying, relevant experience, research fit, and where you are in your research career (see TSI website for guidelines).

The best way to improve your chances of winning a summer research award, regardless of your grades, is to talk with professors that you would like to work with and convince them that you are a good fit for a project in their lab and are keen to learn more.

#### 5. I am not in an honours program. Can I apply?

Yes, see #4 above.

#### 6. Do I really have to talk to professors?

**You should.** You *can* just look at the list of posted USRA/SURA projects and fill out the application forms, but the best strategy is to try to arrange a meeting with professors that you are interested in working with.

TSI Summer Research Award: It is highly recommended that you reach out to professors. The committee does its best to match applicants to a professor based on your application, but that process is made much easier if you have done the work of applying to professors with relevant/aligned research interests.

**How do I approach profs?** More info here: <a href="https://www.physics.mcgill.ca/ugrads/getting-started/">https://www.physics.mcgill.ca/ugrads/getting-started/</a>. Some tips:

- Research profs. Look up what they do. You don't need to be an expert in their field, but know at least what field they are in and roughly what they do – are they experimentalists or theorists? Do their projects involve lab work, data analysis, simulations (it might be many different things)?
- Reach out to profs. Approach them after class, send a polite and concise email with a clear subject line, or visit during their office hours. Ask to talk about potential summer research projects. If you email them, attach your CV and transcript.
- If they agree to meet, come prepared. Be engaged and interested. Be ready to ask a question about their research or any projects they talk about. Be ready to mention skills you have that might be useful. Profs know that you are not an expert in their field. You don't have to be. But making some attempt to understand aspects of their work is good.
- Some profs might list projects but then won't respond to meeting request emails. You
  can try to visit during their office hours and you can still list their projects in your
  prioritized list. At least you tried to meet!

#### **★** I emailed some profs and they didn't get back to me. What do I do?

Politely reach out again in 5-7 days. Profs get tons of emails and yours might have been missed. You can contact several at a time if your emails are tailored to each prof to improve your chances of hearing back from one.

#### **★** I am interested in working with a prof who hasn't posted a project.

Approach them about a potential summer research award project. Maybe they planned to post a project eventually and now they know you are interested, or some might post one based on your conversation.

#### 7. What goes into the Research and Interest Statement?

It is one page max, so put thought and effort into writing this. It is considered as part of the evaluation of your application.

- This is not a copy of your CV or transcript those already show courses and prior jobs. Highlight the most relevant things and put them into context with you as a person and a researcher who is interested in learning more and contributing to a research project.
- Show that this isn't a random, last-minute application. You've thought about what you want to do, how a summer position will help you, and what you'd like to learn and contribute.
- **Do not say,** "Ever since I was a child, I dreamed of ...." in any context in this statement.
- Write about your interests and future goals. You don't have to base your future career
  on what you write but show that you've thought about it.
- If you have specifics, because you've read profs websites and/or talked with them, mention those. If you don't have defined interests, talk about what you'd like to learn.
- Highlight any experience (brag!). If they're research-related or not, you might have some useful technical or "soft" skills from courses, hobbies, or prior jobs. Things that show initiative and leadership are good too.

#### **TSI Summer Awards**

The guidelines for what to include are on our website. Statements of Interest are 1-2 pages long. Your Statement of Interest should address:

- Motivation for applying: why you're interested in pursuing summer research, including
  what your goals are and how this program contributes to them (e.g is the application a
  stepping stone to longer term career goals like graduate school, job in the private
  sector, etc)
- What you hope to gain from the experience: skills you hope to acquire, and how those skills will help you achieve your goals
- Experience you've gained so far (either within or outside academia) and how that is related to your motivation and goals
- Research fit: which projects/supervisors at TSI you're interested in and why
- Capacity for engagement: why this program and TSI are a good fit for you, and what you hope to contribute to the program
- If you're interested in pursuing a Science Education or Science Communication component in your work, please elaborate on what you'd like to do and how you see it aligning.

#### 8. Do I need reference letters?

**No**, not for the USRAs, SURAs, or TSI summer research awards.

#### 9. Is one of these awards my only chance of doing research this summer?

**Not necessarily.** Sometimes professors can pay for summer students from their research funds. There are also other summer research programs, such as those mentioned in all the emails you get. These include TRIUMF, the National Research Council, etc. If you do not get an award or summer research position this year, it **does not** mean that there is no hope for future applications, that you are a bad student, or that you have no potential for research.

Going through the process will make it easier to apply next year – you now have a CV and a research interest statement that you can edit. Introducing yourself to profs can be helpful for arranging research projects during the school year for credit. If you check in with a prof that you wanted to work with, they may be able to suggest that you take a super relevant class or "talk to this other person about research" or something helpful.

#### 10. Can I do research in another department?

**Yes.** You can look at summer awards posted in other departments, and apply through those departments. Talking to professors in those fields is necessary because they can help you navigate their department's application. In other departments, a project proposal must be submitted with the application (unlike Physics where you submit a prioritized list), so talking with potential supervisors is necessary. **Other departments have different procedures and deadlines for applying for these summer awards**.

#### **★** Can I apply for a position in Physics *and* in a different department?

Technically, yes. You would fill out one USRA form and two separate SURAs. However, be mindful that in other departments, the prof and student submit one project directly together, without match-making process. Therefore, if a prof submits a project with/for you, and then you don't go with that prof, they could be left without a student and any future relationship you might have with them as a potential supervisor could be jeopardized.

#### **★** Can I apply for a position at another school?

Yes, but talk with the prof for guidelines about their school's/department's application process and deadlines.

# 11. Can I do a PHYS 396/449/479/489 project for credit at the same time as the USRA/SURA/other research awards?

**No.** You cannot get both credit and money at the same time for the same work. The research courses aren't usually offered in the summer. These summer research positions do not show up on your transcript and are the same as any other full-time summer job.

#### 12. Can I take a summer course if I have a summer research award?

**Maybe.** The research positions are considered full-time work for 14-16 weeks. Technically, taking one course is allowed while holding a USRA, but permission is not guaranteed and you need to be up front with potential supervisors. For USRAs, profs need to submit a plan and ask for permission to get a project funded that will involve the student being unavailable for a certain time. Regardless of the award you hold (or if the prof pays you from their own funds) you will want to be up front with the professor and together establish timelines and expectations. Getting a prof to agree to supervise you and then dropping it on them that you're taking a course that will take up many hours is a bad start.

#### ★ What if I know I'll be away for part of the summer?

Talk to the professor. Most profs may be OK with a student talking a week off or maybe even two during the summer, and a few days here and there may be fine. However, if you know that you will be away for, say, 3 weeks in July, that is a significant portion of the 15-16 week project and it's a good idea to be up front during the initial meeting.