

Career Vision Board (PYP)

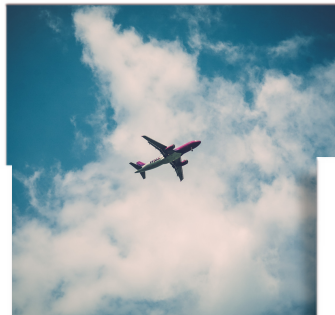
By Rekik Sissay



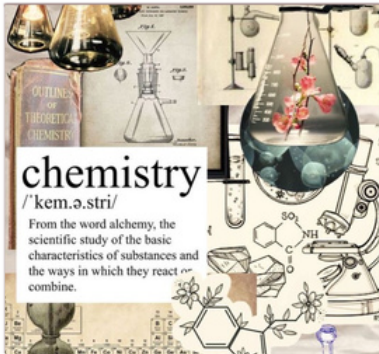
Health and Relationships



Finances



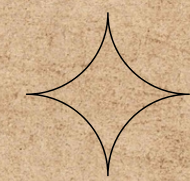
Travel



Education



Hobbies

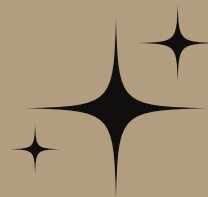


About me:

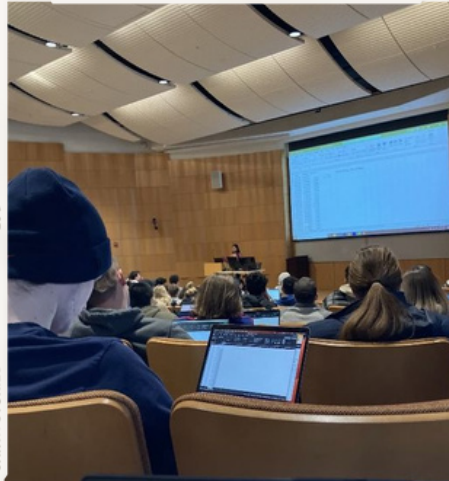
- Currently - Montreal, CA
- Age 18
- Vanier College
- 2nd Semester
- Interested in Sciences

Actions I do now/will do that will help me achieve my desired career:

- Volunteering at a Hospital
- Two mentorship programs
- Robotics Club
- Potential Lab Placements
- Web designing projects
- Hobbies to keep me motivated



My Path (current/future)



Today, the light up above our heads just shines so bright. I have to try to find out a new thing to be productive.



Cegep 2 years in the Health Science Program



University :- double major or 1 major and a minor

- Pharmacology and Toxicology
- Computer Science



Continue to work force and then add Master's/PhD





CEGEP

Name: Vanier College

Location: St. Laurent, Quebec

Type of Program: Pre-University Program



Name of the program: Health Science

Duration of the program: 2 year program

Details about the program: To think like a scientist, To employ a scientific method, To read and analyze scientific publications, To choose and appropriately use digital technologies to support learning, to present content, to model, to simulate and to program

Where this could lead: Graduates of this profile are well-prepared for a wide variety of university studies, such as medicine, dentistry, physiotherapy, physiology, biochemistry, pharmacology, veterinary medicine ecology, or environmental sciences.

Offers: Counselling, Robotics, STEM club, Athletic Facility for Students





UNIVERSITY



Name: McGill/ University of Toronto

Location : Montreal/Toronto, Canada

Name of Major: Pharmacology

Faculty: Faculty of Medicine and Health Sciences

Departments: School of Biomedical Sciences

Name of Minor (Major #2): Computer Science

Faculty: Faculty of Sciences

Departments: School of Computer Sciences

Details about the program(s): 3 years programs. Research required for Pharmacology.

Application requirements: Science prerequisites from College. Eg: Math, Chemistry & Biology

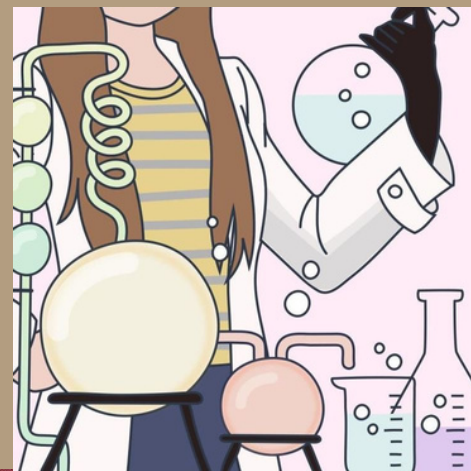
Application fee (s): \$129.52

Financial Aid: <https://www.mcgill.ca/studentaid/>

Deadline to apply: March 2025

Offers: McGill Pharmacology Students' Association (MPSA), McGill Volunteer Bureau, Undergraduate Research Opportunities Program (UROP) and McGill Code Jam.





Pharmacologist

✓ Patience and determination

✓ Analytical Skills
Research Skills
Ethical Understanding
Problem-Solving Skills

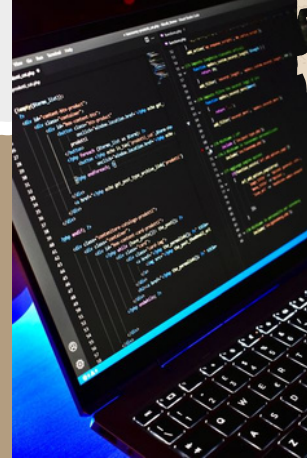
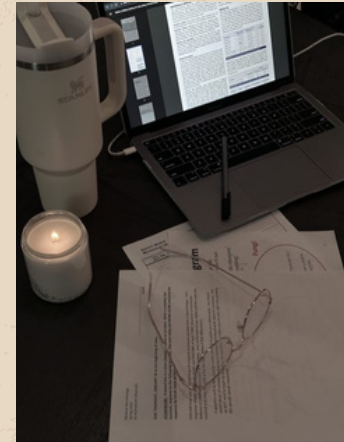
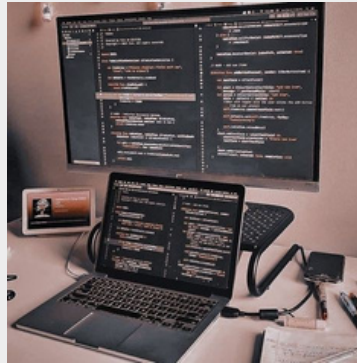




General descriptions for career:

- ✓ This career requires university bachelor's as a minimum, but for higher pay, a higher degree is necessary.
- ✓ A research scientist in pharmacology conducts experiments to understand how drugs work at a molecular and cellular level. They may work in academia, government research labs, or in the private sector.
- ✓ Continuing to master's or PhD, depending on how it goes in UNI
- ✓ Most days are spent in the lab using cell and tissue cultures to look at the affect of drug targets
- ✓ Depending on where I work, travelling may or may not be necessary. EG: if I have to go to conferences or etc. Typically a 9-5 job with indoor working conditions, but might require extra studies since I want to continue with PhD
- ✓ This profession is focused on teamwork, but still allows me to do personal research with grants
- ✓ The demand for pharmacologists is expected to continue as advancements in healthcare and drug development drive the need for expertise in pharmacology and related disciplines. However, job availability may vary with many factors
- ✓ Currently enhancing required skills
- ✓ \$98,000 average salary





Software Developer

✓ Persistent and Cooperative
Personal Projects

✓ Problem-Solving
Programming Languages
Continuous Learning
Communication Skills



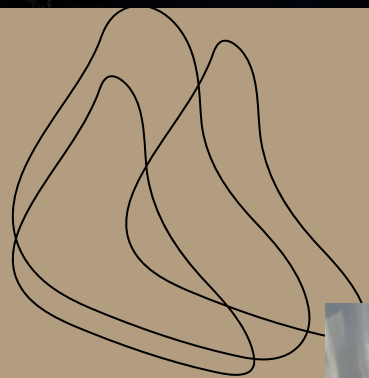
General descriptions for career:

- ✓ Software development continues to be a highly in-demand and rapidly evolving field. However, the field is highly competitive, and staying updated on emerging technologies and continuously improving my skills will be essential.
- ✓ Jobs are open as many places continue to advance in medicinal research.
University bachelor's should suffice with some individual practice.
- ✓ A software developer designs and develops software programs, applications, and systems
- ✓ A day in the life involves working on applications, programs, and systems at various stages of development
- ✓ Travelling won't be necessary. Most likely 8 hours a day or less depending on the company, and with indoor working conditions.
- ✓ Could be a team or individual work, depending on the position and task
- ✓ \$70,000 to \$120,000 per year
- ✓ Currently enhancing required skills
- ✓ The fields of pharmacology and computer science continue to intersect, professionals with expertise in both areas could bridge the gap between laboratory scientists and computational researchers, for interdisciplinary collaboration.





Hobbies for some sanity



- ✓ Languages
- ✓ Music
- ✓ Reading
- ✓ Sports/
Astronomy



INSPIRATIONS



Q&A's with people in STEM

•WOMEN IN SCIENCE• who changed the world



A. With Sevane

1. Projects you've done as a student while studying either pharmacy or pharmacology. And if so, how available was it for you?

I took some credits from the bachelor's degree (minor part) to do an internship in the health research field. You don't have to reserve credits from your degree for that, I just wanted to do that. I have to admit it took me some time to find an internship because I didn't start early enough and I didn't reach out to teachers that were offering some in class. An advice would be to get in contact with teachers and teaching assistants asap when they offer job/internship opportunities if you're interested in their field. Otherwise when you look independently, they often require previous lab experience (which I didn't have); so it might take some time so be patient it's normal. An internship is a good to know if you're in the right field too. So the earlier, the better in my opinion! My internship was in human genetics at the MUHC Glen, so not directly pharmacology but very interesting for me. I learned a lot! I was also in a school association, MASS (McGill African Student Society) in the event planning. It wasn't pharmacology related but allowed me to make connections in different fields.

2. What advice would you give to someone considering a career in pharmacology/pharmacy?

For pharmacology/pharmacy it's worth seeing if there are shadowing opportunities to spend a day with a professional and see what their daily tasks are like (see with your school counseling programs or email companies).

A good way to see if that field is for you is to try working there if it's possible.

Working a bit in a pharmacy helped me to have a more concrete idea of what I was learning in school. For pharmacy, there are different places to practice as well : community (most accessible one), hospital, industry, research, etc.

3. How did your studies in pharmacology intersect with other scientific disciplines or fields?

Pharmacology helped me with the main concepts of chemistry and biology, concepts that are just as important in any health fields.

It also gave me insight on what goes on in the development of drugs, it's a long tedious process that is very interesting.

4. Another one is what you would advise a college student to strengthen their skills at this level to better prepare for university and beyond.

Learn to procrastinate as least as possible, stay constant to not accumulate too much work load. Manage your time well to be able to have time off to see friends/family and relax. At least once per week!

Be patient with the journey, those programs are demanding but you'll get through it :)

Also chose a program that you're interested in (even if it's a program that you're doing while waiting to get into another program). It helps with the studying if the material is somewhat interesting to you.

And again try gaining some experience in the field you're going into to have more on field experience.

B. With my mentor Adam

1. What inspired you to pursue a career in medicine?


When I examine my career path, three central areas stand out: academic research, healthcare, and teaching. The role of a physician encompasses many things, but it is also reflective of those same three factors. As an individual, I love to solve problems as well as engaging & relating to others on a human level. My experiences both in the laboratory and as a TA have developed my skills as an investigator and an instructor. Working in translational research and vaccine development, I hope to bridge the gaps from the bench to the patient's bedside by introducing novel therapies and prophylactic vaccines that can directly help people in the field.

2. What do you find most challenging about your work, and how do you overcome these challenges?

I don't work as a physician yet, but as a medical student, it's easy to feel like you're dealing with multiple fires all at once. It can be quite overwhelming and I don't think it gets any easier as a physician but you do become better at managing it. Another issue can be that of imposter syndrome. I think it can be normal to compare yourself to others and to be harsh on yourself, but it is important to remember that you belong here just as much as anyone else and that you are competent.

3. On the flip side, what aspects of your job do you find most rewarding?

I think it's extremely rewarding to be in a position where you can help people and provide insight that they can't necessarily find elsewhere. Patients trust us while they're in a vulnerable stage of their lives and it is crucial to treat that trust with the utmost respect and responsibility. It is also great to work in multidisciplinary teams where everyone has the same common goal but approaches it from various different angles.



4. In your previous studies, how do you balance between research activities and practical applications in your role?

Balance is very important. You are a person first and what you need to be comfortable and happy should take precedence over the demands of your career. This way, you can accomplish your tasks successfully and still maintain your own mental health and physical wellbeing. Prioritizing helps a lot and sometimes research might be busy and take more time whereas at other times it might be the other parts of your job, so it's all about finding that balance and trying to stay organized.

I believe inspiration comes from the various daily encounters we have, even though we don't always notice it. Taking the time to inquire, explore, and engage is important as a person in STEM and other various fields.

I would like to thank all for the effort in keeping the PYP program, as it permitted me to explore even more than I thought I would initially.

*For some a prologue,
For some an epilogue.*
BULGAKOV.