

EDUCATION

Doctor of Philosophy (PhD), McGill university Department of Human Genetics.	Montréal, QC 2026 – present
Certificate, Université de Montréal Computer Science. GPA : 3.932/4.3	Montréal, QC 2024 – 2025
Master of Science (MSc), Université de Montréal Pharmaceutical sciences. GPA : 4.113/4.3	Montréal, QC 2022 – 2024
- Research project: Identification of transposable elements induced by chemotherapy in triple-negative breast cancer - Supervisors : Pr. Geneviève Deblois, Pr. Sébastien Lemieux (IRIC) - Other responsibilities: Lab inventory management, reviewing scholarship applications	
Bachelor of Science (BSc), Université de Montréal Montréal, QC Biomedical sciences, with Honors. GPA : 4.164/4.3	2019 – 2022

SCHOLARSHIPS AND AWARDS

1. FRQS PhD's Training Award – 1st rank (100,000\$)	2025
2. Francis and Geneviève Melançon Foundation Scholarship, IRIC (declined) (10,000\$)	2025
3. FRQS Master's Training Award – 1st rank (40,000\$)	2023
4. Centennial Scholarship, Faculty of Pharmacy, Université de Montréal (17,500\$)	2022
5. Canada Graduate Scholarship – Master's (CGS-M), CIHR (17,500\$)	2022
6. Laurence Jacob-Roy Award, Biomedical Sciences (300\$)	2022
7. IRIC Master's Recruitment Scholarship (10,850\$)	2021
8. PREMIER Research internship Award (5,000\$)	2021
9. Summer Research Scholarship, CHU Ste-Justine (declined) (4,200\$)	2021
10. Student Success Support Initiative Grant, Department of Pharmacology and physiology (2,000\$)	2021
11. FAÉCUM Student Engagement Scholarship (500\$)	2021
12. Alan Short Scholarship, Mille-et-un-métiers Fund (2,000\$)	2021
13. Florence Michaud Scholarship, Mille-et-un-métiers Fund (2,000\$)	2020

RESEARCH EXPERIENCE

<u>Research assistant – Bourque lab</u>	Montréal, QC
Victor Phillip Dahdaleh institute of genomic medicine, McGill university	Sept. 2025 – Dec. 2025
- Conducted a literature review on transposable elements and existing detection methods in WGS data - Developed a bioinformatics analysis pipeline for the detection of transposable elements insertions - Supervisor: Pr. Guillaume Bourque	
<u>Research assistant – Deblois lab</u>	Montréal, QC
Institute for research in immunology and cancer (IRIC), Université de Montréal	Sept. 2024 – Sept. 2025
- Performed bioinformatics analyses in six graduate-level (MSc and PhD) projects - Responsible for lab inventory management, reviewing grants and scholarship applications - Supervisor: Pr. Geneviève Deblois	
<u>Teaching assistant – Immunology</u>	Montréal, QC
Department of Microbiology, infectiology and immunology, Université de Montréal	Sept. 2022 – Dec. 2022
- Delivered lab demonstrations and technical explanations - Responsible for health and safety training	
<u>Research intern – Deblois lab</u>	Montréal, QC
Institute for research in immunology and cancer (IRIC), Université de Montréal	Jan. 2022 – Apr. 2022
- Project: Investigating the role of transposable elements in chemotherapy response in triple-negative breast cancer - Supervisor: Pr. Geneviève Deblois	

- Project: Investigating the role of the immune system in preeclampsia
- Supervisor: Pr. Sylvie Girard

PUBLICATIONS

Submitted

1. EZH2 inhibition induces an integrated stress response driving glutamine-dependent vulnerability in TNBC (2025). Lucas Porras, Marina Fukano, [Ann-Sophie Gironne](#), et al.

Theses

2. Identification of transposable elements induced by chemotherapy in triple negative breast cancer (2024). [Ann-Sophie Gironne](#), Geneviève Deblois, Sébastien Lemieux ; Université de Montréal.

Science communication

3. Quand les gènes s'expriment (2024). [Ann-Sophie Gironne](#) ; Revue Dire, Université de Montréal.

In preparation

4. Dynamic regulation of spatially restricted metabolic zones in triple-negative breast cancer uncovers therapeutic implications (2025). Marina Fukano, Hugo Philippeau, Dongmei Zuo, [Ann-Sophie Gironne](#), et al.

POSTERS

Identification of transposable elements induced by chemotherapy in triple negative breast cancer; [Ann-Sophie Gironne](#), Geneviève Deblois, Sébastien Lemieux.

1. Institute for research immunology and cancer (IRIC) 11th scientific day (2025), Université de Montréal; Montréal, QC.
2. Faculty of pharmacy's 12th Pharmaceutical research meeting (2023), Université de Montréal; Montréal, QC.
3. Faculty of pharmacy's 11th Pharmaceutical research meeting (2022), Université de Montréal; Montréal, QC.

TALKS

Identification of transposable elements induced by chemotherapy in triple negative breast cancer; [Ann-Sophie Gironne](#), Geneviève Deblois, Sébastien Lemieux.

1. Faculty of pharmacy's graduate seminars (2023), Université de Montréal ; Montréal, QC.
2. Faculty of pharmacy's lightning pitch science communication contest (2023), Université de Montréal ; Montréal, QC.
3. Department of Pharmacology and physiology's internship results (2022), Université de Montréal; Montréal, QC.

Predictive value of histological analyses of placentas and fetal membranes for the neurological development of late preterm infants; [Ann-Sophie Gironne](#), Jonathan Charron, Sylvie Girard.

1. PREMIER's student research symposium (2022), Université de Montréal ; Montréal, QC.

SCIENCE OUTREACH & COMMUNICATION

1. What is RNA-seq? (2023). [Ann-Sophie Gironne](#); Institute for research in immunology and cancer (IRIC)'s SciencePop contest, Université de Montréal; Montréal, QC.
2. Chemotherapy resistance in triple negative breast cancers (2023). [Ann-Sophie Gironne](#); BistroBrain's Montréal event; Montréal, QC.
3. Cancer and epigenetics (2021-2023). [Ann-Sophie Gironne](#), et al.; Four presentations given in colleges as part of Biomed Talks science outreach initiative, Université de Montréal.
4. Fighting misinformation on COVID-19 (2021). [Ann-Sophie Gironne](#); Educational video created as part of Department of Pharmacology and physiology's Student success support initiative, Université de Montréal, Montréal, QC.
5. How to fight ethnic injustice (2020). [Ann-Sophie Gironne](#), Leïla Naji; Public talk on stem cell donation awareness as part of Swab the World's initiative, Université de Montréal; Montréal, QC.

SKILLS & INTERESTS

Technical skills

Programming languages:

R, Julia, Python, Bash, Java, MIPS*, VHDL*, OCaml*, Zig*, Prolog*, Io*

Bioinformatics**:

STAR, Salmon, Trimmomatic, bwa-mem, DiffBind, samtools, DESeq2, Limma-voom, ggplot2, MELT, MEGAnE, bedtools, fastp, MACS3, deeptools

Laboratory techniques:

Cell culture, RNA extraction (w/ Trizol), PCR, qRT-PCR, IHC, IF

Professional interests

Transposable elements, cancer, genomics, genetics, epigenetics, bioinformatics

Personal interests

Thrifting, books, gym, kayak, plants, hiking

* some experience

** non exhaustive

VOLUNTEERING & LEADERSHIP

› Administrator, FAÉCUM, Université de Montréal	2022 – 2024
› External affairs coordinator, AEPUM-CS, Université de Montréal	2022 – 2024
› Member, Grants and scholarships allocation committee, FAÉCUM, Université de Montréal	2021 – 2023
› Founder, Peer support program in Pharmacology and physiology (PAPPUM)	2021 – 2022
› President & internal affairs director, AÉSBUM	2021 – 2022
› Student member, Research committee, University Assembly, Université de Montréal	2021
› Organized public conferences on suicide prevention and sexual violence	2021
› Participated in fundraising for breast cancer research (Virée Rose), raising more than 2,000\$	2020 – 2021
› Academic affairs director, AÉSBUM	2019 – 2021