

Education

McGill University

Honours BSc in Computer Science and Biology (GPA: 3.98/4.00)

MONTREAL, CANADA

2017 – 2020 (expected)

- Dean's Honour List
- James McGill Scholarship
- Faculty of Science Scholarship
- Teaching Assistant for MATH 324
- Science Undergraduate Research Award
- Member of Golden Key Intl Honour Society

Centennial Secondary School

British Columbia Dogwood Diploma

COQUITLAM, CANADA

2015 – 2017

- Governor General's Academic Medal
 - National Biology Scholar with Distinction
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Research Experience

Research Assistant, Gerhold Lab

MONTREAL, CANADA

May '19 – present

- Design automated algorithms for centrosome pairing in cells that undergo mitosis
- Conduct *in situ* live-cell imaging experiments of *C. elegans* germline stem cells (GSCs)
- Characterize mitotic spindle assembly in GSCs under various environmental conditions
- Training in spinning disk confocal microscopy, MetaMorph & worm mounting techniques

Research Assistant, Yamanaka Lab

MONTREAL, CANADA

Dec '18 – Apr '19

- Created **MiSeq-Analyzer**, a tool that streamlines dynamic MiSeq sequencing data analyses
- Quantified and classified Cas9 RNA-guided endonucleases off-target sites to identify the clonal selection patterns during cancer progression in mice models of ovarian cancer

Research Student (BIOC396 Project), Akavia Lab

MONTREAL, CANADA

Jan '19 – Apr '19

- Assessed protein localization prediction in a human genome-scale metabolic model
- Cross-validated against datasets from multiple biochemistry experimental studies
- Identified possible causes of inaccurate model predictions

Summer Research Intern, Canada's Digital Health Hub

SURREY, CANADA

Jul '18 – Aug '18

- Reviewed extensive literature on stress paradigm and memory consolidation
 - Tested a variety of biosensors to design stress stimulation experiments
 - Operated electroencephalography (EEG) tests for control and autistic children
 - Assisted with EEG data pre-processing using MATLAB FieldTrip Toolbox
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Extracurricular Activities & Volunteering

VP of Student Affairs, Canadian Organization for Undergraduate Health Research

MONTREAL, CANADA

Jul '18 – present

- Initiate and maintain contact with Principal Investigators
- Develop a comprehensive database of PIs with matched students
- Promote positive student relations and advocated for co-curricular needs of the students

Media Relations Volunteer, Canadian Cancer Society (BC & Yukon Division)

VANCOUVER, CANADA

Nov '16 – Aug '18

- Translated and reviewed promotion and education materials on cancer prevention
 - Composed wellness-related articles for publication in **Herald Monthly**, a Vancouver-based not-for-profit monthly Chinese newspaper
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Proficiencies

- **Natural Languages:** English, Mandarin Chinese, French, Wenzhounese
- **Programing Languages and Technologies:** Python (*Bioython*, *Matplotlib*, *scikit-learn*), MATLAB (*FieldTrip*), Java, C++, Jupyter Notebook, L^AT_EX, Linux, git, bash, gdb, ImageJ (*TrackMate*, *CSBDeep*), MetaMorph
- **Confocal Spinning Disk Microscopy:** Visualization of fluorescent molecules in *C. elegans* germline stem cells, time-lapse photography of *C. elegans* dividing cells
- ***C. elegans* Care and Husbandry:** Bleaching, worm picking, strain maintenance, whole-mounting