

## Education

### McGill University

#### Honours BSc in Computer Science and Biology

MONTREAL, CANADA

2017 – 2020 (expected)

- GPA: 3.98/4.00 | Dean's Honour List (Top 10% in the Faculty) | Teaching Assistant for MATH 324
- James McGill Scholarship | Faculty of Science Scholarship | Science Undergraduate Research Award

### Centennial Secondary School

COQUITLAM, CANADA

#### British Columbia Dogwood Diploma

2015 – 2017

- Governor General's Academic Medal | Top 1 in the Graduating Class | AP Scholar with Honour
  - National Biology Scholar with Distinction | Science Club Co-President | Indian Umbrella President
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## Research Experience

### Research Assistant, Gerhold Lab

MONTREAL, CANADA

May '19 – present

- Designs automated algorithms for centrosome pairing in cells that undergo mitosis
- Conducts *in situ* live-cell imaging experiments of *C. elegans* germline stem cells (GSCs)
- Characterizes 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

- Initiates and maintains contact with Principal Investigators
- Develops of a comprehensive database of PIs with matched students
- Promotes 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
- **Programing Languages and Technologies:** Python (*Bioython*, *Matplotlib*, *scikit-learn*), MATLAB (*FieldTrip*), Java, C++, Jupyter Notebook,  $\LaTeX$ , Linux, git, bash, gdb, ImageJ (*TrackMate*, *CSBDeep*), MetaMorph
- ***C. elegans* Care and Husbandry:** Bleaching, worm picking, strain maintenance, whole-mounting
- **Confocal Spinning Disk Microscopy:** Visualization of fluorescent molecules in *C. elegans* germline stem cells, time-lapse photography of *C. elegans* dividing cells