

Jessica Qiu

✉ qiu22@mcmaster.ca | 📞 (647) 782-1888 | 👤 jessicaqiu.me

✓ SUMMARY OF QUALIFICATIONS

- Lab experience in microscopy and morphometrics.
- Comfortable using P20, P100, P1000, multi-channel pipettes and Pasteur pipettes.
- Familiar with research software like BORIS for data collection and R for data visualization & statistics.
- Trained in WHMIS, EOHSS Health & Safety, CAF Fish Handling, & certified as a Nuclear Energy Worker.

🎓 EDUCATION

Enrolled in Honours Psychology, Neuroscience & Behaviour (BSc.) 2019 - present
MCMaster UNIVERSITY, HAMILTON, ON

Ontario Secondary School Diploma, English Achievement Award for 3 years 2015 - 2019
UNIONVILLE HIGHSCHOOL, MARKHAM, ON

🧰 WORK & VOLUNTEER EXPERIENCE

Research Assistant 2021 – present
WILSON TOXICOLOGY LAB, HAMILTON, ON

Project 1: *Effects of metformin on larval & adult zebrafish* | Dr. Joanna Wilson & Dr. Oana Birceanu

- Dissected fish to collect tissue samples (brain, liver, gill, kidney, gonad, intestine, and muscle).
- Imaged 300+ larval zebrafish at 5 life stages and completed morphometric measurements on images.
- Performed fish care tasks like feeding, water quality checks, water changes, and water sampling.

Project 2: *Macromolecule & water content in lake whitefish tissue.* | Environment & Climate Change Canada

- Used Pierce BCA protein assay and standard curves to determine protein content.
- Carried out lipid extraction using chloroform-methanol lipid assay.
- Determined water content of tissue by incubating samples in a laboratory furnace.

Project 3: *Glycogen content in fathead minnow brains.* | Environment & Climate Change Canada

- Completed glycogen extraction using perchloric acid (PCA) method.

Research Project Student 2021 – present
AQUATIC BEHAVIOURAL ECOLOGY LAB, HAMILTON, ON

Project 1: *Leadership behaviour in the endangered redbreasted dace.* | Dr. Sigal Balshine & Dr. Andy Turko

- Mastered new software (BORIS) to collect experimental data from video observations.
- Analyzed collected data in Excel & created data visualizations in R, presented results in 5min talk.

Project 2: *Antioxidant adjustment during social ascension in cichlids.* | Dr. Sigal Balshine

- Created clear graphical abstract that highlighted key findings for scientific paper.

Children Ministry Intern 2019 & 2020
MILLIKEN CHRISTIAN COMMUNITY CHURCH, SCARBOROUGH, ON

- Led and prepared work schedule for volunteer teams & planned events with intern team.

- Developed weekly activity plans for children with a focus on cognitive and fine motor skill development through crafts, rudimentary coding, and story time.
- Problem-solved by adapting traditionally in-person events into online format.

Camp Counsellor

2019

VILLAGE EULOGIA FOR FAMILIES WITH SPECIAL NEEDS, TORONTO, ON

- Provided one-on-one support to children with Down's Syndrome and autism.
- Maintained calm and patience when children were agitated and problem-solved to diffuse situations.
- Learned to be highly observant & communicate creatively with non-verbal children.

Fracture Clinic & Inpatient Mental Health Care Volunteer

2018

MARKHAM-STOUFFVILLE HOSPITAL, MARKHAM, ON

- Organized patient flow calmly under fast-paced environment and supported doctors by preparing clinic rooms for incoming patients.
- Managed patient records while adhering to strict patient confidentiality.

Summer Daycamp Leader

2016 – 2020

MILLIKEN CHRISTIAN COMMUNITY CHURCH, SCARBOROUGH, ON

- Supervised and interacted with a group of up to 15 children ages 5-8.
- Developed weekly activity plans for children with a focus on cognitive and fine motor skill development through crafts, story time and LEGO Education sets.

ACHIEVEMENTS & EXTRACURRICULARS

Annual Ontario Psychology Undergraduate Thesis Conference (AOPUTC)

2021

- Presented my poster and talk "*Simon Says: Leadership Behaviour in Redside Dace*". ([poster link](#))
- Placed top 10% out of 200+ undergraduate thesis presentations as a 2nd year student.

LEAP Canada Creative Director

2020 - present

- Led creative team in developing branding, marketing materials, and website from scratch.

English Achievement Award, Unionville Highschool

2017, 2018, 2019

- In recognition of written and spoken English communication skills, awarded for 3 consecutive years.

Student Council Creative Director, Unionville Highschool

2017 - 2019

Toronto Youth Network Graphic Designer

2017 - 2019

SKILLS & INTERESTS

Art & Design: skilled in Photoshop CC, Illustrator CC, and Sony Vegas Pro for graphic design & video editing. Portfolio can be found at: jessicaqiu.myportfolio.com.

Bilingual: English and conversational Mandarin.

Programming: basic skills in R for data visualization and statistics.

Girl Scout (6 Years): comfortable in the outdoors, can swim & equipped with survival skills.