

# HAOTIAN XUE

+1 (647)-289-3872 | XUEH9@MCMASTER.CA

Address: 166 Cline Ave. N Hamilton ON, L8S 3Z9

LinkedIn: [linkedin.com/in/haotian-xue-064ba3170](https://www.linkedin.com/in/haotian-xue-064ba3170)

## EDUCATION

### Biomedical and Mechatronics Engineering (CO-OP)

Expected Completion, 2023

McMaster University, Hamilton ON

- Currently enrolled in the second year of Integrated Biomedical Engineering and Health Sciences
- Maintaining cumulative average of A+ on CHEM 1E03: General Chemistry for Engineering I, CHEM 1AA3: Introductory to Chemistry II and HTHSCI 2E03: Inquiry II: Biochemistry
- Maintaining the cumulative average above A- on four Math and two Physics courses taken
- Degrees earned upon completion: Bachelor of Engineering and Biomedical Engineering (B.Eng.BME)

## ENGINEERING AND HEALTH SCIENCE PROJECTS

### DNA Wet Labs

February 2020 - Present

Working with DNA and get an opportunity to apply the knowledge to amplify and manipulate DNA. In the wet lab, a pipette training and a PCR amplification of the EGFP gene was first performed. The restriction enzyme digestion, PCR amplicon purification, DNA ligation and transformation reactions were performed to insert the EGFP gene into E.coli DH5a cells. In the end, DNA mini-preps, agarose gel electrophoresis and resection mapping were used to verify the inserted gene.

### Inquiry: Biochemistry Research Project

September 2019 - December 2019

A comprehensive research on the biochemistry of a new drug treating atherosclerosis, Inclisiran. The research process starts from the background information, extending to the mechanism of action and finally to the clinical trials. During the procedure, our group also did a journal article review. The research achieved an above 90 average in the end.

## SKILLS

- Familiar with micro-pipetting
- Fundamental programming with Python, C and C++ with knowledge up to class
- Familiar with data analysis through laboratory works
- Effective collaboration and optimization skills acquired while taking the project-based design course
- Well-developed problem solving and working knowledge gained from projects related to society, ethics and professionalism

## CERTIFICATION

- Biosafety Training**
- FHS Training** (Code Awareness, Hospital Fire Safety and Routine Practices)
- Workplace Training** (Primer on Privacy, AODA and Human Right Code and Violence and Harassment Prevent)
- Skills & Experience eDevelopment Program** (McMaster University 2019)

## AWARDS

- McMaster Entrance Scholarship (>90%) 2018
- Top 25% of Euclid Math Contest 2018

## EXTRACURRICULAR ACTIVITIES

- Langstaff S.S. Science and Math tutor (2018)
- McMaster ISS Buddy Program (2019)