

Lavender K. Graham

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[LinkedIn](#)

SUMMARY OF QUALIFICATIONS

- Master's degree in the field of Stem Cell Technology & Regenerative Medicine at the University of Nottingham, performed at the top 10% of my class
- Master's degree in Cellular & Molecular Medicine at the University of Ottawa specialized in Bioinformatics
- Over a year and a half of experience conducting research
- Performed numerous procedures as a researcher at the Fritz Lipmann Institute and University of Ottawa such as mouse dissection and harvesting of bones and organs, MTT assay, qPCR, chromatin immunoprecipitation, Western blot, and FACS
- Strong mathematical skills and scientific literacy
- Excellent teamwork skills gained through laboratory collaboration throughout undergraduate studies and Master's degree projects such as a business plan for an atherosclerosis nanoparticle therapy
- Excellent scientific writing and communication skills as demonstrated by a distinction received for Master's dissertation on the regulation of epigenetics and epitranscriptomics and a review article on cancer nanotherapeutics
- Conducted several presentations on scientific advancements including on the ability of metformin to treat multiple sclerosis, the development of nanoparticle therapies for atherosclerosis, and the role of PTEN mutations in metastasis

EDUCATION

Master's of Science, Cellular And Molecular Medicine (specialized in bioinformatics) 2022 - 2023
University of Ottawa, ON
Expected Graduation Date, December 2023

Master's of Science, Stem Cell Technology And Regenerative Medicine 2020
Nottingham, England (Graduated With Distinction)

- Winner of the 2020 Nottingham University Science & Biotechnology showcase for outstanding presentation on a business plan for a nanoparticle therapy for atherosclerosis

Bachelor's of Science, Biochemistry & Biotechnology 2018
Waterloo, ON

- In-course scholarship for outstanding performance in organic chemistry (2015)

TECHNICAL SKILLS

Python | R | BioRender | SQL | PostgreSQL | SQLite | Tableau | Git | GitHub | Anaconda | VSCode | Jupyter Notebook | RStudio | Pandas | NumPy | APIs | Matplotlib | Seaborn | Plotly | Geopandas | Statistical Analysis | Statistical Modelling | Data Extraction, Transformation, & Loading | Data Analytics | Data Cleaning | Data Extraction | Data Visualization | Data Presentation | Microsoft Office Suite (Word, Excel, PowerPoint) | Quality Assurance

LABORATORY SKILLS

- Aseptic techniques
- SDS-PAGE, PCR, MTT assays
- Cell Culture
- Fluorescence Activated Cell Sorting

RELEVANT EXPERIENCE

RESEARCH ASSISTANT

2022 - Present

G-INCs Lab, Dr. Gadde, Faculty of Medicine, University of Ottawa, ON

- Researched and analysed the effects of chemotherapeutic drugs on breast cancer cells
- Researched and analyzed the physiochemical properties of nanoparticles
- Performed cell culture, MTT assays, and SDS-PAGE
- Reviewed academic literature on nanoparticle technology & nanoparticle therapy
- Prepared journal club presentations on recent discoveries in cancer biology
- Wrote grant applications for cancer studies
- Performed bioinformatic analysis on the effects of nanoparticles on their protein coronas
- Wrote review article on how nanoparticle treatments target the Hallmarks of Cancer

RESEARCH ASSISTANT

2021

Karl Lenhard Rudolph Lab, Fritz Lipmann Institute, Jena, Germany

- Performed experimental procedures including mouse dissection and harvesting of bones and organs, qPCR, chromatin immunoprecipitation, Western blot, and FACS
- Received certification from the Federation of European Laboratory Animal Science Associations (FELASA) for safety and ethically performing experiments on mice in Germany
- Committed to rigorous safety protocols in the laboratory to maintain a hazard-free workplace

UNDERGRADUATE RESEARCHER

2017 - 2018

Department of Chemistry & Department of Biology, Wilfrid Laurier, Waterloo, ON

- Thesis Title: Effects Of Ammonia Induced Oxidative Stress On Brain Swelling on *Carassius auratus* and relief using antioxidant compounds and urea
- Performed independent experiments inducing brain swelling in goldfish and attempting to alleviate the condition using urea as an osmolyte
- Presented my results to an academic committee and prepared a poster presentation

RESEARCH ASSISTANT

2015

UW Aquaponics, University of Waterloo, Waterloo, ON

- Participated in a team developing environmentally sustainable aquaculture technology
- Collected peer-reviewed data and made recommendations for research directions for the engineering team

INTERESTS AND ACTIVITIES

- Reading about biotechnology, medicine, and economics (journal articles and books)
- Participating and leading in a philosophy club, Rational Ottawa, featuring discussions related to philosophy, science, technology, and social psychology
- Interest in improvisational comedy and theatre