Email: madhurya@buffalo.edu Mobile: +1-267-945-1359

### **Education:**

University at Buffalo, New York Master of Science in Genetics, Genomics and Bioinformatics, 2022

University of British Columbia, Vancouver Bachelor of Science in Biology, 2020

Cambridge International A-levels, Chennai, India Cambridge International IGCSEs, Queenstown, Singapore

#### **Employment:**

Freelance Scientific Editor at Cactus Communications

October 2020 to January 2021

- Edited manuscripts from professionals and faculty from countries who are non-English speaking nations to ensure scripts are ready for publishing
- Format manuscripts according to Journal guidelines to ensure that they are submission-ready

Undergraduate Researcher at the (Ben) Matthews Lab, UBC

December 2019 to May 2020

- Conducted experiments to study feeding behaviours in Aedes. aegypti
- Investigated the role of ppk301 in the ability of Aedes. aegypti in their ability to 'taste' water
- Developed a protocol using fluorescence to quantitively measure feeding in mosquitoes

YR Gaitonde Centre for AIDS Research and Education (YRG CARE)

May to August 2019

- Was involved in creating a module as a part of an outreach initiative that will be used in schools all over India
- Compiled previous research on education in children and teenagers to enhance the educational module
- Formulated facilitation tasks for sessions in Sex Education in schools to be effective and inclusive

Internship at Apollo Hospitals, Chennai

June to August 2018

- Shadowed Consultants in the Infectious Diseases and Emergency Medicine department and learned to identify and diagnose patients
- Assisted with mechanical tasks in laparoscopic surgeries in the Obstetrics and Gynaecology department
- Learnt about different processes in the Microbiology lab when identifying microorganisms in samples from patients

Internship for SCARF India, DEMCARES (Schizophrenia Research Foundation, affiliated with WHO)

June to July 2017

- Assisted with cognitive stimulation sessions for patients suffering from dementia
- Was involved in the collection and analysis of data for research
- Accompanied consultants during outpatient sessions and was involved in the process of diagnosis of illness

## Leadership Skills:

Wellness Peer at UBC's Wellness Centre

September 2019 to April 2020

- Took on the role of a peer counsellor by having sit-down peer-to-peer conversations with students regarding mental and physical health
- Involved in campaigns and outreach with regards to mental and physical health for students

Senior Orientation Leader for UBC Imagine Day

January to December 2018

- Trained volunteer Orientation Leaders to welcome new-to-UBC students by equipping them with the correct resources and ensuring that they are aware of the correct procedures when leading groups of students
- Organised a large-scale social event with three other student leaders for 200 students
- Helped with the logistics of Imagine UBC, which involved understanding the workings of UBC Orientations
- Facilitated interviews to recruit students for the Imagine UBC process and led team-building sessions

#### **Technical Skills:**

Laboratory: Immunohistochemistry, training with mice, odometric and acid-base titrations, column chromatography, the use of the spectrophotometer, light microscopy, dissection, gel electrophoresis, western blotting, quantifying fluorescence

Computer: Proficient in R, Python, Microsoft Excel, PowerPoint and Word

# Projects in Coursework:

Investigating Feeding Behaviours in *Aedes aegypti* with the use of Fluorescence Investigating the Contribution of SNP rs34730029-11q.12.1 in Differential Olfactory Processing in Homosexual men Investigation of *Sm* Gene Family between Maize and Rice and Differences in Expression Effect of Retinoic Acid in