# Saisha Lakkoju

(she/her) Greater Seattle Area

#### EXPERIENCE

### UT Austin Microbe Hackers Lab, Research Intern

(JUNE 2021- JULY 2021, VIRTUAL)

- Learned about Synthetic Biology Concepts and basic lab procedures
- Learned how to read analyze scientific sources
- Explored and designed DNA sequences for evolutionary stability of CRISPR repeats in BW2513 strain of E. Coli
- Learned how to use the software Benchling

## UW Medicine Kaeberlein Lab, Research Intern

(JUNE 2022- PRESENT)

- Analyzing paralysis and lifespan assays on C. elegans nematode worm for pre-clinical screening of therapeutic agents for age-related diseases such as Parkinsons and Alzheimers
- Trimmed, compiled and presented multiple data sets to show the results of experiments
- Summer 2022: Worked specifically on how Metamorphin, AICAR and AE related treatments
- Fall 2022: Working specifically with RNAi treatments and previous treatments

# Museum Of Pop Culture, Youth Advisory Board Member

(SEPTEMBER 2022- PRESENT)

# PROJECTS

#### More than Solar — Website

Coded More than Solar with HTML, Javascript and CSS. Provides users data about their local weather and UV scale and how long they can stay in the sun before getting burned.

# Relationship Between Hiking and Melanoma in Washington State — Research Poster

Researched the relationship between outdoor activity and melanoma rates in Washington State using regression models. Analyzed both geospatial and numerical data in order to construct a proper regression model. Research Poster is showcased on the Washington Department of Health Website.

# Identifying Differentially Expressed Genes for Medulloblastoma — Research Presentation and Project

Found possible biomarkers for Medulloblastoma Brain Cancer through bioinformatics research methods, such as R statistical analysis and functional enrichment analysis. Presented research to neuroscientists at Stanford University in the Stanford Virtual Neuroscience Forum and got feedback on project.

# EDUCATION

## **Bothell High School**

Class of 2024, 4.0/4.0 GPA

# AWARDS

1st Place - WTN Youth Science Contest Health Science Won Statewide contest about health science and data analysis. Met with Washington Department of Health Epidemiologists in order to improve my project

Science Olympiad: Over 15 medals Placed over 15 times in Science Olympiad events both in national invitationals and regional competitions

2nd Place Congressional AppChallenge - Made an app thatdisplays UV scale for your city

2nd Place FBLA E-Business WLCWorked on backend ofe-commerce website

Presenter at Stanford Virtual Neuroscience Forum - Presented independent research about Medulloblastoma in international forum, where less then 10% of applicants selected

Presenter at Fred Hutch STEM for Justice Summit

AP Scholar with Distinction