Elaine Chan

1726 Mandan Place, Fremont, CA 94539

□ elaine.chan@berkeley.edu

C | 510. 298. 8919

Education

University of California Berkeley (UC Berkeley) Berkeley, California

Expected Graduation May 2023

Experience

Editor-in-Chief, Irvington High School Newspaper The Voice Jun 2018- Jun 2019

- managed staff of 30 students, grades 10-12, in newspaper publication process
- 21% online viewership increase through revamping publicity strategy and social media
- reported on critical local issues such as district-wide teacher strikes & district elections
- initiated class-wide focus on meaningful layout design through effective Indesign use
- designed new training manual & development program for incoming staff
- previously Student Life Editor (2017-2018) & Staff Writer (2016-2017)

Sun Lab Stanford Department of Ophthalmology Summer Intern 2017 & 2018

- researched Lowe syndrome, ocular melanomas, and cilia formation
- presented "Loss of Cilia in Ocular Melanomas: Implications for Diagnosis"
- 400+ immunofluorescence confocal images analyzed; data contributed to publication
- cultured Uveal melanoma and primary Retinal Pigmented Epithelium (RPE) cell lines

Krummel Lab UCSF Department of Pathology Summer Research Intern 2016

- assisted in research on immune sensitivity and imaging technology
- frequented PCR, tumor digestion, blood typing, and flow cytometry lab techniques.

Projects

Modulation of Planaria Regeneration by Resolvin D1 and the Omega-3 Fatty Acid Precursor 17-hydroxy docosahexaenoic acid Dec 2017-Aug 2019

Mentored by Dr. Anuran Chatterjee

Developed a time-efficient, quantitative method for quantifying planaria regeneration, utilizing a modification of the MTT assay on whole and cut planaria instead of the traditional BrdU method. Method analyzes proliferation based on the formation of formazan crystals on regenerating blastema.

Publication Published by the Journal of Emerging Investigators 13 August 2019 Effect of Omega 3 Fatty Acid Precursor 17-HDHA and its Lipid Mediator Metabolite RvD1 in Planaria Regeneration

Mentored by Dr. Anuran Chatterjee

Analyzed the effect of supplementing planaria with resolvin lipid mediators on regeneration. Used ELISA assay and protein quantification assay to quantify regeneration proportional to mass. Also developed eye scoring system to classify different states of regeneration.

<u>Awards</u>: 2018 California State Science Fair 4th Place, Amgen BioGENEius Challenge 3rd Place (received citation from US Congressman Ro Khanna), 2018 & 2019 Alameda County Science and Engineering Fair 1st Place.

Volunteer

Volunteer Student Instructor Oct 2018- June 2019

Contributed to lesson plans and taught in Tech Program. Tutored underserved children at Smythe Clubhouse Boys and Girls Club in San Jose.

Stemnova Nonprofit Organization Instructor June 2018- May 2019

Trained elementary school students in Cell Biology and Science Jeopardy over a 10 week period in an effort to introduce complicated STEM topics in a holistic, hands-on approach.

Violinist for the San Jose Youth Chamber Orchestra Community Outreach

Brought orchestral performances to terminally-ill patients at Santa Clara Valley Medical Center Rehabilitation Center.

AP
Courses
Skills

AP Chinese, AP Biology, AP Chemistry, AP United States History, AP English Language and Composition, AP Psychology, AP English Literature, AP French, AP United States Government

Microsoft Office; Google Docs; Adobe Photoshop & Indesign; Mac and Windows OS;

cell culture (serum starvation, transfection); ELISA assay; Western Blot; Immunofluorescence; PCR; Flow Cytometry

Languages

English-native; Chinese-native; French-limited working proficiency