

Zian “Zane” Liu

zianliu@berkeley.edu • (510) 213-8771 • <http://chairmanzian.com>
Berkeley, CA

EDUCATION

University of California, San Francisco, Schools of Medicine and Pharmacy

University of California, Berkeley, College of Engineering

Master of Translational Medicine (M.T.M.)

Aug 2016 – Jun 2017

- Coursework: Biomedical Device Development, Regulation and the FDA, Data Analytics, Drug Discovery and Development, Healthcare Economics and Policy, Business Fundamentals, Project Management

University of California, Berkeley, College of Engineering

Bachelor of Science (B.S.) with High Honors in Bioengineering

Aug 2012 – May 2016

Minor's Program in Public Policy, Goldman School of Public Policy

Synthetic Biology Certificate, Synthetic Biology Engineering Research Center

- Cumulative GPA: 3.86 / 4.00
- Coursework: Data Structures, Protein Informatics, Drug Delivery, Mass Transport, Policy Analysis, Negotiations

SKILLS

Programming and Data Analysis

Python, Java, JavaScript, Ruby on Rails, R, COMSOL, MATLAB

Bioengineering and Laboratory

Molecular cloning, cell culture, PCR, western blot, ELISA, DNA/RNA extraction

Product Design and Business Development

User research, needs finding, policy analysis, finance, medical device & digital health regulation

PRODUCT

DEVELOPMENT

Multiple Sclerosis Center, University of California, San Francisco

The Open Multiple Sclerosis BioScreen

Sep 2016 – Present

Advisers: Riley Bove, M.D., M.M.Sc.; Stephen L. Hauser, M.D.

- Developing an open-access web application that applies regression modeling to medical data to help physicians, patients, and caregivers contextualize and predict a MS patient's disease progression.
- Conducting user research to design a user interface that responsibly presents disease progression to end-users.
- Determining a regulatory strategy for the platform through collaboration with bioethics professionals and the FDA, and tailoring tool functions to allow expedient approval.

Undergraduate Biodesign Program, University of California, Berkeley

Drug-Delivering Contact Lenses for Corneal Ulceration

Sep 2015 – Jul 2016

Advisers: Daniel Chao, M.D., Ph.D., and Hayley Lam, Ph.D.

- Designed a dual-layer drug-eluting contact lens, composed of PDMS and PLGA, to deliver antifungal drug natamycin to treat corneal ulcers.
- Constructed a proof-of-concept prototype with antifungal efficacy at a low \$0.14 material cost per lens.

POLICY

ANALYSIS

Goldman School of Public Policy, University of California, Berkeley

“Bioweapons for Dummies”

May 2015 – Mar 2016

Adviser: Stephen Maurer, J.D.

- Studied the impacts of synthetic biology, open-access literature, and amateur “biohacking” on national security, and proposed policies to decrease the biosecurity risk of such activities.
- Estimated the time and resources needed by amateur biology enthusiasts to create a viable bioweapon, and identified technological advances that would change the current biosecurity landscape.

PROFESSIONAL

AFFILIATIONS

& LEADERSHIP

Tau Beta Pi, the Engineering Honor Society (TBP), CA-A Chapter

Oct 2013 – Present

Alumnus advisor; former executive officer and longest-serving committee chair

Oversaw sustainability and knowledge retention efforts. Led the 501(c)3 project, coordinating with Advisory Board members and pro-bono lawyers to revise bylaws and practices to secure tax-exempt status.

Bioengineering Honor Society (BioEHS) at UC Berkeley

Sep 2013 – Present

Former president; co-founder and adviser, Bioengineering High School Competition (BioEHSC)

Spearheaded new programs to promote career readiness, industrial partnerships, and educational outreach. Founded the BioEHSC, the only comprehensive bioengineering research and design competition for U.S. high schools.

INTERESTS

Fountain pen calligraphy, menswear and fashion, current affairs, politics, coffee and espresso brewing, educational outreach, photography, public speaking