

Anatori Serena A. Prieto

anatoriprieto@berkeley.edu | (628) 999-4407 | Berkeley, CA

Education

University of California, Berkeley

May 2018 - Present

- *Major: Bioengineering*
- *Expected graduation: December 2022*
- *Relevant courses: Engineering Molecules, Drug Delivery, Macromolecular Synthesis and Cellular Function*
- *Current GPA: 3.527*

Experience

Undergraduate Researcher

Aug 2021 - Present

Núñez Lab, Barker Hall, UC Berkeley

- *Optimizing CRISPRoff epigenetic gene editing*
- *Techniques: iPSC, Cas9 modular modification, HEK293t cell culture*

Process Sciences Intern

Jun 2021 - Aug 2021

Astellas Gene Therapy, South San Francisco

- *Tested colony selection and screening to improve productivity of E. coli fermentation used in AT845 gene replacement therapy for Pompe disease*
- *Performed transfection and perfusion of 2L, 10L, and 50L bioreactors*
- *Passaged and inoculated HEK239 seed train cell culture*
- *Communicated findings in team presentations and a technical report*
- *Techniques: NGS sequencing, Qiacube miniprep, Dasgip fermentation, Cedex and Nova Bioanalyzer, Cary 60 UV-vis spectrometer, Sartorius bioreactor, sampling, passaging, perfusion, transfection, Bioprofile Flex, harvest and clarification, sterile welding, DOE, JMP, Benchling*

Strain Engineering Intern

May 2020 - Dec 2020

Huue, Oakland Genomics Center, Oakland

- *Performed genetic integration and transformation on our base strain to improve product yield and efficiency*
- *Analyzed and presented HPLC-derived data*
- *Defined scalable assays to screen base strain in 96-well format*
- *Techniques: HPLC, electroporation, Golden Gate Assembly, PCR, gel electrophoresis, competent cell prep, CRISPR-based genetic integration, test digest, cell banking, DNA recovery*

Undergraduate Researcher

May 2019 - Dec 2019

Joint Bioenergy Institute, Lawrence Berkeley Lab, Emeryville

- *Created Python scripts to process genetic data*
- *Designed graphs and diagrams for publication currently under review*
- *Techniques: Scientific publication, genetic transformation, plasmid extraction, Nanodrop, NCBI Blast+, Biopython*

Undergraduate Researcher

Sept 2018 - May 2019

Terry Lab, Koshland Hall, UC Berkeley

- *Screened bacteria consortia found in petroleum-contaminated areas*
- *Genetically modified E. coli to contain petroleum degradation enzymes*
- *Techniques: media prep, GCMS, microscopy, spectrophotometry, Gibson Assembly, laboratory safety*

Skills

Computer Programming

- *SQL, Python*