

Matthew Mao

PHONE: 408-702-5355 ▪ EMAIL: maoymatthew@gmail.com ▪ LINKEDIN: <https://www.linkedin.com/in/matthewymao>

EDUCATION

Bachelor of Science in Biochemistry and Molecular Biology, Minor in Anthropology (class of 2023)
University of California, Santa Barbara | Santa Barbara, CA

Major Courses:

- Biochemistry Series
- Organic Chemistry Series and Lab
- Molecular Genetics Series
- Human and Developmental Biology
- Medical Microbiology and Animal Virology
- Medical Immunology

Coursework from University of California, San Diego Extension:

- Analytical Chemistry
- Introduction to Clinical Hematology

WORK EXPERIENCE AND PROJECTS

Guardant Health - Redwood City (March 2024 - current)

Biospecimen Associate II supervised by Ronald Navarro

- Processed and accurately logged sensitive patient PHI from liquid biopsy and Guardant Health blood collection kits, ensuring strict compliance with HIPAA and laboratory quality standards
- Operated laboratory equipment including centrifuges, pipettes, refrigerated storage units, and ultra-low freezers to isolate, extract, and store blood plasma for clinical operations
- Collaborated with the Biorepository team to manage and organize over 10,000 patient samples, improving storage efficiency and sample traceability
- Participated in Pfizer's 2026 biopharma audit by ensuring adherence to laboratory procedures and regulatory requirements
- Drove continuous improvement by identifying workflow inefficiencies and implementing time- and cost-saving process enhancements while maintaining SOP compliance
 - Designed and 3D-modeled a custom Active Clinical Box lid using OpenSCAD, improving durability and functionality while reducing replacement costs
 - Led a process improvement initiative that reduced blood tube disposal timelines from 15 days to 7 days; presented findings to laboratory directors and updated SOPs to implement the new standard (~30% increased efficiency)
 - Developed automated workflows in Microsoft Teams using Power Automate and JSON to establish a clear, auditable chain of custody (saving ~5-10 hours/week)

Research With Acinetobacter Baylyi ADP1 - Enoch Yeung's Lab, UCSB (November 2022 – June 2023)

Lab Technician and Assistant to Graduate Student Charles Johnson

- Cultivated multiple strains of ADP1 to incubate and prepare for experiments
- Titrated a variety of 96-well plates to spike ADP1 with multiple sugars in order to identify whether different strains of ADP1 were able to grow in the presence of certain sugars
- Analyzed questionable data suggesting the lab methods and procedures were flawed; devised solutions with Charles Johnson to approach the problem and prevent contamination of ADP1 cells

SKILLS

Centrifuge Operation, Compound Microscope, Micropipetting, Agarose Gel Electrophoresis, Chromatography, MATLAB, PCR, Western Blot, Multimode Microplate Reader, Titrations, Incubator Machines, Cell Assays, Microsoft Office, LIMS, ACS, SCAD, Python, JSON, HTML, SQL (SELECT, JOIN, GROUP, filtering, aggregations)