

Tianqi Li
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EDUCATION

- University of California, Davis** Sep. 2019-June. 2023
- **Major:** Bachelor of Arts in Biological Sciences; Bachelor of Arts in Economics
 - **GPA:** 3.91/4.00
 - **Awards:** Dean's List: Fall 2019; Winter 2020; Spring 2020; Fall 2020; Fall 2021.
- Columbia University Mailman School of Public Health** Sep. 2023–Present
- **Major:** Master of Public Health in Biostatistics; Certificate in Comparative Effectiveness Outcomes Research
 - **GPA:** 4.08/4.00 (A+ gets 4.33/4.0)
 - **Anticipated completion of graduate degree:** 05/21/2025

RESEARCH PROJECTS

- Analysis and Interpretation of Population Differences in Structural Variation of the Human Genome**
Institute of Biophysics, Chinese Academy of Sciences Jun. 2024-Present
- Carry out literature research under the guidance of the tutor.
 - Statistical analysis using R and Python to analyze the difference in genes between populations under Linux operation system.
 - Visualize the analysis results and develop a research report.
- Effect of Heating on Tailless P4 Bacteriophages** Sep. 2022-Sep. 2024
- Practicing different lab skills needed to complete experiments.
 - Developing and writing a thesis.
 - Designing experiments that achieve desired results and are suitable to include in the thesis report.
- Clinical Trial Studies on Efficacy and Safety of Chuanhu Qutong Granule in the Treatment of Acute Gouty Arthritis** Aug. 2022-Jan. 2023
- Read research proposals and case report forms (CRF) to support this study.
 - Compose a detailed statistical analysis proposal.
 - Conduct data analysis, after gathering and screening data from CRF, using R and Excel.

LAB EXPERIENCE

- Vazquaz - Arsuaga Lab** Mar. 2022-Sep. 2023
- Lab Member
- Set up growth for bacteriophages and record optical density using spectrophotometer.
 - Purify phage samples using chloroform and ultracentrifugation.
 - Create solutions with the help of pH meter.
 - Purify and quantify DNA using Nanodrop.

GRADUATE COURSE PROJECTS AND JOBS

- SAS Final Project - Sex and Genetic Risk Factors for Cognitive Impairment in Late Middle-Aged Adults** Apr. 2024-May. 2024
- BISTP6110
- Use SAS to analyze the provided dataset and generate appropriate outputs.
 - Interpret the SAS output and develop a written report based on the results.

- Correctly format the output into tables and graphs to include in the report.

SAS Teaching Assistant

Sep. 2024-Present

BISTP6110

- Help to manage the lab session and answer any questions related to lab activities.
- Help with grading the homeworks and midterm.
- Holding office hours to answer students' questions related to SAS programming.

Community Spotlight

Jan. 2024-Mar. 2024

PUBHP6081

- Selection and contact of the interviewee.
- Developed a detailed interview plan with a list of interview questions.
- Organized and conducted an interview section with the interviewee.
- Completed a reflection on the interview process and topics discussed during the interview.

Article Critique Memo

Mar. 2024-May. 2024

HPMNP8568

- Select and read a cost-effective analysis study with topics of interest.
- Review the methods used to develop the analysis.
- Reflect on and criticize the potential limitation of the analysis.
- Summarize and organize the ideas into an article critique memo.

UNDERGRADUATE COURSE PROJECTS

Empirical project: The Effect of Factors Affecting Graduation Probability and Academic Performance

Jan. 2023-Mar. 2023

ECN140

- Determination of a set of factors that will influence the outcome of interest.
- Practiced using STATA and a provided dataset to analyze the relationship using regression (both linear probability model and logit model).
- Generated data summary, regression analysis, and appropriate graph.
- Analyzed the results and developed a report paper with proper format.

Studying HIV using Mathematical and Genetic Approaches

Mar. 2022-May. 2022

MAT 124

- Practiced using R and Matlab to analyze data found in selected papers.
- Reproduced results from selected paper and plotted proper graphs using Matlab and/or R.
- Generated Protein 3D structure from obtained sequence, using YASARA.

Scientific Report on the Effect of Reverse Genetic Approach in C.elegans

Sep. 2022-Jan. 2023

MCB160L

- Practicing lab skills needed to conduct experiments that produce report-worthy results (gel electrophoresis, pipetting, light, and fluorescent microscope, etc.).
- Devise proper rationales for experimental steps for inclusion in the report.
- Use Snapgene and other simulators to analyze plasmid and cross of Drosophila.
- Organize lab notebook according to projects throughout the project.

SKILLS AND INTERESTS

- **Computer Skills:** SAS, R, Python, Matlab, Snapgene, STATA, TreeAge
- **Languages:** Chinese (mother tongue), English (proficient, GRE: 327/340), Japanese (3 quarters of study)