Albert W. Zhou

https://www.albertwzhou.com/

EDUCATION

Princeton University, Princeton, NJ

September 2020 – May 2024

A.B. in Molecular Biology, magna cum laude; Certificate in Music Performance (viola)

Awards: Shapiro Prize for Academic Excellence, elected to Sigma Xi

Royal College of Music, London, United Kingdom

September 2022 – December 2022

Study abroad program for music performance

South Pasadena High School, South Pasadena, CA

August 2016 – June 2020

High school diploma

EMPLOYMENT AND RELATED EXPERIENCE

Functional Genetic Technician, Parker Lab, California Institute of Technology

June 2024 – present

- Develop CRIPSR/Cas9-based gene editing tools in Dalotia coriaria
- Manage D. coriaria and Drosophila cultures
- Create transgenic D. coriaria strains

Undergraduate Teaching Assistant, Department of Chemistry, Princeton University

September 2023 – May 2024

- Assisted with weekly discussion sections
- Evaluated written assignments
- Contributed to weekly problem sets
- Led exam review sessions and resource hours

Shadowing, Pacific Coast Oral & Maxillofacial Surgery, Pasadena, CA

August 2023

Shadowing, Paul H. Chu Internal Medicine, Los Angeles, CA

July 2023 – August 2023

Care Ambassador, Emergency Department, Princeton Medical Center, Plainsboro, NJ

January 2023 – April 2023

Shadowing, Emergency Department, LA County-USC Medical Center, Los Angeles, CA

September 2022

Shadowing, Pathology Department, Children's Hospital Los Angeles, Los Angeles, CA

August 2022

Shadowing, Emergency Department, Kaiser Permanente, Downey, CA

July 2022 – August 2022

May 2022 – September 2022

Ophthalmic Technician Intern, Retina Eye Specialists, South Pasadena, CA

Assisted physician by working up patients and performing optical coherence tomography

Care Ambassador, Telemetry Unit, Princeton Medical Center, Plainsboro, NJ

Communicated with patients about appointments and prescriptions

January 2022 – April 2022

Public Services Captain & Assistant, Mendel Music Library, Princeton University

February 2021 – May 2024

- Managed circulation desk and answered reference questions
- Assisted with stacks maintenance, with a primary responsibility for shelving
- Uploaded, mapped, and published digitized music collections
- Trained new public services and digital collections student employees

PRESENTATIONS AND PUBLICATIONS

Senior thesis: The RNA-binding protein Zn72D contributes to oskar function and germline development, advised by Elizabeth R. Gavis (2024)

Poster presentation: The RNA-binding protein Zn72D in germline development, MolBio Summer Research Program Poster Session (2023)

RESEARCH EXPERIENCE

Undergraduate researcher, Gavis Lab, Princeton University, Princeton, NJ

February 2023 - May 2024

- Investigated the function of the Zn72D gene in Drosophila germline development
- Learned core molecular biology techniques
- Adapted to unexpected results through troubleshooting and designing new experiments
- Presented updates at lab meetings

Laboratory assistant, Center for Craniofacial Molecular Biology, Univ. of So. Calif., CA

June 2021 – August 2021

SERVICE

Viola Section Coach, Trenton Arts at Princeton, Princeton, NJ

September 2023 – May 2024

• Led sectionals and provided guidance for Trenton high school students passionate about music

Violin Teacher, Trenton Arts at Princeton, Princeton, NJ

September 2021 – May 2024

• Taught free private lessons for Trenton high school students

LEADERSHIP

Principal Violist, Princeton University Orchestra

September 2023 – May 2024

• Served as coordinator between conductor, other principal players, and section members

President, Opus Chamber Music, Princeton University

May 2023 - May 2024

- Oversaw and delegated officer board responsibilities
- Coordinated and planned concerts, auditions, and day-to-day operations for a smooth member experience
- Served as liaison to university, music department, and other external parties
- Implemented member feedback mechanisms
- Fostered collaborations with peer groups at Columbia University and the University of Pennsylvania

Publicity Chair, Opus Chamber Music, Princeton University

May 2022 – May 2023

ACTIVITIES

Violist, Opus Chamber Music, Princeton, NJ

September 2021 – May 2024

Violist, Princeton University Orchestra, Princeton, NJ

September 2020 – May 2024

SKILLS

Laboratory: DNA and RNA extraction, PCR, cloning, cDNA synthesis, CRISPR sgRNA and HDR template design and plasmid construction, *Drosophila* genetics and husbandry, *Drosophila* genomic and transcriptomic analysis, immunohistochemistry, confocal microscopy, microinjections, *Dalotia coriaria* husbandry

Software: SnapGene, ApE, FIJI/ImageJ, R/R Studio, Microsoft Office, Adobe Illustrator, Google Apps

Language: Spanish (5 years)