



Isabella Orduna

Contingent OTP 1, Pathology Sponsored Projects

Bio

BIO

I am a graduate of University of California, Santa Cruz, concentrating on Bio Medicine within the context of Global and Community Health.

My experience includes volunteering and administrative work at the VA Hospital in Palo Alto, teaching roles with children, helping to create sustainable food systems in my community through the UCSC Center for Agroecology, and engaging in Parkinson's research in the Schuele Lab. Health. I am proficient in both English and Spanish, using both languages in professional and informal settings. I am eager to embrace all opportunities that come my way.

Throughout my coursework and lab experiences, I have gained proficiency in various skills including bacteriophage isolation, antibiotic resistance mechanisms and assays, culture plating *E. coli*, determining bacterial cell counts, bioremediation techniques, gel electrophoresis, spectrophotometry, PCR, utilizing literature search tools, analyzing primary and review literature, navigating the UCSC genome browser, performing Blastn searches, using ApE for sequence analysis, and presenting primary literature effectively.

CURRENT ROLE AT STANFORD

Laboratory Assistant - Parkinson's Research

As a lab assistant at the Schuele Lab in the Stanford Department of Pathology, I actively contribute to research focused on understanding Parkinson's disease and developing potential therapies. My role involves a diverse range of tasks, allowing me to gain valuable experience in various laboratory techniques and research methodologies.

Being part of the lab has allowed me to engage in hands-on learning and observation of essential lab techniques, including DNA extraction and analysis, immunostaining of tissues, PCRs, tissue cultures, molecular cloning, working with iPSCs, etc. I have been immersed in a laboratory setting that allows me to work alongside accomplished researchers and clinicians. My experiences in learning these techniques have deepened my understanding of the molecular mechanisms involved in neurodegeneration and the potential avenues for therapeutic intervention.

The Schuele Lab's primary focus lies in gene discovery and novel stem cell technologies. We utilize cutting-edge methods to generate patient-specific stem cell models from individuals with Parkinson's disease. These models offer invaluable insight into understanding the underlying causes of neurodegeneration, providing a foundation for developing targeted biomarkers and innovative therapies.

My time in the Schuele Lab has not only enriched my technical skills but also deepened my appreciation for the impact that dedicated researchers can have on improving the lives of patients.

EDUCATION AND CERTIFICATIONS

- Bachelors of Science, University of California Santa Cruz , Global and Community Health B.S. - Bioinformatics Minor (2026)

SERVICE, VOLUNTEER, AND COMMUNITY WORK

- SCI Volunteer (2021 - 2022)

LINKS

- Schuele Lab Site: <http://www.schuelelab.site/>

Professional

WORK EXPERIENCE

- Laboratory Assistant - Parkinson's Research - Stanford University School of Medicine (2023 - present)
- UCSC Center for Agroecology Intern - University of California, Santa Cruz (September 2023 - December 2023)
- Administrative Assistant - U.S. Department of Veterans Affairs (7/2022 - present)
- Cashier Customer Service - Old Port Lobster Shack (May 2022 - September 2022)
- Robotics Summer Camp Counselor - TechKnowHow Franchises (May 2019 - September 2019)

SKILLS AND EXPERTISE

Administrative Operations

- Communication
- Google Drive
- Microsoft Excel
- Microsoft Office
- Microsoft PowerPoint
- Organization/Prioritization

Information Technology

- Health Care
- Lab Technologies