

CELESTE VALDIVIA

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EDUCATION

UNIVERSITY OF WASHINGTON • SEATTLE, WASHINGTON

Master of Science in Aquatic and Fishery Science • *September 2022 – Present*

Cumulative GPA: 4.0 out of 4.0

UNIVERSITY OF CALIFORNIA (UC), DAVIS • DAVIS, CALIFORNIA

Bachelor of Science in Animal Biology • *September 2016 – September 2020*

Cumulative GPA: 3.4 out of 4.0.

RELATED EXPERIENCE

MOLECULAR BIOLOGY LABORATORY (GARDELL LAB) • UNIVERSITY OF WASHINGTON

Graduate Research Assistant • *September 2022 – Present*

Researching the constraints on in vitro cellular immortality in a marine model invertebrate under the NSF funded project: *Somatic cell adaptation towards immortalization in a marine tunicate*. Optimizing primary cell culture methods in order to promote the facilitation of spontaneous or induced immortalization.

Mentoring undergraduate students.

ECOTOXICOLOGY AND ECOPHYSIOLOGY LABORATORY (CONNON LAB) • UC DAVIS

Junior Specialist • *January 2021 – September 2022*

Undergraduate Research Assistant • *January 2020 – January 2021*

Undergraduate Volunteer • *August 2018 – December 2019*

Facilitated various projects in the field, in the lab, and virtually concerning the effects of contaminant, pathogenic, thermal, and salinity stressors on native California aquatic species. Analyzed large data sets relating to pathogen detection, gene expression, gill tissue histology, and photo-motor responses in larval fishes and aquatic invertebrates. Mentored undergraduate students. Assessed and troubleshooted issues arising with animal care and laboratory protocols.

GEMINI BIO-PRODUCTS, INC. • WEST SACRAMENTO, CALIFORNIA

Laboratory Technician • *August 2020 – September 2020*

Maintained an aseptic laboratory environment exceeding U.S. FDA standards to fulfill the demand for high quality COVID-19 testing kits, supporting the effort to identify cases of disease within California.

Documented the large volume of units produced, enabling clear communication with colleagues. Directed new hires into organized task forces to complete critical inventory processes.

BODEGA MARINE LABORATORY • UC DAVIS

Bodega Marine Reserve Steward Intern • *September 2019 – December 2019*

Participated in restoration of Bodega Marine Reserve removing invasive plant species under arduous field conditions. Surveyed for native plant species identified as candidates for greenhouse germination to supplement ecosystem diversity in future dispersal.

MOLECULAR BIOLOGY LABORATORY (POGLIANO LAB) • UC SAN DIEGO

Research Scholar • July 2015

Constructed recombinant plasmids of bacteriophage gp200 DNA to fluorescently tag capsid protein localization during host infection with the mCherry reporter protein. Contributed to ongoing research investigating the role of capsid proteins in jumbo phage reproduction in *Pseudomonas chlororaphis* host cells. Developed a concise and informative poster under an intensive three-week deadline detailing this procedure.

TECHNICAL SKILLS

Legend: Advanced ****, Proficient ***, Intermediate **, Novice *

<i>Molecular Biology</i>	Nucleic acid extraction of tissue and environmental samples ****	Cell culturing *	qPCR ****	Primer design ****
<i>Aquaculture</i>	Teleost fish brood stock care ****	Teleost fish embryo and larvae care ****	Aquatic invertebrate collection ****	Aquatic invertebrate care ****
<i>Chemical</i>	Solid phase extraction ***	Sublethal toxicity exposure ***	Serial dilutions ****	Acid bath glassware cleaning ****
<i>Field</i>	Teleost fish dissection ***	Teleost fish tissue collection ***	eDNA sample collection ****	Wilderness first aid and CPR certified ***
<i>Bioinformatic</i>	Behavioral assessment (EthoVision XT, DanioScope) ****	Microsoft Office (Word, Excel, PowerPoint) ****	Histological analysis (ImageJ) ****	Data analysis (GraphPad Prism 9, RStudio) ****

Languages

Fluent in oral and written English. Proficient in oral and written Spanish.

COMMUNITY INVOLVEMENT

- Junior Specialist • August 2020 – September 2022 • Developed and implemented COVID-19 safety protocols mitigating the risk of SARS-CoV-2 exposure amongst lab members.
- United Students Against Sweatshops Local 143 Organizer • September 2018 – January 2020 • Oversaw fellow students in multiple demonstrations to advocate for University of California service workers in their negotiations for fair contracts with the university.
- Movimiento Estudiantil Chicanx de Aztlán Vice President • September 2015 – June 2016 • Engaged peers in Chicanx history emphasizing the role of higher education in the empowerment of our community.

SCIENCE COMMUNICATION AND OUTREACH

Posters

C. Valdivia, V. Chaikerasitak, J. Pogliano. The major capsid protein of a bacteriophage is localized close to the infection nucleoid in the host cell. Poster presented at: 3rd Annual Academic Connections Research Scholars Presentation. University of California, San Diego; 2015 Jul 31; San Diego, CA.

C. Valdivia, S. M.R Abdelrazek, S. M. Brander, M. J. Lydy, R. E. Connon. Impacts of bifenthrin, an endocrine disrupting pesticide, on the reproductive health of Delta Smelt. Poster presented at NorCal SETAC 30th Annual Meeting; 2022 Sep 15; Davis, CA.

Publications in Preparation

Segarra A, Mauduit F, **Valdivia C**, Connon R. Effect of insecticide and pathogen infection on Chinook salmon health.