

**Dean Wu**  
Doctoral candidate  
Quantitative and Systems Biology  
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## **EDUCATION**

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Ph.D. Quantitative and Systems Biology. UC Merced. In progress

Advisor: Emily V Moran

Committee: A Carolin Frank (chair), Teamrat A Ghezzehei, Roger C Bales

**Simulating effects of evolutionary potential on forest dynamics under projected future climates.**

A.Sc. Computer Information Systems. Monterey Peninsula College. 2015

M.Sc. Biological Sciences (Molecular and Cellular Biology). California State University Sacramento. 2011

Advisor: Nicholas N Ewing

Committee: Brett Holland, Fu-Tong Liu

**Association analysis of galectin gene promoter polymorphisms with multiple cancers.**

B.Sc. Molecular, Cellular, and Developmental Biology. UC Santa Cruz. 2004

## **RESEARCH/PROFESSIONAL EXPERIENCE**

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Researcher/Research Assistant. UC Merced. 2015-present

EV Moran lab:

- *Analyzed greenhouse experiment data for heritable variation in drought tolerance*
- *Assisted in setting up greenhouse trials of ponderosa seedlings*
- *Obtained and analyzed forestry trial data to detect heritable variation in climate response traits*
- *Modified and ran simulations in SORTIE-ND forest simulator under various heritability/climate scenarios*
- *Carried out tree measurements and surveys at Sierra Nevada field sites*
- *Supervised and mentored undergraduate field assistants*

FW Wolf lab:

- *Performed Drosophila forward genetic screen for OTUD6 interactors*
- *Ran DNA gels for OTUD6 expression*
- *Performed Bradford assays and immunoassays for various proteins*
- *Performed fly crosses and carried out dissections*
- *Maintained fly cultures*

Volunteer Researcher. UC Davis Medical Center. 2006-2011

FT Liu lab:

- *Analyzed cancer microarray data to locate putative methylation sites in promoter regions of galectin genes*
- *Performed Bradford assays and immunoassays for various proteins*
- *Embedded, sectioned, and stained H&E and IHC slides*
- *Maintained cultures*

Undergraduate Research Assistant. UC Santa Cruz.

2003-2004

MC Zúñiga lab:

- *Performed ELISA and immunoblots to measure expression of ciliary neurotrophic factor*
- *Prepared lysates and ran DNA gels to check for presence and localization of various transfected genes*
- *Maintained cell and bacterial cultures*
- *Picked up antibodies from Santa Cruz Biotechnology*
- *Prepared classroom experimental setups for student groups in MARC-MBRS summer program*
- *Carried out routine laboratory maintenance*

## **WORKSHOPS**

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USFS Placerville Nursery Clients Meeting and Workshop. Placerville, CA. 2022

Communicating Your Science With the Media. Ecological Society of America Media Workshop. Long Beach, CA. 2021

North American Forest Ecology Workshop. Sault Ste. Marie, ON. 2021

Exploratory Plotting and Data Analysis in R. UC Berkeley D-Lab Workshop. Berkeley, CA. 2015

R for Beginners. UC Berkeley D-Lab Workshop. Berkeley, CA. 2015

Next Generation Sequencing Workshop. UC Davis Bioinformatics Core. Davis, CA. 2011

RNASeq Workshop. UC Davis Bioinformatics Core. Davis, CA. 2011

## **PUBLICATIONS AND PAPERS**

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Wu D, Moran EV. (in prep) Effects of heritability in climate responses on range shifts in Sierra Nevada forest trees.

Wu D, Moran EV. (in prep) Is the evolvability of climate responses potentially important for local-scale forest dynamics?

Wu D, Shu M, Moran EV. 2023. Heritability of plastic trait changes in drought-exposed ponderosa pine seedlings. *Ecosphere*. DOI 10.1002/ecs2.4454.

## **POSTERS AND PRESENTATIONS**

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Wu D, Shu M, Moran E. Heritability of plastic trait changes in drought-exposed

ponderosa pine seedlings. 2023. Ecological Society of America Annual Meeting. Portland, OR. Talk.

Wu D, Shu M, Moran E. Heritability of plastic trait changes in drought-exposed ponderosa pine seedlings. 2023. UC Merced Research Week. Merced, CA. Poster.

Wu D, Shu M, Moran E. Heritable variation in ponderosa pine environmental response traits. 2021. Ecological Society of America Annual Meeting. Long Beach, CA. Talk.

Wu D. Heritable variation in ponderosa pine environmental response traits. 2021. UC Merced, QSB Retreat. Merced, CA. Talk.

Wu D, Vannest N, Aubry-Kientz M, Moran E. Effects of evolutionary potential on forest dynamics under projected future climates. 2019. Symposium: Climate Change and the Ecology of Sierra Nevada Forests. Merced, CA. Poster.

Wu D, Navarrete J, Manansala M, Wolf FW. Ovarian tumor deubiquitinases in physiological stress responses. 2018. UC Merced Research Week. Merced, CA. Poster.

Wu D, Navarrete J, Manansala M, Wolf FW. Ovarian tumor deubiquitinases in physiological stress responses. 2017. Neurobiology of Drosophila. Cold Spring Harbor, NY. Poster.

## ***AWARDS AND FELLOWSHIPS***

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UC Merced QSB Travel Fellowship (\$1000). 2023

UC Merced QSB Remote Teaching and Research Fellowship (\$250). 2021

UC Merced Graduate Student Research Award in Invertebrate Ubiquitination Pathways (\$4609.06). 2016

## ***TEACHING EXPERIENCE***

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Teaching Assistant. ESS 015: Weather, Climate, and the Environment. UC Merced.  
Summer 2023

Teaching Assistant. MATH 015: Introduction to Scientific Data Analysis. UC Merced.  
Spring 2023

Teaching Assistant. BIO 180: Mathematical Modeling for Biology. UC Merced.  
Spring 2023

Teaching Assistant. ESS 001: Intro to Earth Systems Science. UC Merced.  
Fall 2022

Teaching Assistant. ESS 002: Sustainability Science. UC Merced.  
Summer 2021

Teaching Assistant. BIO 130/ESS 130: Plant Biology. UC Merced.  
Spring 2021

Teaching Assistant. BIO 001: Contemporary Biology. UC Merced.

	Fall 2020, Fall 2021, Spring 2022
Teaching Assistant. BIO 141: Evolution. UC Merced.	
	Fall 2019
Instructor. BIO 001L: Contemporary Biology Lab. UC Merced.	
	Summer-Fall 2018
Teaching Assistant. BIO 130: The Cell. UC Merced.	
	Fall 2016
Instructor. BIO 002L: Molecular Biology Lab. UC Merced.	
	Fall 2015, Fall 2017, Spring 2018, Spring 2019

## ***SERVICE AND OUTREACH***

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Peer reviewer. Scientia Forestalis.	2022-present
Member. UC Merced Graduate Pedagogy Association.	2021-present
Content Producer/Social Media Editor. RadioBio UC Merced Podcast scientific outreach organization.	2018-2019
Invited speaker. SACNAS at UC Merced Spring Seminar Series.	2016
Member. UC Merced Graduate Student Association.	2015-present

## ***PROFESSIONAL AFFILIATIONS***

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Northern California Botanists	2022-present
Ecological Society of America	2021-present

## ***OTHER SKILLS***

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Proficient in English and Mandarin