

Dean Wu
Doctoral candidate
Quantitative and Systems Biology
5200 N. Lake Road
Merced, CA 95343
dwu38@ucmerced.edu

EDUCATION

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

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

RESEARCH/PROFESSIONAL EXPERIENCE

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

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

Wu D, Shu M, Moran EV. (in prep) Heritability of plastic trait changes in drought-exposed ponderosa pine seedlings.

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 evolution important for forest dynamics over 80-100 year timescales?

POSTERS AND PRESENTATIONS

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

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

Teaching Assistant. Sustainability Science. UC Merced. Summer 2021

Teaching Assistant. Plant Biology. UC Merced. Spring 2021

Teaching Assistant. Contemporary Biology. UC Merced. Fall 2020, Fall 2021, Spring 2022

Teaching Assistant. Evolution. UC Merced. Fall 2019

Instructor. Contemporary Biology Lab. UC Merced. Summer-Fall 2018

Instructor. Molecular Biology Lab. UC Merced. Fall 2015, Fall 2017, Spring 2018, Spring 2019

Teaching Assistant. The Cell. UC Merced. Fall 2016

SERVICE AND OUTREACH

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

PROFESSIONAL AFFILIATIONS

Northern California Botanists
Ecological Society of America

2022
2021

OTHER SKILLS

Proficient in English and Mandarin