

Dean Wu

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Quantitative and Systems Biology, School of Natural Sciences, UC Merced
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EDUCATION

- PhD. Quantitative and Systems Biology. UC Merced. 2024
Advisor: Emily V Moran
Committee: A Carolin Frank (chair), Teamrat A Ghezzehei, Roger C Bales
Heritable variation in climate responses in trees and its impact on forest dynamics under climate change.
- MS. Quantitative and Systems Biology. UC Merced. 2024
- AS. Computer Information Systems. Monterey Peninsula College. 2015
- MS. 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.
- BS. Molecular, Cellular, and Developmental Biology. UC Santa Cruz. 2004

RESEARCH/PROFESSIONAL EXPERIENCE

- Researcher/Research Assistant. UC Merced. 2015-present
EV Moran forest ecology lab.
FW Wolf *Drosophila* neuroscience lab.
- Volunteer Researcher. UC Davis Medical Center. 2006-2011
FT Liu dermatology/immunology lab.
- Undergraduate Research Assistant. UC Santa Cruz. 2003-2004
MC Zúñiga mouse immunology lab.

PUBLICATIONS AND PAPERS

- Wu D, Shu M, Moran EV. 2023. Heritability of plastic trait changes in drought-exposed ponderosa pine seedlings. *Ecosphere*. DOI 10.1002/ecs2.4454.
- Wu D, Vannest N, Moran EV. (in prep) Evolution of climate responses could alter forest dynamics under climate change even over short time-spans.

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

Breithaupt L, Kneitel J, O'Brien S, Nguyen P, Montiel-Molina JAM, Wu D, Sexton J. (in prep) Ecology and conservation of vernal pool ecosystems.

POSTERS AND PRESENTATIONS

Wu D, Vannest N, Moran EV. (in prep) Is the evolvability of climate responses important for local-scale forest dynamics under climate change? 2025. Ecological Society of America Annual Meeting. Baltimore, MD. Oral presentation.

Wu D, Moran EV. Does the evolvability of climate responses affect local-scale forest dynamics? 2024. Sierra Nevada Science Symposium. Merced, CA. Poster presentation.

Wu D, Shu M, Moran EV. Heritability of plastic trait changes in drought-exposed ponderosa pine seedlings. 2023. Ecological Society of America Annual Meeting. Portland, OR. Oral presentation.

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

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

Wu D. Heritable variation in ponderosa pine environmental response traits. 2021. UC Merced Quantitative and Systems Biology Retreat. Merced, CA. Oral presentation.

Moran EV, Aubry-Kientz M, Vannest N, Wu D. Modeling climate change dynamics of Sierra Nevada forests. 2020. Ecological Society of America Annual Meeting. Salt Lake City, UT. Poster.

Wu D, Vannest N, Aubry-Kientz M, Moran EV. 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 presentation.

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

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

AWARDS AND FELLOWSHIPS

UC Merced Quantitative and Systems Biology Teaching Service Award (\$50).2024

UC Merced Quantitative and Systems Biology Travel Fellowship (\$1000). 2023

UC Merced Quantitative and Systems Biology Remote Teaching and Research Fellowship (\$250). 2021

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

TEACHING EXPERIENCE

Teaching assistant:

BIO 150: Embryos, Genes, and Development	UC Merced	Spring 2024
BIO 011L: Molecular Biology Lab	UC Merced	Fall 2023
ESS 015: Weather, Climate, and the Environment	UC Merced	Summer 2023
MATH 015: Introduction to Scientific Data Analysis	UC Merced	Spring 2023
BIO 180: Mathematical Modeling for Biology	UC Merced	Spring 2023
ESS 001: Intro to Earth Systems Science	UC Merced	Fall 2022
ESS 002: Sustainability Science	UC Merced	Summer 2021
BIO 130/ESS 130: Plant Biology	UC Merced	Spring 2021
BIO 001: Contemporary Biology	UC Merced	Fall 2020, Fall 2021, Spring 2022
BIO 141: Evolution	UC Merced	Fall 2019
BIO 001L: Contemporary Biology Lab	UC Merced	Summer-Fall 2018
BIO 130: The Cell	UC Merced	Fall 2016
BIO 002L: Molecular Biology Lab	UC Merced	Fall 2015, Fall 2017, Spring 2018, Spring 2019

WORKSHOPS

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

SERVICE AND OUTREACH

Treasurer/founding member. UC Merced QSB Graduates for Diversity/Diversity Reading Group.	2023-present
Member. UC Merced/Michigan State University NSF Biological Integration Institute INSITE (Institute for Symbiotic Interactiona, Training, and Education in the Face of a Changing Climate) Symbioses Journal Club.	2023-present
Member. UC Merced EcoEvo Mega lab meeting.	2023-present
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

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

OTHER SKILLS

Proficient in English and Mandarin