



ELENA SUGLIA

SCIENTIST. LEADER.
ADVOCATE. COMMUNICATOR.

CONTACT

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EDUCATION

Ph.D. Population Biology (2023)

University of California, Davis (UCD)

Dissertation Title: *Divergent phenological, morphological, and fitness responses to climate and herbivory across elevations in a native California wildflower*

B.A. Biology (2015)

Brown University

Honors Thesis Title: *Does Sea Level Rise and Die-off Synergistically Kill Salt Marshes?*

PUBLICATIONS

Co-Author "Variation in the seasonal germination niche across an elevational gradient: The role of germination cueing in current and future climates." (2020)

Co-Author "Germination timing and chilling exposure create contingency in life history and influence fitness in the native wildflower *Streptanthus tortuosus*." (2020)

Co-Author "Experimental predator removal causes rapid salt marsh die-off." (2014)

Co-Author "Meiotic gene expression initiates during larval development in the sea urchin." (2013)

PROFILE

Mission- and results-driven leader leveraging 13 years of research experience and 9 years of science education experience to envision and implement equitable policies and programs promoting natural resource stewardship, community engagement, climate resilience, and environmental justice.

ENVIRONMENTAL SCIENCE & RESEARCH

California Sea Grant State Fellow

2024 - Present

Office of Information Management and Analysis, State Water Resources Control Board

- Assisting with designing eDNA Special Studies for the Surface Water Ambient Monitoring Program eDNA Metabarcoding Monitoring and Analysis Project (SeMMAP), including scouting for field sites and designing sampling plan
- Coordinated and facilitated eDNA 101 Workshop; reached over 60 attendees
- Conceptualizing revisions to the Safe to Swim map to improve its utility as an accessible, interactive science communication tool for the public
- Serving as a member of the Racial Equity Data Subcommittee of the Environmental Justice Roundtable
 - Assisting with drafting and implementing the Racial Equity Action Data Plan
 - Consulting on Division of Water Resources equity data survey design
- Assisting with coordinating and facilitating Advisory Workshops for the SWAMP Region 2 Bioaccumulation Monitoring Program Realignment effort

Graduate Student Researcher

2017 - 2023

Gremer Laboratory, Department of Evolution and Ecology, UCD

- Investigated native California plant responses to climate change and drought using field studies, greenhouse experiments, and population genetics
- Awarded National Science Foundation Graduate Research Fellowship
- Acquired \$156,400 across 17 grants for research program and associated travel and mentoring activities
- Communicated research findings to wide audiences through 8 first-authored presentations

Research Assistant

2016 - 2017

Schmitt Laboratory, Department of Evolution and Ecology, UCD

- Studied life history variation and local adaptation in the plant *Streptanthus tortuosus* across elevational and latitudinal clines in the context of its ability to adapt to climate change
- Co-authored 5 presentations and 2 publications with >50 citations: [Google Scholar](#)

Research Assistant

2015

Winfree Laboratory, Department of Ecology, Evolution, and Natural Resources, Rutgers University

- Conducted field work determining the effectiveness of pollinator habitat restoration strategies on native bees
- Led >5 outreach events for over 100 diverse members of the public discussing native bee conservation

Undergraduate Student Researcher

2013 - 2015

Bertness Laboratory, Department of Ecology, Evolution, and Organismal Biology, Brown University

- Performed field experiments demonstrating that recreational overfishing indirectly causes salt marsh die-off
- Coauthored publication in *Ecology Letters* (impact factor 11.27) with >50 citations
- Contributed scientific illustrations to published book chapters, scientific papers, and presentations

POLICY & COMMUNICATION

Diversity, Equity, Inclusion, and Justice

Graduate Advisor to the Dean on DEIJ

2022 - 2023

College of Biological Sciences (CBS), UCD

- Advised and collaborated with CBS leadership to develop and implement policies supporting Diversity, Equity, Inclusion, and Justice among a diverse student body
- Secured \$20K/year for Fellowship and Grant programs providing financial and institutional support for graduate student DEIJ initiatives and leaders
- Advocated for policy reforms to address unmet peer needs and equity gaps

CBS DEIJ Committee Co-Chair

- Collaborated to create the CBS DEIJ Strategic Plan proposing policy recommendations to the Dean; worked to implement Plan priorities
- Represented CBS at campus-wide meetings with the Vice Chancellor's Office of DEI and Campus Council on Community & Diversity
- Facilitated cross-talk to centralize DEIJ efforts across levels of the University

Graduate DEIJ Leader Fellowship Co-Founder

- Co-founded Fellowship to provide compensation and a support network to outstanding graduate students spearheading the advancement of DEIJ
- Collaborated to conceptualize, design, and implement programming for the inaugural cohort which served 9 diverse graduate students across disciplines

Graduate DEIJ Initiative Grant Co-Founder

- Collaborated to develop, fundraise, and implement grant program providing funding for graduate student-led initiatives supporting diversity and inclusion
- Solicited and reviewed applications; recommended programs for funding
- Allocated over \$4K to fund 11 graduate-led programs

Science Policy & Communication

Diversity & Advocacy Committee Member

2024 - present

National Science Policy Network (NSPN)

- Co-authored a [public comment](#) for the National Institutes of Health Request For Information on re-envisioning postdoctoral training. *Press: [Research!America article](#), NSPN spotlight [blog post](#)*

Writer and Editor

2017 - 2019

SciComms Program, Boston University (formerly National Public Radio SciComms)

- Pitched, wrote, edited, and published an OpEd on Scientific American Blog
- Peer-edited 2 articles published in popular science journalism outlets

Organized Science Communication Colloquium

2015

Brown University

- Organized, marketed, and led three days of public talks and events
- Hosted a prominent scientist who gave a keynote address to >100 people
- Secured over \$5K in funding from various sources

Science Policy Director

2013 - 2015

Triple Helix Magazine, Brown University

- Served on the Executive Committee for Triple Helix Magazine
- Organized 6 public Science Cafes for 10-30 attendees to showcase work done by researchers on campus

PRESS COVERAGE

"From Tide Pools to Policy: CBS Graduate Student Leads in Environmental Research and Advocacy" [Link](#)

"Creativity and Commitment: Fellows to Present on Efforts to Foster Diversity and Inclusivity" [Link](#)

"AIBS Names 2023 Emerging Public Policy Leaders" [Link](#)

"Talking Science, Policy, and Congressional Visits with Emerging Public Policy Leadership Award Winners" [Link](#)

POLICY MEMOS

Co-Author Public Comment on the NIH RFI "Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise" (2023)

Co-Author "Increasing HPV Vaccination in Minnesota: School Vaccine Mandate" (2021) *Entered the International Science Policy Memo Competition, Journal of Science Policy & Governance and National Science Policy Network*

Author "Recreational Fishing Triggers Salt Marsh Die-Off: Recommendations to Preserve Rhode Island Marshes" (2015) *Sent to Senator Whitehouse (RI)*

PUBLISHED WRITING

"Climate change once heated the oceans and caused 'The Great Dying'" *Massive Science* (2019) [Link](#)

"Vanishing Nutrients" *Scientific American Blog* (2018) [Link](#)

"Bringing Science on a Blind Date" *Center for Population Biology* (2018) [Link](#)

"Accidental Greatness" *The College Hill Independent* (2015) [Link](#)

LEADERSHIP & CIVIC ENGAGEMENT

Director of Professional Development

2020 - 2021

Equity in STEM and Entrepreneurship (ESTEME), Graduate Student Organization, UCD

- Led monthly virtual career panels with an emphasis on DEIJ; speakers included 6 Black womxn, 8 People of Color, and 11 womxn
- Connected over 100 undergraduate and graduate students with valuable career advice and perspectives from a variety of careers
- Volunteered for after-school program leading hands-on science activities biweekly at two local disadvantaged middle schools

Student Diversity Committee Chair & Member

2017 - 2023

Chair (2020-2021), Member (2017-2023) | Population Biology Graduate Group, UCD

- Improved equity in graduate admissions by recommending policy reform implementing holistic application review and eliminating GRE requirement
- Led 2 summer reading groups of 20-30 CBS students and faculty promoting action-oriented discussions on enhancing DEIJ in STEM and academia
- Proposed changes to policy on curriculum and advising to increase equity, inclusion, and student mental health and learning outcomes

Founding Executive Board Member

2019 - 2021

Evolution and Ecology Graduate School Preview | Population Biology Graduate Group

- Collaborated to design, organize, fundraise, and virtually host first iteration of program demystifying the “hidden curriculum” of applying to graduate school
- Served as Community Building Chair in 2021 iteration
- Served over 150 participants since 2020, including first generation, Latinx, Black, veteran, disabled, and LGBTQIA+ students

Steering Committee Student Representative

2018-2019; 2020-2021

Center for Population Biology & Population Biology Graduate Group, UCD

- Advocated for student needs by compiling and presenting evidence comparing ratio of cost of living to student stipends across graduate groups during program review, resulting in increased student pay by \$6700/year
- Lobbied to secure continued program funding during 5-year review

Steering Committee Member

2017 - 2019

Graduates for Inclusion, Diversity, and Equity, Graduate Student Organization, UCD

- Collaborated with the Campus Dialogue and Deliberation office and the Sustained Dialogue Institute to host dialogue events for graduate students to build cross-campus community and address divisive issues on campus
- Organized and facilitated allyship trainings for groups of 30-60 students
- Created the Diversity & Inclusion Network to compile information about D&I initiatives and resources across campus into a centralized archive

Biology Curriculum Committee Student Representative

2012-2015

Biology Department, Brown University

- Successfully advocated to incorporate scicomm into the undergraduate Biology concentration program and increase available course offerings
- Recommended curricular changes resulting in new courses in biological illustration and upper-division science writing

Social Action House Founding Co-President

2013

Brown University

- Organized and hosted community building events for House residents
- Led collaborative group discussions on local social justice issues

PROFESSIONAL SERVICE

Ad Hoc Reviewer PLOS ONE
Scientific Journal

Abstract Reviewer for the Plant
Population Ecology Section of the
Ecological Society of America Annual
Meeting (2020-2022)

Reviewer for textbook Marine
Community Ecology and Conservation,
ed. 2 (2013)

COMMUNITY SERVICE

Volunteer NorCal Resist Mutual Aid
Farm (2021 - Present)

Volunteer STEM Squad, Equity in
STEM and Entrepreneurship
(ESTEME), UCD (2017 - 2023)

Co-Organizer Center for Population
Biology Symposium (2020)

Volunteer Undergraduate Student
Training in Academic Research, UCD
(2018)

Volunteer Picnic Day Tree of Life
Exhibit, Planet Earth Award Winner
2019, UCD (2018, 2019)

Volunteer Family STEAM night, Barrett
Middle School, ESTEME (2017)

SOCIETY MEMBERSHIP

National Science Policy Network

National Association of Science Writers

American Association for the
Advancement of Science

Ecological Society of America (*Science
Communication Section, Plant
Population Ecology Section*)

Society for the Study of Evolution

Davis Botanical Society

California Botanical Society

Botanical Society of America

MENTORING

Research Mentor

2017 - 2019

UCD | 21 womxn/nonbinary persons and 13 underrepresented minorities

- Created an implemented a research training program for 24 undergraduate students including student-centered research training, interactive skill building workshops, personalized professional development, and career advising
- Collaborated to recruit, interview, select, and supervise groups of 5-10 students for a study resulting in 3 undergraduate co-authorships
- Supervised an intern co-authoring a manuscript for a Professional Writing Minor

Mentor

2022 - 2024

Polygence | K-12

- Mentored 3 students for program aiming to democratize access to research
- Guided mentees through research project design, execution, and showcasing
- Taught students skills in literature review, coding, and scientific writing

FORMAL MENTORING

Peer Mentor Population Biology Graduate Group (3 students) (2019-2023)

Mentor for intern satisfying requirements for Professional Writing Minor (1 student) (2022)

Mentor Evolution and Ecology Graduate Preview Program (1 student) (2018)

Awardee Sharon Gray Memorial Mentorship Award (1 student) (2017)

TEACHING

Instructor

2014 - 2023

UCD & Brown University

- Teaching Assistant for 7 undergraduate courses with a variety of course content, learning goals, structures, and class sizes
- Fostered student learning by applying evidence-based pedagogical training in active learning and innovative techniques
- Delivered learning content by leading discussion groups, lessons, review sessions, and office hours
- Provided authentic learning experiences to diverse people by cultivating inclusive, student-centered learning spaces
- Managed multiple classrooms of 25 students

Democracy Coach

2012

Generation Citizen, Brown University

- Co-taught a seventh grade class at an underserved middle school to enhance project-based civics education in the classroom and promote civic engagement outside the classroom
- Planned and taught lessons and aided students in creating an anti-gang violence awareness video that they presented at the Rhode Island State House



PhD study species
Illustration by E. Suglia

ORAL COMMUNICATION

Invited Panelist "Social Justice in Academia"

MCP 290 Navigating Graduate School, UCD (2022)

Invited Panelist "What I wish I knew before starting a PhD"

Underrepresented Minorities Graduate Preparatory Program, UCD (2022)

Panelist Roundtable Discussion

Holistic U Graduate Diversity Orientation, UCD (2018)

Talk "A Story About a Salt Marsh,"

Department of EEOB Seminar, Brown University (2015)



RESEARCH PRESENTATIONS

Talk Ecological Society of America Annual Meeting (2020, 2022)

Talk Center for Population Biology Seminar (2020)

Talk Population Biology Graduate Group Symposium (2017, 2020)

Poster Botanical Society of America Annual Conference (2020)

PROFESSIONAL DEVELOPMENT

Environmental Research

SWAMP eDNA Metabarcoding Monitoring and Analysis Project
Study Design and Field Collection Training
Bioassessment 101: Introduction to Bioassessment, SWRCB (2024)
Data Management Workshop, UCD (2020)
Introduction to R in GIS, UCD Data Science Initiative (2018)

Science Policy & Communication

An Equity-First Approach to Climate Adaptation Planning & Implementation (2024)
AAAS Catalyzing Advocacy in Science and Engineering (2023)
Mentee, National Science Policy Network Mentorship Program (2022-2023)
AAAS Forum on Science & Technology Policy (2022)
Science Policy Short Course: Survival in and Dynamics of the Congressional Ecosystem, ESA Annual Meeting (2022)
Science Communication Workshop Series, Scholars Promoting Education Awareness and Knowledge, UCD

Diversity, Equity, Inclusion, and Justice

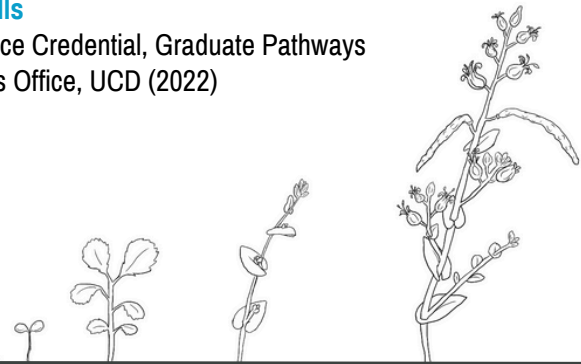
Asking Different Questions Social Justice in Research Program, Feminist Research Institute, UCD (2021)
Diversity 102 Workshop, GradPathways, UCD (2018)
Foundations in LGBTQIA Allyship Training, UCD (2018)
UndocuAlly Program for Educators, UCD (2017)
Graduate Diversity Orientation Program Extension Workshop Series, UCD (2017-2018)

Leadership

Leaders for the Future Fellowship (2022-2023)
Strengths Based Leadership Training for Diversity and Inclusion, UCD (2018)

Interpersonal Skills

Conflict Competence Credential, Graduate Pathways Institute & Ombuds Office, UCD (2022)



GRANTS & AWARDS

Environmental Research

\$2000: Sequencing Seed Grant, UCD Genome Center (2022)
\$1000: Hardman Foundation Research Award, UCD (2022)
\$1500: Graduate Studies Travel Award, UCD (2022)
\$2500: Graduate Research Excellence Grant, Society for the Study of Evolution (2019)
\$3000: UC Davis Natural Reserve System Graduate Student Research Grant (2019)
\$1000: Northern California Botanists Research Scholarship, California Native Plant Society Shasta Chapter (2018)
\$138,000: National Science Foundation Graduate Research Fellowship Program (2017)
\$3500: Voss Environmental Fellowship, Brown University (2014)
\$4200: Summer Undergraduate Research Fellowship for Rhode Island NSF EPSCoR (2012)

Science Policy & Communication

\$62,246: California Sea Grant State Fellowship (2024)
\$400: National Science Policy Symposium Travel Award (2024)
AIBS Emerging Public Policy Leader Award (2023)
Semi-Finalist, California Council on Science & Technology Policy Fellowship (2023)
\$1500: National Association of Science Writers Travel Fellowship to attend AAAS meeting (2015)
\$1000: National Winner, Letters About Literature Contest (2007)

Education

\$1000: Dean Marjorie Thompson Senior Prize in Biology for outstanding student education, Brown University (2015)

Mentoring

\$1000: Sharon Gray Memorial Award, UCD (2017)

SKILLS

Transferrable

Diversity, Equity, Inclusion, and Justice
Written & Oral Communication
Collaboration
Mentorship & Advocacy
Research
STEM Education
Civic Engagement & Outreach

Technical

Project Management
Microsoft Office 365
Data Analytics
R & Bash Programming