

ELENA SUGLIA

SCIENTIST. ADVOCATE.
LEADER. COMMUNICATOR.



CONTACT



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EDUCATION

Ph.D. Population Biology (Exp. 2023)
University of California, Davis (UCD)
Dissertation Title: Climate change impacts on flowering timing 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?



POLICY MEMOS

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)

PROFILE

Mission- and results-driven leader leveraging 13 years of research experience and 9 years of science communication experience to envision and implement equitable data-driven policies promoting climate resilience, environmental justice, and community wellbeing.

POLICY & ADVOCACY IN HIGHER EDUCATION

Graduate Advisor to the Dean on DEIJ

2022 - Present

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

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; currently serving 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 as of March 2023

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

Student Diversity Committee Chair & Member

2017 - Present

Chair (2020-2021), Member (2017-Present) | 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

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

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

SCIENCE COMMUNICATION & POLICY

Writer and Editor 2017 - 2019

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

- 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

PUBLISHED WRITING

Select published writing:

"Climate change once heated the oceans and caused 'The Great Dying'" Massive Science (2019) <u>Link</u>

"Vanishing Nutrients" Scientific American Blog (2018) <u>Link</u>

"Bringing Science on a Blind Date"

Center for Population Biology (2018) Link

"Accidental Greatness" The College Hill Independent (2015) <u>Link</u>

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
 Black womxn, 8 People of Color, and 11 womxn
- Connected over 100 undergraduate and graduate students with valuable career advice and perspectivites from a variety of careers
- Volunteered for after-school program leading hands-on science activities biweekly at two local disadvantaged middle schools

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 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

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

COMMUNITY SERVICE

Volunteer NorCal Resist Mutual Aid Farm (2021 - Present)

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

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)

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)

RESEARCH

Graduate Student Researcher

2017 - 2019

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

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

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

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

RESEARCH PUBLICATIONS

Co-Author Gremer et al. (2020) "Variation in the seasonal germination niche across an elevational gradient: The role of germination cueing in current and future climates." *American Journal of Botany*.

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

Co-Author Bertness et al. (2014) "Experimental predator removal causes rapid salt marsh die-off." *Ecology Letters*.

Co-Author Gustafson et al. (2013) "Meiotic gene expression initiates during larval development in the sea urchin." *Developmental Dynamics*.

TEACHING

Instructor 2014 - 2020

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



ORAL COMMUNICATION

Invited Panelist "Social Justice in Academia" MCP 290 Navigating Graduate School (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)

MENTORING

Research Mentor

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 - 2023

Polygence | K-12

- · Mentored 2 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)

GRANTS & AWARDS

Research

\$2000: Sequencing Seed Grant, UC Davis Genome Center (2022)

\$2500: Graduate Research Excellence Grant, Society for the Study of Evolution (2019)

\$3000: UC Davis Natural Reserve System Graduate Student Research Grant (2019)

\$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)

Communication

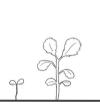
2017 - 2019

\$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)





PROFESSIONAL DEVELOPMENT

Science Policy & Communication

AIBS Emerging Public Policy Leader Award (2023)

AAAS Catalyzing Advocacy in Science and Engineering (2023)

California Council on Science & Technology Policy Fellowship Semi-Finalist (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)

Diversity, Equity, Inclusion, and Justice

Asking Different Questions Social Justice in Research Program, Feminist Research Institute, UCD (2021)

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)

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