

Elena R. Suglia

Center for Population Biology · University of California, Davis

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Education

University of California, Davis, Ph.D. student, Population Biology 2017-present
University of California, Davis, M.Sc., Population Biology 2018
Brown University, B.A. Biology with honors, 3.88 GPA 2015

Publications

Gremer, J.R., Chiono, A., **Suglia, E.**, Bontrager, M., Okafor, L. and J. Schmitt. *In press*. Variation in the seasonal germination niche across an elevational gradient: The role of germination cueing in current and future climates. *American Journal of Botany*.

Gremer, J.R., Wilcox, C.J., Chiono, A., **Suglia, E.** and J. Schmitt. *In press*. 2019. Germination timing and chilling exposure create contingency in life history and influence fitness in the native wildflower *Streptanthus tortuosus*. *Journal of Ecology* doi: 10.1111/1365-2745.13241.

Bertness, M.D., Brisson, C.P., Coverdale, T.C., Bevil, M.C., Crotty, S.M., and **E.R. Suglia**. 2014. Experimental predator removal causes rapid salt marsh die-off. *Ecology Letters* 17(7):830-835 doi: 10.1111/ele.12287.

Yajima, M., **Suglia, E.R.**, Gustafson, E.A., and G.M. Wessel. 2013. Meiotic gene expression initiates during larval development in the sea urchin. *Developmental Dynamics* 242(2):155-63 doi: 10.1002/dvdy.23904.

Research

PhD Student, Gremer Laboratory, University of California, Davis 2017-present
Studying plant responses to climate change using a combination of field, genomics, and modeling approaches. Specifically, investigating the effects of snowmelt timing on phenology and gene flow in several populations of the native California plant *Streptanthus tortuosus* at Lassen Volcanic National Park.

Research Assistant, Schmitt Laboratory, University of California, Davis 2016-2017
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, Winfree Laboratory, Rutgers University 2015
Conducted field work determining the effectiveness of pollinator habitat restoration strategies on native bees. Identified New Jersey bees and plants to species and curated insect and plant collections. Measured bee and floral traits to quantify trait matching.

Research Assistant, Bertness Laboratory, Brown University 2013-2015
Performed field experiments in Cape Cod salt marshes demonstrating that recreational overfishing triggers a trophic cascade that leads to salt marsh die-off.

Research Assistant, Wessel Laboratory, Brown University 2013

Studied expression of meiotic genes and proteins during echinoderm embryogenesis and gametogenesis. Designed and performed independent study researching possible splicing event in echinoderm meiotic gene *dmc1*.

Academic Honors & Awards

Dean Marjorie Thompson Senior Prize in Biology, Brown University	2015
Sigma XI Scientific Research Honor Society	2015
USA Rugby All-Academic	2014

Funding

Graduate Research Excellence Grant, Society for the Study of Evolution (\$2500)	2019
Davis Botanical Society Student Research Grant (\$1500)	2019
UC Davis Natural Reserve System Graduate Student Research Grant (\$3000)	2019
California Native Plant Society Education Grant (\$600)	2018
Center for Population Biology Research Award, UC Davis (\$1200)	2018
Northern California Botanists Research Scholarship, CNPS Shasta Chapter (\$1000)	2018
Sharon Gray Memorial Award to fund mentorship activities, UC Davis (\$1000)	2017
NSF Graduate Research Fellowship Program Award (\$138,000)	2017
National Association of Science Writers Travel Fellowship to attend AAAS meeting (\$1500)	2015
Voss Environmental Fellowship, Brown University (\$3500)	2014
Undergraduate Teaching and Research Award, Brown University (\$3500)	2013
Summer Undergraduate Research Fellowship for Rhode Island NSF EPSCoR (\$4200)	2012

Presentations

* oral presentation, † poster presentation

- J. Gremer, C. Wilcox, **E. Suglia**, A. Chiono, and J. Schmitt. Life history plasticity and adaptation in a changing climate. Joint Congress on Evolutionary Biology, Montpellier, France. 2018
- J. Gremer, C. Wilcox, A. Chiono, **E. Suglia**, and J. Schmitt. Life history contingency in a native wildflower, *Streptanthus tortuosus*: Mechanisms and fitness consequences. Ecological Society of America, New Orleans, LA and University of Michigan's Green Life Symposium, Ann Arbor MI. 2018
- J. Gremer, C. Wilcox, **E. Suglia**, A. Chiono, and J. Schmitt. Mechanisms of life history variation and climate adaptation in a native wildflower. American Society of Naturalists, Pacific Grove, CA. 2018
- L. Okafor, **E. Suglia**, and J. Gremer. Understanding the life history of *Streptanthus tortuosus* through a thermal germination study. Evolution and Ecology Graduate Admissions Pathway Program Conference, Davis, CA. 2018
- E. Suglia**. The impact of snowmelt on phenology and population genetics of *Streptanthus tortuosus*. Population Biology Graduate Group Student Symposium, Davis, CA.* 2017
- E. Suglia**, M. Bertness, C. Brisson, T. Coverdale, M. Bevil, and S. Crotty. Experimental predator removal causes rapid salt marsh die-off. Benthics Ecology Meeting, Quebec City, Canada.* 2015
- E. Suglia**, M. Yajima, E. Gustafson, and G. Wessel. Expression of Meiotic Genes and Proteins During Echinoderm Embryogenesis and Gametogenesis. Rhode Island SURF Conference, Kingston, RI. † 2012

Teaching

<i>Teaching Assistant</i> , Introduction to Evolution, UC Davis	Winter 2019
<i>Teaching Assistant</i> , Ecology and Evolution of Animal-Plant Interactions, UC Davis	Fall 2018
<i>Teaching Assistant</i> , Principles of Ecology, Brown University	Spring 2014, Spring 2015
<i>Teaching Assistant</i> , Statistical Analysis of Biological Data, Brown University	Spring 2015
<i>Teaching Assistant</i> , Environmental Scholarship and Communication, Brown University	Spring 2015
<i>Teaching Assistant</i> , Coastal Ecology and Conservation, Brown University	Fall 2015
<i>Democracy Coach</i> , Generation Citizen, Brown University	Fall 2012

Mentoring

Peer Mentor , Population Biology Graduate Group, UC Davis	2019-present
Mentored 13 undergraduates , University of California, Davis	2016-present

Mentees: Vanessa Bassinello, Helena Bayat, Jasmine Curcio, Danielle Davisson, Hannah de la Calle, Lahari Indraganti, Gautum Mathur, Joaquin Meckler-Pacheco, Ryan Moore, Ylana Nguyen, Lauren Okafor, Noah Rosenberg, John Schroder

Summer research mentor for Evolution and Ecology Graduate Admissions Pathway program (LO), 2018

Sharon Gray Memorial Award Mentor (LI), 2018. Accompanied mentee to California Native Plant Society 2018 Conservation Conference and Jepson Herbarium Introduction to Lichens Workshop

Research Mentor for HB, JM, LI, LO. Assisted with project design, analytical approach, and poster presentation (HB, JM, LO); guided literature review, held weekly check-ins, oversaw research activities (HB, LI, LO)

Aided in applications for jobs and fellowships, navigating degree and GPA, cover letter and resume writing (HB, JM); provided professional development advice and resources (HB, LI, JM, RM)

Designed and ran a cover letter and resume writing workshop for two quarters

Led scientific paper discussion group for three quarters

Designed and taught introductory R programming workshops for two quarters

Professional Service

Ad Hoc Reviewer, PLOS ONE

Reviewer for textbook *Marine Community Ecology and Conservation*, ed. 2

Academic Organizations

Equity in Science, Technology, Engineering, Math, and Entrepreneurship, University of California, Davis

Outreach Committee Member (2017-present), <https://esteme.weebly.com/>

Women in Life Sciences at Davis, University of California, Davis

Administrator (2018-present), <https://wild.ucdavis.edu/>

Professional Membership

Ecological Society of America (Science Communication Section, Plant Population Ecology Section)
California Native Plant Society (Shasta Chapter, Mount Lassen Chapter)
Botanical Society of America (Ecological Section)
Davis Botanical Society (Center for Plant Diversity, University of California, Davis)
Society for the Study of Evolution
Friends of the Jepson Herbarium
Society for Herbarium Curators
National Association of Science Writers

Professional Development

Research

Introduction to R in GIS, University of California, Davis Data Science Initiative 2018

Teaching

Teaching Assistant Wellbeing Program, UC Davis Center for Educational Effectiveness & Student Health and Counseling Services 2019
Creating Inclusive Learning Spaces Workshop Series, UC Davis Center for Educational Effectiveness 2019
Fall Foundations in Teaching Workshop Series, UC Davis Center for Educational Effectiveness 2018
Teaching Philosophy Workshop, UC Davis Center for Educational Effectiveness 2018
Diversity Statement Workshop, UC Davis Center for Educational Effectiveness 2018

Diversity & Inclusion

Strengths Based Leadership Training for Diversity and Inclusion, UC Davis 2018
Diversity 102 Workshop, GradPathways, UC Davis Graduate Studies 2018
Foundations in LGBTQIA Allyship Training, UC Davis LGBTQIA Resource Center 2018
UndocuAlly Program for Educators, UC Davis AB540 and Undocumented Center 2017
Graduate Diversity Orientation Program Extension Workshop Series, UC Davis 2017-2018

Outreach & Community Service

Student Representative, Population Biology Graduate Group Steering Committee, UC Davis 2018-2019
Member, Population Biology Graduate Group Diversity Committee, UC Davis 2018-present
Steering Committee Member, Graduates for Inclusion, Diversity, and Equity, UC Davis 2017-present
Volunteer, STEM Squad, Winters Middle School, Winters, CA 2017-present

<https://estemestemsquad.weebly.com/>

<i>Volunteer</i> , Roundtable Discussion, Holistic U Graduate Diversity Orientation, UC Davis	2018
<i>Volunteer</i> , Undergraduate Student Training in Academic Research, UC Davis	2018
<i>Volunteer</i> , Picnic Day Tree of Life Exhibit, Planet Earth Award Winner 2019, UC Davis	2018-2019
<i>Volunteer</i> , Family STEAM night, Barrett Middle School, Carmichael, CA	2017

Science Communication | Writing Portfolio: elenasuglia.journoportfolio.com

Contributing writer and editor, National Public Radio SciCommers	2017-present
SciComm Workshop Series, Scholars Promoting Education Awareness and Knowledge, UC Davis	2017
Lead public Pollinator Walks in New Jersey discussing native bee diversity and conservation	2015
Organized and led 3-day Science Communication Colloquium, Brown University	2015
Published a This I Believe essay about salt marshes on Rhode Island National Public Radio	2015

Selected Science Writing

"Climate change once heated the oceans and caused 'The Great Dying.'" Massive Science. 25 February 2019. [Link](#)

"Vanishing Nutrients." Scientific American Blog. 10 December 2018. [Link](#)

"The Buzz on Bee Research at Fairview Farm." Raritan Headwaters Association Newsletter. 29 October 2015. [Link](#)

"Tardigrades: The tiny superheroes that have been to space." Public Radio Exchange. 7 May 2015. [Link](#)

"Robots may soon swarm the ocean floor searching for resources." National Association of Science Writers. 18 February 2015. [Link](#)

Skills

Programming: R, Unix, JAGS, Stan, MySQL

Software: JMP, ImageJ, G*Power, SAS, Estimate S, Microsoft Office, Adobe Illustrator, Procreate