

# Anjum Kaur Gujral

*Curriculum vitae*

Department of Biology, San Francisco State University

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## **EDUCATION**

*San Francisco State University*

Present

M.Sc. Ecology, Evolution, and Conservation Biology

*Advisor: Dr. Kevin Simonin*

*San José State University*

August 2014 – May 2019

B.Sc. Biological Sciences: Ecology and Evolution

Minor: Environmental Studies

*Magna Cum Laude*

## **RESEARCH EXPERIENCE**

**Assessing the Influence of Topography and  
Soil Water Potential on Mycorrhizae Colonization  
of Coast Live Oak**

February 2020- Present

UC Berkeley, Research Affiliate

*Postdoctoral Researcher: Dr. Suzanne Pierre*

*Project: Maintained a greenhouse study, extracted and quantified DNA from roots and rhizosphere of Coast Live Oak growing along a moisture gradient, in order to determine mycorrhizal colonization.*

**Population Genetics, Ecology, and Reproductive  
Biology of a Rare Redwood Forest Specialist**

January 2019 - Present

Save the Redwoods League, Field Biologist

*Primary investigator: Dr. Benjamin Carter; Co-investigator: Dr. Tracy Misiewicz*

*Project: Collected life history demographic data, as well as pollination and dispersal observations to inform conservation management for a rare and endemic plant.*

*Implemented a litter removal field experiment and created a system for tracking development of individuals through space and time.*

**Evolutionary and Plastic Changes in a Native  
Annual Plant After Historic Drought**

August 2017- August 2019

San José State University, Undergraduate Researcher

*Primary investigator: Dr. Susan Lambrecht*

*Project: Designed and executed a greenhouse study to test for evolution in physiological function, morphology, and phenology in response to long-term drought.*

**Global Observation Research Initiative  
in Alpine Environments (GLORIA)**

July 2018- Present

UCLA White Mountain Research Station, Volunteer Surveyor

*Project: Conducted downslope surveys on alpine plants to generate a comprehensive dataset that can inform our understanding of how alpine species distribution ranges are changing due to climate change.*

### **Evolutionary Ecology of *Scleropodium***

April 2017- May 2018

San José State University, Undergraduate Researcher

*Primary investigator:* Dr. Benjamin Carter

*Project:* Assisted in data collection for determining morphological differences in moss species, participated in a reciprocal transplant field experiment for aquatic and terrestrial species, and led the development of a dry down experiment in order to investigate responses to water stress.

**San Bruno Mountain Watch**, San Bruno, CA

June 2016- August 2016

Intern

*Project:* Assisted in the process of restoring the native vegetative habitats of San Bruno Mountain by collecting seed, propagating individuals in a nursery and replanting native species on the mountain. Maintained a catalog for native plant seed inventory.

### **PUBLICATIONS**

Lambrecht, S., **Gujral, A.**, Renshaw, L., Rosengreen, L. 2019, "Evolutionary and plastic changes in a native annual plant after a historic drought," *Ecology and Evolution*

### **PRESENTATIONS**

**Gujral, A.**, Carter, B., 2020, "The reproductive biology and life history of a rare redwood forest specialist, Dudley's Lousewort (*Pedicularis dudleyi*)," Poster at the Northern California Botanists Symposium, Chico, CA.

**Gujral, A.**, Rosengreen, L., Lambrecht, S. 2019. Evolution and plasticity of flowering time of *Leptosiphon bicolor* (Polemoniaceae) in response to an historic California drought. Poster at the Botanical Society of America Annual Conference, Tucson, AZ.

**Gujral, A.**, Renshaw, L., Rosengreen, L., Lambrecht, S. 2019. Evolution and plasticity of flowering time of *Leptosiphon bicolor* (Polemoniaceae) in response to an historic California drought. Poster at the SJSU College of Science Student Research Fair, San José, CA

### **FUNDING**

Achievement Rewards for College Scientists (ARCS) Scholarship June 2020  
\$10,000

CSU Program for Education and Research in Biotechnology April 2019  
\$1,500 Travel Grant

### **AWARDS & HONORS**

National Science Foundation Graduate Research Fellowship Honorable Mention 2020

2<sup>nd</sup> Place Poster Award at the Northern California Botanists Symposium 2020

Magna Cum Laude 2019

Phi Kappa Phi Honor Society 2018, 2019

Tri Beta Biological Honor Society 2019

Dean's Scholar, San José State University 2014-2019

### **CONFERENCES ATTENDED**

Botanical Society of America: Botany 2020 July 2020

Northern California Botanists Symposium January 2020

Botanical Society of America: Botany 2019  
California Botanical Society Graduate Student Symposium

July 2019  
March 2019

**SKILLS:**

Plant identification, taxonomic keying, soil texture analysis, preparing and cataloging herbarium specimens, conducting vegetation surveys, performing DNA extractions, backpacking, R, Datagraph, Mesquite, Geneious, PAUP

**CITIZEN SCIENCE**

**California Academy of Sciences** December 2020- Present  
Plant Collections Volunteer  
Transcribed herbarium specimen labels from digital images.

**Notes From Nature - Capturing California's Flowers** May 2020- Present  
Citizen Science Volunteer  
Transcribed herbarium specimen labels from digital images in order to contribute to the investigation of phenological changes in California native plants.

**BioBlitz, San José, CA** April 2017- Present  
Citizen Science Volunteer  
Led groups through nature hikes and taught people how to document species observations on the iNaturalist data crowdsourcing platform.

**SJSU Community Garden, San José, CA** January 2016 -January 2018  
Student Volunteer  
Worked with a group of students on practicing sustainable gardening techniques to grow food for the student body.

**PROFESSIONAL AFFILIATIONS:**

Botanical Society of America  
Ecological Society of America  
American Geophysical Union  
California Native Plant Society  
American Association for the Advancement of Science