

**MYRIAM SERRANO**[Myraceae@gmail.com](mailto:Myraceae@gmail.com)[Website](#) [Linkedin](#)

415.859.8017

**EDUCATION**


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<b>M.S.</b> Ecology, Evolution, and Conservation Biology San Francisco State University	<i>expected 2021</i>
<b>B.S.</b> Biology, Concentration in Botany San Francisco State University	2019
<b>A.A.</b> Science and Math Napa Valley College	2017

**LAB EXPERIENCE**


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**GRADUATE STUDENT RESEARCHER** *Fall 2019-present*  
**SAN FRANCISCO STATE UNIVERSITY - DEPARTMENT OF ECOLOGY, EVOLUTION, AND CONSERVATION BIOLOGY**  
 Working on tracking leaf trait differentiation of newly diverging subspecies of *Chenopodium oahuense* on the Hawaiian Islands in Dr. Kevin Simonin's Laboratory.

- ❖ Using *DinoXcope* and *Image j* to capture and calculate: leaf size, stomata size and density
- ❖ Using *LI-600 Porometer/Fluorometer* to track gas exchange on each subpopulation during its life.
- ❖ Using *Pressure Chamber* to measure water potential and calculate leaf capacitance, relative water content, and turgor loss point.
- ❖ Establishing an Ecological Niche Model and generating maps of new populations using *R*.

**RESEARCH ASSISTANT** *Spring - Summer 2019*  
**SAN FRANCISCO STATE UNIVERSITY - DEPARTMENT OF BOTANY**  
 Conducting a salt-water experiment and tracking morphological changes over time of *Chenopodium oahuense* and Australian acacias in Dr. Jason Cantley's Laboratory. Organizing, mounting, and digitizing the Harry D. Thiers Herbarium database

- ❖ Using *DinoXcope*, *Image j* and *DSLR Camera* to capture and calculate: leaf size, bladder cell density and size, stomata density and size.
- ❖ Using a *Digital Caliper* to measure leaf thickness, mucro, phyllode, internode, and stipule length.
- ❖ Successfully germinating seeds, managing watering treatments, and maintaining a clean pest-free greenhouse environment.
- ❖ Using *R* to create graphs and *PCA* providing evidence of a new species of Acacia.

**UNDERGRADUATE RESEARCHER** *Spring 2019*  
**SAN FRANCISCO STATE UNIVERSITY - DEPARTMENT OF BOTANY**  
 We studied the correlation of plant cell size to genome size, under the Rules of Life Grant in Dr. Kevin Simonin's Laboratory.

- ❖ Using dental impressioning techniques and *epidermal peels* on cacti to obtain stomata density and size.

**WORK HISTORY**


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**HORTICULTURE ACCESSIONING ASSISTANT** *June*  
*2019-Nov2020*

**SAN FRANCISCO CONSERVATORY OF FLOWERS**

Responsible for *managing* the plant collections information, including obtaining and/or researching plant history, bloom times, origins, rarity, conservation status, nativity, and educational insights. I *developed* bed maps for all greenhouse bays and galleries allowing us to successfully record plant locations for horticulture, engagement, and educational usage. I piloted a new collections management database (IrisBG) and developed *protocols* and *procedures* for all horticulture and education staff. Developed content and vetted scientific information for over 270 plants for the Conservatory's website.

## TEACHING EXPERIENCE

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San Francisco State University

*Oral and Written communication skills* in instructing, managing, and leading students of various age groups. *Generating and grading* assignments and quizzes. *Supervising* students in field and lab settings.

### LAB INSTRUCTOR

- ❖ BIOL313 Principles of Ecology (SP2021)
- ❖ BIOL230 Introductory Biology (FA2020)
- ❖ BIOL213 Principle of Human Physiology (SP2019)

### GRADUATE ASSISTANT

- ❖ BIOL525 Plant Physiology (FA2020)
- ❖ BIOL529G Plant Ecology (SP2019)

## PROFESSIONAL MEMBERSHIPS

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| <ul style="list-style-type: none"> <li>❖ California Native Plant Society</li> <li>❖ California Botanical Society</li> <li>❖ SACNAS</li> <li>❖ Women in Science and Engineering</li> <li>❖ Carnivorous Plant Society</li> </ul> | <ul style="list-style-type: none"> <li>❖ Botanical Society of America</li> <li>❖ Society for Conservation Biology</li> <li>❖ Association for Tropical Biology and Conservation</li> <li>❖ American Society of Naturalist</li> </ul> |
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## SCHOLARSHIPS, GRANTS, AND AWARDS

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| <ul style="list-style-type: none"> <li>❖ Middle Class Scholarship (2017-2018)</li> <li>❖ Biology Tuition Reimbursement Program (2019)</li> <li>❖ Bioluminary Award (2019)</li> </ul> | <ul style="list-style-type: none"> <li>❖ NorCal Botanists Student Stipend (2020)</li> <li>❖ Outstanding Graduate Teaching Assistant &amp; Graduate Assistant (2020)</li> </ul> |
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## ADDITIONAL SKILLS

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**HOBBIES:** Plant Identification using the Jepson Manual and ability to identify common California flora, Digital and Analog Photography

**LANGUAGES:** English (native); Spanish (basic)

## RELEVANT COURSEWORK

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**UNDERGRADUATE COMPLETED:** Evolution and Diversity of Plants, Evolution, Environmental Ethics, Plant Taxonomy, Plants and Human Affairs, Genetics, Plant Ecology, Comparative Anatomy of Vascular Plants, Biology of Fungi, Biometry, Plant Physiology, Environmental Problems and Solutions

**GRADUATE COMPLETED:** Introduction to Research Skills, Science Teaching for Scientists, Advances in Ecology and Systematics Biology, Skills for Scientific Proposal Writing, Advances in Biology Education Research, Advances in Ecology and Systems Biology Ecological Theory and Philosophy, Biology Colloquium

**IN PROGRESS (SPRING 2021):** Life Science Careers