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CURRENT POSITION

Associate Professor – Biology, California State University, Fresno (2021-present)
Assistant Professor – Biology, California State University, Fresno (2015-2021)

EDUCATION

Postdoctoral Research Associate – Biology, Kansas State University (2013-2015)
Adviser: Dr. Carolyn Ferguson
Ph.D. - Evolution, Ecology, and Population Biology, Washington University (2006-2013)
Advisers: Dr. Kenneth Olsen and Dr. Barbara Schaal
B.S. - Botany, Summa Cum Laude, University of Florida (2002-2006)
Minor in Anthropology

HONORS, AWARDS, and FUNDING

STEM-NET Faculty Interdisciplinary Collaborative Research Seed Grant: Native plants, places and people: Linking STEM education to local cultural and linguistic diversity (2023-2024)	\$24,820
CSU Agricultural Research Institute Grant: Biology, ecophysiology, genetics, and management of Central Valley populations of common waterhemp (<i>Amaranthus tuberculatus</i>) (2019-2023)	\$149,572
USDA NIFA AFRI: Using evolutionary genomics to probe agricultural invasiveness and adaptive evolution in <i>Amaranthus palmeri</i> (2019-2023)	\$189,106
NSF ADBC: Digitization TCN: Capturing California's Flowers: using digital images to investigate phenological change in a biodiversity hotspot (2018-2023)	\$56,706
USDA NPGS Plant Exploration for Crop Improvement: Plant exploration in California, Arizona, and New Mexico to collect <i>Amaranthus</i> germplasm for crop improvement (2019-2020)	\$9,936
CSU, Fresno College of Science and Mathematics Faculty Professional Development Awards	\$5,963
CSU, Fresno Undergraduate and Graduate Student Awards for Research (cumulative, 2015-2022) from external or internal funding sources	\$34,099
CSUPERB (the California State University Program for Education and Research in Biotechnology) New Investigator Grant (2017-2018)	\$15,000
COAST (CSU Council on Ocean Affairs, Science and Technology) Rapid Response Grant (2017-2018)	\$7,500
CSU, Fresno College of Science and Mathematics Scholarly and Creative Activity Awards (2017-2018, 2022)	\$25,960
National Geographic Society Committee for Research and Exploration Grant 9126-12, Phylogenetic Relationships and Conservation of the Plant Genus <i>Amaranthus</i> in the Galápagos Islands (2012)	\$10,000
National Geographic Society Committee for Research and Exploration Grant 8901-11, An Investigation of the Phylogeographic Origin and Conservation Status of Endemic <i>Amaranthus</i> Species in the Galápagos Islands (2011)	\$8,780

PUBLICATIONS

- Waselkov, K., and K.M. Olsen. 2022. Herbaria reveal cost of the Green Revolution. *Science Perspective* 378(6624): 1053-1054. DOI: [10.1126/science.ade4615](https://doi.org/10.1126/science.ade4615).
- Avila, A.T., T.A. Van Laar, J.V.H. Constable, and **K. Waselkov**. 2020. 16S rRNA gene diversity of bacterial endophytes in parasitic *Cuscuta campestris* and its *Helianthus annuus* host. *Microbiology Resource Announcements* 9(43): e00968-20. doi: 10.1128/MRA.00968-20.
- Waselkov, K.E.**, N.D. Regenold, R.C. Lum, and K.M. Olsen. 2020. Agricultural adaptation in the native North American weed waterhemp, *Amaranthus tuberculatus* (Amaranthaceae). *Plos One* 15(9): e0238861.
- Waselkov, K.**, M. Santiago, B. Heidel, M.H. Mayfield, and C.J. Ferguson. 2020. Population genetics of the Wyoming endemic *Phlox pungens* (Polemoniaceae). *Western North American Naturalist* 80(3): 369-380.
- Pearson, K.D., J.M. Yost, J. Alexander, E. Gilbert, et al. 2019. The California Phenology Collections Network: Using digital images to investigate phenological change in a biodiversity hotspot. *Madroño* 66(4): 130-141.
- Waselkov, K.E.**, A. Boleda, and K.M. Olsen. 2018. A phylogeny of the genus *Amaranthus* (Amaranthaceae), based on several low-copy nuclear loci and chloroplast regions. *Systematic Botany* 43(2): 439-458.
- Waselkov, K.E.**, and K.M. Olsen. 2014. Population genetics and origin of the native North American agricultural weed waterhemp (*Amaranthus tuberculatus*; Amaranthaceae). *American Journal of Botany* 101(10): 1726-1736.
- Judd, W.S., N.C. Melvin III, **K. Waselkov**, and K.A. Kron. 2013. A taxonomic revision of *Leucothoë* (Ericaceae; tribe Gaultherieae). *Brittonia* 65(4): 417-438.
- Judd, W.S., N.C. Melvin III, **K. Waselkov**, and K.A. Kron. 2012. Taxonomic revision of *Eubotrys* (Ericaceae; tribe Gaultherieae). *Brittonia* 64(2): 165-178.
- Waselkov, K.**, and W. S. Judd. 2008. A phylogenetic analysis of *Leucothoë* s.l. (Ericaceae; tribe Gaultherieae) based on phenotypic characters. *Brittonia* 60(4): 382-394.
- Axsmith, B. J., M. Krings, and **K. Waselkov**. 2004. Conifer pollen cones from the Cretaceous of Arkansas: implications for diversity and reproduction in the Cheirolepidiaceae. *Journal of Paleontology* 78(2):402-409.

FEATURED RESEARCH

- CSU Fresno College of Science and Mathematics Facebook Page (February 11, 2020): Women in Science highlight. <https://www.facebook.com/CSMFresnoState/>
- CSU Fresno Campus News (November 12, 2019): “Feature: Professors receive USDA grant to study problematic weed.” Article about collaborative USDA-funded research on Palmer amaranth population genomics. <https://campusnews.fresnostate.edu/>
- California Ag Today, podcast (February 24, 2019): “Fresno state student Priyanka Chaudhari is researching why hairy fleabane is glyphosate resistant.” <https://californiaagtoday.com/podcasts>
- CSU Fresno College of Science and Mathematics Elements Magazine (Fall 2019): “Dr. Katherine Waselkov to investigate flowering time shifts in the California flora.” Article about the NSF CAP-TCN grant and the Fresno State Herbarium’s involvement (along with associated social media posts on Facebook and Twitter). [CSM Elements Fall 2019](#)

PUBLISHED ABSTRACTS: PRESENTATIONS and POSTERS since 2015

Bold denotes student co-authors

- Lopez, Alexander**, Anil Shrestha, Lynn Sosnoskie, and Katherine Waselkov. Botany 2022 (annual meeting of the Botanical Society of America, American Society of Plant Taxonomists, and others) (Presentation). Origin of *Amaranthus tuberculatus* (waterhemp) in Central Valley agroecosystems: a population genetics approach using genotyping-by-sequencing.

- Duque, Josue, Alexander Lopez, Romy Lum,** and Katherine Waselkov. Botany 2022 and 43rd Annual Virtual Central California Research Symposium (CCRS) 2022 (Presentation). Population genomics of the native and invaded California range of Palmer amaranth (*Amaranthus palmeri*).
- Riley, Reece,** and Katherine Waselkov. Botany 2022 and CCRS 2022 (Presentation). A phylogeny of the western North American wildflower genus *Helianthella*.
- Fajardo, Kristine, Josue Duque,** and Katherine Waselkov. Botany 2022 (Poster). Tracing the origin of Central California *Amaranthus palmeri* populations and identifying possible genes of adaptation.
- Cardenas, Andrew, Arshnoor Kaur, Jacklyn Fajardo,** and Katherine Waselkov. Botany 2022 (Poster). Population genetics of two California species of checker lily (*Fritillaria*).
- Kaur, Arshnoor, Jacklyn Fajardo, Andrew Cardenas,** and Katherine Waselkov. CCRS 2022 (Poster). Population genetics of two California species of checker lily (*Fritillaria*).
- Lopez, Alexander,** Katherine Waselkov, Tricia Van Laar, and Anil Shrestha. CCRS 2022 (Presentation) and 74th Annual Conference of the California Weed Science Society (CWSS) 2022 (Presentation). Origin of *Amaranthus tuberculatus* (waterhemp) in Central Valley agroecosystems: a population genetics approach using genotyping-by-sequencing.
- Fajardo, Kristine, Josue Duque,** and Katherine Waselkov. CWSS 2022 and CCRS 2022 (Poster). Tracing the origin of Central California *Amaranthus palmeri* populations and identifying possible genes of adaptation.
- Shrestha, Anil and Katherine Waselkov. 2022 California Plant and Soil Conference (Presentation). The increasing prevalence of Palmer amaranth and common waterhemp in the Central Valley.
- Frnzyan, Takui,** Katherine Waselkov, Chance Riggins, and Anil Shrestha. CWSS 2022 (Poster). Competitive effects of glyphosate-resistant and -susceptible Palmer amaranth plants with grapevines during vineyard establishment.
- Duque, Josue, Alexander Lopez, Romy Lum,** Chance Riggins, and Katherine Waselkov. CWSS 2022 and 1st Annual Meeting of the International Weed Genomics Consortium 2021 (Poster). Population genomics of the native and invaded California range of Palmer amaranth (*Amaranthus palmeri*).
- Lopez, Alexander,** Anil Shrestha, Lynn Sosnoskie, and Katherine Waselkov. 1st Annual Meeting of the International Weed Genomics Consortium 2021 (Poster). Origin of *Amaranthus tuberculatus* (waterhemp) in Central Valley agroecosystems: a population genetics approach using genotyping-by-sequencing.
- Gill, Pawanpreet, Savneesh Athwal, Estefania Aguilar-Gutierrez,** and Katherine Waselkov. Botany 2021 (annual meeting of the Botanical Society of America, American Society of Plant Taxonomists, and others) (virtual presentation). Population genetics of the widespread perennial wildflower *Phlox speciosa* using microsatellite markers.
- Riley, Reece,** and Katherine Waselkov. Botany 2021 (virtual presentation). A phylogeny of the western North American montane perennial genus *Helianthella*.
- Duque, Josue, Alexander Lopez, Romy Lum,** and Katherine Waselkov. 73rd Annual Conference of the CWSS 2021 (virtual poster), and CCRS 2021 and Botany 2021 (virtual poster presentation). Population genomics of the native and invaded California range of Palmer amaranth (*Amaranthus palmeri*). Poster available online at: http://celassen.ucanr.edu/Weed_Advisor/2021_CWSS_Student_Poster_Competition/ and CCRS presentation available online at <https://www.youtube.com/watch?v=Rz3BcySoKgA> (timestamp: 2:02:45).
- Lopez, Alexander,** Anil Shrestha, Lynn Sosnoskie, and Katherine Waselkov. CWSS 2021 (virtual poster), and 42nd Annual Virtual CCRS 2021 and Botany 2021 (virtual presentation). Origin of *Amaranthus tuberculatus* (waterhemp) in Central Valley agroecosystems: a population genetics approach using genotyping-by-sequencing. Poster available online at: http://celassen.ucanr.edu/Weed_Advisor/2021_CWSS_Student_Poster_Competition/, and CCRS presentation available online at <https://www.youtube.com/watch?v=TBud2nWBWB4> (timestamp: 5:50).

- Riley, Reece,** and Katherine Waselkov. California Botanical Society 28th Annual Graduate Student Symposium (virtual presentation), and 42nd Annual Virtual Central California Research Symposium (CCRS) 2021 (virtual presentation). A phylogeny of the genus *Helianthella*. CCRS presentation available online at: <https://www.youtube.com/watch?v=TBUD2nWBWB4> (timestamp: 50:37).
- Lum, Romy,** Anil Shrestha, and Katherine Waselkov. CWSS 2021 (virtual poster). Characterizing herbicide resistance in Southwestern U.S. and invasive California populations of *Amaranthus palmeri*. Poster available online at: http://celassen.ucanr.edu/Weed_Advisor/2021_CWSS_Student_Poster_Competition/
- Celaya-Finke, Gabrielle,** Katherine Waselkov, Lynn Sosnoskie, and Anil Shrestha. CWSS 2021 (virtual poster). Effects of moisture and salt stress on germination of common waterhemp (*Amaranthus tuberculatus*). Poster available online at: http://celassen.ucanr.edu/Weed_Advisor/2021_CWSS_Student_Poster_Competition/
- Galvan, Kelsey,** Anil Shrestha, and Katherine Waselkov. CWSS 2021 (virtual poster). Effects of salinity and pH on common waterhemp (*Amaranthus tuberculatus*) germination. Poster available online at: http://celassen.ucanr.edu/Weed_Advisor/2021_CWSS_Student_Poster_Competition/
- Waselkov, Katherine, **Reece Riley,** Maria Peña, Katelin Pearson, and Jenn Yost. Annual meeting of the Society for the Preservation of Natural History Collections 2020 (Virtual Poster). Capturing the flowers of the Sierra Nevada mountains: the contribution of the Fresno State Herbarium (FSC) to the California Phenology Network. Poster available online at: <https://spnhc.biowikifarm.net/wiki/Posters>
- Gill, Pawanpreet, Savneesh Athwal, Monique Cantu,** and Katherine Waselkov. Northern California Botanists Symposium 2020 and CSM Virtual Research Showcase 2020 (accepted for the Central California Research Symposium, cancelled due to COVID-19 shutdown) (Poster). Population genetics of the widespread perennial wildflower *Phlox speciosa* using microsatellite markers.
- Lum, Romy,** Anil Shrestha, and Katherine Waselkov. CSM Virtual Research Showcase 2020 (accepted for the Central California Research Symposium, cancelled due to COVID-19 shutdown) (Poster). Testing for herbicide resistance in the native and invaded California range of *Amaranthus palmeri*.
- Bivins, Christopher, Josue Duque, Alexander Lopez, Brianna Mulvey, Reece Riley, Danielle Sublett, Franziska Wenger,** and Katherine Waselkov. CSU Fresno High-Impact Practices Symposium, Fall 2019 (Poster). Plant exploration in the Southwestern U.S. to collect germplasm for crop improvement.
- Figueroa, Norma, Paul Banayat Gonzales, Tshaaj Her, Kulvir Janjua, Benjamin Quatro, Karen Vasquez.** CSU Fresno High-Impact Practices Symposium, Fall 2019 (Posters). Six total posters from Biol 140 Plant Anatomy Fall 2019 independent research projects.
- Lum, Romy,** Katherine Waselkov, and Chance Riggins. Botany 2019 (Poster). Testing for herbicide resistance in the native and invaded California range of *Amaranthus palmeri*.
- Avila, Adam,** John V.H. Constable, Katherine Waselkov, and Tricia Van Laar. Botany 2019 and CCRS 2019 (Poster). Investigating bacterial endophytes in parasitic *Cuscuta campestris* and its *Helianthus annuus* host.
- Lum, Romy,** Katherine Waselkov, and Chance Riggins. CCRS 2019 (Poster). Using evolutionary genomics to probe agricultural invasiveness in *Amaranthus palmeri*.
- Chaudhari, Priyanka, Diana Camarena Onofre,** and Katherine Waselkov. CSU Annual Biotechnology Symposium 2019 and California Weed Science Society (CWSS) Annual Conference 2019 (Poster and Lightning Talk). Characterizing the expression of candidate genes for herbicide resistance in the agricultural weed hairy fleabane (*Erigeron bonariensis*).
*Winner of 2nd place graduate student poster award at CWSS.
- Waselkov, Katherine. Botany 2018 (Presentation). “Wait, plants have insides?” Leading an undergraduate plant anatomy class from basics to independent research, in one semester.
- Benitez, Tomi, Aldo Chavira, Crystal Espindola, John Henry Fajardo, David Flores, Paritosh**

- Gadra, Yesenia Gastelum, Daniel Gramajo, Isabella Heredia, Katherine Holm, Alexander Lopez, Alehi Mendoza, Darian Rodriguez, Masou See,** and Katherine Waselkov. CSU Fresno STEM Symposium for Course-Based Research and Projects 2018 (Poster). The impact of dredging on plant biodiversity at Morro Bay: Spring 2018 Biol 125 Plant Taxonomy Class research project.
- Aguilar-Gutierrez, Estefania,** and Katherine Waselkov. 60th Annual Maize Genetics Conference 2018 (Poster). Does subspecific variation correspond to genetic or cytotypic variation in the widespread taxon *Phlox speciosa* (Polemoniaceae)?
- Yang, May N.,** and Katherine Waselkov. CWSS 2018 (Poster). Herbicide resistance in the native range of the agricultural weed Palmer amaranth.
- Chaudhari, Priyanka, Diana Camarena Onofre,** and Katherine Waselkov. CWSS 2018 and CCRS 2018 (Poster). The genetic basis of glyphosate resistance in the Central Valley agricultural weed hairy fleabane (*Erigeron bonariensis* L.). *Winner of 3rd place student poster award at CWSS.
- Camarena Onofre, Diana,** Katherine Waselkov, Anil Shrestha, Balaji Sethuramasamyraja, Dave Goorahoo, Florence Cassel Sharma, and John Bushoven. Students of Agronomy, Soils and Environmental Sciences Annual Meeting 2017 and CCRS 2018 (Poster). Germination rate and glyphosate resistance of hairy fleabane (*Conyza bonariensis*): research from the 2017-2018 USDA-NIFA-NLGA Research Internship. *Winner of outstanding poster presentation in CCRS poster section.
- Pathak, Ankit, Adam Avila,** and Katherine Waselkov. Evolution 2017 (annual meeting of the Society for the Study of Evolution, the American Society of Naturalists, and the Society of Systematic Biologists) (Poster). Investigating the genetic basis of glyphosate resistance in the San Joaquin Valley agricultural weed hairy fleabane (*Erigeron bonariensis*).
- Molina, Rigoberto, Ankit Pathak,** and Katherine Waselkov. Evolution 2017, CSU Annual Biotechnology Symposium 2017, and CCRS 2017 (Poster). Investigating the genetic basis of glyphosate resistance in the San Joaquin Valley agricultural weed hairy fleabane (*Erigeron bonariensis*).
- Pathak, Ankit,** and Katherine Waselkov. CSU Annual Biotechnology Symposium 2017 and CCRS 2017 (Poster). Fitness cost of glyphosate resistance in hairy fleabane (*Erigeron bonariensis*) under drought conditions.
- Aguilar-Gutierrez, Estefania,** and Katherine Waselkov. Botany 2016, CSU Annual Biotechnology Symposium 2017, and CCRS 2017 (Poster). Does subspecific variation correspond to cytotypic variation in the widespread taxon *Phlox speciosa* (Polemoniaceae)?
- Santiago, Mercedes,** Katherine Waselkov, Bonnie Heidel, Mark H. Mayfield, and Carolyn J. Ferguson. Evolution 2016 and Botany 2016 (Poster). Genetic diversity of the Wyoming endemic *Phlox pungens* (Polemoniaceae), placed within a taxonomic context.
- Pano, Emeline,** John V.H. Constable, and Katherine Waselkov. CSU-LSAMP Fresno State Summer 2016 Research Program (Presentation). Modernizing the Fresno State Herbarium into an online resource.
- Waselkov, Katherine, Shannon D. Fehlberg, L. Alan Prather, **Bethany Wright,** and Carolyn J. Ferguson. Botany 2015 (Presentation). Assessing allelic diversity in polyploid complexes of *Phlox* (Polemoniaceae) using next-generation amplicon sequencing.

SEMINARS (*invited) since 2015

- Lum, Romy, and **Katherine Waselkov.** Agricultural invasions and “superweeds”: characterizing herbicide resistance in Palmer amaranth. CSU, Fresno Biology Colloquium (Fall 2019).
- Waselkov, Katherine.** Hidden in plain sight: The natural history collections of the Fresno State Biology Department. CSU, Fresno Biology Colloquium (Fall 2018).
- *Waselkov, Katherine.** The evolutionary approach to weeds. Ecology, Evolution and Conservation Biology Seminar, San Francisco State University (Fall 2016).

- ***Waselkov, Katherine.** Perplexing polyploidy in the Polemoniaceae: patterns in *Phlox* phylogenies. Botany Lunch at the University and Jepson Herbaria, UC Berkeley (Fall 2016).
- ***Waselkov, Katherine.** The evolutionary approach to weeds. Plant Health Society, CSU, Fresno (Spring 2016).
- ***Waselkov, Katherine.** Population genetics and herbicide resistance studies in waterhemp (*Amaranthus tuberculatus*). Guest lecture for CSU, Fresno, Biometrics in Agriculture class (AGRI 200) (Fall 2015).
- ***Waselkov, Katherine.** The young and the restless: evolutionary explorations in the plant genera *Amaranthus* and *Phlox*. Wichita State University, Department of Biological Sciences Seminar Series (Spring 2015), and Rancho Santa Ana Botanic Garden Botany Seminar Series (Fall 2015).

TEACHING EXPERIENCE

Course leader

- BIOL 125 – Plant Taxonomy, CSU-Fresno (Spring 2016-Spring 2020, Spring 2022)
- BIOL 251 (260T) – Experimental Design for Biologists, CSU-Fresno (Fall 2017, Fall 2018, Spring 2020, Fall 2020, Spring 2021, Spring 2022)
- BIOL 140 – Plant Anatomy, CSU-Fresno (Fall 2015-Fall 2019, Fall 2021)
- BIOL 105 – Evolution, CSU-Fresno (Fall 2016, Spring 2018, Spring 2019, Fall 2019, Fall 2020, Spring 2021, Fall 2021)
- BIOL 113H – Biology Honors Colloquium, CSU-Fresno (Spring 2019, Spring 2021)
- BIOL 189T – Collection and Curation of Plant Biodiversity, CSU-Fresno (Fall 2019)
- BIOL 180/280 – Biology Colloquium, CSU-Fresno (Spring 2016)
- BIOL 281 – Graduate Seminar in Biological Science, CSU-Fresno (Fall 2015)

Course-based Undergraduate Research Experiences (CUREs)

- BIOL 189T – Plant exploration in the Southwestern U.S. to collect germplasm for crop improvement (Fall 2019)
- BIOL 140 – Independent investigations into anatomy, ecology, and climate change impacts on native and invasive Central California plants (Fall 2017, Fall 2018, Fall 2019, Fall 2021)
- BIOL 125 – The impact of dredging on plant biodiversity at Morro Bay: Plant Taxonomy class research project (Spring 2018)
- BIOL 140 – Comparative plant anatomy independent projects (Fall 2016)

Research mentor

- Samantha Cardenas, CSU-Fresno Biology undergraduate (Spring 2022-present)
Project: Digitizing the Fresno State Herbarium collections
- Jashandeep Gill, CSU-Fresno Biology undergraduate (Spring 2022-present)
Project: Digitizing the Fresno State Herbarium collections
- Takui (Tiffany) Frnzyan, CSU-Fresno M.S. in Plant Science (Fall 2021-present)
--co-advised with Dr. Anil Shrestha
Project: Herbicide resistance testing for Central Valley Palmer amaranth
- Padmavathi Bhavana Rongala, CSU-Fresno M.S. in Biotechnology (Fall 2021-present)
Project: Herbicide resistance testing for Central Valley common waterhemp
- Andrew Cardenas, CSU-Fresno Biology undergraduate (Fall 2021-present)
Project: Chloroplast marker sequencing for *Fritillaria* species ID
- Arshnoor Kaur, CSU-Fresno Biology undergraduate (Fall 2021-present)
Project: Chloroplast marker sequencing for *Fritillaria* species ID; Digitizing the Fresno State Herbarium collections
- Jacklyn Fajardo, CSU-Fresno Biology undergraduate (Spring 2021-present)
Project: Chloroplast marker sequencing for *Fritillaria* species ID; Digitizing the Fresno State Herbarium collections

Kristine Fajardo, CSU-Fresno M.S. in Biology (Fall 2020-present)
Project: Population genomics of the cross-continental invasion of Palmer amaranth

Josue Duque, CSU-Fresno M.S. in Biology (Fall 2019-Spring 2022)
Project: Population genomic diversity and structure of Palmer amaranth in the native and invaded California range

Reece Riley, CSU-Fresno Biology undergraduate, now M.S. in Biology (Fall 2018-Spring 2022)
Projects: Digitizing the Fresno State Herbarium collections; molecular phylogeny of *Helianthella*

Alexander Lopez, CSU-Fresno Biology undergraduate, now M.S. in Biology (Fall 2018-Spring 2022)
Projects: Digitizing the Fresno State Herbarium collections; describing a new species of *Fritillaria* from Southern California; population genomics of the California invasion of waterhemp (*Amaranthus tuberculatus*)

Zainab Rana, CSU-Fresno Biology undergraduate (Spring 2021-Fall 2021)
Project: Digitizing the Fresno State Herbarium collections

Christopher Bivins, CSU-Fresno M.S. in Biology (Spring 2019-Spring 2021)
--co-advised with Dr. Alija Mujic
Project: The mycorrhizal ecology of four mycoheterotrophic plant species in California

Savneesh Athwal, CSU-Fresno Biology undergraduate (Summer 2018-Spring 2021)
Project: Population genetics of diploid and polyploid *Phlox speciosa*

Pawanpreet Gill, CSU-Fresno Biology undergraduate (Summer 2018-Spring 2021)
Project: Population genetics of diploid and polyploid *Phlox speciosa*; digitizing the Fresno State Herbarium collections

Romy Lum, CSU-Fresno M.S. in Biology (Spring 2018-Fall 2020)
Project: Testing for herbicide resistance in the native and invaded California range of *Amaranthus palmeri*

Tyrren Parrish, CSU-Fresno Biology undergraduate (Spring 2019; Spring 2020)
Project: Population genomics of the cross-continental invasion of Palmer amaranth

Adam Avila, CSU-Fresno M.S. in Biology (Spring 2018-Fall 2020)—co-advised with Dr. John Constable
Project: Investigating bacterial endophytes in parasitic *Cuscuta campestris* and its *Helianthus annuus* host

Monique Cantu, CSU-Fresno Biology undergraduate (Spring 2019-Spring 2020)
Project: Digitizing the Fresno State Herbarium collections; population genetics of *Sidalcea keckii* in the Central Valley; population genetics of diploid and polyploid *Phlox speciosa*

Harneet Kaur, CSU-Fresno Biology undergraduate (Summer 2018-Spring 2020)
Projects: Digitizing the Fresno State Herbarium collections; population genetics of *Sidalcea keckii* in the Central Valley

Catherine Prieto, CSU-Fresno Biology undergraduate (Spring 2019)
Project: Digitizing the Fresno State Herbarium collections

Chyann Stiles, CSU-Fresno Biology undergraduate (Summer 2018-Fall 2018)
Project: Fitness costs of glyphosate resistance under drought conditions in hairy fleabane

Priyanka Chaudhari, CSU-Fresno M.S. in Biotechnology (Spring 2017-Fall 2018)
Project: RNA-Seq analysis of genes underlying glyphosate resistance in hairy fleabane

Diana Camarena, CSU-Fresno Plant Science undergraduate, USDA-NIFA intern (Spring 2017-Fall 2018)
Project: Fitness costs of glyphosate resistance at multiple stages in hairy fleabane

Gurkiran Bains, CSU-Fresno Biology undergraduate (Spring 2018)
Projects: Digitizing the Fresno State Herbarium collections

May Yang, CSU-Fresno Plant Science undergraduate (Fall 2017-Spring 2018)
Project: Population genomics of the cross-continental invasion of Palmer amaranth

Adam Avila, CSU-Fresno Biology undergraduate (Spring 2017-Summer 2017)
Project: Detecting hybridization between two weedy *Erigeron* species in the Central Valley

Ankit Pathak, CSU-Fresno M.S. in Biotechnology (Fall 2015-Spring 2017)
Project: Fitness costs of glyphosate resistance under drought conditions in hairy fleabane

Emeline Pano, CSU-Fresno LSAMP Biology undergraduate (Summer 2016-Fall 2017)
Projects: Digitizing the Fresno State Herbarium collections, and Population genetics of diploid and polyploid *Phlox speciosa*

Rigoberto Molina, CSU-Fresno Biology undergraduate (Spring 2016-Fall 2017)
Project: Genetic basis of glyphosate resistance in hairy fleabane

Estefania Aguilar-Gutierrez, CSU-Fresno Biology Honors undergraduate (Spring 2016-Spring 2018)
Project: Population genetics of diploid and polyploid *Phlox speciosa*

Recent science education outreach

Notes from Nature Citizen Science Initiative: Fresno State Herbarium (5 expeditions, 2019-2022)
(<https://www.zooniverse.org/projects/md68135/notes-from-nature-capturing-californias-flowers>)

Fresno County Science Fair: Plant Science Judge (March 11, 2019; March 16, 2020; March 15, 2021)

CSU Fresno CSM Stars, Science, and Birthday Party for Galileo Reception for San Joaquin River Parkway organization (February 15, 2020)

CSU Fresno CSM Science Fair (Day of Giving, November 7, 2019)

Central California Research Symposium Judge (May 1, 2019; April 20, 2022)

Feria de Educación/Day of Discovery Public Outreach Event (October 20, 2018)

Botanical Society of America PLANTS Mentor (Preparing Leaders and Nurturing Tomorrow's Scientists) (Summer 2018)

Reinvigorating the Fresno State Herbarium (Fall 2017-present): volunteer days

Central Valley Café Scientifique (October 3, 2016)
--"The Great Invasive Species Debate", with Dr. Brian Tsukimura and Dr. Ulrike Müller. Radio interview on KFCF 88.1 FM and public talk at Santa Fe Basque Restaurant as part of the Café Scientifique public lecture series presented by CSU, Fresno.

Tulare County Expanding Your Horizons Conference (2015, 2018, 2021): STEM outreach for girls

SERVICE

Search Committee Chair, CSU, Fresno Biology Department Microbiology Faculty Search (2021-2022)

CSU, Fresno Campus Faculty Hearing Panel (2020-2021)

Restarting Research During COVID-19 Committee, CSU-Fresno Biology Department (Summer 2020)

M.S. Biotechnology Application Review Committee, CSU-Fresno College of Science and Mathematics (Spring 2018-present)

Institutional Biosafety Committee, CSU-Fresno University Committee (Spring 2019-present)

Search Committee for Biology Department Administrative Analyst/Specialist, CSU-Fresno College Committee (Summer 2019, Summer 2020)

College Research Committee, CSU-Fresno College of Science and Mathematics (Fall 2019)

Dog Days Advising Volunteer, CSU-Fresno Department of Biology (Summer 2017, 2018, 2019)

Tri Beta Biology Honors Society, CSU-Fresno Faculty Advisor (Fall 2018-Spring 2020)

Arboretum Committee, CSU-Fresno University Committee (2017-present)

Assessment Committee, CSU-Fresno Biology Department (2017-present; Chair in Spring 2021)

Graduate/Research Committee, CSU-Fresno Biology Department, (2015-2016, Fall 2018-present)

Staffing and Scheduling Committee, CSU-Fresno Biology Department (2016-Spring 2018)

Scholarship Committee, CSU-Fresno Biology Department (2015-2017)

Reviewer: American Journal of Botany, Annals of the Missouri Botanical Garden, Biodiversitas Journal of Biological Diversity, Botanical Journal of the Linnean Society, Canadian Journal of Plant Science, Evolutionary Applications, Frontiers in Agronomy, Frontiers in Plant Science, Journal of Heredity, Molecular Ecology, Molecular Ecology Notes, Molecular Phylogenetics and Evolution, PeerJ, Plant Genetic Resources, Plant Molecular Biology Reporter, PLoS One, Systematic Botany, Taiwania.

Grant reviewer: National Geographic Society, US-Israel Binational Agricultural Research and Development Fund, National Science Foundation.

PROFESSIONAL ORGANIZATIONS

Weed Science Society of America (joined 2020)

California Weed Science Society (joined 2019)

The Society of Herbarium Curators (joined 2018)

California Native Plant Society, Sequoia Chapter (joined 2015): Treasurer (January 2021-present);

Conservation Chair (June 2019-December 2020)

Society for the Study of Evolution (joined 2011)

The American Society of Plant Taxonomists (joined 2012): Treasurer starting September 2022; Website Committee (September 2020-present), Liaison to Diversity, Equity, and Inclusion Committee (October 2020-21)

Botanical Society of America (joined 2006)

Society for Economic Botany (joined 2006)

California Botanical Society (joined 2015)

Southern California Botanists (joined 2015)

Northern California Botanists (joined 2015)