EVOLUTION, ECOLOGY, AND ORGANISMAL BIOLOGY

UNIVERSITY OF CALIFORNIA, RIVERSIDE

FALL 2025 NEWSLETTER

IN THIS EDITION ...

BOYD DEEP CANYON. PHOTO BY SOPHIE CREHAN

ANNOUNCEMENTS

Congratulations to our newest Ph.D. graduates who defend their dissertations
Summer/Fall 2025

- Mitchell Coleman
- Allyn Nguyen
- Anthony Cobos

Congratulations to our newest M.S. graduates who defend their thesis
Summer/Fall 2025

- Matthew Major
- Chenkun Jiang
- Jamie Dolan
- Joseph Wu

ANNOUNCEMENTS (CONT.)

Welcome to our Fall 2025 Cohort:

- Apodaca Samantha
- Campagnari Bianca
- Carter Sjana
- Conwell Holland
- Datta Poorvi
- Gerald-Yamasaki Cailley
- Jain Aarul
- Martinez Tabitha
- Maynard Emily
- Mendivil Zara
- Stanley Raymond
- Stickrod Morgan
- Sudoko Samantha
- Wallasch Brooke
- Zeltsar Max

UPCOMING EVENTS:

SOPHIE AND RIA WILL BE HOSTING A SEEDS RECRUITMENT EVENT AT THE WINTER 2026 INVOLVEMENT FAIR TO HELP REVIVE THE SEEDS ECOLOGICAL SOCIETY OF AMERICA (ESA) CHAPTER AND REBUILD OUR MENTORSHIP COMMUNITY WITH THE SEEDS COMMITTEE. PLEASE FEEL FREE TO SHARE THE INFORMATION WITHIN YOUR NETWORK. "FOR UNDERGRADUATES: STOP BY TO CONNECT, ASK QUESTIONS, AND DISCOVER HOW YOU CAN JOIN A SUPPORTIVE NETWORK OF ACADEMIC SCIENCE COMMUNITY WHO ARE PASSIONATE ABOUT ECOLOGY, RESEARCH, AND ENVIRONMENTAL LEADERSHIP!

AWARDS

Ria Ghosh, a fourth year PhD candidate from the Anderson Lab, has been awarded from the **General Endowment Award of the Society for Freshwater Science (SFS)**, 2026, one of approximately fourteen competitive grants supporting undergraduate and graduate research excellence. As an award recipient, she has been formally invited to the SFS Endowment Reception at the society's Annual Meeting, where she will be honored and presented with her award. Congratulations to Ria on this achievement and her continued contributions to freshwater science.

MEET THE SECOND-YEARS

Tucker Heptinstall
Ph.D. Student (Armstrong Lab)

Hi everyone,
My name is Tucker Heptinstall, and I am a second year JDP student in Dr. Kinsey Brock's Lab at SDSU and Dr. Ellie Armstrong's Lab at UCR! My research primarily focuses on urban ecology and evolution of reptiles (snakes in particular). I will be investigating what traits allow snakes to persist in novel human-created habitats and how urbanization influences gene flow and population dynamics across the landscape.

Sophie Crehan
Ph.D. Student (Spasojevic Lab)

I am a forest community ecologist studying how plant neighborhood composition impacts tree growth, survival, and reproduction. I'm interested in how abiotic stress can shift neighborhood interactions from competitive to facilitative and how those interactions vary between life stages and species. Currently, I'm working on a project at the San Jacinto Forest Dynamics Plot (adjacent to the James Reserve) studying how adult tree neighbors influence seed production and viability. Through my research, I aim to improve our understanding of temperate forest neighborhoods and contribute to the management of resilient forests.

MEET THE SECOND-YEARS

Teddy Reitman
Ph.D. Student (Ostevik Lab)

I am interested in understanding how the environment and the genome interact to modify outcomes of adaptation and speciation, using angiosperms as a model system. For my dissertation, I am focusing my research on dune-endemic sunflowers (genus Helianthus). I am excited to center my research on these species due to their specific ecological niches and dynamic genomes, which harbor large chromosomal inversions and active transposable elements. Through this work, I hope to understand how adaptation to novel environments drives population divergence, and ultimately speciation, and whether genetic elements like inversions and transposable elements may be facilitating these processes.

Elisabeth Leung
Ph.D. Student (Armstrong Lab)

Hi everyone! My name is Elisabeth, and I am studying conservation genomics and broadly interested in how some small populations persist. I am investigating this in the island fox, a species that has ungone multiple bottlenecks across each of the islands, leading to population fluctuations. I am currently working with genomic data from the different extant populations to identify if there is structure within each of the islands and assess the genomic health. In the future, I aim to investigate how populations have changed over time using genomic samples from the founders of the captive breeding programs.

MEET THE SECOND-YEARS

Oscar Cuellar
Ph.D. Student (Moen Lab)

Hi! I am Oscar, and I come from Colombia. I am a second-year PhD student in the Moen's lab. I have always been curious about the diversity of forms we can find in nature, especially for those traits that are highly connected to specific functions. Thus, for my dissertation, I am investigating gliding behavior in frogs from an integrative perspective on biomechanics and evolution. For my first-year research project, I am exploring the taxon sampling effect on phylogenetic evolutionary methods, such as estimating rates of evolution, and how a biased sampling could affect the results.

RECENT PUBLICATIONS

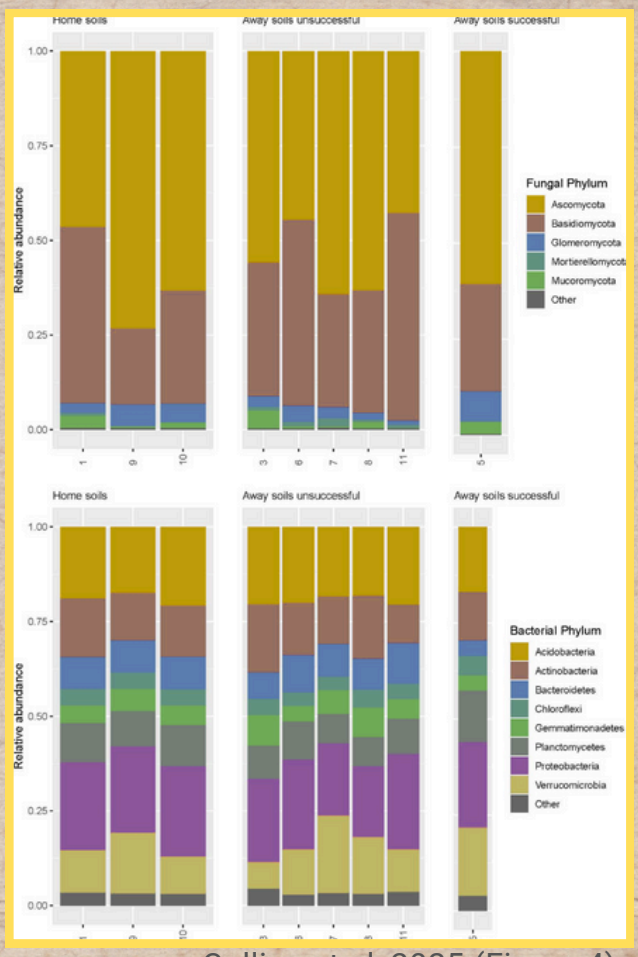
Ávila-Lovera, E., Haro, R., Choudhary, M., Acosta-Rangel, A., Pratt, R. B., & Santiago, L. S. 2024. The benefits of woody plant stem photosynthesis extend to hydraulic function and drought survival in Parkinsonia florida. Tree Physiology 44(3).

Backus, G.A., M.B. Rose, S.J.E. Velazco, J. Franklin, A.D. Syphard, H.M. Regan. Population decline for plants in the California Floristic Province: Does demography or geography determine climate change vulnerability? Diversity and Distributions. 2025. 31(8), p.e70067.

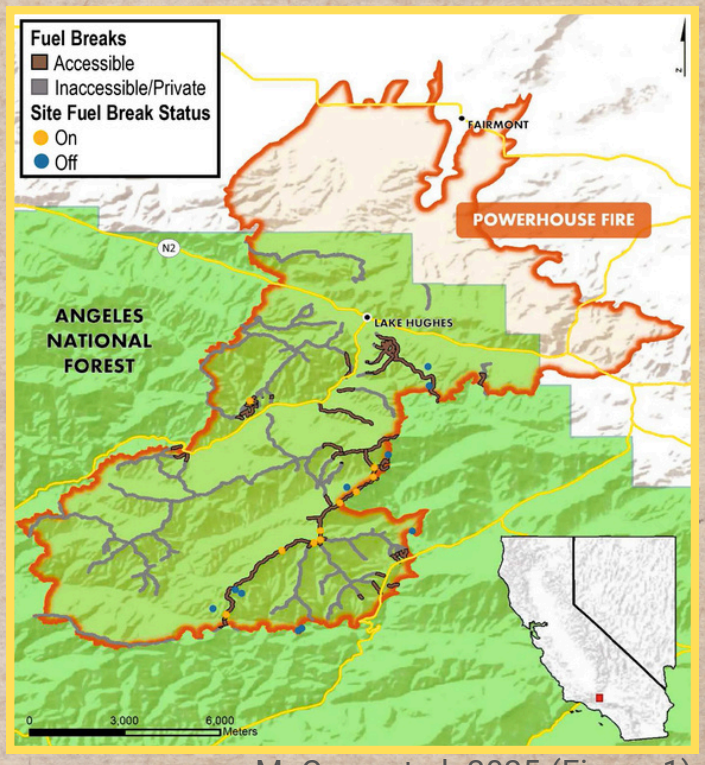
Cano-Barbacil C., J. F. Cahill, H. M. Regan, T. D. Hackett, J. N. Barney, I. Donoso, F. Essl, E. García-Berthou, T. Heger, L. Korell, I. Kühn, D. Rakosy, K. Visakorpi, N. Roura-Pascual. Overcoming barriers that limit the impact of ecological research. Frontiers in Ecology and the Environment. 2025. p.e70016.

Careau, V., P. Agnani, N. Bonin, and T. Garland, Jr. 2025. The behaviour-performance continuum: How does individual variation in locomotor abilities relate to behaviour? Biological Reviews. In press.

Collins, C., Dinwiddie, D., Pombubpa, N., McGuire, K., Spasojevic, M.J., 2025. Soil mutualists facilitate the population persistence of an endemic plant outside its historic elevation range. Ecology and Evolution. 15(6):e71629



Collins et al, 2025 (Figure 4)



McCann et al. 2025 (Figure 1)

RECENT PUBLICATIONS

Li, J., Campbell, P., Meyer, A., & Reznick, D. 2025. Heterochronic changes in gene expression underlie placental evolution in the fish family Poeciliidae. Proceedings of the Royal Society B: Biological Sciences 292(2051):20250573. PubMed Central

McCann, E., Flores, Z., Franklin, J. Spasojevic, M.J., Molinari, N., Larios, L. 2025. Postfire recovery trajectories of bulldozed versus burned chaparral eight years postfire. Fire Ecology. 21:78

Ortiz, Andrea Monica D., Patricia Huinca Blanco, Carlos Alberto Arnillas, Anni Arponen, Marc W. Cadotte, Javiera Beatriz Chinga Chamorro, Mariana C. Chiuffo, Sharon Collinge, Kadambari Devarajan, Ken Ehrlich, Marilyn Grell-Brisk, Claudio Guevara, Rebecca W. Kariuki, Heather M. Kharouba, Tara G. Martin, Ana Carolina Prado-Valladares, Helen M. Regan, Nicolás Santos Domínguez, Bruno Eleres Soares, Gisela C. Stotz, Ivette Ulloa Caniú, Kristiina Visakorpi, Marten Winter, Florencia A. Yannelli. Listening Deeply to Indigenous People: A Collaborative Perspective and Reflection Between a Mapuche Machi and Ecologists. Ecology and Evolution. 2025. 15 (8), e71914.

Ortiz et al. 2025 (Figure 3)

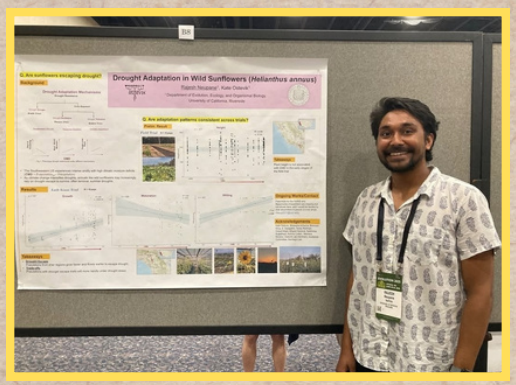
Schwartz, N. E., Alva, M. R., & Garland, T., Jr. 2026. Effects of dehydration on voluntary wheel-running behavior and body mass in laboratory house mice. Physiology & Behavior 303:115139.

Valencia, M., Monroy, J., Garland, T., Jr., & Horner, A. M. 2025. Early-life exercise effects on Achilles tendon in mice selectively bred for high voluntary wheel-running behavior. Physiological Reports 13:e70515.

Weber, J. C., Arkle, J. C., de Verteuil, L., Murphy, J. C., Noriega, N. C., Reznick, D. N., & Jowers, M. J. 2025. Trinidad and Tobago geogenomics: Exploring connections between geology and vicariance and dispersal biogeography — a review and synthesis. Palaeogeography, Palaeoclimatology, Palaeoecology 662:112682.

EEOB IN ACTION

In September 2025, Dr. Helen Regan participated in a field trip to the Florida Everglades as part of the National Academies “Committee on Independent Scientific Review of Everglades Restoration Progress (CISRERP) XI - The 2026 Biennial Review” of which she is Chair. The field trip was hosted by the Miccosukee Tribe who took the committee in airboats through the Central Everglades and onto a tree island where they visited a traditional chickee. The committee learned about the development of the tree island and ridge and slough performance measures and challenges and tradeoffs when optimizing water management in the Everglades.

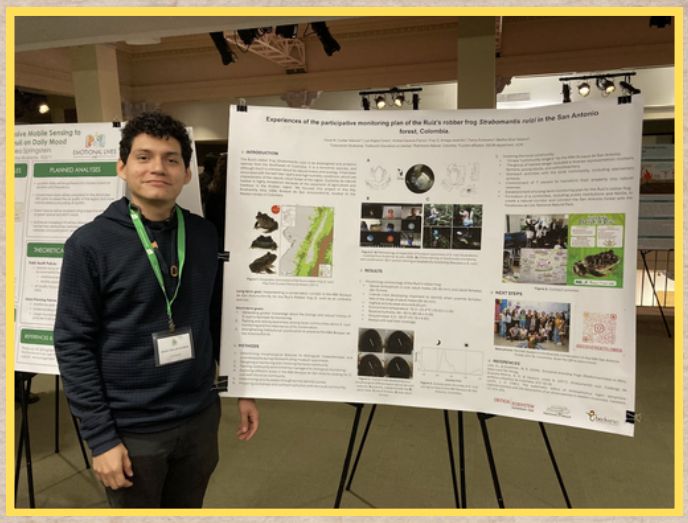


Teddy, Rajesh, and Brennan presented their posters at Evolution.

Rebecca and Gangothri gave talks there too!

EEOB IN ACTION

The Ostevik lab enoyed their time at the Botany without Barries Conference.



Oscar Cuellar presented a poster at Latinxs & the Environment Conference.

Gangothri (Ostevik Lab)gave a lecture in the S'more Science Lecture Series at Joshua Tree National park

Do you want your news featured in the next newsletter?

Upcoming events, resources, new publications, grants, award stories, photos, etc.?

Please send them to me to be included in the next newsletter!

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