

Gabriel C. Runte

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Education

- PhD Candidate** | University of California, Santa Barbara - Ecology, Evolution, and Marine Biology. **Present**
Committee: Holly Moeller (chair), Leander Anderegg, Laura Bogar (UC Davis), Carla D'Antonio, Ryoko Oono
- M.A.** | University of California, Santa Barbara - Ecology, Evolution, and Marine Biology. **2021**
Thesis: Spheres of Influence: Host Tree Proximity and Soil Chemistry Shape rRNA, but Not DNA, Communities of Symbiotic and Free-Living Soil Fungi in a Mixed Hardwood-Conifer Forest
Committee: Holly Moeller (co-chair), Ryoko Oono (co-chair), Carla D'Antonio
- B.Sc.** | University of California, Santa Barbara - Environmental Studies. **2018**
Minor in Professional Writing for Science Communication
Writing Advisor: Amy Propen

Publications

- Runte, Gabriel C**, R Oono, NA Molinari, SR Proulx, CM D'Antonio (2022). Restoring bigcone Douglas-fir post-fire in drought-stricken Southern California: Assessing the effects of site choice and outplanting strategies. *Frontiers in Forests and Global Change*.
<https://doi.org/10.3389/ffgc.2022.995487>
- Weverka, Jacob, **GC Runte**, EL Porzig, CJ Carey (2022). Exploring plant and soil microbial communities as indicators of soil organic carbon in a California rangeland. *Soil Biology and Biochemistry*. <https://doi.org/10.1016/j.soilbio.2023.108952>
- Runte, Gabriel C**, AH Smith, HV Moeller, LM Bogar (2021). Spheres of influence: Host tree proximity and soil chemistry shape rRNA, but not DNA, communities of symbiotic and free-living soil fungi in a mixed hardwood-conifer forest. *Frontiers in Ecology and the Environment*.
<https://doi.org/10.3389/fevo.2021.641732>

Grants, Fellowships, and Awards

- Worster Award Fellowship (\$5,000) **2022**
- Sonoma County Mycological Society Scholarship (\$1,000) **2022**
- Schmidt Family Foundation Mentorship Award (\$8,000) **2021**
- Associated Students Coastal Fund at UC Santa Barbara (\$9,000) **2021**
- Honorable Mention, NSF Graduate Research Fellowships Program **2021**
- Garden Club of America Fellowship in Ecological Restoration (\$4,000) **2020**
- Honorable Mention, NSF Graduate Research Fellowships Program **2020**
- Sonoma County Mycological Society Scholarship (\$1,000) **2020**
- NSF Research Experiences for Undergraduates **2018**
- UC Global Food Initiative Fellowship (\$4,000) **2018**
- Diana Raab Writing Fellowship (\$750) **2018**

Presentations

Ecological Society of America Annual Meeting	2023
Terrestrial Microbiology (EEMB 145) Guest Lecture on Fungi in the Environment*	2020, 2023
8th Annual California Oak Symposium	2022
Ecological Society of America Annual Meeting	2022
Yosemite Symbiosis Workshop	2022
Conservation Seminar Series, UC Santa Barbara*	2021
UCSB EEMB Graduate Research Symposium	2020
National Fish and Wildlife Fire Restoration Grantee Forum	2019

* = Invited Talk

Training

CyVerse Foundational Open Science Skills (FOSS) Course	2023
ESIIL Forest Resiliency Working Group	2023

Mentorship

Undergraduate Researchers

Aubrey Chuen	2022-2023
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Developed a non-destructive plant health survey method for greenhouse applications. This method is based on remote sensing techniques and uses a multispectral camera and R for image analysis. *Worster Award Recipient*

Bailey McKernan	2021-2023
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Designed and implemented an experiment to assess how drought-conditioning might improve seedling outplant success in the backcountry. *Schmidt Family Foundation Mentorship Award Recipient, URCA Recipient. Masters Student at SDSU beginning fall 2024.*

Nicholas Haghani	2019-2020
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After the campus closure due to COVID, Nicholas pivoted from a lab-based project to bioinformatic and statistical analyses on microbe communities in a highly stratified marine system. *Currently a PhD student at UC Davis*

Teaching Experience

Teaching Assistant

Ecological Modeling	2022
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Led a computer-based laboratory section introducing students to coding in R and working with calculus-based mathematical modeling using numerical simulations.

Introduction to Ecology	2021, 2024
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Broad introductory course to many of ecology's foundational theories. Led discussion sections centered on literature interpretation. (2021 was via Zoom)