

# Caleb Rosen

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## EDUCATION

**University of Southern California**, Los Angeles, CA

*PhD student, Department of Earth Sciences, GPA: 4.0,*

Present

Advisors: Dr. Jan Amend and Dr. Douglas LaRowe

**Carleton College**, Northfield, MN

*Bachelor of Arts in Geology, GPA: 3.51, major GPA 3.68*

June 2020

Senior Thesis: “Effects of the Wairarapa and Hikurangi Eddies on Chlorophyll Fluorescence off the East Coast of New Zealand” Advisors: Dr. Deb Goodwin (Sea Education Association), Dr. Bereket Haileab (Carleton College).

## PUBLICATIONS

Parsons, C, Stüeken, EE, **Rosen, CJ**, Mateos, K, Anderson, RE. Radiation of nitrogen-metabolizing enzymes across the tree of life tracks environmental transitions in Earth history. *Geobiology*. 2020; 00: 1– 17. <https://doi.org/10.1111/gbi.12419>

## POSTERS AND PRESENTATIONS

**Rosen, C.J.**, R. Barco, A. Smith, C. Thrash, J.P. Amend; Microbial Metabolism for Greenhouse Gas Removal: Bioenergetics of Linked Methane and Nitrous Oxide Consumption; Poster at Southern California Geobiology Symposium 2/23/2023.

**Rosen, C.J.**, R. Barco, A. Smith, C. Thrash, J.P. Amend; Microbial Metabolism for Greenhouse Gas Removal: Bioenergetics of Linked Methane and Nitrous Oxide Consumption; Poster at University of Southern California Wrigley Sustainability Institute Annual Symposium 2/23/2023.

Perez, J., S. Slagter, C. Goncalves, **C.J. Rosen**, M. Sandweiss, B. Smith, S. Marroquín, D. Utter, E. Eitel, A. Sessions; Biogeochemical Origins and Timing of Laminations in Mono Lake Sediments; Poster at American Geophysical Union Fall Meeting 12/14/2022.

**Rosen, C.J.**, D. Goodwin, B. Haileab; Effects of the Wairarapa and Hikurangi Eddies on Chlorophyll Fluorescence off the East Coast of New Zealand; Presentation at Carleton College Geology Senior Seminar 5/4/2020.

## RESEARCH EXPERIENCE

**Graduate Research Assistant**

Aug 2021-Present

University of Southern California, Los Angeles, CA, Earth Sciences Department

**International Geobiology Course Participant**

Jun-Jul 2022

California Institute of Technology, Pasadena, CA, Division of Geological Sciences

**Bioinformatics Analyst**

Apr-Aug 2019

Virtual Planetary Laboratory, Carleton College/University of Washington, Seattle, WA

**Undergraduate Researcher**

Jan 2019-Mar 2020

SEA Semester, New Zealand & Carleton College, Northfield, MN

## **AWARDS**

NSF Graduate Research Fellowship Aug 2023-present  
Fulbright US Student Program, Study/Research – New Zealand declined  
USC Earth Science Research Award Sept 2023

## **TEACHING EXPERIENCE**

### **Graduate Teaching Assistant, *University of Southern California***

Department of Biological Sciences, Geobiology and Astrobiology (BISC 483) Spring 2023

Department of Earth Sciences, Metals and Life (GEOL 165) Fall 2022

Department of Earth Sciences, Oceanography (GEOL 107) Spring 2022

Department of Environmental Studies, Environment Issues in Society (ENST 150) Fall 2021

### **Field Teaching Assistant, *Sea Semester* Summer 2021**

Northeast Pacific, coastal and offshore waters

## **FIELD EXPERIENCE**

### **Antarctica**

Scott Base and Mt. Erebus

Oct-Dec 2023

### **SEA Semester Oceanographic Research**

New Zealand, coastal and offshore waters

Feb-Mar 2019

### **Carleton College Geology Field Semester in New Zealand**

New Zealand, North and South Islands

Jan-Mar 2018

### **Carleton College Cowling Arboretum**

Northfield, MN

Jun-Aug 2017

## **SERVICE AND DEI ACTIVITIES**

**Mentor, *Young Researcher Program, University of Southern California***

Summer 2023

**Graduate Student Representative, *Department of Earth Sciences***

May 2022-May 2023

**Mentor, *Geology Earth Science Mentorship (GEMS)***

Sept 2022-May 2023, Sept 2024

**Instructor, *Shaukat Initiative, University of Southern California***

Fall 2022

**Scientist, *Skype a Scientist***

Sept 2021-May 2023