EDUCATION

University of Colorado Boulder, Boulder, CO
Master of Science: Geological Sciences — Aug 2026
GPA: 4.00/4.00

Wesleyan University, Middletown, CT
Master of Arts: Earth & Environmental Sciences — May 2021
Paleoenvironmental Reconstruction of Paulina Lake (Newberry Volcano, OR)
Thesis: https://doi.org/10.14418/wes01.2.295 | Defense: https://www.youtube.com/watch?v=vlfNld5NKIU
GPA: 4.00/4.00

Wesleyan University, Middletown, CT
Bachelor of Arts Double Major: English and Earth & Environmental Sciences — May 2020
Minor: IDEAS (Integrated Design, Engineering, and Applied Sciences)
GPA: 3.81/4.00; Honors: Dean's List Fall 2017, Spring 2018, Fall 2018, Spring 2019, Spring 2020

RESEARCH EXPERIENCE

Research Assistant, **CU Boulder Earth Systems Stable Isotope Lab**, CU Boulder — July 2022-May 2026
Geological Sciences Department; Advisor: Kathryn Snell, PhD

- Performed regular maintenance on CU Boulder Earth Systems Stable Isotope Lab (CUBES-SIL) Thermo 253+ dual inlet mass spectrometer (MS; measures stable carbon, oxygen, and 'clumped' isotope ratios), including Autoline/slurry trap maintenance, checking liquid nitrogen levels, changing the acid bath, and loading samples into the carousel to be analyzed
- Drilled and weighed samples (including those from external collaborators) to highly precise masses (~1 to 15 mg +/- 0.1 mg) on a microbalance for analyses on the 253+ mass spectrometer
- Operated and troubleshot the 253+ mass spectrometer for day- and week-long periods
- Weighed and ran samples on the Thermo Delta V+ FlashEA/Gasbench/TCEA/ConfloIV (gas source, gas chromatography isotope ratio MS and gas source, continuous flow stable isotope ratio MS)
- Processed and catalogued carbonate samples for various projects; separated in situ carbonate nodules from massive carbonate samples for future analyses

Research Assistant, **Newberry Volcanology Lab**, Wesleyan University — Jan. 2019-May 2021
Earth & Environmental Sciences Department; Advisor: Ellen Thomas, PhD

- Processed and prepared core samples to be picked for microfossils (specifically freshwater ostracods)
- Picked and organized microfossils from sediment on slides using a Zeiss -2.75 stereomicroscope
- Imaged ostracods and other microfossils (diatoms, insects, Daphnia eggs) using a digital camera on a light microscope and a Scanning Electron Microscope (SEM)
- Tracked and interpreted microfossil abundance and stable isotope analysis data, as well as sediment characteristics and contents, to recreate a paleoenvironmental history of Paulina Lake
- Traveled in August 2019 with research team to Newberry Volcano, OR to collect field samples (sediment, water, air) from the Newberry Caldera and its two volcanic lakes (Paulina and East Lake)

Research Assistant, **Newberry Volcanology Lab**, Wesleyan University — Sept. 2018-Jan. 2019
Earth & Environmental Sciences Department; Advisor: Johan C. Varekamp, PhD

- Assisted in the extrusion and production of core samples from a five-meter-long sediment core procured from the volcanic Paulina Lake
- Recorded notes detailing observations about core samples taken from the sediment core
- Operated grinding machinery and hydraulic press to produce pellets for X-ray diffractometry
- Collaborated with other lab personnel to create a dynamic and supportive lab environment

TEACHING EXPERIENCE

Freelance Tutor, **Virtual** — May 2021-present

- Edit essays, papers, and reports for clarity, grammatical correctness, tone, style consistency, and factual accuracy
- Assist middle and high school students in learning course material (Science, English, History, Math)
- Teach 7-week online SAT courses through CampusPrep using the Barron's 2025 SAT Prep Book

Teaching Assistant, **Introduction to Physical Geology Lab**, CU Boulder **Aug. 2022-May 2023; Aug 2024-present**

- Teach an overview of introductory geology topics ranging from rock and mineral identification to tectonics, paleontology, hydrology, and more while fostering a collaborative learning environment
- Evaluate student performance on weekly lab assignments (including field trips) and original written exams related to introductory geology topics covered in short weekly lectures
- Independently oversee and track students' progress through the lab course
- As GEOL1030 Lead TA for 2 semesters, assisted in the organization of field trips, course materials, and extra help sessions; wrote a new script for a lab to go with a playlist of spatiotemporal datasets projected onto a sphere via Science On A Sphere, a program developed by NOAA

Instructor, **CU Science Discovery,** CU Boulder July 2025, June-July 2026

- Participated in an 8-hour instructor training day to engage in developing teaching and classroom management strategies
- Taught a variety of scientific topics to classes of ~10-20 students; courses included *Muggle Magic* (grades 3-5); *Volcanoes, Caves, and Canyons* (grades K-2); and *Girls in STEAM* (grades 6-8)

Graduate Assistant, **RESESS Program**, CU Boulder May 2023-Aug 2023

- Funded by CU's Office of Diversity, Equity, and Community Engagement (ODECE), the College of Arts and Sciences, and the Department of Geological Sciences
- Facilitate weekly Writing Workshops and Communications Seminars for EarthScope RESESS and Geo-Launchpad interns
- Follow the progress of the interns in accomplishing their writing assignments and presentations
- Provide feedback on and help interns revise scientific posters, presentations, and research papers
- Assist in organizing and planning the annual CU Geological Sciences field trip for EarthScope interns

Teaching Assistant, **Introduction to Geochemistry**, CU Boulder Jan 2023-May 2023

- Evaluate student performance on homework assignments and written exams
- Host weekly recitations and office hours to provide enrolled students with additional support

Private Tutor, **MJ Test Prep***,* Bryn Mawr, PA Sept. 2014-Aug. 2017, July 2021-May 2022

- Tutor high school students for college admissions exams (SAT, ACT) and elementary and middle school students for middle and high school entrance exams (SSAT, HSPT, ISEE)
- Mentor and motivate numerous students on a weekly basis through their high school and/or middle school academic processes
- Answer various inquiries from parents and students regarding how to best navigate the college process

Graduate Writing Tutor, **Office of Student Academic Resources**, Wesleyan University Sept. 2020-May 2021

- Hosted weekly virtual writing sessions, as well as one virtual workshop, for graduate students working on theses, dissertations, and other academic projects
- Edited and provided specific feedback on graduate students' writing pieces to improve organization, grammar, clarity, and overall effectiveness in one-on-one consultations

Course Assistant, **The Changing Ocean**, Wesleyan University Feb. 2021-May 2021

- Performed administrative tasks related to tracking 21 students' course participation
- Held office hours each week to aid students in understanding course material and answer questions pertaining to problem sets and labs
- Assisted Professors Elizabeth Sibert and Catherine Davis in grading weekly assignments

Course Assistant, **Mass Extinctions in the Oceans**, Wesleyan University Aug. 2020-Dec. 2020

- Received training in operating the Arctec Space Spider 3D Scanner and using the associated Artec Studio software

- 3D scanned various objects and fossils; processed the scans via Artec Studio software to transform them into 3D models; posted 3D models on an online platform (Viewshape.com) to be shared
- Performed administrative tasks related to tracking 16 students' course participation
- Assisted Professor Ellen Thomas in setting up class sessions in which students look at fossils from Wesleyan's paleontological collections (in addition to 3D models)
- Held office hours each week to aid students in understanding course material and answer questions

Course Assistant, **As the World Turns**, Wesleyan University July 2020-August 2020

- Performed administrative tasks related to tracking 14 first-year students' course participation
- Served as communication liaison between participating students and Professors Ellen Thomas and Johan C. Varekamp
- Hosted weekly office hours to aid students in understanding course material and answer questions

Course Assistant, **Life in the Oceans in the Anthropocene and Beyond**, Wesleyan Jan. 2020-May 2020

- Performed administrative tasks related to tracking 49 students' course participation
- Read and evaluated 49 students' work using rubric provided by Professor Ellen Thomas
- Hosted weekly office hours to aid students in understanding course material and answer questions

Teaching Fellow, **Breakthrough of Greater Philadelphia**, Philadelphia, PA June 2018-August 2018

- Participated in a two-week-long Breakthrough Collaborative pedagogical theory orientation program
- Taught science (Experimental Procedure, Genetics, Sustainable Oceans, Infectious Disease, and Water Scarcity), to rising 7th and 8th grade students to prevent summer learning loss and enrich their future academic experiences
- Mentored–in a small group setting–highly motivated, underserved rising 7th, 8th, and 9th grade students from the Greater Philadelphia area to prepare them for high school

Writing Mentor, **Writing Workshop**, Wesleyan University Sept. 2017-May 2018

- Worked 1-1 with 4-5 university students on a weekly basis to develop their academic writing skills
- Provided guidance and support to help university students achieve success in their writing endeavors
- Edited university students' papers and other pieces of writing to refine grammar, syntax, structure, and overall cohesiveness

Teaching Fellow, **NSF Teaching Experience for Undergraduates**, Hartford, CT June 2017-July 2017

- Participated in a two-week-long science pedagogy course taught by a local university professor
- Designed a two-week-long sustainability-based curriculum, complete with lessons and activities, for rising high school sophomores of various demographics from the local Title I magnet school, Hartford Magnet Trinity College Academy (HMTCA)
- Co-taught the curriculum, to two consecutive groups of 15-20 HMTCA students over five weeks, in a classroom setting overseen by professional teachers
- Helped two consecutive groups of 15-20 HMTCA students create a presentation for staff and faculty from their school about what they learned
- Met regularly with professional teachers to discuss progress and to receive feedback and suggestions

AWARDS AND HONORS

Achievement Rewards for College Scientists (ARCS) Scholarship	Aug 2025-May 2026
Stephen H. Evans Scholarship in Geological Sciences	Aug. 2025
Colorado Scientific Society Student Grant	May 2025
University of Colorado Boulder Museum of Natural History Student Research Award	April 2025
Society for Sedimentary Geology (SEPM) Student Research Grant	March 2025
Penny E. Patterson Graduate Endowed Research Fellowship	March 2025
Beverly Sears Graduate Student Research Grant	Feb. 2025
T. Keith Marks Scholarship	Aug. 2024
Graduate and Professional Student Government (GPSG) Travel Grant	May 2024

Colorado Scientific Society Travel Grant May 2024

Marcy H and Bruce D. Benson Graduate Fellowship Aug. 2023-May 2024
Awarded fellowship for full academic year ('23-'24) graduate funding.

The Micropaleontological Society (TMS) Image Competition Nov. 2021
Photo taken through microscope of ostracod valves arranged on a slide was selected as one of ten winners.

Geraldine J. Murphy Prize Dec. 2019
Awarded by the Wesleyan University English Department to a student who has written an outstanding critical essay that focuses on short fiction or novels.

Wesleyan University Summer Research in the Sciences Fellowship June 2019-Aug. 2019
Grant awarded by the College of Integrative Sciences to continue independent research project from the academic year, culminating in a poster presentation of research project findings in August 2019. Won summer research image competition with my microscope photo of ostracod valves arranged on a slide.

Robert W. Parsons, Xi 1922 Award June 2019
Academic merit scholarship awarded by the Psi Upsilon Foundation to a student who demonstrates the highest moral, intellectual and social excellence in all they do in the chapter, on campus, and in their communities.

James T. Gutmann Field Studies Scholarship May 2019
The Gutmann Scholarship is awarded by the Department of Earth and Environmental Sciences to an especially promising member of the rising junior, junior, or senior classes either to defray the costs of a summer course in field geology or to support geologic field research.

PRESENTATIONS

Geological Society of America (GSA) Annual Meeting, San Antonio, TX Oct. 2025
Poster Presentation
Paleoenvironmental and Paleoclimate Interpretations of a Historic Two Medicine Formation Site

American Geophysical Union (AGU) Annual Meeting, Washington, DC Dec. 2024
Poster Presentation
Paleoenvironmental Reconstruction of a Historic Two Medicine Formation Site

Geological Society of America (GSA) Annual Meeting, Portland, Oregon Oct. 2021
Oral Presentation
Environmental Evolution of Paulina Lake (Newberry, OR) Over The Last 15,000+ Years

Geological Society of America (GSA) Annual Meeting, Online Oct. 2020
Poster Presentation
Resilience of Life in a Volcanic Lake: The Ostracod Record of Paulina Lake, Newberry Volcano, OR

Wesleyan Earth & Environmental Sciences Graduate Research Seminar, Online Oct. 2020
Oral Presentation
Resilience of Life in a Volcanic Lake: The Ostracod Record of Paulina Lake, Newberry Volcano, OR

Geological Society of America (GSA) Annual Meeting, Phoenix, Arizona Oct. 2019
Poster Presentation (co-presented with first author)
The Ostracod Record in Paulina Lake, Oregon: Environmental History of a Volcanic Crater Lake

Wesleyan University Summer Research Symposium, Middletown, CT July 2019
Poster Presentation
Paleoenvironmental Indicators: The Ostracod Record of Paulina Lake

PROFESSIONAL MEMBERSHIPS

Member, **Geological Society of America (GSA)** Sept. 2019-present
Member, **American Geophysical Union (AGU)** Sept. 2018-Dec 2025
Member, **American Institute of Professional Geologists (AIPG)** Jan 2025-present

Member, **Paleontological Society** Oct. 2021-present
Member, **Sigma Gamma Epsilon National Honor Society for Earth Sciences** Sept. 2018-May 2020

SKILLS

Laboratory Microfossil Picking (and associated sample preparation), Optical and Cathodoluminescence Microscopy, Petrography, Mass Spectrometry (and associated sample preparation), Microbalance Weighing
Field Stratigraphic sections, carbonate identification, sedimentology
Technology MATLAB, RStudio, Microsoft Word, Excel, PowerPoint, Adobe Photoshop and Illustrator, Procreate
Software ArcGIS Pro

ADDITIONAL EXPERIENCE

Station Lead, **Earth Mysteries and Histories Outreach Event**, CU Boulder April 2024, 2025

- Design, build, and run a carbonates-based outreach activity geared toward audiences of all ages, primarily children, at the annual Earth Mysteries and Histories Outreach Event

Welcome Committee Coordinator, **Geological Sciences Department**, CU Boulder June-Aug 2023, 2024

- Connected virtually with incoming GEOL graduate students to provide opportunities for them to ask questions in advance of their matriculation at CU Boulder
- Organized groups of current GEOL graduate students to host meetings for incoming GEOL graduate students; facilitated "getting to know you" activities; presented information on frequently asked-about topics like moving to and living in Boulder, community and university resources, departmental activities and initiatives, and getting involved on campus and in the greater community

Grad Talk Coordinator, **Geological Sciences Department**, CU Boulder Aug 2023-May 2024

- Assisted GEOL graduate student government leadership in organizing weekly "Grad Talk" events, grad-only lunches which featured internal and external speakers
- Coordinated weekly food ordering and pickup for grad talk lunches, accounting for various dietary restrictions and needs and ensuring prompt and proper payment for vendors within the allotted budget

Intern, **Office of Student Academic Resources,** Wesleyan University Aug. 2019-May 2021

- Led training sessions for peer tutors through the Dean's Peer Tutoring Program
- Held office hours during which students could seek academic support and guidance
- Helped to facilitate communication between and lead weekly meetings with Academic Peer Advisors
- Tracked, verified peer tutoring hours; approved Dean's Peer Tutoring Program tutor timesheets

Academic Peer Advisor, **Office of Student Academic Resources,** Wesleyan University Aug. 2017-May 2021

- Received training in assistive technologies, advising strategies, metacognitive learning strategies, active listening techniques, effective communication methods, and more
- Worked one-on-one with university students of all class years to improve their study, organizational, time management, and other academic skills
- Provided guidance and encouragement to university students as they navigated their academic and extracurricular responsibilities
- Directed university students, when appropriate, to additional resources on campus to ensure that students received adequate support; made referrals to said resources when necessary
- Coordinated with faculty, administrators, accessibility specialists, and university students to ensure that students' needs were being met
- Ran tailored academic skills and study techniques workshops for groups of university students
- Advised more than thirty first-year students during New Student Orientation to assist them in building a balanced, challenging, and rewarding first semester schedule

3D Scanning Technician, **Environmental Archaeology Lab**, Wesleyan University Feb. 2021-May 2021

- Received training in operating the Arctec Space Spider 3D Scanner and using the associated Artec Studio software
- 3D scanned various objects and fossils; processed the scans via Artec Studio software to transform them into 3D models; posted 3D models on an online platform (Viewshape.com) to be shared
- Trained undergraduate students to use the 3D scanner

REFERENCES

Kathryn Snell, PhD
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Karen Chin, PhD
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Ellen Thomas, PhD
Smith Curator of Paleontology of the Joe Webb Peoples Museum of Natural History
Harold T Stearns Professor of Integrative Sciences, Emeritus
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