Katherine Almquist

katherinealmquist2029@u.northwestern.edu (269) 612-7730 Connect on LinkedIn

EDUCATION

Northwestern University, Evanston, IL (September 2024 – present)

2nd Year PhD Student Department of Earth, Environmental and Planetary Sciences, Cumulative GPA: 3.67

PI – Dr. Andrew Darin Jacobson

Working Research Title: Investigating the potential of Ca and Sr Isotopes as tracers within an open-system field experiment to provide an MRV mechanism for ERW carbon capture and sequestration

Skidmore College, Saratoga Springs, NY (September 2020 – May 2024) B.A. in Environmental Science, Minors: International Affairs and Spanish, Cumulative GPA: 3.453

EXPERIENCE

Volunteer Affiliate Expert Screener, CDRXIV, Remote January 2025 – Present

- With a PhD research focus on improving MRV for enhanced rock weathering, I am consistently exposed to many aspects of the industry within and outside of my research with multiple ties to industry leaders
- I serve as a volunteer to screen preprint papers to aid in the accessibility and transparency of the quickly evolving carbon dioxide removal and sequestration industry

Northwestern University Geochemistry PhD Student September 2024 – Present

- My current work involves collecting soil and water samples from a farm in downstate Illinois in collaboration with Ireland-based startup company Silicate, to be processed and analyzed in the lab to isolate calcium for isotopic measurement using Thermal Ionization Mass Spectrometry (TIMS)
- To further my knowledge, I am actively connecting and attending meetings with multiple groups at Northwestern, including the Paula M. Trienens Institute for Sustainability and Energy, Querry InQubation Lab, and Center for Talent Development

Part-Time Communications Intern, NOAA Climate Program Office, Remote April 2024 – September 2024

- Through collaboration with internship mentor, John Coggin (Senior Communications Specialist), conducted extensive literary research, co-interviewed 4 senior scientists, and co-authored a Climate.gov article (publishing pending)
- Attended multiple weekly meetings with senior CPO leadership to learn about internal and external government relations

ESS Senior Thesis – Skidmore College, NY Fall 2023 – Spring 2024

- Proving the Use of Inactive Brewer's Yeast to Remove Lead from Drinking Water (preliminarily proved inactive brewer's yeast absorbance capacity of lead through proof-of-concept trials)
- Wrote a grant proposal (\$500) to the Skidmore SEF fund that was accepted for thesis funding

Atmospheric Chemistry Research Assistant, Navea Lab, Skidmore College, NY Spring 2021 – May 2024

- Researching the foundations of photosensitization through detecting the combination of humic acid/4BBA and nitrogen oxide when reacted with light in the condensed and gas phase using an FTIR spectrometer
- Only undergraduate research lab and project in partnership with CAICE (Center for Aerosol Impacts on Chemistry of the Environment)

Research Assistant, Harvard Forest Summer Research Program in Ecology, Harvard University, MA Summer 2023

- Worked with a Harvard University PhD student to determine the impact of mycorrhizal crowding patterns
 on soil nutrient acquisition strategies and forest ecosystem dynamics and attended seminars to learn from
 experts in the ecology field
- Independently conducted field, lab, and microscopy work to test the hypothesis generated with my PhD student at the beginning of the summer; and presented findings in an end of summer presentation symposium

Research Assistant, Drawdown Scholars Program, Penn State University, PA Summer 2022

- Worked with research scholars to discuss and debate Project Drawdown solutions to climate change, attended guest speaker presentations, collaborated with research students to present findings surrounding Drawdown Solutions
- Aided in a research project focused on engineering antenna transmitters for honeybees to track their flight patterns and determine the impact of climate change on their survival; and presented findings in the field in end of summer poster symposium

Sustainability Intern, Chikaming Township Union Pier, MI Summer 2021

• Attended 6 high priority meetings with the supervisor of the township and University of Michigan MECC program, aided in the establishment of the lakefront resiliency ordinance, provided advice and recommendations for environmentally sustainable additions to the new project plans for different towns under the jurisdiction of the township

LEADERSHIP

Collegiate Varsity Athlete, Skidmore College, Saratoga Springs NY August 2020-May 2024

- Captain of the Skidmore Women's Varsity Tennis Team Fall 2023 & Spring 2024, Co-Captain Fall & Spring 2023
- Won 10th, 11th, 12th, 13th Liberty League Championship team title in 2021, 2022, 2023, and 2024

$Student\ Athlete\ Advisory\ Committee\ Subcommittee\ Leader$

August 2022-May 2024

• Student Athlete Advisory Committee (SAAC) member; Diversity, Equity, and Inclusion (SAAC) Subcommittee Leader attending meetings with Skidmore Athletics executive staff, the Dean of Students, and subsequent student committees

Co-Leader, SUPR (Single-Use Plastic Reduction) Initiative, Skidmore College, NY Summer 2022 – May 2024

Co-leader in the development of the Skidmore (SUPR) initiative to remove single use plastics on campus
and spearheaded the initiative to remove single-use plastic bottles from Skidmore campus through
meetings with the sustainability office at Skidmore College and executive dining hall staff at Skidmore
College

Skidmore Women's Tennis Leadership Award Winner Spring 2023 & Spring 2024

Skidmore Athletics Leadership Award Spring 2024

ITA National Arthur Ashe Jr. Leadership and Sportsmanship Award Spring 2024

"The Arthur Ashe Jr. Leadership and Sportsmanship Award, which dates back to 1982, is presented to the men's and women's national student-athletes who have exhibited outstanding sportsmanship and leadership, as well as scholastic, extracurricular and tennis achievements"

Skidmore College Student Government Association Senior Leadership Award Spring 2024

"Recognize and thank graduating senior leaders who have contributed consistently to the cocurricular life of the College. These senior award recipients have unselfishly devoted countless hours of their time, as well as their energy, skills and talents to building a richly diverse and vibrant campus life at Skidmore"

SKILLS

Language: Advanced Spanish reading comprehension, translation, and writing

Computer: Proficient in Microsoft Office Suite, Google Suites, Zoom

Laboratory: ICP-OES, calcium isotope isolation for soil and water samples, FTIR, vacuum filtration, micro pipetting,

KCL/phosphorus extraction, microscopy