

Gustavo A. Marchant Allende

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Education

2021 – 2025 **Macalester College** – Saint Paul, MN
B.A. in Geology/Earth Sciences, minor in Statistics
GPA: 3.87
Advisor: Dr. Kelly R. MacGregor

Research Experience

June 2024 – **MIT Summer Research Intern (MSRP)** – Massachusetts Institute of Technology
Aug 2024 Mentors: Dr. Nicole Nie
Rock-melt diffusion in the upper mantle via a peridotite xenolith from the Tariat region, Mongolia.

June 2023 – **Summer Research Assistant** – Macalester College
Aug 2023 Mentors: Dr. Emily First
Orange glass from the Moon: new perspectives on olivine crystallization from Ti-rich magma.

Laboratory Experience

Sept 2022 – **Keck Geology Laboratory Assistant** – Macalester College
Present Operated petrographic and imaging laboratory equipment (SEM, XRD, and XRF) for students' research and department inventory.

Teaching Experience

Sept 2024 – **Teaching assistant, GEOL 160: Dynamic Earth and Global Change** – Macalester College
Present Seminar-style first-year course. In-class and laboratory support, weekly office hours, 16 students. Supervisor: Dr. Emily First

Sept 2023 – **Teaching assistant, STAT-COMP 112: Introduction to Data Science** –
May 2024 Macalester College
Multiple sections, weekly office hours, 70 students per semester. Supervisors: Dr. Brianna Heggeseth, Dr. Alicia Johnson

Presentations

Oct 2024 Rock-melt diffusion in the upper mantle via a peridotite xenolith from the Tariat region, Mongolia.
2024 National Diversity in STEM Conference (Phoenix, AZ), poster.

Sept 2024 Rock-melt diffusion in the upper mantle via a peridotite xenolith from the Tariat region, Mongolia.
2024 MacFest Academic Summer Showcase (Saint Paul, MN), poster.

- Aug 2024 Rock-melt diffusion in the upper mantle via a peridotite xenolith from the Tariat region, Mongolia.
*MIT Summer Research Forum (Cambridge, MA), **oral**, poster.*
- Oct 2023 Orange glass from the Moon: new perspectives on olivine crystallization from Ti-rich magma.
National Diversity in STEM Conference (Portland, OR), poster.
- Sept 2023 Orange glass from the Moon: new perspectives on olivine crystallization from Ti-rich magma.
2023 MacFest Academic Summer Showcase (Saint Paul, MN), poster.

Honors and Scholarships

- 2024 Undergraduate Poster Presentation Award in Geology – SACNAS
- 2021 – Present Dean's List for Academic Excellence – Macalester College
All eligible semesters.
- 2021 – Present Davis United World College Scholar – Davis Foundation
- 2021 – Present Kofi Annan Scholar – Macalester College
- 2019 – 2021 United World College Scholar – UWC Robert Bosch College

Service and Leadership

- 2023 – Present Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (Board member, Macalester chapter)
- 2024 – Present GeoClub (Co-chair)
- 2022 – 2023 Adelante! Latin American Student Org (Co-chair)

Other Roles

- June 2021 – Present **National Committee of UWC in Chile (Board member)**
Participate in yearly selection processes to select six to ten Chilean high school students for all-inclusive scholarships to attend a UWC school for two years.

Technical Skills

Programming languages

R, Python

Software

ArcGIS, QGIS, ERDAS Imagine, Google Earth Engine, \LaTeX , Git

Languages

Spanish (native), German (fluent)

Certificates

Wilderness/Remote First Aid Certificate (NOLS, 2022)