

LAURA ALEXANDRA MATTAS

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EDUCATION

Climate Change Institute

Orono, ME

M.Sc. in Quaternary and Climate Science, Anticipated Graduation: May 2021

University of Maine

Orono, ME

Bachelor of Science in Earth and Climate Science: Climate Concentration, August 2019

Honors College • GPA: Major 3.7 / Cumulative 3.4

President of UMaine for Environmental Advocacy, Lead Resident Assistant, 4H STEM Ambassador, Geology club, Appointed to Honors College Advisory Committee, Student Ambassador for Earth & Climate Science Department
Honors thesis: "Interglacial Expansion of Alpine Glaciers in Garwood Valley, Antarctica" Advisor: Brenda Hall

GRANTS AND AWARDS

Golden Fund Scholar

Two time Recipient, Summer, 2018/ Summer, 2019

- Recipient of funding for summer work for investigating and developing a chronology of Norwegian alpine glaciers using cosmogenic nuclide samples
- Recipient of funding for summer work involving the investigation and processing of macrofossils from glacial lake sediment cores from the Wind River Range, Wyoming

Outstanding Senior Award

Spring 2019

- Recipient of departmental award offered annually to the top senior in the graduating class based on GPA, merit and involvement in research and volunteer opportunities

Edith Patch Award

Distinguished Nominee 2019

- Received honorable distinction and public recognition in a campus wide search for an award given to one female undergraduate per year based on exemplary work completed at the University of Maine
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SKILLS

ArcGIS • Ultra Cold Clean lab • Scanning Electron Microscope • Cryostage •
• Clean Chemistry • Cosmogenic Nuclide Chemistry • Wilderness First Aid certified

RESEARCH EXPERIENCE

Climate Change Institute

Orono, ME

Student Researcher, November/2017-Present

- Prepares cosmogenic nuclide samples for mass accelerator processing through the utilization of rock saws, crushers, pulverizers, sieves and microscopes to achieve desired grain size.
- Researches ratio of radiogenic beryllium in quartz samples through physical and chemical isolation of target minerals in sample rock using strong acid and clean chemistry procedures.

- Effective communication of research through synthesis of figures including georeferenced geomorphologic maps that were presented at poster seminars, conferences, in papers and in presentations.

School of Earth and Climate Science

Orono, ME

Student Researcher, April/2017-November/2017

- Trained to independently conduct electron backscattering diffraction scans on a SEM equipped with a cryogenic stage to identify microstructures present in ice core samples.

Climate Change Institute

Orono, ME

Student Researcher, January/2017-June/2017

- Conducted research and presented a poster on the study on stable isotopes ratios found in alaskan ice cores discovered through sample processing using ultra cold clean lab procedures, mass spectrometry and data analysis of relevant papers.

FIELD EXPERIENCE

Dry Valleys, Antarctica

Field Assistant, 12/2017-2/2018 • *Field Assistant*, 12/2018-2/2019

- Member of remote field team with intent to map, identify landforms and collect cosmogenic beryllium and radiocarbon samples for furthering research.

Aoraki National Park, New Zealand

Field Assistant, 12/2017-2/2018

- Member of field team with intent to map, acquire drone imagery, identify landforms and collect cosmogenic nuclide samples for furthering research.

Khumbu Valley, Nepal

Masters Student directing field studies, 4/2019-5/2019

- In charge of logistics and directing an internationally based field team with intent to map, acquire drone imagery, identify landforms and collect cosmogenic nuclide samples for furthering research.
- Ensured the needs of the students and goals of the project were met each day

CONFERENCE PROCEEDINGS

Comer Climate Meeting

Poster Presentation, October 2018

- Presented radiocarbon chronology and preliminary findings on Holocene expansion of Joyce Glacier, Dry Valleys, Antarctica

North East Geological Society of America

Poster Presentation, March 2019

- Presented a poster on the final findings of geochronologic data documenting the age of moraines deposited during the last glacial maximum from the Shaluli Shan mountains in Southeastern Tibet, Sichuan Province, China

HOBBIES

Rock climbing • Ice climbing • Hiking • Backpacking • Kayaking •
Stand Up Paddle Boarding • Surfing • Yoga • Running • Whitewater sports •
Photography • Creative Writing •

REFERENCES

DR. BRENDA HALL

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