



Exploring ancient lavas on the Oregon Coast.



Teaching field mapping and stratigraphy in northern Utah.

# Brennan van Alderwerelt, Ph.D.

# Geoscientist, Earth Mapping Resources Initiative (Earth MRI)

Brennan is a part of the Geologic Mapping team, currently leading an effort to better understand the state's critical mineral resources and abandoned mine sites in support of the USGS' Earth Mapping Resources Initiative (Earth MRI) by compiling published data, collecting geochemical data, and field mapping. Prior to joining the Survey, he taught university courses, directed geologic field camps, and conducted research in Chile, Iceland, and across the US.

# **Job Responsibilities**

Produce geologic maps and cross sections to improve our understanding of mineral systems. Inventory and characterize mine waste for critical minerals throughout the state. Collect and interpret geochemical data. Build relations between the Survey and the public.

# **Professional Interests**

Pacific Northwest geology, subduction zones, magmatism, geochemistry of mineral systems, microscopy, public outreach, Earth science education.

#### Skills

Field geology, mapping, igneous petrology, electron beam microscopy, GIS, mineralogy, geochemistry, economic geology, geo-communication, education.

# **Professional Experience**

- Field Camp Instructor, Oregon State University, Mitchell, OR
- Petrology Lecturer, Central Washington University, Ellensburg, WA
- Field Camp Director, Auburn University, Auburn, AL
- Applied Geochemistry Lecturer, Auburn University, Auburn, AL
- Electron Microprobe Research Assistant, University of Iowa, Iowa City, IA
- Technician, CA Department of Water Resources, Sacramento, CA

# Education

- Ph.D. Geoscience, University of Iowa, Iowa City, IA
- B.S. Physics, University of California Davis, Davis, CA

# **Personal Interests**

Woodwinds, bicycles, ceramics, kayaking, community arts and music, animals.