

OTTO IAN LANG

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229 B Street Apt. 6
Salt Lake City, UT 84103

EDUCATION

Master of Science, Geology *Starting August 2019*
University of Utah, Salt Lake City, UT

Bachelor of Science, Geology *August 2015 – April 2019*
Fort Lewis College, Durango, CO
GPA 3.99, Dean's List
Minor in Mathematics, GIS certificate

Selected Coursework

Geology / GIS: Mineralogy, Petrology, Geophysics, Calculus-based Physics, Geomorphology, Engineering Geology, Advanced GIS, Remote Sensing, Programming and Web-mapping, Structural Geology, Scanning Electron Microscope (SEM) Techniques, Stratigraphy and Sedimentary Geology, Historical Geology, & Geologic Field Methods

Mathematics: Calculus I, II, III, Linear Algebra, Differential Equations, & Statistics

Chemistry: General Chemistry & Analytical Chemistry

RESEARCH EXPERIENCE

Undergraduate Researcher *Summer 2018*

REU, University of Hawai'i at Mānoa, Honolulu, HI / Mentors: Dr. Michael Garcia & Dr. Thomas Shea

- Completed 9-weeks of volcanology research understanding magmatic timescales of the Kīlauea Volcano with chemical diffusion in zoned olivine
- Capable of operating and programming analyses on an electron microprobe
- Familiar with grain mount and thin section selection, preparation, and polishing procedures
- Proficient at numerically modeling geochemical data using MATLAB

Undergraduate Senior Thesis *2017-2018*

Fort Lewis College, Durango, CO / Advisor: Dr. David Gonzales

- Year-long project comparing Nd, Sr, and Hf isotopic signatures for plutonic rocks in the Rico Mountains
- Conducted chemical analyses using inductively coupled plasma mass spectrometry at the University of Arizona
- Obtained bulk-rock thermal ionization mass spectrometry data from the University of Colorado, Boulder
- Experience analyzing samples, calibrating instrumentation, and constructing element maps on an SEM
- Conducted 3 days of petrology field work

GIS / Geomorphology Independent Study *Spring 2019*

Fort Lewis College, Durango, CO / Advisor: Dr. Jonathan Harvey

- Spatial analysis of post-fire debris flow controls

WORK EXPERIENCE

Fort Lewis College, Durango, CO

Teacher's Assistant, Department of Geosciences, CRLA I Certified* *2017-2019*

Labs assisted: Mineralogy, Introduction to GIS, & Earth and the Environment

Student Peer Educator, Department of Mathematics, CRLA I Certified* *2016-2019*

Courses mentored: Pre-calculus, Calculus I, II, III

* College Reading & Learning Association

LEADERSHIP

- Fort Lewis College Geology Club Treasurer *2017-2018*
 - Organized finances, helped obtain funding, and actively contributed to promoting club events

SCHOLARSHIPS / AWARDS

- University of Utah Graduate Fellowship (\$27000/year) *2019-Current*
- Student Marshal Spring 2019 Commencement Ceremony, Fort Lewis College *2019*
- Rocky Mountain Association of Geologists Foundation, Eugene M. Shoemaker Outstanding Student in Geology Award *2019*
- Outstanding Senior Award: Geology, Fort Lewis College *2019*
- Analytical Chemistry Achievement Award, Fort Lewis College *2019*
- Rockhopper Geology Scholarship (\$3000/year), Fort Lewis College *2018-2019*
- Rocky Mountain Association of Geologists Foundation, Neal J. Harr Memorial Outstanding Student Award *2018*
- Faculty recommendation for USGS position, selected from field camp *2018*
- Thurston Geology Scholarship (\$2500/year), Fort Lewis College *2016-2018*
- Outstanding Statistics Student Award, Fort Lewis College *2017*
- General Chemistry Achievement Award, Fort Lewis College *2016*
- Roshong Music Scholarship (\$1000/year), Fort Lewis College *2015-2016*
- Merit Scholarship (\$9000/year), Fort Lewis College *2015-2019*

ACCEPTED GRANTS

- Fort Lewis College Travel Grant (\$540) *October 2018*
- Fort Lewis College Travel Grant (\$350) *June 2018*
- Fort Lewis College Student Research, Scholarly, and Creative Activity Grant (\$1000) *2017*
- Rocky Mountain Geological Society of America (GSA) Undergraduate Research Grant (\$750) *2017*
- Colorado Springs Mineralogical Society Undergraduate Research Scholarship (\$600) *2017*

PROFESSIONAL PRESENTATIONS

GSA Annual Conference, Indianapolis, IN (Poster) *November, 2018*
Otto Lang, Michael Garcia, Thomas Shea, & Kendra Lynn: Taking the Pulse of Kīlauea Volcano, Hawai'i: Using Zoned Olivine to Decipher Magmatic Timescales

Rocky Mountain GSA Conference (Poster) *June, 2018*
Four Corners Geological Society Meeting (Oral Presentation) *May, 2018*
Otto Lang & David Gonzales: A Comparison of Nd, Sr, and Hf Isotopic Signatures for Late Cretaceous and Pliocene Plutonic Rocks in the Rico Mountains, Colorado: Insight into Magmatic Sources at 68 and 4 Ma

MISCELLANEOUS

- Participation in the Fort Lewis College cycling team; conference champions 2015, 2016, 2017
- 3 years of experience as a ski instructor
 - Pebble Creek Ski Area, Inkom, ID *2013-2015*
- 10+ years of musical experience playing classical guitar, clarinet, and saxophone
- Fluent in German
- Passionate about skiing, mountaineering, mountain biking, running, and traveling