

Name
Email
Address
Phone

Education

August 2020- Present

Colorado School of Mines
PhD. In Economic Geology
Advisor: Dr. Thomas Monecke
Expected Graduation: Spring 2024

August 2018-
Fall 2020

Colorado School of Mines
M.Sc. in Geology
Graduation Date: December 2020

Fall 2013-summer 2017

Central Washington University
B.S. in Geological Sciences; summer 2017

Research Experience

Fall 2020- Present

PhD Thesis

August 2018-
December 2020

Masters Thesis: Taking the tectonic pulse of Paleoproterozoic orogenesis:
U–Th–Pb monazite geochronology of metasediments in the Colorado Front
Range
Advisor: Dr. Richard Palin

Research conducted

- XRF trace and bulk element analysis
- Bright phase element mapping, TIMA
- Major element mineral chemistry, EMPA
- Monazite composition analysis, EMPA
- *In-situ* monazite U-Th-Pb geochronology, EMPA
- High precision phase diagram-based thermobarometry (Theriak-Domino and THERMOCALC)

Spring 2016- June 2018

Undergraduate Research: Metamorphic evolution of a kyanite eclogite from the Dulan area, North Qaidam ultrahigh-pressure (UHP) terrane Northwest China
Advisor: Dr. Chris Mattinson

- Phase equilibria modeling: Perple_X
- Mineral separation: crushing, sieving, magnetic separation, heavy liquid separation and mounting
- Analytical experience: SEM (CL imaging), EMPA (major element analysis), LA-ICP-MS (zircon U-Pb dating, REE analysis)

Teaching Experience

Spring 2021

Lab Instructor- Petrology (CSM)

Fall 2020	Lab Instructor- Mineralogy and Mineral Character (CSM)
Fall 2020	Lab Instructor- Earth and Environmental Systems (CSM)
Spring 2020	Lab Instructor- Mineral Exploration Design (CSM)
Fall 2019	Lab Instructor- Earth and Environmental Systems (CMS)
Fall 2019	Graduate Teaching Assistant- Global Studies, Asian Politics (CSM)
Spring 2019	Graduate Teaching Assistant-Global Studies, Ethics (CSM)
Fall 2018	Graduate Teaching Assistant-Global Studies (CSM)
Spring 2017	Undergraduate Teaching Assistant- Intro Geology lab (CWU)
Winter 2017	Undergraduate Teaching Assistant- Mineralogy (CWU)
Fall 2016	Undergraduate Teaching Assistant- Rocks and Minerals (CWU)

Meeting Talk and Poster Presentations

- **Lehman, M.**, Palin, R. M., 2019, Taking the tectonic pulse of Paleoproterozoic orogenesis: U–Th–Pb monazite geochronology of metasediments in the Colorado Front Range. Paper 85-2, Abstracts with Programs Geological Society of America. V 51, No. 5
- **Lehman, M.**, Palin, R. M., 2019, Taking the tectonic pulse of Paleoproterozoic orogenesis: U–Th–Pb monazite geochronology of metasediments in the Colorado Front Range. Colorado School of Mines Graduate Student Government GRADS Symposium
- **Lehman, M.**, Palin, R. M., 2019, Taking the tectonic pulse of Paleoproterozoic orogenesis: U–Th–Pb monazite geochronology of metasediments in the Colorado Front Range. Colorado School of Mines Department of Geology and Geological Engineering Symposium.
- **Lehman, M.**, Hernández-Urbe, D., Mattinson, C., 2017, Multistage History Recorded by Zircons from a Kyanite Eclogite, North Qaidam UHP Terrane, China. Paper 85-8, Abstracts with Programs Geological Society of America. v.49, No. 6
- **Lehman, M.**, Hernández-Urbe, D., Mattinson, C., 2016, Metamorphic evolution of a kyanite eclogite, North Qaidam terrane, western China. Paper 336-13, Abstracts with Programs Geological Society of America. v.48, No. 7
- Hernández-Urbe, D., Mattinson, C., Kylander-Clark, A., Neill, O., **Lehman, M.**, 2017, A Comparison Between Zircon-Rutile Thermometry of Eclogites: Implications for Temperature-Time Evolution of North Qaidam UHP Terrane, China. Paper 176-4 Abstracts with Programs Geological Society of America v. 49 No. 6
- Hernández-Urbe, D., Stubbs, K., **Lehman, M.**, Gilmore, V., Kylander-Clark, A., Mattinson, C., 2016, U-Pb zircon geochronology and Zr-in-rutile thermometry of eclogites from the Dulan area, North Qaidam ultra-high pressure (UHP) terrane, western China. Abstract: V13D-2875 presented at 2016 Fall Meeting, AGU, San Francisco, CA, 12-16 Dec

Grants, Scholarships and Recognitions

December 2020	Steven C. Potter Scholarship (SME) (\$2,500)
May 2019	Graduate Student Government Travel Grant (\$450)
April 2019	Colorado Scientific Society Research Grant (\$500)
November 2016	Office of Undergraduate Research travel grant (\$500)
Fall 2016	Dean's List (GPA >3.5)
Fall 2015	Dean's List
Winter 2014	Dean's List
Fall 2013	Freshman Scholar Tuition Award (\$800)

Work, Volunteer and Leadership Experience

- Colorado School of Mines, Society of Economic Geology Secretary (2019-20)

- CSM Department of Geology and Geologic Engineering Graduate Student Representative (2019-20)
- Hydrothermal Ore Deposits Short Course, January 2019
- Volunteer at the Arvada Community Farm, 3+ years
- Volunteer at the USGS Denver in the mineral separation lab, Supervisor Chris Holm-Denoma 3+ months
- Software: Microsoft office, Perple_X, Theriak-Domino, THERMOCALC, Adobe Illustrator
- FTS Enterprises: Administrative assistant and Inventory manager for owner Dudley Blauwet, specializing in corundum
- Central Washington University Equestrian Team: secretary, captain and show coordinator from spring 2014- spring 2017

Professional Associations

- Society of Economic Geology
- Society for Mining, Metallurgy and Exploration
- Prospectors and Developers Association of Canada
- Geological Society of America
- Mineralogical Society of America
- Intercollegiate Horse Show Association

References

- Thomas Monecke, Professor, Department of Geology and Geologic Engineering, CSM
- Katharina Pfaff, Research Associate Professor, Department of Geology and Geological Engineering (CSM)
- M. Steve Enders, Department Head, Department of Mining Engineering, CSM