

**Yiming Zhang**  
*Curriculum Vitae*

Department of Earth and Planetary Science  
University of California, Berkeley  
Berkeley, CA 94720  
yimingzhang@berkeley.edu  
duseryiming@gmail.com  
(323) 810-2226

**EDUCATION**

*Ph.D. Candidate.*, Earth and Planetary Science  
University of California, Berkeley

Expected May 2024

*B.A, cum laude.*, Geology, Occidental College

2019

**PUBLICATIONS**

Slotznick, S.P., Swanson-Hysell, N.L., **Zhang, Y.**, Clayton, K.E., Wellman, C.H., Tosca, N.J., and Strother, P.K. (in revision) Reconstructing the paleoenvironment of an oxygenated Mesoproterozoic shoreline and its record of life, *GSA Bulletin*.

Pierce, J., **Zhang, Y.**, Hodgins, E.B., and Swanson-Hysell, N.L., Quantifying inclination shallowing and representing flattening uncertainty in sedimentary paleomagnetic poles, submitted to *Geochemistry, Geophysics, Geosystems*. doi: <https://doi.org/10.1029/2022GC010682>

Rose, I., **Zhang, Y.**, and Swanson-Hysell, N.L. Bayesian paleomagnetic Euler pole inversion for paleogeographic reconstruction and analysis, *JGR: Solid Earth*. doi: <https://doi.org/10.1029/2021jb023890>

**Zhang, Y.**, Swanson-Hysell, N.L., Avery, M.S., Fu, R.R., (2022), High geomagnetic field intensity recorded by anorthosite xenoliths requires a strongly powered late Mesoproterozoic geodynamo. *PNAS*. doi: <https://doi.org/10.1073/pnas.2202875119>

Hodgins, E.B., Swanson-Hysell, N.L., DeGraff, J.M., Kylander-Clark, A.R.C., Schmitz, M.D., Turner, A.C., **Zhang, Y.**, Stolper, D.A., (2022), Final inversion of the Midcontinent Rift during the Rigolet Phase of the Grenvillian Orogeny. *Geology*. doi: <https://doi.org/10.1130/G49439.1>

Cromwell, G., **Zhang, Y.**, (2021), New paleointensity data from Aniakchak volcano, Alaska, USA. *Geochemistry, Geophysics, Geosystems*. doi: <https://doi.org/10.1029/2021GC0100321>

**Zhang, Y.**, Swanson-Hysell, N.L., Schmitz, M.D., Miller Jr., J.D., and Avery, M.S., (2021), Synchronous emplacement of the anorthosite xenolith-bearing Beaver River diabase and one of the largest lava flows on Earth. *Geochemistry, Geophysics, Geosystems*. doi: <https://doi.org/10.1029/2021GC009909>

Swanson-Hysell, N.L., Avery, M.S., **Zhang, Y.**, Hodgins, E.B., Sherwood, R.J., Apen, F.E., et al., (2021). The paleogeography of Laurentia in its early years: new constraints from the Paleoproterozoic East Central Minnesota batholith. *Tectonics*. doi: <https://doi.org/10.1029/2021TC0067511>

Swanson-Hysell, N.L., Hoaglund, S.A., Crowley, J.L., Schmitz, M.D., **Zhang, Y.**, and Miller Jr., J.D., (2020), Rapid emplacement of massive Duluth Complex intrusions within the Midcontinent Rift. *Geology*. doi: <https://doi.org/10.1130/G47873.1>

**Zhang, Y.**, Pairing paleointensity results with coercivity spectra: providing support for selection criteria. *IRM Quarterly*. Volume 30. Number 1.

## TALKS

2023 MagIC workshop (*invited*) Feb 2023  
*New perspectives on Laurentia's Grenville Loop: tracking Rodinia across the Mesoproterozoic to Neoproterozoic boundary*

2022 AGU Fall Meeting Dec 12-16 2022  
*Reconstructing the position of the supercontinent Rodinia in the early Neoproterozoic: new constraints from Laurentia's interior and the Grenville margin*

Beijing Paleomagnetism and Geochronology Laboratory (*invited, online*) Sep 28 2022  
*High geomagnetic field intensity recorded by anorthosite xenoliths requires a strongly powered late Mesoproterozoic geodynamo*

Young CEED 21 Frontiers in quantitative paleogeography (*invited, online*) Nov 14-20 2021  
*Bayesian\_PEP\_inversion: a Bayesian framework for integrating paleomagnetic and geochronologic data into apparent polar wander inversion*

Grand Canyon Supergroup Field Forum (*invited*) April 9-19 2021  
*The rich paleomagnetic record of the Mesoproterozoic Midcontinent Rift and the Southwestern Laurentia LIP*

Cloud Meeting on Paleomagnetism (*invited, online*) 1/29/2021  
*Intense magmatic activity and a strong geomagnetic field -a study on the anorthosite xenoliths hosted in the Mesoproterozoic Midcontinent Rift diabase*

2020 AGU Fall Meeting (*online*) 12/15/2020  
*Recovering Mesoproterozoic geomagnetic field intensity using anorthosite xenoliths hosted in Midcontinent Rift diabase*

North Central GSA Conference, Duluth, MN (*online*) 05/18/2019  
*The rich paleomagnetic records of Proterozoic Midcontinent Rift intrusives: an updated synthesis with a new pole from the Beaver River diabase*

Institute for Rock Magnetism, University of Minnesota, Minneapolis, MN (*invited*) 01/09/2019  
*Paleomagnetism and rock magnetism on the Beaver River diabase and anorthosite xenoliths therein*

## TEACHING

Reader for EPS 88 PyEarth: A Python Introduction to Earth Science Spring 2023  
Advisor: Nicholas Swanson-Hysell

GSI for EPS 101 Field Geology and Digital Mapping Fall 2022  
Advisor: Nicholas Swanson-Hysell

Reader for EPS 115 Stratigraphy and Earth History Spring 2022  
Advisor: Eben Blake Hodgkin

GSI for EPS 101 Field Geology and Digital Mapping Fall 2021  
Advisor: Nicholas Swanson-Hysell

|  |             |
|--|-------------|
| GSI for EPS 50 The Planet Earth<br><i>Advisor: Daniel Stolper</i>                            | Spring 2021 |
| Participant in the Graduate Remote Instruction Innovation Fellows Program                    | Winter 2020 |
| GSI for EPS 101 Field Geology and Digital Mapping<br><i>Advisor: Nicholas Swanson-Hysell</i> | Fall 2020   |
| Completion of UC Berkeley GSI Conference training  | Jan 2020    |
| Completion of required Online Course: Professional Standards and Ethics for GSIs             | Fall 2019   |
| Completion of required Pedagogy Course EPS 375   | Fall 2019   |

## ORIGINAL GEOLOGICAL FIELD WORK

|   |                  |
|---|------------------|
| Adirondack Mountains, New York [1 week]<br><i>Pairing paleomagnetic data and thermochronology records to reevaluate the exhumation history of rocks of the Grenvillian Orogeny in Adirondack Highlands and recalibrate the Grenville Loop.</i>  | 2022             |
| Death Valley, California; Grand Canyon, Arizona [4 weeks]<br><i>Using paleomagnetism and geochronology to study the temporal and magnetic relationship between the ca. 1.1 Ga South-western Laurentia Large Igneous Province and the Midcontinent Rift.</i>   | 2021             |
| Pikes Peak, Colorado [2 weeks]<br><i>Using paleomagnetism and geochronology to study the emplacement history of Pikes Peak batholith and its temporal and magnetic associations with the Midcontinent Rift 1.1 billion years ago.</i>   | 2020             |
| Midcontinent Rift, Lake Superior Region [11 weeks]<br><i>Reconstructing the behavior of the Mesoproterozoic geomagnetic field, continental motion during supercontinent assembly and the nature of ancient environments through paleomagnetic studies of the intrusive rocks and sediments of the 1.1 billion-year-old Midcontinent Rift.</i> | 2019, 2020, 2021 |
| Central Highland, Iceland [3 weeks]<br><i>Qualitatively and quantitatively measure the erosion rate of rhyolite soil erosion in Central highlands, Iceland</i>  | 2019             |

## RESEARCH AND FUNDING

|   |      |
|---|------|
| UC Berkeley graduate student conference travel grant  | 2022 |
| <i>Hearts to Humanity Eternal (H2H8) Programs</i><br><i>H2H8 Association Graduate Research Grant to Advance Humanity through Science (\$10,000)</i>   | 2022 |
| <i>U.S. Visiting Student Fellowships, Institute for Rock Magnetism</i><br><i>Paleomagnetism and rock magnetism study on Mesoproterozoic Beaver Bay Complex and anorthosite xenoliths therein (\$500)</i>        | 2019 |
| <i>ILSG Student Research Fund, Institute on Lake Superior Geology</i><br><i>To study the emplacement history of the Beaver River diabase and the anorthosite xenoliths therein using paleomagnetism (\$500)</i> | 2019 |

|   |      |
|---|------|
| <i>Chevron-Xenel Gateway Fellowship, Berkeley International House (\$5,000)</i>   | 2019 |
|   |      |
| <i>John Parke Young Student Grant , Occidental College</i>  | 2019 |
| <i>Multi-temporal UAV Data for Monitoring Modern Rofabard Soil Erosion in Central Highlands, Iceland (\$3,500)</i>                            |      |
|   |      |
| <i>Student assistant, Scripps Institute of Oceanography</i>   | 2019 |
| <i>Pleistocene Paleointensity Record of Aleutian Island Volcanics, NSF award 1520788</i>  |      |
|   |      |
| <i>Independent research, Occidental College</i>   | 2018 |
| <i>Pseudo-Thellier Paleointensity Measurement on R-N Geomagnetic Polarity Reversal Recorded by Mafic Lava Flows, Anahola, Kauai (\$4,000)</i> |      |
|   |      |
| <i>Independent research, Henry Luce Foundation, Nanjing Univeristy</i>  | 2017 |
| <i>Mapping of Ambient Ozone Pollution in China and the Assessment of Its Health Impact on Socio-Economy (\$2,250)</i>                         |      |

## MEMBERSHIPS

*American Geophysical Union (AGU)*  
*Geological Society of America (GSA)*