

# Jon K. Golla

Department of Geology, University of Illinois at Urbana-Champaign  
jgolla2@illinois.edu | jkgolla.github.io

## EDUCATION

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<b>Ph.D. Geology</b> , University of Illinois at Urbana-Champaign	Aug 2019 – Present
<b>M.S. Earth &amp; Planetary Sciences</b> (with distinction), University of New Mexico	Aug 2017 – Jul 2019
<b>B.S. Geology</b> , University of Puget Sound	Aug 2013 – Aug 2017

## RELEVANT EXPERIENCE

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<b>Hydrology Student Trainee</b> , U.S. Geological Survey	May 2019 – Jul 2019
Contributed to geochemical source-tracking (Snowy River Passage) and geothermal assessment (Messilla Basin) projects	
<b>Seasonal Hydrologic Technician</b> , Valles Caldera National Preserve	Spring 2018, Spring 2019
Contracted through a UNM research assistantship; maintenance of YSI 6920 sondes at 10 stream sites and data management	
<b>Teaching Assistant</b> , University of New Mexico	Fall 2017, Fall 2018
Taught introductory Environmental Science (ENVS) and Earth History courses; Revised and digitized two ENVS labs	
<b>Geology Department Assistant</b> , University of Puget Sound	Aug 2015 – May 2017
<b>Course Assistant</b> , University of Puget Sound	Spring 2015, Fall 2017
Lab aide for Mineralogy and Petrology and Physical Geology courses	
<b>Summer Job Shadow</b> , PT Chevron Pacific Indonesia	Jun 2015 – Jul 2015
Geoscience mentors briefed on exploratory and developmental stages in the geothermal division	

## PUBLICATIONS

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### Proceedings Papers

- Lindsey, C.R. and **Golla, J.K.** (2019) ‘Multivariate Statistical Method Validation using Aqueous Geochemistry from Yellowstone National Park’, *Geothermal Resources Council Transactions*, v. 43, pp. 861-872.
- Golla, J.K.** (2018) ‘Using Principal Component Analysis to Aid Visualization and Interpretation of Geothermal Solute Geochemistry: An Application to Yellowstone Thermal Waters’, *Geothermal Resources Council Transactions*, v. 42, pp. 1226-1239.
- Golla, J.K.** and Tepper, J.H. (2017) ‘Comparison and Controls of Thermal Spring Chemistry in Cascade Range and Olympic Mountains Geothermal Provinces, Washington’, *Geothermal Resources Council Transactions*, v. 41, pp. 1438-1454.

### Conference Abstracts

- Golla, J.K.**, Kuessner, M.L., Bouchez, J., Rempe, D.M., and Druhan, J.L. (2020), ‘Tracing Silicate Weathering Dynamics in a Shale-Dominated Hillslope using Lithium Isotopes in a Reactive Transport Framework’, *Goldschmidt Abstracts*
- Golla, J.K.** and Lindsey, C.R. (2019) ‘A comparison of dimensionality reduction techniques in hydrogeochemistry’, *American Geophysical Union Fall Meeting 2019*, Abstract V11C-13.
- Golla, J.K.**, Crossey, L.J., Karlstrom, K.E., and Ali, A.S. (2018) ‘Trace metal salinization of the Jemez River, New Mexico: Geothermal spring and major tributary inputs’, *Geological Society of America Abstracts with Programs*, v. 50, no. 6, doi: 10.1130/abs/2018AM-324753.
- Golla, J.K.**, Crossey, L.J., Karlstrom, K.E., and Ali, A.S. (2018) ‘Groundwater-Streamwater rare earth element dynamics in the Sulphur Creek watershed, Valles Caldera, New Mexico’, *Geological Society of America Abstracts with Programs*, v. 50, no. 6, doi: 10.1130/abs/2018AM-324849.
- Golla, J.K.** and Crossey, L.J. (2018) ‘Major-solute observations of geothermal salinization of the Jemez Watershed, New Mexico’, *Geological Society of America Abstracts with Programs*, v. 50, no. 5, doi: 10.1130/abs/2018RM-313942.
- Smith, K.L., Crossey, L.J., McGibbon, C., and **Golla, J.K.** (2018) ‘Using stable isotopes and continuous sensors to track geothermal salinity contributions that impair surface and groundwater quality, Jemez River, NM’, *Geological Society of America Abstracts with Programs*, v. 50, no. 5, doi: 10.1130/abs/2018RM-314271.
- Holt, B.D., Karlstrom, K.E., Crossey, L.J., Darrah, T.H., Whyte, C., Gonzales, D.A., Burch, S.J., and **Golla, J.K.** (2018) ‘Mantle-to-surface neotectonic connections in the San Juan Mountains documented by  $^3\text{He}/^4\text{He}$ ,  $\text{CO}_2$  flux measurements, and hydrochemical analyses of the geothermal system’, *Geological Society of America Abstracts with Programs*, v. 50, no. 5, doi: 10.1130/abs/2018RM-313617.
- Golla, J.K.** and Tepper, J.H. (2017) ‘Subsurface characterization of thermal springs in Cascade Range and Olympic Mountains, Washington using multiple mineral equilibria geothermometry’, *Geological Society of America Abstracts with Programs*, v. 49, no. 6, doi: 10.1130/abs/2017AM-297338.

## Other Publications

2. Mathioudakis, M., Johnson, M., Huang, K., **Golla, J.**, and Renaud, T. (2018) 'Lava Eruption Disrupts the Puna Geothermal Venture: The Background', in Crawford, I. (ed.) *Geothermal Resources Council Bulletin*, v. 47, no. 4, pp. 53-57.
1. **Golla, J.K.**, Fan, K., and Basant, R. (2018) 'Adventures within the Geothermal Community: a Q & A with Cary Lindsey, a past GRC Scholarship Awardee', in Crawford, I. (ed.) *Geothermal Resources Council Bulletin*, v. 47, no. 2, pp. 32-36.

## PRESENTATIONS

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<b>Goldschmidt 2020</b> , Virtual (Talk)	Jun 2020
<b>American Geophysical Union 2019 Fall Meeting</b> , San Francisco, CA (eLightning: 3-minute Talk & Virtual Poster)	Dec 2019
<b>New Mexico Geological Society 2019 Spring Meeting</b> , Socorro, NM (Talk)	Apr 2019
<b>Thompson Hall Science and Mathematics Seminar</b> , University of Puget Sound (Invited Talk)	Mar 2019
<b>University of New Mexico STEM Research Symposium</b> (Invited Poster)	Mar 2019
<b>New Mexico State Graduate Education Day</b> , Santa Fe, NM (Invited Poster)	Feb 2019
<b>Shared Knowledge Conference</b> , University of New Mexico (Invited Poster)	Nov 2018
<b>Geological Society of America 2018 Annual Meeting</b> , Indianapolis, IN (Poster & Talk)	Nov 2018
<b>Geothermal Resources Council 42nd Annual Meeting</b> , Reno, NV (Talk)	Oct 2018
<b>Geological Society of America 70th Rocky Mountain Section Meeting</b> , Flagstaff, AZ (Poster)	May 2018
<b>New Mexico Geological Society 2018 Spring Meeting</b> , Socorro, NM (Poster)	Apr 2018
<b>New Mexico EPSCoR Year 5 All Hands Meeting: "Minute Madness"</b> , Albuquerque, NM (Co-Talk)	Nov 2017
<b>New Mexico Academy of Science 2017 Research Symposium</b> , Albuquerque, NM (Poster)	Nov 2017
<b>Geological Society of America 2017 Annual Meeting</b> , Seattle, WA (Poster)	Oct 2017
<b>Geothermal Resources Council 41st Annual Meeting</b> , Salt Lake City, UT (Poster & Talk)	Oct 2017
<b>11th Washington Hydrogeology Symposium</b> , Tacoma, WA (Poster)	May 2017
<b>6th South Sound Undergraduate Geosciences Conference</b> , Pacific Lutheran University (Poster)	May 2017
<b>Thompson Hall Science and Mathematics Seminar</b> , University of Puget Sound (Co-Talk)	Apr 2017
<b>25th Murdock College Science Research Conference</b> , Spokane, WA (Poster & Invited Talk)	Nov 2016

## AWARDS & HONORS

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<b>Outstanding Master of Science Graduate for 2019</b> , Earth & Planetary Sciences Department, UNM	May 2020
<b>Chateaubriand Fellowship (2020-2021)</b> , Office for Science & Technology, Embassy of France in the US	Apr 2020
<b>Geology Alumni Scholarship Fund</b> , Earth & Planetary Sciences Department, UNM (\$600)	May 2019
<b>Graduate Research Fellowship (2019-2024)</b> , National Science Foundation	Apr 2019
<b>Honorable Mention (Predoctoral Fellowship)</b> , Ford Foundation, NASEM	Apr 2019
<b>Department of Geology Endowed Fellowship (2019-2020)</b> , Department of Geology, UIUC	Feb 2019
<b>GSA 2018 Annual Meeting Student Travel Grant</b> , GSA Rocky Mountain Section (\$125)	Oct 2018
<b>Alexander and Geraldine Wanek Graduate Scholarship</b> , Earth & Planetary Sciences Department, UNM (\$550)	Jun 2018
<b>Student Water Research Grant</b> , New Mexico Water Resources Research Institute (\$6000)	May 2018
<b>Roy J. Shlemon Scholarship Fund</b> , GSA EEGD Division (\$2500)	May 2018
<b>GSA 2018 RM Section Meeting Student Travel Grant</b> , GSA Rocky Mountain Section (\$200)	Apr 2018
<b>Cearley Graduate Grant-in-Aid</b> , New Mexico Geological Society (\$2500)	Apr 2018
<b>Best Presentation (Geochemistry 1 Session)</b> , Geothermal Resources Council	Nov 2017
<b>2nd Best Graduate Poster @ NMAS 2017 Research Symposium</b> , New Mexico EPSCoR (\$100)	Nov 2017
<b>GSA 2017 Annual Meeting Student Travel Grant</b> , GSA Rocky Mountain Section (\$100)	Sep 2017
<b>GRC Graduate Scholarship</b> , Geothermal Resources Council (\$2500)	Aug 2017
<b>Al Eggers Award</b> , Geology Department, University of Puget Sound	May 2017
<b>Anadarko Petroleum Scholarship</b> , Indiana University Geologic Field Station (\$2500)	Apr 2017
<b>GRC Undergraduate Scholarship</b> , Geothermal Resources Council (\$1500)	Jul 2016
<b>Agricola Scholar Award</b> , University of Puget Sound (\$4900)	May 2016

## MENTORING & SERVICE

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### Undergraduate Mentoring

2017 – Present

- **Jinyu Wang**, University of Illinois at Urbana-Champaign  
Project: Examining the deep pyrite oxidation front in the Critical Zone
- **Kent Smith**, University of New Mexico  
Project: Tracking geothermal contributions to the Jemez River, New Mexico with stable isotopes and continuous sensors
- **Brittany Griego**, University of New Mexico  
General aqueous geochemistry labwork

**Summer Undergraduate Research Opportunities Program**, Department of Geology, UIUC Summer 2020

**Undergraduate Research Opportunity Conference**, University of New Mexico Apr 2019

Poster presentation judge

**Field Day with Southwestern Indian Polytechnic Institute (SIPI)** Mar 2019

Demonstration of hydrologic and remote-sensing instrumentation to SIPI Geospatial Information Technology students

**New Mexico Summer Community College Opportunity for Research Experience (SCCORE)** Summer 2018

Assisted Cassandra Roback with water water quality sampling for their SCCORE project

**Geothermal Resources Council Student Committee** Oct 2017 – Apr 2019

Wrote articles for periodic Bulletin; Organized fundraising opportunities; Planned Annual Meeting events

**Sigma Gamma Epsilon - Theta Eta Chapter** Aug 2016 – May 2017

Tutor for undergraduate geology students

## MISCELLANEOUS

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### Short Courses and Workshops

- **Isotope Tracers in Catchment Hydrology**, University of Saskatchewan May 2020
- **Geothermal Exploration and Development Decisions Based on Resource Conceptual Models**, Jun 2018  
National Geothermal Academy, University of Nevada, Reno
- **GEOL G429: Field Geology in the Rocky Mountains**, Indiana University Jun 2017 - Aug 2017

### Skills

- **Labwork:** ICP-OES, Ion Chromatography, Gran titrations
- **Geochemical software:** CrunchTope, SOLVEQ, iGeoT (GeoT-iTOUGH2), PhreeqcI, Geochemists' Workbench
- **Computing:** python, R, GNU Bash (beginning proficiency)
- **GIS:** QGIS
- **Others:** L<sup>A</sup>T<sub>E</sub>X, Microsoft Office Suite, Vector-image manipulation

### Organizations

- American Geophysical Union
- Geological Society of America
- Geochemical Society
- Geothermal Resources Council
- Sigma Gamma Epsilon - Theta Eta Chapter