

Robert (“Robby”) Goldman, Ph.D. (he/him)

EDUCATION

Ph.D. in Geology

August 2023

University of Illinois at Urbana-Champaign (UIUC), Urbana, IL

Dissertation title: “An interdisciplinary approach toward improving volcanic hazard and threat management”

Primary Advisor: Patricia M. Gregg (UIUC)

NSF GRIP Partner Agency Advisor: Wendy K. Stovall (U.S. Geological Survey)

B.A. in Geology, Minor in Physics, *magna cum laude*

May 2015

Pomona College, Claremont, CA

Bachelor’s thesis title: “Assessing volcanic caldera formation using elastic finite element models”

Advisor: Eric B. Grosfils

RESEARCH EXPERIENCE

NSF Graduate Research Fellow / UIUC Doctoral Research Fellow

January 2017 – August 2023

National Science Foundation (NSF); University of Illinois at Urbana-Champaign

- Funded by three distinct graduate research fellowships over course of Ph.D. program.
- Dissertation includes three peer-reviewed publications (described below) and a fourth research chapter.
- Areas of specialization: volcano geophysics, hazards assessment, and communication science.

National Science Foundation (NSF) Graduate Research Intern

January 2020 – August 2022

U.S. Geological Survey (USGS) Volcano Hazards Program (VHP)

- Awarded \$5000 to conduct two research projects analyzing the efficacy of the USGS VHP’s communication response during the 2018 eruption of Hawaii’s Kīlauea volcano.
- Provided USGS with insights on effective in-person and social media hazard crisis communication strategies.
- Results are published or in-press as two peer-reviewed journal articles.

Fulbright Graduate Student Fellow

February – December 2016

University of Canterbury (UC), Christchurch, New Zealand

- Conducted field observations, lab analyses, and computer simulations of ancient eruptions from New Zealand’s Akaroa Volcano, an extinct volcano similar to active volcanoes in Hawaii.
- Demonstrated new method for mapping and identifying locations where downslope, or flank, eruptions are most likely to occur on active volcanoes with similar size, shape and rock composition to Akaroa.
- Developed into first full chapter of Ph.D. dissertation and published as a peer-reviewed journal article.

PEER-REVIEWD PUBLICATIONS

PUBLISHED

Goldman, R.T., Albright, J.A., Gravley, D.M., Grosfils, E.B., Gregg, P.M., & Hampton, S.J. (2022). Stress control of dike deflection and flank eruption at Akaroa Volcano, New Zealand. *Journal of Geophysical Research: Solid Earth*, 127, e2022JB024305. <https://doi.org/10.1029/2022JB024305>

Goldman, R.T., Stovall, W.K., Damby, D.E., & McBride, S.K. (2023). Hawai’i residents’ perceptions of Kīlauea’s 2018 eruption information. *Volcanica*, 6, 19-43. <https://doi.org/10.30909/vol.06.01.1943>

IN REVISION

Goldman, R.T., McBride, S.K., Stovall, W.K., & Damby, D.E. USGS and Facebook user dialogue and sentiment during Kīlauea 2018 eruption. *Frontiers in Communication*.

SCIENCE POLICY OUTREACH AND LEADERSHIP

North-Central Representative, Geology & Public Policy Committee **January 2019 – June 2023**
Geological Society of America (GSA)

Participant, AGU Virtual Advocacy Days **June – July 2020**
American Geophysical Union (AGU)

AGU Voices for Science “Policy Track” 2018 Cohort **March 2018 – March 2019**
American Geophysical Union (AGU) & University of Illinois at Urbana-Champaign (UIUC)

Chair and Volunteer, Advocacy Committee – Science Policy Group **May 2017 – April 2019**
American Geophysical Union (AGU) & University of Illinois at Urbana-Champaign (UIUC)

AAAS CASE Workshop Participant **March 2018**
University of Illinois at Urbana-Champaign (UIUC)

2017 Geoscience Congressional Visits Days Participant **September 2017**
Geological Society of America (GSA)

ADDITIONAL LEADERSHIP AND SERVICE

President, U.S. West Coast Chapter **November 2020 – Present**
Fulbright Prism

- Founding member of the first U.S.-based regional chapter of the Fulbright Prism, a non-profit organization led by LGBTQ+ grantees and alumni of the U.S. Department of State’s Fulbright international exchange program.

Panelist, 2021 Public Affairs Conference **September 2021**
Missouri State University (MSU)

- Participated in three panels for MSU’s 2021 Public Affairs Conference (PAC):
 - “Science: Unite not alienate”
 - “Teacher education: Engaging future educators in difficult conversations”
 - “Impact of implicit biases when building connections”

Participant and Discussion Leader, DEI Reading Group **September – November 2020**
Department of Geology, University of Illinois at Urbana-Champaign (UIUC)

- Led discussions on incorporating Indigenous perspectives into geoscience research and promoting LGBTQ+ inclusivity in geoscience research and instruction.

Chair, Volunteer, and Emcee; SESE Research Review Committee **Nov. 2017 – February 2019**
University of Illinois at Urbana-Champaign (UIUC)

- Chair of 2019 School of Earth, Society, and Environment (SESE) Research Review.
- Recruited and led committee of 10 other student volunteers for 2019 Research Review.
- Managed logistics for 2019 event venue and catering, poster and photo contests, event photography, lightning talks, and awards ceremony. Was instrumental in soliciting poster submissions and RSVPs.
- As 2018 Research Review volunteer and emcee, solicited nominations for 5-minute lightning talks.
- Organized 2018 Research Review lightning talk schedule, welcome and closing addresses, and awards presentations in coordination with School Head and Department Chairs. Also met with School IT Coordinator to ensure that audio-visual media ran smoothly.

TECHNICAL AND MANAGERIAL SKILLS

- Efficiently reading and interpreting technical scientific publications
- Writing policy-oriented position statements
- Organizing and participating in meetings with congressional staff
- Project administration for university, government and non-profit organizations
- Building coalitions among staff and departments within an organization
- Establishing partnerships within and across organizations
- Writing persuasive grant proposals
- Carefully managing and efficiently spending grant awards
- Conducting and analyzing interview conversations with hazard-impacted community members
- Python and Matlab (mathematical programming languages)
- COMSOL Multiphysics (physics simulation software package)
- NVivo (qualitative thematic analysis software package)
- ArcGIS (geographic information system software package)
- Adobe Illustrator (computer graphic design)

SELECTED HONORS AND AWARDS

Awarded 38th GSA-USGS Congressional Science Fellowship **March 2023**

Geological Society of America (GSA) & United States Geological Survey (USGS)

Special Recognition in Graduate Student Leadership **October 2022**

Graduate College, University of Illinois at Urbana-Champaign (UIUC)

- One of four graduate students receiving honorable mentions for exceptional leadership service.

2021 Outstanding Student Presentation Award **February 2022**

American Geophysical Union (AGU)

- Received formal recognition from the American Geophysical Union for giving one of the top-rated oral presentations during the 2021 Fall Meeting.

Harriet Wallace Geology Graduate Student Service Award **April 2018**

University of Illinois at Urbana-Champaign (UIUC)

- Conferred to a graduate student in recognition of their contributions to the geology department through participation in Research Review, Engineering Open House, and outreach to the community.

National Science Foundation Graduate Research Fellowship **August 2017 – 2022**

National Science Foundation (NSF)

- Awarded for demonstrated potential to strengthen vitality of U.S. science and engineering enterprise.
- Five-year fellowship with three full years of funding, and \$5000 Graduate Research Internship stipend.

Graduate College Fellowship **August 2017 – 2023**

Graduate College, University of Illinois at Urbana-Champaign (UIUC)

- Awarded to exceptional applicants to the University of Illinois Graduate College.
- Funding applied to three non-consecutive years of PhD.

Evergreen Endowed Fellowship **January – July 2017**

Department of Geology, University of Illinois at Urbana-Champaign (UIUC)

- Awarded to meritorious geology graduate students with an interest in developing an interdisciplinary background, combining their area of expertise with other areas in geoscience or other disciplines, and applying geoscience knowledge to address problems facing society.