

DR. PAUL M. BETKA

Assistant Professor
Geology Department, Western Washington University
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ACADEMIC APPOINTMENTS

Assistant Professor, Aug. 2019–present Geology Department, Western Washington University.
Assistant Professor, Aug. 2019–Aug. 2023 Department of Atmospheric, Oceanic, and Earth Sciences, George Mason University.
Associate Research Scientist, Feb. 2018–present (Adjunct Aug. 2019-present) Lamont-Doherty Earth Observatory, Columbia University
Postdoctoral Research Scientist, 2015–2018 Lamont-Doherty Earth Observatory, Columbia University

EDUCATION

Ph.D. Geological Sciences, 2013 Jackson School of Geosciences, The University of Texas at Austin
Advisor: Sharon Mosher. Co-advisor: Keith Klepeis
M.S. Geology, 2008 University of Vermont. Advisor: Keith Klepeis
B.S. Geology, 2006 Virginia Polytechnic Institute and State University.

PROFESSIONAL EXPERIENCE

Geologist III, Alaska Division of Geological and Geophysical Surveys, 2013–2015
Field-based structural geology research and mapping in the Cook Inlet forearc basin.
Structural Geology Intern, Chevron, Summer 2012
Modeling of basement structures in a rifted margin setting from 2D seismic data.
Received full-time offer.

FUNDED PROJECTS

NSF Tectonics (2023-2026). Collaborative Research: Evaluating the role of sliver terrane accretion on the formation of syntaxial corners during indenter tectonics. \$400k PIs: **Betka, P. (WWU)**, Col: K. Lang (GA Tech); K. Hodges (ASU).
USGS EDMAP (2022-2023). Bedrock Geological Mapping of the Orkney Springs (Virginia half) 7.5' Quadrangle; Structural Investigation of the North Mountain Thrust Zone and Associated Alleghenian Deformation in the Central Appalachians. \$70k. PI: P. Betka.
NSF Integrated Earth Systems (2017-2023). Collaborative Research: Subduction below extreme sedimentation – A multidisciplinary transect from the Ganges-Brahmaputra Delta to the IndoBurman Backarc, PIs Steckler, M., Buck, R., Cai, Y., Gaherty, J. Seeber, L. (w/ Thomson, S., U. AZ; Persaud, P., LSU; Sandvol, E., U. MO; Prose, D., LaMacchia, D., Earth Images Foundation). \$3,506,912.
My role: Lead field geology campaign, structural analyses, and integration of surface geology with geophysical results and low-T thermochronology, I helped conceive and write proposal as a postdoc.

STUDENT ADVISEES

- (6) Tomás Urbina (MS 2025). Geol. Dept. WWU.
- (5) Natasha Tagle (EDMAP undergraduate researcher, 2022). AOES Dept. George Mason Univ.
- (4) Alex Gray (undergraduate researcher, 2021; MS 2023). AOES Dept., George Mason Univ.
-recipient of GSA Structural Geology and Tectonics Division Outstanding Student Award, 2022
-recipient of GSA Best Student Geologic Map Competition Award, 2022
- (3) Austin Matthews (MS 2022). AOES Dept., George Mason Univ.
-recipient of GSA Structural Geology and Tectonics Division Outstanding Student Award, 2021
- (2) Kristen Chiama (COS undergraduate researcher, 2020). AOES Dept., George Mason Univ.
- (1) Jacob Rosenthal (PhD committee member, 2024). Syracuse Univ. Dept. Earth Environmental Sciences. (MS co-advisor, 2016). Geology Dept., Univ. Alaska Fairbanks; Graduate student intern, Alaska Division of Geological and Geophysical Surveys.

INVITED TALKS

- Monsoon Seminar Series, international, virtual, Sept. 2022
- Geological Society of Washington, Washington DC, Sept. 2021
- Geological Society of Mizoram, Aizawl, Mizoram, India, Nov. 2018, 2020
- Univ. of Mizoram Department of Geology, Aizawl, Mizoram, India, Nov. 2018, 2020
- Univ. Calif. Santa Cruz Institute of Geophysics and Planetary Physics Seminar series, May 2018.
- Keynote speaker, Myanmar Applied Earth Sciences Association, Yangon, Myanmar. Nov. 2017.
- Lamont-Doherty Earth Observatory Structural Geology and Tectonics seminar. Sept. 2017.
- Queens College School of Earth and Environmental Sciences Colloquium, April 2016

FIELDWORK AND GEOLOGIC MAPPING EXPERIENCE

- Eastern Alaska Range, Alaska, 2 weeks ongoing
- Cordillera Real, north-central Ecuador, 1 month ongoing
- Indo-Burma Ranges, NE India and Myanmar, 10 months, 2015–ongoing
- Sandia Mountains, New Mexico, 2 weeks, 2018
- Main Central Thrust, Nepal, 2 weeks, 2017
- Lost River Range, Idaho, 1 week, 2017
- Iniskin Peninsula, Cook Inlet, Alaska (3 months) 2013–2015
- Cordillera Darwin, Chile (8 months) 2007–2012
- Fiordland, New Zealand (3 weeks) 2007
- University of New Mexico Advanced Field Camp (3 weeks) 2006
- Sauratown Mountains, NC, (2 weeks) 2005–2006
- Norumbega Fault Zone, Maine (2 months) 2005

OUTREACH AND ACADEMIC SERVICE

Guest Speaker for District of Columbia Public Schools – *Measuring Plate Tectonics: How Earth Scientists use Earthquakes and GPS to Monitor Plate Motion and the Interior of our Planet.*
Washington DC, 2021, 2023

AGU Session Convener – *Coupled Tectonic and Deltaic Systems in the Eastern Himalaya and Bengal Basin.* AGU Annual meeting, Washington DC, 2018, 2019.

Instructor, GeoHazards International – Geologic mapping and structural techniques field-course for geologists, educators, and engineers in Aizawl, India, Oct. 2016 (2 weeks).

Instructor, GeoFORCE – Field trip across the Appalachians. Univ. of Texas at Austin outreach program for high school students. July 2016 & 2017 (2 weeks).

TEACHING

Course Title	Position, University	Term
GEOL 101 Intro. to Geology	Asst. Professor, WWU	F. W. 2023
GEOL 318 Structural Geology		F. 2023, Sp. 2024
GEOL 456/556 Principles of Orography		Sp. 2024
GEOL 601 The Lithosphere	Asst. Professor, George Mason U.	F. 2020, 2022.
GEOL 500 Adv. Structural Geol.		F. 2021
GEOL 340 Modern Methods in Geol.		F. 2020–2021
GEOL 401 Structural Geol. and Lab		Sp. 2020–2022
GEOL 404 Virtual Geol. Field Camp		Sm. 2020–2021
GEOL 302 Mineralogy Lab		F. 2022
GEO 660 Field Camp	Asst. Instructor, U. Texas at Austin	Sm. 2011–2012
Earth Materials; Structural Geol.; Field Camp; Physical Geol.; Intro. to Field and Stratigraphic Methods	GTA, U. Texas at Austin	2008–2012
Earth Systems Science; Structural Geol.	GTA, Univ. of Vermont	2006–2007
Physical & Resources Geol.	Student Athlete Tutor, Virginia Tech	2005–2006