

Eyal Marder

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Appointments:

- 2022 Postdoctoral Fellow - Earth Sciences, Indiana University, Bloomington, IN, USA

Education:

- 2018 Ph.D. - Geosciences, Colorado State University, Fort Collins, CO, USA
- 2016 M.Sc. - Marine Geosciences, University of Haifa, Haifa, Israel
- 2010 B.Sc. - Geology, The Hebrew University of Jerusalem, Jerusalem, Israel

Graduate Advisors:

- Gallen, S.F., Dept. of Geosciences, Colorado State University
- Bookman, R., Dept. of Marine Geosciences, University of Haifa
- Filin, S., Dept. of Civil and Environmental Engineering, Technion - Israel Institute of Technology

Honors/Awards:

- CSU Evelyn I. Clark Scholarship (2021)
- GSA AGeS2 Award (2020)
- GSA On the Future Award (2019)
- GSA John T. and Carol G. McGill Research Award (2019)
- CSU Lary Kent Burns Memorial Scholarship (2019)
- CSU Joby Adams Geosciences Graduate Scholarship (2019)
- The Ministry of Energy, Infrastructure, and Water Resources Fellowship (2015-2017)
- Marine Geosciences Research Grant for Masters Students (2014-2016)
- Strauss Scholarship for Excellency for Master Students (2015)
- Best poster, The 15th Israel Geomorphology Research Group Conference (2015)
- PERACH program (2008)

Positions Held:

- Graduate Teaching Assistant- Colorado State University (2018-present)
- Graduate Research Assistant- University of Haifa (2014-2016)
- Graduate Research Assistant- The Hebrew University of Jerusalem (2010-2012)
- Undergraduate Research Assistant- Geological Survey of Israel (2009-2010)

Teaching:

- GEOL 436 - Geology Summer Field Course (CSU)
- GEOL 376 - Geologic Field Methods (CSU)
- GEOL 332 - Optical Mineralogy (CSU)
- GEOL 121 - Introductory Geology Laboratory (CSU)

Professional Affiliations:

- American Geophysical Union (2021-present)
- Geological Society of America (2019-present)
- American Association of Petroleum Geologists (2019-2020)
- Israel Geological Society (2014-2018)
- Israel Geomorphology Research Group (2014-2018)
- Israel Geographical Association (2015-2018)

Selected Papers & Presentations:

- **Marder, E.** and Gallen, S. F., The role of Climate on Topographic Form as seen from Global Erosion Rates and Channel Steepness Data (in revision for Geology).
- **Marder, E.**, Gallen, S. F., and Pazzaglia, F. L., Late Cenozoic Deformation in the Southern Colorado Front Range Revealed by River Profile Analysis and Fluvial Terraces (in revision for GSA Bulletin).
- **Marder, E.** & Gallen, S. F., 2021. Searching for a Climate Signal in Fluvial Topography Using a Global Analysis of Long-Term Erosion Rates and Channel Steepness Data. AGU Fall Meeting, USA, 2021.
- **Marder, E.** & Gallen, S. F., 2020. New Evidence for Westward Tilting in the Southern Colorado Front Range. GSA Connects Annual Meeting, USA, 2020.
- **Marder, E.** & Gallen, S. F., 2019. Stream Piracy, Tilting, and Incision in the Upper Arkansas River Basin: Evidence from High Plains Terraces. GSA Annual Meeting, 2019.
- **Marder, E.**, Bookman, R., and Filin, S., 2018. Geomorphological response of the Lower Jordan River basin to active tectonics of the Dead Sea Transform: *Geomorphology*, v. 317, p. 75–90.
- **Marder, E.**, Bookman R., Filin S., 2016. The Geomorphology and Morphotectonics of the Jordan Valley Fault, IGS Annual Assembly.

Professional Experience:

- **2018-2022- PhD graduate research student, Colorado State University:** Research thesis: "Landscape Evolution of the Colorado Front Range during the Late Cenozoic". In this research, I investigate the tectonic geomorphology of the Colorado Front Range since the late Cenozoic using a blend of field mapping, digital topographic analysis, river analysis, geochronology, and numerical modeling.
- **2018- Geological consultant, Ecolog Engineering Ltd:** Geological consultancy, including field mapping and measurements, natural hazards mapping, GIS, report writing, collaborations with engineers, hydrologists, and governmental staff.
- **2014-2016- MSc graduate research student, University of Haifa:** Research thesis: "The Geomorphology and Morphotectonics of the Jordan Valley Fault". In this research, I explored the relationship between landscape changes and tectonic activity using photogrammetry, remote sensing, and GIS tools on aerial photographs, satellite images, and high-resolution imagery.
- **2013 - Geological consultant, Dr. Uzi and Boaz Saltzman Geology and Rock Engineering Ltd:** Drilling and boreholes oversight, geological and environmental analysis (logs, field trips, site map planning, spatial correlation), work collaborations with contractors, engineers and site managers during managing construction sites.
- **2010-2012- MSc research graduate student, The Hebrew University of Jerusalem:** In this research, I explored dry and wet granular media dynamics in earthquakes and fault gauges. The study was conducted at the Hebrew University of Jerusalem with an internship at Texas A&M University, and included numerical modeling, geophysical simulations and statistical analyzes.
- **2008-2010- Laboratory assistant, Geological Survey of Israel (GSI):** Laboratory and field work of Stalactites: drillings, analysis and isotopes' separation (full U-Th analysis).

Field, Laboratory, and Computing

- **Field:** ^{10}Be basin wide erosion rates (sampling), Terrace OSL (Sampling), geological and surficial mapping, drone surveying (total station, handheld GPS, laser range finding, EDM), stratigraphy, structural/bedrock mapping, terrace identification.
- **Lab:** U-Th dating (full process and analysis), ^{10}Be basin wide erosion rates (purification).
- **Computing:** Microsoft Office, ArcGIS, Socet GXP (BAE Systems), Matlab, R, Python, Fortran, Java, Adobe Illustrator and Photoshop.

Courses and Certifications

- 2020 - ESPIn - Earth Surface Processes Modeling Summer Institute, University of Colorado
- 2014 - Student at the Department of Literature and Writing, Minshar College of Art, Tel-Aviv.
- 2012 - French course, Le Centre Culturel Français de Jérusalem Romain Gary, Jerusalem.

Other:

- Proficiency in English and Spanish, and some proficiency in Portuguese and French.
- Actor at the Hai-Po theater, Haifa, Israel.
- Professional hiker, kayaker, and experience in field trips around the world.