CURRICULUM VITAE

Tal Y. Shutkin
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Department of Geography
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EDUCATION

2023-Present	**Ph.D.** (expected 2026), **Geography** The Ohio State University, Columbus, OH *Dissertation Title*: Glacier Change and Social Hydrology of the Cordillera Huaytapallana, Perú *Candidacy Exam*: October 2024 *Committee*: Bryan Mark (advisor), Zhengyu Liu, Kendra McSweeney GPA: 4.0
2020-2022	**M.A., Geography** The Ohio State University, Columbus, OH *M.A. Thesis Title*: Multi-Temporal Glacier-Climate Interactions in Peru's Queshque Valley (~10˚S): Modeling Contemporary Glacier Change and Interpreting Geomorphic Evidence of Holocene Climate History GPA: 4.0
2015-2019	**B.S., Environment and Natural Resources** The Ohio State University, Columbus, OH GPA: 3.94

AWARDS AND ACHIEVEMENTS/ SCHOLARSHIPS/ GRANTS

External

2024	**Fulbright-Hays Doctoral Dissertation Research Abroad Fellowship**, U.S. Department of Education.
2023	**Thriving Earth Exchange Community Science Fellowship**, American Geophysical Union. Serving as liaison for community near Trussville, AL working with scientists to develop a project addressing their environmental justice concerns.
2022	**NSF Graduate Student Geoscience Grant**, Geological Society of America. Grant covering expenses for laboratory analysis of lake sediment cores.
2021	**Graduate Student Scholarship**, Water Managers Association of Ohio. Grant covering field expenses for water sample collection.
2019	**Undergraduate Research Paper Competition Winner**, Political Ecology Working Group, University of Kentucky, KY
2017	**Udall Scholarship**, The Udall Foundation. Competitive national scholarship awarded to select undergraduate students from each state showing promise in the environmental and/or tribal governance fields.

The Ohio State University

2024 **ENGIE-Axium Curricular Practical Training Scholarship**, Graduate School. Nominated by Department of Geography to cover summer semester enrollment.

2020 **University Fellowship**, Graduate School. Prestigious award covering tuition and stipend for one year of graduate studies.

2019 **Honors Scholarship**, School of Environment and Natural Resources. For fieldwork in British Columbia for undergraduate thesis.

2019 **Undergraduate Research Scholarship**, College of Arts and Sciences. For fieldwork in British Columbia for undergraduate thesis.

2018 **International Research Grant**, College of Arts and Sciences. For fieldwork in British Columbia for undergraduate thesis.

2018 **Academic Enrichment Grant**, Office of International Affairs. For fieldwork in British Columbia for undergraduate thesis.

2017 **Katherine Weisner Scholarship**, School of Environment and Natural Resources. Four-year partial scholarship for undergraduates.

PUBLICATIONS

2024 Mark, B. G., Stansell, N. D., **Shutkin, T. Y.**, & Schoessow, F. (2024). Glaciation and the Environments of the Cordillera Blanca. In V. Vilímek, B. Mark, & A. Emmer (Eds.), *Geoenvironmental Changes in the Cordillera Blanca, Peru* (pp. 95–115). Springer International Publishing. https://doi.org/10.1007/978-3-031-58245-5_6

2023 Stansell, N. D., Abbott, M. B., Diaz, M. B., Licciardi, J. M., Mark, B. G., Polissar, P. J., Rodbell, D. T., & **Shutkin, T. Y.** (2023). Pre-industrial Holocene glacier variability in the tropical Andes as context for anthropogenically driven ice retreat. Global and Planetary Change, 229. https://doi.org/10.1016/j.gloplacha.2023.104242

2022 Stansell, N. D., Mark, B. G., Licciardi, J. M., Rodbell, D. T., Fairman, J. G., Schoessow, F. S., **Shutkin, T. Y.**, & Sorensen, M. (2022). Energy mass balance and flow modeling of early Holocene glaciers in the Queshque valley, Cordillera Blanca, Peru. Quaternary Science Reviews, 281. https://doi.org/10.1016/j.quascirev.2022.107414

2022 Price, B. N., Stansell, N. D., Fernández, A., Licciardi, J. M., Lesnek, A. J., Muñoz, A., Sorensen, M. K., Jaque Castillo, E., **Shutkin, T. Y.**, Ciocca, I., & Galilea, I. (2022). Chlorine-36 Surface Exposure Dating of Late Holocene Moraines and Glacial Mass Balance Modeling, Monte Sierra Nevada, South-Central Chilean Andes (38°S). Frontiers in Earth Science, 10. https://www.frontiersin.org/articles/10.3389/feart.2022.848652

PRESENTATIONS

Papers Presented

2023 (Dec.) "Temperature-Driven Retreat of a Tropical Glacier Exacerbated by Proglacial Lake Feedbacks," 2023 American Geophysical Union Annual Meeting, San Francisco, CA

2023 (Jun.) "Un Intercambio de Conocimiento Glaciologico entre ANA y OSU," guest lecture delivered at Universidad Nacional Santiago Antúnez de Mayolo Department of Geography, Huaraz, Perú

2022 (Sep.) "Calibrating and Applying Open-Sourced Model Tools for Testing Tropical Glacier Paleoglacier Model Forcing," International Mountain Conference, University of Innsbruck, Austria

Posters Presented

2024 (Dec.) "Synthesizing the Last Glacial to Holocene Tropical Glacier History of Central Peru's Chinchaycocha Basin using a Distributed Ice Flow Model," 2024 American Geophysical Union Annual Meeting, Washington, D.C.

2023 (Dec.) "Modeling Tropical Andean Paleoglacier Advances during the Local Last Glacial Maximum of Central Perú," 2023 American Geophysical Union Annual Meeting, San Francisco, CA

2023 (Mar.) "Cascading Climate Impacts on Montana's Beartooth Plateau," American Association of Geographers Annual Meeting, Denver, CO

FIELD RESEARCH EXPERIENCE

2024 (Jun.) **Junín, Perú**. Preliminary research including water sampling and reconnaissance in the Cordillera Huaytapallana and Huancayo area. (14 days).

2023 (Oct.) **Concepción, Chile**. Cold-Blooded: Drivers of Climate Change Refugia for Glaciers and Streamflow Responses. With advisor B. Mark and colleagues from Universidad de Concepción. Glaciological monitoring and participating in professional exchanges between Chilean journalists and scientists **in Spanish**. *Funded by the Chilean Agencia Nacional de Investigación y Desarrollo* (10 days).

2023 (Jun.) **Junín, Perú**. Climate Forcings of the Local Last Glacial Maximum in the Junín Region of Perú. With advisor B. Mark and others. Sampling moraines and other glacial deposits for exposure dating using state-of-the-art methods. *Funded by the National Science Foundation* (10 days).

2023 (Jun.) **Ancash, Perú**. Glacio-hydrological Change in Perú's Cordillera Blanca. **Synoptic water chemistry survey**, glacier mapping and surveying using ground-penetrating radar. *Funded by the National Science Foundation.* (11 days). with the **Peruvian National Water Authority (ANA) conducted entirely in Spanish**) (3 days).

2022 (Jul.) **Tartu, Estonia**. International Research Experience for Undergraduates US-Estonia Climate Research Partnership. Graduate assistant for lake and peat sediment coring with N. Stansell (21 days).

2022 (Jun.) **Junín, Perú**. Climate Forcings of the Local Last Glacial Maximum in the Junín Region of Perú. With advisor B. Mark and others (10 days).

2021 (Sep.) **Montana, USA**. Mixed Methods Assessment of Hydroclimatic Changes in Alpine Glacier and Lake Systems of the Beartooth Plateau. STEM+ART survey of high alpine glacier-environmental changes organized in collaboration with graduate students across multiple universities and community organizations. *Funded by Wild Montana* (6 days).

2021 (Aug.)	**Nevada, USA**. Great Basin Experience. With advisor B. Mark. Investigating water chemistry, microclimate, and rock glacier changes. *Funded by the National Parks Foundation* (7 days).
2019 (Aug.)	**Alaska, USA**. Enhancing Tribal Resilience through Community-based Monitoring and Planning. With Yukon River Inter-Tribal Watershed Council (YRITWC). Erosion, drinking water quality, and permafrost monitoring. *Funded by the Bureau of Indian Affairs.*
2019-20 (Continuous)	**Alaska, USA**. Indigenous Observation Network. Water quality monitoring on behalf of (YRITWC). Water sample collection and logistics management. *Funded by the National Science Foundation.*
2018 (Jul.-Aug)	**British Columbia, Canada**. Indigenous Politics of Collaborative Conservation at the Muskwa-Kechika Management Area. Interviewing community conservation stakeholders for undergraduate honors thesis. *Funded by The Ohio State University* (35 days).

PROFESSIONAL EXPERIENCE

Academic

2023 - present	**Graduate Teaching Associate**, Department of Geography, The Ohio State University (Courses Taught: GEOG 5900, GEOG 2800)
2022	**Graduate Research Assistant** for International Research Experience for Undergraduates US-Estonia Climate Research Partnership, Northern Illinois University, IL
2020-2022	**Graduate Research Associate**, Department of Geography, The Ohio State University. Funded by NSF Award EAR-2002541: Transient forcing of the Local Last Glacial Maximum in the tropical Peruvian Andes.

Non-Academic

2023-present	**Thriving Earth Exchange Community Science Fellow**, American Geophysical Union. Serving as liaison for community near Trussville, AL working with scientists to develop a project addressing their environmental justice concerns
2019-2020	**Environmental Coordinator**, Yukon River Inter-Tribal Watershed Council. Environmental monitoring, solid waste management, and tribal sustainability programming in central Alaska

PROFESSIONAL AFFLIATIONS

2023 – present	American Geographical Society (AGS)
2022 – present	American Association of Geographers (AAG)
2021 – present	American Geophysical Union (AGU)
2022 – present	Geological Society of America (GSA)
2021 – present	Water Management Association of Ohio (WMAO)