

Dr. Erik N. Johanson

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Appointments

Assistant Professor, Department of Geosciences, Florida Atlantic University, 2017–present
Adjunct Professor, Department of Geography & Sustainability, 2023–present
Lecturer, Department of Geography, University of Tennessee, 2016–2017
Research Specialist/Archaeologist, Archaeological Research Laboratory, University of Tennessee, 2009–2011

Education

PhD Geography, University of Tennessee, Knoxville, 2013–2016
Dissertation: *Reconstructing Late Holocene Fire, Agriculture, and Climate from Sediment Records in Costa Rica and the Dominican Republic*
MA Anthropology, University of Tennessee, Knoxville, 2011
Thesis: *Predictive Modeling in Western Louisiana: Prehistoric and Historic Settlement Patterning in the Kisatchie National Forest*
BA Anthropology, University of Tennessee, Knoxville, 2008

Publications (* indicates advisee)

Refereed Journal Articles

In Print

- 2023 Andrés Garzón-Oechsle*, **Erik N. Johanson**, and Valentina Martinez. The Bola de Oro Manteños and Their Resilience to Climate Change: chronological reconstruction of agricultural modifications through age-depth modelling and carbon abundance analysis. *STRATA*, Vol. 1 (2), 1–31. Instituto Nacional de Patrimonio Cultural - Ecuador. DOI <https://doi.org/10.5281/zenodo.10246526>.
- 2023 Madeleine Bitting*, **Erik N. Johanson**, Kurt Haberyan, and Sally P. Horn. Response of Diatom Communities to Climate and Human Disturbance: A 4200-year record from Costa Rica. *The Holocene*, 33(12), 1–13, DOI <https://doi.org/10.1177/09596836231197775>.
- 2023 Sally P. Horn, **Erik N. Johanson**, Mauricio Murillo-Herrera, Kurt A. Haberyan, Taber Friedel* and Chad S. Lane. Initial Limnological Observations at Laguna Pozo Verde, Juan Castro Blanco National Park, Costa Rica. *UNED Research Journal*, Vol. 15(2), 1–6, DOI <https://doi.org/10.22458/urj.v15i2.4835>.
- 2022 Yanuskiewicz, Elizabeth, Chad S. Lane, Sally P. Horn, **Erik N. Johanson**, Douglas W. Gamble. Compound-Specific Stable Carbon and Hydrogen Isotope Analyses of Late-Holocene Vegetation and

Precipitation Change at Laguna Los Mangos, Costa Rica. *Quaternary International*, 1–11, DOI <https://doi.org/10.1016/j.quaint.2021.08.018>.

- 2020 **Johanson, Erik N.**, Sally P. Horn, Chad S. Lane, Maureen Sánchez, Jacob Cecil. Fire History Across the Little Ice Age in Southern Pacific Costa Rica. *Journal of Paleolimnology*, 1–23, DOI 10.1007/s10933-020-00118-0.
- 2019 **Johanson, Erik N.**, Sally P. Horn, Chad S. Lane. Pre-Columbian agriculture, fire, and Spanish contact: A 4200-year record from Laguna Los Mangos, Costa Rica. *The Holocene*, 1–15, DOI:10.1177/0959683619862032.
- 2018 Horn, Sally P., **Erik N. Johanson**, Kurt A. Haberyan, Matthew S. Boehm, Jessie L. Johanson, Maureen Sánchez P., and Mario Hernández V. Initial limnological observations at five small lakes in southern Pacific Costa Rica. *UNED Research Journal*, Vol. 10(1): 119-134.
- 2010 Anderson, David G., D. Shane Miller, Stephen J. Yerka, J. Christopher Gillam, **Erik N. Johanson**, Derek T. Anderson, Albert C. Goodyear, and Ashley M. Smallwood. PIDBA (Paleoindian Database of the Americas) 2010: Current Status and Findings. *Archaeology of Eastern North America*, 38:63–90.

In Press

In Review

- Pend. Kathryn Swick*, **Erik N. Johanson**, and Xavier Comas. A Multiproxy Analysis of Modern Environmental Change within a Cypress Swamp Forest, Collier County, FL. In Review with *Discover Environment*, submitted on August 3, 2023.
- Pend. Andrés E. Garzón-Oechsle*, **Erik N. Johanson**, Sudhagar Nagarajan and Valentina Martínez. In-Between the Sites: Understanding Late Holocene Manteño Agricultural Contexts in the Chongón-Colonche Mountains of Coastal Ecuador through Remote Sensing and Excavation. In Review with *Journal of Field Archaeology*, 49(2), submitted on July 3, 2023.
- Pend. Taber Friedel*, **Erik N. Johanson**, and Sally P. Horn. Post-Conquest Vegetation and Fire Dynamics at Laguna Carse, Costa Rica: A Pollen and Microscopic Charcoal Record. In Review with *Vegetation History and Archaeobotany*, submitted on June 1, 2023.

Books and Book Chapters

- 2012 **Johanson, Erik N.** *Predictive Modeling in Western Louisiana: Prehistoric and Historic Settlement within the Kisatchie National Forest*. Special Publication Number 1. Kisatchie National Forest, Louisiana.
- 2012 Driskell, Boyce, Jeremy Sweat, Katherine McMillan, Stephen Carmody, Phyllis Rigney, and **Erik N. Johanson**. Stone Implements from Cherokee Contexts at the Townsend Sites. In *The Cherokees of Tuckaleeche Cove*, edited by Jon Bernard Marcoux, pg. 137–156. Museum of Anthropology, University of Michigan memoirs; number 52.

Reports

- 2015 Horn, Sally P., Maria Caffrey, **Erik N. Johanson**. Storm Surge Modeling and Ecosystem Services at Cape Lookout National Seashore Final Technical Report. Report submitted to USGS and NPS in Denver, Colorado. PR # 0020049716. University of Tennessee, Knoxville.
- 2015 Kerr, Matthew T., Sally P. Horn, Chad S. Lane, **Erik N. Johanson**. Report on Stable Carbon and Nitrogen Isotope Analysis of Five Pottery Surface Residue Samples from Site C362MNG, Costa Rica. Universidad de Costa Rica, Facultad de Ciencias Sociales, Escuela de Antropología, Laboratorio de Arqueología.
- 2015 Kerr, Matthew T., Sally P. Horn, Chad S. Lane, **Erik N. Johanson**. Report on Stable Carbon and Nitrogen Isotope Analysis of 6 Pottery Surface Residue Samples and 1 Soil Sample from Site L72NC, Costa Rica. University of Tennessee, Knoxville.
- 2015 Kerr, Matthew T., Sally P. Horn, Chad S. Lane, **Erik N. Johanson**. Report on Stable Carbon and Nitrogen Isotope Analysis of 3 Pottery Surface Residue Samples from Site C304AC, Costa Rica. University of Tennessee, Knoxville.
- 2012 **Johanson, Erik N.** *Predictive Modeling in Western Louisiana: Prehistoric and Historic Settlement within the Kisatchie National Forest*. Report Number R2010080600007. Kisatchie National Forest, Louisiana.
- 2011 Driskell, Boyce, Katherine M. Barry, Jeremy Sweat, Edward W. Wells III, Stephen B. Carmody, Phyllis Rigney, and **Erik N. Johanson**. Chapter 7: Stone Implements and Artifacts. In *Archaic and Woodland Occupations in Tuckaleechee Cove, Blount County, Tennessee* by Kandace D. Hollenbach and Stephen J. Yerka. Report submitted to the Federal Highway Administration and the Tennessee Department of Transportation Nashville, Tennessee. Archaeological Research Laboratory, University of Tennessee, Knoxville.
- 2011 Shannon D. Koerner, Lynne P. Sullivan, and **Erik N. Johanson**. Chapter 3: Introduction to the Mississippian Remains from Tuckaleechee Cove. In *The Mississippian Period Occupation of Tuckaleechee Cove, Blount County, Tennessee* by Shannon D. Koerner and Lynne P. Sullivan. Report submitted to the Federal Highway Administration and the Tennessee Department of Transportation Nashville, Tennessee. Archaeological Research Laboratory, University of Tennessee, Knoxville.
- 2011 Driskell, Boyce, Jeremy Sweat, Katherine McMillan Barry, Stephen Carmody, Phyllis Rigney, and **Erik N. Johanson**. Chapter 5: Stone Implements and Other Artifacts. In *The Mississippian Period Occupation of Tuckaleechee Cove, Blount County, Tennessee* by Shannon D. Koerner and Lynne P. Sullivan. Report submitted to the Federal Highway Administration and the Tennessee Department of Transportation Nashville, Tennessee. Archaeological Research Laboratory, University of Tennessee, Knoxville.
- 2010 Driskell, Boyce, Jeremy Sweat, Katherine McMillan, Stephen Carmody, Phyllis Rigney, and **Erik N. Johanson**. Chapter 8: Stone Implements from Cherokee Contexts at the Townsend Sites. In *The Cherokees of Tuckaleechee Cove* by Jon Marcoux. Report submitted to the Federal Highway Administration and the Tennessee Department of Transportation Nashville, Tennessee. Archaeological Research Laboratory, University of Tennessee, Knoxville.

Textbooks

- 2020 Ricardo Nogueira, **Erik Johanson**, Frederick Chambers. *Weather, Climate, and Beyond: An introduction to physical geography*, Third Edition. Top Hat. ISBN: 978-1-77412-215-0.

Presentations and Proceedings (* indicates advisee)

a. *International Conferences*

- 2022 Friedel, Taber*, **Erik N. Johanson**, Sally P. Horn. Vegetation and Fire Histories at Laguna Carse, Costa Rica. Poster presented at the annual meeting of the American Association of Geographers in NYC (virtual).
- 2022 Amanda Tomlinson, Chad S. Lane, Sally P. Horn, **Erik N. Johanson**, Mauricio Murillo Herrera Morgan Steckler. Analysis of compound-specific hydrogen isotopes from lacustrine sediments to establish Holocene paleoprecipitation dynamics at Laguna Arancibia, Costa Rica. Poster presented at the annual meeting of the American Association of Geographers in NYC (virtual).
- 2021 Horn, Sally P., **Erik N. Johanson**, Mauricio Murillo Herrera, Chad S. Lane, Taber Friedel*, Morgan Steckler, Mathew S Boehm, Qiusheng Wu. A Multiproxy Record of Late Holocene Environmental Change in Arancibia, Costa Rica. Invited paper presented at the annual meeting of the American Association of Geographers in Seattle, WA (virtual).
- 2021 Friedel, Taber*, **Erik N. Johanson**, Sally P. Horn. Reconstructed vegetation of the past 400 years at Laguna Carse, Costa Rica. Poster presented at the annual meeting of the American Association of Geographers in Seattle, WA.
- 2019 **Johanson, Erik N.**, Mathew T. Kerr, Sally P. Horn, Luke R. Blentlinger, Chad S. Lane. A 4,200-year record of fire history from the southern Pacific Costa Rica lowlands. Paper presented at the annual meeting of the American Association of Geographers in Washington DC.
- 2019 Yanuskiewicz, Elizabeth, Chad S. Lane, **Erik N. Johanson**, Mathew T. Kerr, and Sally P. Horn. Compound-Specific Stable Carbon Isotope Analysis of Vegetation and Land-Use Change from Laguna Los Mangos, Costa Rica. Paper presented at the annual meeting of the American Association of Geographers in Washington DC.
- 2018 **Johanson, Erik N.**, Sally P. Horn, Chad S. Lane, and Jacob A. Cecil*. Fire History Across the Little Ice Age in Southern Pacific Costa Rica. Poster presented at the annual meeting of the American Association of Geographers in New Orleans, LA.
- 2017 **Johanson, Erik N.**, Sally P. Horn, and Chad S. Lane. Pre-Columbian Agriculture, Fire, and Spanish Contact: A 4300-year record from Laguna Los Mangos, Costa Rica. Invited paper presented at the annual meeting of the American Association of Geographers in Boston, MA.
- 2017 Horn, Sally P., Mathew S. Boehm, **Erik N. Johanson**, Elizabeth MacLennan, and Chad S. Lane. A New Sediment Record from the Blue Ridge Mountains of North Carolina. Invited paper presented at the annual meeting of the American Association of Geographers in Boston, MA.
- 2017 Horn, Sally P., Chad S. Lane, **Erik N. Johanson**, Maureen Sánchez P., Zachary P. Taylor and Matthew T. Kerr. Isótopos de Carbono Estables en los Sedimentos Lacustres en Costa Rica como Indicador de la Deforestación y el Cultivo [Stable Carbon Isotope Ratios in Costa Rican Lake Sediments as a Proxy for Forest Clearance and Crop Cultivation]. XI Congreso de la Red Centroamericana de Antropología [XI Congress of the Central American Anthropology Network], 27 February–3 March 2017, San José, Costa Rica.
- 2016 Horn, Sally P., Maureen Sánchez, Chad S. Lane, Zack Taylor, Matthew Kerr, **Erik N. Johanson**, and Jacob Cecil. Late Holocene Fires in Costa Rica: Patterns and Drivers. Invited paper presented at the annual meeting of the American Association of Geographers, San Francisco.

- 2015 **Johanson, Erik N.**, Sally P. Horn, and Chad S. Lane. Late Holocene Paleoenvironments and Human-Environment Interactions from Southern Pacific Costa Rica: Two New Records. Invited poster presented at the annual meeting of the American Association of Geographers, Chicago, Illinois.
- 2014 **Johanson, Erik N.**, Mathew S. Boehm, and Sally P. Horn. Stable Carbon and Nitrogen Isotope Analysis as an Indicator of Late-Holocene Aridity in the Valle de Bao, Cordillera Central, Dominican Republic. Invited paper presented at the annual meeting of the Association of American Geographers in Tampa, FL.
- 2010 **Johanson, Erik N.**, David G. Anderson, D. Shane Miller, Stephen J. Yerka, Derek T. Anderson, J. Christopher Gillam, and Ashley Smallwood. PIDBA: Challenges Related to the Curation and Dissemination of Paleoindian Data at a Hemispheric Scale. Paper presented at the annual meeting of the Society for American Archaeology in St. Louis, MO (Invited Session).
- 2010 Miller, D. Shane, Joseph A.M. Gingerich, and **Erik N. Johanson**. Ambiguous Chronologies and Biface Morphology: Examining Spatial and Temporal Trends in Eastern Fluted Points. Paper presented at the annual meeting of the Society for American Archaeology in St. Louis, MO.
- 2009 Anderson, David G., D. Shane Miller, Derek T. Anderson, Stephen J. Yerka, J. Christopher Gillam, **Erik N. Johanson**, and Ashley Smallwood. Paleoindians in North America: Evidence from PIDBA (Paleoindian Database of the Americas). Poster presented at the annual meeting of the Society for American Archaeology in Atlanta, GA.
- 2008 Anderson, David G., Scott C. Meeks, D. Shane Miller, Derek T. Anderson, Stephen J. Yerka, J. Christopher Gillam, Albert C. Goodyear, **Erik N. Johanson**, and Allen West. The Effect of the Younger Dryas on Paleoindian Occupations in Eastern North America: Evidence from Artifactual, Pollen, and Radiocarbon Records. Poster presented at the American Geophysical Union, San Francisco, CA.

b. Regional/Local Conferences

- 2023 Richardson, Caroline*, **Erik N. Johanson**, and Alyssa Dausman. Anthropogenic Impacts and Restoration Management of the Barataria Estuary. Poster presented at the annual FAU Environmental Science Retreat, April 25, 2023.
- 2023 Friedel, Taber*, **Erik N. Johanson**, and Sally P. Horn. Late Holocene Local and Extra-local Fire Activity at Laguna Arancibia, Costa Rica. Poster presented at the annual meeting of the Florida Society of Geographers, St. Augustine, FL.
- 2023 Swick, Kathryn*, **Erik N. Johanson**, and Xavier Comas. Sediment Core and Remote Sensing Analyses of Modern Environmental Change within a Cypress Swamp Forest, Collier County, FL. Poster presented at the annual meeting of the Florida Society of Geographers, St. Augustine, FL.
- 2022 Friedel, Taber*, **Erik N. Johanson**, and Sally P. Horn. Vegetation and Fire Histories at Laguna Carse, Costa Rica, Costa Rica. Paper presented at the annual meeting of the Florida Society of Geographers.
- 2021 Bitting, Madeleine*, **Erik N. Johanson**, Kurt Haberyan, and Sally P. Horn. A 4200-year diatom record from a small tropical lake. Paper presented at the GeoSym 2021 at the University of Tennessee.
- 2021 Garzon-Oechsle, Andres*, **Erik N. Johanson**, Sudghar Nagarajan, and Valentina Martínez. Mapping the Manteño Landscape: UAV-based LiDAR for the Detection of Ancient Human-Environment Interactions in the Chongón-Colonche Mountains of Ecuador. Paper presented at the GeoSym 2021 at the University of Tennessee.

- 2021 Friedel, Taber*, **Erik N. Johanson**, and Sally P. Horn. Vegetation changes at Laguna Carse, Costa Rica over the past 400 years. Paper presented at the GeoSym 2021 at the University of Tennessee.
- 2021 Garzon-Oechsle, Andres*, **Erik N. Johanson**, Sudghar Nagarajan, and Valentina Martínez. Mapping the Manteño Landscape: UAV-based LiDAR for the Detection of Ancient Human-Environment Interactions in the Chongón-Colonche Mountains of Ecuador. Paper presented at the annual meeting of the Florida Society of Geographers.
- 2021 Friedel, Taber*, **Erik N. Johanson**, and Sally P. Horn. Post-Conquest Vegetation Dynamics at Laguna Carse, Costa Rica. Poster presented at the annual meeting of the Florida Society of Geographers.
- 2021 Bitting, Madeleine*, **Erik N. Johanson**, Kurt Haberyan, and Sally P. Horn. Reconstructing the Late Holocene History of Human Activity and Climate from a Costa Rican Diatom Record. Poster presented at the annual meeting of the Florida Society of Geographers.
- 2020 Steckler, Morgan, Sally P. Horn, Chad S. Lane, Mathew S. Boehm, Mauricio Murillo H., **Erik N. Johanson**, and Taber Friedel. Stable Carbon and Nitrogen Isotope Ratios in the Sediments of Laguna Arancibia, Costa Rica. Poster presented at the EURECA undergraduate symposium at the University of Tennessee.
- 2018 Horn, Sally P., **Erik N. Johanson**, Kurt A. Haberyan, Mathew S. Boehm, Jessie L. Johanson, Maureen Sánchez P., Mario Hernández V. Limnological Observations at Five Costa Rican Lakes. Paper presented at the 3rd biennial Geography Symposium: Mapping Outside the Lines: Geography as a Nexus for Interdisciplinary and Collaborative Research, 15–16 February 2018 in Knoxville, TN.
- 2017 Cecil*, Jacob A., Sally P. Horn, **Erik N. Johanson**, Mathew S. Boehm, and Luke R. Blentlinger. Late Holocene Fire History from Wetland Sedimentary Charcoal in the Central Valley of Costa Rica. Poster presented at the annual meeting of the SouthEastern Division of the American Association of Geographers in Starkville, MS.
- 2017 Blentlinger, Luke R., Sally P. Horn, **Erik N. Johanson**, Matthew T. Kerr, Chad S. Lane, Mathew S. Boehm, and Jacob A. Cecil*. Proxy Analyses of Wetland Sediments in Costa Rica. Poster presented at the annual meeting of the SouthEastern Division of the American Association of Geographers in Starkville, MS.
- 2017 Blentlinger, Luke R., Sally P. Horn, **Erik N. Johanson**, Matthew T. Kerr, Chad S. Lane, and Mathew S. Boehm. Reconstructing Past Environments in Costa Rica through Analyses of Wetland Sediments. Poster presented at Discovery Day Undergraduate Research, University of Tennessee.
- 2015 Cecil*, Jacob A., **Erik N. Johanson**, and Sally P. Horn. Agricultural Practices Around Laguna Danta, Costa Rica: An 800 Year Reconstruction Based Upon Macroscopic Charcoal Analysis. Poster presented at Discovery Day Undergraduate Research, University of Tennessee.
- 2011 **Johanson, Erik N.** Predictive Modeling in Western Louisiana: Prehistoric and Historic Settlement Patterning in the Kisatchie National Forest. Paper presented at the annual meeting of the Southeastern Archaeological Conference in Jacksonville, FL.
- 2010 Anderson, David G., D. Shane Miller, Tom Pertierra, Derek Anderson, Thad Bissett, Stephen Carmody, Tracy Hadlett, **Erik N. Johanson**, Ashley M. Smallwood, and Sarah Walters. Cumberland River/Midsouth Paleoindian Survey Project. Paper presented at the 67th Annual meeting of the Southeastern Archaeological Conference, Lexington, KY.

- 2009 **Johanson, Erik N.**, David G. Anderson, D. Shane Miller, Stephen J. Yerka, Derek T. Anderson, J. Christopher Gillam, and Ashley Smallwood. PIDBA: The State of the Database. Paper presented at the annual meeting of the Southeastern Archaeological Conference in Mobile, AL.
- 2007 Anderson, David G., J. Christopher Gillam, D. Shane Miller, **Erik N. Johanson**, Jason O'Donoghue, Michael K. Faught, and Stephen J. Yerka. Paleoindian Research in the Southeast: Examples Using PIDBA (Paleoindian Database of the Americas). Paper presented at the annual meeting of the Southeastern Archaeological Conference in Knoxville, TN.

Research Grants (Funded)

a. External (\$423,492)

- 2020 Human-Environment Interaction in coastal Ecuador during the Late Holocene, American Association of Geographers (AAG) Anne White Fund, (PI Erik Johanson), \$1,500.00
- 2017 Developing a Network of n-Alkane Hydrogen Isotope Records in Costa Rica to Elucidate Drivers and Impacts of Holocene Droughts, National Science Foundation (NSF) GSS 1660185, (PI SP Horn, Co-PIs DW Gamble and CS Lane, Faculty Associate EN Johanson), \$421,992.

b. Internal (\$14,721.65)

- 2019 FAU College of Science Seed Funding (PI Erik Johanson), Paleoflood Reconstructions and El Niño Southern Oscillation Climate Variability in Coastal Ecuador (co-PI Tiffany Briggs), \$14,721.65

Proposals (Pending)

- 2023 X-ray Powder Diffraction: An indispensable tool for research and education in science and engineering, Department of Defense (DoD) W911NF23S0014, (PI V Merk, Co-PIs R Wang, Z Xie, D Du, T Leventouri, W Muhammad, E Johanson, A Oleinik, H Mahfuz, Y Kang, M Jahander-Lashaki, D Meeroff, D Chamely-Wiik), submitted on Sep 14, 2023, \$238,187.

Project Proposals (Not-funded)

a. External (\$223,762.23)

- 2023 Prehistoric Landscapes and People in West Central Costa Rica: Paired Lake-sediment and Archaeological Analyses. National Geographic Society (NGS) Level 2 Grant, (PI Sally Horn, co-PI's Mauricio Murillo H., Erik N. Johanson, Kurt Haberyan, Chad Lane, and Ricardo Felipe Sol), \$67,341.00
- 2023 Prehistoric Landscapes and People in West Central Costa Rica: Paired Lake-sediment and Archaeological Analyses, Subaward from University of Tennessee (PI Erik Johanson), \$11,789.94
- 2021 Doctoral Dissertation Research: Past Societal Resiliency to a Changing Climate in the Context of El Niño-Southern Oscillation during the Late Holocene, National Science Foundation (NSF) Archaeology DDRI 2138671, (PI EN Johanson, Co-PI Andres Garzon-Oechsle), \$28,262.
- 2021 Doctoral Dissertation Research: Vegetation and Fire Histories of Environmental Change and European Conquest in Costa Rica from Lake Sediment Proxies during the Late Holocene, National Science Foundation (NSF) Human-Environment & Geographical Sciences DDRI 2145937, (PI EN Johanson, Co-PI Taber Friedel), \$18,834.

- 2020 Reconstructing Pre-Columbian Agriculture, Fire, and Climate Across the Late Holocene in Coastal Ecuador, National Geographic Society (NGS) Early Career Grant, (PI Erik Johanson, co-PI's Valentina Martinez, Michael Harris, Jessie Johanson), \$8,000.00
- 2020 The Interplay Between Social and Environmental Change in Prehistoric Costa Rica, National Geographic Society (NGS) Enduring Impacts RFP, (PI Sally Horn, co-PI's Mauricio Murillo H., Erik N. Johanson, Cindy Rodriguez, Luis Guillermo A.), \$80,000.00
- 2020 Climate and Social Change in Central Costa Rica: Drawing on the last 3000 years to inform the present, Subaward from University of Tennessee (PI Erik Johanson), \$9,535.29
- b. Internal (\$17,944)*
- 2023 The reality of 'blue carbon' ecosystems: the effectiveness of Florida Bay seagrass meadows as a longer-term organic matter sink, Florida Atlantic University Science Research Fellows Program (PI E Prokocki, Co-PI E Johanson), submitted on Sep 30, 2023, \$50,000
- 2019 Paleoenvironmental reconstruction of the Early Pleistocene Levantine gateway area of humans out of Africa: the fossil pollen evidence, FAU-Israel Pilot Project, (PI's Dafna Langgut and Erik Johanson), \$15,000
- 2018 Environmental and Climate Histories of the Quebrada Estero Wetland in San Ramon, Costa Rica, FAU College of Science Seed Funding, (PI Erik Johanson) \$2,944

Teaching

a. Courses taught (undergraduate)

- 1) Hazards, Climate, and People (EVR 4112), Fall 2017, 2019, 2020, 2021, 2022 (Developed in 2017, AS-L component in 2020, Course Design Update in 2023)
- 2) Weather, Climate, and Climate Change (MET 2010), Summer 2019, 2020, 2021, 2022, 2023, Fall 2019, 2020, 2021, 2022, Spring 2020, 2021, 2022, 2023 (Course Design Update in 2021, QM Certified in 2022)
- 3) World Geography (GEA 2000), Summer 2018
- 4) Directed Independent Research (GEO4915/4916), 2022–2023
- 5) Directed Independent Study (GEO 4905), 2023

b. Courses taught (graduate)

- 1) Paleoenvironmental Reconstruction (EVR 6931), Spring 2018, 2020, 2022 (Developed in 2018)
- 2) Paleoenvironments and People (EVR 6417), Spring 2019, 2021, 2023 (Developed in 2019)
- 3) Pollen in the Neotropics (DIS, GEO 6908)
- 4) Fire in the Neotropics (DIS, GEO 6908)
- 5) Paleolandscapes in the Neotropics (DIS, GEO 6908)
- 6) Past Human-Environment Interaction in Florida (DIS, GEO 6908)
- 7) Florida Conservation / Environmental Restoration (DIR, EVS 6916)

c. Graduate student mentoring (indicates committee chair/co-chair)*

22. Gyawali, Sabina (PhD advisor), in progress.
21. Luintel, Sanjeev (PhD advisor), in progress.

20. Graham Morrison-Plumley (MS advisor), in progress.
19. Obrien, Kayla (MS committee), in progress.
18. Palaparathi, Jyothirmayi (PhD committee), in progress.
17. Opitz, Dylan. (MS committee), in progress.
16. Ciesinski, Carson. (MS committee), in progress.
15. Field, Anita. (MS non-thesis Advisor in Environmental Science), in progress.
14. Richardson, Caroline. (MS non-thesis Advisor in Environmental Science), Spring 2022.
13. Clark, Rebecca. Hurricane Maria's impacts on Puerto Rico. (PhD committee), in progress.
12. Kahn, Haibat. (MS committee), Spring 2022.
11. *Swick, Kathryn. Sediment Core and Remote Sensing Analysis of Modern Environmental Change within a Cypress Swamp Forest, Collier County, FL (MS Advisor), Spring 2023.
10. Paudel, Asha. Examining the effects of post-fire management strategies on vegetation and fuels in conifer forests with altered fire regimes in the Sierra Nevada range of California (PhD committee), Summer 2022.
9. *Friedel, Taber. Late Holocene Environmental Change, Climate Stress, and Pre-Columbian Agriculture in the Central Valley, Costa Rica (PhD Advisor), in progress.
8. *Garzon-Oechsle, Andres. The Manteño Of Bola De Oro: Past Human Resiliency To Climate Change Through Remote Sensing, Excavation, And Chronological Reconstruction of Landscape Modifications (PhD advisor), Summer 2023.
7. Uperty, Sudan. Farming Household's Adaptive Capacity to Changes in Food Systems (PhD committee), in progress.
6. Oglesby, Glen. It's all just in your head: How does a person's cultural identity affect their flood risk perceptions and mitigation behaviors? (MS committee), Summer 2021.
5. *Hooler, Skylar. The Influence of a Flow Control Structure on Canal-Groundwater Interactions in South Florida (MS Advisor), Summer 2021.
4. *Bitting, Madeleine. Reconstructing the Late Holocene History of Human Activity and Climate from a Costa Rican Diatom Record (MS Advisor), Summer 2021.
3. Kittredge, Danielle. An Exploration of the Sociodemographic and Socioeconomic Dichotomy of Shrinking Cities and Formerly Shrinking Cities in the Context of the "Back to the City Movement." PhD committee, Florida Atlantic University, Fall 2020.
2. Carroll, Robert. Assessing Sr/Ca Paleotemperature Calibration Techniques for Subtropical Western Corals Using *Pseudodiploria strigose*. MS Committee, Florida Atlantic University, Fall 2018.
1. *Cecil, Jacob. Fire History from Charcoal in the Sediments of the Quebrada Estero Wetland, Costa Rica (Undergraduate Honors Thesis co-advisor), University of Tennessee, Spring 2017.

d. Mentored Student Grants and Awards (Environmental Change Lab Students)

- 2023 Graham Morrison-Plumley, FAU Geosciences Graduate Student Endowed Scholarship Fund, \$700
- 2023 Taber Friedel, Best Poster Presentation (PhD) at the Annual Meeting of the Florida Society of Geographers, \$150
- 2022 Andres Garzon, Promotion Line for Cultural Heritage and Social Memory Research 2022, Ecuadorian National Institute of Cultural Patrimony, \$5,000
- 2022 Kathryn Swick, FAU Graduate Student Thesis and Dissertation Scholarship, \$500
- 2021 Taber Friedel, Best Poster Presentation (PhD) at the Annual Meeting of AAG
- 2021 Madeleine Bitting, Best Poster Presentation (MS) at the Annual Meeting of the Florida Society of Geographers, \$150
- 2021 Skylar Hooler, FAU COVID-19 Emergency Cash Grant, \$700
- 2020 Skylar Hooler, FAU Science Graduate Research Support Scholarship, \$475
- 2020 Skylar Hooler, FAU Geosciences Graduate Student Endowed Scholarship Fund, \$600
- 2020 Skylar Hooler, American Water Resources Association William V. Storch Student Award, \$1,500
- 2020 Madeleine Bitting, AAG Paleoenvironmental Change Specialty Group Student Research Grant, \$300
- 2020 Andres Garzon, Lewis and Clark Fund for Exploration, \$5,000
- 2019 Taber Friedel, AAG Paleoenvironmental Change Specialty Group Student Research Grant, \$300

Services

Service to the Department/College/University

2023

IFP Faculty Group, Science Committee Member, FAU
 DoR Associate Fellowship Review Committee (Science), Member, FAU
 Geosciences Graduate Program Committee Member, FAU
 College of Science Assessment Committee (Climate Change Focus), Committee Member, FAU
 Geosciences Climate Science Faculty Position Search, Committee Member, FAU
 Geosciences Scholarship Committee Member, FAU
 Geosciences Department Code of Conduct Development, Committee Member, FAU
 Geosciences Department Post Tenure Review Guidelines, Committee Member, FAU
 Environmental Science Program Faculty Member, FAU
 Harbor Branch Oceanographic Institute Member, FAU
 Commencement Faculty in Regalia for Spring Graduation, FAU

2022

Environmental Science MS Thesis Poster Judge, FAU
 Geosciences Graduate Program Committee Member, FAU
 College of Science Assessment Committee (Climate Change Focus), Committee Member, FAU
 Geosciences Climate Science Faculty Position Search, Committee Member, FAU
 Environmental Science Program Faculty Member, FAU
 Harbor Branch Oceanographic Institute Member, FAU
 Commencement Faculty in Regalia for Spring Graduation, FAU

2021

Academic Freedom and Due Process Committee Member, FAU
 Geosciences Master's Program Committee Member, FAU
 Geosciences BS Climate Change Focus Curriculum Committee Member, FAU
 Geosciences Promotion and Tenure Criteria Update Committee, FAU
 Geosciences Departmental Newsletter, FAU

Environmental Science Program Faculty Member, FAU
Harbor Branch Oceanographic Institute Member, FAU
Undergraduate Program Curriculum Committee, Departmental Representative for Climate Change Focus, FAU

2020

Academic Freedom and Due Process Committee Member, FAU
Geosciences Master's Program Committee Member, FAU
Geosciences BS Climate Change Focus Committee Member, FAU
Geosciences Faculty Meeting Secretary, FAU
Geosciences Departmental Newsletter, FAU
Environmental Science Program Faculty Member, FAU
Harbor Branch Oceanographic Institute Member, FAU
Geosciences Scholarship Committee Member, FAU
Geosciences Library Representative, FAU
Geosciences Departmental Newsletter, FAU

2019

Invited speaker for FAU's Ecuador Archaeological and Ethnographic Field Programs. "Paleoenvironments, Paleoclimate, and Past Human-Environment Interaction", June 25, 2019.
Academic Freedom and Due Process Committee Member, FAU
Geosciences Master's Program Committee Member, FAU
Geosciences Faculty Meeting Secretary, FAU
Environmental Science Program Faculty Member, FAU
Harbor Branch Oceanographic Institute Member, FAU
Geosciences Scholarship Committee Member, FAU
Geosciences Library Representative, FAU
Commencement Faculty in Regalia for Summer Graduation, FAU
Super Meeting of the Minds, OURI, Departmental Representative, FAU

2018

Invited speaker for FAU's Marine Science seminar, Department of Biological Sciences. "Environmental Change, Climate, and People Across the Late Holocene", January 19, 2018.
Geosciences Faculty Meeting Secretary, FAU
Geosciences Undergraduate Program Committee Member, FAU
Environmental Science Program Faculty Member, FAU
Harbor Branch Oceanographic Institute Member, FAU
Geosciences Scholarship Committee Member, FAU
Geosciences Library Representative, FAU
Commencement Faculty in Regalia for Summer Graduation, FAU

2017

Geosciences Faculty Meeting Secretary, FAU
Geosciences Undergraduate Program Committee Member, FAU
Geosciences Scholarship Committee Member, FAU
Geosciences Library Representative, FAU

Service to the Profession

2023

Florida Society of Geographers, Executive Committee Member
Editorial Board Member for the *Journal of Geology, Earth and Marine Sciences*
Paleoenvironmental Change Specialty Group of the American Association of Geographers, Grant Reviewer
Reviewer for submitted papers to the *Journal of Archaeological Science*

AAG Paleoenvironmental Change Student Research Grant, Judge

2022

Florida Society of Geographers, President
 Florida Society of Geographers, Executive Committee Member
 Florida Society of Geographers, 2022 Meeting Conference Organizer Chair
 Florida Society of Geographers, 2022 Conference Student Presentation Competition Chair
 Paleoenvironmental Change Specialty Group of the American Association of Geographers, Director
 Reviewer for submitted papers to *Land* and *Atmosphere*
 Editorial Board Member for the Journal of *Geology, Earth and Marine Sciences*

2021

Florida Society of Geographers, President
 Florida Society of Geographers, Conference Student Presentation Competition Judge
 Paleoenvironmental Change Specialty Group of the American Association of Geographers, Director
 AAG Conference, Paleoenvironmental Change Student Presentation Competition, Organizer
 AAG Paleoenvironmental Change Student Research Grant, Judge
 American Philosophical Society (Lewis and Clark Fieldwork Student Research Fund), Reviewer
 Reviewer for submitted papers to *Atmosphere*
 Editorial Board Member for the Journal of *Geology, Earth and Marine Sciences*

2020

Paleoenvironmental Change Specialty Group of the American Association of Geographers, Director
 AAG Paleoenvironmental Change Student Research Grant, Judge
 American Philosophical Society (Lewis and Clark Fieldwork Student Research Fund), Reviewer
 Reviewer for submitted papers to *Atmosphere* and *Sustainability*
 Editorial Board Member for the Journal of *Geology, Earth and Marine Sciences*

2019

Paleoenvironmental Change Specialty Group of the American Association of Geographers, Director
 AAG Paleoenvironmental Change Student Research Grant, Judge
 American Philosophical Society (Lewis and Clark Fieldwork Student Research Fund), Reviewer
 Reviewer for submitted papers to *Atmosphere*
 Editorial Board Member for the Journal of *Geology, Earth and Marine Sciences*

2018

Paleoenvironmental Change Specialty Group of the American Association of Geographers, Director
 AAG Paleoenvironmental Change Student Research Grant, Judge
 Reviewer for submitted papers to *Atmosphere*
 Editorial Board Member for the Journal of *Geology, Earth and Marine Sciences*

2017

Reviewer for submitted papers to *Economic Botany*

Service to the Community

2022

Laboratory outreach for Climate READY Ambassadors (high school level), Florida Atlantic University, Boca Raton, Florida. “Climate READY: A lab experience at FAU’s Environmental Change Laboratory”, March 26, 2022.

2021

Interviewed for the 2021 Hurricane Season by FAU's University Press newspaper in August 2021.
 Interviewed on camera for WPLG (Ft Lauderdale) climate change news coverage in August 2021.
 Invited speaker for the Climate READY Teacher Collaborative Workshop, FAU Pine Jog Environmental Education Center. "Climate Change and Human Impacts", July, 27-28, 2021.
 Steering Committee Member, Climate Change Stressors, State of the Indian River Lagoon Technical Report.

2020

Steering Committee Member, Climate Change Stressors, State of the Indian River Lagoon Technical Report.

2019

Invited speaker for the Institute for Learning in Retirement, Boca Raton, Florida. "Agriculture, Drought, and Fire: Reconstructing Past Environments and Climates to Inform the Present", January 14, 2019.

2018

Invited speaker for Unity School (Elementary), Delray Beach, FL. "What do Geographers do?", *October 8, 2018*.

Professional Development

2019-2020

Early Career Academy with FAU's Division of Research

2018

eCertificate Workshop with FAU's Center for eLearning
 Laboratory Safety and Hazardous Waste Awareness & Handling with FAU's EHS
 USDA APHIS Permit to Receive Regulated Soil for the Environmental Change Laboratory at FAU

Honors and Awards

- 2017 SGA Open Education Award, University of Tennessee
- 2016 Stewart McCroskey Memorial Research Fund, University of Tennessee, \$450
- 2015 Yates Dissertation Fellowship, University of Tennessee, \$15,000
- 2015 Science Alliance Fellowship Award, 2014–2015 Academic Year, UT, \$3,000
- 2015 Outstanding Teaching Associate Award, Department of Geography, University of Tennessee
- 2015 University of Tennessee Graduate Student Senate Travel Award, \$650
- 2015 University of Tennessee Undergraduate Research Summer Grant (Advisee: Jacob Cecil), \$2,000
- 2014 AAG Biogeography Specialty Group Graduate Student Research Grant (PhD), \$1,000
- 2014 AAG Paleoenvironmental Change Specialty Group Student Research Grant (PhD), \$200
- 2014 Geological Society of America Research Grant, \$900
- 2014 Stewart McCroskey Memorial Research Fund, University of Tennessee, \$500
- 2014 Quest Scholar (*December*), University of Tennessee
- 2014 Science Alliance Fellowship Award, 2013–2014 Academic Year, UT, \$1,500
- 2014 Fieldwork Excellence Award, Department of Geography, University of Tennessee
- 2014 University of Tennessee Graduate Student Senate Travel Award, \$900
- 2013 Student Publication Award, Department of Geography, University of Tennessee

Professional Affiliations

- American Association of Geographers (AAG)
- Paleoenvironmental Change Specialty Group

- Climate Specialty Group
- Biogeography Specialty Group

Florida Society of Geographers

Southeastern Division of the Association of American Geographers

Gamma Theta Upsilon – International Geographical Honor Society

Geological Society of America

Society for American Archaeology