Amanda Hoffman-Hall, Ph.D.

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Education

2020	**Ph.D. Geographical Sciences**, University of Maryland College Park *Dissertation: Interdisciplinary Geospatial Assessment of Malaria Exposure in Ann Township, Myanmar*
2011	**B.S. Geography**, University of Oklahoma

Professional Experience

2022 – Present	**Assistant Professor**, Environmental Studies Discipline, Eckerd College, St. Petersburg, FL
2020 – 2022	**Director of Undergraduate Studies**, Department of Geographical Sciences, University of Maryland, College Park, MD
2014 – 2022	**Instructor**, Department of Geographical Sciences, University of Maryland, College Park, MD
2016 – 2020	**Undergraduate Advising Coordinator**, Department of Geographical Sciences, University of Maryland, College Park, MD
2015 – 2016	**Graduate Research Assistant**, NASA Project: Arctic-Boreal Vulnerability Experiment (ABoVE) Arctic Boreal Burned Area (ABBA), Dr. Tatiana Loboda's Lab, University of Maryland College Park, MD
2014 – 2015	**Adjunct Professor**, Towson University, Towson, MD
2013 – 2016	**Graduate Research Assistant**, NASA Project: Forested land cover and land use change (LCLUC) in Northern Eurasia under the combined drivers of climate and socio-economic transformation, Dr. Tatiana Loboda's Lab, University of Maryland College Park, MD
2012 – 2014	**Teaching Assistant**, Department of Geographical Sciences, University of Maryland, College Park, MD
2012 – 2013	**Graduate Research Assistant**, NASA LCLUC Project: Synthesis of forest growth, response to wildfires and carbon storage for Russian forests, Dr. Tatiana Loboda's Lab, University of Maryland, College Park, MD **Graduate Field Assistant**, NASA Carbon Monitoring System Project: A framework for high-resolution estimation of terrestrial carbon stocks and dynamics, Dr. George Hurtt's Lab, University of Maryland, College Park, MD
2011 – 2012	**GIS Analyst**, Chesapeake Energy, Oklahoma City, OK
2011	**Dam Safety Technician**, Oklahoma Water Resources Board, Oklahoma City, OK

Funding

2026	Eckerd College Natural Sciences Summer Research Program, "Geospatial Assessment of Toxic Release Facilities to Disaster Risk" ($9,600)
2025	Eckerd College Natural Sciences Summer Research Program, "Geospatial Assessment of Toxic Release Facilities to Disaster Risk" ($10,800)
	NSF GeoCAFE Scholar Fellow ($2,000)
	NASA SCoPE AGU SciAct Affiliate ($2,000)

2024	Eckerd College Natural Sciences Summer Research Program, “Geospatial Assessment of Toxic Release Facilities to Disaster Risk” ($7,200)
2023	Eckerd College Natural Sciences Summer Research Program, “Geospatial Assessment of Wildfire Risk for Toxic Release Facilities” ($4,800)
	Eckerd College Institutional Technology Award Grant “PurpleAir PM Monitoring Sensors for WT: Air Quality Course” ($927)
2020	UMD Teaching Innovation Grant, “Repurpose Geographical Sciences research space into a socially distanced laboratory for undergraduate students” ($28,520)
	UMD Teaching Innovation Grant, “GEOG201/211: Geography of Environmental Systems” ($6,800)
2020	UMD College of Behavioral and Social Sciences Dean’s Research Initiative Undergraduate Mentored Teams Grant, “Perceptions of Geography Key Words and Program Names by University of Maryland Undergraduates” ($1,000)
2015	UMD College of Behavioral and Social Sciences Dean’s Research Initiative Dissertation Improvement Grant, “Assessing the impact of climate change on *Phytophthora cinnamomi*, a destructive forest pathogen in the northeastern United States” ($2,500)
2014	UMD College of Behavioral and Social Sciences Dean’s Research Initiative Pre-Candidacy Grant, “Assessing the impact of climate change on *Phytophthora cinnamomi*, a destructive forest pathogen in the northeastern United States” ($1,500)

Peer-reviewed Publications (Google Scholar)

1. Tong, D., Gorris, M., Abadi, A., Anenberg, S., Ardon-Dryer, K., Bratburd, J. R., Cromar, K., Hang, Y., Harp, R. D., Hoffman-Hall, A., Horwell, C. D., Kerr, G. H., Ma, Y., Ryan, S. J., Stowell, J. D., Usmani, M., Wimberly, M.C., Zaitchik, B. F., Chen, K. Calling for a GeoHealth Decadal Survey: Accelerating Solution-Oriented Research and Applications to Address Environmental and Health Problems. **GeoHealth**. http://dx.doi.org/10.1029/2026GH002024

2. de Oliveira, G., Koster, E., Marubo, B., Laureto, L., Nobre, C., Funatsu, B., Geber-Corrêa, R., Dias-Júnior, C., Delgado Pugley, D., Pierrat, Z., Heredia-R, M., Morton, D., Hoffman-Hall, A., Maure, L., Zhuang, Q., Krause, T. et al. (2026). Spiraling frontier threats in Indigenous Amazonia, **Nature Sustainability** https://doi.org/10.1038/s41893-026-01874-z

3. Motherscholar Collective, Alhassan, S. W., Azim, K. A., Blanks Jones, J. L., Bielski, L., Butterworth, M., Campbell-Obaid, M., Eilert, M., Frazer, A. K., Frazier, K. E., Greene, C., Greene-Rooks, J. H., Hoffman-Hall, A., Key-Delyria, S., McKagen, E. L., Myles-Baltzy, C. C., Richardson, I., & Tooley, K.M. (2026). Caught between a rock and a hot place: How motherscholars engage in individual, collective, or other (in)actions to address climate precarity. In C. Toscano and S. M. Wiebe (eds). **Mothers, Mothering, and Climate Change**. Demeter Press.

4. Chen, D., Hall, J.V., Hoffman-Hall, A., Shevade, V., Argueta, F., Liang, X., Loboda, T. 2026. The Arctic Boreal Burned Area (ABBA) Product, **Geoscience Data Journal,** 13(2). https://doi.org/10.1002/gdj3.70060

5. Hoffman-Hall, A. 2025. The Role of Land Cover/Land Use in Malaria Transmission in Myanmar. **Remote Sensing of Land Cover and Land Use Changes in South and Southeast Asia**, Volume 2. CRC Press 179-191.

6. Hoffman-Hall, A., Puett, R., Silva, J.A., Chen, D., Baer, A., Han, K.T., Han, Z.Y., Thi, A., Htay, T., Thein, Z.W., Aung, P., Plowe, C.V., Nyunt, M.M., Loboda, T.V., 2023. Comparison of Deforestation and Forest Land Use Factors for Malaria Elimination in Myanmar. **International Journal of Infectious Diseases - Regions**, 8: 75-83. https://doi.org/10.1016/j.ijregi.2023.06.006

7. Hoffman-Hall, A., M. E. Gorris, S. Anenberg, A. E. Bredder, J. K. Dhaliwal, M. A. Diaz, S. K. Fortner, B. G. McAdoo, D. Reano, R.C. Rehr, H.A. Roop, B. F. Zaitchik. 2022. A GeoHealth Call to Action: Moving Beyond Identifying Environmental Injustices to Co-Creating Solutions. **GeoHealth, 6(11).** https://doi.org/10.1029/2022GH000706

8. Chen, D., Shevade, V., Baer, A., He, J., Hoffman-Hall, A., Ying, Q., Li, Y., Loboda, T.V. 2021. A Disease Control-Oriented Land Cover Land Use Map for Myanmar. **Data,** 6(6), 63. https://doi.org/10.3390/data6060063

9. Hoffman-Hall, A., Puett, R., Silva, J.A., Chen, D., Baer, A., Han, K.T., Han, Z.Y., Thi, A., Htay, T., Thein, Z.W., Aung, P., Plowe, C.V., Nyunt, M.M., Loboda, T.V. 2020. Contextualizing Malaria Exposure in Myanmar by Combining Satellite-Derived Land Cover and Use Observations with Field Surveys. **GeoHealth**, 4, 12. https://doi.org/10.1029/2020GH000299

10. Bergen, K., Loboda, T., Sun, G., Newell, J., Kharuk, V., Hitztaler, S., Johnson, T., Hoffman-Hall, A., Ouyang, W., Park, K., Fort, C. 2020. Long-term trends in anthropogenic land use in Siberia and the Russian Far East: A case study synthesis from Landsat. **Environmental Research Letters**, 15, 105007. https://doi.org/10.1088/1748-9326/ab98b7

11. Hoffman-Hall, A., Loboda, T. V., Hall, J. V., Carroll, M. L., & Chen, D. 2019. Mapping remote rural settlements at 30 m spatial resolution using geospatial data-fusion. **Remote Sensing of Environment**, 233, 111386. https://doi.org/10.1016/j.rse.2019.111386

12. Shuman, J.K., Foster, A.C., Shugart, H.H., Hoffman-Hall, A., Krylov, A., Loboda, T.V., Ershov, D., and Sochilova, E. 2017. Fire disturbances and climate change: implications for Russian forests. **Environmental Research Letters**, 12(3). https://doi.org/10.1088/1748-9326/aa5eed

13. Chen, D., Loboda, T.V., Hoffman-Hall, A., Channan, S. 2014. Long-term record of sampled disturbances in Northern Eurasian boreal forest from pre-2000 Landsat data. **Remote Sensing**, 6: 6020-6038. https://doi.org/10.3390/rs6076020

Published Datasets

14. Loboda, Tatiana V; Hall, Joanne; Chen, Dong; Hoffman-Hall, Amanda; Shevade, Varada; Argueta, Fernanda; Liang, Xiaoyu (2024): Arctic Boreal Burned Area (ABBA) Product,

Circumpolar Boreal Forests and Tundra, Version 2. **PANGAEA**, https://doi.org/10.1594/PANGAEA.965193

15. Chen, D., Baer, A., He, J., Hoffman-Hall, A., Shevade, V., Ying, Q., Loboda, T.V. 2020. Land cover land use map for Myanmar at 30-m resolution for 2016. **PANGAEA**, https://doi.pangaea.de/10.1594/PANGAEA.921126

16. Loboda, T.V., J.V. Hall, A.H. Hall, and V.S. Shevade. 2017. ABoVE: Cumulative Annual Burned Area, Circumpolar High Northern Latitudes, 2001-2015. **ORNL DAAC**, Oak Ridge, Tennessee, USA. https://doi.org/10.3334/ORNLDAAC/1526

17. Chen, D., T.V. Loboda, S. Channan, Hoffman-Hall, A. 2015. Russian Boreal Forest Disturbance Maps Derived from Landsat Imagery, 1984-2000. **ORNL DAAC**, Oak Ridge, Tennessee, USA. http://dx.doi.org/10.3334/ORNLDAAC/1294

In review

18. Abadi, A. M., Blanton, O.F., Talluri, S., Gabriel, K.P., Wickliffe, J.K., Levitan, E.B., Hoffman-Hall, A., Rocque, G.B., Roland, H.B., Qasim Hussaini, S.M. Cumulative residential proximity to toxic hazard sites and chronic disease prevalence in the United States: a nationwide ecological cross-sectional study. **Environmental Health**. (under review)

19. Silva, J. A., Strong, M., Charrua, A. B., Anderson, K., Hoffman-Hall, A. Roots in the Margins: Adaptive Place Attachment in Slum Neighborhoods. **Proceedings of the National Academy of Sciences**. (under review)

20. Shevade, V., Hoffman-Hall, A., Thwe Han, K., Plowe, C. V., Nyunt, M.M., Loboda, T. V. Using Land Use Engagement Surveys to Improve Understanding of Malaria Exposure in Myanmar's Rakhine State. **Malaria Journal.** (under review)

21. Motherscholar Collective, Pennell, S.M., Garcia-Hallet, J., Azim, K.A., Bielski, L.M., Blanks Jones, J.L., Coleman-King, C., Diaz, A., Frazer, A.K., Frazier, K.E., Greene-Rooks, J., Harmon, A., Hoffman-Hall, A., Karlsgodt, K.H., Lim, S.R., Parker-Barnes, L., & Richardson, I. Teaching with care: Turning lip service into anti-racist practice. **The SoJo Journal: Social and Cultural Foundations of Education** (under review)

22. Frazier, K.E., Pennell, S. M., Greene-Rooks, J. H., Bielski, L., Richardson, I., Hoffman-Hall, A., Redefining Support: Supporting the Acamama+ in Your Life: 5 things to try today, and 3 to avoid at all costs. In The Motherscholar Collective (Ed.) **The MotherScholar Collective:** A Framework for Redefining Academic Life. (abstract accepted, manuscript under review)

Presentations

Invited Professional Presentations and Panels

1. July 2026. Joint Webinar: GeoCAFE and AGU GeoHealth Section. **CAFE: The Research Coordinating Center for Climate and Health, a joint initiative of Boston University School of Public Health and Harvard T.H. Chan School of Public Health**, virtual.
2. April 2024. Advancing Environmental Health and Justice through Geospatial Data Fusion. Invited Colloquium speaker for the **University at Buffalo Department of Geography**, Buffalo, NY.
3. December 2021. Climate Change and Health Equity: Action at the Intersection of Social Justice and Health Disparities. Invited panelist for **American Geophysical Union Fall Meeting Innovation Session**, New Orleans, LA.
4. April 2021. Fighting Malaria through Geospatial Data Fusion. Invited speaker for **AGU GeoHealth Early Career Seminar Series**, virtual. Recording: https://youtu.be/Qe_U8Kt2k9c
5. April 2018. Teaching and Advising About Careers in Geography. Invited panelist at **American Association of Geographers Annual Meeting**, New Orleans, LA.

Accepted Oral Presentations *(* denotes mentored undergraduate student)*

6. Hoffman-Hall, A., *Glass, E., *Price, D., *Stebbins, L., *Harris, S., *Inmon, A. Intersecting Hazards: Wildfires and Industrial Chemical Risk. Wildfires & Health: From Research to Resilience 2025, hosted by **CAFE: The Research Coordinating Center for Climate and Health, a joint initiative of Boston University School of Public Health and Harvard T.H. Chan School of Public Health**, virtual. https://www.youtube.com/watch?v=lxHP4_hmyJU
7. *Anderson, A., Hoffman-Hall, A. Indigenous Land in Oklahoma Disproportionately at Risk of Natech Disasters. **American Geophysical Union 2024**, Washington, DC.
8. Hoffman-Hall, A., Puett, R., Silva, J.A., Chen, D., Baer, A., Han, K.T., Han, Z.Y., Thi, A., Htay, T., Thein, Z.W., Aung, P., Plowe, C.V., Nyunt, M.M., Loboda, T.V., December 2023. Comparison of Deforestation and Forest Land Use Factors for Malaria Elimination in Myanmar. **American Geophysical Union Annual Meeting**, San Francisco, CA.
9. Dong Chen, Joanne Hall, Fernanda Argueta, Sofia Grossman, Amanda Hoffman-Hall, Varada Shevade, and Tatiana V Loboda. December 2023. Arctic Boreal Burned Area (ABBA): A burned area product developed specifically for circumpolar boreal forests and tundra. **American Geophysical Union Annual Meeting**, San Francisco, CA.
10. Hoffman-Hall, A., *Chen, Z., *Kuei, C., *Lutebula, N., *McPartland, C.,*Mills, A. April 2021. Is Geography for Gen Z? Perceptions of Geography Key Words by University of Maryland Undergraduates. **American Association of Geographers Annual Meeting,** virtual.
11. Loboda, T.V., Puett, R., Hoffman-Hall, A., Chen, D., Shevade. V., Baer, A. November 2020. Assessing multi-scale exposure pathways in zones of patchy distribution of malaria reservoirs within remote regions of Myanmar. **American Society of Tropical Medicine and Hygiene Annual Meeting,** virtual.
12. Hoffman-Hall, A., Puett, R., Loboda, T.V., Silva, J.A., Chen, D., Baer, A., Nyunt, M., Aung, P. November 2019. Contextualizing Malaria Exposure in Myanmar by Combining Satellite-Derived Land Cover and Use Observations with Field Surveys. **American Association of Geographers Annual Meeting**, Denver, CO.
13. Hoffman-Hall, A., Puett, R., Loboda, T.V., Silva, J.A., Chen, D., Baer, A., Nyunt, M., Aung, P. November 2019. Malaria Risk in Myanmar: Contextualizing Remotely Sensed Land Cover Data with Qualitative Land Use Data to Inform Targeted Interventions. **Mid-Atlantic Division American Association of Geographers Annual Meeting**, Baltimore, MD.
14. Loboda, T. V., Carroll, M., Hoffman-Hall, A., Nyunt, M., Plowe, C. April 2019. Malaria landscape: examining the role of land cover / land use nexus in malaria transmission in Myanmar. **Global Land Programme Open Science Meeting**, Bern, Switzerland.

15. Hoffman-Hall, A., Loboda, T.V., Puett, R. April 2019. More than Mosquitoes: Malaria Risk in Ann Township, Myanmar. **American Association of Geographers Annual Meeting**, Washington DC.
16. Hoffman-Hall, A., Loboda, T.V., Hall, J. V., Carroll, M. December 2018. Rural Population Mapping at Moderate Spatial Resolutions Using Geospatial Data Fusion. **Geophysical Union Annual Meeting**, Washington DC.
17. Hoffman-Hall, A. April 2018. Mapping Population: Utilizing Satellite Derived Metrics in Data-Poor Regions. **American Association of Geographers Annual Meeting**, New Orleans, LA.
18. Hoffman-Hall, A. Assessing the impact of climate change on *Phytophthora cinnamomi*, a destructive forest pathogen in the northeastern United States. April 2014. **Association of Geographers Annual Meeting**, Tampa, FL.

Posters *(* denotes mentored undergraduate student)*

19. *Angell, E., Hoffman-Hall, A. February 2026. Hurricane Storm Surge and Industrial Hazards Along the Coast of Florida. **Ocean Sciences Meeting**, Glasgow, Scotland.
20. *Sollers, J., Hoffman-Hall, A. December 2025. Analyzing Storm Surge Vulnerability of Hazardous Material Sites with Simulated Storm Surge Data and Hurricane Forecasts, **American Geophysical Union**, New Orleans, LA.
21. *Throne, A., Hoffman-Hall, A. December 2025. Systematic filtering of VIIRS 375 m global active fire product for vegetation fire detection in the United States, **American Geophysical Union**, New Orleans, LA.
22. *Inmon, A., Hoffman-Hall, A. December 2025. Affected Populations from Spread of Ground Lead from TRI Facilities due to Wildfires in California, **American Geophysical Union**, New Orleans, LA.
23. *Fentress, O., Hoffman-Hall, A. December 2025. Geospatial Analysis of New Mexico's Socially Vulnerable: At a Higher Risk for Natech Disasters?, **American Geophysical Union**, New Orleans, LA.
24. *Epley III, L., Hoffman-Hall, A. December 2024. Arkansas Flood Risk and Carcinogenic TRIs Analysis. **American Geophysical Union**, Washington, DC.
25. *Johnson, A., Hoffman-Hall, A. December 2024. Toxic Release Inventory Facilities Impact on Vegetation Health and Wildfire Risk in the State of Hawaii. **American Geophysical Union**, Washington, DC.
26. *Glass, E., Hoffman-Hall, A. November 2023. Oregon Toxic Release Facilities at Risk of Wildfire. Poster presented at **Southeast Division of the American Association of Geographers,** Norfolk, VA.
27. *Harris, S., Hoffman-Hall, A. November 2023. TRIs and Wildfires: Country-Wide Analysis. **Southeast Division of the American Association of Geographers,** Norfolk, VA.
28. *Price, D., Hoffman-Hall, A. November 2023. The Wildland Urban Interface: Assessing Wildfire Risk For Toxic Release Facilities in Nevada. **Southeast Division of the American Association of Geographers,** Norfolk, VA.
29. *Stebbins, L., Hoffman-Hall, A. November 2023. Industrial Wildfire Risk: Western U.S. T.R.I. Facilities at Risk of Wildfire. **Southeast Division of the American Association of Geographers,** Norfolk, VA.
30. Shevade, V., Hoffman-Hall, A., Loboda, T.V. December 2021. Using Land Use Engagement Surveys to Improve Understanding of Malaria Exposure In Ann Township, Myanmar. **American Geophysical Union Annual Meeting**, New Orleans, LA.
31. Hoffman-Hall, A., Puett, R., Silva, J., Chen, D., Baer, A., Plowe, C. V., Nyunt, M. M., Loboda, T. V. December 2020. Land Use Engagement and Malaria Prevalence in Ann Township, Myanmar: The Role of Forest-Related Activities. **American Geophysical Union Annual Meeting**, virtual.

32. Hoffman-Hall, A., Baer, A.E., Loboda, T.V. December 2019. Assessing occupational exposure risk factors for subclinical malaria as a function of land cover and land use in Myanmar. **American Geophysical Union Annual Meeting**, San Francisco, CA.
33. Shevade, V., Chen, D., Hoffman-Hall, A., Baer, A., He, J., Loboda, T.V. December 2019. Identifying Population Vulnerability to Malaria in Myanmar. **Geophysical Union Annual Meeting**, San Francisco, CA.
34. *Auger, R. Hoffman-Hall, A. Water Resources Influence on Civil Conflict: Syrian Case Study. **American Association of Geographers 2019**, Washington, DC.
35. *Khan, M, Hoffman-Hall, A. Land Cover Change in Southern California. **American Association of Geographers 2019**, Washington, DC.
36. *Wilson, D., Hoffman-Hall, A. Alternate Routes to avoid Flooding in Mozambique. **American Association of Geographers 2019**, Washington, DC.
37. *Rouleau, D., Hoffman-Hall, A. Undergraduate Motivations to Enrolling in a Geographical Sciences Major. **American Association of Geographers 2019**, Washington, DC.
38. Loboda, T.V., Carroll, M., Chen, D., Hoffman-Hall, A. December 2018. Mapping and Monitoring Myanmar's Malaria Landscape. **American Geophysical Union Annual Meeting**, Washington DC.
39. Hoffman-Hall, A., Loboda, T.V., Hall, J. V., Carroll, M. October 2018. Rural Population Mapping at Moderate Spatial Resolutions Using Geospatial Data Fusion. **Race, Ethnicity, and Place Conference**, Austin, TX.
40. Loboda, T., Hoffman-Hall, A., French, N., Jenkins, L., Miller, M. E., Bourgeau-Chavez, L. April 2015. Long-term Multi-Sensor Record of Fire Disturbances in High Northern Latitudes. **Carbon Cycle and Ecosystems Joint Science Workshop**, College Park, MD.
41. Bergen, K., Loboda, T., Shugart, H. H., Newell, J., Shuman, J., Brown, D., Sun, G., Hitztaler, S., Poon, W., Hoffman-Hall, A. April 2015. LCLUC Synthesis: Forested Land-Cover and Land-Use Change in the Far East and East Siberia of Northern Eurasia under the Combined Drivers of Climate and Socio-Economic Transformation. **NASA Carbon Cycle and Ecosystems Joint Science Workshop**, College Park, MD.
42. Bergen, K., Loboda, T. Newell, J., Sun, G., Krankina, O., Blam, Y., Cui, L., Estrada, J., Hoffman-Hall, A., Hitztaler, S., Johnson, T., Park, K., Wang, Y., Wang Y.C., Wen, X. April 2014. Synthesis of Long-Term Datasets and of Trends and Variation of Landscape LCLUC Across The Russian Far East and Central Siberia. **NASA LCLUC Annual Meeting**, Rockville, MD.
43. Chen, D., Loboda, T. V., Hoffman-Hall, A., and Weber, C. Y. Mapping stand-age distribution of Russian forests from satellite data. December 2013. **American Geophysical Union,** San Francisco, CA.
44. Hoffman-Hall, A. Phytophthora cinnamomi and climate change. November 2013. **Research Interaction Day for Graduate and Early Career Scientists**, College Park, MD

Public Outreach

45. June 2026. Pints for Science: Looking at the Earth from Space! **New Worlds Brewery**, Tampa, FL.
46. November 2025. Great American Teach-In: Learning about the Earth…From Space! **Lake St. George Elementary**, Palm Harbor, FL.
47. November 2025. Great American Teach-In: Satellite Earth Science & Art. **Clearwater High School**, Clearwater, FL.
48. December 2024. Flooding Presentation to Senator Rick Scott Staff. **Hart Senate Office Building**, Washington, DC.

49. November 2024. Great American Teach-In: Learning about the Earth…From Space! **Lake St. George Elementary**, Palm Harbor, FL.
50. November 2023. Great American Teach-In: Learning about the Earth…From Space! **Frontier Elementary**, Largo, FL.
51. August 2023. Eckerd Alumni Book Club: Rising: Dispatches from the New American Shore Discussant. **Eckerd College**, St. Petersburg, FL.
52. February 2023. Problem Solving using data analytics. **Pinellas County Public Works**, St. Petersburg, FL.
53. November 2022. Great American Teach-In: Learning about the Earth…From Space! **Frontier Elementary**, Largo, FL.

Other Scholarly Works

1. Delivering an innovative cold storage solution powered by biogas / renewable energy to the Braco small farming community, Community-led science, Thriving Earth Exchange, American Geophysical Union 2023

Graduate Student Researchers Supervised

2023 — Luke Quattrochi, *Algorithm Development for Illicit Trafficking Networks Across the US-Mexico Border* (UMD GIS MS Capstone Project)

Jack Cantilli, *Examining the eco-climatic drivers of Malaria in West Central Africa with predictive spatio-temporal modelling* (UMD GIS MS Capstone Project)

2022 — Heather Caviglia, *Roadway Alignment Tool* (UMD GIS MS Capstone Project)

Liam Monahan, *Gopher Resources LLC and Lead Exposure* (UMD GIS MS Capstone Project)

Undergraduate Student Researchers Supervised

2026 — Alejandra Diaz, *Mapping Hurricane Hazard and Toxic Release Inventory (TRI) Facilities in Florida: Assessing Potential Environmental Risks* (Eckerd NSSRP Research Student)

Ava Hemann, *Using GIS to Examine TRI Site Placement Through an Environmental Justice Perspective* (Eckerd NSSRP Research Student)

Helena Heinrich, *Assessing Conditional Risk to Potential Structures at Toxic Release Facilities in Florida* (Eckerd NSSRP Research Student)

Kristopher Bower, *Carcinogens and Flood Risks in Pennsylvania* (Eckerd NSSRP Research Student)

Lila Perron, *TRI Facilities Vulnerable to EIHRs in California Due to Seismic Activity* (Eckerd NSSRP Research Student)

Lily Boucher, *Environmental Hazards in Vietnam* (Eckerd NSSRP Research Student)

2025

Elizabeth Angell, *Hurricane Storm Surge and Industrial Hazards Along the Coast of Florida* (Eckerd NSSRP Research Student, Posters presented at Ocean Sciences Meeting and American Geophysical Union)

Jack Sollers, *Analyzing Storm Surge Vulnerability of Hazardous Material Sites with Simulated Storm Surge Data and Hurricane Forecasts* (Research Volunteer, Poster presented at American Geophysical Union)

Taylor Queen, *Understanding settlement behavior, physiology, and swimming dynamics of Caribbean king crab larvae for enhanced coral reef restoration in FL Keys* (Marine Science Senior Thesis, Primary Supervisor: Phil Gravinese)

Alec Throne, *High-intensity wildfire risk algorithm based on spatio-temporal reconstruction of VIIRS active fire detections using machine learning* (Eckerd NSSRP Research Student, Poster presented at American Geophysical Union)

Cassandra Kielty, *Burning Risks: A Comparative Analysis of Wildfire Threats to California's TRI Facilities* (Research Internship)

Isabella Helm, *Toxic Release Facilities Chemicals Connection to Wildfire Exposure in Minnesota* (Eckerd NSSRP Research Student)

Ruby Mantel, *Wildfires and Toxic Facilities: Impacts on Native Hawaiian Lands and Fire Infrastructure* (Eckerd NSSRP Research Student)

McKenna Brochu, *Point Source Metal Mining Waste Threatens The Health of Alaskan Wetland Ecosystems* (Eckerd NSSRP Research Student)

Maddy Vacaro, *Toxic Release Impact on Surrounding Schools and Students in Florida*, (Eckerd NSSRP Research Student)

Orion Fentress, *Geospatial Analysis of New Mexico's Socially Vulnerable: At a Higher Risk for Natech Disasters?* (Research Volunteer, Poster presented at American Geophysical Union)

Lilah Bergman, Pink Crockett, Mia Henrich, *Hoffman-Hall Human and Environmental Health Lab GIS Internship* (Research Internship)

2024

Amelia Anderson, *Indigenous Land in Oklahoma Disproportionately at Risk of Natech Disasters* (Oral talk presented at AGU 24)

Lewis Epley III, *Arkansas Flood Risk and Carcinogenic TRIs Analysis* (Poster presented at AGU 24)

Amelia Johnson, *Toxic Release Inventory Facilities Impact on Vegetation Health and Wildfire Risk in the State of Hawaii* (Poster presented at AGU 24)

Tobianna Aldrich, *TRI Risk of Storm Surge* (Eckerd NSSRP Research Student)

Ella Crosby, *Environmental injustice in South Florida: Burning sugarcane may lead to increased hospitalizations from respiratory distress related to PM2.5 exposure* (Poster presented at Eckerd Research Symposium 2024)

Liz Cleveland, *Phytomyxid Parasites and Tampa Bay* (Independent Research Student)

2023	Isabella Micale, Lewis Epley III, *Geospatial Assessment of Wildfire Risk for Toxic Release Facilities* (Eckerd Research Volunteer)
	Ella Glass, *Oregon Toxic Release Facilities at Risk of Wildfire* (Eckerd NSSRP Research Student, Poster presented at SEDAAG 2023, **Winner of EC Get Inspired Fest 2023 Student's Choice Award**)
	Spencer Harris, *TRIs and Wildfires: Country-Wide Analysis* (Eckerd NSSRP Research Student, Poster presented at SEDAAG 2023, **Winner of EC Get Inspired Fest 2023 Faculty Choice Award**)
	Diana Price, *The Wildland Urban Interface: Assessing Wildfire Risk For Toxic Release Facilities in Nevada* (Eckerd NSSRP Research Student, Posters presented at SEDAAG 2023)
	Lucas Stebbins, *Industrial Wildfire Risk: Western U.S. T.R.I. Facilities at Risk of Wildfire* (Eckerd NSSRP Research Student, Posters presented at SEDAAG 2023)
	Mikael Serio, *Geospatial Assessment of Wildfire Risk for Toxic Release Facilities* (Eckerd Research Volunteer)
	Diana Bernate, Cali Douthit, Calli Marshall, Jeniana Willner, *Environmental Feminism* (Eckerd Research Volunteers)
2022	Avi Grant, *Disability and Accommodations in the Geosciences* and *Prescribed Burning Impacts on Air Quality & Health in Florida* (UMD Summer Research Internship)
	Colin Hartnett, *Potential for biochar as a climate mitigation tool* (UMD Senior Internship Thesis)
2021	Paul Raeder, *Social Media Movements and Environmentalism* (UMD Senior Internship Thesis)
2020	Zihan Chen, Chin-Yun Kuei, Numbi Lutebula, Caitlin McPartland, Adam Mills, *Perceptions of Geography Key Words and Program Names by University of Maryland Undergraduates* (Oral Presentation at AAG 2021)
	Benjamin Grove, *Impacts of Invasive Species on Environmental & Human Health in the United States* (Senior Internship Thesis)
2019	Reiley Auger, *Water Resources Influence on Civil Conflict: Syrian Case Study* (Poster Presentation at AAG 2019)
	Mahnoor Khan, *Land Cover Change in Southern California* (Poster Presentation at AAG 2019)
	Damien Wilson, *Alternate Routes to avoid Flooding in Mozambique* (Poster Presentation at AAG 2019)
	Daryl Rouleau, *Undergraduate Motivations to Enrolling in a Geographical Sciences Major* (Poster Presentation at AAG 2019)

Teaching Experience

2022 – Present **Eckerd College (Assistant Professor)**

ES172: Introduction to Environmental Studies
25 students. In-person.

ES211: Earth Science
25 students. In-person.

ES225: Environmental and Climate Justice
18 students. In-person. Writing Intensive General Education requirement.

ES342: Remote Sensing
25 students. In-person.

ES357: Environmental Health
25 students. In-person.

WT: Air Quality
20 students. In-person.

WT: Gulf Impact Project: Art and Climate
35 students. In-person. Collaborative course with Clearwater High School.

WT: Public Health in Puerto Rico
20 students. In-person. Abroad in Puerto Rico. Environmental Perspective General Education requirement.

AT8: Critters and Contagions: Zoonotic Disease Ecology
25 students. In-person. General Education requirement.

FD181: Human Experience: Then & Now
20 students. In-person. General Education requirement.

FD182: First Year Experience: Natural Disasters, Unnatural Consequences
20 students. In-person. General Education requirement.

HP201: Science Communication
25 students. In-person. Co-taught across disciplines. Honors course.

BES200E: Public Health in Puerto Rico
20 students. In-person. Study abroad.

2014 – Present **University of Maryland (Lecturer)**

2021 – 2022 **GEOG441: The Coastal Ocean**
40 students. In-person.

2020 – Present **GEOG201: Geography of Environmental Systems & GEOG211: Laboratory**
240 students. In-person and online (both synchronous and asynchronous).

2015 – 2022 **GEOG 212: Career Planning for Geographical Sciences, GIS, and Environmental Science and Policy Majors**
50 students. In person, hybrid, and online (asynchronous and synchronous).

2014 – 2017	**GEOG 306: Introduction to Quantitative Methods for Geographic and Environmental Sciences** 20 students. Online (synchronous).
2014	**GEOG 472: Advanced Remote Sensing (Co-Teacher)** 50 students. In-person.
2014 – 2015	**Towson University (Adjunct)**
2015	**GEOG 101: Introduction to Physical Geography** 75 students. In-person and online.
2014	**GEOG 232: Introduction to Geographic Information Systems** 20 students. In-person.

Relevant Trainings and Certifications

Dec 2025	**Science Communication Workshop** *NASA SCoPE* https://science.nasa.gov/sciact-team/smd-community-of-practice-for-education/
Nov 2024	**Communicating with Policy-Makers Training** *American Geophysical Union* https://www.agu.org/science-policy
June 2023	**Courageous Conversations about Race** *St. Petersburg Center for Health Equity* https://courageousconversation.com/
May 2023	**Optimizing Cultural Awareness and Responsiveness in Mentoring Relationships** *Dr. Kelly Diggs, Diggs-Andrews Consulting* https://diversity.ucf.edu/hispanic-serving-institution/enfermeria/optimizing-cultural-awareness-and-responsiveness-in-mentoring-relationships-workshop/
October 2021	**Mental Health First Aid Training** *National Council for Mental Wellbeing* https://www.mentalhealthfirstaid.org/
April 2021	**Fostering Terp Success Campus Coach Training for Foster Youth** *University of Maryland Fostering Terp Success Program* https://umd.edu/fostering-terp-success
Nov 2019	**Trauma Informed Hate-Bias Response Training** *University of Maryland Office of Diversity and Inclusion* https://diversity.umd.edu/training-education/hate-response/
August 2018	**An Introduction to Evidence-Based Undergraduate STEM Teaching** *The Center for the Integration of Research Teaching and Learning* http://stemteachingcourse.org/
June 2018	**Teaching Institute** *Johns Hopkins University Teaching Academy* https://cer.jhu.edu/teaching-academy/

May 2018	**Khan Academy for Teachers 101** *Khan Academy* www.khanacademy.org
April 2018	**UndocuTerp Training Series: Working with DACA, TPS, and Undocumented Students** *University of Maryland Office of Immigrant and Undocumented Student Life* https://stamp.umd.edu/engagement/immigrant_undocumented_student_life
Feb 2018	**Universal Design: Making Your Course Accessible to Everyone** *University of Maryland Teaching & Learning Transformation Center* www.tltc.umd.edu
Nov 2017	**Teaching Backwards: Learning Outcomes & Course Design** *University of Maryland Teaching & Learning Transformation Center* www.tltc.umd.edu

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Awards and Honors

2025	GeoCAFE Scholar Fellowship
	NASA SCoPE SciAct Affiliate
2024	Making Opportunities for Mothers in Academia (MOMA) Award, Awarded by the International Association of Maternal Action and Scholarship (IAMAS) to The MotherScholar Collective
2021	AGU 2021 Editors' Citation for Excellence in Refereeing for *GeoHealth*
	American Association of Geographers Health and Medical Geography Specialty Group Jacques May Thesis Award
2020	O.E. Baker Award, for outstanding performance as a Graduate Student in Geographical Sciences, University of Maryland
2019	Nominated for University of Maryland Advisor of the Year Award
2018	Race, Ethnicity, and Place Conference Graduate Student Poster Competition (1st Place) UMD BSOS Enlightening Talk (3 Minute Thesis) Competition (3rd Place)
	UMD Graduate Research Appreciation Day Oral Presentation (1st Place)
	Nominated for UMD College of Behavioral and Social Sciences Advisor of the Year Award
2017	Department of Geographical Sciences Excellence in Graduate Research Award (3rd Place)
2015	Department of Geographical Sciences Outstanding Teaching Assistant
2012	University of Maryland Athletics MVP (Most Valuable Professor)

2011	University of Oklahoma Geography Chair's Best Capstone (Senior Research) Award
	University of Oklahoma Clyde Bollinger Award (Outstanding Senior Geography Student)
	Association of College Rowing Coaches Scholar Athlete Award

Service

Reviewer

2026	Reviewed manuscripts for *Philosophical Transactions of the Royal Society, GeoHealth,* and *Journal of Exposure Science and Environmental Epidemiology*
2025	Reviewed manuscripts for *Remote Sensing of Environment, GeoHealth,* and *Malaria Journal*
	Reviewer for the National Academies Gulf Research Program
2024	Reviewed manuscripts for *Remote Sensing of Environment, Applied Geography*
	Reviewer for National Science Foundation GOLD-EN
2023	Reviewed manuscripts for *GeoHealth*, *Epidemiology and Health*
2022	Reviewed manuscripts for *The Lancet Planetary Health* and *Remote Sensing*
2021	Reviewed manuscripts for *GeoHealth, International Journal of Applied Earth Observations and Geoinformation*, and *Land*
2020	Reviewed manuscripts for *International Journal of Remote Sensing* and *Environmental Research Letters*
2019	Reviewed manuscripts for *Science of Remote Sensing* and *International Journal of Applied Earth Observations and Geoinformation*

Professional Organization Service

2026	AGU26 Fall Meeting Planning Representative for GeoHealth Section
	GeoHealth Meetings Committee Chair
	Session Convener for AGU26 Session: Advances in GeoHealth
	Session Convener for AGU26 Session: Contaminated Landscapes: Environmental Change, Extreme Events, and Human Health in Polluted Environments
	Session Convener for AGU26 Session: Mental Health Impacts of Climate Hazards: Risk, Recovery, and Resilience
2025	AGU25 Fall Meeting Planning Representative for GeoHealth Section

	Convener for AGU25 Session: Advances in GeoHealth
	Convener for AGU25 Session: Anthropocene Changes in Tropical Forests
	GeoHealth Meetings Committee Chair
2024	AGU24 Fall Meeting Planning Representative for GeoHealth Section
	Convener for AGU24 Session: Advances in GeoHealth
2023	AGU23 Fall Meeting Planning Representative for GeoHealth Section
	Convener for AGU23 Union Session: Climate Change and Environmental Health
	Convener for AGU23 Session: Advances in GeoHealth
2022	Contributor to AGU-NASA Ethics in Artificial Intelligence/Machine Learning Policy: Shelley Stall, Guido Cervone, Caroline Coward, et al. Ethical and Responsible Use of AI/ML in the Earth, Space, and Environmental Sciences. ESS Open Archive. April 12, 2023. DOI: 10.22541/essoar.168132856.66485758/v1
	Convener for AGU Innovation Session: Equitable Change: Moving Beyond Identifying GeoHealth Injustices to Co-Creating Solutions
2021	Convener for AGU Town Hall: Surviving Global Change: GeoHealth, Marginalized Communities and Environmental Justice in the Anthropocene
2020 - 2023	Early Career Chair of AGU GeoHealth Section Diversity Committee

Campus Service

2025 - 2026	Environmental Studies Discipline Coordinator
	Gulf Scholars Program Steering Committee
	Athletics Committee Faculty Representative
2024 - 2025	Eckerd Faculty Champion for Academic Consortium to Cultivate Engineering and Science Opportunities (ACCESO) for Latinx Students
	Gulf Scholars Program Steering Committee
	Public Health Minor Proposal Committee
	Environmental Studies Search Committee
2023 - 2024	Eckerd Faculty Champion for Academic Consortium to Cultivate Engineering and Science Opportunities (ACCESO) for Latinx Students
	Athletics Committee Faculty Representative
	Eckerd Writing Portfolio Reviewer (Fall and Spring)
	Environmental Studies Assistant Professor Search Committee

2022 - 2023	Eckerd Writing Portfolio Reviewer (Fall and Spring)
	Academic Research Fund Reviewer (Fall)
	Environmental Studies Visiting Assistant Professor Search Committee
2021 – 2022	Campus Coach for UMD Fostering Terp Success
	Workshop Coordinator for UMD Fostering Terp Success
	TerrapinSTRONG (Campus DEI Training) Facilitator
	UMD College of Behavioral and Social Sciences Social Data Science Advisor Search Committee
2020 - 2021	Faculty Essay Reviewer for Maryland Ascent Fellows (First Generation Baltimore City Students)
2013 - 2020	UMD College of Behavioral and Social Sciences Dean's Graduate Student Advisory Council Chair
	Co-Chair of UMD College of Behavioral and Social Sciences Research Interaction Day for Graduate and Early-Career Scientists
	UMD College of Behavioral and Social Sciences Dean's Graduate Student Advisory Council Geographical Sciences Representative

Professional Organizations

2014 – Present	American Association of Geographers
2018 – Present	American Geophysical Union
2011 – Present	Gamma Theta Upsilon (Geography Honors Society)