Curriculum Vitae – Dr. Joseph Holler

Contact Information

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Professional Profile

Current Position

Associate Professor, Middlebury College Department of Geography

Education

2012, PhD in Geography – University at Buffalo, State University of New York
   Dissertation Title: *Adaptation and Social Vulnerability on Mount Kilimanjaro, Tanzania: Challenges and Possibilities for Sustainable Climate Change Adaptation*
2012, Certificate in Geographic Information Science – University at Buffalo, State University of New York
2003, BA in Anthropology, Computer Science, and Media Studies – Ithaca College

Academic Interests

geographic information science, open science, climate change adaptation, hazards, development

Employment

7/2024 – Present	Associate Professor, Middlebury College Geography
7/2018 – 7/2024	Assistant Professor, Middlebury College Geography
8/2017 – 7/2018	GIS Teaching Fellow, Middlebury College Geography
8/2015 – 7/2017	Visiting Assistant Professor, Middlebury College Geography
6/2015 – 8/2015	Visiting Scholar, Brown University, Institute at Brown for Environment & Society
8/2013 – 5/2018	GIS Teaching Fellow, Middlebury College Geography
8/2012 – 8/2013	Visiting Assistant Professor, University of Mary Washington Geography
7/2011 – 8/2012	Research Assistant, University at Buffalo Law School
8/2009 – 5/2010	Teaching Assistant, University at Buffalo Geography
8/2007 – 8/2008	Teaching Assistant and Adjunct Professor, University at Buffalo Geography
9/2003 – 12/2005	Information Technology Teacher and Lab Administrator, Peace Corps, Tanzania

Professional & Academic Honors

2013	AAG J. Warren Nystrom Award for the best paper based on a dissertation
2012	AAG Development Geographies Specialty Group Student Paper Award
2006 – 2012	National Science Foundation (NSF) Integrative Graduate Education and Research Traineeship (IGERT) Fellow in Geographic Information Science, University at Buffalo
1999 – 2003	Dean's Scholarship, School of Communications, Ithaca College
1999 – 2003	New York State Academic Excellence Scholarship

Publications & Presentations

Peer-Reviewed Papers

1. Kedron, P. and **J. Holler**. 2026. Recent Advances in Reproducibility and Replicability in Cartography and Geographic Information Science: Introduction to a Special Issue. *Cartography and Geographic Information Science* 0 (0): 1–5. https://doi.org/10.1080/15230406.2025.2512084.
2. Kedron, P., A. Trgovac and **J. Holler**. 2025. Replications as Project Based Learning in Geographic Information Science. *Transactions in GIS.* 29:e70162 https://doi.org/10.1111/tgis.70162.
3. **Holler, J**., P. Kedron, D. Burt, K. Udoh, S. Roubin and B. Cordola. 2025. Using Open Geographic Information Science Practices to Create Cascading Improvements in Research Quality and to Support Discovery. *Cartography and Geographic Information Science*. https://doi.org/10.1080/15230406.2025.2591124
4. Roubin, S., **J. Holler**, and P. Kedron. 2025. Urban-Rural Disparities in Spatiotemporal Accessibility of Pharmacy Care: A Case Study of Vermont, USA. *BMC Health Services Research* 25 (1): 1484. https://doi.org/10.1186/s12913-025-13653-1.
5. Frazier, A. E., T. Nelson, P. Kedron, E. Shook, S. Dodge, A. Murray, M. Goodchild, S. Battersby, J.I. Blanford, C. Claramunt, **J. Holler**, C. Koylu, A. Lee, S. Manson, S. Şalap-Ayça, J. Wilson, B. Zhao, L. Bennett, C. Cabrera-Arnau, R. Franklin, G. McKenzie, H. Miller, T. Oshan, S. Rey, F. Rowe, S. Spielman, and W. Xu. 2025. Rethinking GIScience Education in an Age of Disruptions. *Transactions in GIS* 29: e70048. https://doi.org/10.1111/tgis.70048.
6. Kedron, P., **J. Holler** and S. Bardin. 2025. A Survey of Researcher Perceptions of Replication in Geography. *Annals of the American Association of Geographers* 115 (1): 184–204. https://doi.org/10.1080/24694452.2024.2415695.
7. Nelson, Trisalyn, A. Frazier, P. Kedron, S. Dodge, B. Zhao, M. Goodchild, A. Murray, S. Battersby, L. Bennett, J.I. Blanford, C. Cabrera-Arnau, C. Claramunt, R. Franklin, **J. Holler**, C. Koylu, A. Lee, S. Manson, G. McKenzie, H. Miller, T. Oshan, S. Rey, F. Rowe, S. Şalap-Ayça, E. Shook, S. Spielman, W. Xu, and J. Wilson. 2025. A Research Agenda for GIScience in a Time of Disruptions. *International Journal of Geographical Information Science* 39 (1): 1–24. https://doi.org/10.1080/13658816.2024.2405191.
8. Kedron, P., S. Bardin, **J. Holler**, J. Gilman, B Grady, M. Seeley, X. Wang, and W. Yang. 2024. A Framework for Moving Beyond Computational Reproducibility: Lessons from Three Reproductions of Geographical Analyses of COVID-19. *Geographical Analysis.* 56(1):163-184. https://doi.org/10.1111/gean.12370
9. Kedron, P., **J. Holler**, and S. Bardin. 2024. Reproducible Research Practices and Barriers to Reproducible Research in Geography: Insights from a Survey. *Annals of the American Association of Geographers* 114 (2):369–386. https://doi.org/10.1080/24694452.2023.2276115
10. Lyimo, E.H., G. Mayengo, K.M. Hariohay, **J. Holler**, A. Kisingo, D.J. Castico, N.E. Kimambo, J. Lucas, E.H. Martin, and D. Nguma. 2024. Rapid Appraisal of Wildlife Corridor Viability with Geospatial Modelling and Field Data: Lessons from Makuyuni, Tanzania. *Land* 13 (10): 10. https://doi.org/10.3390/land13101647.
11. **Holler, J**. and P. Kedron. 2023. Decentralized Infrastructure for Reproducible and Replicable Geographical Science. *I-GUIDE Forum 2023 - Harnessing the Geospatial Data Revolution for Sustainability Solutions.* https://doi.org/10.5703/1288284317675
12. **Holler, J**., and P. Kedron. 2022. Mainstreaming Metadata into Research Workflows to Advance Reproducibility and Open Geographic Information Science. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences* XLVIII-4/W1-2022:201–208. https://doi.org/10.5194/isprs-archives-XLVIII-4-W1-2022-201-2022

13. Kedron, P., S. Bardin, T. D. Hoffman, M. Sachdeva, M. Quick, and **J. Holler**. 2022. A Replication of DiMaggio et al. (2020) in Phoenix, AZ. *Annals of Epidemiology* 74:8–14. https://doi.org/10.1016/j.annepidem.2022.05.005

14. Kedron, P., and **J. Holler**. 2022. Replication and the Search for the Laws in the Geographic Sciences. *Annals of GIS* 28 (1):45–56. https://doi.org/10.1080/19475683.2022.2027011

15. Fent, A., C. Gibb, S. Ishihara, **J. Holler**, and W. G. Moseley. 2022. Confronting the Climate Crisis: Slow Geographies and Relational Approaches to International Research. *The Professional Geographer* 74 (1):182–192. https://doi.org/10.1080/00330124.2021.1915827

16. **Holler, J**., Q. Bernier, J. T. Roberts, and S. Robinson. 2020. Transformational adaptation in Least Developed Countries: Does expanded stakeholder participation make a difference? *Sustainability* 12 (4):1657. https://doi.org/10.3390/su12041657

17. **Holler, J**. 2020. Teaching critical open GIS. *The Canadian Geographer / Le Géographe canadien* 64 (4):484–494. https://doi.org/10.1111/cag.12521

18. **Holler, J**. 2019. Human geography with open GIS as a transformative introductory higher education course. *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-4/W14, 99–106. https://doi.org/10.5194/isprs-archives-XLII-4-W14-99-2019

19. **Holler, J**. 2014. Is sustainable adaptation possible? Determinants of adaptation on Mount Kilimanjaro, *The Professional Geographer,* 66(4), 526-537. http://doi.org/10.1080/00330124.2014.922015

20. **Holler, J**. 2014. Adaptation policy and adaptation realities: local social organization and cross-scale networks for climate adaptation on Mount Kilimanjaro. *GeoJournal* 79 (6):737–753. http://doi.org/10.1007/s10708-014-9549-7

Other Publications

1. Supp, S., A. Nurse, **J. Holler**, N. Horton, P. Kedron, and R. Ball. 2025. Reproducibility may be the key idea students need to balance trust in evidence with healthy skepticism. *The Conversation*. June 5. https://doi.org/10.64628/AAI.pqqug3wwh

2. Kedron, P. and **J. Holler**. 2024. Validation and Verification of Applied GIS Research. *The Geographic Information Science & Technology Body of Knowledge (2024 Edition)*. Ed. John P. Wilson. https://doi.org/10.22224/gistbok/2024.1.13

3. **Holler, J**., E. Drury, K. Acosta, and J. Gonzalez-Iwanciw. 2015. Chapter 5: Transparency and prioritization at the recipient level, in Toward Mutual Accountability: The 2015 Adaptation Finance Transparency Gap Report. *AdaptationWatch*. Available at https://www.researchgate.net/publication/305700608_Toward_Mutual_Accountability_The_2015_Adaptation_Finance_Transparency_Gap_Report

4. **Holler, J**. 2010. Mazingira ya Mweka 2010, Swahili-language booklet, Arusha, Tanzania.

5. **Holler, J**. 2009. Mazingira ya Mweka, Swahili-language booklet, Dar es Salaam, Tanzania.

Research Workshops, Webinars, and Conference Sessions

1. **Holler, J.** 2026. Organized Session: Measurement, logics, and politics of boundaries and scales. *American Association of Geographers Annual Meeting.* San Francisco, California. 3/172026.

2. Kedron, P., L. Yiu and **J. Holler**. 2025. Organized Sessions: Open Science in Geography. *American Association of Geographers Annual Meeting.* Detroit, Michigan. 3/24/2025.

3. Kedron, P., **J. Holler** and A. Trgovac. 2024. Virtual Workshop: Teaching reproducibility and replicability in spatial data science: Where to start and what to do. *Fifth Spatial Data Science Symposium*, 10/23/2024. https://sdss2024.spatial-data-science.net/

4. **Holler, J**., R. Ball, N. Horton, E. Kaparakis, N. Medeiros and S. Supp. 2024. *AALAC Workshop: Reproducibility and Replicability in the Liberal Arts*, Middlebury College, 7/14/2024—7/17/2024. https://hegsrr.github.io/Workshop-AALAC-RR-2024/

5. Wang, Siqin, **J. Holler** and P. Kedron. 2024. Organized Sessions: Symposium on Geospatial Data Science for Sustainability: A repeatable, reproducible, and expandable (RRE) framework integrating GeoAI and spatiotemporal simulation I and II. *American Association of Geographers Annual Meeting.* Honolulu, Hawai'i. 4/19/2024.

6. Kedron, P. and **J. Holler**. 2024. *Reproducible Research Practices for Spatial Data Science Follow-Up*. University of California Santa Barbara Population in Health Geography Research Group. 1/24/2024.

7. **Holler, J**., P. Kedron and S. Bardin. 2023. *Reproducible Research Practices for Spatial Data Science*. University of California Santa Barbara, 12/7/2023. https://hegsrr.github.io/Workshop-UCSB-2023/

8. **Holler, J**. and P. Kedron. 2023. Virtual Workshop: Reproducing and Replicating Spatial Data Science. *Fourth Spatial Data Science Symposium*, 9/5/2023. https://hegsrr.github.io/Workshop-SDSS-2023/

9. **Holler, J**., P. Kedron, S. Bardin, A. Michels and J. Park. 2023. Organized Sessions: Symposium on Harnessing the Geospatial Data Revolution for Sustainability Solutions: Reproducibility and Replicability in the Human-Environment and Geographical Sciences I and II. *American Association of Geographers Annual Meeting.* Denver, CO. 3/23/2023.

10. **Holler, J**. and P. Kedron. 2022. Workshop: Practicing and Teaching Reproducibility and Replicability in the Human-Environment and Geographical Sciences. *UCGIS Symposium.* Syracuse, NY. 6/6/2022.

11. **Holler, J.** and P. Kedron. 2021. Virtual Webinar: Working with Students to Reproduce COVID-19 Research to Establish the Credibility of Findings and Accelerate Policymaker Adoption. *Geospatial Fellows Webinar Series*. 8/23/2021. Available at https://gsi.cigi.illinois.edu/geospatial-fellows-webinar-series/ or https://youtu.be/-qLVdCQPupc

12. **Holler, J**. and P. Kedron. 2020. Virtual Workshop: Working with Students to Reproduce COVID-19 Research to Establish the Credibility of Findings and Accelerate Policymaker Adoption. *Geospatial Fellows for Advancing COVID-19 Research & Education*. 10/19/2020. Available at https://gsi.cigi.illinois.edu/technical-workshops/

Invited Research Presentations

1. **Holler, J**. P. Kedron and S. Bardin. 2023. Challenges and Breakthroughs in Replicable and Expandable Spatiotemporal Data Science. *The Symposium on Spatiotemporal Data Science.* Harvard University Center for Geographic Analysis, 7/15/2023.

2. Kedron, P., **J. Holler** and S. Bardin. 2023. Open Science Practices for Replicating and Extending Spatiotemporal Data Science Research. *The Symposium on Spatiotemporal Data Science.* Harvard University Center for Geographic Analysis, 7/15/2023.

3. **Holler, J.** 2023. Livelihoods and adaptation on Mount Kilimanjaro. *Mountain Geography Guest Lecture*. SUNY Geneseo, Geneseo NY. 5/4/2023.

4. **Holler, J**. and Kedron, P. 2018. Keynote Presentation: Extreme Weather Preparedness in Oklahoma: An empirical test of social vulnerability and adaptive capacity. *Oklahoma NSF EPSCoR Annual State Conference*. Oklahoma City, OK. 4/24/2018.

5. **Holler, J**. 2017. Bridging the scale gap in vulnerability science: from generalized models to local context in Tanzania and Oklahoma. *Oklahoma State University Geography Colloquium*. 9/15/2017.

Conference Presentations

1. Holler, J. 2026. Parsimonious approach to measuring gerrymandering effects with both representation and compactness. *American Association of Geographers Annual Meeting.* San Franciso, CA. 3/20/2026.
2. Holler, J., S. Barnard and M. Mills. 2025. Reproducing Geographic Analysis Studies as Open Science Project-Based Learning. *FOSS4GNA*. Reston, VA. 11/5/2025.
3. Holler, J., P. Kedron and X. Haro-Carrion. 2025. Reproducibility in the Liberal Arts: a Conversation with Geographers. *American Association of Geographers Annual Meeting.* Detroit, MI. 3/27/2025.
4. Smith, L., J. Holler, P. Kedron. 2024. Replicability of Social Vulnerability Indices over Time. *American Association of Geographers Annual Meeting.* Honolulu, HI, 4/19/2024.
5. Trgovac, A., P. Kedron and J. Holler. 2024. Reproductions and Replications as Project Based Learning in Geographic Information Science. *American Association of Geographers Annual Meeting.* Honolulu, HI, 4/19/2024.
6. Roubin, S. and J. Holler. 2024. A Space-Time Accessibility Analysis of Pharmacy Care in Vermont. *American Association of Geographers Annual Meeting.* Honolulu, HI, 4/18/2024.
7. Holler, J. 2023. Open GIScience Pedagogy in an Age of Scientific Disruption. *Specialist Meeting: Spatial Data Science in an Age of Scientific Disruption*. University of California, Santa Barbara Center for Spatial Studies. 12/8/2023.
8. Holler, J. and P. Kedron. 2023. Decentralized Infrastructure for Reproducible and Replicable Geographical Science. *I-GUIDE Forum.* Columbia University, 10/6/2023.
9. Kimambo, N.E., J. Holler, P.O. Streufert, A. Lutz, G. Shanley Barr. Case studies of restoration projects across ecosystem types in Northern Tanzania. *International Congress for Conservation Biology.* Kigali, Rwanda, 7/26/2023.
10. Kedron, P. and J. Holler. 2023. Insights from Two Surveys on the Reproducibility and Replicability of Geographic Research. *UCGIS Symposium 2023*. Yale University, 6/6/2023.
11. Kedron, P., J. Holler and S. Bardin. 2023. Insights from two surveys on the reproducibility and replicability of geographic research. *American Association of Geographers Annual Meeting.* Denver, CO. 3/23/2023.
12. Holler, J., P. Kedron and S. Bardin. 2023. Framework and infrastructure for reproducible research and pedagogy in HEGS. *American Association of Geographers Annual Meeting.* Denver, CO. 3/23/2023.
13. Bardin, S., P. Kedron, J. Holler, F. Gilman, B. Grady, M. Seeley, X. Wang, and W. Yang. 2023. Moving beyond computation: reproducing geographical analyses of COVID-19 to assess and improve the validity of research. *American Association of Geographers Annual Meeting.* Denver, CO. 3/23/2023.
14. Zhou, J., D. An-Pham, D. Burt, and J. Holler. 2023. Middlebury College undergraduate students reproduce three spatial analysis studies in health and hazards. *American Association of Geographers Annual Meeting.* Denver, CO. 3/23/2023.
15. Holler, J., and P. Kedron. 2022. Mainstreaming metadata into research workflows to advance reproducibility and open geographic information science. *FOSS4G*. Florence, Italy. 8/28/2022.
16. Kedron, P., J. Holler and S. Bardin. 2021. Using Reproductions and Replications to Assess the Credibility of Findings in Health Geography and GISci: Some Early Results from Reproductions of COVID-19 Research. *GeoInformatics*. Virtual, 10/31/2021.
17. Holler, J. and K. Udoh. 2021. Reproducibility of a Climate Vulnerability Model for Africa. *American Association of Geographers Annual Meeting.* Virtual, 4/9/2021.
18. Cannavo, M. and J. Holler. 2021. Developing a Minimal GIS Plugin for Teaching Introductory QGIS. *American Association of Geographers Annual Meeting.* Virtual, 4/9/2021.

19. Holler, J. 2019. Human Geography with Open GIS as a Transformative Introductory Higher Education Course. *FOSS4G*. Bucharest, Romania. 8/27/2019. Available at https://youtu.be/9FVt6vU4YZ8

20. Holler, J. and C. Gomba. 2019. Representation and conceptual drift in social vulnerability models: the case of Hispanic representation in social media and FEMA data of Hurricane Harvey. *Association of American Geographers Annual Meeting*. Washington, DC. 4/5/2019.

21. Holler, J. 2018. Validating and applying social vulnerability indices with crowd-sourced data during natural disasters: the case of Hurricane Harvey. *Association of American Geographers Annual Meeting*. New Orleans, LA. 4/10/2018.

22. Goldman, R, J. Holler, and F. El Rayess. 2017. New curriculum to teach FM residents Geographic Information System (GIS) applications to identify needs of at-risk children and their families. *Society of Teachers of Family Medicine Annual Spring Conference*. San Diego, CA. 5/5-5/9/2017.

23. Holler, J. and Q. Bernier 2017. Scalar tension between international climate governance and local stakeholders in developing countries' national adaptation planning. *Association of American Geographers Annual Meeting*. Boston, MA.

24. Holler, J. 2017. Teaching common pool resources with heirs property in the U.S. South. *Dimensions of Political Ecology 2017* Conference. Lexington, KY. 2/24/ – 2/25/2017.

25. Holler, J. 2016. Prying open geocoded data on international aid and climate adaptation financing. *Association of American Geographers Annual Meeting: Data in action: Tracing the open data experiment Special Session*. San Francisco, CA. 3/29/2016.

26. Drury, E. & J. Holler, 2016. Leveraging geographic vulnerability analysis for national adaptation planning. *The Gobeshona conference for research on climate change in Bangladesh*. Independent University, Bangladesh. 8/1/2016.

27. Holler, J. 2015. Problems within the correlation between social networks and adaptive capacity: an empirical test of categorical resolution. *Association of American Geographers Annual Meeting: Social Networks & Adaptation to Environmental Change Special Session*. Chicago, IL. 4/21/2015.

28. Holler, J. 2014. Territories and spaces of planned climate change adaptation. *Association of American Geographers Annual Meeting: (Re)Imagining Territory as Political Ecological Process Special Session*. Tampa, FL. 4/12/2014.

29. Holler, J. 2014. Open GIS in the liberal arts. *Pre-AAG Workshop on Open GIS*, Tampa, FL. 4/7/2014.

30. Holler, J. 2013. Is sustainable adaptation possible? Determinants of adaptation on Mount Kilimanjaro. *Association of American Geographers Annual Meeting: Nystrom Award Sessions*. Los Angeles, CA. 4/9 – 4/13/2013.

31. Holler, J. 2012. Is sustainable adaptation possible? Determinants of adaptation on Mount Kilimanjaro. *Environmental Studies Research Colloquium*. University of Mary Washington, Fredericksburg, VA. 11/7/2012.

32. Holler, J. 2012. Climate change adaptation impacts and vulnerability: A framework for assessment. *Initiative on Climate Adaptation Research and Understanding through the Social Sciences III*. Columbia University, New York, NY. 5/18 – 5/20/2012.

33. Holler, J. 2012. Climate Adaptation in Tanzania: Building Adaptive Capacity or Reproducing Vulnerability? *Association of American Geographers Annual Meeting: Resilience, Adaptation, and Innovation: Applied Geographies of Climate Change Special Session*. New York, NY. 2/24 – 2/28/2012.

34. Holler, J. 2011. Adaptive capacity in a structurally adjusted environment. *Rethinking Development: Debating new directions in a time of crises*. Cornell University, Ithaca, NY. 10/10 – 10/12/2011.

35. Holler, J. 2011. Networks of Knowledge, Assistance and Association for Adaptive Capacity on Mount Kilimanjaro, Tanzania. *Association of American Geographers Annual Meeting: Social Aspects of Climate Change Special Session*. Seattle, WA. 4/12 – 4/16/2011.

36. Holler, J. 2010. Communicating climate change science and adaptation options in Tanzania. *The African Climate Change Fellowship Program Fellow's Seminar*. International START Secretariat, Dar es Salaam, Tanzania. 6/26/2010.
37. Holler, J. 2010. Challenges and bias in the analysis and representation of environmental change on Mount Kilimanjaro. *Representing Reality: imagery in the cognitive, social and natural sciences*. University at Buffalo, Buffalo, NY. 5/13 – 5/15/2010.
38. Holler, J. 2010. Law and space in the human/environment interactions of Mount Kilimanjaro. *Association of American Geographers Annual Meeting: Legal Geography Special Session*. Washington, DC. 4/14 – 4/18/2010.
39. Holler, J. 2010. Water rights in the coupled human/environment systems of Mount Kilimanjaro. *Conference on the Right to Water*. Syracuse University, Syracuse, NY. 3/29 – 3/30/2010.
40. Holler, J. 2010. Environmental change, livelihood insecurity & opportunities for adaptation on Mount Kilimanjaro. *GIScience IGERT & International Research Training Group Colloquium*. Videoconference of Universities of Buffalo, Bremen and Muenster, 2/19/2010.
41. Holler, J. 2009. Developing a conceptual framework for human/environment interactions on Mount Kilimanjaro. *Graduate Student Research Symposium*. University at Buffalo, Buffalo, NY. 11/20/2009.
42. Holler, J. 2009. Environmental change, economic insecurity, and opportunity for sustainable adaptations on Mount Kilimanjaro. *Conference for Sustainability IGERTs 2*. Arizona State University, Tempe, AZ. 10/7 – 10/11/2009.
43. Holler, J. 2008. Community-integrated GIS and social networks for water resources management. *IGERT Annual Meeting*. Arlington, VA. 5/18 – 5/20/2008.
44. Holler, J. 2008. Social networks and community-integrated GIS for water resources management. *Association of American Geographers Annual Meeting: Water and Development Special Session*. Boston, MA. 4/15 – 4/19/2008.
45. Holler, J. 2008. Social networks and community-integrated GIS for water resources management. *GIScience IGERT Colloquium*. University at Buffalo, Buffalo, NY. 4/11/2008.
46. Holler, J. 2007. Water resources management: building capacity with participatory GIS. *Conference for Sustainability IGERTs*. University of Alaska, Fairbanks, AK. 10/10 – 10/13/2007.

Conference Panel Discussions

1. Wang, S., T. Grubesic, J. Holler, Y. Lin, D. Tong. 2026. Open Source Spatial Data Science: Education. *American Association of Geographers Annual Meeting.* San Franciso, CA. 3/17/2026.
2. Kedron, P., T. Oshan, J. Holler and S. Salap-Ayca. 2025. Open Science in Geography. *American Association of Geographers Annual Meeting.* Detroit, MI. 3/24/2025.
3. Holler, J., R. Franklin, J. Wilson, C. Wilmott and A. Lee. 2024. Spatial Data Science in an Age of Scientific Disruption – A Curriculum. *American Association of Geographers Annual Meeting.* Honolulu, HI. 4/16/2024—4/20/2024.
4. Kedron, P., J. Holler, and B. Kar. 2020. Convergence, Reproducibility, and Replicability in GIScience: The Road Ahead and the Road Behind. *University Consortium for GIS 2020 Symposium*. Virtual Meeting. 6/3/2020. Available at https://www.ucgis.org/symposium-schedule-2020#Convergence
5. Kedron, Peter, M. Goodchild, J. Holler, B. Kar and E. Shook. 2020. Symposium on Frontiers in CyberGIS and Geospatial Data Science: Reproducibility and Replicability in Geographic Research. *American Association of Geographers Annual Meeting.* Virtual Meeting. 4/8/2020.

6. Holler, J., A. Fent, W. Moseley, C. Gibb, and S. Ishihara. 2020. "Slow" Geographies and Ecological-Ethical Dilemmas of International Research. 2020. *American Association of Geographers Annual Meeting.* Virtual Meeting. 4/8/2020.
7. Holler, J. 2019. The future of open education in geography. *Association of American Geographers Annual Meeting*. Washington, DC. 4/6/2019.
8. Holler, J. 2018. Teaching undergraduate geography service courses with a political ecology framework. *Association of American Geographers Annual Meeting*. New Orleans, LA. 4/12/2018.
9. Holler, J. 2016. Spatial inequity in urban climate change adaptation planning. *Association of American Geographers Annual Meeting: Spatializing Urban Climate Change Governance.* San Francisco, CA. 4/1/2016.
10. Holler, J. 2014. Open GIS projects in an advanced methods and techniques course. *Association of American Geographers Annual Meeting: Innovative Methods for Teaching GIS and Cartography.* Tampa, FL. 4/11/2014.

Research Grants and Awards

2023   [PI, $1,000] Vermont Atlas of Flood Risk and Resilience, *Faculty Research Assistant Fund*, Middlebury College.

2023   [PI, $20,000 with co-organizers R. Ball, N. Horton, E. Kaparakis, N. Medeiros and S. Supp] Workshop on Reproducibility and Replicability in the Liberal Arts, *The Alliance to Advance Liberal Arts Colleges*.

2023   [PI, $5,700] Assessing the viability of the Makuyuni Wildlife Corridor in Tanzania, *Middlebury URO Summer Research Assistant Fund*.

2022   [PI, $3,000] Geographies of Climate and Development on Mount Kilimanjaro, *Ada Howe Kent Grant*, Middlebury College.

2022   [PI, $5,000] Transforming theory-building and STEM education through reproductions and replications in the geographical sciences, *midd.data leave-year fellowship*, Middlebury College.

2020   [PI, $315,082 with co-PI Peter Kedron] Transforming theory-building and STEM education through reproductions and replications in the geographical sciences, *National Science Foundation Human-Environment and Geographical Sciences* award #2049837.

2020   [co-PI, $4,000 with PI Peter Kedron] Working with Students to Reproduce COVID-19 Research to Establish the Credibility of Findings and Accelerate Policymaker Adoption, *Geospatial Fellows for Advancing COVID-19 Research & Education*, through the Geospatial Software Institute at University of Illinois at Urbana-Champaign. https://gsi.cigi.illinois.edu/ .

2019   [declined: Co-PI, $32,584 sub-award of $401,672 grant] with PI Peter Kedron and co-PIs Bandana Kar, Nathan Piekielek, and Jason Tullis] RCN: Geographic Reproducibility and Replicability Improvement Network (GRRIN), *National Science Foundation Research Coordination Network*.

2016   [collaborator, $12,500 component of Memorial Hospital of Rhode Island/Brown University Family Medicine grant] Transforming Family Centered Primary Care for Children & Adolescents in Underserved Communities, *U.S. Department of Health and Human Services Health Resources and Services Administration*.

2015   [PI, $1,402] Tracking international development aid and climate change finance at the sub-national scale: a review of methodologies and empirical test in Malawi, *Faculty Research Assistant Fund*, Middlebury College.

2014   [Visiting Scholar with PI Timmons Roberts, $29,665] Official Funding for Adaptation to Climate Change: Understanding Geographic Patterns of Project Allocation: to Areas of Need or Political Connections? *Institute at Brown for Environment & Society Small Grant*, Brown University.

2014   [PI, $1,402] Open GIScience Education and Pedagogy, *Faculty Research Assistant Fund*, Middlebury College.

2010   [PI, $2,000] Environmental change, livelihood insecurity and opportunities for adaptation on Mount Kilimanjaro, *Mark Diamond Research Fund*, University at Buffalo.

2010   [PI, $1,000] Environmental change, livelihood insecurity and opportunities for adaptation on Mount Kilimanjaro, *Hugh W. Calkins Applied GIS Award*, University at Buffalo Geography.

2009   [PI, 2 IKONOS Scenes] Community-integrated GIS for conservation education and development on Mount Kilimanjaro, *GeoEye Foundation Imagery Grant.*

Teaching and Advising

Middlebury College

- FYSE 1547 Water as a Human Right and Fugitive Resource (FA2019)
- GEOG 100 Place and Society (FA2015, FA2016, FA2025)
- GEOG 120 Fundamentals of Geographic Information Systems (co-instructor SP2014, SP2015, and SP2018, teaching fellow FA2013, FA2014, and FA2017)
- GEOG 120/261 Human Geography with GIS (FA2018, SP2019, SP2020, FA2020, SP2024, FA2024, SP2025, SP2026)
- GEOG 205 Geographies of Nature, Power and Society (SP2016, SP2017)
- GEOG 209 Human Geography of Hazards (SP2017, FA2018, FA2021, FA2023, FA2024)
- GEOG 212 Urban Geography (FA2015 and FA2016)
- GEOG 323/361 Open Geographic Information Science (FA2019, SP2021, FA2021, FA2023, SP2025)
- GEOG 328 GIS for the Developing World (SP2014, SP2015 and SP2018)
- GEOG 428 Seminar in Geographies of Climate Change Adaptation and Development (SP2016, SP2019, SP2021, SP2024, FA2025)
- GEOG 1230 Data Science Across Disciplines (co-instructor WT2025)
- Thesis & research advising: Samuel Robertson (WT2026, SP2026), Tess Hegarty (FA 2025, WT2026), Aidan DeLorenzo (FA2025), Carina Huang (SP2025), Sam Roubin (FA2023, WT2024), Justin Lucas (WT2024), Brooke Laird (FA2021, WT2022, SP2022), Sidra Pierson (FA2021, WT2022), Mistaya Smith (FA2021, WT2022), Drew An-Pham (FA2021), Kufre Udoh (WT2021), Maja Cannavo (WT2021), Maddie Tango (FA2020, WT2021, SP2021), Ben Glass (FA2020, WT2021), Derrick Burt (FA2020), Tori Koontz (SP2020), Kristine Su (WT2020), Chica Morrow and Greyson Zatzick (FA2019), Kineret Grant-Sasson (SP2019), Walker Stewart (SP2019), Penelope Spencer (WT2018, SP2018), Emily Sun (WT2018), Alyne Figueiredo Goncalves (FA2017), Nicolas DeGolia (SP2016), Katie Chamberlain (SP2016), Lee Schlenker (SP2016), Parker Ziegler (SP2016), Amanda Werrell (SP2015)
- Research assistant mentoring: Liam Smith (SU2023, FA2023, WT2024), Elise Chan (FA2023), Charlie Deichman-Caswell (FA2023, WT2024), Justin Lucas (SU2023), Yifei Luo (SU2023), Emily Zhou (SU2022), Derrick Burt (SU2021), Drew An-Pham (SU2021), Kufre Udoh (SU2020), Sidra Pierson (SU2020), Hannah Gokaslan (SU2020), Arthur Ross (SU2019), Claire Gomba (SP2019), Benjamin Brown (SP2016), Hayden Shea (FA2014, SP2015, FA2015).

Brown University

- Research assistant mentoring: Eliza Drury (SU2015, FA2015, SP2016), Kailani Acosta (FA2015)
- Thesis & research advising: Eliza Drury (SP2016)

University of Mary Washington

- GEOG 102 Introduction to Human Geography (FA2012)
- GEOG 245 Environment and Society (SP2013)
- GEOG 250 Introduction to Geographic Information Systems and Cartography (FA2012, SP2013)

University at Buffalo, State University of New York

- GEO 221/505 Univariate Statistics (recitation instructor FA2007)
- GEO 330 Dynamics of International Business (assistant FA2009)
- GEO 334 International Environments and Commercial Problems (instructor SU2008, assistant SP2010)
- GEO 367 Urban Social Geography (assistant SP2010)
- GEO 481/506 Introduction to Geographic Information Systems (laboratory instructor SP2008)

Tanzania: Buswelu, Hekima, and Ihungo Secondary Schools

- Form I: Mathematics, starting with Orientation to the English Language
- Forms I – VI: Information Technology
- Faculty and Staff: Consulting and tutoring in Information Technology

Membership in Professional Organizations

- Association of American Geographers (AAG) and three specialty groups: Africa; Geographic Information Science & Systems; and Hazards Risks and Disasters

Professional Service

- Middlebury College Technology Advisory Committee, 2025-2026.
- Special Issue Editor, Cartography and Geographic Information Science, 2023-2025.
- AAG Nystrom Award Committee, 2024-2025.
- Middlebury College Digital Learning, ITS, and Library Engagement Committee, 2024-2025.
- Middlebury College Judicial Board Faculty Member: 2020-2021 and 2023-2024.
- Organizing Committee, AAG 2024 Symposium on Geospatial Data Science for Sustainability
- Organizer and Moderator, Elemental: Reimagine Wildfire documentary film and panel discussion. Middlebury College, October 18, 2023. https://go.middlebury.edu/elemental
- Program Committee, I-GUIDE Forum 2023: Forum 2023 Harnessing the Geospatial Data Revolution for Sustainability Solutions
- Organizing Committee, AAG 2023 Symposium on harnessing the geospatial data revolution for sustainability solutions
- Treasurer, Development Geographies Specialty group of the AAG. 2018 – 2021.
- Participant, Universal Design for Learning Collaborative at Middlebury College. 2018 – 2019.
- Director, Development Geographies Specialty Group of the AAG. 2016 – 2018.
- Returned Peace Corps Volunteer, Speaker/Panelist at Ithaca College, University at Buffalo, Buffalo State College, University of Mary Washington, Middlebury College. 1/2006 – Present.
- Intern, Jane Goodall Institute Roots & Shoots Program in Dar es Salaam and Moshi, Tanzania. 1/2009 – 7/2009.

- Organizer, GIScience IGERT Colloquium Series and Orientation, University at Buffalo, 8/2008 – 12/2008.
- Organizer, Geography Graduate Student Research Symposium, University at Buffalo, 8/2007 – 5/2008.
- PhD Student Representative to the Geography Department Faculty, University at Buffalo, 8/2007 – 5/2008.
- Information Technology Volunteer, Peace Corps Tanzania, 9/2003 – 12/2005.

Peer/External Reviewer

- Books: *Routledge, Taylor & Francis*
- Curriculum: *International Baccalaureate program in Geography*
- Grants and Awards: *National Science Foundation (four panels 2021-2025), AAG Development Geographies Specialty Group, AAG Nystrom Awards*
- Journals: *Cartography and Geographic Information Science, International Journal of Geographical Information Science, International Journal of Geo-Information, International Journal of Environmental Research and Public Health, The Professional Geographer, ACME, The Canadian Geographer, International Journal of Sociology and Anthropology, Transactions in GIS, ISPRS International Journal of Geo-Information, BMC Public Health, Applied Geography, Sustainability, Land, Global Studies Quarterly, Journal of Geography in Higher Education, Area, Earth System Governance*

Academic and Professional Development

Fellowship:	Geospatial Software Institute COVID-19 Fellowship, University of Illinois Urbana- Champaign, 2020-2021.
Training:	CITI Program Human Subjects Research Social/Behavioral Research Certification. 7/9/2021.
Training:	GitHub Education Training, 1/27/2020.
Workshop:	R for Geospatial Processing, August 27, FOSS4G Bucharest. 8/27/2019.
Workshop:	Intro to Geospatial Data in R, Summer Data Workshop Series, Middlebury College, 7/23/2019.
Workshop:	Data Wrangling and Visualization in R, the Tidy Way, Middlebury College 2019 Scholars Institute, 5/30/2019.
Workshop:	Getting Started in R for Absolute Beginners, Middlebury College 2019 Scholars Institute, 5/29/2019.
Workshop:	Universal Design for Learning Collaborative, Middlebury College, 2018-2019.
Seminar:	Innovations in Teaching GIS, Middlebury College, Middlebury, VT. 9/9 – 12/6/2013 and 9/9 – 12/5/2014.
Workshop:	Middlebury College 26th Annual Retreat on Teaching Writing, Pittsford, VT. 8/20 – 8/21/2013.
Workshop:	Engineering for Stream Ecosystem Restoration, University at Buffalo Environmental Engineering and ERIE IGERT. 6/2 – 6/19/2008.
Workshop:	Vespucci Summer Institute on Geographic Information Science, Tuscany, Italy. 6/10 – 6/15/2007.
Certification:	Advanced Swahili Language, Peace Corps, Tanzania. 2005.
Study Abroad:	Archeology fieldwork and field studies, Peru. Summer 2002.

Study Abroad: Semester at Sea (University of Pittsburgh) visiting: Cuba, Brazil, South Africa, Kenya, India, Malaysia, Viet Nam, Hong Kong, China, Japan. Spring 2001.