



Michelle Stuhlmacher

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Department of Geography & GIS, DePaul University
990 W. Fullerton Ave, Chicago, IL 60614

Academic Appointments

- 2023- **Affiliated Faculty**, Center for Community Health Equity, DePaul University & Rush University.
- 2020- **Assistant Professor**, Department of Geography & GIS, DePaul University, Chicago, IL.

Education

School of Geographical Sciences and Urban Planning, Arizona State University.

2020 Ph.D. - Geography. Co-Chairs: Drs. B.L. Turner II & Matei Georgescu.

2017 M.A. - Geography. Chair: Dr. B.L. Turner II.

Department of Geography, George Washington University.

2015 B.A. - Geography.

Specialties

Earth Observation | Spatial Analysis | Urban Land Systems | Sustainability Science | Urban Green Space | Community-Engaged Research.

Publications

Peer-Reviewed Articles

20. **Stuhlmacher, M.**, Williams, D.*, Impellizeri, C.*, and Curran, W. (2025). "Bridging the land use gap: Examining tree canopy cover and connectivity by land use in 10 U.S. Cities". *Urban Forestry and Urban Greening*. DOI: [10.1016/j.ufug.2024.128626](https://doi.org/10.1016/j.ufug.2024.128626).
19. **Stuhlmacher, M.**, Woods, J.*, Yang, L., and Sarigai, S. (2024). "How does the composition and configuration of green space influence urban noise?: A systematic literature review". *Current Landscape Ecology Reports*. DOI: [10.1007/s40823-024-00099-0](https://doi.org/10.1007/s40823-024-00099-0).
18. Hu, Y., Connor, D.S., **Stuhlmacher, M.**, Peng, J., and Turner, B.L. II (2024) "More urbanization, more polarization: evidence from two decades of urban expansion in China". *npj Urban Sustainability*. DOI: [10.1038/s42949-024-00170-z](https://doi.org/10.1038/s42949-024-00170-z).
17. **Stuhlmacher, M.** and Kim, Y. (2024). "The unequal connectivity of urban green space: A spatial analysis of park and tree canopy distribution in 10 US cities". *Urban Forestry and Urban Greening*. DOI: [10.1016/j.ufug.2024.128332](https://doi.org/10.1016/j.ufug.2024.128332).
16. Rigolon, A., Collins, T., Kim, J., **Stuhlmacher, M.**, and Christensen, J., (2024). "Does gentrification precede and follow greening? Evidence about the green gentrification cycle in Los Angeles and Chicago". *Landscape and Urban Planning*. DOI: [10.1016/j.landurbplan.2024.105095](https://doi.org/10.1016/j.landurbplan.2024.105095).
15. Nelson, J., Won, Y., Kim, J., **Stuhlmacher, M.**, and Kim, Y. (2024). "Is the grass greener or water bluer? Drivers of local park visitation patterns in Phoenix, Arizona". *Urban Forestry and Urban Greening*. DOI: [10.1016/j.ufug.2024.128325](https://doi.org/10.1016/j.ufug.2024.128325).

* indicates undergraduate or MA student collaborator

14. Kim, J., Kim, Y., and **Stuhlmacher, M.**, (2024). "The Green Space Dilemma: Pathways to Greening with and without Gentrification". *Journal of Urban Affairs*. DOI: [10.1080/07352166.2024.2326489](https://doi.org/10.1080/07352166.2024.2326489).
13. Crowley, M.A., **Stuhlmacher, M.**, Trochim, E.D., Van Den Hoek, J., Pasquarella, V.J., Szeto, S.H., Howarth, J.T., Platt, R., Roy, S., Tellman, B., Chakraborty, T.C., Ignatius, A., Cherrington, E., Markert, K., Wu, Q., Madhusudan, M.D., Mayer, T., Cardille, J.A., Erickson, T., Moore, R., Clinton, N.E., and Saah, D.S. (2023) "Pillars of cloud-based Earth observation science education". *AGU Advances*. DOI: [10.1029/2023AV000894](https://doi.org/10.1029/2023AV000894).
12. **Stuhlmacher, M.**, Georgescu, M., Turner, B.L. II, Hu, Y., Goldblatt, R., Gupta, S.*, Frazier, A., Kim, Y., Balling, R.C. and Clinton, N. (2022). "Are global cities homogenizing? An assessment of urban form and environmental implications". *Cities*. DOI: [10.1016/j.cities.2022.103705](https://doi.org/10.1016/j.cities.2022.103705).
11. **Stuhlmacher, M.**, Kim, Y., and Kim, J. (2022). "The role of green space in Chicago's gentrification". *Urban Forestry & Urban Greening*. DOI: [10.1016/j.ufug.2022.127569](https://doi.org/10.1016/j.ufug.2022.127569).
10. Wagner, M., Wentz, E.A., and **Stuhlmacher, M.** (2022). "Quantifying oil palm expansion in Southeast Asia from 2000-2015: A data fusion approach". *Journal of Land Use Science*. DOI: [10.1080/1747423X.2021.2020918](https://doi.org/10.1080/1747423X.2021.2020918).
9. **Stuhlmacher, M.**, Andrade, R., Turner, B.L. II, Frazier, A.E. and Li, W. (2020). "Environmental outcomes of urban land systems change: Comparing riparian design approaches in the Phoenix metropolitan area". *Land Use Policy*. DOI: [10.1016/j.landusepol.2020.104615](https://doi.org/10.1016/j.landusepol.2020.104615).
8. **Stuhlmacher, M.**, Turner, B.L. II, Frazier, A.E., Leffel, J.* and Kim, Y. (2020). "Institutional shifts and environmental change: A case study from the Republic of Cuba's Período Especial". *Journal of Land Use Science*. DOI: [10.1080/1747423X.2020.1829119](https://doi.org/10.1080/1747423X.2020.1829119).
7. Uludere, N., **Stuhlmacher, M.**, Smith, J.P., Clinton, N., and Georgescu, M. (2019). "Urban agriculture's bounty: Contributions to Phoenix's sustainability goals". *Environmental Research Letters*. DOI: [10.1088/1748-9326/ab428f](https://doi.org/10.1088/1748-9326/ab428f).
6. **Stuhlmacher, M.**, Patnaik, S., Streletskiy, D., and Taylor, K. (2019). "Cap-and-trade and emissions clustering: A spatial-temporal analysis of the European Union Emissions Trading Scheme". *Journal of Environmental Management*. DOI: [10.1016/j.jenvman.2019.109352](https://doi.org/10.1016/j.jenvman.2019.109352).
5. Chhetri, N., **Stuhlmacher, M.**, and Ishtiaque, A. (2019). "Nested pathways to adaptation". *Environmental Research Communications*. DOI: [10.1088/2515-7620/aaf9f9](https://doi.org/10.1088/2515-7620/aaf9f9).
4. Wang, C., Myint, S., Fan, P., **Stuhlmacher, M.**, and Yang, J. (2018). "The impact of urban expansion on the regional environment in Myanmar: a case study of two capital cities". *Landscape Ecology*. DOI: [10.1007/s10980-018-0632-1](https://doi.org/10.1007/s10980-018-0632-1).
3. Clinton, N. **Stuhlmacher, M.**, Miles, A., Uludere, N., Wagner, M., Georgescu, M., Herwig, C., and Gong, P. (2018). "Global geospatial ecosystem services estimate of urban agriculture". *Earth's Future*. DOI: [10.1002/2017EF000536](https://doi.org/10.1002/2017EF000536).
2. Goldblatt, R., **Stuhlmacher, M.**, Tellman, B., Clinton, N., Hanson, G., Georgescu, M., Wang, C., Serrano-Candela, F., Khandelwal, A., Cheng, W., and Balling, R. (2018). "Mapping urban land cover: A novel machine learning approach using Landsat and Nighttime Lights". *Remote Sensing of Environment*. DOI: [10.1016/j.rse.2017.11.026](https://doi.org/10.1016/j.rse.2017.11.026).
1. Häger, A., Fernández Otárola, M., **Stuhlmacher, M.**, Acuña Castillo, R., and Contreras Arias, A. (2015). "Effects of landscape composition and management on the diversity and structure of tree species assemblages in coffee agroforests". *Agriculture, Ecosystems and Environment*. DOI: [10.1016/j.agee.2014.08.022](https://doi.org/10.1016/j.agee.2014.08.022).

* indicates undergraduate or MA student collaborator

Editor-Reviewed Book Chapters & Articles

4. Kim, J. and **Stuhlmacher, M.** (2024). "Clusters of Conditions for Green Gentrification". In *Green Gentrification and Environmental Injustice: A Complexity Approach to Policy*, edited by Campbell, H., Eckerd, A. and Kim, Y.
3. **Stuhlmacher, M.** (2024). "Earth Observation". In *A Research Agenda in Spatial Analysis*, edited by L.J. Wolf, A. Heppenstall, and R. Harris. ISBN: [978 1 80220 322 6](#)
2. **Stuhlmacher, M.** and Goldblatt, R. (2023). "Urban Environments". In *Cloud-Based Remote Sensing with Google Earth Engine: Fundamentals and Applications*, edited by J. Cardille, M. Crowley, D. Saah, and N. Clinton, 679-702. Springer International Publishing. DOI: [10.1007/978-3-031-26588-4_33](#).
1. Curran, W., **Stuhlmacher, M.**, and Anderson, E. (2023). "Getting to Just Green Enough". *Landscape Architecture Plus (LA+): Interdisciplinary Journal of Landscape Architecture*. URL: [laplusjournal.com/18-BEAUTY-1](#).

Funded Grants and Awards

External:

- 2023-2026 **NSF Strengthening American Infrastructure**, National Science Foundation. Role: co-PI, Grant Number: 2324642, Title: "SAI: Healthy and Equitable Public Spaces", Award: \$750,000.
- 2022-2024 **NASA Equity and Environmental Justice**, National Aeronautics and Space Administration: Earth Science Applications. Role: PI, Grant Number: 80NSSC22K1676, Title: "Designing for Just Green Enough: A Data Integration Tool for Informing Community Green Space Planning", Award: \$250,000.
- 2022 **Carolyn Merry Mini-Grant (TRELIS)**, University Consortium for Geographic Information Science, Role: PI, Title: "Where do we go from here? An open-source TRELIS toolkit", Award: \$2,500.

Internal:

- 2024-2025 **Departmental Initiative Grant**, Quality of Instruction Council, DePaul University, Title: "Integrating Drone Technology into Departmental Curriculum", Award: \$7,500.
- 2021-2022 **Urban Collaborative Community Research Initiative**, Urban Collaborative, DePaul University, Title: "Designing for Just Green Enough: Greening without Gentrification", Award: \$25,000.
- 2021 **Undergraduate Research Assistant Program (URAP)**, College of Liberal Arts and Social Sciences, DePaul University, Title: "The Patterns and Processes of Urban Green Space: A Systematic Review of Urban Applications of Landscape Metrics", Award: \$2,250.
- 2021 **Research Equipment Grant**, University Research Council, DePaul University, Title: "Are Informal Greenspaces 'Just Green Enough'? A Spatiotemporal Analysis of Green Gentrification in Chicago", Award: \$3,060.
- 2020 **Graduate Professional Development Award**, ASU School of Geographical Sciences and Urban Planning, Award: \$1,400.
- 2019-2020 **Emeritus Faculty Fellowship**, ASU Emeritus College & ASU Graduate College, Award: \$1,400.
- 2019 **Collaborative Graduate Student Research Grant**, Central Arizona Project Long Term Ecological Research (CAP LTER), NSF Grant DEB-1832016, Award: \$6,000.
- 2019 **Completion Fellowship**, ASU Graduate College, Award: \$8,500.

- 2018 **Collaborative Graduate Student Research Grant**, Urban Resilience to Extremes Sustainability Research Network (UREx SRN), NSF Grant BCS-1444755, Award: \$6,000.
- 2018 **Graduate Student Research Grant**, Central Arizona Project Long Term Ecological Research (CAP LTER), NSF Grant DEB-1637590, Award: \$4,000.
- 2017-2018 **Lattie and Elva Coor Building Great Communities Graduate Fellowship**, Award: \$3,000.
- 2017 **Global Intensive Experience Scholarship**, ASU School of Sustainability, Award: \$600.
- 2016-2017 **Gilbert F. White Fellowship**, ASU School of Geographical Sciences and Urban Planning, Award: \$24,000.
- 2014 **Sigelman Undergraduate Research Enhancement (SURE) Award**, GWU University Honors Program, Award: \$500.
- 2014 **Undergraduate Research Enhancement Fund Award**, GWU, Award: \$655.
- 2012 **J.B. & Maurice C. Shapiro Public Service Award**, GWU, Award: \$5,500.

Published Datasets

- 2024 Lambert, S., Halpern, D., Cox, A., Paykin, S., Singh, S., Mukesh Chugani, Vijay, S., Shan, P., Curran, W., **Stuhlmacher, M.**, and Kolak, M. "Chives: A Chicago Environmental Justice Geospatial Dashboard (v3.0.0)" Zenodo. DOI: [10.5281/zenodo.13774077](https://doi.org/10.5281/zenodo.13774077)
- 2023 Halpern, D., Paykin, S., Keane, J., Singh, S., Vijay, S., Chugani, M., Curran, W., **Stuhlmacher, M.**, and Kolak, M. "Chives: A Chicago Environmental Justice Geospatial Dashboard (v2.0.0)" Zenodo. DOI: [10.5281/zenodo.8212065](https://doi.org/10.5281/zenodo.8212065)
- 2021 Frazier, A.E., Sehner, B., **Stuhlmacher, M.**, and Watkins, L. "Composited land surface temperature of the greater Phoenix, Arizona, USA metropolitan area." Environmental Data Initiative. DOI: [10.6073/pasta/ebe6d816dcad68ad4d2bd283c5830a63](https://doi.org/10.6073/pasta/ebe6d816dcad68ad4d2bd283c5830a63)
- 2019 **Stuhlmacher, M.**, Watkins, L. "Normalized Difference Vegetation Index (NDVI) derived from National Agriculture Imagery Program (NAIP) data for the central Arizona region." Environmental Data Initiative.
DOI 2010: [10.6073/pasta/bc90bb968fe198c58e6abdfaf8cfa0d5](https://doi.org/10.6073/pasta/bc90bb968fe198c58e6abdfaf8cfa0d5)
DOI 2013: [10.6073/pasta/845bb4a8b271a542942e47afcc326196](https://doi.org/10.6073/pasta/845bb4a8b271a542942e47afcc326196)
DOI 2015: [10.6073/pasta/906400c74eae1bf4b736af4d77b17737](https://doi.org/10.6073/pasta/906400c74eae1bf4b736af4d77b17737)
DOI 2017: [10.6073/pasta/b4cc65eea352cd50ca0256a5139dfd75](https://doi.org/10.6073/pasta/b4cc65eea352cd50ca0256a5139dfd75)
- 2019 **Stuhlmacher, M.** "Soil-Adjusted Vegetation Index (SAVI) derived from National Agriculture Imagery Program (NAIP) data for the central Arizona region." Environmental Data Initiative.
DOI 2010: [10.6073/pasta/ed991a96b1500a0c245ed7faac5457e3](https://doi.org/10.6073/pasta/ed991a96b1500a0c245ed7faac5457e3)
DOI 2013: [10.6073/pasta/949a1bf1401772736bf2e46482cf3522](https://doi.org/10.6073/pasta/949a1bf1401772736bf2e46482cf3522)
DOI 2015: [10.6073/pasta/5a63cb1d564318c2400fc6a41a475d23](https://doi.org/10.6073/pasta/5a63cb1d564318c2400fc6a41a475d23)
DOI 2017: [10.6073/pasta/2007d7a24828b4681f5e19e3606d9591](https://doi.org/10.6073/pasta/2007d7a24828b4681f5e19e3606d9591)
- 2019 **Stuhlmacher, M.**, Watkins, L. "Numerical summaries of vegetation indices and land surface temperature derived from remotely sensed imagery in Phoenix Area Social Survey (PASS) neighborhoods of central Arizona." Environmental Data Initiative. DOI: [10.6073/pasta/e92101ea8e9637d91f5a9ebfd987c3f3](https://doi.org/10.6073/pasta/e92101ea8e9637d91f5a9ebfd987c3f3)

Honors and Awards

- 2024 **ISTC Researcher to Know**, Included in the Illinois Science & Technology Coalition's (ISTC) list of researchers that are driving innovation in the state of Illinois.

- 2023 **IPCC Author Nomination**, Nominated by NASA to contribute to the scoping of the United Nation's IPCC (Intergovernmental Panel on Climate Change) Special Report on Climate Change in Cities.
- 2023, 2018 **Heidelberg Laureate Forum**, Selected through a competitive process for participation and funding to attend the Heidelberg Laureate Forum in 2018 (by Oak Ridge Associated Universities and NSF) and again in 2023 as an alumni for the 10th anniversary of the forum.
- 2022 **TRELIS (Training and Retaining Leaders in STEM - Geospatial Sciences) Fellow**, Selected through a competitive process to participate in a professional development program for academic women in the geospatial sciences. Program funded via NSF Award 1660400.
- 2017-2020 **College of Liberal Arts and Science Student Leader Award**, Arizona State University.
- 2019 **College of Liberal Arts and Science Graduate Excellence Award**, Arizona State University.
- 2014-2015 **Udall Scholar**, Morris K. Udall and Stewart L. Udall Foundation.
- 2013-2015 **Hollings Scholar**, National Oceanic and Atmospheric Administration.
- 2015 **Robert D. Campbell Prize**, George Washington University, Department of Geography.

Teaching and Mentoring

Earth Observation I (undergraduate), DePaul University

Earth Observation II (undergraduate/graduate), DePaul University

GIS II: Community GIS (undergraduate), DePaul University

GIS for Community Development (graduate), DePaul University

GIS for Sustainable Urban Development (graduate), DePaul University

Explore Chicago: The Making of the City in a Garden (undergraduate), DePaul University

Geospatial Analysis with Google Earth Engine, (undergraduate/graduate), Arizona State University

Physical Geography Lab (undergraduate), Arizona State University

Mentoring:

- 2024 **Salise Sepulveda**, Research Assistant, NASA Equity and Environmental Justice Grant
- 2023-2024 **Dajoin Williams**, Research Assistant, NASA Equity and Environmental Justice Grant
- 2023-2024 **Chris Impellizeri**, Research Assistant, NASA Equity and Environmental Justice Grant
- 2023-2024 **Erin Koster**, Summer Undergraduate Research Grant (SURG) & Research Assistant, NASA Equity and Environmental Justice Grant
- 2022-2023 **Joshua Woods**, Graduate Research Assistant, Sustainable Urban Development
- 2021-2023 **Kayleigh Zinter**, Dissertation Committee, Department of Psychology
- 2022 **Makala Morales**, Graduate Research Assistant, Urban Collaborative Community Research Initiative
- 2022 **Evelyn Ryan**, Graduate Research Assistant, Urban Collaborative Community Research Initiative
- 2021-2022 **Isabella Corya**, Graduate Research Assistant, Sustainable Urban Development
- 2021 **Josephine Stratman**, Undergraduate Research Assistant (URAP), DePaul STEM Showcase, Poster: "Urban Expansion and Temperature in Delhi, India"

Invited Talks

- 2023 **Stuhlmacher, M.** "Urban green space, from space: leveraging satellite imagery to understand green space locally and globally", South Dakota State University, Virtual, November 3rd.

- 2023 **Stuhlmacher, M.** "Are urban landscapes predictable?: Pattern similarities in urban green space and the built-environment of global cities", Oxford Programme for Sustainable Infrastructure Systems, Virtual, January 11th.
- 2022 **Stuhlmacher, M.** "Processing census data for the mapping of Chicago's gentrified neighborhoods", Working with Spatial Data for Policy Research Using R - Arizona State University, Center on Technology, Data and Society, Virtual, October 21st.
- 2022 **Stuhlmacher, M.** "Satellite to green space planning", Ladies of Landsat, Landsat 50th anniversary Capitol Hill celebration, Washington, DC. July 21st.
- 2021 **Stuhlmacher, M.**, "Equity and Inclusion in Academic Leadership", AlumNode Coffee Break (Heidelberg Laureate Forum), Virtual. May 20th.
- 2020 **Stuhlmacher, M.**, "Remote Sensing Curriculum Design with Google Earth Engine", Google Earth Engine Education Group, Virtual. November 20th.
- 2020 **Stuhlmacher, M.**, "Geospatial Applications for Promoting Sustainable Urban Land Systems", Geography Department Colloquium, University of Northern Iowa, Virtual. March 6th.

Conference Presentations

- 2024 **Stuhlmacher, M.**, Williams, D.*, Impellizeri, C.*, and Curran, W. "The Shade Divide: The Role of Land Use and Tree Planting Policies in Urban Tree Canopy Connectivity", American Geophysical Union Fall Meeting, Washington, DC. December 9th.
- 2024 Rigolon, J., **Stuhlmacher, M.**, Christensen, J., Collins, T., and Kim, J. "What Attracts Greening Investments to Gentrifying Communities?", Association of Collegiate Schools of Planning, Seattle, WA. November 8th.
- 2024 Alavez, J., Cox, A., Curran, W., Kolak, M., Lambert, S., Lia, J.*, and **Stuhlmacher, M.** "ChiVes: Integrating Chicago Environmental Justice Data, Researchers, and Communities with Decentralized Web Architecture, Open GIS, and Participatory Design", International Medical Geography Symposium, Atlanta, GA. July 15th.
- 2024 Koster, E.* and **Stuhlmacher, M.** "Amplifying Disparities: The Unequal Burden of Transportation Noise on Minority and Rural Communities", American Association of Geographers, Honolulu, HI. April 19th.
- 2024 Williams, D.*, Curran, W., **Stuhlmacher, M.**, Alavez, J., Kolak, M. and Impellizeri, C. "Data is great, but... Co-producing knowledge for environmental justice", American Association of Geographers, Honolulu, HI. April 18th.
- 2024 Nelson, J., Won, Y., Kim, J., **Stuhlmacher, M.**, and Kim, Y. "Exploring the drivers of local and non-local urban greenspace use through human mobility data", American Association of Geographers, Honolulu, HI. April 16th.
- 2024 **Stuhlmacher, M.**, Impellizeri, C.*, Williams, D.*, Alavez, J., and Kolak, M. "Designing for Just Green Enough: A Data Dashboard for Community Green Space Planning", American Association of Geographers, Honolulu, HI. April 16th.
- 2023 Koster, E.* and **Stuhlmacher, M.** "Amplifying Disparities: The Unequal Burden of Transportation Noise on Minority and Rural Communities", AAG West Lakes Regional Meeting, Chicago, IL. Oct 21st.
- 2023 Rigolon, A., Collins, T., Kim, J., **Stuhlmacher, M.**, and Christensen, J. "Does gentrification precede and follow greening? Evidence about the green gentrification cycle in Los Angeles and Chicago", Association of Collegiate Schools of Planning (ACSP), Chicago, IL. Oct 20th.

- 2023 **Stuhlmacher, M.**, Frazier, A.E., Corya, I., and Yang, W. "Future cities may be wealthier and more innovative, but less green", American Association of Geographers, Denver, CO. March 23rd.
- 2022 Kim, J., **Stuhlmacher, M.**, and Kim, Y. "The Green Space Dilemma: Pathways to Greening with and without Gentrification", Association for Public Policy Analysis & Management, Washington, DC. Nov 18th.
- 2022 Hague, E., **Stuhlmacher, M.**, and Lorr, M. "Student Engagement and Community-led Research in Chicago", Coalition of Urban and Metropolitan Universities, San Diego, CA. Oct 26th.
- 2022 Cardille, J., Saah, D., Crowley, M., Clinton, N., **Stuhlmacher, M.** and Nicolau, A. "A New Open-Access Book Teaching Earth Engine Fundamentals and Applications", Geo For Good, Mountain View, CA. Oct 6th.
- 2022 Kolak, M., Halpern, D., **Stuhlmacher, M.**, Anderson, E., and Paykin, S. "Harmonizing Environmental Data and Partnerships for Resilient Futures", MetroLab Summit, Chicago, IL. June 2nd.
- 2021 **Stuhlmacher, M.** and Kim, Y. "Gentrification and urban green space in Chicago", American Geophysical Union Fall Meeting, Virtual. December 15th.
- 2021 **Stuhlmacher, M.** and Kim, Y. "The role of green space in gentrification", Geo For Good, Virtual. October 20th.
- 2021 **Stuhlmacher, M.**, Georgescu, M., Hu, Y., Turner, B.L. II, Goldblatt, R., Gupta, S.*, Frazier, A., and Clinton, N. "Is urban form homogenizing in global cities? Assessing built footprint changes and implications for the urban heat island", American Association of Geographers Annual Meeting, Virtual. April 9th.
- 2020 Gupta, S.*, **Stuhlmacher, M.**, Georgescu, M. "Quantifying Urban Encroachment on Forests Using Machine Learning", American Association for the Advancement of Science Annual Meeting, Seattle, WA. February 14th.
- 2020 **Stuhlmacher, M.**, Earl, S. Watkins, L. "Numerical summaries and raster data of vegetation indices and land surface temperature derived from remotely sensed imagery." Central Arizona-Phoenix LTER Annual Meeting, Scottsdale, AZ. January 17th.
- 2019 **Stuhlmacher, M.**, Andrade, R., Turner, B.L. II. "The Ecological Outcomes of Riverfront Redevelopment in Tempe, Arizona." US Regional Association for the International Association for Landscape Ecology Annual Meeting, Fort Collins, CO. April 7th.
- 2019 Gupta, S.*, **Stuhlmacher, M.**, Georgescu, M. "Quantifying Urban Encroachment on Forests Using Machine Learning with Remote Sensing", Urban Climate Research Center Poster Competition, Tempe, AZ. March 27th.
- 2019 **Stuhlmacher, M.**, Andrade, R., Turner, B.L. II. "The Ecological Outcomes of Land System Architecture Change: A Case Study of Riverfront Redevelopment in Tempe, Arizona." Central Arizona-Phoenix LTER Annual Meeting, Scottsdale, AZ. January 11th.
- 2019 Uludere, N., **Stuhlmacher, M.**, Smith, J.P., Georgescu, M. "Growing Resilience: The Urban Agriculture Potential in Metro Phoenix." American Meteorological Society Annual Meeting, Phoenix, AZ. January 7th.
- 2018 **Stuhlmacher, M.**, Georgescu, M., Goldblatt, R., Gupta, S.*, Gupta, V.*, and Clinton, N. "Urbanization Dynamics in the United States and India: Assessing Growth Patterns from Landsat Time-Series." American Geophysical Union Fall Meeting, Washington, DC. December 13th.
- 2018 **Stuhlmacher, M.**, Goldblatt, R., Georgescu, M., Gupta, S.*, Clinton, M. "Mapping Urban Landcover with Machine Learning Techniques". Heidelberg Laureate Forum, Heidelberg, Germany. September 27th.

- 2018 **Stuhlmacher, M.**, Goldblatt, R., Georgescu, M., Clinton, M., Tellman, B., Hanson, G., Khandelwal, A. "30-meter Resolution Urban Classification in Google Earth Engine". Central Arizona-Phoenix LTER Annual Meeting, Scottsdale, AZ. January 5th.
- 2017 Clinton, N., **Stuhlmacher, M.**, Miles, A., Uludere, N., Wagner, M., Georgescu, M., Herwig, C., Gong, P. "A Global-Scale Estimate of Ecosystem Services from Urban Agriculture: Understanding Incentives for Natural Capital in Cities". American Geophysical Union Fall Meeting, New Orleans, LA. December 13th.
- 2017 **Stuhlmacher, M.**, Goldblatt, R., Thai, G., Roy, S. "Quantifying Urbanization and Deforestation Outcomes from India's National Highway's Development Project". Geo4Dev. Berkeley, CA. September 6th.
- 2017 **Stuhlmacher, M.**, Georgescu, M., Clinton, N. "Google Earth Engine's Utility for Urban Applications". Urban Water Innovation Network Annual Meeting. Fort Collins, CO. July 31st.
- 2017 **Stuhlmacher, M.**, Goldblatt, R., Tellman, B., Clinton, N., Hanson, G., Georgescu, M., Wang, C., Serrano-Candela, F., Khandelwal, A. "Global Urban Initiative". Google Earth Engine Users Summit. Mountain View, CA. June 12th.
- 2017 **Stuhlmacher, M.**, Patnaik, S. "The Economic Geography of International Cap and Trade Programs: Evidence from the European Union Trading Scheme". American Association of Geographers Annual Meeting, Boston, MA. April 9th.
- 2016 **Stuhlmacher, M.**, Wang, C., Georgescu, M., Tellman, E., Balling, B., Clinton, N., Collins, L., Goldblatt, R., and Hanson, G. "Towards a 30m Resolution Times Series of Historical Global Urban Expansion: Exploring Variation in North American Cities". American Geophysical Union Fall Meeting, San Francisco, CA. December 15th.
- 2016 **Stuhlmacher, M.** "Governance and Adaptation: A Case Study of Urban Agriculture in Cuba's Special Period". Association of American Geographers Annual Meeting, San Francisco, CA. April 1st.
- 2015 **Stuhlmacher, M.** and Squires, M. "Regional Snowfall Impact". Association of American Geographers Annual Meeting: GIS Poster Session, Chicago, IL. April 24th.
- 2014 **Stuhlmacher, M.** and Squires, M. "Societal Impact of Snowfall". NOAA Undergraduate Scholars Research Symposium, Silver Spring, MD. July 27th.
- 2013 **Stuhlmacher, M.** and Häger, A. "Land-use factors influencing plant similarity between forest and agroforests". Association of American Geographers Annual Meeting, Tampa, FL. April 12th.
- * indicates undergraduate collaborator

Service

Department:

- 2025 **Assessment Committee (GEO 201)**, Department of Geography & GIS, DePaul University.
- 2024 **Search Committee for GIS Coordinator**, Department of Geography & GIS, DePaul University.
- 2021-2024 **GIS Curriculum Committee (Chair)**, Department of Geography & GIS, DePaul University.
- 2022 **Assessment Committee (GEO 210)**, Department of Geography & GIS, DePaul University.
- 2020 **Assessment Committee (GEO 233/INT 388)**, Department of Geography & GIS, DePaul University.
- 2018-2020 **Diversity and Inclusion Committee**, School of Geographical Sciences & Urban Planning, ASU.
- 2016-2017 **Graduate Student Committee (President)**, School of Geographical Sciences & Urban Planning, ASU.

2015-2016 **Colloquium Student Coordinator**, School of Geographical Sciences & Urban Planning, ASU.

College:

2021-2024 **Advisory Board**, Sustainable Urban Development Graduate Program, DePaul University.

2021-2023 **Scholarship Committee**, College of Liberal Arts and Social Sciences, DePaul University.

University:

2024-2025 **Planning Committee**, Innovation Day, DePaul University.

2021-2024 **Advisory Board**, Scientific Inquiry Learning Domain, DePaul University.

2021-2024 **Planning Committee**, Annual Undergraduate STEM Showcase, DePaul University.

2022 **Steering Committee**, Engineering Program, DePaul University.

2021, 2022 **Reviewer**, Annual Undergraduate STEM Showcase, DePaul University.

Discipline:

2024 **Outstanding Student Presentation Award Judge**, American Geophysical Union Annual Meeting.

2019-2023 **Ladies of Landsat**, Organize in-person meet-ups at conferences and prepare weekly "Manuscript Monday" tweets highlighting the research of women in remote sensing via the Ladies of Landsat Twitter account.

2022 **Student Lightning Talk Competition Judge**, University Consortium for Geographic Information Science (UCGIS) Symposium.

2021 **Student Paper Competition Judge**, Landscape Specialty Group, AAG Annual Meeting.

Workshop and Conference Session Organization:

2024 **Session Organizer**, "Leveraging urban green space to address compound crises", AAG Annual Meeting, Honolulu, HI. April 16th.

2023 **Workshop Organizer**, "Earth Engine Education Workshop", GeoForGood, Mountain View, CA. October 13th.

2023 **Session Organizer**, "Contextualizing urban green space in the changing city", AAG Annual Meeting, Denver, CO. March 23rd.

2022 **Workshop Organizer**, "Earth Engine Education Workshop", GeoForGood, Mountain View, CA. October 7th.

2021 **Session Organizer**, "Urban Remote Sensing: Methods and Applications I & II", AAG Annual Meeting, Virtual Meeting. April 9th.

2021 **Series Organizer**, Earth Engine Educators (EE-Edu) Virtual Speaker Series. Recorded talks available [here](#).

2020 **Session Organizer**, "Urban Remote Sensing Networking Session", Geo For Good 2020, Virtual Meeting. October 21st.

Grant Reviewer:

NSF Human-Environment and Geographical Sciences Program (HEGS) Panel & Ad Hoc Reviewer.

Journal Reviewer:

BioScience,
Discover Civil Engineering,
Ecology and Society,
Environmental Research Letters,
Environmental Science and Technology,
Frontiers in Earth Science,
IEEE Journal of Selected Topics in Applied Earth Observations & Remote Sensing,
Journal of Geophysical Research: Atmospheres,
Journal of Urban Design,
Landscape and Urban Planning,
Landscape Ecology,
Nature Sustainability,
PLOS Climate,
Proceedings of the National Academy of Sciences,
Remote Sensing,
Science of the Total Environment,
Sustainable Futures,
Urban Design,
Urban Forestry & Urban Greening.

Media Coverage

- 2024 "SPARK Center debuts with environmental data-driven neighborhood project", *The DePaulia*, Sep 30. [Link](#).
- 2024 "Chicago's Latino Neighborhoods Have Less Access to Parks, But Residents Are Working to Change That", *Block Club Chicago*, Sep 30. [Link](#).
- 2024 "Faculty Named Illinois 'Researchers to Know'", *DePaul University Newsline*, Aug 14. [Link](#).
- 2024 "Research Brief: Examining the nuances of green gentrification", *DePaul University Newsline*, May 20. [Link](#).
- 2023 "How do public spaces make you feel? DePaul University measuring equity by tracking how people respond to urban design", *Chicago Tribune*, Dec 8. [Link](#).
- 2023 "Mapping Emotions: Researchers to Track Psychology, Equity of Public Spaces", *DePaul University Newsline*, Nov 13. [Link](#).
- 2023 "Research team seeks to expand access to environmental data in Chicago: NASA grant provides funding for research, expansion of ChiVes database", *The DePaulia*, April 24. [Link](#).
- 2022 "DePaul Researchers Creating Chicago Neighborhood Database of Environmental Disparities", *DePaul University Newsline*, Sep 16. [Link](#).
- 2022 "A Pilsen Group Is Promoting Green Spaces In The Neighborhood By Building Butterfly Sanctuaries, Giving Away Plants", *Block Club Chicago*, June 21. [Link](#).
- 2021 "Dangerous Heat, Unequal Consequences", *The Center for Public Integrity*, Jan 19. [Link](#).
- 2020 "Growing Up — Urban Farms Have the Potential to Transform Phoenix", *Phoenix New Times*, April 2nd. [Link](#).
- 2020 "Greening Phoenix Through Urban Agriculture (Episode 29)", *Future Cities Podcast*, Feb 6th. [Link](#).
- 2019 "Ladies of Landsat (Season 6: Episode 1)", *Scene from Above Podcast*, Oct 22nd. [Link](#).
- 2019 "Urban agriculture could help food desert cities meet sustainability Goals", *Earth.com*, Oct 6th. [Link](#).

- 2019 "Where's the Waste? A 'Circular' Food Economy Could Combat Climate Change", *New York Times*, Sep 21st. [Link](#).
- 2018 "ASU student joins meeting of the greatest minds in computer science and mathematics", *ASUNow*, Oct 8th. [Link](#).
- 2018 "Crops take root in unlikely city spaces", *Financial Times*, Oct 15th. [Link](#).
- 2018 "Big Data Suggests Big Potential for Urban Farming", *CityLab*, Feb 15th. [Link](#).
- 2018 "Urban farms 'critical' to combat hunger and adapt to climate change", *Reuters*, Jan 11th. [Link](#).

Memberships

American Association of Geographers

Phi Beta Kappa

Gamma Theta Upsilon

American Geophysical Union

North American Regional Association for the International Association for Landscape Ecology