

# JANE SOUTHWORTH

## Department of Geography

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## RESEARCH INTERESTS

My research interests are based on the study of human-environment interactions within the field of Land Change Science. All of my research is undertaken with highly interdisciplinary research teams which involve both social and physical scientists. It is this interdisciplinary focus on research problems that interests me and for which I was trained. Within such interdisciplinary teams my particular strengths lie in the remote sensing of time series analyses, machine learning and AI RS approaches, vegetation dynamics, land use, land cover change and land change modeling; the implications of scale and scaling in remote sensing and modeling analyses; people and parks; and modeling of the impacts of climate change on human-environment systems and vegetation dynamics.

## LEADERSHIP

**Administrative Leadership.** Department Chair and Professor of Geography at the University of Florida (UF), overseeing the academic and operational functions of the department for over eight years. As Chair, I manage a wide range of responsibilities, including financial oversight, teaching assignments, strategic planning, faculty development, and external relations, while fostering a collaborative, innovative culture within the department. Under my leadership, the department has expanded its research footprint, revamped its curriculum, doubled its faculty, and implemented major renovations to both physical spaces and digital outreach.

**Career Trajectory.** My academic journey began with a focus on human-environment interactions within the field of Land Change Science, where I integrated remote sensing, AI methodologies, and interdisciplinary approaches to tackle critical global issues. As my career progressed, I have taken on increasingly complex roles, culminating in my position as Chair of UF's Geography Department and leadership in university-wide initiatives related to AI and interdisciplinary research. This trajectory has been complemented by a commitment to service, editorial work, and national leadership in geography education.

## NOTABLE LEADERSHIP HIGHLIGHTS

**University Initiative Building.** As Co-Chair of the Quality Enhancement Program (QEP) '*AI Across the Curriculum*' initiative at UF from 2021 to 2024, I worked alongside Dr. Kati Migliaccio to develop a comprehensive, five-year plan to integrate AI literacy into UF's undergraduate curriculum. Our charge was to align AI education with UF's strategic goals, particularly the "Your Pathway to AI"

initiative, which positions AI at the heart of the university's academic vision. This included leading a 48-member task force through data collection, strategic planning, and the presentation of our final recommendations, which were successfully approved by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) in February 2024. This initiative has become a model for other universities aiming to embed AI across disciplines. In addition, I serve on the UF AI Curriculum and Research Committees, where I represent the College of Liberal Arts and Sciences (CLAS) and contribute to university-wide efforts to expand AI education and research.

**AAG Task Force Leadership.** I was recently invited to join the American Association of Geographers (AAG) special task force on nurturing undergraduate geography education, known as the Gen A Project (2024-2026). The task force, composed of national leaders in geography education, is charged with exploring strategies to reverse the decline in geography undergraduate enrollment and strengthen the discipline's presence in the US academy. My appointment to this task force reflects both my leadership role as Chair at an R1 institution and my expertise in growing UF's geography undergraduate program. Our goal is to produce actionable recommendations that will inform the AAG's long-range plans, ensuring a vibrant future for geography education nationwide.

**National and International AI Advocacy.** My leadership in AI extends beyond UF, with national visibility through multiple speaking engagements and collaborations. In May 2024, I was invited to speak at the Harvard Center for Geographic Analysis on the topic of "Evaluating the Science of Geospatial AI." This invitation reflects my recognized expertise in geospatial technologies and AI applications in geography. In 2023, I was copresenter on testimony to the US House Future Forum Caucus on AI education, highlighting the importance of AI integration across academic disciplines. I was also co-presenter on AI and curriculum development at conferences such as the AI in Agriculture conference, in Orlando, Florida, in partnership with other national institutions. These roles place me at the forefront of the conversation on how AI can transform education and research across fields.

**Professional Service and Editorial Leadership.** I currently serve as the Specialty Chief Editor for the *Remote Sensing Time Series Analysis* section of *Frontiers in Remote Sensing*, where I lead the development of this emerging field with a focus on the integration of AI techniques. I am the only female Chief Editor in this journal's leadership team. Additionally, I am on the editorial boards of several key journals, including *Global Environmental Change* and *Geographical Analysis*. I have also led initiatives within the AAG to increase the visibility and representation of women in remote sensing and GeoAI, and am currently in the process of petitioning for the establishment of a new AAG specialty group on these topics.

**Building a Departmental Legacy.** As Chair of UF's Geography Department, I have spearheaded numerous initiatives aimed at enhancing both academic and student life. I led the effort to secure a \$1 million gift for the creation of the Poehling Professorship in Geography, developed new undergraduate certificate programs in 'GeoAI' and a new 'Graduate Certificate in Digital Geography and GIS,' and completed several major renovations to departmental spaces. I also initiated UF's first Geography Alumni Event and have grown our annual Giving Day into a significant fundraising effort, increasing participation and donations each year. Furthermore, I have actively expanded the department's course offerings and social media presence, helping to boost student engagement and enrollment. I have established a new Departmental External Advisory Board to help take our Department to the next level and better prepare our graduates for the real-world.

**Investment in Future Leaders.** My role as Chair also emphasizes mentorship, particularly for junior faculty and graduate students. I run monthly junior faculty meetings, hold annual one-on-one check-ins, and run department retreats for faculty. Additionally, I serve as a mentor for the Women in Geography (WIGs) group at UF, supporting female graduate students and junior faculty in navigating the challenges of academia. This commitment to leadership development is also reflected in my active participation in leadership institutes, including my graduation from the HERS Leadership Institute (Class of 2023).

## EDUCATION

PhD	2000	Indiana University	Environmental Science
MS	1996	Indiana University	Geography
BSc	1992	Leicester University, UK	Geography

## ACADEMIC APPOINTMENTS

Sept 2021-2024	Task Force Co-Chair: Quality Enhancement Program for UF 'AI Across the Curriculum' with Dr. Kati Migliaccio from ABE
August 2016-current	Professor, Chair, Dept. of Geography, University of Florida
2011-August 2016	Professor, Dept. of Geography and the Land Use and Environmental Change Research Institute (LUECI), University of Florida
2010-2016	Chair: Steering Committee of the Florida Climate Institute. A joint UF/FSU institute developed with both Universities Funding.
2005-2011	Associate Professor, Department of Geography and the Land Use and Environmental Change Research Institute (LUECI), University of Florida
2002-2005	Assistant Professor in the Department of Geography and the Land Use and Environmental Change Research Institute (LUECI), UF
2000-2001	Post-doctoral Research Associate in Climate Change Analysis and Remote Sensing of Land Cover Change, NIGEC & CIPEC, Indiana University

## AWARDS & HONORS

2017	Graduate Student Council Award for <i>Outstanding Service by a Faculty Member on behalf of Graduate Students</i> for the 2016-2017 Academic Year.
2014-2017	University of Florida Climate Institute Faculty Fellow for 2014-2017.
2014-2015	Nominated by CLAS as the Teacher/Scholar of the Year for 2014-2015

- 2013 Nominated for CLAS Dissertation Adviser and Mentoring Award for 2012-2013. Selected by college to go forward to University wide competition.
- 2011 Nominated for CLAS Dissertation Adviser and Mentoring Award for 2010-2011.
- 2011 2011 Association of American Geographers E. Willard and Ruby S. Miller Award. This annual award recognizes members of the Association who have made truly outstanding contributions to the geographic field due to their special competence in teaching and research. (<http://www.aag.org/cs/awards/miller>)
- 2007-2010 Awarded a University of Florida Research Foundation Professorship
- 2010 Nominated for CLAS Advising Award, November 2010
- 2009 Nominated for CLAS Advising Award, November 2009
- 2008 Nominated for CLAS Advising Award, November 2008
- 2007 Nominated for Teaching Award and for Advising Award
- 2006 Nominated for Professorship
- 2005-2006 Nomination for Teacher/Scholar of the Year 2005-2006
- 2004 Received a CLAS Faculty Teaching Award for 2004-05

## GRANTS

- 2016-2022 NSF CNH Program: Recent land transactions in Ethiopia: Impacts on agriculture, ecosystem services, and food-energy security. Notified of funding April 2016. \$1.6 million. UF portion with Southworth as PI = \$360,000  
Total Award Period Covered: 9/1/2016 – 8/31/2022. PI: Dan Brown (University of Washington). Co-PIs: Jane Southworth (UF PI) and Arun Agrawal (University of Michigan).
- 2016-2018 NIOSH: South Eastern Coastal Center for Agricultural Health and Safety \$10 million. PI: Overall center PI – Glenn Morris. Sub-PI for our project (\$280,000) is Greg Glass. Co-PI: Southworth
- 2017-2018 University of Florida, International Center: Geography and CAS Study Abroad Program in South Africa. \$25,000. PI: Southworth, Co-PI's: Ryan and Child.
- 2014-2015 UF Informatics Institute SEED Grant. "Death, Disease and Distribution", \$36,000. PI – Southworth, Co-PIs: Blackburn, Waylen, Glass, Ryan, Munoz-Carpena, and Kiker

- 2015-2016 UF Water Institute: The Water-Energy-Food-Environment nexus: Unintended consequences of interbasin water transfer for hydropower generation and agriculture on the protected environment. Total Award Amount: \$10,000. PI: Rafael Munoz-Carpena. Co-PIs: Jane Southworth, Ray Huffaker, Greg Kiker, Peter Waylen
- 2015-2016 UF Water Institute: Water, Africa, Disease, and Health (WADAH). Total Award Amount: \$10,000. PI: Jane Southworth. Co-PIs: Rafael Munoz-Carpena, Ray Huffaker, Greg Kiker, Jason Blackburn, Brian Child, Greg Glass, Sadie Ryan, Peter Waylen
- 2013-2018 NSF PIRE Program: PARTNERS (People And Reforestation in the Tropics: a Network for Education, Research, and Synthesis). Total Award Amount: \$499,011. University of Connecticut - PI: Robin Chazdon. My role: Collaborator – Networking Grant.
- 2013-2016 Google Earth Outreach Grant / Collaboration. PIs: Jane Southworth and Erin Bunting. Purpose: to bring *Google Earth Engine*, *Google Maps Engine*, *Open Data Kit*, *Timelapse*, and *Google Tours* into the Introductory Remote Sensing Class. This collaboration enabled our students to have contact with cutting edge remote sensing technology available through the Google array. This introduces our student to big data analysis via access to the extensive Google data catalog. Furthermore, the open data kit program is a tablet based field collection technique. Note: There is no direct money from this. The collaboration enabled our students to access a resource that only a couple other universities around the world have. Specifically other collaborations have been set up at Stanford, Cal Tech, and Princeton.
- 2011-2013 NSF PIRE – Collaborative Research: Catalyzing New International Collaborations: Interdisciplinary workgroup on water sustainability in the Tempisque Basin, NW Costa Rica. PI: Rafa Munoz-Carpena, My role: Participating Faculty. \$50,000.
- 2011-2015 NSF-CNH Program. Global Sensitivity & Uncertainty Analysis in the Evaluation of Social Ecological Resilience: Theoretical Debates over Infrastructure Impacts on Livelihoods & Forest Change. \$1.6 million. PI: Dr. Stephen Perz. My role: Senior Investigator.
- 2010-2012 Planning Grant For: The Florida Climate Institute and an NSF Science and Technology Center to Understand and Respond to Climate Change Submitted by: IFAS: James W. Jones (PI), Keith T. Ingram (Co-PI) CLAS: Jane Southworth (Co-PI) - \$250,000 to UF's VP for research for the planning grant for collaborative research proposal request.
- 2009-2013 NASA – LCLUC Program. Understanding and predicting the impact of climate variability and climate change on land use and land cover change via socio-economic institutions in Southern Africa. \$871,000. PI: Southworth, J. G. Kiker, Y. Qiu, R. Munoz-Carpena, P.R. Waylen, M.W. Binford, E. Keys, B. Child (all Co-I's).

- 2008-2013 IGERT Competition. Title: Spatial Ecology and Evolution: Quantitative Training in Biology, Statistics, and Mathematics. 2 million. P.I. Ben Bolker. My role: Co-PI, Senior personnel, Advisory Board member.
- 2005-2009 NSF HSD Program: Infrastructure Change, Human Agency, and Resilience in Social-Ecological Systems. PI: Stephen Perz. Co-PIs: Southworth, Kiker, Carpena, Cumming. \$650,000.
- 2005-2006 UF RGP Research Opportunity Incentive Seed Fund. \$72,000 PI Southworth with Co-PIs Dr. Child and Dr. Barnes, “Governance, Land Use and Resource Rights in Southern Africa: Paths toward grassroots democratization.” Summer 2006.
- 2006-2009 EPA STAR Fellowship. PI Southworth (Student fellowship for Claudia Stickler) “Alternative landscapes along the Amazon’s frontier: Simulating future land-use and carbon dynamics in the Xingu River headwaters region” \$30,000 per year
- 2005-2007 NASA Fellowship, \$24,000 per year. PI Southworth (Student funding request for Claudia Stickler). “Alternative landscapes along the Amazon’s frontier: Simulating future landuse and carbon dynamics in the Xingu River headwaters region. Only kept for 2005 as then she received an EPA fellowship.
- 2005-2006 PI Southworth, Jaclyn Hall Co-PI. “Biodiversity of a landscape: examining Forest Heterogeneity and Ecological Change in the East Usumbaras. Sponsor: Critical Ecosystem Partnership Fund. \$15,800.
- 2005-2006 P.I. Innovations in Uses of Technology in Instruction. Grant title: Improving Accessibility to a Lab Course CITT technology Grant to computerize the GEO2200 labs, received \$9,200
- 2006 Center for Africa Studies Travel Grant \$400 for the AAG Meetings, Chicago, March 2006.
- 2005 Principal Investigator. “Interactions among Protected Areas, Agricultural Change, and Biodiversity in East Africa” SNRE – New Faculty Support Grant, \$5,000.
- 2005 Co- Principal Investigator. “Roadies Research Group Meta-data and proposal submission” SNRE – Research Programs Grant, \$15,000.
- 2004-2006 NSF, BCS Geography & Regional Science. “Consequences of Parks for Land Use, Livelihood Diversification, and Biodiversity in East Africa.” PI: Goldman, Co-PIs: Binford & Southworth \$184,000.
- 2004-2007 NSF HSD Program: “Economic Growth, Social Inequality and Environmental Change in Thailand and Cambodia” PI: Binford, Co-PI Southworth. \$749,277 (UF Subcontract: \$280,000).

2002-2007 NSF IGERT Program: “Working Forests in the Tropics.” \$2,000,000. PI: Dan Zarin. My role: Core faculty.

## PUBLICATIONS

### Edited Book Volume

- Under Contract ‘Remote Sensing, Big Data, and GeoAI’ with Elsevier. Editors: Erin Bunting, Jane Southworth, Hannah Herrero and Cerian Gibbes.
- 2020 Herrero, Hannah Victoria and Southworth, Jane. Special Issue on Dynamics of the Global Savanna and Grasslands Biomes. Compiled into book:
- 2009 Nagendra, H., and Southworth J., Editors ‘Reforesting Landscapes: Linking Pattern and Process’ Springer’s Landscape Series.
- 2002 Doering, O.C., Randolph, J.C., Southworth, J., and R.A. Pfeiffer (Eds.). Effects of Climate Change and Variability on Agricultural Production Systems. Kluwer Academic Publishers, Norwell, MA, USA pp. 275

### Research Papers

- In Review Mashoukur Rahaman, Jane Southworth, Amobichukwu Chukwudi Amanambu, Bewuket B. Tefera, Ali Alruzuq, Mohammad Safaei, Md. Muyeed Hasan, Audrey Culver Smith. Combining Deep Learning and Machine Learning Techniques to Track Air Pollution in Relation with Vegetation Cover through Remote Sensing Data. *Journal of Environmental Management* - In Review.
- In Review Mashoukur Rahaman, Jane Southworth, David Keellings and Yixin Wen. Assessment of Machine Learning and Deep Learning Methods for Almond Crop Detection in California’s Central Valley, utilizing Remote Sensing. *International Journal of Applied Earth Observation and Geoinformation* - In Review.
- In Revision Muir, C., Khatami, R., Southworth, J., Quantification of recent land cover changes in Ethiopia with a specific focus on the role of land transactions impacting land cover change. *Ecology and Society*.
- 2024 [112] Southworth, J., Smith, A., Safaei, M., Rahaman, M., Alruzuq, A., Tefera, B.B., Muir, C.S., and Herrero, H.H. Machine Learning versus Deep Learning in Land System Science: A Decision-Making Framework for Effective Land Classification. *Frontiers in Remote Sensing*, 5, 1374862.
- 2024 [111] Southworth J, Bunting E, Herrero HV and Crews K. Editorial: Women in remote sensing: 2022. *Front. Remote Sens.* 5:1369697. doi: 10.3389/frsen.2024.1369697

- 2024 [110] Dewald, Julius; Southworth, Jane; Moise, Imelda. The Role of People, Parks, and Precipitation on the Frequency and Timing of Fires in a Sub-Saharan Savanna Ecosystem. *International Journal of Wildland Fire*, 33, WF23020. <https://doi.org/10.1071/WF23020>
- 2024 [109] Dewald, J.R.; Southworth, J.; Szapocznik, J.; Lombard, J.L.; Brown, S.C. Greening the Urban Landscape: Assessing the Impact of Tree-Planting Initiatives and Climate Influences on Miami-Dade County's Greenness. *Remote Sens.* **2024**, *16*, 157. <https://doi.org/10.3390/rs16010157>
- 2023 [108] Jane Southworth & Kati Migliaccio. Developing Career-Ready Graduates: The Importance of AI Literacy Across the Curriculum. *Media & Learning Newsletter*, <https://media-and-learning.eu/type/featured-articles/developing-career-ready-graduates-the-importance-of-ai-literacy-across-the-curriculum/>
- 2023 [107] Yang, Di, Chiung-Shiuan Fu, Hannah Victoria Herrero, Jane Southworth, and Michael Binford. "Linking forest management to surrounding lands: a citizen-based approach towards the regional understanding of land-use transitions." *Frontiers in Remote Sensing* 4: 1197523.
- 2023 [106] ÖZDEŞ, Mehmet, and Jane Southworth. Land Change Science: Understanding the complexity of monitoring protected areas in savanna ecosystems of Sub-Saharan Africa. *Türk Coğrafya Dergisi* (82), 63-76. <https://doi.org/10.17211/tcd.1211634>
- 2023 [105] Southworth J, Ryan SJ, Herrero HV, Khatami R, Bunting EL, Hassan M, Muir CS and Waylen P (2023), Latitudes and land use: Global biome shifts in vegetation persistence across three decades. *Front. Remote Sens.* 4:1063188. doi: 10.3389/frsen.2023.1063188
- 2023 [104] Hannah V. Herrero, Jane Southworth, Reza Khatami, Stephanie Insalaco, and Carly Muir. Examining the relationship between vegetation decline and precipitation in the national parks of the Greater Limpopo Transfrontier Conservation Area during the 21st century. *Frontiers in Environmental Science*, 11, 335. <https://doi.org/10.3389/fenvs.2023.1106849>
- 2023 [103] Southworth, J., Migliaccio, K., Glover, J., Glover, J., Reed, D., McCarty, C., Brendemuhl, J., & Thomas, A. Developing a model for AI Across the Curriculum: Transforming the Higher Education Landscape via Innovation in AI Literacy. *Computers & Education: Artificial Intelligence*, 4: 100127. <https://doi.org/10.1016/j.caeai.2023.100127>
- 2022 [102] Mohammad Mehedy Hassan, Matthew Duveneck, and Jane Southworth. The role of the refugee crises in driving forest cover change and fragmentation in Teknaf, Bangladesh. *Ecological Informatics*, 74, 101966 <https://doi.org/10.1016/j.ecoinf.2022.101966>



- 2022 [101] Julius R. Dewald<sup>1</sup>, Jane Southworth, Scott C. Brown, Jose Szapocznik. Comparison of NDVI Values from Multiple Satellite Sensors to Monitor for Public Health in an Urban Sub-tropical Setting. *American Journal of Geographic Information System*, 11(2): 33-40. DOI: 10.5923/j.ajgis.20221102.01
- 2022 [100] Mohammad Mehedy Hassan, Ikramul Hassan, Jane Southworth, Tatiana Loboda Mapping fire-impacted refugee camps using the integration of field data and remote sensing approaches. *International Journal of Applied Earth Observation and Geoinformation*, 115: 103120. <https://doi.org/10.1016/j.jag.2022.103120>
- 2022 [99] Southworth, J., V. Seufert, K. Seto, and D.K. Munroe, 2022. Editorial Introduction: Women in Land Science. *Journal of Land Use Science*, 17 (1): 1-11.
- 2022 [98] Tyler Schaper, Reza Khatami, Mohammad Mehedy Hassan, Gregory Glass, Jane Southworth. Monitoring Major Crop Coverage Change Trends in Agricultural in Florida. *American Journal of Geographic Information System*. 11(1): 23-31. doi:10.5923/j.ajgis.20221101.03
- 2021 [97] Southworth, Jane and Muir, Carly, 2021. Specialty Grand Challenge: Remote Sensing Time Series Analysis. *Frontiers in Remote Sensing*, 2, 10.3389/frsen.2021.770431
- 2021 [96] Xavier Haro-Carrión, Peter Waylen & Jane Southworth. Spatiotemporal changes in vegetation greenness across continental Ecuador: a Pacific-Andean-Amazonian gradient, 1982–2010, *Journal of Land Use Science*, 16 (1): 18-33. DOI: [10.1080/1747423X.2020.1866705](https://doi.org/10.1080/1747423X.2020.1866705)
- 2021 [95] Muir, C., Southworth, J., Khatami, R., Herrero, H., and Akyapi, B., 2021. Vegetation Dynamics and Climatological Drivers in Ethiopia at the Turn of the Century. *Remote Sensing*, 13 (16): 3267, <https://doi.org/10.3390/rs13163267>
- 2020 [94] Herrero, Hannah Victoria and Southworth, Jane. Special Issue on Dynamics of the Global Savanna and Grasslands Biomes. (2020). *Applied Sciences*. 10 (22), 8043. Editorial. <https://doi.org/10.3390/app10228043>
- 2020 [93] Herrero, H. V., Southworth, J., Muir, C., Khatami, R., Bunting, E., and Child, B. (2020). An evaluation of vegetation persistence in and around southern African national parks during the 21st century. *Applied Sciences*, 10(7), 2366. Special Issue: Dynamics of the Global Savanna and Grasslands Biomes. <https://doi.org/10.3390/app10072366>
- 2020 [92] Khatami, R., Southworth, J., Muir, C., Caughlin, T., Ayana, A., Brown, D.G., Liao, C., & Agrawal, A. (2020). Operational large-area land cover mapping: an Ethiopia case study. *Remote Sensing*, 12, 954.

- 2020 [91] Hassan, M. M., Ash, K., Abedin, J., Paul, B. K., & Southworth, J. A Quantitative Framework for Analyzing Spatial Dynamics of Flood Events: A Case Study of Super Cyclone Amphan. *Remote Sensing*, 12(20), 3454; <https://doi.org/10.3390/rs12203454>
- 2020 [90] Khatami, R., Southworth, J., Muir, C., Caughlin, T., Ayana, A., Brown, D.G., Liao, C., Agrawal, A. Operational large-area land-cover mapping: Ethiopia case study. *Remote Sensing*, 12(6), 954; <https://doi.org/10.3390/rs12060954>
- 2020 [89] Herrero, H., P. Waylen, J. Southworth, R. Khatami, D. Yang, and B. Child. A healthy park needs healthy vegetation: The story of Gorongosa National Park in the 21<sup>st</sup> century. *Remote Sensing*, 12(3), 476; <https://doi.org/10.3390/rs12030476>
- 2019 [88] Klarenberg, G., R. Munoz-Carpena, S. Perz, C. Baraloto, M. Marsik, J. Southworth, and L. Zhu. A spatiotemporal natural-human database to evaluate road development impacts in an Amazon trinational frontier, *Nature Scientific Data* 6(1): 93 DOI: [10.1038/s41597-019-0093-7](https://doi.org/10.1038/s41597-019-0093-7)
- 2019 [87] Hassan, M., L. Juhasz, and J. Southworth. Mapping time-space brickfield development dynamics in peri-urban areas of Dhaka, Bangladesh. *ISPRS International Journal of GeoInformation*, 8(10), 447; <https://doi.org/10.3390/ijgi8100447>
- 2019 [86] Herrero, H., J. Southworth, E. Bunting, R. Kohlhaas, and B. Child. Integrating surface-based temperature and vegetation abundance estimates into land cover classifications for conservation efforts in savanna landscapes. *Sensors*, 19(16), 3456; <https://doi.org/10.3390/s19163456>
- 2018 [85] Xavier Haro-Carrión and Jane Southworth. Understanding Land-Cover Change in a Highly Complex Landscape in a Biodiversity Hotspot of Coastal Ecuador. *Remote Sensing* 10, 1980; doi:10.3390/rs10121980
- 2018 [84] Eduardo Gelcer, Clyde W Fraisse, Lincoln Zotarelli, Forrest R Stevens, Daniel Perondi, Daniel D Barreto, Hipólito A Malia, Carvalho C Ecole, Verona Montone, and Jane Southworth, 2018. [Influence of El Niño-Southern oscillation \(ENSO\) on agroclimatic zoning for tomato in Mozambique.](#) *Agricultural and forest meteorology*, 248, 316-328.
- 2018 [83] Southworth J., Bunting, E., Zhu, L., Ryan, S., Herrero, H.V., Waylen, P., Munoz-Carpena, R., Campo-Bescos, M, and Kaplan, D. Using a Coupled Dynamic Factor-Random Forest Analysis (DFRFA) to Reveal Drivers of Spatiotemporal Heterogeneity in the Semi-Arid Regions of Southern Africa. *PLoS One*, 13(12) doi: [10.1371/journal.pone.0208400](https://doi.org/10.1371/journal.pone.0208400)

- 2018 [82] Bunting, E.L., Southworth, J., Herrero, H., Ryan, S.J., and Waylen, P., Understanding Long Term Savanna Vegetation Persistence across Three Drainage Basins in Southern Africa, *Remote Sensing*, 2018, doi:[10.3390/rs10071013](https://doi.org/10.3390/rs10071013)
- 2018 [81] Mohammad Mehedy Hassan, Audrey Culver Smith, Katherine Walker, Munshi Khaledur Rahman and Jane Southworth. Rohingya Refugee Crisis and Forest Cover Change in Teknaf, Bangladesh. *Remote Sensing*, 10(5): 689.
- 2018 [80] Mohammad Mehedy Hassan and Jane Southworth. Analyzing Land Cover Change and Urban Growth Trajectories of the Mega-Urban Region of Dhaka Using Remotely Sensed Data & an Ensemble Classifier. *Sustainability*, 10(1): 10.
- 2017 [79] Guo Cao, Bisheng Wang, Xavier Haro-Carrión, Di Yang, and Jane Southworth. A new difference image creation method based on deep neural networks for change detection in remote sensing images. *International Journal of Remote Sensing*, 38(23): 7161-7175.
- 2017 [78] Fullman, T., Bunting, E., Kiker, G., and Southworth, J. Predicted Shifts in Large Herbivore Distribution under Climate Change and Management Scenarios in Kruger National Park, South Africa. *Ecological Modeling*, 352: 1-18.
- 2017 [77] Hannah Herrero, Jane Southworth, Erin Bunting, and Brian Child. Observing Vegetation Change Over 72 Years in Gorongosa National Park, Mozambique Using Repeat Photography. *African Studies Quarterly*, 17(2): 65-82.
- 2017 [76] Ryan, S.J., Palace, M., Diem, J., Hartter, J. Chapman, C.A., Southworth, J. Population pressure and global markets drove a decade of deforestation in Africa's Albertine Rift. *Applied Geography*, 81: 52-59. [available online <http://dx.doi.org/10.1016/j.apgeog.2017.02.009>]
- 2017 [75] Fullman, T.J., G.A. Kiker, A. Gaylard, J. Southworth, P.R. Waylen and G.I.H. Kerley. Elephant movement responses to vegetation phenology in an aseasonal system, Addo Elephant Park. *Koedoe*; 59 (1): 21 pages. doi:10.4102/koedoe.v59i1.1326
- 2016 [74] Hannah Herrero, Jane Southworth, Erin Bunting. Utilizing Multiple Lines of Evidence to Determine Landscape Degradation within protected area landscapes: A Case Study of Chobe National Park, Botswana from 1982 to 2011. *Remote Sensing*, 8 (8): 623, <http://dx.doi.org/10.3390/rs8080623>.
- 2016 [73] Ray Huffaker, Rafael Muñoz-Carpena, Miguel Campo-Bescos, Jane Southworth. Demonstrating Correspondence Between Decision-Support Models and Dynamics of Real-World Environmental Systems. *Environmental Modelling & Software*, 83: 74-87.

- 2016 [72] Bunting, E., Fullman, T., Kiker, G., and Southworth, J. Utilization of the SAVANNA Ecosystem Model to Analyze Future Patterns of Vegetation Cover in Kruger National Park under IPCC Climate Change Scenarios. *Ecological Modeling*, 342: 147-160.
- 2016 [71] Michael J. Hill, Qiang Zhou Qingsong Sun, Crystal B. Schaaf, Jane Southworth, Niti B. Mishra, Cerian Gibbes, Erin Bunting, Thomas B. Christiansen & Kelley A. Crews, 2016. Dynamics of the relationship between NDVI and SWIR32 vegetation indices in southern Africa: implications for retrieval of fractional cover from MODIS data. *International Journal of Remote Sensing*. [Volume 37](#), [Issue 6](#), pages 1476-1503.
- 2016 [70] Hill, Michael, J., and Jane Southworth, 2016. Anthropogenic change in savannas and associated forest biomes. *Journal of Land Use Science*, Volume 11: Issue 1, Pages 1-6.
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### **Book Chapters**

- 2024 Jane Southworth, Hannah V. Herrero, Cerian Gibbes, Erin L. Bunting, Mohammad Mehedy Hassan. Book Chapter: Remote Sensing of Savanna Vegetation, in book 'Comprehensive Remote Sensing' by Giles Foody. Elsevier Publisher. In Press
- 2019 Stephen G. Perz, Galia Selaya, Rafael Munoz-Carpena, Gregory Kiker, Christopher Baraloto, Matthew Marsik and Jane Southworth, 2019. Scientists and Stakeholders, Data and Diagnostics: Crossing Boundaries for Modeling the Impacts of Highway Paving in a Tri-National Frontier in the Amazon in 'Collaboration Across Boundaries for Social-Ecological System Science: Experiences Around the World' edited by S.G. Perz, Palgrave Macmillan, pp. 437

- 2018 Southworth, J., Ryan S.J., Bunting E., Herrero, H.V., Nagendra, H., Gibbes C., and Agarwal S., 2018. Protected Areas, Climate Change and Ecosystem Sustainability, pp 202-219. INVITED Book Chapter Contribution for: Book #9 in “Remote Sensing Applications for Societal Benefits”. Editor: Dr. Stephen Walsh, as part of the series on *Comprehensive Remote Sensing* edited by Shunlin Liang at the University of Maryland and published by Elsevier
- 2017 Jane Southworth, Harini Nagendra, Sadie J. Ryan, Erin Bunting, Cerian Gibbes, Hannah Herrero, and Agarwal. Protected Areas, Climate Change and Ecosystem Sustainability. INVITED (Southworth) Book Chapter Contribution for: Book #9 in “Remote Sensing Applications for Societal Benefits”. Editor: Dr. Stephen Walsh, as part of the series on *Comprehensive Remote Sensing* edited by Shunlin Liang at the University of Maryland and published by Elsevier.
- 2013 Stephen G. Perz, Youliang Qiu, Yibin Xia, Jing Sun, Jane Southworth, Karla Rocha, Grenville Barnes (2013) “Political Ecology and Land Change Science in the Study of Infrastructure Impacts.” Forthcoming as Chapter 8 in *Synergies and Divergences between Land Change Science and Political Ecology*, eds. C. Branstromm and J. Vadjunec. Manuscript 31 pages + 2 maps.
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- 2005 Southworth, J. Encyclopedia Entries for the book: “*Our Earth’s Changing Land: An Encyclopedia of Land-Use and Land-Cover Change*” Edited by Helmut Geist, Greenwood Press, Westport, Connecticut, pp. 715. *Coffee*, Volume I, pp. 130-132; *Continuous Data*, Volume I, pp. 142-143; *Discrete Data*, Volume I, pp. 170; *Thermal Band Analysis*, Volume II, pp. 590-591
- 2005 Tucker, C. M. and J. Southworth. Processes of Forest Change at the Local and Landscape Levels in Honduras and Guatemala. Pg.253-277, in: *Seeing the Forest and the Trees: Human-Environment Interactions in Forest Ecosystems*, ed. Emilio F. Moran and Elinor Ostrom. MIT Press.Cambridge, MA pp. 442
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- 2002 Pfeifer, R.A., J. Southworth, O.C. Doering and L. Moore. Climate Variability Impacts on Farm-level Risk, Chapter 9, pp. 179-192. In: Doering, O.C., J.C. Randolph, J. Southworth, and R.A Pfeiffer (Eds.), *Effects of Climate Change and Variability on Agricultural Production Systems*. Kluwer Academic Publishers, Norwell, MA, USA pp. 275

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### Reviews/Other

- 2012 Global Land Project Newsletter. "Infrastructure, institutions and land cover change: a comparative analysis in the Southwestern Amazon." S. Perz, Y. Qiu, Y. Xia, J. Sun, G. Barnes, J. Southworth, K. Rocha. No. 8, 29 - 31.
- 2009 Global Land Project Newsletter. "Climate, land-use/land-cover change and institutional response: A multi-scalar approach to human environment interactions in southern Africa." Andrea E. Gaughan, Forrest R. Stevens, Cerian Gibbes, Jane Southworth, Eric Keys, Brian Child, Peter Waylen, Greg Kiker, Rafael Muñoz-Carpena, Michael W. Binford.
- 2007 J. Southworth. Book Review of 'Emerging Threats to Tropical Forests'. Edited by William F. Laurance and Carlos A. Peres. Quarterly Journal of Biological Sciences.
- 2006 Southworth, J. Conserving Biodiversity in agricultural landscapes: Model based planning tools. Book Review. *Landscape Ecology*, 21(2): 309-310
- 2003 Southworth, Jane. MAPublisher 5.0 : Turning GIS Maps into Art. *Geospatial Solutions*, 13: 51-53
- 2001 Munroe, D., J. Southworth, and C.M. Tucker. The Dynamics of Land-Cover Change in Western Honduras: Spatial Autocorrelation and Temporal Variation. Paper presented at the American Agricultural Economics Association (AAEA) Annual Meeting, Chicago, Ill., August 5–8. Published by AAEA
- 2001 Williams, A.N., M. Nearing, M. Habeck, J. Southworth, R.A. Pfeifer, O.C. Doering, J. Lowenberg-DeBoer, J.C. Randolph, and M.A. Mazzocco. Global Climate Change: Implications of Extreme Events for Soil Conservation Strategies and Crop Production in the Midwestern United States. ISCO Special Publication.
- 2000 Reviewer for the 'Overview: Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change' National Synthesis Team, U.S. Global Change Research Program, Cambridge University Press, USA, pp. 153

### Journal Volumes

- 2022 Guest Editors: Jane Southworth, Kelley Crewes, Hannah Herrero and Erin Bunting. Special Issue on Women in Remote Sensing in *Frontiers of Remote Sensing*.

- 2022 Guest Editors: Ariane de Bremond, Daniel G. Brown, Arun Agrawal, Jane Southworth. Special Issue on ‘Land Acquisitions, Well-being, and Environment in *Ecology and Society*.
- 2022 Guest Editors: Jane Southworth, Verena Seufert, Karen Seto & Darla K. Munroe (2022). Special Issue on ‘Women in land science’, *Journal of Land Use Science*
- 2020 Gues Editors: Hannah V. Herrero and Jane Southworth. Special Issue on ‘Dynamics of the Global Savanna and Grasslands Biomes’, *Applied Sciences*
- 2015 Guest editor with Prof. Michael Hill, on “Savanna system dynamics and human landscapes.” *Journal Land Use Science*
- 2013 Guest editor, Special Issue of *LAND*, "Landscape Changes in Savanna Systems: Understanding the Roles of Climate, Vegetation Dynamics, Parks and Protected Areas, Resources, People and Livelihoods"
- 2006 Guest editor (with D. Munroe and H. Nagendra), Special Issues of *Applied Geography*, “Are Parks Working? Exploring Human-Environment Tradeoffs in Protected Area Conservation” Volume 26 (2), pp. 87-174. April 2006
- 2004 Guest Editor (with D. Munroe and H. Nagendra), Special Issue of *Agriculture, Ecosystems and Environment* “From Pattern to Process: Landscape Fragmentation and the Analysis of Land Use/Land Cover Change”

## PRESENTATIONS

### INTERNATIONAL MEETINGS

- 2022 Good, Ryan Z., Leandra Merz, Carly Muir, Reza Khatami, and Jane Southworth. “Relationships between landscape-level conservation and vegetation persistence in East Africa: a remote-sensing perspective.” Poster presented at the Association for Tropical Biology and Conservation Annual Meeting, Cartagena, Colombia, July 2022.
- 2022 Kahler, J., Southworth, J., Hull, V., and Morales-Giner, P. (15 Sept 2022). “Climate change & wildlife crime in social-ecological systems: A conceptual framework and examples from the Global South.” When Climate Change Intersects Crime Webinar Series (<https://www.sakraplatser.abe.kth.se/sv/2020/12/05/when-climate-change-intersects-crime/>), Safeplaces Network, KTH Royal Institute of Technology, Sweden, & Northumbria University, UK. Recording found here: [https://bit.ly/Jessica\\_Kahler\\_CCC\\_Webinar](https://bit.ly/Jessica_Kahler_CCC_Webinar)
- 2021 Kahler, J., Morales-Giner, M.P\*., Hull, V., and Southworth, J. (2021, December). “Complex interactions between climate change and wildlife crime in social-ecological systems.” 30th International Congress for Conservation Biology Conference. Kigali, Rwanda (Held Virtually).

- 2021 Audrey Smith and Jane Southworth. Association for Tropical Biology and Conservation Annual Meeting, July 2021: Large-scale land acquisitions and ecosystem services: Impacts on natural woodlands, biodiversity, and local livelihoods in Ethiopia (Held Virtually).
- 2015 Ryan, S.J., Southworth J., Hartter J., Fuda R., Dowhaniuk N., Diem J. 2015. "Household level influences on fragmentation in an African park landscape." *27<sup>th</sup> International Congress for Conservation Biology and 4<sup>th</sup> European Congress for Conservation Biology*. August 2-6th, 2015. Montpellier, France.
- 2014 Submitted a session proposal for the: 2014 GLOBAL LAND PROJECT OPEN SCIENCE MEETING in Berlin, Germany, March 19 – 21, 2014. Title: *UTILIZING TIME SERIES ANALYSES TO ENHANCE UNDERSTANDINGS OF SYSTEM DYNAMICS*. Session was accepted. Co-organizers Dr. Harini Nagendra and Dr. Cerian Gibbes.
- 2014 Southworth, J. Zhu, L., Waylen, P.R., Munoz Carpena R, Huffaker, R., Using dynamic factor analysis to model the combined spatial and temporal effects of environmental covariates on NDVI in southern Africa and to develop new land change analysis techniques. 2014 GLOBAL LAND PROJECT OPEN SCIENCE MEETING in Berlin, Germany, March 19 – 21, 2014
- 2014 Bunting, E., Steele, J., Keys, E., Child, B., Southworth, J. Patterns and perceptions: the impact of climate and environmental variability on people and vegetation in the savanna landscapes of Southern Africa. 2014 GLOBAL LAND PROJECT OPEN SCIENCE MEETING in Berlin, Germany, March 19 – 21, 2014
- 2011 Southworth, J., Gibbes, C., Cui, X., Waylen, P., Child, B., Binford, M., Keys, E., and Qui, Y. On the broad scale relationships between changes in vegetation and precipitation for southern Africa, and linkages to land use, management and conservation. 9th Annual Savanna science Networking Meeting, 13-18 March 2011, Kruger National Park, South Africa.
- 2011 Brian Child, Shylock Muyengwa, Patricia Mupeta, Rodgers Lubilo, J. Southworth, C. Gibbes Collaborative, adaptive science: using the "Governance Dashboard" to understand and improve community governance in CBNRM Programmes, Making Science Relevant To Protected Area Management - Spanning The Bridge To Implementation, 9th Annual Savanna Science Networking Meeting, 13-18 March 2011. Kruger National Park, South Africa.
- 2010 Hartter, J., Ryan, S.J., Southworth, J., Goldman, A.C., Binford, M.W., and C.A. Chapman. *Upcoming*. Fortresses and Fragments: Impacts of Fragmentation in a Forest Park Landscape. IUFRO Landscape Ecology International Conference. September 21-27, 2010. Bragança, Portugal.
- 2009 Panel submitted and accepted for the International Human Dimensions Program - IHDP Meeting (held only once every 3 years) in India, October 2008. Was postponed to May 2009 and moved to Bonn, Germany. Drivers of Change: Patterns and Processes of Urbanization in Developing and Developed Areas\* *Endorsed by IHDP-UGEC (Urbanization and Global Environmental Change Core Project)*. Organizers: Harini Nagendra, Darla Munroe and Jane Southworth.

- 2008 Panel member and invited and fully supported guest of the NSF supported Germany-US Conference 'Tough Choices - Land Use under a Changing Climate' in Berlin September 2008. Also got to nominate and support one graduate student. Cerian Gibbes went with me and presented a poster presentation on her research. In addition another of my PhD students was present, Claudia Stickler, also nominated and supported by NSF.
- 2008 Gibbes, C., Southworth, J. Land management and land cover change: An examination of the impact of protected area management on savanna heterogeneity, German-US Conference: Tough Choices – Land Use Under a Changing Climate, Berlin, Germany. September 2008.
- 2007 Goldman, A. and J. Hartter. Southworth, J., Binford, M., Chapman, C., Chapman, L., Omeja, P., Twinomugisha, D., and A. Kasangaki. 2007. Human (& Biological) Landscapes around Kibale National Park. Kibale Chimpanzee Project 20th Anniversary Workshop. June 15-17, 2007. Kibale National Park, Uganda.
- 2005 Panel session submitted and accepted to the 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, "Global Environmental Change, Globalization and International Security: New Challenges for the 21st Century," taking place from 9-13 October 2005 in Bonn, Germany. Our panel session is titled "Contextualizing the Pixel: Comparing Continuous and Discrete Methods for Regional Studies of Human Dimensions on Land-Use/Cover Change (LUCC) Research" I am a session organizer, panel chair and presenter.
- 2005 Southworth, J., M. Binford, A. Goldman, J. Hartter, C. Chapman, and L. Chapman– Footsteps on the land: detecting and analyzing change within a continuous landscape framework in and around Kibale National Park, Uganda. 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, "Global Environmental Change, Globalization and International Security: New Challenges for the 21st Century," October 2005, Bonn, Germany.
- 2005 Munroe, D.K., C. Calder, and J. Southworth. IHDP – Darla Multivariate multiple regression models of land cover: can land use drivers predict continuous land cover outcomes? 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, "Global Environmental Change, Globalization and International Security: New Challenges for the 21st Century," October 2005, Bonn, Germany.
- 2004 Southworth, J. The Use of Remote Sensing for Spatial and Temporal Analysis of Landscape Change. Presented at the Caribbean Research Meeting in Puerto Rico, May 2004.
- 2004 Nagendra, H., J. Southworth, C.M. Tucker, B. Karna and M. Karmacharya.. Remote Sensing for Policy Evaluation: Monitoring Parks in Nepal and Honduras. At the 2004 meeting of the International Association for the Study of Common Property, 9-14 August 2003, Oaxaca, Mexico.
- 2003 Nagendra, H., and J. Southworth. Seeing reforestation patterns, inferring institutional processes. Presented at the *1st International Young Scientists Global Change Conference*, Trieste, Italy.
- 2003 Southworth, J., D. Munroe, and H. Nagendra. Investigating alternatives to classification analyses: From models to landscapes. Presented at the *2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community*, Montreal, Canada.



- 2001 Doering, O.C., R. A. Pfeifer, J. Southworth, and J.C. Randolph. Farm Level Adaptation Strategies under Global Climate Change in the Upper Midwestern United States. *Global Change Open Science Conference of the International Geosphere-Biosphere Project (IGBP)*. Amsterdam, The Netherlands.
- 2001 Tucker, C.M., J. Southworth, and H. Nagendra. Environmental and Social Processes Contributing to Reforestation Trends in Western Honduras. *Global Change Open Science Conference of the International Geosphere-Biosphere Project (IGBP)*, Amsterdam, The Netherlands.
- 2001 Nagendra, H., J. Southworth and C.M. Tucker. Fragmentation of a Landscape. Presented at the *Center for Ecological Sciences Seminar Series, Indian Institute of Science, Bangalore, India*.
- 1999 Southworth, J. Consequences of future climate change and changing climate variability on corn yields in the Midwestern United States. *GCTE Focus 3 Conference*, Reading, England.

#### NATIONAL MEETINGS

- 2024 **Invited Speaker:** Harvard Center for Geographic Analysis, on **Evaluating the Science of geospatial AI**. May 2024
- 2024 Torit Chakraborty, Jane Southworth, Mehedy Hassan (2024). From grapes to pixels: GeoAI based approach for identifying vineyards for Stellenbosch vineyard detection. Poster Presentation, American Association of Geographers Annual Meeting, April 16-21, Honolulu, Hawaii.
- 2023 **Invited Speaker:** **AI in Higher Education: Transforming the Teaching and Learning Experience Symposium**. University of Tennessee, October 2023.
- 2023 **Invited Speaker:** Migliaccio, K.W. and J. Southworth. **Testimony to House Future Forum Caucus regarding AI across the Curriculum**. May 16. Washington D.C.
- 2023 Migliaccio, K.W. and J. Southworth. **AI Across the Curriculum and Agriculture. AI in Agriculture: Innovation and Discovery to Equitably Meet Producer Needs and Perceptions** Conference. April 17-19, 2023, Orlando, FL.
- 2024 Mohammad Safaei, Jane Southworth, Mohammad Mehedy Hassan (2024). Object-based Classification for Land Cover Change Mapping in Addo Elephant National Park using Landsat Imagery. Florida Society of Geographers, February 16-18, 2024, St. Augustine, Florida
- 2023 **Invited Speaker:** **Ecology & Climate: Past Present and Future of GIScience**. American Association of Geographers Webinar.
- 2024 Mashoukur Rahaman, Jane Southworth, Yixin Wen, David Keellings (2024). Assessment of Machine Learning and Deep Learning Methods for Almond Crop Detection in California's Central Valley, utilizing Remote Sensing. Presentation, American Association of Geographers Annual Meeting, April 16-21, Honolulu, Hawaii.

- 2024 **Jane Southworth.** Redefining Boundaries: Geography's Role in Tomorrow's Challenges. Presentation, American Association of Geographers Annual Meeting, April 16-21, Honolulu, Hawaii.
- 2024 Mohammad Safaei, Jane Southworth, Mohammad Mehedy Hassan (2024). Land Use and Land Cover Classification in Addo Elephant National Park: Analyzing the Impact of Variables, Algorithms, and Object-Based Approach. American Association of Geographers Annual Meeting, April 16-21, Honolulu, Hawaii.
- 2024 **Jane Southworth.** Chair for "GIS Certification - Get a certificate program started at your institution". American Association of Geographers Annual Meeting, April 16-21, Honolulu, Hawaii.
- 2024 Striley, J. L., Child, B., & Southworth, J. (2024). Land cover change, resource conservation and use, and direct funding for community-based natural resource management in Niassa Special Reserve, Mozambique. Poster presented at the American Association of Geographers Annual Meeting, Honolulu, Hawaii, April 18, 2024.
- 2024 **Jane Southworth.** Panelist for "GIS Certification - Grow or improve your certificate program" American Association of Geographers Annual Meeting, April 16-21, Honolulu, Hawaii.
- 2023 Audrey Smith and Jane Southworth (2023). Agro-industrial Land Investments in Africa: Tradeoffs Between Agricultural Productivity Production and Forest Conservation in Ethiopia. SEDAAG November 18-20, 2023, Norfolk, Virginia
- 2024 **Jane Southworth.** Panelist for "What is progress in Environmental Geography?" American Association of Geographers Annual Meeting, April 16-21, Honolulu, Hawaii.
- 2024 Audrey Smith and Jane Southworth (2024). Rapid Urbanization in the Context of Sustainable Development: A Case Study of Addis Ababa, Ethiopia. Florida Society of Geographers, February 16-18, 2024, St. Augustine, Florida
- 2023 Mohammad Safaei, **Jane Southworth**, Mohammad Mehedy Hassan (2023). Precision Land Use and Land Cover Mapping in Addo Elephant National Park through Landsat-8 and Google Earth Engine. SEDAAG November 18-20, 2023, Norfolk, Virginia
- 2024 Audrey Smith and Jane Southworth (2024). Social-Ecological and Environmental Impacts of Rapid Urbanization of Addis Ababa, Ethiopia. American Association of Geographers Annual Meeting, Honolulu, Hawaii, April 18, 2024.
- 2023 Mashoukur Rahaman, **Jane Southworth**, Yixin Wen, David Keellings (2023). Assessment of Machine Learning and Deep Learning Methods for Almond Crop Detection in California's Central Valley, utilizing Remote Sensing. Presentation, SEDAAG November 18-20, 2023, Norfolk, Virginia.

- 2023 Good, Ryan Z., Leandra Merz, Carly Muir, Reza Khatami, and Jane Southworth. "Application of Remotely Sensed Vegetation Persistence to Monitor and Improve Management for Sustainable Development Goal 15: A Case Study of Kavongo-Zambezi Transfronteir Park." Paper presented at the American Association of Geographers Annual Meeting, Denver, CO, March 2023.
- 2022 Kahler, J., Morales-Giner, P., Hull, V., and Southworth, J. (16 Nov 2022). "Climate change and wildlife crime in social-ecological systems: A conceptual framework and examples from the Global South" American Society of Criminology Conference, Atlanta GA, USA.
- 2022 Good, Ryan Z., Carly Muir, Leandra Merz, Reza Khatami, and Jane Southworth. "Remote Sensing-Derived Drivers of Vegetation Persistence in East Africa." Poster presented at the American Association of Geographers Annual Meeting, Virtual, February 2022.
- 2022 Audrey Culver Smith, University of Florida; Jane Southworth, University of Florida; Large-scale land acquisitions and ecosystem services: Impacts on natural woodlands, biodiversity, and local livelihoods in Ethiopia. American Association of Geographers Annual Meeting, Virtual, February 2022.
- 2021 Audrey Smith and Jane Southworth. AAG, April 2021: Large-scale land acquisitions and ecosystem services: Impacts on natural woodlands and energy security in Ethiopia
- 2021 Good, Ryan Z., Jane Southworth, and Reza Khatami. "Vegetation Persistence in the Lake Victoria Basin: A Remote Sensing Perspective." Poster presented at the American Association of Geographers Annual Meeting, Virtual, April 2021.
- 2021 Audrey Smith and Jane Southworth. ATBC, July 2021: Large-scale land acquisitions and ecosystem services: Impacts on natural woodlands, biodiversity, and local livelihoods in Ethiopia
- 2021 Audrey Smith and Jane Southworth. AAG, April 2021: Large-scale land acquisitions and ecosystem services: Impacts on natural woodlands and energy security in Ethiopia
- 2021 Good, Ryan Z., Jane Southworth, and Reza Khatami. "Vegetation Persistence in the Lake Victoria Basin: A Remote Sensing Perspective." Poster presented at the American Association of Geographers Annual Meeting, Virtual, April 2021.
- 2021 Audrey Smith and Jane Southworth. FSG, Feb. 2021: Conflict in Africa: Are Land (and Water) Grabs a Threat Multiplier?
- 2020 Audrey Smith and Jane Southworth. SEDAAG, Nov. 2020: Conflict in Africa: Is the Recent Phenomenon of Lands Grabs a Threat Multiplier?
- 2018 Haro-Carrión, X., Loiselle, B., & J. Southworth. Understanding land-cover change and its impact on biodiversity in an Ecuadorian fragmented landscape. United States Regional Association of the International Association for Landscape Ecology (US – IALE) Annual Meeting, Chicago, IL. Oral presentation. April 2018

- 2018 Haro-Carrión, X., J. Southworth., & P. Waylen. Spatiotemporal Changes in Vegetation Greenness Across Continental Ecuador, 1982-2010. American Geophysical Union (AGU) Annual Meeting, Washington, D.C. Poster presentation. December 2018
- 2018 Khatami, R., Southworth, J., Muir, C., Caughlin, T., & Ayana, A. (2018, Oral). Operational large-area land-cover mapping: Ethiopia case study. Association of American Geographers (AAG) Annual Meeting 2018, New Orleans, LA.
- 2018 Muir, C., Southworth, J., Khatami, R., & Ayana, A. Vegetation Persistence and Change in Ethiopia as a Function of Climate. Association of American Geographers (AAG) Annual Meeting 2018, New Orleans, LA.
- 2018 Southworth, J., Ryan, S.J., Khatami, R., Waylen, P., Herrero, H., Bunting, E.L., Zhu, L., Hill, M., Latitudes and Land Use: Global Biome Shifts in Greenness Persistence across Three Decades. American Association of Geographers Annual Meeting, New Orleans.
- 2018 Hannah Herrero and Jane Southworth. Examining vegetation changes in Eastern Zambia savanna landscapes from 1984-2016: an integrated approach. Applications of Time Series Remote Sensing at the Global to Landscape Scale Session. American Association of Geographers Annual Meeting. New Orleans, LA. April 2018.
- 2017 Hannah Victoria Herrero and Jane Southworth. Temporal and spatial specificity of vegetation changes in Eastern Zambia savanna landscapes. Land Systems Science Symposium. American Association of Geographers Annual Meeting. Boston, MA. April 2017.
- 2017 Jane Southworth, Sadie Ryan, Hannah Herrero, Erin Bunting, Michael Hill, Peter Waylen, Likai Zhu Global biome shifts in greenness persistence across three decades: climate and anthropogenic drivers differ by hemisphere, and forests are in trouble. American Association of Geographers Annual Meeting. Boston, MA. April 2017.
- 2016 Southworth, J., Likai Zhu, Erin Bunting, Sadie Ryan, Hannah Herrero, Peter Waylen, Michael Hill. Changes in vegetation persistence across global savanna landscapes, 1982-2010. Association of Geographers Annual Meeting. San Francisco, CA. April 2016.
- 2016 Southworth, J., Likai Zhu, Erin Bunting, Sadie Ryan, Hannah Herrero, Peter Waylen, Michael Hill. Changes in vegetation persistence across global savanna landscapes, 1982-2010. Annual Association of Geographers Meeting, San Francisco, CA, April 2016.
- 2016 Carrion, Haro Xavier and Jane Southworth. Classifying a highly fragmented forest landscape in Ecuador. Annual Association of Geographers Meeting, San Francisco, CA, April 2016.
- 2016 Audrey Smith and Jane Southworth. A time series analysis of climate-driven vegetation change and child stunting in the country of Zambia. AAG 2016 Annual Meeting, San Francisco CA. April, 2016
- 2016 DEVELOPED AND RAN NATIONAL SYMPOSIUM ON DRYLAND RESEARCH – MENLO PARK, CA. MARCH 2016.

- 2015 Ryan, S.J., Southworth, J., Hartter, J., Dowhaniuk, N., Fuda, R., Diem, J. 2015. "Household level influences on fragmentation in an African park landscape." Association of American Geographers (AAG) Annual Meeting, April 21-25, 2015, Chicago, IL.
- 2015 Southworth, Waylen, Bunting, Zhu, Huffaker, Campo-Bescos, Munoz-Carpena, and Kaplan. Using time-series and dynamic factor analysis to model and explain the combined spatial and temporal effects of environmental drivers on vegetation growth in southern Africa. Association of American Geographers (AAG) Annual Meeting, April 21-25, 2015, Chicago, IL.
- 2015 Panel Session: Supporting women in Remote Sensing and GIS. *Organizer(s)*: Timothy Warner - West Virginia Uni and Michaela Buenemann - New Mexico State Uni. *Panelist(s)*: Elizabeth A. Wentz, Lindsay Deel , Daoqin Tong , Jane Southworth , Christopher D. Lippitt and Beth Mitchneck . Association of American Geographers (AAG) Annual Meeting, April 21-25, 2015, Chicago, IL.
- 2015 Xavier Haro-Carrión and Jane Southworth. 2015. The performance of random forests to classify a fragmented landscape of semi-deciduous tropical forests. Southeastern Division of the American Association of Geographers (SEDAAG) Annual Meeting. Pensacola, FL.
- 2014 Erin Leigh Bunting, Greg Kiker, Timothy J. Fullman, Jane Southworth. Utilization of the SAVANNA Model to Analyze Future Patterns of Vegetation Cover in Kruger National Park under IPCC Climate Change Scenarios. AAG Annual Meeting, Tampa, FL April 2014.
- 2014 Mehmet Ozdes and Jane Southworth. Vegetation Change Detection in Kruger National Park and Surrounding Landscapes as a Function of Tourism Development and Park Conservation. AAG Annual Meeting, Tampa, FL April 2014.
- 2014 Likai Zhu and Jane Southworth. Interannual variability of global terrestrial net primary production derived from satellite observations, 1982-2010. AAG Annual Meeting, Tampa, FL April 2014.
- 2013 Lesley Rigg, Jane Southworth, Cerian Gibbes, Peter Waylen, Shannon McCarragher, Lin Cassidy. *Linking dendrochronology, satellite remote sensing and climate in savanna landscapes, Botswana*. AAG National Meeting, Los Angeles, CA, USA. April 2013.
- 2013 Jane Southworth, Cerian Gibbes, Peter Waylen, Brian Child. *How do climate variability and climate change influence vegetation cover and vegetation change in dryland ecosystems across Southern Africa?* AAG National Meeting, Los Angeles, CA, USA. April 2013.
- 2013 Peter Waylen, Jane Southworth, Cerian Gibbes and Huiping Tsai. Developing Time Series Analyses and Statistical Significance of Land Cover Change Processes in Vegetation Persistence Analyses. AAG National Meeting, Los Angeles, CA, USA. April 2013.

- 2013 Richard Aspinall, Jane Southworth, Dan Brown, Andrew Millington. Closing Plenary of the Land Systems Science Symposium. AAG National Meeting, Los Angeles, CA, USA. April 2013.
- 2013 Erin Bunting and Jane Southworth. Utilization of Remotely Sensed Spectral Indices to Differentiate Vegetation Patterns in Savanna Landscapes. AAG National Meeting, Los Angeles, CA, USA. April 2013.
- 2011 Xanic J. Rondon, Graeme C. Cumming, Rosa Cossio and Jane Southworth. Simulations of Selective Logging Behaviors and Spatial Patterns of Forest Fragmentation. Resilience 2011, March 11-16<sup>th</sup>, Tempe, Arizona.
- 2011 Gibbes, C., Southworth, J., Waylen, P., Cui, X., Bunting, E. Assessing ecological response of savanna landscapes to climate change. Florida Society of Geographers Annual Meeting, Gainesville FL.
- 2011 Gibbes, C., Southworth, J., Waylen, P., Cui, X., Bunting, E. Measuring ecological responses to climate change: Long term vegetation trends in southern African savannas. *Graduate Student Council Forum, University of Florida, Gainesville, Florida.*
- 2010 Bunting, E.L\*, Gibbes, C\*, Southworth, J. 2010. The Impact of Climate Vulnerability /Change on the Semi-Arid Savanna Landscape of Southern Africa. NSF Conference. University of Florida. October 25-26, 2010.
- 2010 X. Ciu, C. Gibbes\*, J. Southworth and P.R. Waylen, 2010. Measuring Semi-arid Savanna Cyclical Patterns and Dynamics. *Florida Climate Institute Meeting, Tallahassee, Fl*
- 2010 Bunting, E., Gibbes, C., Southworth, J. Climate Variability Across the Kwando, Okavango, and Zambezi Catchments. *Florida Climate Institute Meeting, Tallahassee, Fl.*
- 2010 Southworth, J., Binford, M., Waylen, P., Keys, E., Child, B., Cassidy, L., Qiu, Y., Kiker, G., Mundoz-Carpena, R., Gibbes, C., Gaughan, A., Stevens, F., Steele, J., Bunting, E., Sun, J., Mwenga, S., Falcon, G. Predicting the impact of climate variability and climate change on land use and land cover change via socio-economic institutions in Southern Africa. *Florida Climate Institute Meeting, Tallahassee, Fl.*
- 2010 Gibbes, C., Ciu, X., Southworth, J. Quantifying cyclical climate-land patterns and dynamics in semi-arid savannas. *Florida Climate Institute Meeting, Tallahassee, Fl.*
- 2010 Gibbes, C., Southworth, J., Cui, X., Waylen, P. Quantifying ecological resilience in African savannas. *Global Land Project Open Science Meeting, Tempe, Arizona. October 2010*
- 2010 Eric Keys, Brian Child, Jessica Steele, Patricia Mupeta, Cerian Gibbes, Shylock Muyengwa, Erin Bunting, Jing Sun, Jane Southworth, Lin Cassidy; Southern African livelihood and land cover change as a response to institutional and environmental change. *Global Land Project Open Science Meeting, Tempe, Arizona. October 2010*

- 2010 SOUTHWORTH, J., H. NAGENDRA, L. CASSIDY. Forest transition pathways in Asia - Case studies from Nepal, India, Thailand and Cambodia. *Association of American Geographers Annual Meeting, Washington DC*. April 14-18, 2010.
- 2010 Mondal, P. and Southworth, J. 2010. Exploring the utility of ASTER thermal bands in measuring protected area effectiveness. *Association of American Geographers Annual Meeting, Washington DC*. April 14-18, 2010.
- 2010 Bunting, E.L, Gibbes, C., Southworth, J. Impacts of Seasonal Precipitation Shifts on the Landscape of Southern Africa. *Association of American Geographers Annual Meeting, Washington DC*. April 14-18, 2010.
- 2010 Gibbes, C., Adhikari, S., Southworth, J. Evaluating ecological status in semi-arid African savannas: A multi-scalar and multi-platform approach to quantifying savanna composition. *Association of American Geographers Annual Meeting, Washington DC*. April 14-18, 2010.
- 2010 PANELIST: FIELDWORK IN AN AFRICAN SETTING III. Annual Association of American Geographers (AAG) Meeting. April 2010
- 2010 Mondal, P. and Southworth, J. Using CA-Markov model to investigate the importance of national level policy in forest conservation. Florida Society of Geographers Annual Meeting. 15-17 January 2010, Tampa, FL. Paper Presentation.
- 2009 Southworth, Perz, Marsik, Rocha, Stevens and Qiu. "Land Cover Change Patterns and Processes: Linking to Infrastructure Change and Resilience in Social-Ecological Systems: The Case of Southwestern Amazonia" Annual Association of American Geographers (AAG) Meeting. March 2009
- 2009 Invited Panel Member Panel "Challenges of collaborative and interdisciplinary research projects" with Jane Read, Richard Aspinall, Dan Brown, David Bennet, and Billie Turner. Annual Association of American Geographers (AAG) Meeting. March 2009
- 2009 Jane Southworth, Stephen Perz, Youliang Qiu, Matt Marsik, Karla Rocha, Forrest Stevens, 2009. Resilience in a Social-Ecological Systems: The Case of Southwestern Amazonia. Florida Society of Geographers, St. Augustine, FL, Feb 2009.
- 2009 Pinki Mondal and Jane Southworth. Graduate Student Council Interdisciplinary Conference, UF. '30 Years of Protection: Is Pench Tiger Reserve a Success Story?' February 2009.
- 2008 Rutgers Conference. Invited and fully supported participant of the 'Land Use Transition in the Tropics' Conference. March 2008. Presentation title: 'Evaluating forest transition pathways in Asia - Case studies from Nepal, India, Thailand and Cambodia.
- 2008 Invited Colloquium Presentation. Indiana University, School of Public and Environmental Affairs. 'Infrastructure Change, human Agency and Resilience in Social-Ecological Systems: The Case of Southwestern Amazonia.' October 2008.
- 2008 Joel Hartter, Sadie Ryan, Jane Southworth. Examining the Change in Forests and Wetlands in and Around Kibale National Park, Uganda. Presented at Conservation Biology Annual Meeting. Chattanooga, TN, July 13-17, 2008

- 2007 Jane Southworth, Lin Cassidy, Michael W Binford. "What's with all the classifications? Using continuous approaches to land cover change analyses within the Lower Mekong River Region." AAG Annual Meeting Presentation, San Francisco, CA, April 2007.
- 2007 Invited Panelist: 'Becoming a Writer I: Physical Geography and GIS'. Session Chair: Kathryn Davis - San Jose State University. Panelists: Jane Southworth - University of Florida, Molly E. Brown - Science Systems and Applications (NASA), James H. Speer - Indiana State University, David M. Helgren - San Jose State University, Robert Gilmore Pontius - Clark University, Gary Pereira - San Jose State University. AAG Annual Meeting, San Francisco, CA, April 2007.
- 2007 Invited Panelist: 'Experience, Ideas, and Issues with Curricula on Human-dimensions/human-environment/nature-society'. Session Chairs: Martha E. Geores - University of Maryland, Karl Zimmerer - University of Wisconsin – Madison. Panelists: Billie L. Turner - Clark University, Diana M. Liverman - University of Oxford, Gregory W. Knapp - University of Texas – Austin, David L. Carr - UC Santa Barbara, Jennifer L. DeHart - Allegheny College, Jane Southworth - University of Florida, Karl Zimmerer - University of Wisconsin – Madison. Martha E. Geores - University of Maryland. AAG Annual Meeting, San Francisco, CA, April 2007.
- 2007 Cerian Gibbes and Jane Southworth. "Turning up the heat." AAG Annual Meeting Presentation, San Francisco, CA, April 2007.
- 2007 Matt Marsik, Karla Rocha, Jane Southworth, Frank Barra, I. Foster Brown, and Stephen Perz. "Land Cover Change in the MAP Region, Southwestern Amazonia: Driven by Road Expansion" AAG Annual Meeting Presentation, San Francisco, CA, April 2007.
- 2007 Karla Rocha, Matt Marsik, Jane Southworth, Frank Barra, I. Foster Brown, and Stephen Perz. "Methods of Data Standardization for Image Processing and Land Cover Change Analysis in the Tri-National Frontier of Madre de Dios (Peru), Acre (Brazil), and Pando (Bolivia) - MAP" AAG Annual Meeting Presentation, San Francisco, CA, April 2007.
- 2006 Co-Organizer and Chair, 5 Special sessions under the overarching theme *Linking Social & Ecological Systems*. Session I: *Theory, Rationale & Necessity for Integrating Social & Ecological Systems*, Session II: *Governance & Tenure*, Session III: *Livelihoods*, Session IV *Landscape-level Analysis & Remote Sensing and Session V: Infrastructure & Connectivity*. Annual Meeting of the Association of American Geographers, Chicago, USA, March 2006
- 2006 Southworth, J., M. Binford, J. Hartter, A. Goldman, C. Chapman, and L. Chapman. Linking social and ecological systems in Uganda: Interactions among Protected Areas, Land Cover Change, Land Use and Biodiversity. Annual Meeting of the Association of American Geographers, Chicago, USA, March 2006.
- 2006 Hartter, J., A. Goldman, M. Binford, C. Chapman, L. Chapman, and J. Southworth. *Environmental Services and Hazards of Wetlands and Forest Patches in Western Uganda*. Annual Meeting of the Association of American Geographers, Chicago, USA, March 2006.



- 2006 Binford, M., L. Cassidy, J. Felkner, R.M. Townsend, A.L. Kolata, and J. Southworth. How to study the combined domains of environment, economics, and social behavior in Thailand and Cambodia. Annual Meeting of the Association of American Geographers, Chicago, USA, March 2006.
- 2006 Southworth, J., M. Binford, and J. Hartter. *Hotspots and Change: Using thermal analyses for improving land cover classifications*. Annual Meeting of Florida Society of Geographers, St. Petersburg, FL, February 2006.
- 2006 Hartter, J., A. Goldman, M. Binford, C. Chapman, L. Chapman, and J. Southworth. *Services and Hazards of Wetlands and Forest Patches for Communities Around Kibale National Park, Uganda*. Annual Meeting of Florida Society of Geographers, St. Petersburg, FL, February 2006.
- 2006 Goldman, A., J. Hartter, J. Southworth, and M. Binford. "Superpixels" on the Landscape Meso-scale sampling to study livelihoods, land use, land cover, and biodiversity around Kibale National Park, Uganda. Annual Meeting of Florida Society of Geographers, St. Petersburg, FL, February 2006.
- 2005 Southworth, J., M. Binford, A. Goldman, C. Chapman, L. Chapman, and E. Binford. Land Cover Change and Fragmentation in and around Kibale National Park, Uganda. Annual Meeting of Florida Society of Geographers, Orlando FL, February 2005
- 2005 Marsik, M., J. Southworth, G. Cumming and M. Binford. Variance across space and time in north-central Florida. Meeting of Florida Society of Geographers, Orlando FL, February 2005
- 2004 Nagendra, H., J. Southworth and C. Tucker. Accessibility as a Determinant of Landscape Transformation in Western Honduras: Linking Pattern and Process. In Seminar Series on 'Space Matters: Research That Uses Geospatial Information, GIScience, Remote Sensing, and Other Spatial Matters', Stanford University, April 7th.
- 2004 Southworth, J., G. Cumming, and M. Matthew. Spatial versus Temporal Analysis of Landscape Change in North Central Florida. Presented at the *100th meeting of the Association of American Geographers*, Philadelphia, PA.
- 2004 Munroe, D., H. Nagendra, and J. Southworth. Protection, topography and market accessibility: Examining forest fragmentation in Celaque National Park, Western Honduras. Presented at: *100th meeting of the Association of American Geographers*, Philadelphia, PA.
- 2003 Southworth, J., D. Munroe and C. Tucker. Forest fragmentation and degradation in a protected area: Celaque National Park, Western Honduras. *South Eastern Division of the Association of American Geographers (SEDAAG) Annual Meeting*, Charleston, South Carolina.
- 2003 Southworth, Jane, Darla Munroe and Harini Nagendra. Fragmentation and Land Cover Change Research – Addressing the issues of continuous versus discrete analyses for a study area in Western Honduras. At the *99th Annual Meeting of the Association of American Geographers*, New Orleans.

- 2003 Tucker, C. M., and J. Southworth. Coffee Culture, Market Volatility and Environmental Change in Western Honduras. Presented at the *Annual Meeting of the American Anthropological Association*, Chicago, IL.
- 2002 Nagendra, H., J. Southworth and C. Tucker. (2002). Accessibility as a determinant of landscape transformation in Western Honduras: Linking pattern and process. Presented at the 98th Annual Meeting of the Association of American Geographers, 23-29 March 2002, Los Angeles.
- 2002 Southworth, J, H. Nagendra, and C. Tucker. Forest cover change in a western Honduras community: accessibility and protection as determinants of landscape transformation. *Working Forests in the Tropics: Conservation through sustainable management*, Gainesville, FL.
- 2002 Southworth J, J.C. Randolph, O.C. Doering, and R.A. Pfeifer. Farm level adaptation strategies under global climate change in the Upper Midwestern United States. *Florida State Geographers Annual Conference*, Gainesville FL.
- 2002 Tucker, C. M., D. Munroe, H. Nagendra and J. Southworth. Environmental Processes in Honduras and Guatemala: The Complementarity of Ethnographic and Spatially Explicit Approaches. Presented at the *Annual Meeting of the American Anthropological Association*, New Orleans, November 20-24, 2002.
- 2001 Southworth, J., H. Nagendra, and C.M. Tucker. Using landscape metrics to interpret land cover change in Western Honduras and to monitor infringement into Celaque National Park. *86<sup>th</sup> Annual Meeting of the Ecological Society of America*. University of Wisconsin, Madison, WI.
- 2001 Munroe, D., J. Southworth, and C.M. Tucker. The Dynamics of Land-Cover Change in Western Honduras: Spatial Autocorrelation and Temporal Variation. *American Agricultural Economics Association (AAEA) Annual Meeting*, Chicago, IL.
- 2001 Nagendra, H, J. Southworth, and C.M. Tucker. Using landscape metrics to interpret trajectories of land cover change: A case study in Western Honduras. *16<sup>th</sup> Annual Symposium of the U.S. Chapter of International Association of Landscape Ecology*, pp. 177, 25-29 April 2001, Arizona State University, Tempe, AZ.
- 2001 Southworth, J., J.C. Randolph, O. Doering, M. Habeck, and R.A. Pfeiffer. Midwestern crop growth under climate change: Implications and adaptations for maize, soybeans and wheat. *The 97<sup>th</sup> Annual Meeting of the Association of American Geographers*, New York City, NY.
- 2000 Southworth, J., J.C. Randolph, O.C. Doering, M. Habeck, R.A. Pfeifer, and M.A. Mazzocco. Climate change or changing climate variability: Which is worse for crop growth in the midwestern region of the United States? *85<sup>th</sup> Annual Meeting of the Ecological Society of America*, Snowbird, UT.

- 2000 Southworth, J., C. Tucker, and J.C. Randolph. Seeing the forest for the trees: Forest change analysis in La Campa, Western Honduras. *The 96th Annual Meeting of the Association of American Geographers Annual Meeting*.
- 2000 Pfeifer, R.A., J. Southworth, M. Habeck, J.C. Randolph, O.C. Doering, and M.A. Mazzocco. Impact of Climate Change on Crop Yields in the Midwest. Presented at the *ASA-CSSA-SSSA Annual Meetings*. Minneapolis, MN. Pittsburgh, PA.
- 1999 Williams, A., M. Nearing, M. Habeck, J. Southworth, R. Pfeifer, O. Doering, J. Lowenberg-DeBoer, J.C. Randolph, and M. Mazzocco. Global Climate Change: Implications of Extreme Events for Soil Conservation Strategies and Crop Production in the Midwestern United States, *The 10th International Soil Conservation Conference*, West Lafayette, IN.
- 1998 Doering, O.C., M. Habeck, J. Lowenberg-DeBoer, R.A. Pfeifer, J.C. Randolph, J. Southworth, and M. Mazzocco. Assessing Climate Change Impacts and Adaptation: Expert Panel Contributions. *American Society of Agronomy Annual Meetings*, Baltimore, MD.
- 1998 Southworth, J., and J.C. Randolph. The implications of current and future climate variability on crop growth in the Midwestern region of the United States. *83rd Annual Meeting of the Ecological Society of America*. Bulletin of the Ecological Society of America 79:219. Baltimore, MA.
- 1998 Southworth, J., J.C. Randolph, O.C. Doering, M. Habeck, M. Mazzocco, J. Lowenberg-DeBoer, and R. Pfeifer. Preliminary report of the Eastern Midwest Climate Change Workshop presented at the *Workshop for the USGCRP-sponsored National Assessment of the Potential Consequences of Climate Change and Variability*, Monterey, CA.
- 1998 Doering, O.C., M. Habeck, J. Lowenberg-DeBoer, R.A. Pfeifer, J.C. Randolph, J. Southworth, and M. Mazzocco. Assessing climate change impacts and adaptation: Expert panel contributions. *Environmental Sciences and Engineering Symposium*. Purdue University, West Lafayette, IN.
- 1997 Doering, O.C., M. Habeck, J. Lowenberg-DeBoer, R.A. Pfeifer, J.C. Randolph, J. Southworth, and M. Mazzocco. Organizer and Moderator for the *Annual Meeting of the American Agricultural Economics Association*, "American and Canadian Experiences in Interdisciplinary Research Assessing Adaptation to Global Warming."
- 1997 Southworth, J., A. Conea-Floyd, J.J. Johnston, and J.C. Randolph. A classification scheme for dry tropical forest and utilization of the thermal band: Yucatan, Mexico. *82nd Annual Meeting of the Ecological Society of America*, Albuquerque, NM.
- 1997 Southworth, J. Climate change modeling development for the Midwestern study region. *National Center for Atmospheric Research (NCAR)*, Boulder, CO.
- 1995 Southworth, J., and C.S.B. Grimmond. Variation of stomatal resistances within urban areas. *The 91st Annual Meeting of the Association of American Geographers*, Chicago, IL.

## INVITED – UNIVERSITY OF FLORIDA

- 2024 Migliaccio, K.W. and J. Southworth. 2024. Presentation to the SACSCOC Review Team on the AI Across the Curriculum QEP. Feb 27-29. Gainesville, FL.
- 2023 Migliaccio, K.W. and J. Southworth. 2023. Presentation to AI College Leadership at UF. Jul 26.
- 2023 Migliaccio, K.W. and J. Southworth. 2023. Overview of AI Across the Curriculum. Jan 6. University of Albany, UF campus visit.
- 2022 Migliaccio, K.W. and J. Southworth. 2022. QEP: Update on progress. Invited Speaker. Strategic Communications AI Retreat. Jul 25. Gainesville, FL.
- 2022 Migliaccio, K.W. and J. Southworth. 2022. QEP: AI Across the Curriculum. Invited Speaker. IFAS AI Advisory Board meeting. Gainesville, FL.
- 2016 Southworth, Jane, Spring 2015. Changes in vegetation persistence across global savanna landscapes, 1982-2010. Biocomplexity Engineering group Seminar Series.
- 2016 Audrey Smith and Jane Southworth. Climate, Vegetation Dynamics & Child Undernutrition in Zambia. UF Climate Institute 3 Minute Thesis Contest; Oral Presentation. Florida Climate Institute, UF, February, 2017
- 2016 Audrey Smith and Jane Southworth. Climate, Vegetation Change and Child Health in Zambia. UF NRM in Africa working group. March, 2016
- 2016 Audrey Smith and Jane Southworth. The interspatial relationship of NDVI and child undernutrition in Zambia. Department of Geography Colloquium. April, 2016
- 2013 Invited talk in the 'Odum Water and wetlands' Series. Vegetation change and climate variability analysis using remotely sensed time series analyses.
- 2013 Geography Department Colloquium. Vegetation persistence under increasing climate variability across Southern Africa.
- 2010 Moderator. Adaptive Water Management Strategies for Transitioning Environment. Water Institute, Gainesville, FL. Feb 2010.
- 2009 Invited panel member. UF panel addressing the question "Is Collapse Imminent?" Thursday, April 16. 2009. Invited panel member with Dr. Mark Brenner, Dr. Michael Binford, Dr. Michael Mosley, Dr. Bron Taylor and Dr. Jim Jones.
- 2009 Guest Lectures for courses GEO3151: Foundations of GIS and GEO 5177: Research in GIS on 'Remote Sensing: What is it and how does it relate to GIS?'

- 2009 'REDD and Remote Sensing' – invited to present and run a seminar in course taught by Jack Putz on UF Campus, February 2009.
- 2008 Guest Lectures for courses GEO3151: Foundations of GIS and GEO 5177: Research in GIS on 'Remote Sensing: What is it and how does it relate to GIS?'
- 2007 Guest Lectures for courses GEO3151: Foundations of GIS and GEO 5177: Research in GIS on 'Remote Sensing: What is it and how does it relate to GIS?'
- 2007 'Women in Academia' Faculty Panel Member for a workshop.
- 2006 Colloquium to Sigma Xi. Footsteps on the landscape: Monitoring land cover change in and around Kibale National Park, Uganda. December 2006
- 2006 Colloquium in the Entomology department. Monitoring Land use, Land cover change and Implications for Biodiversity: Kibale National Park, Uganda. November 2006
- 2006 Colloquium to the SFRC Department. Seeing the Forest? Seeing the Trees? Advantages and Disadvantages of Satellite Remote Sensing Analyses, Using Examples from Kibale National Park, Uganda. October 2006.
- 2006 SNRE Colloquium Faculty Panel on Interdisciplinarity within Academia. September 2006.
- 2006 Guest Lectures for courses GEO3151: Foundations of GIS and GEO 5177: Research in GIS on 'Remote Sensing: What is it and how does it relate to GIS?'
- 2005 Colloquium in the Botany department. Footsteps on the landscape: detecting and analyzing landscape change in and around Kibale National Park, Uganda and Tarangire National Park, Tanzania. October 2005
- 2005 SNRE Colloquium Series Presentation. Footsteps on the landscape: detecting and analyzing landscape change in and around Kibale National Park, Uganda and Tarangire National Park, Tanzania. November 2005
- 2005 Guest Lectures for courses GEO3151: Foundations of GIS and GEO 5177: Research in GIS on 'The use of Remote Sensing in GIS'
- 2005 Guest Lecture on 'The use of Remote Sensing in Landscape Ecology' in WIS 6468C: Pattern and Process in Landscape Ecology, taught by Dr. Graeme Cumming, WEC.
- 2004 Guest Lecture on 'The use of Remote Sensing in Landscape Ecology' in WIS 6468C: Pattern and Process in Landscape Ecology, taught by Dr. Graeme Cumming, WEC.
- 2004 Guest Lectures (3 per semester) for courses GEO3151: Foundations of GIS and GEO 5177: Research in GIS, as part of a team teaching these courses.
- 2004 Guest Lecture on 'Integrating Satellite Analyses within Resilience Studies: A way to link land use to land cover?' in WIS 6934C: Resilience Class taught by Dr. Graeme Cumming.

- 2003 Guest Lecture on 'The use of Remote Sensing in Landscape Ecology' in WIS 6468C: Pattern and Process in Landscape Ecology, taught by Dr. Graeme Cumming.
- 2003 Guest Lectures (3 per semester) for courses GEO3151: Foundations of GIS and GEO 5177: Research in GIS, as part of a team teaching and revising these courses.
- 2003 Seminar: Helped to create and lead (along with 3 graduate students: Andres Guhl, Tracy Van Holt, and Claudia Stickler) a 1-day workshop on Geographic Methods
- 2003 Department of Geography, Colloquium Presentation, February 14<sup>th</sup> 2003. Title: "Continuous versus discrete data analysis using remotely sensed images: An example from Western Honduras"
- 2002 Seminar: Helped to create and lead (along with 3 graduate students: Andres Guhl, Tracy Van Holt, and Claudia Stickler) a 1-day workshop on Geographic Methods. Created labs, gave lecture, found readings etc.
- 2002 School of Forest Resources and Conservation, Colloquium Presentation, "Seeing the forest for the trees: Forest change analysis in La Campa, Western Honduras"
- 2002 Seminar for brownbag lunchtime series on remote sensing and crops in the school of Agricultural Engineering, University of Florida, Gainesville, Florida, "Remote Sensing, Crop Modelling and Forests"
- 2001 Nagendra, H., J. Southworth and C.M. Tucker.. Accessibility and Protection as Determinants of Landscape Transformation in Western Honduras: Linking Pattern and Process. Presented at the Environmental Science Seminar, School of Public and Environmental Affairs (SPEA), Indiana University, Bloomington, Indiana.

**INVITED – GAINESVILLE COMMUNITY**

- 2016 Southworth, Jane, February 2015. Changes in Land Cover with Time: Examples from Florida, South Africa and the Amazon. Oak Hammock Seminar Series, Gainesville FL.
- 2016 Southworth, Jane. Technology from Space: the Role of Geography' Series of 4 presentations given at Oak Hall School, Gainesville, FL for Science day. Spring 2015.
- 2009 Oak Hammock Retirement Community Seminar: Role of Remote Sensing and GIS in Geography. November 2009
- 2005 Oak Hammock Retirement Community Seminar: Hurricanes & Tornadoes. October 2005
- 2005 Childs Elementary school. Talked to 5<sup>th</sup> grade classes (2) about 'Weather and Weather Forecasting'. November 2005
- 2005 J.J. Finley Elementary school. Talked to 3<sup>rd</sup> and 4<sup>th</sup> graders about Extreme Weather and weather Forecasting. November 2005.
- 2005 Science Fair Judge at Hidden Oak Middle School. December 2005

## COURSES TAUGHT

### Graduate Level

Contemporary Geographic Thought  
Seminar in Land Change Science  
Seminar in Current Climatic Change  
Seminar in Climate Variability and Change in Africa  
Environmental Remote Sensing  
Geographic Information Systems (GIS) in Research  
Advanced Techniques in Environmental Remote Sensing  
Publish or Perish – the publication process in Academia  
How to Survive (and Thrive) in Academia  
Geography Colloquium  
Research Methods in Geography

### Undergraduate Level

Geographical Sciences and Sustainability  
Introduction to Human Geography  
Introduction to Physical Geography  
Weather and Climate  
Introduction to GIS  
Digital Image Processing  
Extreme Weather  
The Good Life

## SERVICE

### National and International Service

- (1) Editorships and service on editorial boards of regional, national, or international publications
  - *Invited* Specialty Chief Editor of the *Remote Sensing Time Series Analysis* specialty section of *Frontiers in Remote Sensing*. I am the only female Chief Editor (10 men!). I develop the overview of this journal and invite editorial board members to join. Prestigious Invitation.
    - <https://www.frontiersin.org/journals/remote-sensing/sections/remote-sensing-time-series-analysis>
    - Wrote Challenges piece to lead the direction of this new journal section, emphasizing the role of AI in this field:  
<https://www.frontiersin.org/articles/10.3389/frsen.2021.770431/full>
    - Currently developing and leading a new special issue featuring Women in Remote Sensing: <https://www.frontiersin.org/research-topics/29593/women-in-remote-sensing-2022>
  - Editor, *Global Environmental Change*, started December 2023

- Editorial Board Member of '*Progress in Environmental Geography* (PiEG)'
- Consulting Editor: '*Geographical Analysis*'
- Editorial Board Member of '*Journal of Land Use Science*'
  - Developed and led a special issue on 'Women in Land Science' highlighting top researchers, challenges, and frontiers of women in this field. Overwhelming number of submissions received!
- Editorial Board Member of '*LAND*'
- Editorial Board Member of '*Current Conservation*'

(2) Professional Service

2024 – 2026	Member of the AAG task force on nurturing undergraduate geography education (aka the Gen A Project)
2023-24	Nominated and ran for Vice-President of AAG. (Dr. Bill Moseley won)
2023-24	Proposing development of new AAG Specialty Group: Women in Remote Sensing/GeoAI. Running sessions and information gathering.
2023 – current	Serve as the Florida Statewide Course Numbering System Discipline Coordinator for Geography – I review and assign course numbers to ALL Geography classes in the state university system.
2023	HERS Leadership Institute Graduate, Class of 2023
2021-2022	NASA LCLUC Program Proposal Reviewer – Fall 2021
2021-2023	NSF HEGS Panel Reviewer and Member (2-year term)
2013-current	Ad hoc Reviewer NSF [GSS, HEGS and CNH Programs]
2013-current	T&P external reviewer for multiple universities [approx. 5 per year]
2015-2018	External Reviewer for Dissertations: Cape Town [3], Norway
2015-2019	External reviewer for European Funding Agencies in Remote Sensing
2013-2014	Panelist NSF GSS
2009-2013	Member, NASA Science Team
2010	Co-leader for the Geography Faculty Development Alliance (GFDA) Workshop, where with Dr. Kenneth Foote (University of Colorado, Boulder), Dr. Scott Freundsuh (NSF GSS Programs) and Dr. J.W. Harrington (University of Washington) we ran a full week of activities and development aimed at new geography faculty. The Geography Faculty Development Alliance is a long-term, broad-based project to improve the learning and teaching of geography in higher education. The aim is to provide early career faculty and advanced doctoral students with the theoretical and practical knowledge needed to excel in the lecture hall, seminar room, and laboratory. Key objectives of the project are to foster a culture of support and success for early career faculty, to help them understand the fundamental interconnections between their teaching and research, and to advance the



scholarship of teaching and learning across the entire discipline. I was a workshop participant 8 years ago, and this year was invited to return to help lead it.

- Dec 2010 Invited Panel member for NSF Social Observatories National Panel. 3-day meeting to approve ideas for a national network of social observatories to the NSF directorate.
- Dec 2010 External examiner of PhD dissertation for The University of Queensland
- 2009-2011 Panel member for NSF, GSS reviews (twice yearly meetings with 190+ proposals)
- 2010 Sponsor, Fully funded Visiting Scholar, Xia Cui, from the College of Earth and Environmental science, Lanzhou University, PR China. Doctoral Candidate
- 2009-2011 Sponsor. Xanic Rhondic, Peruvian visiting scholar on the MAP project. Providing her mentorship and space in the NASA lab in geography for her research.
- 2010 Reviewer European Proposals for STEREO Program. Invited to be panelist for final review board in Netherlands but unable to attend.
- Feb 2011 Reviewer of European Funding Agencies for Professorship Awards.
- 2009 External reviewer. Asian Institute of Technology, Review for Tenure and Promotion to Associate Professor
- 2000-2009 Editorial Advisory Board member: *Agriculture, Ecosystems and Environment* [International – published in Europe]
- 2009 Reviewed for tenure at SNRE, University of Michigan.
- 2009 Reviewed dissertation research proposal for European Universities
- 2006 Co-Organizer and Chair, 5 Special sessions under the overarching theme ***Linking Social & Ecological Systems***. **Session I: Theory, Rationale & Necessity for Integrating Social & Ecological Systems**, **Session II: Governance & Tenure**, **Session III: Livelihoods**, **Session IV Landscape-level Analysis & Remote Sensing and Session V: Infrastructure & Connectivity**. Annual Meeting of the Association of American Geographers, Chicago, USA, March 2006
- 2005 Panel session submitted and accepted to the 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, "Global Environmental Change, Globalization and International Security: New Challenges for the 21st Century," taking place from 9-13 October 2005 in Bonn, Germany. Our panel session is titled "Contextualizing the Pixel: Comparing Continuous and Discrete Methods for Regional Studies of Human Dimensions on Land-Use/Cover Change (LUCC) Research".
- 2004 Co-Organizer and Co-Chair, Special session I-IV "Are parks working? Exploring tradeoffs in protected area conservation" at the *100<sup>th</sup> Annual Meeting of the Association of American Geographers*, Chair, H. Nagendra, Co-Chair, D. Munroe
- 2003 Reviewer of paper for the Early Career Award for the Remote Sensing Specialty Group and Photogrammetric Engineering and Remote Sensing.

- 2002 Co-Organizer and Co-Chair, Special session I-III “Landscape fragmentation and the analysis of land use/land cover change: from pattern to process” at the 98<sup>th</sup> Annual Meeting of the Association of American Geographers, Chair, D. Munroe
- 2002-Present Reviewer for NSF and NIGEC proposals (2-3 per year)
- 2002-Present Reviewer for: *PNAS, GeoJournal, International Journal of Remote Sensing, BioTropica, Photogrammetric Engineering and Remote Sensing, Landscape Ecology, Climate Research, Climatic Change, Agriculture, Ecosystems and Environment, Landscape Research, Ambio, Agricultural Systems, Forest Science, Applied Geography, Annals of the Association of American Geographers, GeoForum, Professional Geographer, PLOS ONE, Global Change Biology, Remote Sensing, Land, Frontiers in Remote Sensing, Journal of Land Use Science, Remote Sensing Environment*

### **University Service**

- 2024 Member Water Institute Director Search Committee
- 2023-2024 University of Florida Provost Search Committee Member
- 2021-2024 Task Force Co-Chair: Quality Enhancement Program for UF 'AI Across the Curriculum' with Dr. Kati Migliaccio from ABE

QEP and AI Across the Curriculum: The University of Florida charged two co-chairs (myself and Kati) and our task force to develop a Quality Enhancement Plan that will provide students with the opportunity to acquire knowledge, skills, and applications in Artificial Intelligence (AI). The five-year plan (2024-2029) coincides with the “Your Pathway to AI” (University of Florida, 2021a) which places AI at the center of a major, long-term initiative combining world-class research infrastructure and cutting-edge research with a transformative curriculum. The co-chairs and committee were charged in October 2021, and our first task force meeting occurred in November 2021. Document has now been completed and presented (February 2024) to SACSCOC – all approved and finalized.

Kati and I were chosen as task force co-chairs due to our existing involvement in department, college, and university AI efforts prior to being nominated to the QEP effort. Once given the QEP charge, we began weekly meetings together to share information and explore ideas. During initial meetings, a survey of UF Deans (representing UF colleges) was conducted and feedback from this survey was useful in guiding us. Given the AI-based activities that were already occurring at UF, we began the QEP task force effort with brainstorming sessions. This was followed by idea refinement and continued meetings of subgroups. Kati and I, as co-chairs, meet weekly to assimilate group output and provide adaptive direction for continued progress. Together we created a powerpoint presentation, in the required AI template format, to be able to start sharing information across campus. This presentation is updated weekly, and Kati and I have given numerous talks all over campus on the QEP and related AI Across the Curriculum efforts at UF.

TALKS GIVEN By KATI & JANE FOR THE AI ACROSS THE CURRICULUM/QEP PROGRAM

- January 21, 2022. QEP & AI Branding Meeting with Tim Brophy, Dana McPherson, Maria Leite.
- January 26, 2022. QEP meeting with David Reed to review initiatives and receive feedback.
- January 26, 2022. QEP & AI Branding meeting with Melanie Schramm (AVP Marketing), Dana McPherson, Tim Brophy, Maria Leite.
- February 1, 2022. QEP Update Presentation with Joe Glover and Tim Brophy.
- February 10, 2022. Presentation to UF AI Curriculum Committee.
- February 21, 2022. K-12 Education Programs with Kim Jacobs (HWCOE).
- February 22, 2022. QEP and AI Center Meeting. Joe Glover and Tim Brophy.
- February 24, 2022. QEP Meeting regarding undergraduate curriculum with Angela Lindner and David Reed.
- March 7, 2022 UF Executive Committee meeting
- March 14, 2022 SLO and student success meeting with Tim Brophy
- March 16, 2022 QEP meeting with FIU regarding their recently implemented QEP
- April 7, 2022. Faculty Senate Steering Committee Meeting to introduce QEP Initiatives and Name.
- April 14, 2022. Faculty Senate Meeting to introduce QEP Initiatives and Name.
- May 11, 2022. Presentation to HWCOE Assoc Dean Curtis Taylor
- May 11, 2022. Presentation to CLAS Chairs and Directors
- May 23, 2022. Presentation to IFAS Chairs meeting
- July 25, 2022. Presentation at UF’s ‘AI Communications Summit’
- August 15, 2022. Presentation to CLAS Staff AI Discussion
- September 23, 2022. Presentation to SEC Information Technology Group
- November 4, 2022. Presentation to UF Alumni, Grand Guard Faculty Speaker
- December 8, 2022. Presentation to UF BOT, AI in the Curriculum and the QEP
- February 2024, Presentation to SACSCOC

KATI AND JANE DEVELOPED MATERIAL AND RAN TASK FORCE MEETINGS:

**TASK FORCE MEETING DATES**

<b>Date and time</b>	<b>Location</b>
January 25, 2022, 3-5pm	Reitz Union classroom G320
February 22, 2022, 3-5pm	Reitz Union classroom G320
March 22, 2022, 3-5pm	Reitz Union classroom 2355
April 26, 2022, 3-5pm	Reitz Union classroom 2355
May 24, 2022, 3-5pm	Turlington Hall 3018
September 28, 2022 9-11am	Turlington Hall 3018
November 2, 2022, 9-11am	Turlington Hall 3018

Fall 2023

Presented to Oregon State University on QEP and our AI Program at UF

2022-24	Developing CLAS AI webpage with AD McCarty and CLAS Communications Group
2023-24	External Member on Search for New Chair in Anthropology
2024	Member Water Institute Director Search Committee
2021-22	External Member on Search for New Chair in Geological Sciences
2020– current	Developed and serve on 'CLAS AI Curriculum Committee'
2020– current	Serve on 'UF AI Curriculum Committee' as CLAS Faculty Representative
2020- current	Serve on 'UF AI Research Committee' again as CLAS Representative
2021- current	Reviewer for Bob Graham Center Fellowships
2017- current	Member of Sustainability Degree Advisory Board
2015-2018	Elected to serve 3-year term on the Graduate Council
2018	External member on Search for New Chair in Economics
2017	External member on Search for New Chair in Psychology
Fall 2013	Hosted UF Visitor – Dr. Michael Mann, Penn State
Fall 2013	Drafted memo on Preeminence hires, structures and procedures in CLAS
2013-2014	Chair – Steering Committee: Preeminence Cluster for Spatial and Mathematical Modeling of Disease – Hired: Dr. Gregory Glass Hired: Dr. Derek Cummings
2013-2014	Member – Search Committee for Latin American Studies Faculty Hired: Dr. Susan Paulson
2013-2014	Member - Steering Committee: Preeminence Cluster for Latin American Development Hired: Dr. Catherine Tucker Hired: Dr. Bob Walker
2013-2014	External Member – Search Committee for BioComplexity; Agricultural and Biological Engineering Search.
2009-current	Member and Chair of the new proposed Florida Climate Institute Advisory Board, led by Director: Dr. J. Jones Ag. Biological Engineering.

2002-current	Land Use and Environmental Change Institute Coordinator: organize meetings and space allocation for graduate student researchers. Currently undertaking a number of key tasks (given current fiscal crisis), in terms of preparing a report on the current state of LUECI: Funding, professors involved, student research, projects, and related publications etc.
2010-current	Nominated to serve on the Water Institute Advisory Board. Nominated by Prof. Wendy Graham, Director, Water Institute
2004-2012	SNRE board and member of committee of SNRE Curriculum Committee
2008-2012	Nominated for (and accepted) SNRE Faculty Advisory Board Member
2010	UFRFP Review Committee
2010	CLAS SEED Proposal Review Committee
2009-2010	CLAS Travel awards committees (Summer, Fall and Spring)
2009-2010	CLAS Mentoring Awards Committee
2009-2010	CLAS Dissertation fellowship Review Committee
2009-2010	CLAS Doctoral Adviser Mentorship Review Committee
2009-2010	Water Institute Symposium Planning Committee Member
2008-2010	Water Institute Symposium Board Member
2008-2009	Sponsored a visiting fellow (Amintas) for the Gordon and Betty Moore foundation
2008	Requested University level reviewer for Dr. Fletcher, nominated for an Oak Ridge Associated Universities Ralph E. Powe Junior Faculty Enhancement Award
2008	UF SEED grant reviewer for CLAS
2006-2008	Member College Curriculum Committee
2002-current	Land Use and Environmental Change Institute Coordinator: organize meetings and space allocation for graduate student researchers. Currently undertaking a number of key tasks (given current fiscal crisis), in terms of preparing a report on the current state of LUECI: Funding, professors involved, student research, projects, and related publications etc.
2006, 2009	CLAS Dissertation Advisors of the Year Selection Committee
2006, 2008, 2009	CLAS Dissertation Fellowship Selection Committee

2006-2008	Member College Curriculum Committee
2006-2007	Member of the Task force for Distance and E-Learning at UF
2006	Panel Proposal reviewer for IGERT students – Nov 2006
2005 – 2009	Member of the Harn Museum Faculty Council
2005	CLAS Teacher of the Year Awards Committee
2005	Reviewer, SNRE Mini-Grants (3)
2004	PREVIEW Advisor, University of Florida
2002-2004	Reviewer of the Tropical Conservation and Development Program Summer Research Grants Proposals.

## Departmental Service

### CHAIR:

I took over on a 3-year term as Department Chair as of August 16<sup>th</sup> 2016. I have signed up for 2 additional appointments, August 2019- August 2022, and August 2022- August 2025. I am now in my third, and final term as Chair. In addition to the regular items I perform as Chair – payroll, checking all financials and appointment letter, FARs, Effort certification, all grants and travel approvals, teaching assignments, course scheduling, and continuous liaison with shared services, I also chose a number of items to focus on: to undertake a major departmental renovation of our physical space and update/create all departmental media/handouts, update all webpages and develop a real social media presence. All these tasks are complete, and website is currently undergoing its second overhaul since I became chair.

I am currently starting my 9<sup>th</sup> year as Chair of Geography and many of the items from my previous terms are continuing and new program development also underway. Main areas I am currently focused on are:

- Two new classrooms – including receiving funding of \$106,000 for OmniGlobe
- First ever Geography Alumni Event: Held March 2022, now repeating annually – very successful
- Giving Day – led by Dr. Katy Serafin, received 64 gifts and close to \$5,000 raised – this was our first foray into this area and now will be an annual event, now in year 3 receive over \$8,000 and over 125 gifts annually
- Led proposal which produced a \$1,000,000 gift commitment for a new Poehling Professorship in Geography. Paperwork has been signed.
- Developed a Newsletter – Geogator Gazette to highlight Geography's accomplishments and to mail out to Alumni and Giving Day givers. Will continue annually going forward.
- Developed and submitted paperwork for a new Off-Book Certificate Program: A 'Graduate Certificate in Digital Geography and GIS'. Approved Fall 2022.
- Continued renovations: Worked with Margaret Fields on continued renovations in Geography – renovated old lab into a research lab [TUR3016] for faculty and converted old graduate lab into new lab space for Dr. Blackburn [TUR 3014].
- Created a new research lab space for graduate students in GeoAI – TUR1216, completely renovated space and purchased new desks and computers [Departmental IDC]

- Developed new Climatology Research Space [TUR3032]
- New signage for all Geography spaces
- New posters on Geography foci designed and created – all 20 posters now mounted on first floor. Negotiated for the first-floor corridor display with Dean.
- Run junior faculty meetings monthly, and meet annually one on one with all 13 junior faculty for check-in/updates and input to APR [Annual Program Review]
- Run 3 faculty all-day, off-campus retreats every year – Last years were April 2022, December 2021, and August 2021. Always around this time of year as use reading days for the April and December meetings, and week prior to new semester starting in August. Here we worked on new research foci and teaching areas, developing new alumni event, recruitment of students - graduate and undergraduate, developed new undergraduate themes etc. Focus on integration of AI across our curriculum and idea for increased undergraduate enrolment.
- Served on the 'CLAS AI Committee', as well as serving on: 'UF AI Curriculum Committee' as CLAS Faculty Representative and 'UF AI Research Committee' again as CLAS Representative
- Grew Social Media presence – now also on Instagram and Vine. Significant increase in Social Media traffic being recorded.
- New Meteorology Program Preproposal was resubmitted in Spring 2021 and full proposal submitted (final step) in September 2022. Massive amount of work for team involved (Stephen Mullens, Dr. Esther Mullens, Dr. Cori Matyas, and Dr. Berry Wen)
- Developed relationship with DIAL Center, established MOU which will now fund 2 Geography TAs per year
- Developed relationship with UF's Writing Program – now established MOU with 4 funded TA's per year
- Continued to encourage and even prioritize Quest courses in department –we had 4 new Quest courses offered last year – will be 5 offered this coming year [funding another 3 TAs annually]
  - Global Patterns of STIs [Hamerlinck]
  - Living with Rising Seas [Serafin]
  - The Next Pandemic [Hamerlinck]
  - Humanities Course: Blues, Music & Culture [Fik]
  - The Future of Energy [Engstrom]
- Encouraged all new faculty to submit their new courses for approval and instituted policy where after taught once as a topics course must be submitted to UCC for all older courses to get all existing courses onto the books. As such, Geography has continued to develop many new courses and getting them submitted to the UCC and finally starting to get the new course numbers. In addition, many faculty have submitted for Gen Ed where appropriate and so again helping to pull students into our courses in terms of enrolments.

### **Associate Chair (January 2014-2016)**

Was tasked with a series of tasks, most prominent of which were:

1. Develop the UFO Program for Geography – getting it into the catalogue and sheparding through our courses and course development
2. Work with the MGGH Committee (of which I am also a member) to develop and submit the paperwork for the new MGGH BA and BS Degrees
3. Social Media: Develop an online presence for the Department in terms of Social Media
4. Bring new Certificate Programs online
5. Department Name Change

### **Graduate Coordinator: 2005-2012**

I served as the Geography Department Graduate Coordinator, during which time I effected a complete overhaul of our graduate program, instituted annual reports and reviews of both students and advisors, and created a new graduate handbook. I have developed and teach two new, one-credit hour courses, specifically related to graduate student professional development (a greatly overlooked facet of graduate education), “*Publish or Perish*”, which addresses the logistics of the publication process; and “*How to Survive (and Thrive) in Academia*”, which examines how to get the best job one can, how to market oneself for job opportunities, and also a discussion of what one should be doing while in graduate school to improve one’s chances of attaining a desired employment position. In a related theme, I also started and continue to direct the WIGs (“Women in Geography”) group at UF, which meets to discuss the issues relating specifically to women in academia.

### Other Departmental service

2018	Designed and raised funding for laptop lab classroom renovation – TUR3018
2015-2016	Designed and funded new Flipped Classroom in Geography department – TUR 3006.
2015	Led committee for development of new UF Online BA in Geography and minor in Geography – BA approved and due to start Fall 2015.
2014-2015	Worked with committee to develop new Medical Geography in Global Health BA and BS Programs in Geography. Paperwork submitted to college May 2015
2015	Developed a certificate in Geographic Technologies with Dr. Liang Mao. Submitted to college May 2015
2013-2015	Graduate Admissions Committee – Member
2013-2014	Chair - Search Committee Medical Geography (assistant Associate level) Geography and EPI joint position Hired: Dr. Sadie Ryan
2013-2014	Member – Latin American Development Search committee for Geography Department (below Steering Committee for Preeminence hire which is multi-departmental committee, each Department also hosts its own ‘Search Committee’).
2013-2014	Chair – Spatial and Mathematical Modeling of Disease Search committee for Geography Department (below Steering Committee for Preeminence hire which is multi-departmental committee, each Department also hosts its own ‘Search Committee’).
2013	Chair – Merit Review Committee
2012	Chair – 3 <sup>rd</sup> Year Review for Dr. Jason Blackburn
2012	Chair – 3 <sup>rd</sup> Year Review, Dr. Youliang Mao



2004-2012	Member Geography Department Graduate Admissions Committee
2004-2012	Ryan Poehling Fellowship Committee
2008-2012	We are currently working on developing a climate curriculum within the department and I am part of this endeavor.
2005 – 2012	Department of Geography, Graduate Coordinator
2005 – 2012	Faculty Mentor to New Faculty member Dr. Cori Matyas
2005 –2009	Faculty Teaching Mentor to 3 GEO 2200 Lab TA's
2004 - 2011	Member Geography Department Graduate Admissions Committee
2005	Search committee member for Economic Geographer
2005 - 2006	Edward Fik Memorial Fellowship Awards Committee (Graduate)
2005	Dunkle Fellowship Awards Committee (Undergraduate)
2005	Committee to redesign TUR 3012
2005 - 2006	Committee to create 'Peer Teaching Evaluation Reports' with Dr. Tim Fik
2004	Search Committee Member for Climatologist
2004	Faculty Search Committee Member for Senior Level Economic Geographer
2004	Search Committee Member (GIS/Computer Technician)
2003-2005	Chair, Geography Colloquium Series
2003	Search Committee Member for LUECI Computer Systems/GIS/Field person
2003	Search Committee Member (GIS/Computer Technician)
2002	Member of Ryan Poehling Fellowship Annual Awards Committee
2002	Member of Annual activities Committee

### **PROFESSIONAL MEMBERSHIPS**

Association of American Geographers (AAG)  
 International Association of Landscape Ecology (IALE)  
 Florida Society of Geographers (FSG)  
 South Eastern Division of American Geographers (SEDAAG)

## GRADUATE STUDENTS

Graduate Faculty Status received Spring 2003. I currently serve as chair for 8 PhD students, and 1 Masters student. I have graduated an additional 33 graduate students: 9 Masters and 24 PhD. I also mentor female graduate students across disciplines.

### **Current Doctoral Students Advised (8):**

Torit Chakraborty

- Identification of Agricultural cropping systems using deep learning approaches

Muyeed Hasan

- Social-ecological systems in Bangladesh

Audrey Smith

- Human health, vegetation change and climate in Zambia and Ethiopia

Mohammad Safaei

- Machine learning, deep learning and advanced classification analysis

Bewuket Tefera

- Social-ecological systems and agricultural transformation in Ethiopia

Yu (Vera) Tian

- Urban sustainability and remote sensing

Anusha Chaudhury

- Urban vegetation and health linkages, and conservation of African landscapes

Mashoukur Rahaman

- Machine learning and deep learning remote sensing classification

### **Current Masters Students Advised (2):**

Mason Theurer

- Wildlife conservation, remote sensing and landscape analysis of Florida landscapes for Corridor development

Sarah VanSchoik

- Flood Mapping for Hurricane Ian and social disaster mitigation and impact assessment

### **Graduated Doctoral Students [24]**

1. Dr. Carly Muir

Graduated Summer 2023

Research Scientist, William and Mary

2. Dr. Leandra Merz (Co-Chair with Dr. Brian Child)  
Graduated Spring 2022.  
Assistant Professor, San Diego State University  
<https://www.researchgate.net/profile/Leandra-Merz>
3. Dr. Ryan Good  
Graduated Summer 2021  
Lecturer, SNRE, University of Florida  
<https://snre.ifas.ufl.edu/people/faculty-staff-and-administration/good/>
4. Dr. Mehedy Hassan  
Graduated Summer 2021.  
Postdoc, University of Florida  
<https://geog.ufl.edu/alumni-2/mehedy/>  
<https://scholar.google.com/citations?user=4cxbjzIAAAAJ&hl=en>
5. Dr. Xavier Haro-Carrion  
Graduated Summer 2019.  
Assistant Professor, Macalester University  
<https://www.macalester.edu/geography/facultystaff/xavier-haro-carrion/>  
<https://xavierhc.weebly.com/>
6. Dr. Meshari Alenzi  
Graduated Summer 2019.  
Assistant Professor, University of Kuwait  
<https://scholar.google.com/citations?user=4SCb85EAAAAJ&hl=en>
7. Dr. Hannah Herrero  
Graduated Summer 2019.  
Assistant Professor, University of Tennessee  
<https://geography.utk.edu/about-us/faculty/dr-hannah-herrero/>  
<https://www.researchgate.net/profile/Hannah-Herrero>
8. Dr. Mehmet Ozdes  
Graduated Spring 2018.  
Assistant Professor, Namik Kemal University, Turkey  
<http://fened-c-en.web.nku.edu.tr/Personel/0/s/4812/5047>  
<https://www.researchgate.net/profile/Mehmet-Ozdes-2>
9. Dr. Forrest Stevens  
Graduated December 2015.  
Associate Professor, University of Louisville  
<https://louisville.edu/geogeo/our-people/profiles/forrest-r-stevens-ph-d>  
[https://scholar.google.com/citations?user=L\\_YiAkgAAAAJ&hl=en](https://scholar.google.com/citations?user=L_YiAkgAAAAJ&hl=en)

10. Dr. Erin Bunting  
Graduated Summer 2014.  
Assistant Professor and Director of Remote Sensing Institute, Michigan State University  
<https://geo.msu.edu/directory/bunting-erin.html>  
<https://scholar.google.com/citations?user=qClqu8EAAAAJ&hl=en>
11. Dr. Tim Fullman  
Graduated Summer 2014. Co-Chair with Dr. Brian Child.  
Senior Ecologist, The Wilderness Society  
<https://www.wilderness.org/about-us/tim-fullman-phd>  
<https://www.researchgate.net/profile/Timothy-Fullman>
12. Dr. Jessica Steele  
Graduated Summer 2014.  
Senior Enterprise Fellow, University of Southampton  
<https://www.southampton.ac.uk/people/5xf866/doctor-jessica-steele>  
<https://www.researchgate.net/scientific-contributions/Jessica-E-Steele-2143568041>
13. Dr. Likai Zhu  
Graduated Summer 2014.  
Associate Professor, Linyi University, China  
<https://scholar.google.com/citations?user=B8UnCHMAAAAJ&hl=en>
14. Dr. Jing Sun  
Graduated Summer 2013.  
Professor, Institute of Agricultural Resource and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing, China  
<https://www.researchgate.net/profile/Jing-Sun-46>
15. Dr. Muhammad Almatar  
Graduated Fall 2012.  
Associate Professor & Chair, University of Kuwait  
<https://www.researchgate.net/profile/Muhammad-Almatar>
16. Dr. HuiPing Tsai  
Graduated Fall 2012.  
Faculty member, NCH University, Taiwan  
<https://www.researchgate.net/profile/Huiping-Tsai>
17. Dr. Cerian Gibbes  
Graduated Spring 2011.  
Associate Professor, University of Colorado, Colorado Springs  
[https://ges.uccs.edu/cerian\\_gibbes](https://ges.uccs.edu/cerian_gibbes)
18. Dr. Sanchayeeta Adhikari  
Graduated Spring 2011.  
Associate Professor, University of California, Northridge  
<https://www.csun.edu/social-behavioral-sciences/geography/sanchayeeta-adhikari>

19. Dr. Pinki Mondal  
Graduated Fall 2010.  
Assistant Professor, University of Delaware  
<https://www.udel.edu/academics/colleges/ceoe/departments/gss/faculty/pinki-mondal/>  
<https://scholar.google.com/citations?user=PnouwuQAAAAJ&hl=en>
20. Dr. Claudia Stickler  
Graduated December 2009.  
Scientist, Earth Innovation Institute  
<https://earthinnovation.org/about/eii-staff/4>  
<https://www.researchgate.net/profile/Claudia-Stickler>
21. Dr. Jaclyn Hall  
Graduated Summer 2009.  
Research Scientist, Health Outcomes and Biomedical Informatics, University of Florida  
<https://hobi.med.ufl.edu/profile/hall-jaclyn/>
22. Dr. Amy Daniels  
Graduated Summer 2009.  
Research Scientist
23. Dr. Matt Marsik  
Graduated Fall 2008 (Co-Chair with Dr. Peter Waylen)  
Data Management Analyst, UF Health  
<https://scholar.google.com/citations?user=ANZWueQAAAAJ&hl=en>  
<https://www.researchgate.net/profile/Matthew-Marsik>
24. Dr. Joel Hartter  
Graduated Fall 2007 (Co-Chair with Dr. Abe Goldman)  
Professor & Director of MENV Program, University of Colorado, Boulder  
<https://www.colorado.edu/envs/joel-hartter>  
<https://jhartter.weebly.com/>

#### **GRADUATED: Masters Students [9]**

1. Mashoukur Rahaman  
Graduated December 2023  
Started PhD at UF, Spring 2024
2. Tyler Schaper  
Graduated Spring 2021.  
Works in Foreign Affairs, US Government  
<https://www.linkedin.com/in/tyler-schaper-27043388>
3. Audrey Smith  
Graduated Spring 2017.  
Continued on to PhD [see above]

4. Hannah Herrero  
Graduated Spring 2015.  
Continued on to PhD [see above]
5. Mariano Gonzalez  
Graduated Fall 2009.  
Continued on to PhD at Duke University  
Country Director, Wildlife Conservation Society, Argentina  
<https://scholar.google.com/citations?user=6yRjqVsAAAAJ&hl=en>  
<https://ar.linkedin.com/in/mariano-gonzalez-roglich-8a061913>
6. Forrest Stevens  
Graduated Spring 2009.  
Continued on to PhD [see above]
7. Muhammad Almatar  
Graduated Spring 2008.  
Continued on to PhD [see above]
8. Cerian Gibbes  
Graduated Fall 2006.  
Continued on to PhD [see above]
9. Rob Lopez  
Graduated Spring 2006.  
Geospatial Analyst, US Department of Defense  
<https://www.linkedin.com/in/robert-lopez-5422164a>

## POST-DOCS AND VISITING FELLOWS

- **Julius Roderick Dewald:** Served as an external member of his PhD committee at University of Miami, and now his remote sensing mentor in his postdoctoral position with Drs. Scott Brown and Jose Szapocznick, both from the University of Miami
  - <https://people.miami.edu/profile/j.dewald@umiami.edu>
  - <https://scholar.google.com/citations?user=AqLLGboAAAAJ&hl=en>
- **Mehedy Mohammad Hassan:** Postdoctoral scholar, working on time series analysis, machine learning and advanced classification approaches. Jan 2021 – current
  - <https://scholar.google.com/citations?user=4cxbjzIAAAJ&hl=en>
- **Reza Khatami:** Postdoctoral scholar, working on time series analysis, land cover change and land transactions in Ethiopia and Florida agricultural analysis. Jan 2017 – Jan 2021
  - <https://scholar.google.com/citations?user=ksex1GgAAAAJ&hl=en>

- **Guo Cuo:** Visiting Scholar, China. Worked on remote sensing techniques and machine learning, 2016-2017
- **Erin Bunting:** Post-doc on the SEED Grant from the Informatics Institute on Health Climate and Land. 2014-2015.
- **Lin Cassidy:** Research scholar at the Okavango Research Institute, University of Botswana and independent consultant. Post-doc (25% time) on NASA Project 2009-2013
- **Xia Cui:** Visiting Scholar to my lab, from Lanzhou University, China. Major: Cartography and Geographic Information System. Graduation Date: Summer, 2011.
- **Xanic Rondon:** Visiting Scholar, Department of Geography, University of Florida, Gainesville, FL (Feb-Oct 2010), and Postdoctoral Fellow, Percy Fitz Patrick Institute, University of Cape Town, South Africa. Advisors: G. Cumming, S. Perz, and J. Southworth. Project: NSF grant: Infrastructure change, human agency, and resilience in social-ecological systems.