EMILY BURCHFIELD

Assistant Professor ◇ Department of Environmental Sciences
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RESEARCH AND TEACHING INTERESTS

Food system sustainability, geospatial programming and analysis

APPOINTMENTS

Emory University *August 2019 - present*
Assistant Professor
Department of Environmental Sciences
Emory College of Arts and Sciences

Utah State University *August 2017 - July 2019*
Assistant Professor of Geospatial Analysis
Department of Environment and Society
Quinney College of Natural Resources

EDUCATION

Vanderbilt University *May 2017*
Ph.D. in Environmental Engineering

University of Louvain, Belgium *July 2012*
M.A. in Economics, Grande Distinction

Clemson University (dual degree) *May 2010*
B.A. in Economics
Magna Cum Laude, Honors College, Phi Beta Kappa

University of Louvain, Belgium (dual degree) *May 2010*
B.S. in Economics and Management
Transatlantic Exchange in Economics Scholar

1. RESEARCH

Google Scholar profile

1.1. PEER-REVIEWED JOURNAL ARTICLES

*Graduate or postdoctoral mentee

32. Christman, M.*, Spears, L., **Burchfield, E.**, Pearse, W., Strange, J., Ramirez, R. (2024) Bumble bee responses to climate and landscapes: Investigating habitat associations and species assemblages across geographic regions in the United States of America. *In press* at *Global Change Biology.*

31. Haycock, S., Bean, B., **Burchfield, E.** (2024). Producing fast and convenient machine learning benchmarks in R with the stressor package. In press at *Journal of Data Science.*

30. **Burchfield, E.**, Crossley, M., Nelson, K. (2024). Rotational complexity across US counties is currently insufficient to observe yield gains in major crops. 19*(4)*. *Environmental Research Letters.* https://doi.org/10.1088/1748-9326/ad300b

29. Schnur, S.*, Maki, C.*, **Burchfield, E.** (2024) Farmers Need the Land: Georgia's Agricultural Future in the Patchy Anthropocene. *107*, 103259. *Journal of Rural Studies.* https://doi.org/10.1016/j.jrurstud.2024.103259.

28. Rissing, A.*, **Burchfield, E.** (2024). Crop diversification as landscape change: Using land systems science to understand agricultural trajectories in North Carolina. *24*(3). *Regional Environmental Change*. https://doi.org/10.1007/s10113-023-02162-8

27. Briske, D., Archer, S. **Burchfield, E.**, Burnidge, W., Derner, J., Gosnell, H., Hatfield, J., Kazanaski, C., Khalil, M., Lark, T., Nagler, P., Sala, O., Sayre, N., Stackhouse-Lawson, K. (2023). Supplying ecosystem services on US rangelands. *Nature Sustainability*. https://www.nature.com/articles/s41893-023-01194-6

26. Rissing, A.*, **Burchfield, E.**, Spangler, K.*, Schumacher, B.* (2023). Implications of U.S. agricultural data practices for sustainable food systems research. *4*, 213-217. *Nature Food*. https://doi.org/10.1038/s43016-023-00711-2

25. Schumacher, B.*, **Burchfield, E.**, Brennan, B.,Yost, M. (2023). Leveraging important covariate groups for corn yield prediction. *13*(3), 618. *Agriculture*. https://doi.org/10.3390/agriculture13030618

24. Nelson, K. and **Burchfield, E.** (2023). Defining features of diverse and productive agricultural systems: An archetype analysis of U.S. agricultural counties. *Frontiers in Sustainable Food Systems*. *7*(76). https://doi.org/10.3389/fsufs.2023.1081079

23. **Burchfield, E.** (2022). Where and how to grow food. *Nature Food*. https://doi.org/10.1038/s43016-022-00663-z

22. Spangler, K.*, **Burchfield, E.**, Radel, C., Jackson-Smith, D., Johnson, R. (2022). Crop diversification in Idaho's Magic Valley: the present and the imaginary. *Agronomy for Sustainable Development*. *42*(99). https://doi.org/10.1007/s13593-022-00833-0.

21. Christman, M. E., Spears, L. R., Strange, J. P., Pearse, W. D., **Burchfield, E.**, Ramirez, R. A. (2022). Land cover and climate drive shifts in Bombus assemblage composition. *Agriculture, Ecosystems & Environment*. *339*, 108113. https://doi.org/10.1016/j.agee.2022.108113

20. **Burchfield, E.** (2022). Shifting cultivation geographies in the Central and Eastern US. *Environmental Research Letters*. *17*, 054049. https://doi.org/10.1088/1748-9326/ac6c3d

19. Spangler, K.*, Schumacher, B.*, Bean, B., **Burchfield, E.** (2022). Path dependencies in US agriculture: Regional factors of diversification. *Agriculture, Ecosystems and Environment*, 333, 107957. https://doi.org/10.1016/j.agee.2022.107957.

18. **Burchfield, E.**, Schumacher, B.*, Spangler, K.*, Rissing, A.*(2022). The state of US farm operator livelihoods. *Frontiers in Sustainable Food Systems*, 566. https://doi.org/10.3389/fsufs.2021.795901.

17. Nottebrock, H., **Burchfield, E.**, Fenster, C. (2022). Farmers' delivery of floral resources: to 'bee' or not to 'bee.' *American Journal of Botany*. *109*(1), 4-8. https://doi.org/10.1002/ajb2.1809

16. Schumacher, B.*, Yost, M., **Burchfield, E.**, Allen, N. (2022). Water in the West: trends, production efficiency, and a call for open data. *306*, 114330. *Journal of Environmental Management*. https://doi.org/10.1016/j.jenvman.2021.114330

15. Nelson, K., **Burchfield, E.** (2021). Landscape complexity and US crop production. *Nature Food*. *2*(5). 330-338. https://doi.org/10.1038/s43016-021-00281-1

14. **Burchfield, E.**, Nelson, K. (2021). Agricultural yield geographies in the United States. *Environmental Research Letters*. *16*, 054051. https://doi.org/10.1088/1748-9326/abe88d

13. **Burchfield, E.**, Schumacher, B.* (2020). Bright spots in US corn production. *Environmental Research Letters*. *15*(10), 104019. https://doi.org/10.1088/1748-9326/aba5b4

12. Spangler, K.*, **Burchfield, E.**, Schumacher, B.* (2020) Past and current dynamics of US agricultural land use and policy. *Frontiers in Sustainable Food Systems*, *4*, 9. https://doi.org/10.3389/fsufs.2020.00098

11. **Burchfield, E.**, Matthews-Pennanen, N.*, Stoebner, J., Lant, C. (2019). Changing yields in the Central United States under climate and technological change. *Climatic Change*, *159*, 329-346. https://doi.org/10.1007/s10584-019-02567-7

10. **Burchfield, E.**, Nelson, K., Spangler, K.* (2019). The impact of agricultural diversification on US crop production. *Agriculture, Ecosystems & Environment. 285*, 106615. https://doi.org/10.1016/j.agee.2019.106615

9. Tozier-de-la-Poterie, A., **Burchfield, E.**, Carrico, A. (2018). The implications of group norms for adaptation in collectively-managed agricultural systems: evidence from Sri Lankan Paddy farmers. *Ecology and Society. 23*(3):21. https://doi.org/10.5751/ES-10175-230321

8. **Burchfield, E.**, Williams, N., Carrico, A. (2018). Rescaling drought mitigation in rural Sri Lanka. *Regional Environmental Change. 18*(8): 1-14. https://doi.org/10.1007/s10113-018-1374-y

7. **Burchfield, E.**, Tozier-de-la-Poterie, A. (2018). Determinants of crop diversification in rice-dominated Sri Lankan agricultural systems. *Journal of Rural Studies. 61*, 206-215. https://doi.org/10.1016/j.jrurstud.2018.05.010

6. Nay, J., **Burchfield, E.**, Gilligan, J. (2018). A machine-learning approach to forecasting remotely sensed vegetation health, *International Journal of Remote Sensing. 39*(6), 1800-1816. https://doi.org/10.1080/01431161.2017.1410296

5. Nelson, K., **Burchfield, E.** (2017). Effects of the structure of water rights on agricultural production during drought: A spatiotemporal analysis of California's Central Valley. *Water Resources Research. 53*(10), 8923 - 8309. https://doi.org/10.1002/2017WR020666

4. **Burchfield, E.**, Gilligan, J. (2016). Agricultural adaptation to drought in the Sri Lankan dry zone. *Applied Geography. 77*, 92-100. https://doi.org/10.1016/j.apgeog.2016.10.003

3. **Burchfield, E.**, Nay, J., Gilligan, J. (2016). Application of machine learning to prediction of vegetation health. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences.* XLI-B2, 465-469, doi:10.5194/isprs-archives-XLI-B2-465-2016

2. **Burchfield, E.**, Gilligan, J. (2016). Dynamics of individual and collective agricultural adaptation to water scarcity. *Winter Simulation Conference 2016 Proceedings.* Available at SSRN: https://ssrn.com/abstract=2807452

1. Gunda, T., Benneyworth, L., **Burchfield, E.** (2015). Exploring water indices and associated parameters: A case study approach, *Water Policy*, *17*(1), 98 - 111. https://doi.org/10.2166/wp.2014.022

1.2. ARTICLES UNDER REVIEW

3. **Burchfield, E.**, Ferro, M., Hüttel, S., Lakes, T., Niedermayr, A., Rissing, A.*, Seifert, S., Wesemeyer, M. (2024). Towards a comparative analysis of agricultural land systems in the EU and US: A critical comparison of publicly available datasets, *Revised and resubmitted* at *Land Use Policy.*

2. Gingrich, J.*, **Burchfield. E.**, (2024). Spatial patterns of food access in the Appalachian Region of the US. *Under Review* at *Food Policy.*

1. Magliocca, N., **Burchfield, E.**, Busby, E., Brantley, E., Cleveland, O., Ellenburg, L., Kumar, M., Mishra, V., McGuire, D., Nair, U., Pate, A., Pathak, R., Pearl, S., da Silva, A., White, A., Williams, A., Worosz, M. (2024). Leverage points to pathways for transformation of agri-food systems. *Under Review* at *Environmental Research: Food Systems.*

1.3. OTHER PUBLICATIONS

2. Yost, M., Schumacher, B.*, Johnson, L., **Burchfield, E.**, Barker, B. (2022). County-Level View of Irrigation Trends in Utah and the West. Public extension report published online at https://extension.usu.edu/crops/research/county-level-view-of-irrigation

1. **DATASET**: **Burchfield, E.**, Nelson, K. (2023). County-level Estimates of Landscape Complexity and Configuration in the Coterminous US. Ag Data Commons. https://doi.org/10.15482/USDA.ADC/1529163.

1.4. ACTIVE GRANTS

2023-2027 — *DISES: Integrating human and biophysical factors to project future cropscapes under climate change*
NSF Dynamics of Integrated Socio-environmental Systems
PI, $1,597,234 (Emory $445,876)

2022-2024 — *Drawdown Georgia Phase 3 Collaboration Grant*
Drawdown Georgia
PI, $20,000

2022-2027 — *Quantifying the potential to reduce GHG emissions and increase carbon sequestration by growing and marketing climate-smart commodities in the Southern Piedmont*
USDA Climate-smart Commodities
Co-PI, $33,824,624 (Emory $5,356,237)

2022-2025 — *Migration, rural land use, and resilience in coastal Bangladesh*
NSF HEGS
Co-PI, $415,617 (Emory $59,729)

2022 - 2025 — *Managing markets: Assessing farmers' direct marketing experiences on economic viability and quality of life*
USDA Southern SARE
Co-PI, $313,431 (Emory $238,987)

2022-2024 — *Supporting sustainable agriculture in the EU and US*
Halle Collaborative Research Grant
PI, $29,980 (Emory $11,500)

1.5. COMPLETED GRANTS

2022 - 2023 — *Agricultural adaptation to climate change in Georgia*
Emory URC
PI, $29,500

2020-2023 — *Agricultural landscape management for improved sustainability*
USDA NIFA BNRE Program
Co-PI, $499,949 (Emory $184,813)

2020-2021 — *Socio-environmental indicators of Great Salt Lake desiccation*
Utah State University SPARC Program
Co-PI, $34,988

2018-2020 — *Resilience of agricultural systems to climate stress*
Utah Agricultural Experiment Station
PI, $42,498

2018-2019 — *Finding balance: Diversity and agricultural production*
Utah State University Research Catalyst Grant
PI, $19,938

2018-2019 *Local water conservation research and education needs*
Utah State University Extension Grants Program
Co-PI, $19,401

2016-2017 *Data-driven drought effect estimation*
SESYNC Graduate Pursuit
PI, $25,000 for travel and stipends

2015-2016 *Adaptive management in the Sri Lankan dry zone*
American Institute for Sri Lankan Studies Dissertation Planning Grant
PI, $4,500

1.6. GRANTS UNDER REVIEW

*Date reflects date of submission

February 2024 *Integrating predictive modeling and la méthode prospective to support sustainable agricultural transitions in France and the U.S.*
FACE Foundation
PI, $20,000 (Emory $10,000)

1.7. FELLOWSHIPS, AWARDS, AND HONORS

Arts and Social Justice Fellow, Emory University (class project / showcase) *Fall 2021*
University Graduate Fellowship, Vanderbilt University *2012 - 2016*
Martin Luther King Award for Service Excellence, Clemson University *2009*
Duckenfield Scholarship, University of Oxford *2008*

1.8. MEDIA COVERAGE

9. "Shifting climate could lead to greater change in agricultural industry", Iowa Farmer Today, August 5, 2022.
8. "Climate change could spell the end for Midwestern corn, study finds", Yahoo News, June 1, 2022.
7. "The U.S. Corn Belt will take a hard hit from climate change", Earth, May 25, 2022.
6. "Even as we see the flaws in our food system we aim to force it on the world", CounterPunch, April 22, 2022.
5. "The U.S. forces its flawed food system on the world", CommonDreams, April 22, 2022.
4. "New research shows struggles of US farm livelihoods", AgDaily, March 7, 2022.
3. "First-of-its-kind study shows that diverse landscapes could boost US crop yields by 20 percent", Anthropocene, August 27, 2021.
2. "Diverse landcover boosts yields for major crops", Oklahoma Farm Report, August 19, 2021.
1. "Diversity may boost US wheat and corn yields by 20 percent, Futurity, August 12, 2021.

1.9. INVITED PRESENTATIONS

14. *Towards research that transforms in agricultural systems*, presented to the SONYA group at the Université Libre de Bruxelles, Belgium, June 2024.
13. *Growing sustainable agricultural futures in the Anthropocene*, presented to the CERES group at the Ecole Normale Supérieure, France, April 2024.
12. *Moving together towards better: Stakeholder-centered research to catalyze sustainable agricultural transition*, presented to the Earth Life Institute at UCLouvain, Belgium, February 2024.

11. *Growing agricultural transitions*, presented at the Symposium on Transdisciplinary Research for a Healthy Planet at l'Université de Reims Champagne-Ardenne, France, February 2024. (video here)

10. *Sustainable agricultural futures in the US,* presented to the Department of Environmental Studies, University of Colorado, Boulder, October 2023.

9. *Grand challenges in US food systems,* presented to the Department of Geography, Humboldt University, Germany, June 2023.

8. *Pathways towards sustainable agricultural futures in the US,* presented to the Earth Life Institute at the University of Louvain, Belgium, May 2023.

7. *Agricultural sustainability in the Anthropocene,* presented to the Department of Geography at Indiana University, Bloomington, February 2023.

6. *Sharing data and shaping policies across the EU and US to support sustainable agricultural transitions,* presented at Gottingen University, Germany, June 2022.

5. *Cultivating agricultural sustainability in a changing world*, presented to the Department of Earth and Environmental Sciences at Vanderbilt University, April 2022.

4. *Using mixed methods to understand socio-ecological trajectories of crop diversity*, presented to the Department of Geography at Kansas State University, February 2022.

3. *Socio-environmental implications of changing US landscapes*, presented to the PBEE Program Faculty at Emory University, November 2020.

2. *Agricultural sustainability in the US*, presented to the Emeritus College at Clemson University, October 2020. Video.

1. *Cultivating food security in a changing world*, presented to the PhenoRob Female Talk Series group at University of Bonn, Germany, July 2020. Video.

1.10. PAPER PRESENTATIONS

Selected from submitted abstracts.

18. *Integrating human and biophysical factors to project future agricultural landscapes under climate change in the United States,* presented at the SECU Conference in Leuven, Belgium, April 2024.

17. *Pathways towards sustainable agricultural futures in the southeastern US,* presented at the American Association of Geographers Annual Meeting in Denver CO, March 2023.

16. *The state of US farm operator livelihoods*, presented at the Association for the Study of Food and Society Annual Conference, May 2022.

15. *Agricultural and biophysical drivers of US cultivation geographies*, presented at the American Association of Geographers Annual Meeting, February 2022.

14. *Geographies of US food production*, presented at the Just Food Conference, June 2021.

13. *Geographies of agricultural production*, presented at the Applied Statistics in Agriculture and Natural Resources Annual Conference, held virtually, May 2021.

12. *The future of US cropscapes*, presented at the American Association of Geographers Annual Meeting, held virtually, April 2021.

11. *The impact of agricultural diversification on US crop production*, presented at the International Association of Landscape Ecology Meeting in Fort Collins, CO, April 2019.

10. *Spatiotemporal dynamics of yield-response to climate extremes*, presented at the American Association of Geographers Annual Meeting in New Orleans, LA, April 2018.

9. *Agricultural response to changes in water availability and temperature in the coterminous US*, presented at the American Geophysical Union Annual Meeting in New Orleans, LA, December 2017.

8. *Application of machine learning to the prediction of vegetation health*, presented at the International Society for Photogrammetry and Remote Sensing in Prague, July 2016.

7. *Agricultural adaptation in the Sri Lankan Dry Zone*, presented at the IPWSD Workshop at Columbia University, NY, April 2016.

6. *Application of machine learning to big environmental datasets to predict vegetation health*, presented at the Association for American Geographers Annual Meeting in San Francisco, CA, April 2016. Session organizer, "Human-Environment Interactions: Linking Remote Sensing and the Social Sciences"

5. *The application of PCA for the identification of adaptive agricultural systems in the tropics*, presented at the Workshop on the Use of Remote Sensing for Decision-Making in Agricultural and Water Management in Colombo, Sri Lanka, August 2015.

4. *Institutions and imagery: Mapping water management in rural Sri Lanka*, presented at the Association of American Geographers Conference in Chicago, IL, April 2015.

3. *ADAPT-SL: Agricultural Decision Making and Adaptation to Precipitation Trends in Sri Lanka*, presented at the National Science Foundation Water, Sustainability and Climate PI meeting in Washington, D.C., February 2015.

2. *Patterns of meteorological and agricultural drought in Sri Lankan agricultural areas*, presented at the Gordon Research Seminar on Science, Technology and Policy, in Waterville Valley, NH, August 2014.

1. *Resettlement and coloniality in the Mahaweli Ganga Watershed*, presented at the Annual Dimensions of Political Ecology Conference on Nature/Society in Lexington, KY, February 2013.

1.11. POSTER PRESENTATIONS

Selected from submitted abstracts.

7. *Landscape complexity and US crop production*, presented virtually at the Landscape 2021 conference in Berlin, Germany, September 2021.

6. *Using* `R-INLA` *to understand institutional moderators of drought*, presented at the `useR!` Conference in Brussels, Belgium, July 2017.

5. *Dynamics of collective and individual agricultural adaptation to water scarcity*, presented at the American Geophysical Union Conference in San Francisco, CA, December 2016.

4. *Agricultural adaptation to water scarcity in the Sri Lankan dry zone: A comparison of two water management regimes*, presented at the National Science Foundation Water, Sustainability and Climate PI meeting in Washington, D.C., February 2015.

3. *Mapping water management: A case study from Sri Lanka*, presented at the American Geophysical Union Annual Conference in San Francisco, CA, December 2014.

2. *Patterns of meteorological and agricultural drought in the Sri Lankan Dry Zone*, presented at the Gordon Research Conference on Science, Technology and Policy in Waterville Valley, NH, August 2014.

1. *Patterns of agricultural drought in Sri Lankan paddy fields: Spatiotemporal image analysis*, presented at the Borlaug Summer Institute on Global Food Security, Lafayette, IN, June 2014.

1.12. PUBLIC PRESENTATIONS

2. *Science ATL STEM career talk*, presented virtually to McGarity Elementary in March 2022

1. *Ethics at the Center: Sustainable Futures in the Anthropocene*, discussion leader at Emory Center for Ethics in February 2023

2. TEACHING

2.1. COURSES TAUGHT

*Original courses developed by Dr. Burchfield.

Emory University - Undergraduate Courses

- **ENVS 323: Sustainable Food Systems***
  Fall 2022, Fall 2023
- **IDS 290R: Interdisciplinary Sidecar: Revolution in the Anthropocene**
  Spring 2022 (co-taught with Dr. Lynne Huffer)
- **ENVS 224: Economy and the Environment***
  Spring 2021, Spring 2022, Spring 2023
- **ENVS 270: Environmental Data Science***
  Fall 2020, Fall 2021, Fall 2022, Fall 2023
- **ENVS 495R: Honors Research**
  Fall 2021, Spring 2022, Fall 2022
- **ENVS 498R: Individual Directed Reading***
  Spring 2022 (Climate and Agriculture)

Emory University - Graduate Courses

- **ENVS 585: Environmental Data Science***
  Fall 2020
- **ENVS 585: Spatial Patterns of Food Insecurity***
  Spring 2021, reading course for MS student
- **ENVS 599R: Master's Thesis Research**
  Fall 2021, Spring 2022

Utah State University

- **GEOG 3800: Data Visualization***
  Fall 2018
- **USU, ENVS 2000: Natural Resources Professional Orientation***
  Fall 2018
- **GEOG 49/6950: Geospatial Analysis***
  Spring 2018, Spring 2019

Vanderbilt University

- **Vanderbilt Programs for Talented Youth**
  Developed and taught geospatial analysis to gifted middle and high school students.
  Summer 2015, Summer 2016
- **Certificate in College Teaching**
  Spring 2014

2.2. GUEST LECTURES

- Spring 2024, *Transitions rurales aux USA*. Rural Geography class at UCLouvain, Belgium.
- Fall 2023, *Everything you every wanted to know about US food and farming.* Emory Sustainable Food Fair class.
- Fall 2022, *An introduction to US food systems.* Emory Sustainable Food Fair class.
- Spring 2021, *Agriculture and climate change 101.* Emory Climate Organization student organization.
- Spring 2021, *How to R: An introduction to programming.* ECAST student organization.
- Spring 2021, *Data visualization: The good, bad, and ugly.* HLTH 385 Storytelling for Scientists, Dr. Amanda Freeman
- Fall 2019, *US Agricultural Policy.* ENVS/POLS 227 Environmental Policy, Dr. Tracy Yandle
- Fall 2019, *An Introduction to US Agriculture.* ENVS 399 Agroecology, Dr. John Wegner

2.3. TEACHING AWARDS AND GRANTS

- Fall 2023, Emory CDFE Community-Engaged Learning Grant ($1500 to partner with Sci4GA)

3. STUDENT MENTORING

3.1. CURRENT GRADUATE AND POSTDOCTORAL MENTEES

Jean Ribert Francois (Committee Member)
PhD Geography, Kansas State University, 2025
Rural well-being in agricultural communities

Dr. Scott Schnur (**Postdoctoral Researcher**, 2022-2024)
PhD Anthropology, Emory University, 2022
URC-funded qualitative fieldwork with agricultural stakeholders in Georgia, SSARE Managing Markets.

Britta Schumacher (Committee Member)
PhD Plants, Soils & Climate, Utah State University, 2026
Water in the west

3.2. PAST GRADUATE MENTEES

Milon Barmon (Graduate Mentee)
PhD Population Biology, Ecology and Evolution Rotation, Spring 2023

Jared Gingrich **(Primary Advisor)**
MS ENVS, Emory University, 2022
Food access in rural Appalachia

Dr. Mo Christman (Committee Member)
PhD Biology, Utah State University, 2022
Landscape ecology of beneficial insects in agronomic crops of Utah

Dr. Kaitlyn Spangler **(Primary Advisor)**
PhD Environment and Society, Utah State University, 2021
Cultivating agrobiodiversity in the US: Barriers and bridges at multiple scales

Britta Schumacher **(Primary Advisor)**
MS Ecology, Utah State University, 2020
Trends in US agricultural production

Jenna Keaton (Committee Member)
MS Watershed Sciences, Utah State University, 2019
The vulnerability of littoral structures under multiyear drought conditions

Neil Matthews-Pennanen (Committee Member)
MS Environment and Sociey, Utah State University, 2019
Assessment of potential changes in crop yields in the Central US under climate change regimes

3.3. PAST POSTDOCTORAL MENTEES

Dr. Heidirun Leonhardt (**Visiting Postdoctoral Researcher**, Spring 2023)
PhD. Ecological Economics, University of Natural Resources and Life Sciences, Vienna

Dr. Andrea Rissing (**Postdoctoral Researcher**, 2021-2022)
PhD Anthropology, Emory University, 2019
USDA-funded qualitative fieldwork in rural N.C.

3.4. CURRENT UNDERGRADUATE MENTEES

Anisha Johnson (Research Mentee)
ENVS BS 2026, Fall 2023 - present

Isabel Staton (Honors Thesis Committee Member)
ANTH BS 2024, Fall 2023 - present
Farming in the Storm: Exploring Alternative Risk Management Strategies Amid Winter Storm Elliot

Kaegan Ortlund (Research Mentee)
ENVS BS 2024, Fall 2023

3.5 PAST UNDERGRADUATE MENTEES

Caroline Maki (Research Mentee)
ENVS BS 2023, Spring 2022 - Spring 2023

Ilana Fischer (SIRE Mentee, **Honors Thesis Advisor**)
ENVS BS 2023, Spring 2021 - present
Crop insurance and climate change

Jesus Palenzuela (Research Mentee)
ENVS/ECON BS 2023, Spring 2023

Jackson Pentz (Honors Thesis Committee Member)
ENVS/ECON BS 2023, Fall 2022 - Spring 2023
Estimating the county-level effects of the Tennessee Valley Test Farm Program on U.S. agriculture (1935-1950)

Shivam Saram (Honors Thesis Committee Member)
QSS/Physics BS 2023, Fall 2022 - Spring 2023
Jailbirds: A Machine-Learning Approach to Measuring Racial and Ethnic Disparities in Monetary Bail Setting

Jack Miklaucic (Honors Thesis Committee Member)
ENVS BS 2023, Fall 2022 - Spring 2023
Going Beyond Carbon: Mitigating Nitrogen Pollution from Agriculture in the U.S.

Emily Isaac (**Honors Thesis Advisor**)
ENVS BS 2022, Spring 2021 - Spring 2022
On the Fence: Role of the attitude-behavior gap in residential landscaping decisions

Dading Shi (QTM Undergraduate Fellow)
QTM BS 2022, Fall 2019

3.7. STUDENT GRANTS AND AWARDS

Jared Gingrich (MS), Lester Research Grant, Fall 2021
Jared Gingrich (MS), Lester Travel Grant, Fall 2021
Emily Isaacs (Undergraduate), Lester Research Grant, Fall 2021
Kaitlyn Spangler (PhD), Presidential Doctoral Research Fellow, Fall 2019
Britta Schumacher (MS), Ecology Center Graduate Research Grant, Spring 2019

4. SERVICE

4.1. DEPARTMENTAL SERVICE

Spring 2022 - present	ENVS Diversity, Equity and Inclusion Committee (Chair)
Fall 2020 - Spring 2022	ENVS Diversity, Equity and Inclusion Committee (member)
Fall 2023 - Spring 2024	ENVS Faculty Search Committee (member)
Fall 2020 - Spring 2024	ENVS Honors Coordinator
Fall 2022 - Spring 2023	ENVS Faculty Search Committee (member)

4.2. COLLEGE SERVICE

Spring 2022 - present	ECAS Education Abroad Committee (elected member)

4.3. UNIVERSITY SERVICE

Spring 2021 - present	Emory Sustainable Food Committee (President-appointed member)
Fall 2022 - present	Emory Center for Ethics Senior Faculty Fellow
Fall 2022 - Fall 2023	Emory Climate Action Task Force

4.4. PROFESSIONAL SERVICE

Article reviews for academic journals including:
Climatic Change
International Journal of Disaster Risk Reduction
Environmental Research Letters
International Journal of the Commons
Environmental Management
Weather, Climate and Society
Agricultural, Ecosystems and Environment
Journal of Environmental Management
Nature Food
Global Environmental Change

Grant reviews for the following agencies:
NSF Geospatial Sciences
Emory URC

Conference session chair:
Convener: *Sustainable agricultural landscapes*, Association of American Geographers Annual Meeting, Spring 2023
Convener: *Agricultural landscape transitions*, Association of American Geographers Annual Meeting, Spring 2022
Convener: *Geographies of climate impacts*, Association of American Geographers Annual Meeting, Spring 2018

Expert Panels:
NICHD/NIH Agriculture and Diet: Value Added for Nutrition, Translation and Adaptation in a Global Ecology: ADVANTAGE Project, Spring 2023-Fall 2024
Lead Author, USGS Biodiversity and Climate Change Assessment (Chapter 5), Spring 2024

4.5. COMMUNITY SERVICE

Fall 2022 - present — Drawdown Georgia, Climate-Smart Agriculture Team Lead

4.6. PROFESSIONAL MEMBERSHIPS

American Association of Geographers
Global Land Programme
Agriculture, Food, and Human Values Society

LANGUAGE PROFICIENCIES

English Native speaker
French Fluent written and spoken

**Last updated on May 29, 2024.*