

BRENDAN L. LAVY, PhD

Assistant Professor
Department of Environmental Sciences
Texas Christian University
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AREAS OF RESEARCH

- Urban Sustainability
- Urban Forestry
- Urban Environmental Management
- Disaster Recovery and Resilience
- Water Resources Governance
- Geographic Information Systems

EDUCATION

- 2017 **PhD, Geography**, Texas State University, San Marcos, TX
Dissertation: *Changing patterns of water, access, and public discourse in the lower Colorado River valley of Texas, 1970-2015*, Advisor: Ronald R. Hagelman, III
- 2013 **MS, Geography**, Texas State University, San Marcos, TX
Thesis: *A geography of permitted tree removals in Austin, Texas, 2002 to 2011*
- 1998 **BA, Anthropology**, University of North Texas, Denton, TX
Senior report: *The primer manual for community empowerment, public participation, and environmental justice*

ACADEMIC EXPERIENCE

- 2020-pres. **Assistant Professor**, Department of Environmental Sciences, Texas Christian University, Fort Worth, TX
- 2018-2020 **Assistant Professor**, School of Earth, Environmental, and Marine Sciences, The University of Texas Rio Grande Valley, Edinburg, TX
- 2017-2018 **Visiting Assistant Professor (one-year appointment)**, Department of Geography, Binghamton University, State University of New York, Binghamton, NY
- 2014-2016 **Instructor of Record**, Department of Geography, Texas State University, San Marcos, TX
- 2013-2017 **Graduate Research Assistant**, Department of Geography, Texas State University, San Marcos, TX

ACADEMIC PROFILES

- [Google Scholar](#) | [ORCID iD](#) | [ResearchGate](#)

PROFESSIONAL EXPERIENCE (most recent)

- 2019-pres. **Human Geography Advanced Placement (AP) Reader**, The College Board, Cincinnati, OH
2013 **Communications Director and Environmental Policy Analyst (interim)**, Texas Catholic Conference of Bishops, Austin, TX (joined PhD program)
- 2009-2010 **Personal Assistant to the Deputy Secretary of State**, U.S. Department of State, Washington, DC (joined MS program)
- 2006-2008 **Chief of Staff to the Dean**, Lyndon B. Johnson School of Public Affairs, The University of Texas at Austin, Austin, TX
- 2002-2005 **Website and Outreach Manager**, Foreign Policy Studies, The Brookings Institution, Washington, DC

PUBLICATIONS

Refereed journal articles

- 2022 **Lavy, B. L.**, R. C. Weaver, and R. R. Hagelman, III. Using the Change Point Model (CPM) framework to identify windows for water resource management action in the Lower Colorado River Basin of Texas, USA. *Water* 14(1): 18. <https://doi.org/10.3390/w14010018>
- 2020 **Lavy, B. L.** Cooperation, fragmentation and control: News media representations of changing water access from Austin to the Texas Rice Belt. *Water Alternatives* 13(3): 779-799.
- 2020 Zavar, E. M., **B. L. Lavy**, and R. R. Hagelman, III. Chain tourism in post-disaster recovery. *Tourist Studies* 20(4): 429-449. <https://doi.org/10.1177/1468797620939413>
- 2019 **Lavy, B. L.**, and R. R. Hagelman, III. Protecting the urban forest: Variations in standards and sustainability dimensions of municipal tree preservation ordinances. *Urban Forestry & Urban Greening* 44: 126394. <https://doi.org/10.1016/j.ufug.2019.126394>
- 2018 Massa, A.,¹ E. M. Zavar, **B. L. Lavy**, and S. M. Graves. Fragmented forest: A case study examining historical land management and current urban forest health. *The Northeastern Geographer* 10: 27-45.
- 2017 **Lavy, B. L.**, and R. R. Hagelman, III. Spatial and temporal patterns associated with permitted tree removal in Austin, Texas, 2002-2011. *The Professional Geographer* 69(4): 539-552. <https://doi.org/10.1080/00330124.2016.1266953>
- 2017 Zavar, E. M., R. R. Hagelman, III, **B. L. Lavy**, and B. Prince. Land use change at temporary group-housing sites in post-Katrina Louisiana. *Natural Hazards Review* 18(3): 1-9. [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000243](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000243)
- 2016 **Lavy, B. L.**, E. D. Dascher, and R. R. Hagelman, III. Media portrayal of gentrification and redevelopment on Rainey Street in Austin, Texas (USA), 2000-2014. *City, Culture and Society* 7(4): 197-207. <https://doi.org/10.1016/j.ccs.2016.08.001>
- 2016 **Lavy, B. L.**, J. P. Julian, and R. N. Jawarneh. The impact of past and future urban expansion on soil resources in central Arkansas, 1994-2030. *Papers in Applied Geography* 2(1): 25-39. <https://doi.org/10.1080/23754931.2015.1106972>
- 2014 Hiner, C. C., C. G. Townsend, and **B. L. Lavy**. Harm J. de Blij's 1983 *Wine: A Geographic Appreciation*. *Progress in Physical Geography* 38(5): 674-684. <https://doi.org/10.1177/0309133314540691>

¹undergraduate student

Refereed journal articles in review

Hagelman, III, R. R., E. M. Zavar, **B. L. Lavy**, and J. Garibay. A longitudinal recovery research framework for post-disaster change analysis applied to Hurricane Harvey (2017).

Refereed book chapter

2020 Holtkamp, C., **B. L. Lavy**, and R. Weaver. Leaving the old Kentucky home: Emerging landscapes of bourbon production. In C. C. Myles, editor, *Fermented landscapes: Lively processes of socio-environmental transformation*. Lincoln, NE: University of Nebraska Press.

Refereed encyclopedia entry

2021 Zavar, E. M., and **B. L. Lavy**. Mitigation: Learning from and anticipating crises. In E. Stern, editor, *Oxford Research Encyclopedia of Politics*. Oxford: Oxford University Press.
<https://doi.org/10.1093/acrefore/9780190228637.013.1963>

Report

2019 Zavar, E. M., **B. L. Lavy**, and R. R. Hagelman, III. *Recovery of tourism-based economies on the Texas Gulf Coast after Hurricane Harvey*. QR 287. Boulder, CO: University of Colorado Natural Hazards Center.

Non-refereed article

2020 **Lavy, B. L.**, and R. R. Hagelman, III. Tree preservation ordinances in Texas: Opportunities and challenges for sustaining our urban forests. *Urban Tree Growth and Longevity Working Group Newsletter (International Society of Arboriculture)* Summer 2020.

In preparation

Lavy, B. L., E. M. Zavar, and S. Tamima. Texas museums, heritage sites, parks, and protected places responses to the COVID-19 pandemic.

Lavy, B. L., and E. M. Zavar. Place attachment, tree culture, and Hurricane Harvey recovery through tourists' eyes. Target Journal: *Urban Forestry & Urban Greening*.

Lavy, B. L., and J. Brush. Species preferences of birdwatchers in the Lower Rio Grande Valley. Target Journal: *Urban Ecosystems*.

RESEARCH GRANTS, FUNDING, AND FELLOWSHIPS

Awarded

2020 **Lavy, B. L.** Fellow, Enabling the Next Generation of Hazards and Disasters Fellowship Program, University of Colorado Natural Hazards Center (funded by the National Science Foundation grant number CMMI1921157) (2020-2021)

2018 **Lavy, B. L.** Co-PI. Recovery of tourism-based economies along the Texas Gulf Coast after Hurricane Harvey (PI: E. Zavar and Co-PI: R. R. Hagelman, III). University of Colorado Natural Hazards Center Quick Response Research Grant Program (funded by National Science Foundation grant number CMMI1333610) (\$2,000)

2017 Hagelman, III, R. R., E. M. Zavar, and **B. L. Lavy**. Hurricane Harvey's impacts on businesses in Texas's central Gulf Coast region. Departmental Research Enhancement Funds, Department of Geography, Texas State University (\$5,000)

2016 **Lavy, B. L.** Fellow, Joseph E. Pryor Graduate Fellowship, Alpha Chi National College Honor Society (2016-2017; \$5,000)

Unfunded

- 2019 **Lavy, B. L.** Co-PI. STEM collaborations and opportunities through cross-sector partnerships and experiential education: Earth and environmental sciences (SCOPE) (PI: E. Pereira; Co-PIs: C. Cheng, A. Raysoni, and M. Lu) National Science Foundation Improving Undergraduate STEM Education: Hispanic-Serving Institutions (IUSE-HIS)
- 2018 **Lavy, B. L.** PI. 2018 Hurricane Season: Understanding the long-term recovery of small businesses & heritage sites in coastal communities (Co-PIs: E. Zavar and R. R. Hagelman, III). Rapid Response Research (RAPID), National Science Foundation Humans, Disasters, and the Built Environment
- 2017 Loftus, T. T., R. Weaver, and **B. L. Lavy** (as PhD student). Use and effectiveness of municipal irrigation restrictions during drought. Outdoor Water Savings Initiative, Phase 2, Alliance for Water Efficiency

AWARDS AND HONORS

- 2016 Outstanding Doctoral Student Award, College of Liberal Arts, Texas State University
- 2016 "Favorite Professor" Award (as PhD instructor), Texas Iota Chapter, Alpha Chi National College Honor Society
- 2016 Pearson Graduate Student Teaching Award, Department of Geography, Texas State University
- 2016 Graduating Student Recognition of Campus Support (as PhD instructor), Office of Retention Management and Planning, Texas State University
- 2014 Transfer Student Appreciation of Campus Support (as PhD instructor), Office of Retention Management and Planning, Texas State University
- 2010 Superior Honor Award, U.S. Department of State

INVITED SPEAKER AND GUEST LECTURER

- 2019 Whose responsibility? Business recovery along the Texas Coastal Bend following Hurricane Harvey. Department of Emergency Management and Disaster Science Colloquium Series, University of North Texas, 9 Oct.
- 2019 Business recovery along the central Texas coast following Hurricane Harvey. School of Earth, Environmental, and Marine Sciences Seminar Series, 22 Feb.
- 2017 Moving communities forward: Challenges and opportunities for urban sustainability. Sustainable Communities Program Colloquium, Binghamton University, State University of New York, 19 Oct.
- 2017 Austin's urban forest: Geographic patterns of permitted tree removals, 2002-2011. City of Austin's Urban Forestry Department, 11 Aug.
- 2017 Analyzing human-environment interactions using a geographic information system (GIS). GIS Day 2016, Texas State University, 17 Nov.

CONFERENCE PRESENTATIONS

- 2022 **Lavy, B. L.**,* E. M. Zavar, and S. Tamima.² Texas museums, heritage sites, parks, and protected places responses to the COVID-19 pandemic. American Association of Geographers, Virtual and New York, NY

- 2022 Howe, K.,^{2,*} and **B. L. Lavy**. Sustainability practices of food, beverage, and textile manufacturers in Texas's four largest metropolitan areas. American Association of Geographers, Virtual and New York, NY
- 2021 **Lavy, B. L.,*** and E. M. Zavar. Trees, tree cultures, and disasters: Implications for urban forest management. American Association of Geographers, Virtual and Seattle, WA
- 2020 Zavar, E. M.,* **B. L. Lavy**, and R. R. Hagelman, III. Chain tourism: The role of social networks and place attachments in disaster recovery. Fifth International Conference on Tourism & Leisure Studies, Dubrovnik, Croatia
- 2019 **Lavy, B. L.,*** and R. R. Hagelman, III. Protecting the urban forest: Variations in standards and sustainability dimensions of municipal tree preservation ordinances. Southwestern Division of the American Association of Geographers, Fort Worth, TX
- 2019 Zavar, E. M.,* **B. L. Lavy**, and R. R. Hagelman, III. The role of chain tourism in Hurricane Harvey recovery. Natural Hazards Workshop Researchers Meeting, Broomfield, CO
- 2019 **Lavy, B. L.,*** E. M. Zavar, and R. R. Hagelman, III. Business recovery along the Central Texas Coast following Hurricane Harvey. American Association of Geographers, Washington, DC
- 2019 Holtkamp, C.,* **B. L. Lavy**, and R. Weaver. Leaving the old Kentucky home: Emerging landscapes of bourbon production. American Association of Geographers, Washington, DC
- 2019 **Lavy, B. L.*** Panelist: "Fermented landscapes": Perspectives on landscape, fermentation, and their material and figurative linkages. American Association of Geographers, Washington, DC
- 2018 **Lavy, B. L.*** Co-Organizer and Panelist: The intersection of disaster with race, ethnicity, and place. Race, Ethnicity, and Place Conference, Austin, TX
- 2018 **Lavy, B. L.,*** E. M. Zavar, and R. R. Hagelman, III. Chain tourism in post-disaster recovery. Southwestern Division of the American Association of Geographers, Baton Rouge, LA
- 2018 **Lavy, B. L.,*** R. Weaver, and R. R. Hagelman, III. Changes in urban and agricultural water use in the lower Colorado River valley of Texas. American Association of Geographers, New Orleans, LA
- 2017 Hagelman, III, R. R.,* **B. L. Lavy**, and S. Maleki. Geographic patterns of children in FEMA disaster declarations, 1990-2012. American Association of Geographers, Boston, MA
- 2016 **Lavy, B. L.,*** and R. R. Hagelman, III. Socio-spatial and temporal patterns associated with permitted tree removal in Austin, Texas. Southwestern Division of the American Association of Geographers, Denton, TX
- 2016 **Lavy, B. L.,*** and R. R. Hagelman, III. Visualizing conceptual pillars supporting urban sustainability ordinances. American Association of Geographers, San Francisco, CA (poster presentation)
- 2015 **Lavy, B. L.,*** J. P. Julian, and R. N. Jawarneh. The impact of past and future urban expansion on soil resources in central Arkansas (USA), 1994-2030. Southwestern Division of the Association of American Geographers and Applied Geography Conference Joint Meeting, San Antonio, TX
- 2015 Zavar, E. M.,* R. R. Hagelman, III, **B. L. Lavy**, and B. Prince. Temporary group housing sites as a catalyst for landscape change and development in post-Katrina Louisiana. Southwestern Division of the Association of American Geographers and Applied Geography Conference Joint Meeting, San Antonio, TX
- 2015 **Lavy, B. L.,*** E. D. Dascher, and R. R. Hagelman, III. The shifting landscape of Rainey Street, Austin, TX: An analysis of the news media's portrayal of an urban renewal effort. Association of American Geographers, Chicago, IL
- 2015 Townsend, C. G.,* C. C. Hiner, and **B. L. Lavy**. The impact and legacy of Harm J. de Blij's 1983 Wine: A Geographic Appreciation. Association of American Geographers, Chicago, IL
- 2015 **Lavy, B. L.,*** E. D. Dascher, and R. R. Hagelman, III. Putting gentrification in context: News media coverage and neighborhood transformation. Alpha Chi National Convention, Chicago, IL
- 2014 **Lavy, B. L.,*** and R. R. Hagelman, III. The regulatory landscape of urban forestry in Texas. Association of American Geographers, Tampa, FL

- 2014 **Lavy, B. L.*** Preserving trees in Texas: An exploratory evaluation of environmental policies. Alpha Chi National Convention, St. Louis, MO
- 2013 **Lavy, B. L.*** A geography of permitted tree removals in Austin, Texas, 2002-2011. Association of American Geographers, Los Angeles, CA
- 2012 **Lavy, B. L.*** The social equity of public parks and park access in Austin, Texas. Association of American Geographers, New York, NY (poster presentation)
- 1999 **Lavy, B. L.*** Environmental justice, community empowerment, and public participation: A case in eastern Oklahoma. Society for Applied Anthropology, Tucson, AZ
- *presenter; ¹undergraduate student; ²graduate student*

ENVIRONMENTAL AND URBAN SUSTAINABILITY FIELDTRIPS

- 2014 San Antonio urban design and river restoration. Fieldtrip with R. R. Hagelman, III, Texas State University, 18 Apr.
- 2014 New Urbanism and sustainable neighborhood developments in Central Texas. Fieldtrip, Texas State University, 22 Feb.

TEACHING

Texas Christian University

Contemporary Environmental Issues ENSC 10143
Introduction to Sustainability Science ENSC 30134
Field Experience ENSC 30403
Environmental Impact Statements ENSC 50743
Environmental Issues ENSC 60203
Publication Writing ENSC 70357
Research in Sustainability Science ENSC 70970

The University of Texas Rio Grande Valley, Edinburg, TX

Environment and Society ENVR 2302
Natural Resources Conservation ENVR 3301
Environmental Sciences Research Project ENVR 4303
Urban Sustainability ENVR 4357 / EEMS 6357
Ecosystem Management and Social-Ecological Resiliency EEMS 6300

Binghamton University, State University of New York, Binghamton, NY

Introduction to Geography GEOG 101
Environmental Planning and Policy GEOG 239 / ENVI 239
Natural Hazards GEOG 330
Water Resources Planning and Management GEOG 341

Texas State University, San Marcos, TX

Introduction to Environmental Geography GEO 2310
Urban Geography GEO 3310

Lab instructor:

Physical Geology Laboratory GEOL 1410
Physical Geography Laboratory GEO 2110

Instructional assistant:

Physical Geology GEOL 1410
Cities and Urban Design GEO 4321
Interpretive Environmental Geography (online course) GEO 4322 / 5322
Environmental Management GEO 5313

MENTORING

Graduate thesis committee chair

In progress de Oyarzabal Barba, M. Urban forests and bat movement. (2022)
In progress Fahey, P. Ecosystem services of property acquisition landscapes in Arlington, Texas. (2021)
In progress Howe, K. Sustainability practices, the Circular Economy, and small manufacturing firms in Dallas-Fort Worth. (2021)

Graduate thesis committee member

In progress Tamima, S. COVID-19 impact on museums, parks, and protected places. (UNT)
In progress McGee, J. The use of swimming pools by bats in a game reserve in South Africa. (TCU)
In progress Stephens, L. An analysis of the bottom up approach of Border 2020's waste tire management system. (UTRGV)

Supervised undergraduate research

2020 Ballesteros, L. Tree species associated with permitted tree removals. (UTRGV)
2020 Barbosa, M. Models of urban form in the Lower Rio Grande Valley. (UTRGV)
2020 Guerra, E. Drought and the urban forest. (UTRGV)
2020 Lindgren, E. Hurricane Harvey's impact on vegetation in Rockport-Fulton, Texas.
2018 Warner, R. The effects of tree removal on neighborhood canopy cover. GIS and remote sensing undergraduate research project presented at 2018 Binghamton Research Days, Binghamton, NY (poster presentation) (Binghamton University)
2017 Yanes-Garcia, A. The effect of surgical and ambulatory centers on underprivileged women in Texas. GIS-based undergraduate research project presented at the 2017 Alpha Chi National Convention, Louisville, KY (poster presentation) (Texas State University)
2016 Ross, S. Exploring the relationship between gas price and U.S. National Park Service Unit annual attendance. GIS-based undergraduate research project presented at the 2016 American Association of Geographers Annual Meeting, San Francisco, CA (poster presentation) (Texas State University)

Undergraduate honors thesis committee member

2018 Rusinko, K. A. (B.S. Hon.) The geography of Detroit city's post-industrial feelings and its development. (Binghamton University)

COMMUNITY-ENGAGED LEARNING EXPERIENCES

- 2019 Commercial Photography and Ecosystem Management, Santa Ana National Wildlife Refuge, US Fish and Wildlife Service
- 2019 Park Visitorship and Community Outreach Plan, Estero Llano Grande State Park, Texas Parks and Wildlife Department

SERVICE

Manuscript Review

- Sustainability
- Urban Forestry and Urban Greening
- Journal of Sustainable Forestry
- Annals of the American Association of Geographers
- Papers in Applied Geography

Textbook Review

- Getis, A., M. D. Bjelland, and V. Getis. *Introduction to Geography, Sixteenth edition*. New York, NY: McGraw-Hill Education.

Texas Christian University

- 2021-pres. Chair, Departmental Advisory Committee, Department of Environmental Sciences, Texas Christian University
- 2021-pres. Member, Tree Advisory Committee, Texas Christian University
- 2020-pres. Volunteer, University Sustainability Committee, Texas Christian University

The University of Texas Rio Grande Valley

- 2018-2020 Member, Graduate Degree Program Committee, Agricultural, Environmental, and Sustainability Sciences, School of Earth, Environmental, and Marine Sciences, The University of Texas Rio Grande Valley
- 2018-2020 Member, Evaluation Standards Revision Committee, School of Earth, Environmental, and Marine Sciences, The University of Texas Rio Grande Valley
- 2018-2019 Member, Search Committee, 3-Year Lecturer in Geology, School of Earth, Environmental, and Marine Sciences, The University of Texas Rio Grande Valley
- 2019-2020 Member, Planning Committee, Bachelor of Arts in Interdisciplinary Studies (Public Heritage), The University of Texas Rio Grande Valley
- 2019-2020 Co-organizer, (First) Annual GIS Day, The University of Texas Rio Grande Valley

Texas State University

- 2015-2016 Co-President, and Vice President, Graduate Student Forum, Department of Geography, Texas State University
- 2015-2016 Member, Colloquium Committee, Department of Geography, Texas State University
- 2014-2016 Student Government Graduate House Representative, Texas State University.
- 2014-2015 Member, Presidential Award for Excellence in Teaching Selection Committee, Texas State University
- 2014-2015 Member, Mariel M. Muir Excellence in Mentoring Award Selection Committee, Texas State University

- 2013-2017 Mentor, Bobcat Bond Program, Texas State University
- 2011-2012 Member, Texas Geography Student Research Symposium Planning Committee, Department of Geography, Texas State University

Organizations

- 2015-2017 Student Sponsor Alpha Chi National College Honor Society, Texas Iota Chapter
- 2014-2015 Vice President, Alpha Chi National College Honor Society, Texas Iota Chapter
- Spr. 2014 Treasurer, Alpha Chi National College Honor Society, Texas Iota Chapter

Community

- 2021-pres. Member, Research Working Group, North Texas Food Policy Alliance
- 2021-pres. Member, Project Advisory Group for the North Central Texas Organic Waste to Fuel Feasibility Study, North Central Texas Council of Governments (NCTCOG) and University of Texas at Arlington (UTA)
- 2019-2020 Member and Secretary, Tree Advisory Board, City of Edinburg, TX

MEMBERSHIPS

- 2011-pres. Member, American Association of Geographers (AAG)
 - Hazards, Risks and Disasters Specialty Group
 - Urban Geography Specialty Group
 - Water Resources Specialty Group
 - Cultural & Political Ecology Specialty Group
- 2014-pres. Member, Phi Kappa Phi Honor Society
- 2012-pres. Member, Alpha Chi National College Honor Society
- 1997-pres. Member, Golden Key International Honour Society

TRAININGS AND WORKSHOPS

- Fall 2020 Mitigating Unconscious Bias Training, Office of Diversity and Inclusion, Texas Christian University
- Sum. 2020 Fall 2020 Hybrid Design and Delivery Training, Texas Christian University
- Fall 2019 DREAM Zone Advocate Training in support of undocumented or DACAmented students, Center for Diversity and Inclusion, The University of Texas Rio Grande Valley
- Spr. 2019 Community Engagement and Culturally Relevant Pedagogy, College of Sciences, The University of Texas Rio Grande Valley
- Spr. 2017 Ally Training in support of LGBTQiA+ community, Office of Student Diversity and Inclusion, Texas State University

SKILLS

ESRI ArcGIS Desktop, Pro, and Online; QGIS; ERDAS Imagine; SPSS; R; Atlas.ti; Microsoft Office Suite; learning management systems (e.g., myCourses, Blackboard); Windows and Macintosh systems