

Denise Chavez

EDUCATION

Ph.D. in Geography, *Kansas State University* | May 2026 (expected)

Research interests: adaptive capacity, resilience, health access, climate change, rural communities

Advisor: Dr. Katherine Nelson || Dr. Laura Moley

Certificate: **Geographic Information Systems** | May 2024

Master of Public Health, *East Tennessee State University (ETSU)*, Johnson City, TN | May 2020

Concentration: **Epidemiology**

Certificate: **Biostatistics**

M.S. in Technology, *ETSU*, Johnson City, TN | June 2018

Concentration: **Entrepreneurial Leadership**

Thesis: *An assessment of the factors that increase the likeliness of Hispanic students to attend higher education in Northeast Tennessee*

Advisor: Dr. Mohammad Moin Uddin

Independent Research: *Meta-Analysis on Work Ethic*

Advisor: Dr. Allen Gorman

B.S. in Human Services, *ETSU*, Johnson City, TN | May 2016

Minor: **Management**

TECHNICAL SKILLS

Programming languages: Python | SQL | R | STATA

Software: Microsoft Suite | ArcGIS Pro | ArcGIS Online | Qualtrics | REDCap

Language: Fully bilingual in Spanish and English, beginner French

PROFESSIONAL DEVELOPMENT

William Averette Anderson Fund Fellow, Sept. 2024 – Present. Accepted as a BAF fellow for Hazard and Disaster Mitigation Education and Research

I-GUIDE Summer School, UCAR, Boulder, Colorado, August 2023. Participated in a selective week-long immersive program for geospatial data science using cloud- and high-performance computing.

Contributed to the completion of a team-based project on *Characterizing the spatiotemporal changes of the wildland-urban interface in the United States*.

The Grad WINGS, UCGIS, Spring 2023. Participated in a selective workshop to learn how to navigate and chart a course forward for Women Graduate Students in Geospatial Science

RELEVANT PUBLICATIONS

Chavez D, Nelson K, Zipper S, **A comparison of adaptive capacity index construction approaches and a process for reducing the number of variables used.** (*Under review*)

Huang Q, Chavez D, Dockery N, Alali W. **Urban-rural Differences in Cardiovascular Chronic Conditions in the U.S. Counties.** (*Under review*)

Park YM, Chavez D, Sousan S, Figueroa-Bernal N, Alvarez JR, Rocha-Peralta J. **Personal exposure monitoring using GPS-enabled portable air pollution sensors: A strategy to promote citizen awareness and behavioral changes regarding indoor and outdoor air pollution.** *J Expo Sci Environ Epidemiol.* 2022 Dec 14. doi: 10.1038/s41370-022-00515-9. Epub ahead of print. PMID: 36513791.

Dula, T, Chavez D, Baker K., Slawson D, Cutshaw L, Kozinetz C, Maisonet M. (2019). **Assessment of Stakeholder Engagement for Conducting COPD Research in Appalachian Tennessee.**

Poster presented at the 76th Annual Tennessee Public Health Association educational conference in Franklin, TN

PRESENTATIONS

Chavez Reyes, D. (2024) **The Health Impacts of Air Quality Amid Climate Change and Human Activities.** *Community outreach presentation was hosted by Flint Hill Sierra Club, Manhattan KS.*

Chavez Reyes, D. A & Nelson, K (2023) **Adaptive Capacity in Kansas: An Uncertainty Analysis.** *Paper presentation was hosted by AAG GPRM Annual Meeting, Sioux Falls, South Dakota.*

Chavez Reyes, D. A. Maisonet, M. (2020). **Climate Change and Public Health.** *Lobby Training hosted by the Friends Committee on National Legislation, Washington, DC.*

AWARDS

Archard Lab Research Incentive Award \$3,225 to conduct air quality study at the individual level.

Graduate Student Leadership Award \$1000, recognized by the K-State Geography Department for professionalism, dedication, and leadership in the 2024 academic year.

Mary Dobbs Outstanding Department Citizen Award \$1000, recognized by the K-State Geography Department to the student whose actions during 2024 academic year best exemplify the spirit of the department and a willingness to give "110%".

WORK EXPERIENCE

Research Assistant, Dept. of Geography & Geospatial Sciences, Manhattan, KS | Aug. 2022 – Present

- Worked with stakeholders in Kansas to identify indicators of adaptive capacity to climate change and water quality.
- Modeled adaptive capacity for farming, metro and non-metro areas

Research Assistant, Dept. of Geography, Planning & Env., Greenville, NC | Aug.2021 -May 2022
"A Low-Cost Mobile Air-Pollution Sensor with Geospatial Mapping" PI: Dr. Yoo Min Park

- Recruited and trained 101 participants
- Established community relationships and networks for future studies
- Managed participant data collection and participation payment

Research Assistant, Dept. of Geography & Geospatial Sciences, Manhattan, KS | Jan. - Aug.2021
"Agricultural Community Adaptive Capacity in Kansas" PI: Dr. Katherine Nelson

- Collected, cleaned, and transformed secondary data from USDA, Census Bureau and the Bureau of Economic Analysis
- Evaluated methods for index construction and their sensitivity
- Modeled adaptive capacity in python using random forest

Office Assistant, KAWSE, Manhattan, KS, August. 2020- Jan. 2021

- Managed STEM outreach programs to middle school, high school, and college students
- Thrived at social media engagement
- Conducted program effectiveness evaluation

Epidemiology Intern, TN Dept. of Health, Johnson City, TN, Jan. 2020- May 2020

- Created infographics on diseases to educate the population on health prevention
- Extracted and created a database from reportable disease reports and visualized data
- Utilized GIS to establish care areas in the region
- Conducted contact investigations by interviewing and providing testing or referral

Research Assistant, *Dept. of Epidemiology and Biostatistics*, ETSU, May 2018 – May 2020

“Chemical Exposure in Hispanic Women”

PI: Dr. Mildred Maisonet

“Household Air Pollution and COPD Study”

PI: Dr. Mildred Maisonet

- Recruited, interviewed, and collected bio-specimen from research participants in rural Tennessee, Kentucky, and Virginia
- Established community connection to promote preventive health information
- Created manual of operations (MOPs) and standard operation procedures (SOPs)
- Conducted Spirometry lung test function to potential participants

Events Coordinator, *Language and Culture Resource Center*, ETSU, Sept. 2016- May 2018

- Coordinated and secured funds for community events that aimed to bridge the Latino and Appalachian cultures
- Established programs to motivated students to attend higher education
- Served as medical interpreter for people with limited English

Program Coordinator, *QUEST for Success*, ETSU, Jan. 2016 - Aug. 2016

- Conducted interviews to select student leaders
- Created a leader training program
- Coordinated activities and programs for 200 incoming students

Student Success Intern, *Office of Equity and Diversity*, ETSU, Jan. 2015 – Dec. 2015

- Designed marketing material for Success Programs
- Conducted research in program effectiveness and implementations to be made
- Performed statistical analysis and interpreted data for Equity and Diversity Student Success Programs

LEADERSHIP EXPERIENCE

Event Organizer, *Gamma Theta Upsilon K-State Chapter*, Aug 24 – May 25

- Revitalized ‘Career Talks’ to aid professional development across the geography students
- Arranged speaker line-up and designed marketing materials

Graduate Faculty Student Liaison, *Dept. of Geography & Geospatial Sciences*, Aug 23-May 24

- Advocated for the needs and wants of the geography students
- Secured resources like computers for student use
- Mobilized students to participate in seminars, visiting faculty colloquiums, and annual conferences

Delegation Leader, *Friends Committee on National Legislation*, Aug. 2018-May 2021

- Organized a lobby training event for faculty, staff, and members of the community
- Secured funding for traveling expenses of our delegation
- Participated on Spring Lobby Weekend 2019 and lobbied for social justice

Resident Advisor, *Upward Bound – Trio Support Program*, Summer 2015, 2017

- Inspired Students to achieve great things by teaching classes to student minorities
- Encouraged students to explore beyond their comfort zone
- Empowered students to take action on what they want to accomplish

On-site-coordinator, *LeaderShape Institute*, May 2015

- Attendee May 12-17, 2014
- Organized all logistical details for a 6 - day leadership program engaging 45 student leaders
- Worked in partnership with Lead and Cluster facilitators to model leadership
- Served as a catalyst for others learning
- Established a climate to foster a 'healthy disregard for the impossible'