Curriculum Vitae

Yan Lin
Associate Professor

Educational History

Ph.D., 2014, Texas State University, San Marcos, TX, USA; Major: Geographic Information Science; Dissertation title: "Cervical Cancer Disparities in Texas"; Dissertation advisor: F. Benjamin Zhan

M.S., 2009, Central South University, Changsha, China; Major: Cartography and Geographic Information Science; Thesis title: "Geostatistic and GIS methods for Assessing Heavy Metal Contamination in Soils"; Thesis advisor: Jianjun Zhu

B.S., 2006, Hunan Normal University, Changsha, China; Major: Geography Information Science; Thesis title: "Spatial distribution change of migrants' habitat in Eastern Dongting Lake, China"; Thesis advisor: Jianxin Qin

Employment History Part I

Associate Professor, 1/2025- ; Department of Geography, Penn State University, State College, PA

Associate Professor, 8/2022-12/2024; Department of Geography and Environmental Studies, University of New Mexico, Albuquerque, NM

Assistant Professor, 8/2016-7/2022; Department of Geography and Environmental Studies, University of New Mexico, Albuquerque, NM

Assistant Professor, 8/2014-5/2016; Department of Geography, South Dakota State University, Brookings, SD

Research Associate, 8/2013-5/2014; Texas Center for Geographic Information Science, Department of Geography, Texas State University, San Marcos, TX

Instructor of record (Geography 2426: Fundamentals of Geographic Information Systems), 1/2013-5/2013; Department of Geography, Texas State University, San Marcos, TX

Teaching Assistant, 8/2010-12/2012; Department of Geography, Texas State University, San Marcos, TX

Research Assistant, 8/2009-12/2012; Department of Geography, Texas State University, San Marcos, TX

Research Assistant, 9/2007-8/2008; School of Geosciences and Info-physics, Central South University, Changsha, China

Employment History Part II

Affiliated Faculty, 8/2019-present; Center for Advancement of Spatial Informatics Research & Education, University of New Mexico, Albuquerque, NM

Affiliated Faculty, 5/2019-present; Cancer Control & Population Science, UNM Comprehensive Cancer Center, University of New Mexico, Albuquerque, NM

Professional Recognition and Honors

Women in STEM Faculty Development Awards, 2022, University of New Mexico

Sobel Duncan Science for Health in Indigenous Populations (SHIP) Research Award (Awarded together with doctoral student advisee), 2022, University of New Mexico

Emerging Scholar Award Nomination, 2021, Health & Medical Geography Specialty Group, American Association of Geographers

Provost's Conference Travel Award, 2019, University of New Mexico

Doctoral Research Award, 2013, Texas State University

Second Place Poster Presentation, 2013, Women in Science and Engineering (WISE) Annual Conference Student Poster Competition

First Place Poster Presentation, 2013, North American Association of Central Cancer Registries (NAACCR) Annual Conference Student Poster Competition

ESRI Graduate Award, for Excellence in GIS, 2013, Texas State University, San Marcos, TX

Texas State Associated Student Government Scholarship, 2011-2014, Texas State University, San Marcos, TX

College of Liberal Arts Graduate Scholarship, 2010-2014, Texas State University, San Marcos, TX

Short Narrative Description of Research

As a geographer with training in Geographic Information Science (GIScience) and health/medical geography, my research is dedicated to exploring the interrelated process between space, place, and health. By leveraging GIScience and spatial analysis & statistics methodologies, I aim to unravel the multifaceted relationships among human health, social dynamics, and environmental factors. My research endeavors bridge the realms of GIScience with environmental and social determinants of health, with a particular focus on spatial analysis and modeling, data & uncertainties, environmental health, and cancer disparities. In the realm of spatial analysis and modeling, my research delves into the development and refinement of geospatial modeling (e.g., spatial accessibility modeling and exposure assessment modeling) and the exploration of uncertainties inherent in data source and their propagation through modeling, as well as their social implications with a critical lens. Additionally, I developed a space-time exposure model to estimate cumulative environmental exposure risk based on a large volume of GPS data. Furthermore, my research agenda extends to environmental health, with a specific emphasis on understanding and addressing environmental health disparities, particularly within Native American communities. Central to this endeavor is the cultivation of sustained partnerships with indigenous communities, ensuring that research efforts are aligned with and responsive to community priorities and needs. In the domain of cancer disparities research, I adopted a geographical lens to examine various facets of cancer prevention and control. In collaboration with health care providers and various stakeholder, I explore the transformative potential of geographic information and technology in addressing cancer disparities, while also developing spatially explicit intervention programs aimed at reducing cancer disparities.

I have generated several external grants from NIH, NSF, and USEPA, serving as lead or Co-lead PI (4 grants), Co-I (6 grants), and subaward PI (3 grants). I received the UNM Sobel Duncan Science for Health in Indigenous Populations (SHIP) Research Award (awarded jointly with one of my doctoral student advisees) as well as Women in STEM Faculty Development Award in 2022. I have published 39 papers in refereed journals, 3 refereed book chapters, several publications in other formats, and a number of manuscripts with a particular emphasis on community-based projects in progress, acknowledging the extended time required. As part of my dedication to nurturing the next generation of scholars, I have established the Health and Environmental Research - GIS (HER-GIS) Lab, serving as a hub for mentoring graduate and undergraduate students at the intersection of Health and GIS, fostering interdisciplinary collaboration and scholarly inquiry.

My long-term research aspiration is to establish a robust program centered on the geography of health equity by fostering a holistic understanding of the multifaceted factors driving health inequities. Contemporary questions are global in scope, but often local in their manifestation. Geography offers a scalable epistemological framework for the examination of phenomena, ranging from local to regional and global contexts. My vision involves cultivating synergies that comprehensively address the multifaceted nature of health challenges, encompassing historical, social, economic, political, and ethical dimensions. This integrative approach will traverse various domains, including geospatial data science, health and medical geography, GIScience, environmental and social justice, political ecology, and community geography. It will be grounded in critical theories, as demonstrated by my ongoing work in progress. Crucially, this synergy will be underpinned by sustained partnerships with community stakeholders, ensuring that research efforts are grounded in community needs and priorities. By collaboratively engaging with community members, I strive to generate actionable insights and solutions to real-world health challenges.

Scholarly Achievements

Articles Published in Refereed Journals

(Student or advisee are underlined; * denotes that I serve as the corresponding author.)

Krashin, J., Black, P., Brannen, E., **Lin, Y**., Gard, C., Greenwood-Ericksen, M., Trujillo, V., Burkhardt, G., Schreiber, C. 2024. Geographic access to early pregnancy loss management in New Mexico. *Obstetrics & Gynecology* 143(3):435-439. https://doi: 10.1097/AOG.0000000000005505

Jiang, M., Hu, C. J., Rowe, C., Kang, H., Gong, X., Dagucon, C., Wang, J., **Lin, Y**., Sood, A., Guo, Y., Zhu, Y., Alexis, N., Gilliland, F., Belinsky, S., Yu, X., Leng, S. 2024. Application of artificial intelligence in quantifying lung deposition dose of black carbon in a New Mexico population with exposure to ambient combustion particles. *Journal of Exposure Science and Environmental Epidemiology.* 34 (3), 529-537

Gong, X., Huang, Y., Duong, J., Leng, S., Zhan, F. B., Guo, Y., **Lin Y**., Luo, L. 2023. Industrial air pollution and low birth weight in New Mexico, USA. *Journal of Environmental Management,* 348 (2023): 119236. https://doi.org/10.1016/j.jenvman.2023.119236

Girlamo, C., **Lin, Y**., Hoover, J., Beene, D., Woldeyohannes, T., Liu, Z., Campen, M.J., MacKenzie, D. and Lewis, J. 2023. Meteorological data source comparison—a case study in geospatial modeling of potential environmental exposure to abandoned uranium mine sites in the Navajo Nation. *Environmental Monitoring and Assessment*, 195(7), 834.

Gong, X., Liu, L., Huang, Y., Zou, B., Sun, Y., Luo, L., **Lin, Y**. 2023. A pruned feed-forward neural network (pruned-FNN) approach to measure air pollution exposure. *Environmental Monitoring and Assessment*, 195(10), 1183.

Huang, Y., Gong, X., Liu, L., Luo, L., Leng, S., **Lin Y**. 2023. Maternal exposure to metal components of PM2.5 and low birth weight in New Mexico, USA. *Environmental Science and Pollution Research*, 30, 98526–98535.

Lardier DT, Blackwell MA, Beene D, **Lin Y**. 2023. Social vulnerabilities and spatial access to primary healthcare through car and public transportation system in the Albuquerque, NM, metropolitan area: assessing disparities through GIS and multilevel modeling. *Journal of Urban Health* 100: 88–102

Gong, X., Lu, Y., Beene, D., Li, Z., Hu, T., Morgan, M., **Lin, Y**. 2023. Understanding Public Perspectives on Fracking in the United States using Social Media Big Data. *Annals of GIS* 29 (1): 21-35

Liu, Z., **Lin Y.,** Hoover, J., and Beene, D. 2023. Individual level spatial-temporal modeling of exposure potential of livestock in the Cove Wash Watershed, Arizona. *Annals of GIS* 29 (1): 87-107

Beene, D., Collender, P., Cardenas, A., Harvey, C., Huhmann, L., **Lin, Y**., Lewis, J., Loiacono, N., Navas-Acien, A., Nigra, A., Steinmaus, C., van Geen, A. (alphabetical order). 2022. Using mass-balance to evaluate arsenic intake and excretion in different populations. *Environment International* 166: 107371

Scieszka, D., Hunter, R., Begay, J., Bitsui, M., **Lin, Y**., Galewsky, J., Morishita, M., Llaver, Z., Wagner, J., Harkema, J., Herbert, G., Lucas, S., McVeigh, C., Bolt, A., Bleske, B., Canal, C., Mostovenko, E., Ottens, A., Gu, H., Campen, M., Noor, S. 2022. Neuroinflammatory and neurometabolic consequences from inhaled 2020 California wildfire smoke-derived particulate matter at a remote location. *Toxicological Sciences* 186 (1): 149-162

Xu, S., Zou, B., Xiong, Y., Wan, N., Feng, H., Hu, C., & **Lin, Y**. 2021. High spatiotemporal resolution mapping of PM2. 5 concentrations under a pollution scene assumption. *Journal of Cleaner Production* 326: 129409.

Lardier, D., Opara, I., **Lin, Y**., Roach, E., Herrera, A., Garcia-Reid, P., and Reid, R. 2021. A Spatial Analysis of Alcohol Outlet Density Type, Abandoned Properties, and Police Calls on Aggravated Assault Rates in a Northeastern U.S. City. *Substance Use and Misuse* 56 (10): 1527-1535.

Lin, Y.,* Lippitt, C., Beene, D., and Hoover, J. 2021. Impact of travel time uncertainties on modeling of spatial accessibility: a comparison of street data sources. *Cartography and Geographic Information Science* 48(6): 471-490.

Lin, Y.,* Hoover, J., Beene, D., Erdei, E., & Liu, Z. 2020. Environmental risk mapping of potential abandoned uranium mine contamination on the Navajo Nation, USA, using a GIS-based multi-criteria decision analysis approach. *Environmental Science and Pollution Research* 27: 30542-30557.

Zou, B., Li, S., **Lin, Y.,** Wang B., Cao, S., Zhao, X., Peng, F., Qin, N., Guo, Q., Feng H., Campen, M., Xu, S., Duan, X. 2020. Efforts in reducing air pollution exposure risk in China: state versus individuals. *Environment International* 137: 105504.

Zou, B., Liu, N., Wang, W., Feng, H., Liu, X., & **Lin, Y**. 2020. An Effective and Efficient Enhanced Fixed Rank Smoothing Method for the Spatiotemporal Fusion of Multiple-Satellite Aerosol Optical Depth Products. *Remote Sensing* 12(7): 1102.

Dubroff, J., Melendres, L., **Lin, Y**., Beene, D. R., & Ketai, L. 2020. High Geographic Prevalence of Pulmonary Arterial Hypertension: Associations with Ethnicity, Drug Use and Altitude. *Pulmonary Circulation* 10 (1): 2045894019894534.

Li, S., Zou, B., Fang, X., & **Lin, Y**. 2020. Time series modeling of PM2. 5 concentrations with residual variance constraint in eastern mainland China during 2013–2017. *Science of the Total Environment* 710:135755.

Xu, S., Zou, B., **Lin, Y**., Zhao, X., Li, S., Hu, C. 2019. Strategies of method selection for fine-scale PM2.5 mapping in an intra-urban area using crowdsourced monitoring.

Atmospheric Measurement Techniques 12: 2933-2948.

Ni, J., Liang, M., **Lin, Y**., Wu, Y., Wang, C. 2019. Multi-Mode Two-Step Floating Catchment Area (2SFCA) Method to Measure the Potential Spatial Accessibility of Healthcare Services. *International Journal of Geo-Information* 8(5): 236.

Zou, B., You, J., **Lin, Y**., Duan, X., Zhao, X., Fang, X., Campen, M., & Li, S. 2019. Air pollution intervention and life-saving effect in China. *Environment International* 125: 529-541.

Lin, Y.,* Wan, N., Sagert, S., Gong, X., and Davies, A. 2018. A multimodal relative spatial access assessment approach to measure spatial accessibility to primary care providers. *International Journal of Health Geographics* 17:33.

Gong, X., **Lin, Y**, Bell, M. L., Zhan, F.B. 2018. Associations between Maternal Residential Proximity to Air Emissions from Industrial Facilities and Low Birth Weight in Texas, USA. *Environment International* 120:181-198.

Gong, X., **Lin, Y**, Zhan, F.B. 2018. Industrial Air Pollution and Low Birth Weight: A Case-Control Study in Texas, US. *Environmental Science and Pollution Research* 25 (30): 30375–30389.

Lin, Y.,* Wimberly, M., Da Rosa, P., Hoover, J., Athas, W. 2018. Geographic Access to Radiation Therapy Facilities and Disparities of Early-stage Breast Cancer Treatment. *Geospatial Health* 13: 93-101.

Zychowski, KE., Harmon, M., Tyler, C., Sanchez, B., Herbert, G., Avasarala, S., Cerrato, JM., Kunda., N., Muttil, P., Shuey, C., Brearley, A., Ali, A., **Lin, Y**., Kodali, V., Erdely, A., and Campen, M. 2018. Respirable Uranyl-Vanadate Containing Particulate Matter Derived from a Legacy Uranium Mine Site Exhibits Potentiated Cardiopulmonary Toxicity. *Toxicological Sciences* 164(1):101-114.

Lin, Y.,* Wan, N., and Zhan, F. B. 2017. Colorectal cancer disparities among racial/ethnic minorities in Texas, 1995–2003. *Annals of GIS* 23(2): 93-101.

Gong, X., Zhan, F. B., and **Lin, Y**. 2017. Maternal residential proximity to nuclear facilities and low birth weight in offspring in Texas. *Radiation and Environmental Biophysics* 56(1): 111-120.

Lin, Y.,* and Wimberly, M. 2017. Geographic Variations of Colorectal and Breast Cancer Late-Stage Diagnosis and the Effect of Neighborhood-Level Factors. *Journal of Rural Health* 33(2): 146-157.

Lin, Y.,* Gong, X., and Mousseau, R. 2016. Barriers of Female Breast, Colorectal, and Cervical Cancer Screening Among American Indians—Where to Intervene? *AIMS Public Health* 3 (4): 891-906.

Gong, X., Zhan, F. B., Brender, J. D., Langlois, P. H., and **Lin, Y.** 2016. Validity of the

Emission Weighted Proximity Model in estimating air pollution exposure intensities in large geographic areas. *Science of the Total Environment* 563: 478-485.

Lin, Y.* and Gong, X. 2016. Risk Assessment of Water Pollution Exposure to Hazardous Waste Sites: A case study in Bexar County, Texas. *Papers in Applied Geography* 2(4): 383-394.

Lin, Y.,* Schootman, M., and Zhan, F. B. 2015. Racial/Ethnic, Area Socioeconomic, and Geographic Disparities of Cervical Cancer Survival in Texas. *Applied Geography* 56: 21-28.

Zhan, F. B. and **Lin, Y.*** 2014. Racial/Ethnic, Socioeconomic, and Geographic Disparities of Cervical Cancer Late-Stage Diagnosis in Texas. *Women's Health Issues* 24 (5): 519-527.

Lin, Y.* and Zhan, F. B. 2014. Geographic Variations of Racial/Ethnic Disparities of Cervical Cancer Mortality in Texas. *Southern Medical Journal* 107(5): 281-288.

Chow, T. E., **Lin, Y.**, Huynh, N. T., and Davis, J. 2012. Using Web Demographics to Model Population Change of Vietnamese-Americans in Texas Between 2000-2009. *GeoJournal* 77(1): 119-134.

Chow, T. E., **Lin, Y.**, and Chan, W. D. 2011. The Development of a Web-based Demographic Data Extraction Tool for Population Monitoring. *Transactions in GIS* 15(4): 479-494.

Lin, Y.* and Zhu, J. 2009. Research on a Large Amount of Image Visualization Based on Semantic Similarity. *Science of Surveying and Mapping* 34(6): 150-152. (In Chinese)

Articles Appearing in Chapters in Edited Volumes
Refereed

Lin, Y.* 2020. An Integrative Study Using Spatial Statistics and Racial/Ethnic Composition to Measure Racial/Ethnic Residential Segregation at Varying Scales. In *Population Change and Public Policy* (pp. 405-432). Springer.

Hoover, JH, **Lin, Y**, Beene, D, & Liu, Z. 2020. Partnering with indigenous communities to address the environmental health legacy of abandoned mines in the western United States. *The Rocky Mountain West: A compendium of geographic perspectives* (pp.109-117). Washington DC: American Association of Geographers. 2020 March.

Zhan, FB, and **Lin, Y**. 2017. Data Structure, Vector. *The International Encyclopedia of Geography, people, the earth, environment, and Technology*. Volume XIII Sap-T: 1328–1340. DOI: 10.1002/9781118786352.wbieg0489.

Works in Progress

Submitted for publication

Lardier, D., <u>Beene, D.</u>, **Lin, Y**., Kincaid, T., Bonham, C. Accessibility to behavioral healthcare providers and reliable telecommunications in New Mexico. *Journal of Rural Mental Health* (Under Review)

<u>Beene, D.</u>, **Lin, Y**., Shi, X., Hoover, J. Critical geospatial data science: Deconstructing rurality to better "place" health data. *International Journal of Geographical Information Science* (In Revision)

<u>Woldeyohannes, T.</u>, **Lin, Y**., Hoover, J., Zhang, X. Gone with the fire, known and unknown? Addressing a new public health crisis in the US - leveraging remote sensing tools to monitor waste fires. *Nature Sustainability* (Under Review)

Wang, Z, Que, X, Ma, X, Shi, X, Li, M, Fan, C, Liu, Z, **Lin, Y**. Assessing Lyme Disease and Landscape Fragmentation Dynamics Using Spatiotemporally Weighted Regression (STWR): A Town-Level Study in Connecticut. *Environmental Research* (under review)

Li, M., Wallace, D., Winter, J, Fan C, **Lin Y**, Mathewson A, Notarangelo M, Ma X, Shi X. A data mining approach to detecting associations between Lyme disease and landscape fragmentation and diversity. *Ticks and Tick-borne Diseases* (under review)

<u>Huang, Y.</u>, Gong, X., Leng, S., Hawley, K., Mullen, N.M., Ming, L., Lavin, R., Luo, L, **Lin Y.** Relationships between industrial air pollution and newborn hearing health. *Environmental Health Perspectives* (In revision)

<u>Lu, Y.</u>, Gong, X., Howard, N., Brown, C., **Lin Y**. The long-run effect of redlining practice on social vulnerability in major U.S. cities. *Cities* (In revision)

<u>Hridoy, A.E.H.</u>, **Lin, Y***., Li, M., Wang, Z., <u>Liu, Z.</u>, <u>John, M.</u>, Gong, X., Luo, L., Fan, C., Ruberto, I., Shi, X. Impact of climatic, landscape, and social vulnerability determinants on Rocky Mountain Spotted Fever in Arizona. *Ticks and Tick-borne Diseases* (under review)

In preparation

Lin, Y. Advancing Community Driven Health Equity Research with Indigenous Peoples: Towards a Synergy in Geography. (In preparation)

<u>Woldeyohannes, T.</u>, **Lin, Y**., Gay-Antaki, M, Hoover, J., and MacKenzie, D. Coloniality as a geo-field: A political ecology approach for multi-scalar geographic analysis of environmental injustices in Indigenous communities. *Annals of the American Association of Geographer* (In preparation)

<u>Beene, D.</u>, **Lin, Y.**, Lane, M., Hoover, J, MacKenzie, D, Lewis, J. Perceived stress and food security among Navajo mothers: A strengths-based approach. *Health & Place* (In preparation)

Beene, D., **Lin, Y.**, Lane, M., Hoover, J., MacKenzie, D. Navajo WaterGIS: Environmental data poverty, visibility, and usefulness. (In preparation)

Lin, Y., Beene, D., MacKenzie, D., Roman, C., Cajero, M. The impact of geographic access to primary care providers and prenatal care on the realized access to healthcare in the Navajo Nation. (In preparation)

John, M., **Lin, Y.** 2024. Spatial pattern of Spotted Fever Rickettsiosis Dynamics in the United States. *Geospatial Health* (In preparation)

Woldeyohannes, T., Girlamo, C., **Lin, Y**., Hoover, J., Beene, D., and MacKenzie, D. Exposure to abandoned uranium mines and social inequity in the U.S. (In preparation)

Liu, Z., Girlamo, C., **Lin, Y**., Hoover, J. Fuzzy-logic based classification of livestock animal behavior based on GPS data – A case study in Navajo Nation. (In preparation)

Brannen, E., **Lin, Y**., Wiggins, C., Luo, L., and Meisner, A. Disparities of geographic access to cancer support and treatment resources by race/ethnicity, social vulnerability, and rurality. (In preparation)

Research Funding

External Funding

NM-INSPIRES Pilot (PI: Ginossar)   07/01/2024 – 06/31/2025
NIH/National Institute of Environmental Health Sciences (NIEHS)
Grant County Air Information and Research for a Well-Informed Society (Air Wise) Pilot
($50,000 Direct Cost)
Role: Co-Investigator

NM-INSPIRES (1P30ES032755) Pilot **(PI: Lin**)   07/01/2023 – 05/31/2024
NIH/National Institute of Environmental Health Sciences (NIEHS)
Navajo Water GIS Usability & Needs Assessment: Environmental Data Justice and Data Bias
($25,390 Direct Cost)
  Role: Principal Investigator

4UH3OD023344 (PI: MacKenzie & Lewis)
NIH Office of the Director   9/1/2023-8/31/2030

Understanding Risk Gradients from Environment on Native American Child Health
Trajectories: Toxicants, Immunomodulation, Metabolic syndromes, & Metals Exposure –
Renewal ($ 30,369,183 Total Cost)
Role: Co-Investigator

2P42ES025589-06 (PI: Lewis)
NIH/National Institute of Environmental Health Sciences (NIEHS)
Superfund Research Program   09/01/2022-03/31/2027
UNM Metal Exposure Toxicity Assessment on Tribal Lands in the Southwest (METALS)
Superfund Research Program – Renewal ($6,125,000 Direct Cost)
Role: Co-Investigator of the Center, **Co-lead** of Data Management and Analysis Core

P50MD015706 (PI: Lewis, Hoover, and MacKenzie)   07/16/2020-03/31/2025
NIH/ National Institute on Minority Health and Health Disparities (NIMHD)
P50 Center for Native American Environmental Health Equity Research (direct cost:
$4,688,338; indirect cost: $2,110,199)
Research Project 2 (**PI: Lin** & Hoover): Evaluating Cumulative Environmental Exposure to
Metals and Non-metals and Community-level Health Using Geospatial Modeling and Personal
Exposure Assessment (direct cost: $1,049,412; indirect cost: $ 452,899)
Role: Co-Investigator of the Center, **Co-PI** of research project 2 (R01 equivalent)

1P30ES032755 (PI: Blossom)
National Institute of Environmental Health Sciences (NIEHS) P30 Center
NIH/ NIEHS   09/01/2022-04/01/2026
New Mexico Integrative Science Program Incorporating Research in Environmental Sciences
(NM-INSPIRES) ($3,399,900 Direct Cost)
Role: Co-Investigator

NIH IDeA Networks of Biomedical Research Excellence (INBRE) (**PI: Lin** & Hoover)
                                                             05/01/2022-04/30/2024
NIH/National Institute of General Medical Sciences (NIGMS)
Improving geospatial environmental health research with Tribal communities in Montana and
New Mexico ($40,000 Direct Cost)
Role: Institutional PI

NSF 2155222
National Science Foundation (PI: Cook)   09/2022-08/2023
PIPP Phase 1: Planning the Center for Emerging Pathogen Prediction and Integration (total cost
including indirect costs: $999,610)
Role: Co-Investigator

Mountain West CTR-IN (PI: Leng)   01/2022-12/2023
Novel methods of assessing household wood smoke exposure in the rural Mountain West
($150,000 Direct Cost)
Role: Co-Investigator

OIA-2019609 (PI: Ma)
National Science Foundation   09/01/2020-08/30/2024
RII Track-2 FEC: Leveraging Big Data to Improve Prediction of Tick-Borne Disease Patterns
and Dynamics ($5,830,709 including indirect cost)
OIA-2019609-003 Supplements (**PI: Lin**): Integrating Big Data with Individual-Level Data to

Improve Modeling and Prediction of Rocky Mountain Spotted Fever Dynamics in Native American Communities (direct cost: $259,163; indirect cost: $128,695) 01/01/2022-08/30/2024
Role: **Co-PI** of the parent grant, Principal Investigator of the supplements

V-99T54301-4 **(PI: Lin)**
U.S. Environmental Protection Agency   01/01/2021-12/30/2022
Subaward from Dine College
Renewal – GPS Tracking Livestock Movement and Exposure to Abandoned Uranium Mine Waste in Cove Watershed (direct cost: $ 46,147; indirect cost: 20,623)
Role: Principal Investigator

V-99T54301-2 (**PI: Lin** & Lewis)
U.S. Environmental Protection Agency   10/01/2018-12/31/2020
Subaward from Dine College
GPS Tracking Livestock Movement and Exposure to Abandoned Uranium Mine Waste in Cove Watershed (direct cost: $182,458; indirect cost: $54,621)
Role: Co-Principal Investigator

1P42ES025589 (PI: Lewis)   08/15/2017-03/31/2022
NIH/National Institute of Environmental Health Sciences (NIEHS)
UNM Metal Exposure Toxicity Assessment on Tribal Lands in the Southwest (METALS)
Superfund Research Program (direct cost: ~$8 million)
Role: Co-Investigator

3P42ES025589-03S2 (PI: Lewis)   09/13/2019-03/31/2020
NIH/National Institute of Environmental Health Sciences (NIEHS)
Admin Supplement to Superfund Research Program (SRP) Center (direct cost: $373,355; indirect cost: $194,781)
External Use Case (EUC) Project in collaboration with Columbia University and UC Berkeley (**PI: Lin**): Arsenic Mass Balance: Integrating Environmental and Biomarker Data across Diverse Populations (direct cost: $51,815; indirect cost: $23,935)
Role: Co-Investigator of the Admin Supplement; Principal Investigator of the EUC project

Center for Metals in Biology and Medicine Pilot Project (PI: Gong)   11/01/2020-11/01/2022
NIH/National Institute of General Medical Sciences (NIGMS)
Influences of Airborne Metal Pollution on Adverse Birth Outcomes in New Mexico (direct cost: $20,000)
Role: Co-Investigator

Native Environmental Health Equity Research Center Pilot **(PI: Lin)**   06/01/2018-05/30/2019
National Institute of Environmental Health Sciences (NIEHS) & EPA
Novel Geospatial Modeling to Inform Risk Assessment for Metal Contamination Research on Tribal Lands (direct cost: $13,621)
Role: Principal Investigator

R01ES014565 (PI: Lewis)   07/01/2010-06/30/2020
National Institutes of Health
Navajo Uranium Assessment and Kidney Health Project (NUAKHP) (total cost: $2,292,012)

Role: Consultant -Spatial Statistician

USEPA Science to Achieve Results (STAR) Program (PI: Zhan)   2011-2014
USEPA
Air Pollution-Exposure-Health Effect Indicators: Mining Massive Geographically-Referenced
Environmental Health Data to Identify Risk Factors for Birth Defects (total cost: $499,987)

Role: Doctoral RA

Internal Funding

UNM Comprehensive Cancer Center Research Support Pilot (PI: Gong)   08/01/2023-07/31/2024
Cancer Risk of Air Pollution in New Mexico ($40,000 Direct Cost).
Role: Co-Investigator

UNM Women in STEM Faculty Development Awards **(PI: Lin)**   08/01/2022 – 12/31/2023
Spatiotemporal pattern of cancer disparities in New Mexico ($10,000 Direct Cost)
Role: Principal Investigator

UNM WeR1: Investing in Faculty Success Program **(PI: Lin)**   06/01/2022-12/31/2022
($5,000 Direct Cost).
Role: Principal Investigator

UNM WeR1: Investing in Faculty Success Program **(PI: Lin)**   08/01/2021-12/31/2021
($3,500 Direct Cost).
Role: Principal Investigator

UNM Comprehensive Cancer Center Research Support Pilot **(PI: Lin)**   08/01/2021-07/31/2022
Geographic access to cancer support and treatment resources for cancer disparity reduction in
New Mexico ($40,000 Direct Cost).
Role: Principal Investigator

UNM Divisional Endowed Research funding (PI: Krashin)   07/01/2020-06/31/2021
Geospatial access to EPL (Early Pregnancy Loss) management in New Mexico ($10,000 Direct
Cost)
Role: Co-Investigator

UNM Research Allocations Committee Funds **(PI: Lin)**   07/01/2019-12/31/2021
Unconventional Gas/Oil & Pediatric Asthma in Rural New Mexico – a Pilot Study ($9,992
Direct Cost)
Role: Principal Investigator

UNM Research Allocations Committee Funds **(PI: Lin)**   01/01/2017-12/30/2018
A Geographically Targeted and Personalized Approach to Understand and Reduce Cancer
Disparities ($9,108 Direct Cost)
Role: Principal Investigator

UNM College of Pharmacy Research Pilot Project Awards (PI: Hoover) 01/01/2018-12/30/2018
Integrating Geospatial Technology to Better Assess Personal Exposure to Air Pollutants (PI: Hoover) ($4,910 Direct Cost)
Role: Co-Investigator

Scholarly Excellence Funds, South Dakota State University (PI: Lin) 11/01/2014-07/01/2016
A GIS-based multilevel framework for Cancer Disparity Reduction ($12,300 Direct Cost)
Role: Principal Investigator

Scholarly Excellence Funds, South Dakota State University (PI: Lin) 11/01/2014-08/01/2015
A GIS-based Risk Assessment of Water Pollution Exposure to Hazardous Waste Sites ($600 Direct Cost)
Role: Principal Investigator

Doctoral Research Stipend Funding, Texas State University (PI: Lin) 01/01/2013-12/31/2013
Cervical Cancer Disparities in Texas ($1,820)
Role: Principal Investigator

Pending Research Funding

USEPA (PI: Lim) 01/2025-12/2028
Bridging Resources for Enhanced Air Tools and Health Equity with Adaptive Integration and Reporting (BREATHAIR)
Role: Co-Investigator (Subaward PI)

Media Features

2023, 'Research Highlights: Geospatial and Community-based Approach Investigates Potential Exposures from Fires at Waste Disposal Sites' (published by the National Institute of Environmental Health Sciences Superfund Research Program): [Geospatial and Community-based Approach Investigates Potential Exposures from Fires at Waste Disposal Sites (nih.gov)](#)
2022, 'Research Brief 333: Combining Arsenic Data Across Populations Sheds Light on Exposure Sources' (published by the National Institute of Environmental Health Sciences Superfund Research Program): https://tools.niehs.nih.gov/srp/researchbriefs/view.cfm?Brief_ID=333
2022, 'UNM professor publishes paper on arsenic sources' (published by the University of New Mexico Newsroom): http://news.unm.edu/news/unm-professor-publishes-paper-on-arsenic-sources
2022, 'TickBase Project Supports New Internship Program to Address Environmental Health in Underserved Communities' (published by the NSF TickBase Project): https://tickbase.net/tickbase-project-supports-new-internship-program-to-address-environmental-health-in-underserved-communities/
2022, 'Innovative new summer internship program addresses environmental health concerns in communities, (published by the University of New Mexico Newsroom): http://news.unm.edu/news/innovative-new-summer-internship-program-addresses-environmental-health-concerns-in-communities

2022, 'Twelve faculty members receive 2022 Women in STEM awards',(published by the University of New Mexico Newsroom): http://news.unm.edu/news/12-faculty-membersreceive-2022-women-in-stem-awards

Refereed Conference Proceedings, Abstracts and/or Presentations at Professional Meetings

Hridoy, A., Woldeyohannes T., **Lin, Y**. Machine Learning prediction of Potential Environmental Exposure to Abandoned Uranium Mine Sites in the Navajo Nation. *Superfund Research Program Annual Meeting,* Albuquerque, NM, December 4-6th, 2023

Liu, Z., Girlamo, C., **Lin, Y.,** Yang, L., Hoover, J., Beene, D., Woldeyohannes T., Comparison of Hidden Markov Model-based Fuzzy and Pure Fuzzy logic in estimation of exposure potential to Abandoned Uranium Mines. *Superfund Research Program Annual Meeting,* Albuquerque, NM, December 4-6th, 2023

Woldeyohannes, T., Doyle, J., Girlamo, C., Liu, Z., Sethuraman, A., Eggers, M., **Lin, Y**., Hoover, J. Researching Environmental Health Impacts from Unregulated Solid Waste Disposal (USWD) with Native American Communities. *Superfund Research Program Annual Meeting,* Albuquerque, NM, December 4-6th, 2023

Girlamo, C., **Lin, Y.,** Hoover, J., Beene, D., Woldeyohannes, T., Liu, Z., Campen, M., MacKenzie, D., & Lewis, J. 2022. Meteorological Data Source Comparison – a Case Study in Geospatial Modeling of Potential Environmental Exposure to Abandoned Uranium Mine Sites on Navajo Nation. *Superfund Research Program Annual Meeting*, Raleigh, NC, December 14th, 2022

Hoover, JH, Doyle, J., Woldeyohannes, T., Girlamo, C., Eggers, M., **Lin, Y**. 2022. "Improving geospatial environmental health research with Tribal communities in Montana and New Mexico." Poster. *8th Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE Conference)*. Online via vFares Platform. Dec 12-14, 2022.

Woldeyohannes, T., Beene, D., Hoover, JH, **Lin, Y.,** Mirka, B. 2022. "Utilizing remote sensing to examine occurrence of fires at unregulated waste disposal sites." *SRP 35th Anniversary Annual Meeting*, Session: Tools and technologies to enable systems level science (Raleigh, NC), December 14 – 16, 2022.

Beene, D., Fuchs, E., **Lin, Y**., & Rinehart, A. 2020. Feedbacks of irrigator decisions, hydrologic change and long-term water planning, Mesilla Valley, NM. *NGWA Water, Energy, and Policy in a Changing Climate*.

Lin, Y., Hoover, J., Erdei, E., and Beene, D. 2018. Novel Geospatial Modeling to Inform Risk Assessment for Metal Contamination Research on Tribal Lands. *The 10th Conference on Metal Toxicity & Carcinogenesis.* Albuquerque, NM. October 28-31, 2018.

Lin, Y. 2018. Measuring Spatial Access to Healthcare using a Multimodal Two Step Floating Catchment Area Method. *The 26th International Conference on Geoinformatics*.

Kunming, China. June 28-30, 2018.

Da Rosa, P., **Lin, Y.,** Miller, A., and Cudmore, K. 2016. "Investigating Travel Time to Mammogram Facilities as a Barrier for Early Detection of Breast Cancer among Underserved Women". *Annual Meeting of the American Public Health Association (APHA)*. Denver, CO, USA. October 29-November 2, 2016.

Lin, Y., and Gong, X. 2015. Measuring Access to Primary Care Physicians among American Indian Population in South Dakota – Integrating Spatial and Aspatial Factors. *The 38th Applied Geography Conference*. San Antonio, Texas. November 4-7, 2015.

Gong, X., Zhan, FB., and **Lin, Y**. 2015. An Examination of Associations between Maternal Residential Proximity to Nuclear Facilities and Low Birth Weight in Offspring in Texas. *The 38th Applied Geography Conference*. San Antonio, Texas. November 4-7, 2015.

Lin, Y., Hungerford, H., Gong, X., and Mousseau, R. 2015. Geographic Access to Healthcare among American Indian (AI) Population – A New Approach to Understand Cancer Disparity Burdens among AIs. *The 23rd International Conference on Geoinformatics*. Wuhan, China. June 19-21, 2015.

Elliott, M., Elliott, L., and **Lin, Y**. 2015. Corn and Soybean Marketing Contract Adoption and Site-Specificity. In: *Proceedings of 2015 Agricultural & Applied Economics Association and Western Agricultural Economics Association Joint Annual Meeting*. San Francisco, CA, July 26- 28.

Gong, X., Lu Y., **Lin, Y**., and Zhan, F. 2014. K-Vec: A Global and Cross-Scale Analysis Method of Vector Autocorrelation. *Southwest and Great Plains-Rocky Mountain Divisions of the Association of American Geographers Joint Regional Meeting*. Albuquerque, NM, USA. October 23-25.

Lin, Y., and Gong, X. 2014. A GIS-based Risk Assessment of Water Pollution Exposure to Hazardous Waste Sites. *Southwest and Great Plains-Rocky Mountain Divisions of the Association of American Geographers Joint Regional Meeting*. Albuquerque, NM, USA. October 23-25.

Lin, Y. 2013. Geographic Variations of Racial Disparities of Cervical Cancer Late-stage Diagnosis in Texas. *Annual Conference of the North American Association of Central Cancer Registries (NAACCR)*. Austin, TX. June 10-13.

Chow, T. E., Ngu, A. H. H., **Lin, Y**., Phillips, C., and Thornhill, S. 2012. Record linkage of web demographics as a GeoComputation challenge, *Invited position paper in GIScience 2012 Workshop on Role of Volunteered Geographic Information: Quality and Credibility*. http://web.ornl.gov/sci/gist/workshops/2012/documents/Chow,%20Tze%20Kiu%20-%20Paper.pdf.

Invited or Refereed Abstracts and/or Presentations at Professional Meetings

Invited Talks

Woldeyohannes T., Doyle J., Hoover J, **Lin Y**. "What's the awful smell from trash burning? Checking our air quality." Crow Water Quality Project Community Open House, (Crow Agency, MT), June 25, 2024

Woldeyohannes T., **Lin Y**. "UNM Native Environmental Health Equity Center (P50) – Research Project 2 Air Quality Projects." Inspiring Community-Based Air Quality Projects: Lessons from New Mexico Teams, Session: Air Quality Monitoring Project Presentations (Albuquerque, NM), May 28, 2024

Lin, Y. 2024. "Future of the Tickbase Research". EPSCoR Track II TickBase 2024 Annual Meeting. Burlington, VT, March 19, 2024

Lin, Y. 2024. **"**Advancing Health Equity with GIScience and Community Engagement". Department of Geography, Pennsylvania State University, March 28, 2024.

Beene, D., **Lin, Y**. 2024. Navajo WaterGIS 2.0: Critical Geospatial Data Science & Data Sharing. UC Berkeley Water Equity Science Shop (WESS), Berkeley, CA. January 12, 2024.

Lin, Y. "GIS: Opportunities, Best Practices, Challenges, and Lessons Learned in Environmental Health Sciences". National Institute of Environmental Health Sciences Superfund Research Program Annual Meeting – DMAC Session, Albuquerque, NM. December 4, 2023

Lin, Y. "Advancing Health Equity with Geospatial Big & Small Data". University of New Mexico Comprehensive Cancer Center Cancer Control Program Meeting, Albuquerque, NM. September 11, 2023

Luo, L., **Lin, Y**. "Overview of University of New Mexico Superfund Research Program (SRP) Data Management and Analysis Core (DMAC)". University of Arizona, Texas A&M, and University of New Mexico SRP DMAC Summit, University of New Mexico, Albuquerque, NM. August 8, 2023

Lin, Y, Hoover, J, Ingram, J. "Cove Livestock Study". Presented to EPA (Virtual). April 27, 2023

Lin, Y, Lane M, Lewis J, Gong X, Bradfute S, Luo L, Upshaw-Bia K. Integrating Big Data with Individual-Level Data to Improve Modeling and Prediction of Rocky Mountain Spotted Fever Dynamics in Native American Communities. Ramah Navajo Community Meeting. Ramah Navajo, NM, March 13, 2023.

Lin, Y., Lewis, J., Gong, X., Lane, M., Bradfute, S., Luo, L., Upshaw-Bia, K. Integrating Big

Data with Individual-Level Data to Improve Modeling and Prediction of Rocky Mountain Spotted Fever Dynamics in Native American Communities. Presented to Vector-borne & Zoonotic Disease (VBZD) Program, Arizona Department of Health Services. October 20, 2022.

Lin, Y., Lewis, J., Gong, X., Lane, M., Bradfute, S., Luo, L., Upshaw-Bia, K. Integrating Big Data with Individual-Level Data to Improve Modeling and Prediction of Rocky Mountain Spotted Fever Dynamics in Native American Communities. University of New Mexico Superfund Research Center Monthly Meeting (Virtual), University of New Mexico, Albuquerque, NM, July 21, 2022.

Woldeyohannes, T., Beene, D., Hoover, J., **Lin, Y.**, Mirka, B. "Geographic mixed methods approaches to assess environmental justice issues relating to unregulated waste disposal sites." NIH Environmental Health Disparities Annual Meeting, Session: ESI Presentation (Virtual), December 1-2, 2022.

Woldeyohannes, T., Beene, D., Hoover, J., **Lin, Y.**, Mirka, B. "Geographic mixed methods approaches to assess environmental justice issues relating to unregulated waste disposal sites." Department of Geography and Environmental Studies GIS Day, Session: Lightning Talks (University of New Mexico, Albuquerque NM), November 16, 2022.

Lin, Y., and Hoover, JH. "Applying Geospatial Tools and Technology to Implement Community Driven Environmental Health Disparities Research with Indigenous Communities." Invited Oral presentation. STEM Events: See yourself in STEM Workshop Series. Bunker Hill Community College (Boston, MA), Louis Stokes Alliances for Minority Participation (LSAMP) (Virtual). November 10, 2022

Lin, Y. 2022. "Advancing Health Equity with Geospatial Data Science." UNM - Diné College Summer Internship 2022 - Geospatial Data Science, Environment, Community, and Health. University of New Mexico. June 13, 2022.

Lin, Y., Hoover, J., Liu, Z., Beene, D., & Lewis, J. 2022. "Results of Animal Collaring and Spatial Analysis of the Cove Livestock Study". Diné College NSF TCUP 2022 Summer Internship Program Meeting (Virtual). Diné College, May 25, 2022.

Girlamo, C., **Lin, Y.**, Hoover, J., Beene, D., Woldeyohannes, T., Liu, Z., Campen, M., MacKenzie, D., & Lewis, J. 2022. Geospatial modeling of potential environmental exposure to abandoned mine sites on tribal lands - a comparison of meteorological data sources. TickBase project monthly meeting presentation (Virtual), April 25th, 2022

Girlamo, C., **Lin, Y.**, Hoover, J., Beene, D., Woldeyohannes, T., Liu, Z., Campen, M., MacKenzie, D., & Lewis, J. Geospatial modeling of potential environmental exposure to abandoned mine sites on Navajo Nation- a comparison of meteorological data sources. UNM/University of Arizona joint METALS lightning talks (Virtual), April 21st, 2022

Beene, D., & Lin, Y. (2022) Advancing Indigenous Health Equity: GIScience & geographies of Indigenous health. Science for Health of Indigenous Populations (SHIP) Symposium. University of New Mexico, Albuquerque, NM. April 8, 2022.

Lin, Y. 2022. "Advancing Health Equity with Geospatial Data Science." Saint Louis University, Department of Epidemiology and Biostatistics, College for Public Health and Social Justice (Virtual). February 28, 2022.

Lin, Y. 2021. **"**Geospatial Data Science for Environmental Health Research". Department of Geography & Geographic Information Science, University of Illinois Urbana-Champaign (Virtual), December 2, 2021.

Lin, Y., Beene, D., & Hoover, J. 2021. "Moving Native American Environmental Health Disparities Research Forward Through a Geographic Lens". GeoInformatics 2021 Conference, Session: Spatiotemporal analysis in environmental health studies (Virtual), October 31, 2021.

Lin, Y. 2021. "Moving Native American Environmental Health Disparities Research Forward Through a Geographic Lens". Louis Stokes Alliances for Minority Participation (LSAMP) Day-Environmental Health Disparity, Bunker Hill Community College (Virtual), November 18, 2021.

Lin, Y., Beene, D., & Hoover, J. 2021. "Moving Native American Environmental Health Disparities Research Forward Through a Geographic Lens". GeoInformatics 2021 Conference, Session: Spatiotemporal analysis in environmental health studies (Virtual), October 31, 2021.

Lin, Y. 2021. "Assessing AUM risks through geospatial modeling; using meteorological and PM data from AirCare1 to establish "background". Joint Meeting of the Navajo Nation Environmental Protection Agency (NNEPA) and the UNM METALS Superfund Research Program (UNM-SRP) (Virtual), University of New Mexico, Albuquerque, NM, October 4, 2021.

Lin, Y., Hoover, J., Liu, Z., Beene, D., & Lewis, J. 2021. "Cove Livestock Study". University of New Mexico Superfund Research Center Monthly Meeting (Virtual), University of New Mexico, Albuquerque, NM, June 17, 2021.

Hoover, J., **Lin, Y**., Liu, Z., Beene, D., & Lewis, J. 2021. "Results of Animal Collaring and Spatial Analysis of the Cove Livestock Study". Diné College NSF TCUP 2021 Summer Internship Program Meeting (Virtual). Diné College, May 26, 2021.

Lin, Y., Hoover, J., Liu, Z., Beene, D., & Lewis, J. 2021. "Cove Livestock Study". Navajo Nation Health Education and Human Services Committee Meeting (Virtual). University of New Mexico, Albuquerque, NM, May 18, 2021.

Lin, Y. 2021. "A GIS-Based Environmental Mapping of Potential Abandoned Uranium Mine

Contamination on the Navajo Nation, USA". Session: Use of Big Data to Characterize Social and Environmental Determinants of Health Disparities. NIH-EPA Environmental Health Disparities Research Webinar Series, February 22, 2021.

van Geen, A., **Lin, Y.**, Cardenas, A., and <u>Beene, D</u>. 2021. "Arsenic Mass Balance: Integrating Environmental and Biomarker Data across Diverse Populations." National Institute of Environmental Health Sciences (NIEHS) SRP Data Supplement EUC Teams Final Report. February 18, 2021.

Hoover, J., **Lin, Y.**, and <u>Beene, D</u>. 2020. "Cove Livestock Project Progress Report". Navajo Nation Cove Chapter meeting, Cove Chapter, Navajo Nation, February 11, 2020.

Lin, Y. 2020. "Geospatial information and technology for cancer disparities reduction". New Mexico Geography Research Workshop (Virtual), University and New Mexico & New Mexico State University, August 22, 2020.

Lin, Y., <u>Beene, D</u>., Lewis, J. 2020. "Integrating Environmental and Biomonitoring Datasets from the UNM METALS Superfund Center". Columbia University Mailman School of Public Health Mini – Symposium, Columbia University, New York City, NY, February 21, 2020.

Lin, Y., Lewis, J., <u>Beene, D</u>., Ong, J. 2020. "Home Dust Uranium, Environmental Exposure Risk Factors, and Biomonitoring Uranium Concentration among NBCS Participants". Navajo EPA Meeting (Virtual), University of New Mexico, Albuquerque, NM, March 19, 2020.

Lin, Y., <u>Beene, D</u>., Hoover, J., Erdei, E. 2020. "Geospatial Modeling to Inform Environmental Exposure Assessment for Metal Contamination Research on Tribal Lands". University of New Mexico Superfund Research Center Monthly Meeting (Virtual), University of New Mexico, Albuquerque, NM, April 16, 2020.

van Geen, A., **Lin, Y.**, Cardenas, A., and <u>Beene, D</u>. "Arsenic Mass Balance: Integrating Environmental and Biomarker Data across Diverse Populations." National Institute of Environmental Health Sciences (NIEHS) SRP Data Supplement EUC Teams Webinar Series. May 18, September 21 & December 11, 2020.

Lin, Y. 2020. "Geographic Information Science as a Tool to Understand and Reduce Health Disparities". University of New Mexico College of Pharmacy Seminar (Virtual), University of New Mexico College of Pharmacy, Albuquerque, NM. November 09, 2020.

Charley, P. H., Ingram, J., Hoover, J.H., Singer, N., Lopez, M., Lewis, J., **Lin, Y**., Robinson, D., Jameson, R., TCUP Research Symposium 2019, "Cove Livestock Study," *National Science Foundation*, Alexandria, VA, United States. December 17, 2019.

Lin, Y. July 16, 2019. "GIS and Health: Understanding and Reducing Health Disparities". University of New Mexico, Prevention Research Center, Noon Conference Series: Professional Development, Albuquerque, NM, 2019.

Lin, Y., Durkin, J., Berwick, M. May 21, 2019. "Geographic Access to Dermatologists in New

Mexico". University of New Mexico, Comprehensive Cancer Center, Albuquerque, NM, 2019.

Lin, Y. April 26, 2019. "GIS and Health: Understanding and Reducing Health Disparities". New Mexico State University, Department of Geography, Las Cruces, NM, 2019.

Lin, Y. December 3, 2018. "GIS and Health: Understanding and Reducing Cancer Disparities". University of New Mexico Cancer Control Program Meeting, Albuquerque, NM, 2018.

Lin, Y. September 28, 2018. "GIS and Health: Understanding and Reducing Health Disparities". New Mexico Rural Health Equity Group Meeting, Albuquerque, NM, 2018.

Lin, Y. May 30, 2018. "GIS and Health: Understanding and Reducing Health Disparities". Invited Presentation: Central South University, Changsha, China, May 30, 2018.

Lin, Y. May 22, 2018. "Spatial Access to Healthcare and Health Disparities". Invited Presentation: Wuhan University, Wuhan, China, May 22, 2018.

Lin, Y., Taraschi, Z., and McWhorter, T. November 16, 2017. "Geographic access to primary care physicians in the city of Albuquerque Metropolitan Area". New Mexico Department of Health Quarterly Epidemiology Meeting, Albuquerque, NM, 2017.

Lin, Y. March 17, 2016. "Understanding and Reducing Health Disparities-A Geographic Approach". Invited Presentation: South Dakota State University 47th Geography Convention, Brookings, SD. March 17-18, 2016.

Lin, Y. February 18, 2016. "GIS and Health: Understanding and Reducing Health Disparities". Invited Presentation: University of Cincinnati, Cincinnati, OH, February 18, 2016.

Lin, Y. February 2, 2016. "GIS and Health: Understanding and Reducing Health Disparities". Invited Presentation: University of Tennessee, Knoxville, TN, February 2, 2016.

Lin, Y. December 7, 2013. "GIS and Health: Cervical Cancer Disparities in Texas". Invited Presentation: South Dakota State University, Brookings, SD, 2013.

Lin, Y. February 26, 2013. "Cervical Cancer Disparities in Texas". Invited Presentation: Chapman University, Orange, CA, 2013.

Contributed (non-refereed) Abstracts and/or Presentations at Professional Meetings

Woldeyohannes T., **Lin Y**., Hoover J., Beene D., Liu Z., Erdei E., MacKenzie D. "GIScience for Community Driven Environmental Health Equity Research with Indigenous Communities." CAGIS + UCGIS Symposium, Session: Poster (Columbus, OH), June 3 –

6, 2024

Brannen, E., **Lin, Y**. 2024. The Exploration of Health Disparities in Female Breast Cancer Mortality in New Mexico. Annual Meeting of the Association of American Geographers (AAG). Honolulu, HI, April 16-20, 2024.

Liu, Z., **Lin, Y.**, Girlamo, C., Hoover, J. 2024.   Comparison of Machine Learning approach and Fuzzy Logic for Estimating potential Livestock Exposure to Abandoned Uranium Mine sites with GPS in a Community-based research. Annual Meeting of the Association of American Geographers (AAG). Honolulu, HI, April 16-20, 2024.

Woldeyohannes, T., **Lin, Y.**, Zhang, X. 2024. Gone with the fire, known and unknown? Addressing a new public health crisis in the US - leveraging remote sensing tools to monitor waste fires. Annual Meeting of the Association of American Geographers (AAG). Honolulu, HI, April 16-20, 2024.

Lin, Y. 2024. Advancing Community Driven Health Equity Research with Indigenous Peoples: Towards a Synergy in Geography. Annual Meeting of the Association of American Geographers (AAG). Honolulu, HI, April 16-20, 2024.

Woldeyohannes T., Beene D., Doyle J., Martin C., Eggers M., Liu Z., **Lin Y**., MacKenzie D., Erdei E., Hoover J. "Evaluating cumulative environmental exposure to metals and non-metals and community-level health using geospatial modeling and personal exposure assessment." National Institute of Environmental Health Sciences – Partnerships for Environmental Public Health: Climate Change and Environmental Justice: Engaging Diverse Teams, Session: Poster #1 (Research Triangle Park, NC), February 20 – 22, 2024

John, M., **Lin, Y**. 2024. Spotted Fever Rickettsiosis Dynamics in the United States (Poster). EPSCoR Track II TickBase 2024 Annual Meeting. Burlington, VT, March 18, 2024

Liu, Z., Hridoy, A., **Lin, Y**. 2024. A pilot model combining GPS and environmental data to examine dog-tick interactions in Ramah Navajo Nation (Poster). EPSCoR Track II TickBase 2024 Annual Meeting. Burlington, VT, March 18, 2024

Hridoy, A., **Lin, Y**. 2024. Impact of climatic, landscape, and social vulnerability determinants on Rocky Mountain Spotted Fever in Arizona. EPSCoR Track II TickBase 2024 Annual Meeting. Burlington, VT, March 18, 2024

Liu, Z., Hridoy, A., **Lin, Y**. 2024. Procedure of using GPS data to estimate environmental exposure. EPSCoR Track II TickBase 2024 Annual Meeting. Burlington, VT, March 18, 2024

Mackenzie, DM., Hoover, JH., James, L., **Lin, Y.**, Woldeyohannes, T. Evaluating Cumulative Environmental Exposure Using Geospatial Modeling and Personal Exposure Assessment. Study Protocol Presentation to the Navajo Nation Human Research Review Board (online), December 19, 2023

Lin, Y. 2023. Advancing Community Driven Environmental Health Equity Research with

Indigenous Communities Using Geospatial Big & Small Data. *APCG 2023 Association of Pacific Coast Geographers 85th Annual Meeting,* Ventura, CA, October 19-21, 2023

Lu, Y., Gong, X., **Lin Y**., Howard, N., Brown, C. 2023. The long-run effect of redlining practice on social vulnerability in major U.S. cities, in the Program of *2023 Annual Meeting of the Southwest Divisions of the Association of American Geographers (SWAAG)*. Laredo, Texas, USA.

Begay, D., Hoover, JH., **Lin, Y.,** "Requesting Letter of Support for the The Center for Native Environmental Health Equity Research project "Evaluating Cumulative Environmental Exposure Using Geospatial Modeling and Personal Exposure Assessment" Blue Gap/Tachee Chapter Meeting, Blue Gap, AZ, September 16, 2023

Woldeyohannes, T., Doyle, J., Girlamo, C., Liu, Z., Sethuraman, A., Eggers, M., **Lin, Y**. Hoover J Researching Environmental Health Impacts from Unregulated Solid Waste Disposal (USWD) with Native American Communities. *2023 NIH IDeA Western Regional Conference*, Bernalillo, NM, August 2-4, 2023.

Hoover, JH., Beene, D., Matiukaite, S., **Lin, Y.** Arizona Water Resources Research Center Annual Conference, "Using mobile applications to visualize water quality data for underserved communities ". Tucson, AZ, July 11-12, 2023.

Woldeyohannes, T., Doyle, J., Girlamo, C., Zhuoming, L., Sethuraman, A., Eggers, M., Erdei, E., **Lin, Y.,** Hoover, J. Missouri Breaks Research Symposia, Session: Community Research Symposium, "Researching Environmental Health Impacts from Unregulated Solid Waste Disposal (USWD) with Native American Communities." Eagle Butte, SD, April 17, 2023

Sethuraman, A., Hoover, J., **Lin, Y**., Girlamo, C. Characterizing the Occurrence and Spatial Distribution of Polycyclic Aromatic Hydrocarbons at Unregulated Dump Sites in an Indigenous Community. ENViSion Student Conference, Tucson, AZ, March 2023.

Lin, Y., Lane, M., Gong, X., John, M., Lewis, J. 2023. Community-based Geospatial Research to Understand Rocky Mountain Spotted Fever Dynamics in Native American Communities. *Annual Meeting of the Association of American Geographers (AAG).* Denver, CO, March 23-27, 2023.

Woldeyohannes, T., Beene, D., Hoover, J., **Lin, Y.,** Mirka, B. 2023. A multi-scalar geographic mixed method approach to assess environmental justice issues for unregulated waste disposal sites. *Annual Meeting of the Association of American Geographers (AAG).* Denver, CO, March 23-27, 2023.

Brannen, E., **Lin, Y.,** Wiggins, C., Luo, L., Meisner, A. 2023. Access and acceptance of breast cancer treatment among early-stage female breast cancer patients in New Mexico. *Annual Meeting of the Association of American Geographers (AAG).* Denver, CO, March 23-27, 2023.

Beene, D., **Lin, Y**. 2023. Deconstructing rurality to better "place" health data. *Annual Meeting of the Association of American Geographers (AAG).* Denver, CO, March 23-27, 2023.

Sethuraman, A., Hoover, J., **Lin, Y.**, Girlamo, C. 2023. Characterizing the occurrence and spatial distribution of Polycyclic Aromatic Hydrocarbons (PAHs) in soil at unregulated dump sites in an Indigenous community (Poster). *Annual Meeting of the Association of American Geographers (AAG).* Denver, CO, March 23-27, 2023.

Hridoy, A., **Lin, Y**. 2023. Geovisualization and Machine Learning Based Prediction System of RMSF in Arizona (Poster). *EPSCoR Track II TickBase 2023 Annual Meeting*. Lake Tahoe, NV, March 19-22, 2023

Liu, Z., Hridoy, A., **Lin, Y**. 2023. Combine GPS Data with Environmental Data to Explore Environmental Exposure (Poster). *EPSCoR Track II TickBase 2023 Annual Meeting*. Lake Tahoe, NV, March 19-22, 2023

Liu, Z., Hridoy, A., John, M., and **Lin, Y. "**Harnessing environmental data to explore RMSF-environment association". EPSCoR Track II TickBase 2022 Virtual Semi-Annual All Team Meeting. December 7, 2022.

Lin, Y. "TickBase - Diné College Summer Internship 2022: "Geospatial Data Science, Environment, Community, and Health"". EPSCoR Track II TickBase 2022 Virtual Semi-Annual All Team Meeting. December 7, 2022.

Wang, Z., Liu, Z. **"**Remote sensing data processing for environmental studies of tickborne diseases". EPSCoR Track II TickBase Monthly Team Meeting (Virtual). September 15, 2022.

Girlamo, C., **Lin, Y.**, Lewis, J., Gong, X., Lane, M., Bradfute, S., Luo, L., Upshaw-Bia, K. 2022. Integrating Big Data with Individual-Level Data to Improve Modeling and Prediction of Rocky Mountain Spotted Fever Dynamics in Native American Communities. *UNM College of Pharmacy Research Day*, April 28th, 2022.

Girlamo, C., **Lin, Y.**, Hoover, J., Beene, D., Woldeyohannes, T., Liu, Z. 2022. Meteorological Data Comparison – a Case Study in the relationship between a spatial model of potential exposure to abandoned Uranium Mine Sites (AUM's) and marginalized communities in New Mexico. *Southwestern American Association of Geographers*, Fayetteville, AR October 28th, 2022

Girlamo, C., **Lin, Y.**, Lewis, J., Gong, X., Lane, M., Bradfute, S., Luo, L., Upshaw-Bia, K. 2022. Integrating Big Data with Individual-Level Data to Improve Modeling and Prediction of Rocky Mountain Spotted Fever Dynamics in Native American Communities. *2022 TickBase Annual Meeting*, Idaho, March 20-23, 2022.

Woldeyohannes, T., Hoover, JH., **Lin, Y**, Beene, D., Liu, Z., Girlamo, C. "Geospatial modeling of potential exposure to contaminants from unregulated trash disposal sites on the Crow Nation." *College of Pharmacy Research Day, Session: Poster* (University of New Mexico, Albuquerque, NM), April 28, 2022.

Woldeyohannes, T., Beene, D., Hoover, JH., **Lin, Y.**, Mirka, B. "Geographic mixed methods

approaches to assess environmental justice issues relating to unregulated waste disposal sites." *Southwest American Association of Geographers Annual Meeting*, Session: Geographic Information Science (Fayetteville, AR), October 27 – 29, 2022.

Woldeyohannes, T., Hoover, JH., Lin, Y., Beene, D., Liu, Z., Girlamo, C. "Geospatial modeling of potential exposure to contaminants from unregulated trash disposal sites on the Crow Nation." *Department of Geography and Environmental Studies GIS Day, Session: Poster* (University of New Mexico, Albuquerque NM), November 16, 2022.

Beene, D & **Lin, Y**. 2022. Deconstructing rurality to better "place" data. *Southwest Division of the American Association of Geographers (SWAAG) Annual Meeting*. Fayetteville, AR, October 27-29, 2022.

Brannen, E., **Lin, Y**, Luo L, Meisner A, Wiggins, C. 2022. Spatial Analysis of Geographic Access to Cancer treatment facilities in New Mexico. *Southwest Division of the American Association of Geographers (SWAAG) Annual Meeting*. Fayetteville, AR, October 27-29, 2022.

Liu, Z., **Lin, Y**., Hoover, J., & Beene, D. 2022. Individual level spatial-temporal modeling of exposure potential of livestock in the cove wash watershed, Arizona. *2022 TickBase Annual Meeting*, Idaho, March 20-23, 2022.

Hridoy, A., **Lin, Y.**, Liu, Z. 2022. Spatial Temporal analysis of environmental risk factors for Rocky mountain spotted fever in Arizona. *Southwest Division of the American Association of Geographers (SWAAG) Annual Meeting*. Fayetteville, AR, October 27-29, 2022.

Woldeyohannes, T., **Lin, Y**., Hoover, J., Beene, D., Girlamo, C., and Liu, Z. 2022 Geospatial modeling of potential exposure to contaminants from abandoned or inactive mine sites on the Crow Nation. *Annual Meeting of the Association of American Geographers (AAG)*. (Virtual). February 25 - March 1.

Liu, Z., **Lin, Y**., Hoover, J., & Beene, D. 2021. Individual level spatial-temporal modeling of exposure potential of livestock in the cove wash watershed, Arizona. *The 28th International Conference on Geoinformatics*. (Virtual). Oct 31-Nov 3. (Won best student paper competition award)

Woldeyohannes, T., **Lin, Y**., 2021. Assessment of hepatocellular carcinoma (HCC) risk from exposure to pesticides in upstate NY, using a GIS-based statistical model. *Southwest Division of the American Association of Geographers (SWAAG) meeting*. Oklahoma City, OK. October 14-16.

Lin, Y., Lippitt, C., & Beene, D. 2021. Street-source uncertainties in spatial accessibility and social equity: who is affected? *Annual Meeting of the Association of American Geographers (AAG)*. (Virtual). April 7-April 11.

Liu, Z., **Lin, Y**., Hoover, J., & Beene, D. 2021. Classifying livestock grazing behavior and GIS-modeling potential for exposure to Abandoned Uranium Mine Waste in the Cove Wash

Watershed, Arizona, USA. *Annual Meeting of the Association of American Geographers (AAG).* (Virtual). April 7-April 11.

Beene, D., & **Lin, Y**. 2021. Reimagining rurality: Social determinants of health and social connectedness on the Navajo Nation. *Annual Meeting of the Association of American Geographers (AAG).* (Virtual). April 7-April 11.

Hoover, J., **Lin, Y**., Beene, D., Liu, Z., & Lewis JL. 2020. GPS Tracking Livestock to inform potential human exposure to abandoned uranium mine waste in an indigenous community in the southwestern United States. *2020 Geological Society of American Annual Meeting* (Virtual Conference), Montreal, October 26, 2020

Beene, D., **Lin, Y**., Hoover, J., Erdei, E., and Liu, Z. 2020. Geospatial modeling to map environmental exposure to abandoned uranium mine waste on the Navajo Nation, USA. *Superfund Research Program Annual Meeting* (Virtual Conference). December 14-16, 2020.

Lin, Y., Beene, D., & Liu, Z. 2019. Uncertainties in Spatial Accessibility: A comparison of Street Network Data. *The 82nd Annual Meeting of Association of Pacific Coast Geographers.* Flagstaff, AZ. October 16-19.

Lin, Y. 2019. A New PhD Program for New Mexico. The 82nd Annual Meeting of Association of Pacific Coast Geographers. Flagstaff, AZ. October 16-19.

Beene, D., **Lin, Y**., Liu, Z., & Hoover, J. 2019. Abandoned Uranium Mines in the Navajo Nation: How Do We Responsibly and Ethically Model Risk? *The 82nd Annual Meeting of Association of Pacific Coast Geographers.* Flagstaff, AZ. October 16-19.

Liu, Z., **Lin, Y**., Hoover, J., Beene, D. 2019. Classifying livestock grazing behavior and GIS-modeling potential for exposure to Abandoned Uranium Mine Waste in the Cove Wash Watershed, Arizona, USA. *Southwest Division of the American Association of Geographers (SWAAG) meeting.* Fort Worth, TX. October 10-12. (Student author, 2nd place in in the graduate poster competition)

Lin, Y., Sheets, S., and Davies, A. 2019. Uncertainties in measuring spatial access to health care. Annual Meeting of the Association of American Geographers (AAG). Washington, DC, USA. April 3-April 7.

Lane, M. (Chair), Panelists: Buenemann, M., **Lin, Y**., Magrane, E., & Warner, B. 2019. A New PhD Program for New Mexico. Annual Meeting of the Association of American Geographers (AAG). Washington, DC, USA. April 3-April 7.

Lin, Y., Wan, W., and Taraschi, Z. 2018. A multi-model relative spatial access assessment approach to measure spatial accessibility to primary care providers. Annual Meeting of the Association of American Geographers (AAG). New Orleans, LA, USA. April 9-April 14.

Lin, Y., Wimberly, M., Mousseau, R. 2017. Disparities of colorectal and breast cancer survival.

Annual Meeting of the Association of American Geographers (AAG). Boston, MA, USA. April 5-April 9.

Gong, X., Zhan, F.B., **Lin, Y**. 2017. Is Ionizing Radiation Near In the Vicinity of Nuclear Facilities Related to Low Birth Weight in Offspring, in the Program of the 2017 Annual Meeting of the Association of American Geographers (AAG). Boston, MA, USA.

Lin, Y., Wimberly, M., Irwin, J. 2016. Geographic Access to Cancer Treatment Facilities and Breast Cancer Disparities. Annual Meeting of the Association of American Geographers (AAG). San Francisco, CA, USA. March 29-April 2.

Lin, Y., and Hungerford, H. 2015. A multilevel approach to understand and reduce cancer disparities in South Dakota. *Annual Meeting of the Association of American Geographers (AAG).* Chicago, IL, USA. April 21-25.

Lin, Y. 2014. GIS and Health: Cervical Cancer Disparities. *Annual Meeting of the Association of American Geographers (AAG).* Tampa, FL, USA. April 8-12.

Lin, Y. 2013. Cervical Cancer Disparities: Where are Underserved Minorities? *Women in Science and Engineering (WISE) Conference.* San Marcos, TX. November 21-22.

Lin, Y. and Zhan, F. B. 2013. Geographic Variations of Racial Disparities of Cervical Cancer mortality in Texas. *Annual Meeting of the Association of American Geographers*. Los Angeles, CA. April 13.

Lin, Y. and Zhan, F. B. 2012. Geographic Disparities in Cervical Cancer Mortality in the United States. *Annual Meeting of the Association of American Geographers*. New York, NY. February 24.

Lin, Y., Chow, T. E., and Zhan, F. B. 2011. An Exploratory Study of Vietnamese Americans in Texas Using Web Demographic Data. *Annual Meeting of the Association of American Geographers*. Seattle, WA. April 16.

Lin, Y., Zhan, F. B., and Zhu, J. J. 2010. Assessment of Mercury Pollution in Soil. *Annual Meeting of the Association of American Geographers*. Washington, DC. April 15.

Teaching

Doctoral Advisement

Doctoral students (as major advisor)

Daniel Beene; Ph.D. in Geography; graduated 2024 summer; Geography & Environmental Studies (GES), University of New Mexico; Dissertation Title: *Critical Geospatial Data Science: Principles for curating, analyzing, and sharing geospatial data*

Theodros Woldeyohannes; Ph.D. in Geography; expected 2025; Geography & Environmental Studies (GES), University of New Mexico; passed the doctoral dissertation proposal defense

Eric Brannen; Ph.D. in Geography; expected 2025; Geography & Environmental Studies (GES), University of New Mexico; doctoral dissertation proposal defense

Zhuoming Liu; Ph.D. in Geography; in Progress; Department of Geography, Penn State University

Doctoral students (as committee member)

Yujian Lu; Ph.D. in Geography; expected 2025; Geography & Environmental Studies (GES), University of New Mexico; passed the doctoral dissertation proposal defense

Dayna Dominguez; Ph.D. in Geography; expected 2025; Geography & Environmental Studies (GES), University of New Mexico; passed the doctoral comprehensive exam

Niraj Khatiwada; Ph.D. in Economics; graduated 2022 Spring; Economics, University of New Mexico; Dissertation Title: "The health and socioeconomic burdens of air pollution and public preference for air quality improvement: A case study from Nepal"

Shenxin Li; Ph.D. in Cartography and Geographic Information Science; graduated 2019; School of Geosciences and Info-Physics, Central South University

Shan Xu; Ph.D. in Cartography and Geographic Information Science; graduated 2020; School of Geosciences and Info-Physics, Central South University

Samrat B Kunwar; Ph.D. in Economics; graduated 2019; Economics, University of New Mexico; Dissertation Title: "Freshwater Conservation, Drinking Water Quality and Climate Change Adaptation: A Case Study On Nepal"

Mohammad Tayarani; Ph.D. in Civil Engineering; graduated 2018; Civil Engineering, University of New Mexico; Dissertation Title: "Achieving Public Health and Climate Change Goals: What do we Need to Know about Transportation System?"

Masters Advisement:

University of New Mexico

Master's students (as major advisor)

William Tatman; M.S. in Geography; in progress; GES, University of New Mexico;

Al-Ekram Elahee Hridoy; M.S. in Geography; graduated 2024 summer; GES, University of

New Mexico; Thesis Title: "*Geospatial Analysis of Environmental, Tick, and Host Interactions with Rocky Mountain Spotted Fever in the Southwestern United States*"

Chris Girlamo; M.S. in Geography; graduated 2023; GES, University of New Mexico; Thesis Title: "Estimating Potential Exposure from Abandoned Uranium Mine Sites through Machine Learning Classification of Animal Behavior: A Case Study in the Navajo Nation"

Zhuoming Liu; M.S. in Geography; graduated 2021; GES, University of New Mexico; Thesis: "Individual level spatial-temporal modeling of exposure potential of livestock in the Cove Wash Watershed, Arizona" (with Distinction)

Daniel Beene; M.S. in Geography; graduated 2019; GES, University of New Mexico; Thesis Title: "Adjudication and the Adaptive Capacity of Pecan Farmers in the Lower Rio Grande" (with Distinction)

Kevin Carns; M.S. in Water Resources; graduated 2019; Water Resources Program, University of New Mexico; Thesis Title: "Inventory of Restoration Needs of National Forest Lands of the Continental United States: an analysis of two landscape assessment tools"

Master's students (as committee member)

Yully Chaves Lasso; M.S. in Civil Engineering; graduated 2024 summer; Civil Engineering, University of New Mexico; Thesis Title: "Understanding the Relationship Between Arterial Road Features And Vulnerable Road Users, A Case Study Of Albuquerque, New Mexico" (with Distinction)

Luke Isak Andrew; M.S. in Geography; graduated 2023; GES, University of New Mexico; Thesis Project Title: "Identifying Patterns and Factors of Safe Drinking Water Act Violations in New Mexico"

Linda Roach; M.S. in Geography; in progress; GES, University of New Mexico

Tammira Taylor; M.S. in Geography; graduated 2021; GES, University of New Mexico; Thesis Title: "Building Inspection Feasibility Study for Albuquerque Public Schools" (with Distinction)

Rowan Leigh Converse; M.S. in Geography; graduated 2020; GES, University of New Mexico; Thesis Title: "Assessing drought vegetation dynamics at the landscape scale in semiarid grass- and shrubland using MESMA" (with Distinction)

Aron Lee Roberts; M.S. in Geography; graduated 2020; GES, University of New Mexico; Thesis Title: "An Analysis of Contraflow Network Resiliency Under Mass Evacuation Conditions in Houston, Texas" (with Distinction)

Ian Hill; M.S. in Geography; graduated 2019; GES, University of New Mexico; Thesis Title: "A Hybrid GIS/*in situ* Analysis of AED Coverage on the UNM Central Campus"

Kristian Mueller; M.S. in Geography; graduated 2019; GES, University of New Mexico; Thesis Title: "Assessing How Terrain Representations and Scale Affect the Accuracy of Distance Estimates"

Akashia Allen; M.S. in Geography; graduated 2018; GES, University of New Mexico; Thesis Title: "Field Plan for Spectra Collection of a Desert Shrubland/Grassland

Community"

Sagert Sheets; M.S. in Geography; graduated 2017; GES, University of New Mexico; Thesis Title: "Implementing the Distance Decay Function in An Enhanced Two-Step Floating Catchment Area Analysis and Interpreting Its Effect on Results: A Tool for Geographic Information Systems"

South Dakota State University

Master's students (as major advisor)

Jeffrey Irwin; M.S. in Geography; graduated 2018; Geography, South Dakota State University; Thesis Title: "Mapping Understory Forest Fire Fuels in Superior National Forest"

Murat Kececi; M.S. in Geography; graduated 2017; Geography, South Dakota State University; Thesis Title: "Monitoring Pollen Count Using Satellite Observations for Pollen Allergy Early Warning"

Aljehani risLayla; M.S. in Geography; graduated 2015; Geography, South Dakota State University; Thesis Title: "A Case Study of Slum Upgrading Framework in Jeddah, Saudi Arabia"

Master's students (as committee member)

Ahmed Alhomaidhi; M.S. in Geography; graduated 2017; Geography, South Dakota State University; Thesis Title: "Geographic Distribution of Public Hospitals in Riyadh"

Byron Will-Noel; M.S. in Geography; graduated 2017; Geography, South Dakota State University; Thesis Title: "Mapping and Control Noxious Weed in Sioux Falls, SD"

Shailendra Singh; M.S. in Engineering; graduated 2016; Agricultural Engineering, South Dakota State University; Thesis Title: "Predicting Field Water Balance, Crop Yield, And Economic of Drainage Under Various Cropping Systems Using DRAINMOD"

Brad Richardson; M.S. In Geography; graduated 2015; Geography, South Dakota State University; Thesis Title: "The Geography of Lyme Disease in Wisconsin: A Spatio-Temporal Analysis of Landscape Patterns and Disease Incidence"

Duanyang Li; M.S. in Engineering; graduated 2015; Department of Civil and Environmental Engineering, South Dakota State University

Bachelor's Honors Advisement

Jillian Joan Rutherford; B.S. in Geography; 2019; GES, University of New Mexico; Honors Thesis Title: "The Kanyawara Chimpanzee Community: A Home Range Analysis"

Undergraduate Student Mentoring

William Tatman; B.S. in Geography at UNM; 2024 Spring-present

Misael Gared; Computer Science at Bunker Hill Community College (Boston, MA); 2024 Spring (funded by NSF Louis Stokes Alliances for Minority Participation (LSAMP))

Melissa King; Biology at Bunker Hill Community College (Boston, MA); 2023 Spring (funded by NSF Louis Stokes Alliances for Minority Participation (LSAMP))

Mohamed Mohamed; Computer Science at Bunker Hill Community College (Boston, MA); 2023 Spring (funded by NSF Louis Stokes Alliances for Minority Participation (LSAMP))

Sonny Bizure; Computer Science at Bunker Hill Community College (Boston, MA); 2023 Spring-Fall (funded by NSF Louis Stokes Alliances for Minority Participation (LSAMP))

Lang Qian; Computer Science at Bunker Hill Community College (Boston, MA); 2023 Fall - present (funded by NSF Louis Stokes Alliances for Minority Participation (LSAMP))

Mehdi Bimaghra; Computer Science at Bunker Hill Community College (Boston, MA); 2023 Fall -present (funded by NSF Louis Stokes Alliances for Minority Participation (LSAMP))

Sharmila Khadka Thapa; Computer Science at Bunker Hill Community College (Boston, MA); 2022 Spring-Fall (funded by NSF Louis Stokes Alliances for Minority Participation (LSAMP))

Murphy Johns; B.S. in Mathematics and Statistics at UNM; 2022 Spring-present (awarded 2023 Arts & Sciences Support for Undergraduate Research Excellence (ASSURE) scholarship)

Tyler G.Thomas; Pre-engineering at Diné College; 2022 Summer (UNM - Diné College Summer Internship 2022; "Geospatial Data Science, Environment, Community, and Health") (awarded travel scholarship for the for the 2022 National Diversity In STEM (SACNAS) Conference in Puerto Rico)

Tracie L. Jones; Biology; Diné College; 2022 Summer (UNM - Diné College Summer Internship 2022; "Geospatial Data Science, Environment, Community, and Health")

Paige S. Tsosie; Public health; Diné College; 2022 Summer (UNM - Diné College Summer Internship 2022; "Geospatial Data Science, Environment, Community, and Health")

Rutyron Bia; Health occupation; Diné College; 2022 Summer (UNM - Diné College Summer Internship 2022; "Geospatial Data Science, Environment, Community, and Health")

Leorenda Begay; Public health; Diné College; 2022 Summer (UNM - Diné College Summer Internship 2022; "Geospatial Data Science, Environment, Community, and Health")

Shaina Lee; Biology; Diné College; 2022 Summer (UNM - Diné College Summer Internship 2022; "Geospatial Data Science, Environment, Community, and Health")

Angela Davies; B.S. in Geography; 2019; UNM Ronald E. McNair Scholars Program; Thesis Title: "Uncertainties in Spatial Access: A Comparison of Street Networks"

Graduate Student Mentoring

Briana Becerra; M.S. Biology; 2018; Thesis project in Biology

Leah Hollis Puglisi; M.S. Statistics; 2018; Thesis project in Statistics

Heidi A.Pierce; M.A. Anthropology; 2017; Thesis project in Public Archaeology &
        Historic Preservation and Regionalism

Classroom Teaching:

Teaching at the University of New Mexico

Semester & Year	Course Number	Course Title	Number of students
Fall 2024	GEOG525	Advanced GIScience Seminar	5
Spring 2024	GEOG 580L	Spatial Statistics	8
Fall 2022	GEOG 487L/587L (Online MAX)	Geocomputation and Spatial Modeling	11
Spring 2022	GEOG 580L	Spatial Statistics	13
Fall 2021	GEOG 487L/587L (Online MAX)	Spatial Analysis and Modeling	12
Spring 2021	GEOG 486L/586L (Online)	GIS Applications	17
Fall 2020	GEOG 487L/587L (Online MAX)	Spatial Analysis and Modeling	10
Spring 2020	GEOG 486L/586L	GIS Applications	15
Fall 2019	GEOG 487L/587L	Spatial Analysis and Modeling	15
Fall 2018	GEOG 381L	Introduction to GIS	47
Fall 2018	GEOG 487L/587L	Spatial Analysis and Modeling	26
Spring 2018	GEOG 486L/586L	GIS Applications	25
Spring 2018	GEOG 580	Spatial Statistics	6
Fall 2017	GEOG 381L	Introduction to GIS	50
Fall 2017	GEOG 487L/587L	Spatial Analysis and Modeling	22
Spring 2017	GEOG 486L/586L	GIS Applications	16
Spring 2017	GEOG 580	Spatial Statistics	6
Fall 2016	GEOG 487L/587L	Spatial Analysis and Modeling	23
		Total Students:	323

Teaching at South Dakota State University

Semester & Year	Course Number	Course Title	Number of students
Spring 2016	GEOG 473/573	GIS Data Creation/Integration	19
Spring 2016	GEOG 472	Introduction to GIS	32
Fall 2015	GEOG 474/574	GIS Vector and Raster Modeling	19

Fall 2015	GEOG 472	Introduction to GIS	35
Spring 2015	GEOG 473/573	GIS Data Creation/Integration	20
Spring 2015	GEOG 472-S02	Introduction to GIS	17
Spring 2015	GEOG 472-S01	Introduction to GIS	17
Fall 2014	GEOG 472-S02	Introduction to GIS	18
Fall 2014	GEOG 472-S01	Introduction to GIS	15
		Total students:	192

Teaching at Texas State University

Semester & Year	Course Number	Course Title	Number of students
Spring 2013	GEO 2426	Fundamentals of GIS	32
		Total students:	32

Guest lectures

University of New Mexico

GEOG 601 Introduction to Geographic Theory and Application	GES Faculty Research Showcase	Fall 2022
Climate Change and Public Health Preparedness	"Interview for Health Disparity Research"	Spring 2021
CRP 570 Urban Innovation	"Geospatial Urban Health"	Spring 2021
PH 201 Biology of Population Health	"GIS and Health"	Spring 2017, 2018, 2019, 2020, 2021
GEOG 180 Geography of Beer	"Spatial Analysis of Brewing"	Fall 2017, 2018, 2019
GEOG 501 Introduction to Geographic Thought and Method	"GIScience and Health"	Fall 2017, 2018, 2019
GEOG 601 Introduction to Geographic Theory and Application	"GIScience"	Fall 2020, 2021
Environmental Justice	"Environmental Health Disparities through a Geographic Lens"	Fall 2021
GEOG 450 Hazards and Disasters	"Environmental Health Disparities through a Geographic Lens"	Fall 2021

Independent study course and internship advisement

GEOG 491 Independent Study Murphy John	Spring 2024
GEOG 491 Independent Study Murphy John	Fall 2023
GEOG 696 Supervised Research Theodros Woldeyohannes	Fall 2023

GEOG 696 Supervised Research	Fall 2023
Eric Brannen	
GEOG 696 Supervised Research	Fall 2022
Daniel Beene	
GEOG 493 Internship in Applied Geography	Spring 2020
Manuel Guerra	
GEOG 493 Internship in Applied Geography	Summer 2020
Kendyl M. Key	
GEOG 493 Internship in Applied Geography	Fall 2018; Spring 2019
Steven A. Archuleta	
GEOG 493 Internship in Applied Geography	Fall 2018
Angela Davies	
GEOG 493 Internship in Applied Geography	Spring 2019; Summer 2019
Jason Farmer	
GEOG 493 Internship in Applied Geography	Summer 2019
Rachel Sanchez	
GEOG 593 Internship in Applied Geography for graduate students	Fall 2017
Travis McWhorter	
GEOG 491 Independent Study	Fall 2018; Spring 2019
Jillian Joan Rutherford	
GEOG 491 Independent Study	Spring 2019
Angela Davies	
GEOG 591 Independent Study for graduate students	Fall 2017
Heidi A.Pierce	
GEOG 591 Independent Study for graduate students	Spring 2020
Zhuoming Liu	
GEOG 591 Independent Study for graduate students	Fall 2020
Daniel Beene	

Curriculum Development or Teaching Administrative Positions

University of New Mexico

UNM - Diné College Summer Internship 2022; "Geospatial Data Science, Environment, Community, and Health"	Summer 2022
GIS Lab Coordinator: Supervise one Teaching Assistants and oversee 3 laboratory class section	2017 Fall, 2018 Fall

South Dakota State University

GIS Lab Coordinator: Supervise three Teaching Assistants and oversee five laboratory class sections	8/2014-5/2016

Course Development:

08/2022	Name change & content change: Online Max course: GEOG487/587:

	Geocomputation and Spatial Modeling, University of New Mexico
1/2021	Online course: GEOG486/586: GIS Applications, University of New Mexico
8/2020	Online Max course: GEOG487/587: Spatial Analysis and Modeling, University of New Mexico
1/2017	New Course: GEOG580: Spatial Statistics, University of New Mexico
1/2017	Adapted course: GEOG486/586: GIS Applications, University of New Mexico
8/2016	Adapted course: GEOG487/587: Spatial Analysis and Modeling, University of New Mexico
8/2015	Adapted course: GEOG474/574: GIS Vector and Raster Modeling, South Dakota State University
1/2015	Adapted course: GEOG473/573: GIS Data Creation/Integration, South Dakota State University
8/2014	Adapted course: GEOG472: Introduction to GIS, South Dakota State University

Service

Departmental Service

2024 Spring	Associate Chair, Department of Geography and Environmental Studies, University of New Mexico
2024 Spring	Chair, Personnel Committee, Department of Geography and Environmental Studies, University of New Mexico
2024	Member, Graduate Admissions Committee, Department of Geography and Environmental Studies, University of New Mexico
2024 Spring	Member, Budget Committee, Department of Geography and Environmental Studies, University of New Mexico
2022 Fall	Faculty Coordinator, Geography Awareness Week, Department of Geography and Environmental Studies, University of New Mexico
2022 Fall	Member, Personnel Committee, Department of Geography and Environmental Studies, University of New Mexico
2021-2022	Member, Workload Policy Committee, Department of Geography and Environmental Studies, University of New Mexico
2021-2022	Member, Graduate Admissions Committee, Department of Geography and Environmental Studies, University of New Mexico
2021-2022	Member, Space Committee, Department of Geography and Environmental Studies, University of New Mexico
2021-2022	Member, PhD Program Steering Committee, Department of Geography and Environmental Studies, University of New Mexico
2020-2021	Member, Curriculum Committee, Department of Geography and Environmental Studies, University of New Mexico
2017- 2022 Fall	Computing and Facility Coordinator, Department of Geography and Environmental Studies, University of New Mexico
2017-2022 Spring	Member, Budget Committee, Department of Geography and Environmental Studies, University of New Mexico
2021/08	Member, Department Assistant Search Committee, Department of Geography and Environmental Studies, University of New Mexico
2019/11	Member, Department Assistant Search Committee, Department of Geography and Environmental Studies, University of New Mexico
2019 Fall	Member, Personnel Committee, Department of Geography and Environmental Studies, University of New Mexico
2019-2020	Member, Climate Change Assistant Professor Search Committee, Department of Geography and Environmental Studies, University of New Mexico
2018-2021	Peer teaching evaluation, Department of Geography and Environmental Studies, University of New Mexico
2018-2019	Member, GIScience Assistant Professor Search Committee, Department of Geography and Environmental Studies, University of New Mexico
2017-2018	Member, Ad Hoc Strategic Planning Committee, Department of Geography and Environmental Studies, University of New Mexico
2016-2017	Member, curriculum committee, Department of Geography and Environmental Studies, University of New Mexico
2015-2016	Member, Urban Geography and Physical Geography Assistant Professor Search

Committee, Department of Geography, South Dakota State University
2015-2016   Co-Chair, Undergraduate Assessment Committee, Department of Geography, South Dakota State University

Campus Service

2024 Spring   Retention (Mid-Pro) Committee, College of Arts & Sciences, University of New Mexico

2019 & 2020 Fall   Member, UNM Comprehensive Cancer Center, Cancer Control and Population Sciences (CCPS) Annual Strategic Planning Meeting, University of New Mexico

2019-present   Member, Melanoma Translational Action Group, University of New Mexico

2019-present   Affiliated member, Feminist Research Institute, University of New Mexico

2019 Fall   Member, GIS and Public Health Certificate Planning Group, University of New Mexico

2018-present   Member, HIVE (for Health, Inclusion, Vibrancy, and Equity), University of New Mexico

2014-2016   Member, Minor in Informatics Program Planning committee, South Dakota State University

2014-2016   Member, Ethel Austin Martin Nutrition Committee, South Dakota State University

2014-2016   Coordinator, ESRI software licensing, South Dakota State University

2014   Member, South Dakota Geographic Alliance Coordinate Search Committee, South Dakota State University

2015-2016   Member, Holtry Speaker Committee, South Dakota State University

Community Service

2020-present   Member, UNM-Navajo EPA geospatial working group

2018-present   Member, New Mexico Cancer Council's Rural Health Equity Workgroup

2020-present   Member, Mapping subcommittee, New Mexico Cancer Council's Rural Health Equity Workgroup

National Service

2024   AAG Session Organizer and discussant, "Symposium on Geospatial Approaches to Pressing Grand Challenges: Global Pandemics, Climate Change, and Food Security - Vector-borne Diseases under Environmental Changes"

2024   AAG Session Organizer, "GIScience approaches for assessing pollution and environmental health"

2024   Partnerships for Environmental Public Health: Climate Change and Environmental Justice: Engaging Diverse Teams, Session: Workshop co organizer, "Introduction to Spatial Regression Methods in Environmental Health." National Institute of Environmental Health Sciences

2024   NIH Environmental Health Disparities Centers of Excellence Annual

	Meeting Session Chair and Organizer, "Data sharing: best practices, lessons learned and challenges"
2023-2024	NIH Environmental Health Disparities Centers of Excellence Annual Meeting Planning Committee
2023	NIH- National Institute of Environmental Health Sciences Superfund Research Program Annual Meeting – DMAC Session Planning Committee
2023	Session lead, "GIS in Environmental Health Science Research", NIH-National Institute of Environmental Health Sciences Superfund Research Program Annual Meeting
2023	Session Organizer, "Symposium on Geospatial Approaches to Pressing Grand Challenges: Global Pandemics, Climate Change, and Food Security: Vector-borne Diseases under Environmental Changes" at Annual Meeting of the Association of American Geographers (AAG)
2020	Discussion participants, NIH/NIEHS Data Science/Sharing Workshops (Virtual), May, September & December/2020
2015-2017	At Large Board Member, Association of American Geographers Health and Medical Geography specialty group

Editorial board

2018 - 2020	Cogent Social Sciences
2020 - 2023	Guest Editor of international journal of public health and environmental research

Professional Membership

University of New Mexico Comprehensive Cancer Center
American Association of Geographers
Chinese Professional in Geographic Information Systems

Reviewer in Proposals

NSF Panel reviewer   2024
NSF proposal review   2022
NSF proposal review   2020
NSF proposal review   2019
SWAAG Summer Research Scholarship   2018

Reviewer in Peer-Reviewed Journal

Preventing Chronic Disease   2022

Cartography and Geographic Information Science 2022 2023

Health & Place   2021 2023

Geographical Review 2021

Social Science & Medicine 2019

Preventing Chronic Disease 2018

Cancer Communication 2018

Geospatial Health 2018

BMC Public Health 2018

Scientific Reports (Nature)   2017

Annals of Epidemiology 2017 (2)

Environmental Monitoring and Assessment 2017

Journal of Rural Health 2016 2017 (3) 2019

International Journal of Environmental Research and Public Health 2016,2018

BMC Health Service Research 2016

SSM - Population Health   2016

American Journal of Public Health   2016

Chinese Journal of Cancer   2016

Computers, Environment and Urban Systems   2015

Pure and Applied Geophysics   2015

Aims Public Health   2015

BioMed Central   2015

Applied Geography   2014, 2015(2), 2016

International Journal of Health Geographics   2015

BMC Cancer   2014 (2)

Journal of Immigrant and Minority Health   2014

Journal of Health Care for the Poor and Underserved   2014, 2016, 2017, 2018, 2019

Annals of GIS   2014 (2), 2021

Transaction in GIS   2012, 2015, 2016, 2017