

**University of New Mexico  
College of Arts and Sciences  
Curriculum Vitae**

**Yan Lin      Geography and Environmental Studies      10 January 2024**

**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, 8/2022-present; 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, Teaching and Service Interests**

I am a geographer specialized in Geographic Information Science (GIS) who focuses on the impact of space and place on health. I develop and apply GIS and spatial analysis methods to gain better understanding of relationships among human health, society, and the environment. My research merges the concerns of GIS with environmental and social determinants of health, including spatial analysis and modeling, cancer disparities, and environmental spatial epidemiology. In relation to spatial analysis and modeling, my research is focused on spatial accessibility modeling and uncertainties, and air pollution exposure modeling. In relation to cancer disparities research, I study cancer prevention and control through a geographical lens, including: (a) identification of geographic areas with high rates of cancer and cancer risk factors, (b) the roles of geographic information and technology in cancer disparity reduction, and (c) development of evidence-based and spatially explicit intervention programs for cancer disparity reduction. With regard to environmental spatial epidemiology research, I am concerned with understanding and addressing environmental health disparities, especially in Native American communities. My work in Native American communities is built on sustained community partnership, and is designed to address community priorities. I seek solutions to real-world problems through application of cutting-edge geographic theory in fields ranging from Big Data, geospatial modeling, and environmental and social health analyses.

My teaching is focused on the GIS curriculum at the University of New Mexico. I teach introductory, advanced, and applied GIS courses, as well as spatial statistics. I am passionate about teaching and I would like to become that kind of teacher who still asks herself how to improve the next class even after years of teaching. I invite students to learn the course materials with two levels of activities in class. The lower-level activities include learning subject vocabulary and understanding key concepts. The higher-level activities include applying concepts to problems in the real world through group discussions and exercises. I enjoy the one-to-one interactions with students. I work very closely with students on hands-on exercises and help everyone frame a good research question for end-of-semester projects. I encourage community study in my class to cultivate teamwork and collaborative learning experiences. I also invite student to the larger world around them and encourage students to develop and extend their insights. I relate course materials to current research and introduce the big picture of the discipline to students. I maintain that a good researcher should be a good teacher because it cannot be more exciting than to share with students the new research one has conducted.

My departmental service interests lie in improving the spatial and computing resources as well as increasing enrollments. I coordinate maintaining and expanding the spatial computing lab, including facilitating virtual desktop infrastructure, especially during the pandemic. I contribute to increasing and improving local, regional, national, and international presence of the department. I also contribute to improving the GIS curriculum to enhance students' learning outcomes, which offers graduate students broadened research directions. Beyond the department, I contribute at the university and community level on public health related agenda. I served as an At-Large Board Member in the Health and Medical Geography specialty group of AAG. I've served as a discussion participant at three NIH/NIEHS Data Science/Sharing Workshops to contribute and promote NIH data science initiative. I have also served as a proposal reviewer for several federal funding agencies. I have reviewed over 40 journal articles, including a number of prestigious ones.

## Scholarly Achievements

### Articles Published in Refereed Journals

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

- 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* (accepted)
- 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. 2023. 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*. (2023). <https://doi.org/10.1038/s41370-023-00607-0>
- 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*. <https://doi.org/10.1016/j.jenvman.2023.119236>
- Girlando, 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 PM<sub>2.5</sub> 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 PM<sub>2.5</sub> 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 PM<sub>2.5</sub> 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 PM<sub>2.5</sub> 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., Muttill, 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.

## Other Scholarly Works

N/A

## Works in Progress

Submitted for publication

Huang, Y., 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* (under review)

Lu, Y., Gong, X., Howard, N., Brown, C., **Lin Y.** The long-run effect of redlining practice on social vulnerability in major U.S. cities. *Cities* (under review)

Hridoy, A.E.H., **Lin, Y\***, Li, M., Wang, Z., Liu, Z., John, M., 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. (under review)

In preparation

Woldeyohannes, T., Girlando, 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. Girlando C. **Lin Y.** Hoover J. Fuzzy-logic based classification of livestock animal behavior based on GPS data. (In preparation)

Beene D., **Lin Y.**, Lane M, Hoover J. Critical geospatial data science (CGDS) in the context of public health: redefining rurality - to better "place" health data. (In preparation)

Woldeyohannes T., **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. (In preparation)

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

## Invited or Refereed Abstracts and/or Presentations at Professional Meetings

### Invited Talks

**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 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**, 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.

Girlando 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

Girlando 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 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 Beene, D. 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 Beene, D. 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.**, Beene, D., 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., Beene, D., 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.**, Beene, D., 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 Beene, D. “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 47<sup>th</sup> 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.

## 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., Giralmo, 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, Giralmo 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

Giralmo 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, Giralmo 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>.

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

**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.

Woldeyohannes T, Doyle J, Giriamo 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.

**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**, Giriamo 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.

Girlando 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.

Girlando 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

Girlando 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, Girlando 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, Girlando 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., Girlando, 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.

## 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 \(nih.gov\)](https://www.niehs.nih.gov/research/areas/geospatial-and-community-based-approach-investigates-potential-exposures-from-fires-at-waste-disposal-sites)
- 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](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-members-receive-2022-women-in-stem-awards>

## Research

### Research Funding

#### External Funding

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

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

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

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-Principal Investigator of research project 2 (R01 equivalent)

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: 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**

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

08/01/2023-07/31/2024

UNM Comprehensive Cancer Center Research Support Pilot (**PI:Gong**)  
Cancer Risk of Air Pollution in New Mexico (\$40,000 Direct Cost).  
Role: Principal 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

Travel Funding, Texas State University, Tampa, FL. April 8-12, 2014, \$650.

Travel Funding, Texas State University, Austin, TX. June 10-13, 2013, \$600.

Travel Funding, Texas State University, Los Angeles, CA. April 9-13, 2013, \$650.

Travel Funding, Texas State University, New York City, NY. February 24-28, 2012, \$650.

Travel Funding, Texas State University, Seattle, WA, April 12-16, 2011, \$650.

Travel Funding, Texas State University, Washington, DC, April 14-18, 2010, \$650

## **Teaching**

### **Doctoral Advisement**

#### **Doctoral students (as major advisor)**

Daniel Beene; Ph.D. in Geography; expected 2024; Geography & Environmental Studies (GES), University of New Mexico; passed the doctoral dissertation proposal defense

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

Eric Brannen; Ph.D. in Geography; expected 2025; Geography & Environmental Studies (GES), University of New Mexico; passed the doctoral qualifying exam

#### **Doctoral students (as committee member)**

Yujian Lu; Ph.D. in Geography; expected 2024; Geography & Environmental Studies (GES), University of New Mexico; passed the doctoral dissertation proposal defense

Zhuoming Liu; Ph.D. in Computer Science; expected 2026; Computer Science, University of New Mexico

Dayna Dominguez; Ph.D. in Geography; expected 2024; Geography & Environmental Studies (GES), University of New Mexico; passed the doctoral qualifying 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; 2019; School of Geosciences and Info-Physics, Central South University

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

Samrat B Kunwar; Ph.D. in Economics; 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; 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)**

Al-Ekram Elahee Hridoy; M.S. in Geography; expected 2024; GES, University of New Mexico

Chris Giralmo; M.S. in Geography; expected 2023; GES, University of New Mexico

Zhuoming Liu; M.S. in Geography; 2021; GES, University of New Mexico; Thesis Title: “Individual level spatial-temporal modeling of exposure potential of livestock in



the Cove Wash Watershed, Arizona” (with Distinction)

Daniel Beene; M.S. in Geography; 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; 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)**

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

Tammira Taylor; M.S. in Geography; 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; 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; 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; 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; 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; 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; 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; 2018; Geography, South Dakota State University; Thesis Title: “Mapping Understory Forest Fire Fuels in Superior National Forest”

Murat Kececi; M.S. in Geography; 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; 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 Alhomaiddi; M.S. in Geography; 2017; Geography, South Dakota State University; Thesis Title: "Geographic Distribution of Public Hospitals in Riyadh"

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

Shailendra Singh; M.S. in Engineering; 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; 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; 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**

Simona Matiukaite; Computer Science at Bunker Hill Community College (Boston, MA); 2022 Spring-Fall (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
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 696 Supervised Research Eric Brannen	Fall 2023
GEOG 696 Supervised Research Theodros Woldeyohannes	Fall 2023
GEOG 491 Independent Study Murphy John	Fall 2023
GEOG 696 Supervised Research Daniel Beene	Fall 2022
GEOG 493 Internship in Applied Geography Manuel Guerra	Spring 2020
GEOG 493 Internship in Applied Geography Kendyl M. Key	Summer 2020
GEOG 493 Internship in Applied Geography Steven A. Archuleta	Fall 2018; Spring 2019
GEOG 493 Internship in Applied Geography Angela Davies	Fall 2018
GEOG 493 Internship in Applied Geography Jason Farmer	Spring 2019; Summer 2019
GEOG 493 Internship in Applied Geography Rachel Sanchez	Summer 2019
GEOG 593 Internship in Applied Geography for graduate students Travis McWhorter	Fall 2017
GEOG 491 Independent Study Jillian Joan Rutherford	Fall 2018; Spring 2019
GEOG 491 Independent Study Angela Davies	Spring 2019
GEOG 591 Independent Study for graduate students Heidi A.Pierce	Fall 2017
GEOG 591 Independent Study for graduate students Zhuoming Liu	Spring 2020
GEOG 591 Independent Study for graduate students Daniel Beene	Fall 2020

## **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 2017 Fall, 2018 Fall  
laboratory class section

### **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
- 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

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

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- 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 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