

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

Principle positions since the Bachelor’s degree:

Assistant Professor, 8/2016-present; 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 (Geography 2426: Fundamentals of Geographic Information Systems), 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

Professional Recognition, Honors, etc. (Teaching, research, service)

Research and Academic Awards:

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, 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

I am a geographer in health/medical geography and Geographic Information Science (GIS) focusing on the impact of space and place on health. I develop and apply GIS and spatial analysis methods to gain a better understanding of relationships among human health, society, and the environment. My research is situated at the intersection of environmental and social determinants of health and GIS. My research in GIS engages broadly in spatial analysis and modeling, particularly spatial accessibility modeling & uncertainties and air pollution exposure modeling. My research in health/medical geography is focused cancer disparity and environmental spatial epidemiology. My cancer disparity research focuses on cancer prevention and control through a geographical lens, developing methods to identify geographic areas with cancer disparities, and examining the role of geographic information and technology in cancer disparity reduction. My research in environmental spatial epidemiology is concerned with understanding and addressing environmental health disparities especially in Native American communities, including geospatial modeling of exposure and risk assessment of environmental contamination via air, water, and soil, and examining the associations between environmental contamination and adverse health outcomes, such as adverse birth outcomes and respiratory diseases. My research has contributed to the literature in geography, population health, and environmental health.

Scholarly Achievements:

Articles in Refereed Journals:

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

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*.
<https://www.tandfonline.com/doi/abs/10.1080/10826084.2021.1942053?journalCode=isum20>

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* (Accepted)

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., 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, Cham.
- 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*. Washington DC: American Association of Geographers. 2020 March; :109-117.
- 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

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

- 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>.

Other Writings: (not abstracts)

Lin, Y. 2009. Geostatistical and GIS methods for Assessing Heavy Metal Contamination in Soils. Pg. 1-77. Central South University, China. (Thesis)

Works in Progress

Articles in Refereed Journals

Scieszka et al. Neuroinflammatory and neurometabolic consequences from inhaled 2020 California wildfire smoke-derived particulate matter at a remote location. *Nature aging*. (Under Review)

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

Zou, B., Xu, S., Wan, N., Feng, H., Hu, C., Zhou, H., and **Lin, Y.** High spatiotemporal resolution mapping of PM_{2.5} concentrations under a pollution scene assumption. *Environment International*. (Under Review)

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 for now). Using mass-balance to evaluate arsenic intake and excretion in different populations. (In Preparation)

Invited Talks

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 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.

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 Presentation: GIScience
2012 Workshop on Role of Volunteered Geographic Information: Quality and
Credibility.

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

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.

Research Funding

External Funding

- V-99T54301-4 (PI: Lin) 01/01/2021-09/30/2022
 USEPA subaward from Dine College
 Renewal – GPS Tracking Livestock Movement and Exposure to Abandoned Uranium Mine Waste in Cove Watershed (\$66,770)
 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 (\$6,798,537)
 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 (\$1.5 million)
 Role: Co-Investigator of the Center, Co-Principal Investigator of research project 2 (R01 equivalent)
- V-99T54301-2 (PI: Lin & Lewis) 10/01/2018-12/31/2020
 United States Environmental Protection Agency (USEPA)
 GPS Tracking Livestock Movement and Exposure to Abandoned Uranium Mine Waste in Cove Watershed (\$230,000)
 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 (\$8 million Direct Cost)
 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 (\$375,000 Direct Cost)
External Use Case (EUC) Project in collaboration with Columbia University and UC Berkeley:
Arsenic Mass Balance: Integrating Environmental and Biomarker Data across Diverse
Populations (Project cost: \$75,000)
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 (\$20,000
Direct Cost)
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 (\$13,621 Direct Cost)
Role: Principal Investigator

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 (\$499,987)
Role: Doctoral RA

Internal Funding

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.

Pending Research Funding

National Science Foundation (PI: Lin) 09/01/2021-08/30/2023
Integrating Big Data with Individual-Level Data to Improve Modeling and Prediction of Rocky Mountain Spotted Fever Dynamics in Native American Communities (\$387,986)
Role: Principal Investigator

Superfund Research Program (PI: Lewis) 07/01/2022-03/31/2027
NIH/National Institute of Environmental Health Sciences (NIEHS)
UNM Metal Exposure Toxicity Assessment on Tribal Lands in the Southwest (METALS)
Superfund Research Program – Renewal (\$8,750,000 Direct Cost)
Role: Co-Investigator of the Center, Co-lead of Data Management and Analysis Core

National Science Foundation (PI: Benedict) 09/01/2021-08/30/2026
HDR Institute: Advancing Environmental and Human Health with Spatiotemporal Data Science (\$2,467,033)
Role: Senior Personnel

National Cancer Institute UG3/UH3 (PI: Cook and Campen) 09/01/2021-08/30/2027
NIH/NCI
Southwest Environmental Epidemiology Cancer Cohort (SEECC)
Role: Co-Investigator

National Institute of Environmental Health Sciences (NIEHS) P30 Center (PI: Liu)
NIH/ NIEHS 07/01/2021-04/01/2025
New Mexico Integrative Science Program Incorporating Research in Environmental Sciences
(NM-INSPIRES) (\$3,399,900 Direct Cost)
Role: Co-Investigator

Teaching

Doctoral Student Advisement:

Doctoral students (as major advisor)

Daniel Beene (GES, University of New Mexico, in progress, passed the doctoral qualifying exam)

Theodros Woldeyohannes (GES, University of New Mexico, in progress)

Eric Brannen (GES, University of New Mexico, in progress)

Doctoral students (as committee member)

Niraj Khatiwada (Economics, University of New Mexico, in progress)

Shenxin Li (School of Geosciences and Info-Physics, Central South University, in progress)

Shan Xu (School of Geosciences and Info-Physics, Central South University, in progress)

Samrat B Kunwar (Economics, University of New Mexico, graduated in 2019)

Mohammad Tayarani (Civil Engineering, University of New Mexico, graduated in spring 2018)

Masters Advisement:

Master's students (as major advisor) at University of New Mexico

Chris Giralmo (GES, University of New Mexico, in progress)

Zhuoming Liu (GES, University of New Mexico, graduated in summer 2021)

Daniel Raley Beene (GES, University of New Mexico, graduated in spring 2019)

Kevin Carns (Water Resources Program, University of New Mexico, graduated in fall 2019)

Master's students (as committee member) at University of New Mexico

Linda Roach (GES, University of New Mexico, in progress)

Tammira Taylor (GES, University of New Mexico, in progress)

Rowan Leigh Converse (GES, University of New Mexico, graduated in spring 2020)

Aron Lee Roberts (GES, University of New Mexico, graduated in spring 2020)

Ian Hill (GES, University of New Mexico, graduated in fall 2019)
Kristian Mueller (GES, University of New Mexico, graduated in spring 2019)
Akashia Allen (GES, University of New Mexico, graduated in spring 2018)
Sagert Sheets (GES, University of New Mexico, graduated 2017)

Master's students (as major advisor) at South Dakota State University

Jeffrey Irwin, Department of Geography, graduated 2018
Murat Kececi, Department of Geography, graduated 2017
Aljehani risLayla, Department of Geography, graduated 2015

Master's students (as committee member) at South Dakota State University

Ahmed Alhomaidhi, Department of Geography, graduated 2017
Byron Will-Noel, Department of Geography, graduated 2017
Shailendra Singh, Department of Agricultural Engineering, graduated 2016
Brad Richardson, Department of Geography, graduated 2015
Duanyang Li, Department of Civil and Environmental Engineering, graduated 2015
Austin Brynjulson, Department of Geography, in progress

Undergraduate Advisement

Jillian Joan Rutherford (GES, Honor's Thesis, 2019)
Angela Davies (GES, Ronald McNair Program Thesis, 2019)

Classroom Teaching:

Teaching at the University of New Mexico

GEOG 381L Introduction to GIS (Fall 2017, Fall 2018)
GEOG 487L/587L Spatial Analysis and Modeling (Fall 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2021)
GEOG 486L/586L GIS Applications (Spring 2017, Spring 2018, Spring 2020, Spring 2021)
GEOG 580 Spatial Statistics (Spring 2017, Spring 2018)

Teaching at South Dakota State University

GEOG 472 Introduction to GIS (Fall 2014, Spring 2015, Fall 2015, Spring 2016)
GEOG 473/573 GIS Data Creation/Integration (Spring 2015, Spring 2016)
GEOG 474/574 GIS Vector and Raster Modeling (Fall 2015)

Teaching at Texas State University

GEO 2426 Fundamentals of GIS (Spring 2013)

Guest lectures

Climate Change And Public Health Preparedness “Interview for Health Disparity Research”
Spring 2021

CRP 570 - Urban Innovation “Geospatial Urban Health” 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 Fall 2017, 2018, 2019

GEOG 601 - Introduction to Geographic Theory and Application Fall 2020

Independent study course and internship advisement

GEOG 493 Internship in Applied Geography: Manuel Guerra (Spring 2020); Kendyl M. Key (Summer 2020); Steven A. Archuleta (Fall 2018; Spring 2019); Angela Davies (Fall 2018); Jason Farmer (Spring 2019; Summer 2019); 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); Angela Davies (Spring 2019)

GEOG 591 Independent Study for graduate students: Heidi A.Pierce (Fall 2017); Zhuoming Liu (Spring 2020); Daniel Beene (Fall 2020)

Teaching Administrative Position:

GIS Lab Coordinator: Supervise one Teaching Assistants and oversee 3 laboratory class section; 2017 Fall, 2018 Fall, Department of Geography & Environmental Studies, University of New Mexico

GIS Lab Coordinator: Supervise three Teaching Assistants and oversee five laboratory class sections; 8/2014-5/2016, Department of Geography, South Dakota State University

Course Development:

01/2021 Online course: GEOG486/586: GIS Applications, University of New Mexico

08/2020 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

- 2020-2021, Member, Curriculum Committee, Department of Geography and Environmental Studies, University of New Mexico
- 2017-present, Computing and Facility Coordinator, 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
- 2017-2021, Member, Budget 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

- 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

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 2020
NSF proposal review 2019
SWAAG Summer Research Scholarship 2018

Reviewer in Peer-Reviewed Journal

Health & Place 2021

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