

Guangqing Chi

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EDUCATION

Ph.D., Environmental Demography, University of Wisconsin-Madison, 2006
M.S., Environmental Policy, Michigan Technological University, 2002
B.S., Environmental Science, East China Normal University, 1999

POSITIONS AND AFFILIATIONS

Pennsylvania State University (2015–present)

Faculty Appointments:

Professor (2020–present) and Associate Professor (2015–2020) of Rural Sociology, Demography, and Public Health Sciences, Department of Agricultural Economics, Sociology, and Education
Director, Computational and Spatial Analysis Core, Social Science Research Institute and Population Research Institute (2015–2024)

Faculty Affiliations:

Professor (2020–present) and Associate Professor (2016–2020) of Sociology
Research Associate, Population Research Institute (2015–present)
Associate, Institute for Computational and Data Sciences (2017–present)
Graduate Faculty, Social Data Analytics (2016–present)
Graduate Faculty, Applied Demography (2016–present)
Graduate Faculty, International Agriculture and Development (2017–present)
Faculty Affiliate, Engineering Systems and Policy Program (2015–present)
T32 Training Faculty, Social Environments and Population Health Program (2020–present)

Professional Appointments

Editorial Board Member, *Social Forces* (2023–2026)
Advisory Board Member, *Population and Environment* (2019–present)
Editorial Board Member, *Spatial Demography* (2012–present)
Editorial Board member, *SN Social Sciences* (2022–present)
Deputy Editor, *Demography* (2016–2019)
Author, *Sixth National Climate Assessment* (NCA6), Human Health chapter (2024–2027)
Member, Pan-HDR Ice-Melt Community Council, iHARP, UMBC (2024–present)
Rural Sociology Society, Publication Committee Chair (2023–2024) & Council Member (2022–2024)
Member, NAS Board on Environmental Change and Society's Integrating Human Sciences Planning Committee (2023)

Previous Employment

South Dakota State University (2014–2015)
State Demographer of South Dakota
Associate Professor, Department of Sociology and Rural Studies
Director, Rural Life and South Dakota Census Data Center
Mississippi State University (2006–2014)
Associate Professor (2013–2014) and Assistant Professor (2008–2013), Department of Sociology
Research Scientist (2008–2014) & Postdoc Fellow (2006–2008), Social Science Research Center

RESEARCH GRANTS

PI = Principal Investigator; Co-PI = Co-Principal Investigator; Co-I = Co-Investigator; SP = Senior Personnel.
NSF = National Science Foundation; NIH = National Institutes of Health; NASA = National Aeronautics and Space Administration;
USDOT = U.S. Department of Transportation; NHTSA = National Highway Traffic Safety Administration; DOD = Department of
Defense; HHS CMS = U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.

External Grants Awarded

1. **NSF** Research, Innovation, Synergies, and Education. "Belmont Forum Collaborative Research: RETRACE-ResilienceS to Climate Risks: Lessons from Arctic and Pacific Communities" (Award # RISE-2420587). 7/15/2024–6/30/2027. **Partner PI**. \$369,376 (Lead PI: Charlotte Heinzlef, UVSQ, France. Total award: Euro €993,000).
2. **NSF** Office of International Science & Engineering. "Collaborative Research: NSF-NFRF: The Indigenous Peoples Observatory Network (IPON): The Climate-Food-Health Nexus" (Award # OISE-2429010). 6/1/2024–5/31/2027. **PI**. \$225,625 (Lead PI: Tristan Pearce, University of Northern British Columbia. Total award: \$3,519,247).
3. **Belmont Forum** (NSF, UKRI, Inter-American Institute, and Future Earth). "The Indigenous Peoples Observatory Network (IPON): Understanding and responding to complex climate-health emergencies". 7/1/2024–6/30/2027. **Collaborator**. Euro €1,527,000 (Consortium Lead: Carol Zavaleta-Cortijo, Universidad Peruana Cayetano Heredia).
4. **NSF** Navigating the New Arctic Program. "NNA Track 1: Pursuing Opportunities for Long-term Arctic Resilience for Infrastructure and Society (POLARIS)" (Award # NNA-1927827). 1/1/2020–6/30/2025. **PI**. \$3,018,000.
5. **NSF** Navigating the New Arctic Program. "Collaborative Research: NNA Research: Arctic, Climate, and Earthquakes (ACE): Seismic Resilience and Adaptation of Arctic Infrastructure and Social Systems amid Changing Climate" (Award # NNA-2220219). 1/1/2023–12/31/2027. **PI**. \$559,000. (Lead PI: Majid Ghayoomi, U New Hampshire. Total award: \$3,009,000.)
6. **NSF** Environmental Sustainability Program. "CAS-Climate: An Integrated Framework to Investigate Thermal Resilience of Sustainable Buildings and Living Environments for Greater Preparedness to Extreme Temperature Events" (Award # CBET-2215421). 9/1/2022–2/28/2027. **Co-PI** with Julian Wang (PI). \$615,774.
7. **Pittsburgh Supercomputer Center**. "Investigating environmental migration and community resilience using machine learning and high-resolution data integration" (Award # SOC240020). 7/2/2024–7/1/2025. **PI**. 750,000 ACCESS Credits.
8. **NSF**. "Planning: Collaborative: Food Security and Traditional Foods in Urban Spaces" (Award # OPP-2306041). **Co-PI** with Megan Mucioki (PI). 5/1/2023–4/30/2025. \$200,000.
9. **NSF** Office of Polar Program. "RAPID: Using Mobile Phone Data to Understand the Impacts of the COVID-19 Pandemic on Food Assistance Use in Alaska" (Award # OPP-2207436). 2/1/2022–1/31/2025. **PI**. \$200,000.
10. **NIH/NIDDK**. "The Impact of Structural Racism on Racial/Ethnic Disparities in End-Stage Kidney Disease from Healthy Population to Mortality" (Award # 1R01DK132953-01). 8/1/2022–5/31/2026. **Co-I** with Jonathan Daw (PI). \$2,646,872.
11. **NIH/NICHD**. "Population Research Institute" (Award # 2P2C HD041025). 6/1/2021–5/31/2026. **SP (PI** of the Computational and Spatial Analysis Core) with Jennifer Glick (PI). \$3,530,135.
12. **NSF** Strengthening American Infrastructure Program. "EAGER: SAI: Collaborative Research: Community-Driven Innovation for Resilient Bridges in Remote Communities" (Award # BCS-2121909). 10/1/2021–9/30/2024. **PI**. \$259,112.
13. **NSF** Office of Polar Program. "Planning: Building Community Resilience in the Food-Energy-Water and Society Nexus" (Award # OPP-2225982). 10/1/2022–9/30/2024. **Co-PI** with Somayeh Asadi (PI). \$200,000.

14. **Pittsburgh Supercomputer Center.** "The Generalizability and Replicability of Twitter Data for Population Research" (Award # SES180006). 4/15/2018–4/16/2024. **PI.** Memory: 50,000 SUs; Storage: 30,000 GB; 100,000 ACCESS Credits.
15. **National Park Service Research Center.** "Bicycle Patterns in Grand Teton National Park's Multi-Use Pathway: Integrating Behavior, Recreation Specialization, and Big Data." **Co-I** with Bing Pan (PI). 4/1/2023–3/31/2024. \$5,000.
16. **NSF Office of Polar Program.** "Convergence NNA: Coordinate a Transdisciplinary Research Network to Identify Challenges and Solutions of Permafrost Coastal Erosion and Its Socioecological Impact in the Arctic" (Award # OPP-1745369). 1/1/2018–12/31/2023. **Co-PI** with Ming Xiao (PI). \$500,000.
17. **DOD.** "Permanent Change of Station and Variation in Cancer Prevention and Care in the Military Health System" (Award # HQ0034-20-1-0002). 9/29/2019–12/31/2023. **Co-I** with Joel Segel (PI). \$717,562.
18. **NSF Sociology Program.** "RR: The Generalizability and Replicability of Twitter Data for Population Research" (Award # SES-1823633). 7/15/2018–6/30/2023. **PI.** \$500,000.
19. **NIH/NIAAA.** "The Center for Innovation in Intensive Longitudinal Studies (CIILS)" (Award # U24 AA027684). 9/20/2018–8/31/2023. **Co-I** with Sy-Miin Chow (PI). \$1,835,411.
20. **NSF Office of Polar Program.** "RAPID: Collaborative Research: COVID-19 Preparedness in Remote Fishing Communities in Rural Alaska" (Award # OPP-2032790). 6/15/2020–5/31/2022. **PI.** \$119,868.
21. **NIH/NICHHD.** "Play & Learning Across a Year (PLAY)." (Award # R01HD094830-01). 4/1/2018–3/31/2023. **Co-I** with Karen E. Adolph, Catherine Tamis-Lemonda, and Rick Gilmore (PIs). \$8.5 million.
22. **The Food and Agriculture Organization of the United Nations.** "Drivers of Deforestation Analysis and Synthesis Research Project." 1/1/2022–6/30/2022. **SP** with Katie Bernhard and Edwin Sabuhoro (co-PIs). \$40,000.
23. **Social Science Research Council.** "Are We More Willing to Speak Up When We Share Without Clicking? A Study of Political Content Sharing on Facebook" (Award # 228621). 7/1/2020–6/30/2022. **Co-PI** with Shyam Sundar (PI). \$49,017.
24. **NIH.** "Population Research Institute" (Award # P2C HD041025). 9/4/2016–5/31/2021. **Co-I (PI** of the Scientific and Technical Core) with Jennifer Van Hook (PI). \$13,179,754.
25. **FWD.us.** "Twitter Data for Environmental Migration from Central America." 8/23/2021–10/15/2021. **PI.** \$7,798. [contract]
26. **NSF Innovations in Graduate Education Program.** "IGE: Individualized Pathways and Resources to Adaptive Control Theory-Inspired Scientific Education (iPRACTISE)" (Award # DGE-1806874). 7/1/2018–6/30/2021. **SP** with Sy-Miin Chow (PI). \$490,804.
27. **HHS CMS.** "Pennsylvania Rural Health Model" (Award # 4400015622). 11/7/2019–10/20/2020. **Co-I** with Lisa Davis and Chris Hollenbeak (co-PIs). \$4,957,486.
28. **NASA Land Use and Land Cover Change Program.** "How Environmental Change in Central Asian Highlands Impacts High Elevation Communities" (Award # NNX15AP81G). 7/1/2015–6/30/2020. **Co-I** with Geoffrey Henebry (PI). \$969,551.
29. **HHS CMS.** "Pennsylvania Rural Health Model" (Award # 4400015622). 4/17/2019–10/20/2019. **Co-I** with Lisa Davis and Dennis Scanlon (co-PIs). \$4,426,440.
30. **NSF Critical Resilient Interdependent Infrastructure Systems and Processes Program.** "CRISP Type 1/Collaborative Research: Population-Infrastructure Nexus: A Heterogeneous Flow-based Approach for Responding to Disruptions in Interdependent Infrastructure Systems" (Award # CMMI-1541136). 1/1/2016–12/31/2018. **PI.** \$150,000.

31. **Microsoft Azure for Research Program.** "Data Science: Mining Twitter User Demographics as a First-Step in Big Data for Population Research with Microsoft Azure." 3/14/2018–12/31/2018. **PI.** \$10,000.
32. **PA Tobacco Settlement Fund.** "Neighborhood Effects on Health in Pennsylvania." 6/1/2016–12/31/2017. **Co-I** with Cynthia Chuang (PI). \$107,494.
33. **USDOT National Center for Intermodal Transportation for Economic Competitiveness.** "The Economic Demography of Passenger Intermodal Transportation: Opportunities and Challenges" (Award # DTRT12GUTC14-201307). 07/1/2013–12/31/2015. **PI.** \$199,858.
34. **USDOT National Center for Intermodal Transportation for Economic Competitiveness.** "Economic and Demographic Impacts of Passenger Rail Systems: A Scenario Analysis of Restoring the Passenger Rail Corridor between New Orleans and Orlando" (Award # DTRT12GUTC14-201308). 05/15/2013–12/31/2015. **PI.** \$201,226.
35. **South Dakota Rapid City School District.** "School Enrollment Projections." 11/1/2014–2/28/2015. **PI.** \$11,500. [Contract]
36. **NHTSA, Mississippi Highway Patrol, and Mississippi Department of Public Safety.** "Mississippi Highway Patrol Data and Analysis Program: Year Six" (Award # 14-MC-401-1). 10/01/2013–09/30/2014. **Co-PI** with Tonya Thornton-Neaves (PI). \$238,811.
37. **USDOT National Center for Intermodal Transportation for Economic Competitiveness.** "Passenger Usages of the Intermodal Transportation System: An Analysis of the 2009 National Household Travel Survey Data" (Award # DTRT12GUTC14-12050543). 07/01/2012–08/15/2013. **PI.** \$65,459.
38. **USDOT University Transportation Center Program.** "National Center for Intermodal Transportation and Economic Competitiveness." 2012–2014. Faculty Affiliate with Burak Eksioglu (PI). \$3,500,000.
39. **NHTSA, Mississippi Highway Patrol, and Mississippi Department of Public Safety.** "Mississippi Highway Patrol Data and Analysis Program: Year Five" (Award # 13-K9-401-1). 10/01/2012–09/30/2013. **Co-PI** with Tonya Thornton-Neaves (PI). \$194,557.
40. **NHTSA, Mississippi Highway Patrol, and Mississippi Department of Public Safety.** "Mississippi Highway Patrol Data and Analysis Program: Year Four" (Award # 12-K9-401-1). 10/01/2011–09/30/2012. Research Scientist with Arthur G. Cosby (PI). \$270,466.
41. **NHTSA, Mississippi Highway Patrol, and Mississippi Department of Public Safety.** "Mississippi Highway Patrol Data and Analysis Program: Year Three" (Award # 11-K9-401-1). 10/01/2010–09/30/2011. Research Scientist with Arthur G. Cosby (PI). \$277,225.
42. **USDOT National Center for Intermodal Transportation.** "Assessing Economic and Demographic Impacts of Intermodal Transportation Systems" (Award # 363010100-07070609). 08/16/2009–08/15/2010. **PI.** \$44,112.
43. **NHTSA, Mississippi Highway Patrol, and Mississippi Department of Public Safety.** "Mississippi Highway Patrol Data and Analysis Program: Year Two" (Award # 10-K9-401-1). 10/01/2009–09/30/2010. Research Scientist with Arthur G. Cosby (PI). \$392,160.
44. **USDOT National Center for Intermodal Transportation.** "Modeling Economic Benefits of Resilience Enhancement Strategies for Intermodal Transportation Systems." (Award # 363010100-009067-018). 07/01/2009–06/30/2010. **Co-PI** with Li Zhang (PI). \$57,519.
45. **NHTSA, Mississippi Highway Patrol, and Mississippi Department of Public Safety.** "Mississippi Highway Patrol Data and Analysis Program: Year One" (Award # 09-K9-401-1). 10/01/2008–09/30/2009. Research Scientist with Arthur G. Cosby (PI). \$516,632.

External Grants under Review

46. **NIH.** "The Penn State Coordinating Center (CC) for the Multi-Sectoral Preventive Interventions (MSPI) Research Network." 4/1/2025–3/31/2032. **Co-I** with Vernon Chinchilli and Jennifer Kraschnewski (PIs). \$11,557,825.

Internal Grants Awarded

47. PSU Institutes of Energy and the Environment. "Spatiotemporal Analysis of Community Power Outage Impact Under Extreme Weather." 7/1/2024–6/30/2025. **Co-PI** with Yuqing Hu (PI). \$40,000.
48. PSU C-SoDA Accelerator. "Post-Hurricane Katrina Return Migration Decision-Making: A Big-Data Analytical Approach with Infutor Data." 1/1/2024–12/31/2024. **Co-PI** with Yining Feng (PI). \$4,000.
49. PSU Social Science Research Institute. "New Tools for Visualization Research to Improve Hazard and Risk Communication." 7/1/2023–6/30/2024. **Co-PI** with Peter Stempel (PI). \$20,000.
50. PSU Center for Socially Responsible Artificial Intelligence and College of Information Science and Technology. "Predicting Number of Tenants At-Risk of Eviction in High Resolution using Social Media, E-Commerce Data, Sociological Insights, and Low-Resolution Eviction Data." 5/1/2023–10/30/2024. **Co-PI** with Dongwon Lee (PI). \$40,000.
51. PSU C-SoDA Accelerator. "Expanding Methods and Understanding of Trail Use and Users at Grand Canyon National Park with Spatial Applications of Big Data." 1/1/2023–10/31/2023. **Co-PI** with Colby Parkinson (PI). \$5,000.
52. PSU C-SoDA Accelerator. "# BlackHiker: A Black Perspective on Outdoor Recreation by Tweets." 1/1/2023–7/31/2023. **Co-PI** with Yun Liang (PI). \$5,000.
53. NIH Interdisciplinary Network on Rural Population Health and Aging (INRPHA). "Aging Amish: Toward Usable Population Microdata and an Investigation of Residence Proximity, Occupational Change, and Informal Care Practices for the Elderly." 4/15/2021–6/30/2022. **Co-I** with Cory Anderson (PI). \$15,000.
54. PSU Social Science Research Institute. "Mobility Patterns and Their Influence on Food Security in Alaskan Communities: Using Digital Trace Data for Social and Behavioral Research during the COVID-19 Pandemic." 4/1/2021–3/31/2023. **Co-PI** with Junjun Yin (PI). \$30,000.
55. PSU Institution for Computational and Data Sciences. "A Deep Learning-enabled Dasymetric Mapping Approach for Fine-Scale Population Estimation in Alaska." 5/1/2021–4/30/2023. **Co-PI** with Junjun Yin (PI). \$35,000.
56. PSU C-SoDA Accelerator. "Who Visits Yellowstone National Park during the COVID-19 Pandemic? A Gravity Model Analysis by Mobile Device Data." 2/1/2022–10/31/2022. **Co-PI** with Yun Liang (PI). \$6,500.
57. PSU Institutes of Energy and the Environment. "Urban Microclimate, Outdoor Thermal Comfort, and Socio-Economic Mapping: A Case Study of Two High-Density Cities." 4/16/2021–6/30/2022. **Co-PI** with Ute Poerschke (PI). \$26,420.
58. PSU Social Science Research Institute. "Revisiting Secular Trends on Migration." 7/1/2019–6/30/2020. **Co-PI** with Elisa Giannone (PI). \$5,000.
59. PSU Social Science Research Institute, Institute for CyberScience, and College of Information Science and Technology. "Regional Differences in Opinions Toward Climate Change Among Twitter Users." 3/1/2019–12/31/2020. **Co-PI** with Ting-Hao Huang (PI). \$30,000.
60. PSU Social Science Research Institute and Institute for CyberScience. "Food-Water-Energy Choices in Alaska: Mining People's Perception and Attitudes from Geotagged Tweets." 3/1/2019–3/1/2020. **Co-PI** with Somayah Asadi (PI). \$5,000.

61. PSU Social Science Research Institute and Institute for CyberScience. "What Can Social Media Sentiment Analysis of Flu Risk and Vaccine Efficacy Tell Us About Regional and Demographic Variations in Flu Vaccination Rates?" 3/1/2019–2/28/2021. **Co-PI** with Suresh Kuchipudi (PI). \$20,000.
62. Penn State's 2016-2020 Strategic Plan. "Pennsylvania Population Network." 7/1/2018–6/30/2021. **Collaborator** with Jennifer Glick (PI). \$243,423.
63. PSU Social Science Research Institute. "Spatial Economic Patterns in Refugee Integration: An Analysis of TurkTelecom Call Data Records and Geographic Information Systems." 8/1/2018–7/31/2019. **Co-PI** with Clio Andris (PI). \$20,000.
64. PSU Social Science Research Institute. "An Innovative Approach to Tackle the Opioid Epidemic: Utilizing Twitter Data and Integrating Big Data Analytics and Spatial and Social Network Analyses." 5/1/2018–6/30/2019. **Co-PI** with Zhen Lei (PI). \$20,000.
65. Penn State's 2016-2020 Strategic Plan. "Individualized Pathways and Resources to Adaptive Control Theory-Inspired Scientific Education (iPRACTISE)." 7/1/2018–6/30/2020. **Co-I** with Sy-Miin Chow (PI). \$250,000.
66. PSU Human Health and Environment. "Heavy Metal Exposures and Aggressive Prostate Cancer." 7/1/2018–6/30/2020. **Co-I** with Alicia C. McDonald and Ming Wang (PIs). \$50,000.
67. PSU Institute for CyberScience. "The Generalizability and Replicability of Twitter Data for Population Research." 5/1/2018–6/30/2019. **PI**. \$35,000.
68. PSU Social Science Research Institute and Institutes of Energy and the Environment. "From Environmental Change to Left-behind Children's Well-being in Rural Highlands: The Nexus of Pasture Productivity, Family Processes, Labor Migrants, and Child Development." 7/1/2017–6/30/2019. **PI**. \$50,000.
69. Penn State's 2016-2020 Strategic Plan. "Integrated Data Systems Solutions for Health Equity." 7/1/2017–6/30/2019. **Co-I** with Susan McHale (PI). \$180,000.
70. Penn State's 2016-2020 Strategic Plan. "Digital Collaboratory for Precision Health Research." 7/1/2017–6/30/2019. **Co-I** with Vasant Honavar (PI). \$250,000.
71. PSU Human Health and Environment. "Predictive Modeling of Health Risks and Outcomes from Clinical, Environmental, Contextual, Behavioral Data: A Proof-of-Concept Study Focused on Breast Cancer in Central Pennsylvania." 6/1/2017–5/31/2018. **Co-PI** with Vasant Honavar and Eugene Lengerich (PIs). \$50,000.
72. PSU Institutes of Energy and the Environment. "Ecological Migration in a Large-Scale Quasi-Experiment Design in China: Implications of Climate Change, Landscape Structure, Ecosystem Services and Government Intervention." 4/1/2017–6/30/2018. **PI**. \$25,000.
73. PSU Pathway to Partnership Stage I. "Aggressive Prostate Cancer in Pennsylvania: Health Disparities and Environmental Risk Factors." 8/1/2016–2/1/2017. **Co-I** with Ming Wang and Alicia C. McDonald (Co-PIs). \$5,000.
74. PSU Social Science Research Institute. "The Computational and Spatial Analysis Core's Twitter Initiative as Part of Social Science Research Institute's Strategic Area in Innovative Methods." 6/1/2016–6/1/2019. **PI**. \$83,585.
75. PSU Social Science Research Institute and Institutes of Energy and the Environment. "A Household-level Longitudinal Investigation into the Food Environment's Impact on Food Behavior and Health." 7/1/2015–6/30/2016. **Co-I** with Jennifer Van Hook (PI). \$20,000.
76. PSU Pathway to Partnership Stage I. "Population Health Research in the Era of Big Data." 6/1/2015–11/1/2015. **Co-PI** with Cynthia Chuang (co-PI). \$5,000.
77. MSU Office of Research and Economic Development. "Big Data Analysis in Transportation and Sociology." 8/16/2013–8/15/2014. **Co-PI** with Xiaopeng Li (PI). \$2,000.

78. MSU Office of Research and Economic Development. "Infrastructure and Livable Community." 8/16/2012–8/15/2013. **Co-PI** with Xiaopeng Li (PI). \$2,000.
79. MSU College of Arts and Sciences, Henry Family Research Fund. "Social and Spatial Implications of Gasoline Price Changes on Commuting Behaviors." 06/01/2011–05/31/2012. **PI**. \$5,000.

PUBLICATIONS

Book

1. **Chi, Guangqing** and Jun Zhu. 2019. *Spatial Regression Models for the Social Sciences*. Volume 14 of *Advanced Quantitative Techniques in the Social Sciences*. SAGE Publications: Thousand Oaks, CA. 272 pages. ISBN: 9781544302072; 154430207X. [Reviewed in *Environment and Planning B* (2019); *Spatial Demography* (2020)]

Chinese translation: 2023. Beijing, China: Higher Education Press. 《社会科学的空间回归模型》(王平平[译]). 北京: 高等教育出版社, 260 页. ISBN: 9787040604894.

Commissioned White Paper

2. **Chi, Guangqing**. 2019. "Demographic Forecasting and Future Interstate Highway System Demands." In: *Renewing the National Commitment to the Interstate Highway System: A Foundation for the Future*, pp. 313–350 by the Future Interstate Study Committee of the Transportation Research Board in response to a Congressional request for the Fixing America's Surface Transportation Act of 2015. Washington, D.C.: The National Academies Press. DOI: 10.17226/25334.

Peer-Reviewed Journal Articles (and Forthcoming)

* indicates student authors at submission

3. Sundar, S. Shyam, Eugene C. Snyder, Mengqi Liao, Junjun Yin, Jinping Wang, and **Guangqing Chi**. 2024. "Sharing without Clicking on News in Social Media." *Nature Human Behaviour*. DOI: 10.1038/s41562-024-02067-4.
4. Parkinson, Colby, Bing Pan, Sophie Morris, Will Rice, Derrick Taff, **Guangqing Chi**, and Peter Newman. Accepted. "A Comparison between Nature-Based Tourists' Spatial-Temporal Behaviors using Location Based Service Data and Onsite GPS Tracks." *Sustainability*.
5. Yin, Junjun, Matthew Brooks, Donghui Wang, and **Guangqing Chi**. 2025. "Characterizing Climate-Change Sentiments in Alaska on Social Media." *Digital Geography and Society* 8:100110.
6. Segel, Joel, Alison Chetlen, Mark Ramos, Nicholas Zaorsky, **Guangqing Chi**, and Patrick Luan. 2024. "Individual and Catchment Area Factors Associated with Breast and Cervical Cancer Screening within the Military Health System." *Military Medicine*. DOI: 10.1093/milmed/usae525.
7. Xu, Feng, Huan Wang, and **Guangqing Chi**. 2024. "Does Market-Oriented Land Conveyance Affect Regional Economic Resilience? A Spatial and Mediation Analysis Based on 287 Chinese Cities." *Land Use Policy* 150:107457.
8. Paneru, Suman*, Xinyue Xu, Julian Wang, **Guangqing Chi**, and Yuqing Hu. 2024. "Assessing Building Thermal Resilience in Response to Heatwaves Through Integrating a Social Vulnerability Lens." *Journal of Building Engineering* 98:111219.
9. Zhou, Shuai*, **Guangqing Chi**, Huanguang Qiu, Zhen Lei, Erica Smithwick, and Jiquan Chen. 2024. "Relocation Preference and Settlement: Lessons from the Poverty Alleviation Relocation Program in China." *PLoS ONE* 19(10): e0309534.

10. Van Doren, Taylor, Ryan Brown, **Guangqing Chi**, Patricia Cochran, Katie Cueva, Laura Eichelberger, Ruby Fried, Stacey Fritz, Micah B. Hahn, Ron Heintz, Davin Holen, Noor Johnson, Josée Lavoie, Emily Maxwell, Lisa McNair, Todd Nicewonger, Robert Orttung, Andrey Petrov, and James Powell. 2024. "Beyond COVID: Towards a Transdisciplinary Synthesis for Understanding Responses and Developing Pandemic Preparedness in Alaska." *International Journal of Circumpolar Health* 83 (1): 2404273.
11. Mucioki, Megan, Sean Kelly, Davin Holen, Bronwen Powell, Tikaan Galbreath, Sarah Paterno, Robbi Mixon, and **Guangqing Chi**. 2024. "Interweaving Cultivation with Traditional Food Systems in Rural Alaska." *Agriculture and Human Values*. DOI: 10.1007/s10460-024-10652-6.
12. Scott, Christian*, Kathleen Sexsmith, and **Guangqing Chi**. 2024. "Gendered Migration Patterns and Social Change in Rural Kyrgyzstan." *Migration and Development*. DOI: 10.1177/21632324241285086.
13. Scott, Christian, Elizabeth Mack, **Guangqing Chi**, Kamilya Kelgenbaeva, and Geoffrey Henebry. 2024. "Remittances and Livestock Management in Agropastoral Households in Rural Kyrgyzstan: Telecoupled Impacts of Globalization." *Rural Sociology* 89(3): 456–482.
14. **Chi, Guangqing**, Shuai Zhou*, Megan Mucioki, Jessica Miller*, Lance Howe, Ekrem Korkut, Junjun Yin, Davin Holen, Heather Randell, Ayse Akyildiz*, Kathleen E. Halvorsen, Lara Fowler, James D. Ford, and Ann Tickamyer. 2024. "Climate Impacts on Migration in the Arctic North America: Existing Evidence and Research Recommendations." *Regional Environmental Change* 24: 47.
15. Zhou, Shuai* and **Guangqing Chi**. 2024. "How Do Environmental Changes and Variations Influence Migration? A Meta-regression Analysis of the Environmental Migration Literature." *Demographic Research* 50(2): 41–100.
16. Smith, M. Luke, **Guangqing Chi**, Hannah Hennighausen, Davin Holen, and E. Lance Howe. 2024. "Differences in Perceptions of COVID-19 Risks in a Fishing Community in Alaska, 2020–2021." *Marine Policy* 161: 106045.
17. Pickering, Kerrie, Eranga Galappaththi, James Ford, Tristan Pearce, Lui Manuel, Epi Dauniwaqalevu, Bianca van Bavel, Ingrid Arotoma-Rojas, Carol Zavaleta, Chrisma Perera, Indunil Dharmasiri, Keith Hyams, **Guangqing Chi**, Jonathan Nkalubo, Joana Bezerra, Cecil Togarepi, Martha Hangula, Francis Awaafu, and Hans Amukugo. 2024. "Fiji's Policy Response to COVID-19 and the Integration of Indigenous Voices." *Environmental Science and Policy* 158: 103791.
18. Scott, Christian*, **Guangqing Chi**, and Leland Glenna. 2024. "Household Food Security in the Agropastoral Communities of Rural Southern Kyrgyzstan." *Agriculture and Food Security* 13: 14.
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131. Hofmann, Erin and **Guangqing Chi**. 2021. "'Bride Kidnapping' Haunts Rural Kyrgyzstan, Causing Young Women to Flee Their Homeland." *The Conversation*. June 7, 2021. Available at <https://theconversation.com/bride-kidnapping-haunts-rural-kyrgyzstan-causing-young-women-to-flee-their-homeland-158404>
132. **Chi, Guangqing**. 2020. "#SocialScience: Mining Twitter for Social and Behavioural Research." *Research Outreach* 115: 22–25. Available at <https://researchoutreach.org/articles/social-science-mining-twitter-social-behavioural-research/>

133. Kasu, Bishal* and **Guangqing Chi**. 2019. "The Evolving and Complementary Impacts of Transportation Infrastructures on Growth and Development." N-IUSSP, The International Union for the Scientific Study of Population's online news magazine. Available at <http://www.niussp.org/article/the-impact-of-transportation-infrastructures-on-growth-and-development/>
134. Wang, Donghui* and **Guangqing Chi**. 2018. "The Spatial Heterogeneity of County-Level Fertility in China." Report No. 85, The Young Scholar Committee of Chinese Population Association. Available at <https://mp.weixin.qq.com/s/iJvn7cu6trpPYKhM6reNAA>. [in Chinese]

Software Packages

135. **Chi, Guangqing**, Junjun Yin, Jennifer Van Hook, Eric Plutzer, and Heng Xu. 2020. "Estimation of Twitter user demographics in the USA, 2014." [python package]. Available at <https://doi.org/10.7910/DVN/PKKAPK>. Released on November 23, 2020.
136. Kamenetsky, Maria*, **Guangqing Chi**, and Jun Zhu. 2020. "strm: Spatio-Temporal Regression Modeling." [R package]. Available at <https://cran.r-project.org/web/packages/strm/index.html>. Released on November 2, 2020.
137. Zhou, Shuai*, Yanling Li*, **Guangqing Chi**, Sy-Miin Chow, and Yosef Bodovski. 2020. "GPS2space: An Open-source Python Library for Spatial Data Building and Spatial Measure Extraction." [python package]. Available at <https://gps2space.readthedocs.io/en/latest>. Released on September 23, 2020.

Data Products

138. Napolitano, Rebecca, Steve Colligan, Rakeh Saleem, Davin Holen, Megan Mucioki, Heather Randell, and **Guangqing Chi**. 2024. "Wood River Bridge, AK." Available at <https://doi.org/10.5281/zenodo.10479202>. Released on February 6, 2024.
139. Howe, E Lance, Alfred Allen, Kevin Berry, **Guangqing Chi**, Davin Holen, and Morrison Luke Smith. 2023. "Pandemic Preparedness in Remote Rural Fishing Communities, Alaska and elsewhere, 2020-2021." <https://doi.org/10.18739/A2Q814T7M>. Released on October 27, 2023.
140. **Chi, Guangqing**, Junjun Yin, and Yosef Bodovski. 2020. "Global Tweet Mentions of COVID-19." [webGIS product]. Available at <https://webgis.pop.psu.edu/COVID-19>. Released on April 6, 2020.
141. **Chi, Guangqing**, and Hung Chak Ho. 2020. "Land Developability." Available at <https://doi.org/10.7910/DVN/AMZMWH>. Released on February 10, 2020.
142. **Chi, Guangqing** and Derrick Ho*. 2014. "Land Developability from 2001-2010 in the Continental U.S." [webGIS product]. Available at <https://webgis.pop.psu.edu/LandDevelopability>. Released on September 18, 2014.
143. **Chi, Guangqing** and Derrick Ho*. 2013. "Land Developability: A Measure of the Proportion of Lands Available for Development and Conversion." [webGIS product]. Available at <https://webgis.pop.psu.edu/LandDevelopability>. Released on April 15, 2013.

Journal Special Issues

144. Chi, Guangqing, and Junjun Yin (eds). 2024 Expected. "Big Spatial Data in Demography." *Spatial Demography*.
145. Gao, Jinlong, Yurui Li, Guangqing Chi, and David W. Marcouiller (eds). 2022. "Rural Restructuring and Pathways Towards Revitalization in Transitional China and Beyond." *Growth and Change*.
146. Zhang, Jianjun, Guangqing Chi, Yongheng Rao, and Feng Xu (eds). 2022. "Land Use Change and Anthropogenic Disturbances: Relationships, Interactions, and Management." *Land*. https://www.mdpi.com/journal/land/special_issues/land_anthropogenic

147. Chen, Wanxu, Jie Zeng, and Guangqing Chi (eds). 2022. "Ecosystem Health and Human Well-Being." *International Journal of Environmental Research and Public Health*. https://www.mdpi.com/journal/ijerph/special_issues/0CLH08QMIO

Other Publications

148. National Academies of Sciences, Engineering, and Medicine. 2023. Integrating the Human Sciences to Scale Societal Responses to Environmental Change: Proceedings of a Workshop. Washington, DC: The National Academies Press. DOI: 10.17226/27129. [Contributor]
149. Xu, Feng, Guangqing Chi, Yongheng Rao, and Jianjun Zhang. 2022. "Editorial for the Special Issue 'Land Use Change and Anthropogenic Disturbances: Relationships, Interactions, and Management.'" *Land* 11: 1522. DOI: 10.3390/land11091522.
150. Liang, Yun*, Junjun Yin, Bing Pan, Michael Lin*, and Guangqing Chi. 2021. "Assessing the Validity of SafeGraph Data for Visitor Monitoring in Yellowstone National Park." The Travel and Tourism Research Association, June 14–16, 2021, Fort Worth, TX. [Conference proceeding]
151. Singh, Lisa, Leticia Bode, Pamela Davis-Kean, Tanya Berger-Wolf, Ceren Budak, Guangqing Chi, Andy Guess, Jennifer Hill, Adam Hughes, Brad Jensen, Frauke Kreuter, Jonathan Ladd, Margaret Little, Zeina Mneimneh, Kevin Munger, Josh Pasek, Trivellore Raghunathan, Rebecca Ryan, Stuart Soroka, and Michael Traugott. 2020. "Study Designs for Quantitative Social Science Research Using Social Media." [PsyArXiv, DOI: 10.31234/osf.io/zp8q2]
152. Singh, Lisa, Shweta Bansal, Leticia Bode, Ceren Budak, Guangqing Chi, Kornraphop Kawintiranon, Colton Padden, Rebecca Vanarsdall, Emily Vraga, and Yan Chen Wang*. 2020. "A First Look at COVID-19 Information and Misinformation Sharing on Twitter." [arXiv:2003.13907]
153. Liang, Yun*, Junjun Yin, Bing Pan, Guangqing Chi, Clio Andris, Zach Miller, Jack Jorgenson, and Norma Nickerson. 2020. "Understanding Demographics and Experience of Tourists in Yellowstone National Park through Social Media." The Travel and Tourism Research Association, June 16–18, 2020, Victoria, Canada. [Conference proceeding]
154. Aidaraliev AA, GM Henebry, G Chi, P Groisman, M Tomaszewska, MS Baihodjoev, KA Kelgenbaeva, 2019. "Climatic impacts on mountainous livelihood in Kyrgyzstan." Proceedings of the 15th anniversary of the Foundation of CAIAG "Remote and Terrestrial Research of the Land in Central Asia", September 17–18, 2019, Bishkek, Kyrgyzstan, pp. 148–153 (in Russian). [Conference proceeding]
155. Yin, Junjun, Guangqing Chi, and Jennifer Van Hook. 2018. "Evaluating the Representativeness in the Geographic Distribution of Twitter User Population." GIR'18 Proceedings of the 12th Workshop on Geographic Information Retrieval, ACM SIGSPATIAL, November 6, 2018, Seattle, WA. [Conference proceeding]
156. Wang, Donghui*, Annelise D. Hagedorn*, Guangqing Chi, Guljamal Ibraimova, Kamilya Kelgenbaeva, and Geoffrey M. Henebry. 2016. "Agricultural Productions in Kyrgyzstan, 1990–2014." *The International University of Kyrgyzstan Journal* 29(1): 11–16. [Conference proceeding]
157. Li, Chuo, Amir Ghiasi*, Xiaopeng Li, and Guangqing Chi. 2016. "Socio-demographic Characteristics Associated with Access to Organic and Local Food." #16–2058. The Transportation Research Board, January 10–14, 2016, Washington, D.C. [Conference proceeding]
158. Chi, Guangqing, Bishal Kasu*, and Annelise D. Hagedorn*. 2016. "The Economic Demography of Passenger Intermodal Transportation: Opportunities and Challenges." Project Report No. 13-007. National Center for Intermodal Transportation for Economic Competitiveness, U.S. Department of Transportation. Available at <https://trid.trb.org/view.aspx?id=1400760>.
159. Chi, Guangqing and Bishal Kasu*. 2016. "Economic and Demographic Impacts of Passenger Rail Systems: The Impact of Intercity Passenger Rails on Population and Employment Change in the United States, 2000–2010." Project Report No. 13-008. National Center for Intermodal

Transportation for Economic Competitiveness, U.S. Department of Transportation. Available at <https://trid.trb.org/view.aspx?id=1400761>.

160. Chi, Guangqing and Mary Killsahundred*. 2015. "Rapid City School District School-Level Enrollment Projections 2015–2024." Project Report. The Black Hills Knowledge Network, Rapid City, SD.
161. Chi, Guangqing. 2014. "South Dakota State Data Center Newsletter, Winter 2014 Issue." Rural Life and State Data Center, Department of Sociology and Rural Studies, South Dakota State University.
162. Chi, Guangqing. 2014. "South Dakota State Data Center Newsletter, Fall 2014 Issue." Rural Life and State Data Center, Department of Sociology and Rural Studies, South Dakota State University.
163. Chi, Guangqing. 2014. "Traffic Fatalities Have Been Declining Steadily Since 2005: Why?" In: *Mississippi Traffic Safety Data Book 2014*, pp. 13–16, edited by McKee, C., Burns, M.A., Farrell, B., Neaves, T., Falls, A., Singletary, K., Nguyen, J., & Ginn, A. Starkville, MS: Social Science Research Center, Mississippi State University.
164. Chi, Guangqing and Willie Brown. 2014. "Rising Gasoline Prices Lead to the Reduction in Drunk-Driving Crashes." Policy Brief. Public Safety Data Laboratory, Social Science Research Center, Mississippi State University. Available at <http://psdl.ssrc.msstate.edu/wp-content/uploads/GasolinePricesandDrunk-DrivingCrashes.pdf>.
165. Chi, Guangqing. 2013. "Applied Spatial Data Analysis with R" by Roger S. Bivand, Edzer J. Pebesma, and Virgilio Gómez-Rubio (New York, NY: Springer. 374 + xiv. ISBN: 978-0-387-78170-9). *Spatial Demography* 1(2): 227–228. [Book review]
166. Chi, Guangqing and Jamie Boydston. 2013. "Passenger Usages of the Intermodal Transportation System: An Analysis of the 2009 National Household Travel Survey Data." Project Report. National Center for Intermodal Transportation for Economic Competitiveness, U.S. Department of Transportation.
167. Chi, Guangqing and Jamie Boydston*. 2013. "Rising Gasoline Prices and Residential Relocation Closer to Workplaces." #13–1686. The Transportation Research Board, January 13–17, 2013, Washington, D.C. [Conference proceeding]
168. Chi, Guangqing, Jeremy R. Porter, Arthur G. Cosby, and David Levinson. 2013. "Understanding the Impact of Gasoline Price Changes on Traffic Safety: A Time Geography Approach." #13–1687. The Transportation Research Board, January 13–17, 2013, Washington, D.C. [Conference proceeding]
169. Chi, Guangqing, Mohammed A. Quddus, Arthur Huang*, and David Levinson. 2013. "Urban-Rural Difference of Gasoline Price Effects on Traffic Safety." #13–1688. The Transportation Research Board, January 13–17, 2013, Washington, D.C. [Conference proceeding]
170. Chi, Guangqing and Yanbing Zheng. 2012. "Estimating Transport Footprint along Highways at Local Levels: Combination of Network Analysis and Kriging Methods." #12–0754. The Transportation Research Board, January 22–26, 2012, Washington, D.C. [Conference proceeding]
171. Chi, Guangqing and Jamie Boydston. 2012. "Passenger Responses to Gasoline Price Increases: Residential Relocation and Intermodal Transportation." Project Report. Henry Family Research Fund, College of Arts and Sciences, Mississippi State University.
172. Chi, Guangqing. 2010. "Land Developability and Population Dynamics: Developing an Index of Land Use and Development for Sustainability Research." #3D7–ICSU10387. The First International Conference on Sustainable Urbanization, December 15–17, 2010, Hong Kong. [Conference proceeding]

173. Chi, Guangqing. 2010. "Estimating Transport Ecological Footprint at Local Levels: An Ordinary Kriging Approach." #8A02–ICSU10386. The First International Conference on Sustainable Urbanization, December 15–17, 2010, Hong Kong. [Conference proceeding]
174. Chi, Guangqing. 2010. "Assessing Economic and Demographic Impacts of Intermodal Transportation Systems." Project Report. National Center for Intermodal Transportation, U.S. Department of Transportation.
175. Mo, Xiugen*, Guangqing Chi, and Charles A. Campbell. 2009. "The Temporal and Spatial Effect of Highways on China's Economic Growth." Working Paper. Social Science Research Network. Available at SSRN: <http://ssrn.com/abstract=1580246>.
176. Voss, Paul R. and Guangqing Chi. 2004. "On the Causality between Highway Expansion and Population Change: A Spatial Multivariate Regression Analysis." *Applied Demography* 17(2): 5–6.
177. Chi, Guangqing. 1999. "Identifying and Weighing Environmental Factors in Communities." *Shanghai Property Management* 24: 24–25. [in Chinese]
178. Chi, Guangqing. 1999. "Applying the ISO14001 Environmental Management System to Manage Communities: A Case Study of Ching Chu Garden, Shanghai." *Shanghai Property Management* 24:18–20. [in Chinese]
179. Wang, Xiangrong and Guangqing Chi. 1999. "Implementing the ISO14001 Environmental Management System to Improve the Ecological Construction of Urban Communities." *Shanghai Property Management* 24:10–13, 17. [in Chinese]

PRESENTATIONS (selected)

Invited Talks

Grant writing

- "Inter- and Trans-Disciplinary Research and Grant Proposals: A Social Scientist's Perspective." 2022. Planning and Landscape Architecture, UW-Madison.
- "National Science Foundation: Beyond Standard Grants: NSF's Ten Big Ideas." 2019. ASA annual meeting.

Arctic resilience

- "Climate Change and Health: Research Opportunities and Challenges in the Arctic." 2024. Center for Demography and Ecology, UW-Madison.
- "Pursuing Opportunities for Long-term Arctic Resilience for Infrastructure and Society: A Social Science Perspective." 2024. iHARP workshop, Fairbanks, AK.
- "POLARIS: Pursuing Opportunities for Long-term Arctic Resilience for Infrastructure and Society." 2024. FEWSUS workshop, UT Knoxville.
- 2023. ICIMOD, Nepal.
- 2023. Rural Sociology Brownbag, PSU.
- 2023. UiO Arctic Committee, U Oslo.
- 2023. Climate Solutions Symposium, PSU.
- 2023. iHARP Seminar, UMBC.
- 2022. Science on Tap, PSU.
- 2021. International Workshop on Seismic Resilience of Arctic Infrastructure and Social Systems.

Environmental demography

- "The Socio-Environmental Systems: From High Latitudes to High Altitudes." 2021. SCASD, PA.
- "Environmental Demography." 2019. HDNR Graduate Student Organization, PSU.
- 2019. International U of Kyrgyzstan.
- "Environmental Demography: The Power of Computational and Spatial Analysis for Population

- Research in the Era of Big Data." 2016. Statistics, PSU.
- 2016. The Methodology Center, PSU.
- 2016. The Public Health Sciences Seminar, PSU School of Medicine.
- "Environmental Demography and Computational and Spatial Analysis." 2015. Quantitative Developmental Systems Methodology, PSU.
- "An Integrated Population-Environment Framework." 2014. Geography, SDSU.

Computational and spatial analysis for social and health research

- "Spatial Analysis and Community-Based Research." 2023. CTSI KL2, PSU.
- "The (Mis)Representativeness of Twitter Data for Population Health Research." 2019. Discovery Lunchtime Lecture and BERD Seminar, CTSI, PSU.
- "Generalizing Geo-Tagged Tweets for Population-Infrastructure Research." 2018. NSF CRISP Grantee Workshop.
- "Spatial Analysis for Population Health Research." 2016. BERD Seminar, CTSI, PSU.
- "Patient Centered Research: The Power of GIS in the Era of Big Data." 2015. PSU Medicine.
- "Population-Centered Big Data Research." 2015. IGERT, PSU.
- "South Dakota State Data Center." 2014. Sociology, SDSU.

Coupled pasture-migrant systems

- "Household Food Security and Shock Responses in the Rural Southern Kyrgyz Highlands." 2019. Mountain Societies Research Institute Public Lecture series, Bishkek, Kyrgyzstan.
- "Coupled Pasture-Migrant Systems in Montane Agropastoralist Communities." 2018. RSEEC, UIUC.
- "From Environmental Change to Left-behind Children's Well-being in Rural Highlands." 2017. International U of Kyrgyzstan.
- "Ecological Migration in Rural Drylands of Central and East Asia within a Coupled Community and Pasture System Framework." 2017. NSF and NASA workshop on Coupled Human Nature System in Mongolian Plateau and Urbanization and Sustainability under Global Change and Transitional Economies in Southeast, East, and North Asia. Ulaanbaatar, Mongolia.
- "Sociodemographic Resilience of High Elevation Communities." 2016. U of Central Asia, Bishkek, Kyrgyzstan.

Amenity-driven development

- "Rural Development." 2016. Office of Executive Leadership Education, Temple U.
- "Amenity-Driven Development." 2014. Geospatial Sciences Center, SDSU.
- "Spatial Variation in Amenity-Driven Rural Development: Implications of Economic Climate, Transportation Infrastructure, and Land Use." 2014. AESE/PRI/SSRI, PSU.

Population-infrastructure nexus

- "Population-Infrastructure Nexus: A Heterogeneous Flow-based Approach for Responding to Disruptions in Interdependent Infrastructure Systems." 2015. NSF Workshop on Resilience Research for Critical Infrastructure.
- "Transportation Impacts on Population Change along the Urban-Rural Continuum." 2011. Geography, U Utah.
- "The Impacts of Highway Expansion on Population Change: A Spatial Demographic View." 2009. College of Engineering, Mississippi State.
- "An Integrated Spatial Approach for Examining Population-Environment Interactions: The Impact of Highway Expansion on Population Change." 2007. Sociology, Mississippi State.
- "An Examination of the Causality between Highway Expansion and Population Change." 2004. Urban Transportation Center, UIC.

Gasoline prices and traffic safety

- "Social and Spatial Implications of Gasoline Price Increases." 2015. Rural Sociology Brown Bag and CANA Working Group, PSU.
- 2015. Rotary Club, Watertown, SD.
- 2014. Human Nutrition, SDSU.

2014. Department of Geography, U Toronto Mississauga.
2014. Department of Sociology and Anthropology, UT El Paso.
2013. The Center for the Study of Social Justice, UT Knoxville.

Small-area population estimates and forecasting

"Small-Area Population Forecasting and Spatio-Temporal Modeling: Demographics, Livability, Accessibility, Desirability, and Developability."
2007. Geography and ESPP, MSU.
2006. Geography, SUNY Buffalo.
2006. SSRC, Mississippi State.
"A Spatio-Temporal Population Change Model." 2006. SAIC, UW-Madison.

Conference Presentations

Population Association of America (2004–2008, 2011–2014, 2016–2019, 2021–2024)
Rural Sociological Society (2008–2009, 2015–2019, 2021–2024)
Arctic Congress (2024)
Association of American Geographers (2006, 2014, 2017, 2019)
American Sociological Association (2010, 2019)
Regional Science Association International (2005, 2009, 2012, 2019)
International Symposium on Society and Resource Management (2016, 2019)
American Geophysical Union (2019)
Southern Demographic Association (2004, 2007–2010, 2013, 2017)
International Union for the Scientific Study of Population (2017)
Transportation Research Board (2011–2013, 2016)

TEACHING AND SUPERVISING

PSU = Pennsylvania State University; SDSU = South Dakota State University; MSU = Mississippi State University

Courses Taught at PSU

RSOC 597 Spatial Analysis of Social Data. Spring 2016; Spring 2019; Spring 2021; Spring 2024.
RSOC 597 Elements of Social Statistics. Spring 2018.
CED 410 Population and Environment. Spring 2017; Spring 2020; Spring 2023.

Courses Taught at MSU

SO4703/6703 Population Problems. Fall 2012; Fall 2013.
SO4990/6990 Transportation and Society. Spring 2012; Spring 2013.
SO8243 Spatial Analysis of Social Data. Fall 2008; Summer 2011; Spring 2014.
SO8274 Graduate Social Statistics I. Spring 2009; Spring 2010; Spring 2011.
SO8284 Graduate Social Statistics II. Fall 2009; Fall 2010; Fall 2011.

Ph.D., M.S., and undergraduate students, and Postdoc Advisees

J. Huntley Compton, Rural Sociology and Demography, PSU, PhD in progress
Ayse Akyildiz, Rural Sociology and Demography, PSU, PhD in progress
Jessica Miller, Rural Sociology and Demography, PSU, PhD in progress
Melissa Kim, Undergraduate thesis supervisee, PSU Schreyer Honors College, 2024–
Yining Feng, Postdoctoral Fellow, Population Research Institute, PSU, 2025–
Erika Gavenus, Postdoctoral Fellow, Population Research Institute, PSU, 2024–
Cory Anderson, Postdoctoral Fellow, Population Research Institute, PSU, 2020–2023 (co-mentored with Mary Shenk)
Yining Feng, Rural Sociology and Demography, PSU, PhD 2024 (Postdoc, PSU)
Shuai Zhou, Rural Sociology and Demography, PSU, PhD 2023 (Postdoc, Cornell)
Christian Scott, Rural Sociology and International Agriculture and Development, PSU, PhD 2021 (Postdoc, Michigan State)

Xiaoran Sun, Social Data Analytics, PSU 2019 (research rotation advisee, Assistant Professor, U Minnesota)
Shuai Zhou, Rural Sociology and Demography, PSU, MS 2019
Donghui Wang, Rural Sociology and Demography, PSU, PhD 2018 (Associate Professor, Renmin University of China; co-advised with Leif Jensen)
Bridget Ward, Geographic Information Systems, PSU, MS 2017 (GIS Analyst, HDR, Inc.)
Bishal Kasu, Sociology and Rural Studies, SDSU, PhD 2017 (Postdoc, South Dakota State U)
Derrick Shapley, Sociology, MSU, PhD 2015 (Associate Professor, Talladega College)

Ph.D. Dissertation and M.S. Thesis Committees

Colby Parkinson (Recreation, Park, and Tourism Management, PSU, PhD in progress); Lara Maalouf (Architectural Engineering, PSU, PhD in progress); Bianca Wirth (Criminology, PSU, PhD in progress); Rosina Adhikari (Architectural Engineering, PSU, PhD in progress); Kripa Neupane (Forest Resources, PSU, PhD in progress); Shiyan Zhang (Geography, PSU, PhD in progress); Haoyang Zhang (Sociology, PSU, PhD in progress); Saydeh Karabatis (Information Systems, UMBC, PhD in progress); Chen Xia (Architectural Engineering, PSU, PhD 2024); Jessie Slepicka (Criminology, PSU, PhD 2024); Yun Liang (Recreation, Park, and Tourism Management, PSU, PhD 2023); Rachel L. McNealey (Criminology, PSU, PhD 2023); Katrina Alford (Rural Sociology and Demography, PSU, PhD 2023); Megan Evans (Sociology and Demography, PSU, PhD 2023); Grace Wildermuth (Rural Sociology and Demography, PSU, PhD 2022); Dylan Davis (Anthropology, PSU, PhD 2022); Kaida Zhang (Economics, PSU, PhD 2022); Katie Sneeringer (Public Health Sciences, PSU, PhD 2021); Laura Stiberman (Sociology and Demography, PSU, MS 2021); Xuetao Huang (Agricultural, Environmental, and Regional Economics and Demography, PSU, PhD 2021); Richard Bankoff (Bioethics and Anthropology, PSU, PhD 2020); Qiong Zhu (Higher Education, PhD 2019); Wei-Lin Wang (Rural Sociology and Demography, PSU, PhD 2019); Abou Traore (Rural Sociology, PSU, PhD 2018); Bo Bian (Economics, PSU, PhD 2018); Yunmei Lu (Sociology, PSU, PhD 2018); Mohsen Parsafard (Civil and Environmental Engineering, U South Florida, PhD 2017); Chia-Yueh Hus (Social Work and Social Administration, U of Hong Kong, PhD 2017); Andrew Gladfelter (Criminology, PSU, PhD 2016); Danya Kim (Urban and Regional Planning, U of Wisconsin-Madison, PhD 2016); Jamie Boydstun (Sociology, MSU, PhD 2014); Onyumbwe E. Lukongo (Finance and Economics, MSU, PhD 2014); Li Zheng (Sociology, MSU, PhD 2013); Philip Mason (Sociology, MSU, PhD 2012); Kaustav Misra (Finance and Economics, MSU, PhD 2010); John S. McCown (Sociology, MSU, MS 2011); Jamie Boydstun (Sociology, MSU, MS 2009)

PROFESSIONAL SERVICE (selected)

Disciplinary Service

Editorial:

Deputy Editor, *Demography* (2016–2019)
Editorial Board Member, *Social Forces* (2023–2026)
Advisory Board member, *Population and Environment* (2019–)
Editorial Board member, *Spatial Demography* (2012–)
Editorial Board member, *SN Social Sciences* (2022–)
Ad hoc Article Editor, *SAGE Open* (2014)

Author, *Sixth National Climate Assessment* (NCA6), Human Health chapter (2024–2027)

National Academies Board on Environmental Change and Society (2023)

Member of Planning Committee for the workshop “Integrating the Human Sciences to Scale Societal Responses to Environmental Change”

NAS Advisory Panel member for

TRB/American Association of Motor Vehicle Administrators: Project 19-01 Demographic and Technological Trends Impacting the DMV of the Future (2019–2020)

Pan-HDR Ice-Melt Community Council member, iHARP, UMBC (2024–present)

NSF review panels:

Civic Innovation Challenge (2021), Coastlines and People Hubs for Research and Broadening Participation (2022), Engineering Research Centers (2015), Geography and Spatial Sciences (2013), Human, Disaster, and the Built Environment (2022), Human Networks and Data Science–Infrastructure (2021, 2023), Methodology, Measurement, and Statistics (2014, 2020), NSF Research Traineeship (2020), Office of Polar Program (2024), Smart & Connected Communities (2018), Sociology (2018, 2020, 2023)

NIH review panels:

Analytics and Statistics for Population Research (2024), COBRE P20 Centers of Biomedical Research Excellence (2023), NICHD P2C Population Dynamics Research Infrastructure Program (2023), Social Science and Population Studies B (2015), ZRG1 PSE-C 04 (2016), ZRG1 RPHB-R (2018), ZAG1 ZIJ-5 (2017)

Occasional reviewer for:

NASA: Postdoctoral Program (2016)
European Research Council (ERC): Advanced Grant (2017)
Trans-Atlantic Platform (T-AP) for Social Sciences and Humanities (2021)
U.S.-Israel Binational Science Foundation (2019)
UCLA Institute of Transportation Studies (2020)
UNEP's Global Environment Outlook (GEO-7) Report (2024)
University of Cyprus (2024)
USDA Forest Service project reports (2013)

Ad hoc reviewer for journals

American Journal of Agricultural Economics; American Journal of Public Health; American Journal of Preventive Medicine; Annals of the American Association of Geographers; Annals of Operations Research; Annals of Regional Science; Applied Ecology and Environmental Research; Applied Spatial Analysis and Policy; BMC Public Health; Bulletin of Geography, Socio-economic Series; Climate Risk Management; Computers, Environment and Urban Systems; Demographic Research; Demography; Ecological Economics; Ecological Processes; Economic Papers; Environment and Planning A; Environmental Research Letters; Environmental Monitoring and Assessment; Geographical Analysis; Growth and Change; Habitat International; International Journal of Digital Earth; International Journal of Geographical Information Science; Jahrbuch für Regionalwissenschaft (Review of Regional Research); International Migration Review; Journal of Appalachian Studies; Journal of Environmental Planning and Management; Journal of Geographical Systems; Journal of Healthcare Informatics Research; Journal of Maps; Journal of Regional Analysis and Policy; Journal of Transport and Land Use; Journal of Urban Technology; Land; Land Use Policy; Landscape and Urban Planning; Mathematical Population Studies: An International Journal of Mathematical Demography; Nature Cities; Nature Communications; Papers in Regional Science; Population and Environment; Population Research and Policy Review; Population, Space and Place; Preventive Medicine; Review of Regional Studies; Regional Studies; Rural Sociology; Social Forces; Social Science and Medicine; Social Science Research; Sociological Inquiry; Sociological Perspectives; Spatial Demography; Spatial Economic Analysis; Scientific Reports; Sustainability; The Rangeland Journal; Theory, Culture & Society; Transport Findings; Transport Policy; Transportation Research Part A: Policy and Practice; Transportation Research Record; Urban Studies

Review books for publisher: *Routledge* (2013); *Springer* (2022); *Peter Lang Group* (2023)

US Bureau of the Census 2014–2015

Member, Federal-State Cooperative Program for Population Estimates; Member, 2020 Census Redistricting Data Program

Invited Participant, Towards Scenarios of U.S. Demographic Change, the Scenarios and Interpretive Science Coordinating Group, U.S. Global Change Research Program, 2014

Population Association of America: Annual Meeting Program Committee Member, 2018, 2022; Session Organizer, 2017, 2018, 2025; Session Chair, 2017, 2018, 2025; Session Discussant, 2010, 2017

Rural Sociology Society: Publication Committee Chair-Elect, 2022–2023, Chair 2023–2024; Council Member, 2022–2024; Panelist, 2016; Session Chair, 2009

Southern Demographic Association: Member, Walter E. Terrie Award Committee, 2009, 2010, 2012

University Service

Member, Advisory Board, Data-to-Policy and Evidence-to-Impact Collaborative, 2019–
Member, Research Computing and Cyberinfrastructure (RCCI) Governance Council's Executive
Committee, 2022–2023
Member, Steering Committee, Social Science Research Institute, 2017–2024
Member, Steering Committee, Institute for CyberScience, 2017–2018
At-Large Representative, Internal Advisory Board, Population Research Institute, 2016–2019
Member, Advisory Board, Graduate Program in Demography, 2016–2023
Delegate of Population Research Institute and Social Science Research Institute to the University
Consortium for Geographic Information Science (UCGIS), 2015–2020
Member, The Scientific Advisory Committee for the Community Sciences and Health Outcomes
Shared Resources, Penn State Cancer Institute, 2016–2018
Chair, Graduate Faculty Review Committee, College of Agricultural Sciences, 2019–2020
Liaison/Member, ME John Seminars Committee, AESE, 2017–2023, 2024–2025
Member, Promotion and Tenure Committee, AESE, 2016–2020, 2021–2023
Member, Faculty Search Committee, AESE and SSRI, 2015–2016, 2017–2020, 2023–2024

MEDIA COVERAGE

ABC, Aberdeen News, American Thinker, BNET, Christian Science Monitor, Chron, Forbes, Fortune, Fox 5 News, Huffington Post, Kiplinger's Personal Finance, Money, National Public Radio, Star Tribune, South Dakota Public Broadcasting, The Conversation, The Oregonian, The Weather Channel, U.S. News and World Reports, VOAnews, WalletHub, and WAMC Northeast Public Radio, among over 2,000 media appearances.

REFERENCES

Available upon request.