

Feinuo Sun

February 2024

227 Maverick Activities Center,
500 W. Nedderman Dr,
Arlington, TX 76019

Phone: (817) 272-3295 Email: Feinuo.Sun@uta.edu

RESEARCH INTERESTS

Social Determinants of Health; Pain; Opioid; Rural-Urban Health Disparities; Spatial Analysis;
Quantitative Methods

TEACHING INTERESTS

Population Health and Aging; Statistics; Social Research Methods

EMPLOYMENT

- 2023.9-present Assistant Professor in Public Health
Department of Kinesiology
University of Texas at Arlington
- 2023.5-2023.8 Visiting Researcher
Ined - French Institute for Demographic Studies, Paris, France
- 2021.8-2023.8 Postdoctoral Fellow Scholar
Global Aging and Community Initiative,
Mount Saint Vincent University, Halifax, Canada
- Project: *Demography of Chronic Pain*
(National Institutes of Health R01 AG065351)

Fellow 2021-2022
Consortium on Analytics for Data-Driven Decision-Making (CAnD3),
McGill University, Montreal, Canada

EDUCATION

- 2015.8-2021.8 Ph.D. in Sociology
University at Albany, State University of New York
- Dissertation:
Rurality and the Opioid Crisis in U.S. Counties: a Spatiotemporal Investigation
Committee: Tse-Chuan Yang (Chair), Kate W. Strully, Glenn Deane
(2020-2021 Dissertation Research Award, Rural Sociological Society)
 - Certificate of Graduate Study in *Demography*
- 2011.8-2015.6 B.E. in Traffic Engineering
Southeast University, Nanjing, China
- B.A in Administrative Management (Self Examination)
Nanjing University, Nanjing, China

PUBLICATIONS

- Sun, Feinuo**, Anna Zajacova, and Hanna Grol-Prokopczyk. 2024. "The geography of arthritis-attributable activity limitation and pain: A county-level spatial analysis." *PAIN*.
<http://dx.doi.org/10.1097/j.pain.0000000000003155>
- Sun, Feinuo**, Zachary Zimmer, and Anna Zajacova. 2023. "Pain and disability transitions among older Americans: The role of education." *The Journal of Pain*
<https://doi.org/10.1016/j.jpain.2023.01.014>
- Sun, Feinuo**, Jie Yao*, Shichao Du*, Feng Qian, Allison Appleton, Cui Tao, Hua Xu, Lei Liu, Qi Dai, Brian T. Joyce, Drew R. Nannini, Kai Zhang, and Lifang Hou. 2023. "Social determinants, cardiovascular disease, healthcare cost: A nationwide study in the U.S. using machine learning." *Journal of the American Heart Association*
<https://doi.org/10.1161/JAHA.122.027919>
- * Student coauthor
- Sun, Feinuo**, Zachary Zimmer, and Anna Zajacova. 2022. "Educational differences in life expectancies with and without pain." *Journal of Gerontology: Social Sciences*
<https://doi.org/10.1093/geronb/gbac169>
- Yang, Tse-Chuan, Carla Shoff, Seungwon. E. Choi, and **Feinuo Sun**. 2022. "Multiscale dimensions of county-level disparities in opioid use disorder rates among older Medicare beneficiaries." *Frontiers in Public Health* <https://doi.org/10.3389/fpubh.2022.993507>
- Yang, Tse-Chuan, Stephen Matthews, and **Feinuo Sun**. 2022. "Multiscale dimensions of spatial process underlying US county COVID-19 fully vaccinated rates." *American Journal of Preventive Medicine* <https://doi.org/10.1016/j.amepre.2022.06.006>
- Chen, Vivian Yi-Ju, Kiwoong Park, **Feinuo Sun**, and Tse-Chuan Yang. 2022. "Assessing COVID-19 risk with temporal indices and geographically weighted ordinal logistic regression in US counties." *PLoS ONE* 17(4): e0265673. doi: 10.1371/journal.pone.0265673
- Sun, Feinuo**. 2022. "Rurality and opioid prescribing rates in U.S. counties from 2006 to 2018: A spatiotemporal investigation." *Social Science & Medicine* 296: 114788.
<https://doi.org/10.1016/j.socscimed.2022.114788>
- Sun, Feinuo** and Zai Liang. 2021. "Parental migration and anemia status of children in China." *Social Science & Medicine* 270: 113680. <https://doi.org/10.1016/j.socscimed.2021.113680>
- Yang, Tse-Chuan, Seungwon. E. Choi, and **Feinuo Sun**. 2021. "COVID-19 confirmed cases in US counties: The role of racial/ethnic density and residential segregation." *Ethnicity & health* 26(1): 11-21. <https://doi.org/10.1080/13557858.2020.1830036>
- Sun, Feinuo**, Stephen A. Matthews, Tse-Chuan Yang, and Ming-Hsiao Hu. 2020. "A spatial analysis of COVID-19 period prevalence in US counties through June 28, 2020: Where geography matters?" *Annals of Epidemiology* 52: 54-59. <https://doi.org/10.1016/j.annepidem.2020.07.014>
- Yang, Tse-Chuan, **Feinuo Sun**, and Seungwon. E. Choi. 2020. "Rural residence and mortality in later life: Exploring the role of social integration and social support from a longitudinal perspective." *Population, Space and Place* 27(1): e2377. <https://doi.org/10.1002/psp.2377>
- Sun, Feinuo**, Zhen Liu, and Kathryn S. Schiller. 2020. "Parental migration and children's educational aspirations: China and Mexico in a comparative perspective." *Chinese Sociological Review* 52(4): 482-486. <https://doi.org/10.1080/21620555.2020.1779052>

Liang, Zai and **Feinuo Sun**. 2020. “The Lasting impact of parental migration on children’s education and health outcomes: The case of China.” *Demographic Research* 43: 217-244.
<https://doi.org/10.4054/DemRes.2020.43.9>

Yang, Tse-Chuan and **Feinuo Sun**. 2019. “A longitudinal analysis of how perceived discrimination gets under the skin: Investigating the gender and racial/ethnic differences.” *EurAmerica* 49(2): 243-285.

† Both authors contributed equally to the manuscript.

Yang, Tse-Chuan, Stephen Matthews, **Feinuo Sun**, and Marina Armendariz. 2019. “Modeling the relative importance of within and between county effects in an ecological study of the association between social capital and mental distress.” *Preventing Chronic Disease* 16.
<https://doi.org/10.5888/pcd16.180491>

WORK IN PROGRESS

Submitted Zachary Zimmer, **Feinuo Sun**, and Amber Duynisveld. “Are we adding pain-free years to life? A test of compression versus expansion of morbidity.”

Working **Sun, Feinuo**, Zachary Zimmer, and Nicolas Brouard. “Life expectancies with and without pain across rural-urban continuum in the US.”

Sun, Feinuo and Zachary Zimmer. “Examining patterns in pain and disability among older adults using a group-based dual trajectory modeling approach.”

Sun, Feinuo. “Deaths of despair or drug environments? A spatiotemporal investigation of rurality and opioid-involved mortality rates in U.S. counties.”

ACTIVE GRANTS

2023-2024 “Rural-Urban and Within-Rural Disparities in Chronic Pain Among Older Adults.” Interdisciplinary Network on Rural Population Health and Aging (INRPHA) Pilot Grant (\$20,484).

Role: Principal Investigator (Collaborators: Yulin Yang and Anna Zajacova)

GRANTS IN PROGRESS

Submitted “Temperature and Chronic Pain among Older Adults: Evidence from the Health and Retirement Survey” Syracuse University, Center for Aging and Policy Studies Pilot Grant (\$39,998)

Role: co-Principal Investigator

Submitted “Air Pollution and Chronic Pain among Older Adults: Evidence from the Health and Retirement Survey” University of Minnesota, Life Course Center Pilot Grant (\$22,644)

Role: Principal Investigator

Submitted “County-Level Variation in Chronic Pain Conditions among the U.S. Medicare Beneficiaries” UTA Research Enhancement Program (\$11,979)

Role: Principal Investigator

Submitted “UTA CONHI Make Advances for Vulnerable populations Including Rural health Innovations in Clinical (MAVIRIC) Pain Research Training Program.” National Institute of Health HEAL Pain T90/R90 (\$2,700,974)

Role: Postdoc mentor (PI: Renee Manworren and Elizabeth Merwin)

Preparing “Modeling Inter-individual Differences to Address Pain of Sickle cell disease.”
National Institute of Health HEAL Pain NS-24-021 R01 (\$3,250,000)
Role: Co-Investigator (PI: Renee Manworren)

PAST GRANTS AND AWARDS

2023	2022-2023 DRIP Campaign for Foreign Researchers and Doctoral Students (EUR \$5400), Ined – French Institute for Demographic Studies
2021	2021-2022 CSDC-CAnD3 Fellowship (CAD \$10,000)
2021	2020-2021 Dissertation Research Award, Rural Sociological Society (\$1000)
2020	Benevolent Association Research and Creative Activity Grant, University at Albany, State University of New York (\$400)
2019	Professional Development Award, Graduate Student Employees Union, University at Albany, State University of New York (\$500)
2018	Student Paper Prize, Urban China Research Network Conference
2018	Travel Award, International Chinese Sociological Association (\$200)
2018	Professional Development Award, Graduate Student Employees Union, University at Albany, State University of New York (\$750)
2018	Travel Grants, Department of Sociology, University at Albany, State University of New York (\$400)
2017	Travel Grants, Department of Sociology, University at Albany, State University of New York (\$400)

PRESENTATIONS

Sun, Feinuo. “Spatial Inequality of Pain.” Invited talk at the Fall 2023 CONHI clinical translational research forum seminar series, the University of Texas at Arlington, Arlington, TX, 2023.

Sun, Feinuo. “The geography of arthritis-attributable activity limitation and pain: A county-level spatial analysis.” Invited talk at the Research unit annual meeting of Mortality, Health, Epidemiology Unit, French Institute for Demographic Studies, Paris, France, 2023.

Sun, Feinuo and Zachary Zimmer. “Examining patterns in pain and disability among older adults using a group-based dual trajectory modeling approach.” Regular session presentation at the REVES (International Network on Health Expectancy and the Disablement Process) Meeting, Padova, Italy, 2023.

Zachary Zimmer and **Feinuo Sun.** “Are we adding pain-free life to years? Testing a compression of morbidity argument.” Regular session presentation at the REVES (International Network on Health Expectancy and the Disablement Process) Meeting, Padova, Italy, 2023.

Sun, Feinuo, Zachary Zimmer, and Nicolas Brouard. “Life expectancies with and without pain across rural-urban continuum in the US.” Regular session presentation at the REVES (International Network on Health Expectancy and the Disablement Process) Meeting, Halifax, Canada, 2022.

Sun, Feinuo, Zachary Zimmer, and Anna Zajacova. “Pain and disability transitions among older Americans: The role of education.” Flash session presentation at the Population Association of America Annual Meeting, Atlanta, GA, 2022.

- Sun, Feinuo.** “Rurality and the opioid-involved mortality rates in U.S. counties: A spatiotemporal investigation.” Regular session presentation at the American Sociological Association Annual Meeting, Virtual Conference, 2021.
- Liu, Han and **Feinuo Sun.** “Health effects of men’s employment trajectories during the Great Recession” Regular session presentation at the American Sociological Association Annual Meeting, Virtual Conference, 2020.
- Liang, Zai and **Feinuo Sun.** “The Lasting Impact of Parental Migration on Children’s Education and Health Outcomes: The Case of China” Poster Presentation at Population Association of America Annual Meeting, 2020 (canceled due to COVID pandemic).
- Sun, Feinuo.** “Contextual determinants on migrant workers’ household intentions in China–Interacting with hukou status and migration distance.” Regular session presentation at the Population Association of America Annual Meeting, Austin, TX, 2019.
- Liu, Han and **Feinuo Sun.** “Career trajectory and health in mid-adulthood.” Poster presentation at the Population Association of America Annual Meeting, Austin, TX, 2019.
- Sun, Feinuo** and Zai Liang. “Parental migration and anemia status of children in rural China” Roundtable Session Presentation at American Sociological Association Conference, Philadelphia, PA, 2018.
- Sun, Feinuo.** “Parental migration and anemia status of children in rural China” Regular Session Presentation at Regular Session Presentation at Urban China Research Network, Wuhan, China, 2018.
- Sun, Feinuo.** “What do migrant workers care about most? An examination on city evaluations and migrants' household intentions in China” Regular Session Presentation at Eastern Sociological Society Conference, Baltimore, MD, 2018.
- Sun, Feinuo.** “Land abandonment by households with out-migrant workers: The gender effect” Regular Session Presentation at Urban China Research Network, Shanghai, China, 2017.

TEACHING EXPERIENCE

- 2024- Instructor
Department of Kinesiology, University of Texas at Arlington
Intermediate Biostatistics (1 section)
- Sep 2022 Presenter
International Workshop on Health Expectancy: An Educational, Training and Networking Opportunity for Scholars for the 2022 meeting of REVES in Halifax (for early-career scholars, 2 days in-person)
- Fa 2021 Guest Lecturer
Department of Family Studies and Gerontology, Mount Saint Vincent University
Global Health and Aging in the Context of Covid 19
(for graduate and undergraduate students, 1 section in-person)
- 2018-2021 Instructor
Department of Sociology, University at Albany, State University of New York
Introduction to Social Research (3 sections in-person, 2 sections asynchronous)
Introduction to Sociology (1 section in-person, 1 section asynchronous)
The American Welfare State (1 section asynchronous)
- Spr 2018 Co-instructor

Department of Sociology, University at Albany, State University of New York
Statistics for Sociologists (1 section in-person)

Spr 2017 Guest Lecturer

Department of Sociology, University at Albany, State University of New York
Research Proposal Seminar (for honors undergraduate students, 1 section in-person)

2015-2017 Teaching Assistant (grader)

Department of Sociology, University at Albany, State University of New York
Social Demography (2 sections)
Contemporary Immigration and the Second Generation (1 section)
Statistics for Sociologists (3 sections)

RESEARCH EXPERIENCE

2016-2020 Research Assistant

Research Foundation, University at Albany, State University of New York
Center for Social and Demographic Analysis (CSDA), University at Albany, State University of New York
“*Exploring the Relationship between Medicare-Medicaid Dual-Eligibility and Opioid Use Disorder Among Older Adults Living in Rural America*”
NIA-supported Interdisciplinary Network on Rural Population Health and Aging, Tse-Chuan Yang (PI) and Benjamin Shaw (Co-PI).

“*The Educational and Health Consequences of Parental Migration on Children*”
US National Science Foundation (SES#1524282), Zai Liang (PI), Kathryn S. Schiller and Glenn Deane (Co-PI).

“*A Study on Migrant Children and Left behind Children in China*”
National Social Science Foundation of China (15AZD053), Zai Liang (PI).

“*Population Research Center Core Grant*”
Eunice Kennedy Shriver National Institute of Child Health and Human Development (R24-HD044943), Jennifer VanHook (PI), Tse-Chuan Yang (Co-PI) and others.

2015-2018 Graduate Assistant

Department of Sociology, University at Albany, State University of New York

PROFESSIONAL SERVICE

Occasional referee: *Social Forces*, *World Development*, *American Journal of Preventive Medicine*, *Epidemiology*, *Health & Place*, *Public Health*, *Mathematical Population Studies*, *Spatial Demography*, *SSM-Mental Health*, *BMJ Open*, *Journal of Spatial Science*, *BMC Public Health*, *BMC Medicine*, *Frontiers in Sustainable Cities*, *Sustainable Cities and Society*, *PloS ONE*, *International Journal of Environmental Research and Public Health*

Editor: Demopaedia: A Multilingual Demographic Dictionary, Chinese second edition

PROFESSIONAL MEMBERSHIPS

Population Association of America
American Sociological Association
American Public Health Association

Society for Epidemiologic Research
Rural Sociological Society
REVES (International Network on Health Expectancy and the Disablement Process)
United States Association for the Study of Pain
International Association for the Study of Pain
Interdisciplinary Association for Population Health Science

SKILLS AND ABILITIES

Programs STATA/R/Arc GIS/Geoda/HLM/SPSS
Language English (Fluent), Mandarin (Native)

REFERENCES

Zachary Zimmer
Professor, Government of Canada Research Chair, Tier I Professor, Family Studies and Gerontology
Director, Global Aging and Community Initiative
Mount Saint Vincent University, Canada
(902) 457-5541
zachary.zimmer@msvu.ca

Tse-Chuan Yang
Associate Professor, Department of Sociology
University at Albany, State University of New York
(814) 777-6592
tyang3@albany.edu

Anna Zajacova
Professor, Department of Sociology
Western University, Canada
(519) 661-2111
anna.zajacova@uwo.ca