

Jiao (Jo) Yu, PhD

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Research Interests

Social Determinants of Health, Aging and Life Course, Place-based Health Disparities, Cognitive Aging, Quantitative and Data Science Methods, Global Health, Reproductive Health

Education

2021	Ph.D. Sociology	Case Western Reserve University
2014	M.A. Sociology	Peking University
2011	B.A. Sociology & Finance	Central University of Finance and Economics

Academic Positions

2023 - Present	Postdoctoral Associate <i>School of Public Health, Yale University, New Haven, CT</i>
2021 - 2023	Postdoctoral Associate <i>Minnesota Population Center, University of Minnesota, Minneapolis, MN</i>

Peer-Reviewed Journal Articles

25. Qin, W., **Yu, J.**, & Brown, T. (2025). Perceived Neighborhood Disorder, Health Behaviors, and Inflammation Among Older Adults: A Mediation Analysis. *Journal of Aging and Health*. doi:10.1177/08982643251356732
24. Luetke, M., Grace, K., **Yu, J.**, & Gunther, M. (2024). Armed Conflict and Pregnancy Termination: Evidence from Burkina Faso. *Spatial Demography*, 12(3), 9. doi:10.1007/s40980-024-00129-9
23. Qin, W., Nicklett, E. J., **Yu, J.**, & Nguyen, A. W. (2024). Neighborhood social cohesion and physical disorder in relation to social isolation in older adults: racial and ethnic differences. *BMC Public Health*, 24(1), 2574. <https://doi.org/10.1186/s12889-024-20112-9>
22. **Yu, J.**, Huang, W., & Kahana, E. (2024). Temporal and Racial/Ethnic Patterns of Social Engagement among Older Adults: Evidence from American Time Use Survey 2019 to 2022. *Journal of Applied Gerontology*. doi: 10.1177/07334648241263483
21. **Yu, J.**, Grace, K., Boyle, E. H., Mikal, J. P., Gunther, M., & Kristiansen, D. (2024). COVID-19 and Contraceptive Use in Two African Countries: Examining Conflicting Pressures on Women. *Population and Development Review*. doi: 10.1111/padr.12606

20. Talmor-Barkan, Y, **Yu, J.**, Yacovzada, N. S., Pravda, N. S., Ayers, C., de Lemos, J. A., ... & Neeland, I. J. (2024). Trimethylamine-N-Oxide and Related Metabolites: Assessing Cardiovascular Risk in the Dallas Heart Study. *Mayo Clinic Proceedings*. doi: 10.1016/j.mayocp.2023.12.021
19. Strony, J. T., Raji, Y., Trivedi, N. N., McMellen, C. J., **Yu, J.**, Calcei, J. G., ... & Gillespie, R. J. (2023). Effects of Opioid-Limiting Legislation in the State of Ohio on Opioid Prescriptions After Shoulder Arthroscopy. *Orthopaedic Journal of Sports Medicine*, 11(11). doi:10.1177/23259671231202242
18. **Yu, J.**, Boyle, E. H., Zhang, Y., Grace, K., & Sangli, G. (2023). Trust and COVID precautionary measures during the early days of the COVID-19 pandemic: Evidence from two African countries. *Social Science and Medicine - Population Health*, 22.doi: 10.1016/j.ssmph.2023.101397
17. **Yu, J.**, Qin, W., Huang, W., & Thomas, K. (2023). Oral health and mortality among older adults: a doubly robust survival analysis. *American Journal of Preventive Medicine*, 64(1), 9-16.doi: 10.1016/j.amepre.2022.08.006.
16. Strony, J. T., Raji, Y., Ina, J. G., **Yu, J.**, Megerian, M. F., McCollum, S. W., ... & Salata, M. J. (2023). Effects of Opioid-Limiting Legislation and Increased Provider Awareness on Postoperative Opioid Use and Complications After Hip Arthroscopy. *Orthopaedic Journal of Sports Medicine*. 11(5), <https://doi.org/10.1177/23259671231162340>
15. Mengers, S. R., Strony, J. T., Sivasundaram, L., **Yu, J.**, Goodfellow, D., Salata, M. J., ... & Karns, M. R. (2022). Oral ketorolac as an adjuvant agent for postoperative pain control after arthroscopic anterior cruciate ligament reconstruction: A prospective, randomized controlled study. *JAAOS - The Journal of the American Academy of Orthopaedic Surgeons*, 30(24), e1580–e1590. doi: 10.5435/JAAOS-D-21-00721.
14. Mouchati, C., El Kamari, V., Sattar, A., **Yu, J.**, & McComsey, G. A. (2022). Comprehensive assessment of neurocognitive function, inflammation markers, and adiposity in treated HIV and control. *Medicine*, 101(42), e31125. doi: 10.1097/MD.00000000000031125
13. Furdock, R. J., Cho, E., Benedick, A. J., **Yu, J.**, Sattar, A., & Liu, R. W. (2022). The utility of the modified Fels knee skeletal maturity system in limb length prediction. *Journal of Pediatric Orthopaedics*, 42(6), 327-334. doi: 10.1097/BPO.0000000000002157
12. Toe, S., Nagy, M., Albar, Z., **Yu, J.**, Sattar, A., Nazzinda, R., ... & Dirajlal-Fargo, S. (2022). Ambient air pollution is associated with vascular disease in Ugandan HIV-positive adolescents. *AIDS*, 36(6), 863-870. doi: 10.1097/QAD.0000000000003186
11. Wang, F., Qin, W., & **Yu, J.** (2022). Neighborhood social cohesion and mobility limitations among community-dwelling older Americans: The mediating roles of depressive symptoms and mastery. *The International Journal of Aging and Human Development*. 94(3), 290–311. doi: 10.1177/00914150211037657
10. **Yu, J.**, Huang, W., & Kahana, E. (2022). Investigating factors of active aging among Chinese older adults: A machine learning approach. *The Gerontologist*, 62(3), 332-341. doi: 10.1093/geront/gnab058.
9. Toly, V. B., Zauszniewski, J. A., **Yu, J.**, Sattar, A., Rusincovitch, B., & Musil, C. M. (2022). Resourcefulness intervention efficacy for parent caregivers of technology-dependent children: a randomized trial. *Western Journal of Nursing Research*, 44(3), 296–306. doi:10.1177/01939459211062950
8. Raji, Y., Strony, J. T., Trivedi, N. N., Kroneberger, E., **Yu, J.**, Calcei, J. G., ... & Gillespie, R. J. (2022). Effects of opioid-limiting legislation on postoperative opioid use in shoulder arthroplasty in an epidemic epicenter. *Journal of Shoulder and Elbow Surgery*, 31(2), 269–75. doi: 10.1016/j.jse.2021.07.001

7. Dirajlal-Fargo, S., Sattar, A., **Yu, J.**, Albar, Z., Chaves, F. C., Riedl, K., ... & Funderburg, N. (2021). Lipidome association with vascular disease and inflammation in HIV+ Ugandan children. *AIDS*, 35(10),1615–1623. doi: 10.1097/QAD.0000000000002923.
6. **Yu, J.**, Kahana, E., Kahana, B., & Zhang, Y. (2021). Driving cessation in old age: gender influences on mortality. *Journal of Aging and Health*, 33(7–8), 447–57. doi: 10.1177/0898264321991254
5. **Yu, J.**, Yang, Y., & Kahana, E. (2020). Productive activity patterns and functional health: A comparison of urban and rural Chinese older adults. *The International Journal of Aging and Human Development* 91(4), 538–562. doi: 10.1177/0091415019900168
4. **Yu, J.**, Kahana, E., Kahana, B., & Han, C. (2021). Depressive symptoms among elderly men and women who transition to widowhood: comparisons with long term married and long term widowed over a 10-year period. *Journal of Women & Aging*, 33(3),231–246. doi: https://doi.org/10.1080/08952841.2019.1685855
3. Dirajlal-Fargo, S., **Yu, J.**, Albar, Z., Sattar, A., Mahtab, S., Jao, J., ... & McComsey, G. A. (2020). Monocyte activation and gut barrier dysfunction in South African youth on antiretroviral therapy and their associations with endothelial dysfunction. *AIDS*, 34(11),1615–1623. doi: 10.1097/QAD.0000000000002615
2. Dirajlal-Fargo, S., **Yu, J.**, Kulkarni, M., Sattar, A., Funderburg, N., Barkoukis, H., & McComsey, G. A. (2019). Brief report: zinc supplementation and inflammation in treated HIV. *Journal of Acquired Immune Deficiency Syndromes*, 82(3),275–280. doi: 10.1097/QAI.0000000000002129
1. Kahana, B., **Yu, J.**, Kahana, E., & Langendoerfer, K. B. (2018). Whose advocacy counts in shaping elderly patients' satisfaction with physicians' care and communication?. *Clinical Interventions in Aging*, 13:1161–68. doi: 10.2147/CIA.S165086

*Featured in the [Association of Health Care Journalists](#)

Book Chapters

1. Kelley, J. A., & **Yu, J.** (2019). Social Change, Social Institutions, and Cohorts: Contextualizing Men's Health in Later Life. In Toni C. Antonucci (Eds.), *Annual Review of Gerontology and Geriatrics* Volume 39 (pp. 5-22). Springer Publishing Company.
2. Dannefer, D., Han, C., & **Yu, J.** (2021). Inequality Across Time: History, Biography and the Life Course *The Routledge International Handbook of Inequalities and the Life Course* (pp. 4-14).Routledge.
3. Kahana, B., Kahana, E., Bhatta, T., Ye. M., & **Yu, J.** (2017).Altruism and Life Satisfaction among LGBT Older Adults. In Alexandra M. Columbus (Ed.), *Advances in Psychology Research*. Volume 120, chapter 3 (pp. 45-58). Hauppauge, NY: Nova Science Publisher, Inc.
4. Kahana, B., Kahana, E.,Lee, J. E., Kahana, J., & **Yu, J.** (2015). Perspectives of Older Adults on Health Communication Related to Cancer Prevention and Care. In R. Caron (Ed.), *Health Communication: Advocacy Strategies, Effectiveness and Emerging Challenges*, (pp. 15-26). Hauppauge, NY: Nova Science Publisher, Inc.

Manuscripts Under Review

1. **Yu, J.**, Qin, W., & Thorpe, R. J. Digital Technology Use and Dementia Among Older Adults: The Moderating Role of Activity Limitations.

2. **Yu, J.**, Qin, W., Osypuk, T., & Kalesnikava, V. Racial Differences in the Longitudinal Association Between Perceived Neighborhood Disorder and Allostatic Load.
3. **Yu, J.**, Cudjoe, T., Mathis, W., & Chen, X. Uncovering the Biological Toll of Neighborhood Disorder Trajectories: A Machine Learning Based Weighting Analysis of Biomarkers in Older Adults.
4. **Yu, J.**, Wang, Y., Gill, T. M., & Chen, X. Associations of Neighborhood Disorder with Cognitive Impairment and Increased Risk of Dementia: The Mediating Role of Cardiometabolic Risk.
5. Qin, W., **Yu, J.**, & Needham, B. Negative Wealth Shock and Depression in Middle-Aged and Older Adults in the United States: 2008 – 2018.
6. **Yu, J.** & Kelley, J. A Cohort Comparison of Women's Fertility Trajectories in China: A Sequence Analysis and A Decomposition Approach.

Manuscripts In Progress

1. **Yu, J.**, Qin, W., Wang, J., & Kahana, B. Thriving in Place: Unraveling the Interplay of Multi-Dimensional Neighborhood Characteristics in Shaping Successful Aging.
2. **Yu, J.**, Jiang, R., & Chen, X. Frailty and Cognitive Function: Evidence from A Population-based Study of UK Biobank.
3. **Yu, J.**, & Cho, S. Assessing Biological Pathways in the Longitudinal Association Between Neighborhood Disorder and Depressive Symptoms in Later Life
4. **Yu, J.** Fertility history and later life health trajectories: A sequence analysis of cohorts before and during the One-Child Policy era.

Research Grants

- 2023 - 2024** Pilot Grant Principal Investigator
University of Minnesota, Life Course Center (NIH/NIA P30AG066613, PI: Sarah Flood)
Neighborhood Characteristics and Cognitive Health among Black and White Older adults: The Mediation Role of Allostatic Load
Amount: \$40,784
- 2023 - 2027** Postdoctoral Researcher
NIH/NIA R01AG077529-02, PI: Xi Chen
A Life Course Approach to Understanding Racial and Ethnic Disparities in Alzheimer's Disease and Related Dementias and Health Care
Amount: \$729,460
- Submitted** Principal Investigator
NIH/NIA Pathway to Independence Award (K99/R00)
Alzheimer's Disease and Related Dementias Risk and Health Care Utilization: A Machine Learning Analysis of Neighborhood Environments and Modifiable Risk Factors
Amount: \$979,100

Grants Unfunded

- 2024** Co-Principal Investigator
NIH/NIA Advancing Sociodemographic and Economic Study of Alzheimer's Disease and Related Dementias (CeASES-ADRD) Pilot Grant
A Machine Learning Approach Towards Identifying Critical Neighborhood Factors for Risk of AD/ADRD
Amount: \$5,500
- 2023** Co-Principal Investigator
NIH/NIA Yale Claude D. Pepper Older Americans Independence Center Pilot Grant
Using Machine Learning to identifying Neighborhood Factors related to AD/ADRD
Amount: \$4,000
- 2022** Principal Investigator
NIH/NIA Network on Life Course Health Dynamics and Disparities in 21st Century America Pilot Grant
Investigating the role of structural racism in mortality among middle-aged and older adults
Amount: \$40,767

Peer-Reviewed Conference Presentations (Selected)

Session Chair

Yu, J. (2024). Contextual Determinants of Aging and Health. *Gerontological Society of America's (GSA) Annual Scientific Meeting*. Seattle, Washington.

Presentations

1. **Yu, J.**, Cudjoe, T., Mathis, W., & Chen, X. (2025). Uncovering the Biological Toll of Neighborhood Disorder: Links to Metabolic and Inflammatory Markers in Older Adults, presented at the *2025 Annual Meeting of the Population Association of America*. Washington DC.
2. **Yu, J.**, Jiang, R., & Chen, X. (2025). Frailty and Cognitive Function: Evidence from A Population-Based Study of UK Biobank, presented at the *2025 Annual Meeting of the Population Association of America*. Washington DC.
3. **Yu, J.**, Wang, Y., & Chen, X. (2024). Neighborhood Disorder and Cognitive Health: The Causal Mediating Effects of Allostatic Load and Physical Activities, presented at the *Gerontological Society of America's (GSA) 2024 Annual Scientific Meeting*. Seattle, Washington.
4. **Yu, J.**, Qin, W., Wang, J., & Kahana, B. (2024). Clustering of Multidimensional Neighborhood Characteristics in Shaping Healthy Aging, presented at the *Gerontological Society of America's (GSA) 2024 Annual Scientific Meeting*. Seattle, Washington.
5. **Yu, J.**, Qin, W., Osypuk, T., & Kalesnikava, V. (2024). Neighborhood Disorder and Allostatic Load among Older Non-Hispanic Black and White Adults: A Machine Learning Inverse Probability Weighting Approach, presented at the *2024 Annual Meeting of the Population Association of America*. Columbus, Ohio.

6. **Yu, J.**, Boyle, E. H., Grace, K., & Zhang, Y. (2023). Social Capital and Covid Precautionary Measures during the Early Days of Covid-19: Evidence from Two African Countries, presented at the *2023 Annual Meeting of the Population Association of America*. New Orleans, Louisiana.
7. **Yu, J.**, & Huang, W. (2023). Precaution or Precarity? The Impact of the COVID-19 Pandemic on Older Adults Social Engagement, presented at the *2023 Annual Meeting of the Population Association of America*. New Orleans, Louisiana.
8. **Yu, J.**, Kristiansen, D., Grace, K., & Boyle, E. H. (2022). Factors Associated with Contraceptive Use Profiles in Two sub-Saharan African Countries: A Sequence Analysis, presented at the *2022 International Conference on Family Planning (ICFP)*. Pattaya City, Thailand.
9. **Yu, J.** (2022). Fertility History and Biological Functioning in a Chinese Aging Population, presented at the *Society for Longitudinal and Life Course 2022 International Annual Conference*. Cleveland, Ohio.
10. **Yu, J.**, Kristiansen, D., Grace, K., & Boyle, E. H. (2022). Factors Associated with Contraceptive Use Profiles in Two sub-Saharan African Countries: A Sequence Analysis, presented at the *Interdisciplinary Association for Population Health Science (IAPHS) 2022 Annual Meeting*. Minneapolis, MN.
11. **Yu, J.**, Grace, K., Boyle, E. H., Gunther, M., & Kristiansen, D. (2022). Social trust, modern contraceptive use, and Covid-19 knowledge in three African countries, presented at the *2022 Annual Meeting of the Population Association of America*. Atlanta, Georgia.
12. **Yu, J.**, Grace, K., Boyle, E. H., Gunther, M., & Kristiansen, D. (2021). Trust, Covid-19, and Contraceptive Use: Examining the linkages in Burkina Faso and Kenya, presented at *Pandemic Babies? The Covid-19 Pandemic and Its Impact on Fertility and Family Dynamics Conference* (virtual).
13. **Yu, J.** (2021). Cumulative Advantage/Disadvantage or Selection: Chinese Women's Fertility History and Later Life Health, presented at the *116th Annual Meeting of the American Sociology Association* (virtual).
14. **Yu, J.** & Kahana, E. (2020). Driving Cessation in Old Age: Gender Influences on Mortality, presented at the *Gerontological Society of America's (GSA) 2020 Annual Scientific Meeting*(virtual).
15. **Yu, J.**(2020). A Cohort Analysis of Fertility History of Older Women in China, presented at the 115th Annual Meeting of the American Sociology Association (virtual).
16. **Yu, J.** (2020). Oral Health and Mortality Risk in Later Life: A Study among Middle-aged and Older Adults, presented at the *2020 Annual Meeting of the Population Association of America*(virtual).
17. **Yu, J.**, Kahana, E., Kahana, B., & Han, C. (2018). Older Men Hit Hard in Transition to Widowhood, presented at the *Gerontological Society of America's (GSA) 2018 Annual Scientific Meeting*. Boston, Massachusetts.
18. **Yu, J.** & Kahana, E., (2018). Active Aging in China: The Role of Individual Characteristics and Local Context, presented at the *Gerontological Society of America's (GSA) 2018 Annual Scientific Meeting*. Boston, Massachusetts.
19. **Yu, J.**(2018). A Longitudinal Analysis of Productive Aging and Functional Health of Chinese Older Adults: Individual and Context Characteristics, presented at the *113th Annual Meeting of the American Sociological Association*. Philadelphia, Pennsylvania.

20. **Yu, J.** (2018). A Multilevel Analysis of Socioeconomic Status and Health Disparity Among Chinese Elderly, presented at the *2018 Annual Meeting of the Population Association of America*. Denver, Colorado.
21. **Yu, J.** (2017). Functional Limitations and Depression of Chinese Older Adults: An Intersectionality Perspective, presented at the *112th Annual Meeting of the American Sociological Association*. Montreal, Canada.
22. **Yu, J.,** Kelley, J. A., Kahana, E., & Kahana, B.(2016). Social Cascade of Mortality: Capturing Changes in Social Activities and Engagement in Final Years, presented at the *Gerontological Society of America's (GSA) 69th Annual Scientific Meeting*, New Orleans, Louisiana.
23. **Yu, J.,** Kahana, E., Kahana, B., Ye, M., & Wolf, J. (2015). A Propensity Score Matching Analysis of the Health Disparities between LGBT and Non-LGBT Older Adults, presented at the *Gerontological Society of America's (GSA) 68th Annual Scientific Meeting*, Orlando, Florida.

Teaching Experiences

Teaching Assistant

- SOCI 303 Social Research Method (Undergraduate level) 2017
- SOCI 509 Advanced Social Statistics (Graduate Level) 2019
- CRSP 406 Introduction to R Programming (Graduate Level) 2018
- SOCI 525 Multilevel Modelling (Graduate Level) 2017
- SOCI 445 Sociology of Mental Illness (Graduate Level)

Invited Guest Lecturer

- SOCI 306: Logic of Social Inquiry: Introduction of Stata 2019
- SOCI 306: Stress and Coping: Measurement of Stress and Coping. 2018

Pedagogical Training

- *Equitable Teaching in the Social Sciences and Humanities* – 6 sessions 2024
Poorvu Center for Graduate and Postdoctoral Teaching Development
Yale University
- *Future Faculty Preparation certificate* 2017
University Center for Innovation in Teaching and Education
Case Western Reserve University

Mentoring

- Suhyun An, postgraduate student, Yale University 2024
- Jovin Lasway, PhD student, University of Minnesota 2023
- Yaxuan Zhang, PhD student, University of Minnesota 2022
- Yuhan Zhang, PhD student, Case Western Reserve University, 2021
- Julia K. Wolf, Undergraduate students, Case Western Reserve University, 2019

Trainings and Workshops

- **The Methodology Center Summer Institute on Longitudinal Data Analysis** 2025 summer
Purdue University (selected scholar)
- **MGT 802 Large Language Models: Technology and Applications** 2024 fall
Yale School of Management
- **Generative AI For Practitioners** 2024 fall
University of Michigan-Institute for Social Research
- **Climate Change and Aging** 2024 fall
NIA Research Centers Coordinating Network (RCCN) (selected scholar)
- **2024 Add Health Users Conference** 2024 summer
University of North Carolina at Chapel Hill (UNC) (selected scholar)
- **The National Health and Aging Trends Study (NHATS) User Workshop** 2024 summer
Michigan Center on the Demography of Aging (selected scholar)
- **Contextual Data Resource for Understanding the Role of Exposome in Aging Research Workshop** 2024 summer
USC/UCLA Center on Biodemography and Population Health (P30AG017265)
University of Southern California (selected scholar)
- **ResDAC: Introduction to the Use of Medicare Data for Research** 2023 fall
University of Minnesota

Fellowships & Honors

University of Michigan Integrative Well-Being and Inequality (MIWI) Scholar	2024
NIA Research Centers Collaborative Network (RCCN) Scholar	2023
Society for Longitudinal and Life Course Studies Conference Bursary Award (£415)	2022
Graduate Student Professional Development Fund (\$1,300).	2020
Advanced Study Fellowship, Case Western Reserve University (\$6,750)	2019-2021
Marie Haug Award in Exemplary Gerontological Studies (\$500)	2019
Medical Humanities & Social Medicine Student Travel Grants (\$250)	2018
Graduate Student Travel Award (\$500)	2018
Eva L. Pancoast Memorial Fellowship (\$3,500)	2017
Eva L. Pancoast Memorial Fellowship (\$3,500)	2015

Professional Services

Committee Member , The Journals of Gerontology: Series A — Medical Sciences editor-in-chief Search Committee	2025
Committee Member , Gerontological Society of America Annual Scientific Meeting — Emerging Scholar and Professional Organization (ESPO) Working Group	2025
Abstract Reviewer , American Geriatrics Society Annual Scientific Meeting	2025
Session Chair , Gerontological Society of America's (GSA) 2024 Annual Scientific Meeting	2024
Grant Reviewer , University of Minnesota Life Course Center Pilot Grant	2023
Committee member , Yale Postdoc Association Diversity and Inclusion	2023-2024
Mentor , Yale Post Graduate Association	2024-2025
Judge , Yale Postdoctoral Mentoring Award	2024
Reviewer , Yale Postgraduate Association Symposium	2024

Editorial Reviews (Ad Hoc)

(# reviewed in parentheses)

Social Science & Medicine (2); The Journals of Gerontology Series B: Social Sciences (20); American Journal of Epidemiology (1); Journal of Health and Social Behavior (1); Health & Place (1); Aging and Mental Health (2); Innovation in Aging (2); Research on Aging (2); SSM-Population Health (3); SSM-Qualitative Research in Health (1); BMJ Open (2); Scientific Reports (4); BMC Public Health (4); BMC Geriatrics (10); BMC Primary Care (1); European Journal of Aging (3); Journal of Geriatric Psychiatry and Neurology (1); Journal of Applied Gerontology (2); NPJ digital medicine (3); International Journal of Environmental Research and Public Health (17)

Skills & Statistical Methods

- **Statistical Methods:** Sequence Analysis, Machine Learning Models, Multilevel Modeling, Mixed Effects Modeling, Survival Analysis, Data Visualization
- **Programming Skills:** STATA, R, SPSS, Python, Git, LaTeX
- **Languages:** English (professional fluent), Mandarin (native)

Professional Membership

Population Association of America
The Gerontological Society of American
American Sociological Association
The Interdisciplinary Association for Population Health Science (IAPHS)

Updated: August 29, 2025