

Yuan S. Zhang
Curriculum Vitae

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Chapel Hill, NC, 27519

EDUCATION

Ph.D. in Gerontology School of Gerontology University of Southern California, Los Angeles, CA, USA	2019
M.S. in Survey Methodology (statistics track) Program in Survey and Data Science, Institute for Social Research University of Michigan, Ann Arbor, MI, USA	2013
B.A. in Economics Central University of Finance and Economics, Beijing, China	2009

RESEARCH INTERESTS

Demography of Health, Global Aging, Biodemography, Cognitive Aging, Survey Methods

RESEACH POSITIONS

2021-	<i>Postdoctoral Research Associate, K99, NIA</i> Carolina Population Center, University of North Carolina at Chapel Hill
2009-2021	<i>T32 Postdoctoral Trainee</i> Biosocial Training Program (T32 HD091058) Carolina Population Center, University of North Carolina at Chapel Hill Faculty Preceptors: Elizabeth Frankenberg and Allison Aiello
2008	<i>T32 Predoctoral Trainee</i> Multidisciplinary Research Training in Gerontology (T32 AG000037) School of Gerontology, University of Southern California Faculty Preceptor: Eileen Crimmins
2013-2017	<i>Research Assistant</i> School of Gerontology, University of Southern California
2011-2013	<i>Research Assistant</i> Institute for Social Research, University of Michigan

- 2012 *Short-term Consultant*
Development Research Group, World Bank
- 2009-2011 *Project Coordinator*
China Health and Retirement Longitudinal Study, Peking University
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External Research Support

NIH/NIA K99AG070274: A cross-national comparative study on cardiometabolic risk, education, and cognitive aging

Role: PI

Project Period: 04/01/2021 - 03/31/2023

PEER-REVIEWED JOURNAL ARTICLES

1. Brown, L. L., **Zhang, Y. S.**, & Mitchell, U. (2022). Black older adults in the age of biomarkers, physical functioning, and genomics. *Annual Review of Gerontology and Geriatrics*, 41, 183-210.
2. Farina, M. P., **Zhang, Y. S.**, Kim, J. K., Hayward, M. D., & Crimmins, E. M. (2022). Trends in dementia prevalence, incidence, and mortality in the United States (2000-2016). *Journal of Aging and Health*, 34(1), 100–108. <https://doi.org/10.1177/08982643211029716> PMID: 34233528
3. **Zhang, Y. S.**, Strauss, J. A., Hu, P., Zhao, Y., & Crimmins, E. M. (2021). Links between mortality and socioeconomic characteristics, disease burden, and biological and physical functioning in the aging Chinese population. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 77(2), 365-377. <https://doi.org/10.1093/geronb/gbab059> PMID: 33837409
4. Hayward, M. D., Farina, M. P., **Zhang, Y. S.**, Kim, J. K., & Crimmins, E. M. (2021). The importance of improving educational attainment for dementia prevalence trends from 2000 to 2014, among older Non-Hispanic Black and White Americans. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 76(9), 1870–1879. <https://doi.org/10.1093/geronb/gbab015> PMCID: PMC8557827
5. Saenz, J. L., Adar, S. D., **Zhang, Y. S.**, Wilkens, J., Chattopadhyay, A., Lee, J., & Wong, R. (2021). Household use of polluting cooking fuels and late-life cognitive function: A harmonized analysis of India, Mexico, and China. *Environment International*, 156, 106722. <https://doi.org/10.1016/j.envint.2021.106722> PMCID: PMC8380666
6. Sudharsanan, N., **Zhang, Y.**, Payne, C. F., Dow, W., & Crimmins, E. (2020). Education and adult mortality in middle-income countries: Surprising gradients in six nationally-representative longitudinal surveys. *SSM - Population Health*, 12, 100649. <https://doi.org/10.1016/j.ssmph.2020.100649> PMCID: PMC7475202

7. Crimmins, E. M., **Zhang, Y. S.**, Kim, J. K., Frochen, S., Kang, H., Shim, H., Ailshire, J., Potter, A., Cofferen, J., & Faul, J. (2020). Dried blood spots: Effects of less than optimal collection, shipping time, heat, and humidity. *American Journal of Human Biology*, 32(5), e23390. <https://doi.org/10.1002/ajhb.23390> PMID: PMC7347424
8. **Zhang, Y. S.**, Hu, P., Strauss, J. A., Zhao, Y., Wang, Y., & Crimmins, E. M. (2020). Ascertaining cause of mortality among middle-aged and older persons using computer-coded and expert review verbal autopsies in the China Health and Retirement Longitudinal Study. *Global Health Action*, 13(1), 1768502. <https://doi.org/10.1080/16549716.2020.1768502> PMID: PMC7480525
9. Chen, X., Crimmins, E., Hu, P. P., Kim, J. K., Meng, Q., Strauss, J., Wang, Y., Zeng, J., **Zhang, Y.**, & Zhao, Y. (2019). Venous blood-based biomarkers in the China Health and Retirement Longitudinal Study: Rationale, design, and results from the 2015 wave. *American Journal of Epidemiology*, 188(11), 1871–1877. <https://doi.org/10.1093/aje/kwz170> PMID: PMC6825825
*equal contribution
10. Crimmins, E. M., Shim, H., **Zhang, Y. S.**, & Kim, J. K. (2019). Differences between men and women in mortality and the health dimensions of the morbidity process. *Clinical Chemistry*, 65(1), 135–145. <https://doi.org/10.1373/clinchem.2018.288332> PMID: PMC6345642
11. Crimmins, E. M., & **Zhang, Y. S.** (2019). Aging populations, mortality, and life expectancy. *Annual Review of Sociology*, 45(1). <https://doi.org/10.1146/annurev-soc-073117-041351>
12. Crimmins, E. M., **Zhang, Y. S.**, Kim, J. K., & Levine, M. E. (2019). Changing disease prevalence, incidence, and mortality among older cohorts: the Health and Retirement Study. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 74(Suppl_1), S21–S26. <https://doi.org/10.1093/gerona/glz075> PMID: PMC6853787
13. **Zhang, Y. S.**, & Crimmins, E. M. (2019). Urban-rural differentials in age-related biological risk among middle-aged and older Chinese. *International Journal of Public Health*, 64(6), 831–839. <https://doi.org/10.1007/s00038-018-1189-0> PMID: PMC6556141
14. **Zhang, Y. S.**, Saito, Y., & Crimmins, E. M. (2019). Changing impact of obesity on active life expectancy of older Americans. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 74(12), 1944–1951. <https://doi.org/10.1093/gerona/glz133> PMID: PMC6853657
15. Brown, L. L., **Zhang, Y. S.**, Mitchell, C., & Ailshire, J. (2018). Does telomere length indicate biological, physical, and cognitive health among older adults? Evidence from the Health and Retirement Study. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 73(12), 1626–1632. <https://doi.org/10.1093/gerona/gly001> PMID: PMC6230208
16. Crimmins, E. M., Saito, Y., Kim, J. K., **Zhang, Y. S.**, Sasson, I., & Hayward, M. D. (2018). Educational differences in the prevalence of dementia and life expectancy with dementia: Changes from 2000

to 2010. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 73(suppl_1), S20–S28. <https://doi.org/10.1093/geronb/gbx135> PMID: PMC6019027

17. Crimmins, E. M., **Zhang, Y.**, & Saito, Y. (2016). Trends over 4 decades in disability-free life expectancy in the United States. *American Journal of Public Health*, 106(7), 1287–1293. <https://doi.org/10.2105/AJPH.2016.303120> PMID: PMC4984740
18. Zhao, Y., Crimmins, E. M., Hu, P., Shen, Y., Smith, J. P., Strauss, J., Wang, Y., & **Zhang, Y.** (2016). Prevalence, diagnosis, and management of diabetes mellitus among older Chinese: results from the China Health and Retirement Longitudinal Study. *International Journal of Public Health*, 61(3), 347–356. <https://doi.org/10.1007/s00038-015-0780-x> PMID: PMC4880519

Manuscripts under review

- Zhang, Y. S.**, Frankenberg, E. & Thomas, D. Education and cognitive performance in adulthood: Contrasts between siblings.
- Zhang, Y. S.**, & Chang, V. W. The time path of weight status before and after incident dementia.

Book Chapters and Other Publications

1. Crimmins, E. M., **Zhang, Y. S.**, Kim, J. K., & Levine, M. E. (2021). Trends in morbidity, healthy life expectancy, and the compression of morbidity. In *Handbook of the Biology of Aging* (pp.405-414). Academic Press.
2. **Zhang, Y. S.**, Shim, H., & Crimmins, E. M. (2019). Life expectancy and health expectancy. *Encyclopedia of Biomedical Gerontology*. Elsevier.
3. Herningtyas, E. H., Hu, P., Edenfield, M., Strauss, J., Crimmins, E., Witoelar, F., **Zhang, Y.**, Kim, J. K., Thomas, D., & Sikoki, B. (2018). IFLS wave 5 dried blood spot data user guide. RAND Labor & Population. WR-1143/6-NIA/NICHD. Santa Monica.
4. **Zhang, Y. S.**, & Crimmins, E. M. (2018). Longevity. *The SAGE Encyclopedia of Lifespan Human Development*. <http://dx.doi.org/10.4135/9781506307633.n490>

SELECTED CONFERENCE PRESENTATIONS (as presenting author)

- Zhang, Y. S.** & Chang, V. W. The time path of weight status before and after incident dementia. Presented at the Population Association of America annual meeting. 2021.
- Zhang, Y. S.**, Frankenberg, E., & Thomas, D. Contribution of family background to the education-cognition association. Accepted for oral presentation at the Population Association of America annual meeting, Washington, DC. [canceled due to COVID-19]. 2020.
- Zhang, Y. S.**, Kim, J. K., & Crimmins, E. M. Increasing length of life with disease after age 65: United States 1998 to 2014. Presented at the 31st REVES meeting, Barcelona, Spain. 2019.

Ailshire, J. A., **Zhang, Y. S.**, & Crimmins, E. M. Disease and disability patterns among older U.S. adults who survive to age 90 and beyond. Presented at the 31st REVES meeting, Barcelona, Spain. 2019.

Crimmins, E. M., Zhang, Y. S., Kim, J. K., Frochen, S., Kang, H., Shim, H., Ailshire, J., Potter, A., Cofferan, J., & Faul, J. The effects of sample collection, shipping time, heat, and humidity on biomarkers from dried blood spots. Presented at

- Symposium on Biosocial Approaches to Population Health Across the Life Course, Carolina Population Center, UNC-Chapel Hill, NC. 2019.
- The NIA-sponsored Biomarker Network Meeting, the Population Association of America annual meeting, Austin, TX. 2019.

Zhang, Y. S. Early life conditions and later-life biological risk: Evidence from the China Health and Retirement Longitudinal Study. Presented at

- The NIA-sponsored Biomarker Network Meeting, the Population Association of America annual meeting, Denver, CO. 2018.
- The Gerontological Association of America annual meeting, Boston, MA. 2018.

Zhang, Y. S., Saito, Y., & Crimmins, E. M. Effect of obesity on active life expectancy in the United States: Changes over time. Presented at the 21st International Association of Gerontology and geriatrics World Congress, San Francisco, CA, 2017.

Zhang, Y. S., Ailshire, J. A., & Crimmins, E. M. Predicting mortality among older US adults using self-rated health, performance-based measures, and biomarkers: Differences by sociodemographic characteristics. Presented at the Population Association of America annual meeting, Washington, D.C. 2016.

Zhang, Y. S., Ailshire, J. A., & Crimmins, E. M. Mortality in China and the United States among those 60+. Presented at the Cross-National Comparison of Adult Mortality Determinants in Low- and Middle-Income Countries Conference, Los Angeles, CA. 2016.

Zhang, Y. S., Crimmins, E. M., & Ailshire, J. A. Imputation of missing physical performance data: A Comparison of approaches. Presented at the 27th REVES meeting, Singapore, 2015.

Zhang, Y. S., & Crimmins, E. M. Biological risk among the middle-aged and older adults in China: Gender, education, and urban-rural differences. Presented at the Population Association of America annual meeting, San Diego, CA, 2015.

PROFESSIONAL ACTIVITIES

2020-2021 Postdoc representative, Carolina Population Center, UNC

2015- Member, Réseau Espérance de Vie en Santé (REVES)
International Network on Health Expectancy and the Disability Process

2014- Member, Population Association of America
2021 meeting: poster discussant - “Aging and the Life Course” and “Mortality and Morbidity”

	2020 meeting: program committee member 2020 meeting: chair - "Biodemography of Aging" and "Chronic Disease"
2014-	Member, <u>Gerontological Society of America</u> 2021 meeting: discussant - "Cross-National Perspectives on Health and Well-Being in Later Life" 2018 meeting: program committee member - Behavioral and Social Science Section 2018 meeting: chair - "Life Course Development and Aging" 2016 meeting: symposium organizer - "Health and Well-being among Aging Chinese" 2018, 2019, 2022: abstract reviewer
Reviewer	Journal of Gerontology: Social Sciences, Journal of Gerontology: Medical Science, Global Health Action, Biodemography and Human Biology, Journal of Aging and Health, Demographic Research, PLOS ONE, Social Science and Medicine – Population Health, Journal of Marriage and Family, Demography.

TEACHING AND MENTORING

10/12/2021	Guest Lecturer: "Global Aging" SOCI180: Introduction to Global Population Health, University of North Carolina.
09/08/2020	Guest Lecturer: "Sex Differences in Physiological Health" GERO435: Women and Aging, University of Southern California
Fall 2018	Co-instructor: GERO593 Research Methods (graduate level, 3 credits) School of Gerontology, University of Southern California
04/05/2017	Guest Lecturer: "Imputation of Missing Data" Quantitative Methods Seminar, University of Southern California
2016-2019	Student Mentor for Deborah Hoe (Ph.D. student in Gerontology) School of Gerontology, University of Southern California
Fall 2008	Teaching Assistant, Intermediate Microeconomics (undergrad-level) China Center for Economic Research, Peking University

HONORS & AWARDS

2019	Doctoral Student Award, University of Southern California
2019	Heinz Osterburg Prize, University of Southern California
2019	Poster Award, the 31 st REVES Meeting, Barcelona, Spain
2019-2021	Postdoctoral Traineeship, NICHD, Carolina Population Center University of North Carolina at Chapel Hill
2018	Predoctoral Traineeship, NIA, School of Gerontology University of Southern California
2008	Second Prize, Mathematical Contest in Modeling, China

2007 First Prize, Mathematical Contest in Modeling (Beijing Division), China

ADDITIONAL TRAINING (workshops & summer institutes)

2021 Advanced Psychometrics Methods in Cognitive Aging Research
2018 Demographic Methods in Public Health Research
Higher School of Economics & Max Planck Institute for Demographic Research
2017 Genomics for Social Scientists Workshop, University of Michigan
2016 Formal Demography Workshop, University of California, Berkeley
2016 Summer School on the Demography of Health and Education,
Wittgenstein Centre, Vienna, Austria
2014 RAND Summer Institute, RAND, Santa Monica, CA

REFERENCES

Allison E. Aiello

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Gillings School of Global Public Health
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