# Jordan Weiss

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Updated: December 01, 2021

#### ACADEMIC APPOINTMENTS

2020-Present Postdoctoral Scholar

Department of Demography University of California, Berkeley

2020-Present Data Science Fellow

University of California, Berkeley

2018-Present Associate Fellow

Leonard Davis Institute of Health Economics

University of Pennsylvania

#### **EDUCATION**

2020	Ph.D. Demography and Sociology, University of Pennsylvania Dissertation: "Forecasting the burden of dementia in the United States" Committee: Michel Guillot (Chair), Samuel H. Preston, Norma B. Coe Comprehensive exams: Demography, Medical Sociology
2019	M.A. Statistics, The Wharton School, University of Pennsylvania
2018	M.A. Demography, University of Pennsylvania
2018	Certificate in Public Health and Cognitive Aging, University of Pennsylvania
2012	B.Sc. Economics and Mathematics, University of Southern California

### RESEARCH SUPPORT, CURRENT

2021-2022	Unpacking educational gradients in	n dementia.	Columbia l	University (	Center
	for Interdisciplinary Research on A	lzheimer's Dise	ease Dispara	ities, Pilot (	Grant,
	NIA/NIH ( $P30AG059303$ ).				

2020-2022 Improving research transparency and visibility of null findings in observational studies of secondary data. Berkeley Initiative for Transparency in the Social

 $Sciences,\ Catalyst\ Grant.$ 

#### **PUBLICATIONS**

2022

- Beydoun MA, Weiss J, Beydoun HA, Fanelli-Kuczmarski MT, Hossain S, El-Hajj ZW, Evans MK, Zonderman AB. Racial/ethnic disparities in incident all-cause and Alzheimer's disease dementia among older US men and women: Pathways through modifiable risk factors and cognitive performance. Alzheimer's & Dementia: Translational Research & Clinical Interventions. Forthcoming.
- [36] Beydoun HA, Beydoun MA, Weiss J, Gautam RS, Hossain S, Alemu BT, Zonderman AB. COVID-19 pandemic impact on trajectories in cardiometabolic health, physical activity and functioning among adults from the 2006-2020. *Journal of Gerontology: Medical Sciences*. Forthcoming.

2021

- [35] **Weiss J.** Contribution of risk factors to racial/ethnic and gender disparities in dementia and mortality. SSM-Population Health. Forthcoming.
- [34] Beydoun MA, Hooten NN, Maldonado AI, Beydoun HA, **Weiss J**, Evans MK, Zonderman AB. BMI and allostatic load are directly associated with longitudinal increase in plasma neurofilament light among urban middle-aged adults. *The Journal of Nutrition*. Forthcoming.
- [33] Jin SL, Rabinowitz AR, **Weiss J**, Deshpande SK, Gupta N, May RA, Small DS. Retrospective survey of youth sports participation: Development and validation using school records. *PLoS One*. Forthcoming.
- [32] Gemmill A, Weiss J. The relationship between fertility history and incident dementia in the U.S. Health and Retirement Study. *Journal of Gerontology: Social Sciences*. Forthcoming.
- [31] **Weiss J**, Hossain S, Maldonado A, Shen B, Beydoun HA, Kivimäki M, Evans MK, Zonderman AB, Beydoun MA. Associations between race, APOE genotype, cognition, and mortality among urban middle-aged adults. *Scientific Reports*. Forthcoming.
- [30] Beydoun MA, Noren-Hooten N, Beydoun HA, Maldonado AI, **Weiss J**, Mode N, Evans MK, Zonderman AB. Plasma neurofilament light as a potential biomarker for cognitive decline in a longitudinal study of middle-aged urban adults. *Translational Psychiatry*. Forthcoming.
- [29] Li J, Llibre-Guerra JJ, Harrati A, Weiss J, Jiménez Velázquez IZ, Acosta D, Llibre Rodríguez JJ, Liu MM, Dow WH. Associations between education and dementia in the Caribbean and the United States: An international comparison. Alzheimer's & Dementia: Translational Research & Clinical Interventions. Forthcoming.

- [28] Beydoun MA, **Weiss J**, Beydoun HA, Maldonado A, Hossain S, Shen B, Evans MK, Zonderman AB. Race, APOE genotypes and cognitive decline among middle-aged urban adults. *Alzheimer's Research & Therapy*. Forthcoming.
- [27] Weiss J, Rabinowitz AR, Deshpande SK, Hasegawa RB, Small DS. Participation in collision sports and cognitive aging among Swedish twins. *American Journal of Epidemiology*. Forthcoming.
- [26] Beydoun MA, Shaked D, Hossain S, **Weiss J**, Beydoun HA, Maldonado AI, Katzel LI, Davatzikos C, Gullapalli RP, Seliger SL, Erus G, Evans MK, Zonderman AB, Waldstein SR. Red cell distribution width, iron deficiency anemia, and their associations with white matter integrity among middle-aged urban adults. *Neurobiology of Aging*. Forthcoming.
- [25] Beydoun HA, Beydoun MA, Weiss J, Hossain S, Huang S, Alemu BT, Zonderman AB. (2021). Insomnia as a predictor of diagnosed memory problems: 2006-2016 Health and Retirement Study. Sleep Medicine, 80, 158-166.
- [24] Varma VR, Ghosal R, Hillel I, Volfson D, Weiss J, Urbanek J, Hausdorff JM, Zipunnikov V, Watts A. (2021). Continuous gait monitoring discriminates community dwelling mild AD from cognitively normal controls. *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, 7(1), e12131.
- [23] Caplin A, Beauchamp MR, **Weiss J**, Schilf S, Johansen KL, Epel ES, DeLongis A, Puterman E. (2021). Effects of aerobic exercise training on daily psychological processes in family caregivers: Secondary analyses of a randomized controlled trial. *Affective Science*, 2(1), 48-57.
- [22] Ng CD, **Weiss J**. (2021). What your genes can (and can't) tell you about body mass and diabetes. *Biodemography and Social Biology*, 66(1), 40-49.

2020

- [21] **Weiss J**, Puterman E, Prather A, Ware EB, Rehkopf D. (2020). A data-driven prospective study of dementia among older adults in the United States. *PLoS One*, 15(10), e0239994.
- [20] Stokes A, Weiss J, Lundberg DJ, Xie W, Kim JK, Preston SH, Crimmins E. (2020). Estimates of the association of dementia with US mortality levels using linked survey and mortality records. *JAMA Neurology*, 77(12): 1543–1550.
- [19] Puterman E, **Weiss J**, Hives BA, Gemmill A, Karasek D, Mendes WB, Rehkopf DH. (2020). Predicting mortality from 57 economic, behavioral, social, and psychological factors. *Proceedings of the National Academy of Sciences*, 117(28): 16273-16282.

- [18] Hives BA, Buckler EJ, Weiss J, Schilf S, Johansen KL, Epel ES, Puterman E. (2020). The effects of aerobic exercise on psychological functioning in family caregivers: Secondary analyses from a randomized controlled trial. *Annals of Behavioral Medicine*, 55(1): 65-76.
- [17] Beydoun MA, Beydoun HA, **Weiss J**, Hossain S, El-Hajj ZW, Zonderman AB. (2020). Helicobacter pylori, periodontal pathogens and their interactive association with incident all-cause and Alzheimer's disease dementia in a large national survey. *Molecular Psychiatry*, 1-16.
- [16] Hossain S, Beydoun MA, Weiss J, Tajuddin SM, Kuczmarski MF, Evans MK, Zonderman AB. (2020). Longitudinal associations between dietary quality and cognitive performance and the role of an Alzheimer's disease genetic risk among African-American adults. *British Journal of Nutrition*, 1-38.
- [15] Deshpande SK, Hasegawa RB, Weiss J, Small D. (2020). The association between adolescent football participation and early adulthood depression. *PLoS One*, 15(3): e0229978.
- [14] Beydoun MA, Beydoun HA, Hossain S, El-Hajj ZW, Weiss J, Zonderman AB. (2020). Clinical and bacterial markers of periodontitis and their association with incident all-cause and Alzheimer's disease dementia in a large national survey. *Journal of Alzheimer's Disease*, 1-16.
- [13] Zhang B, Weiss J, Small DS, Zhao Q. (2020). Selecting and ranking individualized treatment rules with unmeasured confounding. *Journal of the American Statistical Association*, 1-14.
- [12] Beydoun MA, Shaked D, Tajuddin SM, **Weiss J**, Evans MK, Zonderman AB. (2020). Accelerated epigenetic age and cognitive decline among urban-dwelling adults. *Neurology*, 94(6), e613-e625.
- [11] Beydoun MA, Hossain S, Beydoun HA, Shaked D, **Weiss J**, Zonderman AB, Eid SM. (2020). Red cell distribution width is associated with poor cognitive performance among non-anemic, middle-aged urban adults. *Journal of Nutrition*, 150(1), 128-139.
- [10] Ng CD, **Weiss J**. (2019). Association of genetic and behavioral characteristics with the onset of diabetes. *BMC Public Health*, 19, 1297.

2019

[9] Beydoun HA, Hossain S, Beydoun MA, **Weiss J**, Zonderman AB, Eid SM. (2019). Periodontal disease, sleep duration, and white blood cell markers in the 2009 to 2014 National Health and Nutrition Examination Surveys. *Journal of Periodontology*.

- [8] Beydoun MA, **Weiss J**, Obhi HK, Beydoun HA, Dore GA, Liang H, Evans MK, Zonderman AB. (2019). Cytokines are associated with longitudinal changes in cognitive performance among urban adults. *Brain, Behavior, and Immunity*, 80, 474-487.
- [7] Beydoun MA, Obhi HK, **Weiss J**, Canas JA, Beydoun HA, Pagnotto M, Evans MK, Zonderman, AB. (2019). Systemic inflammation and depressive symptoms: A longitudinal study of urban adults. *Molecular Psychiatry*, 1-15.
- [6] Beydoun HA, Hossain S, Beydoun MA, **Weiss J**, Zonderman AB, Eid SM. (2019). Antimüllerian hormone levels and cardiometabolic disturbances by weight status among men in the 1999 to 2004 National Health and Nutrition Examination Surveys. *Journal of the Endocrine Society*, 3(5), 921-936.

2018

[5] Puterman E, **Weiss J**, Lin J, Schilf S, Slusher AL, Johansen KL, Epel ES. (2018). Aerobic exercise lengthens telomeres and reduces stress in family caregivers: A randomized controlled trial. *Psychoneuroendocrinology*, 98, 245-252.

2017

[4] Puterman E, **Weiss J**, Beauchamp M, Mogle J, Almeida D. (2017). Physical activity and daily negative affective reactivity in daily life. *Health Psychology*, 36(12), 1186-1194.

2014

[3] Rosen IG, Luczak SE, **Weiss J.** (2014). Blind deconvolution for distributed parameter systems with unbounded input and output and determining blood alcohol concentration from transdermal biosensor data. *Applied Mathematics and Computation*, 231, 357-376.

2013

[2] Luczak SE, Rosen IG, Weiss J. (2013, June). Determining blood and/or breath alcohol concentration from transdermal alcohol data. *Proceedings of the American Control Conference*, 473-478.

2012

[1] **Weiss J.** (2012). Does player performance increase during the postseason? A look at professional basketball. *Undergraduate Economic Review*, 9(1).

#### Papers under review

- [11] Beydoun MA, Hooten NN, **Weiss J**, Maldonado AI, Beydoun HA, Katzel LI, Davatzikos C, Gullapalli RP, Seliger SL, Erus G, Evans MK, Zonderman AB, Waldstein SR. Plasma neurofilament light as blood marker for poor brain white matter integrity among middle-aged urban adults.
- [10] Beydoun MA, Hooten NN, **Weiss J**, Beydoun HA, Hossain S, Evans MK, Zonderman AB. Plasma neurofilament light and its association with all-cause mortality risk among urban middle-aged men and women.

- [9] Courtin E, Greener R, Weiss J, Ware EB, Dowd JB, Rehkopf DH. The changing relationship between genetic risk and cognitive decline across birth cohorts.

  Revise and resubmit.
- [8] Beydoun MA, Beydoun HA, Fanelli-Kuczmarski MT, **Weiss J**, Hossain S, Canas JA, Evans MK, Zonderman AB. Association of serum antioxidant vitamins and carotenoids with incident Alzheimer's disease and all-cause dementia among US adults. Revise and resubmit.
- [7] Weiss J. Cumulative risk of dementia under hypothetical interventions on its risk factors: An application of the parametric g-formula. Revise and resubmit.
- [6] Beydoun HA, Beydoun MA, Weiss J, Gautam RS, Hossain S, Alemu BT, Zonderman AB. Sociodemographic, lifestyle and health characteristics as predictors of COVID-19 level of concern among older adults from the Health and Retirement Study.
- [5] Beydoun HA, Beydoun MA, Alemu BT, Weiss J, Hossain S, Gautam RS, Zonderman AB. COVID-19 prognostic factors as predictors of delayed healthcare service seeking behavior among older adults during the pandemic: 2006-2020 Health and Retirement Study.
- [4] Deshpande SK, Bai R, Balocchi C, Starling JE, Weiss J. Estimating the effects of socioeconomic position on cognitive trajectories with Bayesian treed varying coefficient models. Revise and resubmit.
- [3] Weiss J, Tom SE, Stokes AC, Haan MN. Contribution of cognitive impairment and dementia to all-cause mortality among Mexican-Americans.
- [2] **Weiss J**. Association between undiagnosed type 2 diabetes and cognitive decline. Revise and resubmit.
- [1] **Weiss J**. Racial/ethnic variability in undiagnosed depression and its risk factors. Revise and resubmit.

#### CONFERENCE PROCEEDINGS + INVITED TALKS\*

2021

- [36] Rehkopf DR, Puterman E, Weiss J. (2021). Can DNA methylation clocks function as a surrogate endpoint for the most important risk factors for mortality?

  Integrating Genetics and the Social Sciences, Virtual.
- [35] Weiss J, Deshpande S. (2021). Estimating heterogenous effects of education on dementia using Bayesian trees. *Joint Statistical Meetings*, Virtual.
- [34] Romo-González MR, **Weiss J**. (2021). Unpacking educational gradients in mortality: An intersectional approach. *Population Association of America*, Virtual.

[33\*]Weiss J. (2021). Simulation approaches to population health. D-Lab at UC Berkeley, Virtual. 2020 [32]Beydoun MA, Beydoun HA, Weiss J, Hossain S, El-Hajj ZW, Zonderman AB. (2020). Helicobacter pylori, periodontal pathogens and their interactive association with incident all-cause and Alzheimer's disease dementia in a large national survey. Society for Epidemiologic Research, Virtual. [31\*]Weiss J. (2020). Data driven approaches to studying population health: An application to dementia. Population Health Innovation Lab at the London School of Hygiene & Tropical Medicine, Virtual. [30\*]Weiss J. (2020). The cost of dementia in the United States. Berkeley Population Center and the Center for Economics and Demography of Aging, Virtual. [29\*]Weiss J. (2020). Forecasting the burden of dementia in the United States. MELODEM Working Group Meeting, Virtual. [28]Weiss J, Coe NB, Basu A. (2020). Forecasting the burden of Alzheimer's disease and related dementias in the United States. Population Association of America, Washington, DC [Canceled due to COVID-19]. Weiss J, Tom SE, Stokes AC, Guillot M, Haan M. (2020). Deaths attributable [27]to cognitive impairment among Mexican-Americans. Population Association of America, Washington, DC [Canceled due to COVID-19]. 2019 [26]Weiss J. (2019). 16-year risk of dementia under hypothetical interventions on its risk factors: An application of the parametric g-formula. American Public Health Association, Philadelphia, PA. [25] Stites S, Weiss J, Karlawish J. (2019). Future time perspective associates with walking program preferences and participation in healthy older adults. American Public Health Association, Philadelphia, PA. [24]Weiss J. (2019). Disentangling trends in dementia incidence: An application of the parametric g-formula. Alzheimer's Association International Conference, Los Angeles, CA. [23]Deshpande SK, Hasegawa R, Small D, Weiss J. (2019). Estimating the health consequence of playing football: Evidence from observational studies. Joint Statistical Meetings, Denver, CO.

Statistics Symposium, Hartford, CT.

Deshpande SK, Hasegawa R, Weiss J, Small D. (2019). Is adolescent football participation a major risk factor of early adulthood depression? New England

[22]

- [21] Beydoun MA, Shaked D, Tajuddin SM, **Weiss J**, Evans MK, Zonderman AB. (2019). The relation between accelerated epigenetic age and cognitive decline among urban-dwelling adults. *American Psychosomatic Society*, Vancouver, BC.
- [20] Ng CD, **Weiss J**. (2019). Do these genes make me look diabetic? Using a polygenic score to predict incident diabetes in the Health and Retirement Study. *Population Association of America*, Austin, TX.
- [19\*] **Weiss J.** (2018). Estimating transitions between states of cognition among older adults in the United States. *Penn Memory Center*, Philadelphia, PA.
- 2018
   [18] Weiss J. (2018). Early life origins of frailty: Evidence from Swedish twins reared together and twins reared apart. American Public Health Association, San Diego, CA.
- [17] **Weiss J**, Rabinowitz AR, Deshpande SK, Hasegawa RB, Small DS. (2018). Association of playing contact sports in early-life with cognitive outcomes in later-life: Evidence from Swedish twins reared together and twins reared apart. *American Public Health Association*, San Diego, CA.
- [16] Weiss J. (2018). Prevalence of frailty among older adults in the United States: Evidence from the Health and Retirement Study. *The Interdisciplinary Association for Population Health Science*, Washington, DC.
- [15] Weiss J. (2018). A biodemographic approach to estimating APOE genotype-specific mortality. The Interdisciplinary Association for Population Health Science, Washington, DC.
- [14] Deshpande S, Hasegawa R, **Weiss J**, Small D. (2018). Effects of playing high school football on cognition and mental health in early adulthood: An observational study. *ADD Health Users Conference*, Bethesda, MD.
- [13] **Weiss J**, Puterman E, Prather A, Rehkopf D. (2018). Machine-driven classification of cognitive profiles. *American Academy of Neurology*, Los Angeles, CA.
- [12] **Weiss J**, Harrati A. (2018). Cross-national differences in cognitive aging. *Population Association of America*, Denver, CO.
- [11] Dukhovnov D, **Weiss J**. (2018). Stress coping strategies among spousal caregivers of older adults in the United States: Evidence from the Health and Retirement Study. *Population Association of America*, Denver, CO.
- [10\*] Weiss J. (2018). Machine-driven classification of cognitive profiles. *Penn Memory Center*, Philadelphia, PA.
- 2017
   [9] Weiss J. (2017). Cumulative and differential effects of life course exposures on cognitive function and decline. Society for Epidemiologic Research, Seattle, WA.

- [8] Hives B, Weiss J, Schilf S, Caplin A, Epel E, Johansen K, Puterman E. (2017). Psychological effects of physical activity in high-stress caregivers. *International Society of Behavioral Nutrition and Physical Activity*, Victoria, BC, Canada.
- [7] Hives B, **Weiss J**, Schilf S, Johansen K, Caplin A, Epel E, Puterman E. (2017). Six months of aerobic fitness training on daily affect in high-stressed family caregivers. *American College of Sports Medicine*, Denver, CO.
- [6] Weiss J, Rehkopf D, Karasek D, Gemmill A, Berry-Mendes WB, Epel E, Puterman E. (2017). Predictors of telomere length: A random forest analysis. *Population Association of America*, Chicago, IL.
- [5] Caplin A, Weiss J, Schilf S, Johansen K, Hives BA, Epel E, Puterman E. (2017). Aerobic training improves affective and cognitive responses to daily stressors in family caregivers. *Society of Behavioral Medicine*, San Diego, CA.

  \*Awarded Meritorious Student Winner and Citation Winner
- Weiss J, Schilf S, Puterman E, Mogle J, Almeida D. (2015). Keeping stress at bay: A bout of exercise buffers affective reactivity to daily stressors. Association for Psychological Science, New York, NY.
- [3] Nauman E, **Weiss J**, Schilf S, Puterman E, Lachman M. (2015). Factors that influence physical activity over a 10 year period. *Association for Psychological Science*, New York, NY.
- Weiss J, Rosen IG, Wall TL, Luczak SE. (2014). Creating an automated drinking episode identifier software program utilizing transdermal alcohol sensor data from real-time drinking episodes. Research Society on Alcoholism, Bellevue, WA.
- [1] Weiss J, Schilf S, Mogle J, Almeida D, Puterman E. (2014). Exercise mitigates affect reactivity: Findings from the National Study of Daily Experiences.

  Association for Psychological Science, San Francisco, CA.

### RESEARCH SUPPORT, COMPLETE

2016 - 2020	NICHD Trainee Award (NIH T32 HD007242)
2016 - 2020	NICHD Travel Stipend (NIH T32 HD007242)
2019	Gertrude and Otto Pollak American Sociological Association Travel Award
2019	Alzheimer's Association International Conference Travel Fellowship
2017 - 2019	UPenn President Gutmann Leadership Award (3x)
2016 - 2019	UPenn GAPSA Research Student Travel Grant (4x)
2016 - 2019	UPenn SASgov Travel Grant (4x)
2016 - 2019	UPenn School of Arts and Sciences Dean's Travel Subvention (4x)
2016	NIA-Funded Stress Measurement Network Pilot Project
2011 - 2012	USC Provost's Undergraduate Research Fellowship (2x)
2011 - 2012	USC Summer Undergraduate Research Fund Stipend (2x)

### AWARDS

2019	Laurence G. Branch Aging and Public Health Doctoral Student Research Award
2018	First Place, UPenn Institute on Aging Sylvan M. Cohen Poster Session
2017	First Place, UPenn Graduate Student Art Exhibition
2012	USC Discovery Scholar Distinction
	* Honors students who excel in the classroom while demonstrating the ability to create exceptional new scholarship or artistic works
2012	Honorable Mention, USC Symposium for Scholarly and Creative Work
2012	Honorable Mention, COMAP, Mathematical Contest in Modeling

# Additional Training

2021	Genomics for Social Scientists (with tuition), Institute for Social Research, University of Michigan
2020	Research Transparency and Reproducibility Training (with tuition), Berkeley
	Initiative for Transparency in the Social Sciences
2019	IAPHS Workshop on Population Health and Health Disparities (with travel schol-
	arship)
2019	NIH Workshop on Cognitive Reserve and Resilience (with travel scholarship)
2019	RAND Summer Institute (with travel scholarship)
2019	UC Berkeley Workshop and Conference on Formal Demography (with travel
	scholarship)

# Mentorship

2020-	Mentor, Undergraduate Research Apprentice Program, UC Berkeley
2020-	Mentor, Advancing Diversity in Aging Research, UC Berkeley
2017 - 2020	Mentor, Summer Undergraduate Minority Research Program, University of Penn-
	sylvania

### AFFILIATIONS

2017—Present	Member, Healthy Brain Research Network
2017-Present	Associate Researcher, Penn Memory Center
2017-Present	Associate Researcher, Center for Causal Inference, UPenn
2017-Present	Member, American Sociological Association
2016-Present	Member, Society for Epidemiologic Research
$2016\mathrm{-Present}$	Member, Population Association of America

# PROFESSIONAL EXPERIENCE

2018	Summer Trainee in Aging Research Laboratory of Epidemiology & Population Science National Institute on Aging
2013-2016	Statistician Center for Health and Community

	University of California, San Francisco
2013-2016	Data and Evaluation Specialist Bay Area Discovery Museum
2012-2013	Data Scientist Knowledge Is Power Program
2011-2013	Research Assistant USC Modeling and Simulation Lab
2011	NASA Undergraduate Internship Jet Propulsion Lab