

## JENNIFER BEAM DOWD

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## AREAS OF RESEARCH/TEACHING

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Demography, Population Health, Social Epidemiology, Biomarkers, Infection and immunity

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## EDUCATION

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**Ph.D, Princeton University, *Demography and Public Affairs, 2004***

Office of Population Research and Woodrow Wilson School of Public and International Affairs

**M.A., Princeton University, *Public Affairs, 2002***

General Examination Fields: Demography, Development Economics

**B.A., Washington and Lee University, *Political Science and Spanish, 1996***

Summa Cum Laude, Phi Beta Kappa

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## PROFESSIONAL EXPERIENCE

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- **Associate Professor of Demography and Population Health, Senior Research Fellow**, Leverhulme Centre for Demographic Science, Department of Sociology, University of Oxford, 2019- present.
  - **Deputy Director**, Leverhulme Centre for Demographic Research, University of Oxford, 2019-present.
  - **Associate Professor of Social Epidemiology**, Department of Global Health and Social Medicine, Faculty of Social Science and Public Policy, King's College London, 2016-2019.
  - **Deputy Director**, Institute of Gerontology, Department of Global Health and Social Medicine, King's College London, 2016-2019.
  - **Associate Professor** (with tenure), Epidemiology and Biostatistics, CUNY Graduate School of Public Health and Health Policy, City University of New York (CUNY), 2011-2016.
  - **Faculty Associate**, CUNY Institute for Demographic Research (CIDR), 2008-2016.
  - **Assistant Professor**, Epidemiology and Biostatistics, Hunter College, School of Public Health, City University of New York (CUNY), 2008-2011.
  - **Robert Wood Johnson Health and Society Scholar**, University of Michigan, Center for Social Epidemiology and Population Health, Department of Epidemiology, School of Public Health, 2006-2008
  - **Health Researcher**, Mathematica Policy Research, Inc., Washington, D.C., 2004-2005
  - **Luce Scholar**, The Henry Luce Foundation, The Rural Development Foundation, East Java, Indonesia, 1996-1997
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## PEER-REVIEWED PUBLICATIONS

**Google Scholar Metrics, March 2020: Total Citations 4140, h-index=31**

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83.) Block, P., Hoffman, M., Raabe, I. **Dowd, J.B.**, Rahal, R., Kashyap, R., & Mills, M.C. (2020) Social network-based distancing strategies to flatten the COVID-19 curve in a post-lockdown world. *Nature Human Behaviour*

82.) **Dowd, J. B.**, Andriano, L., Brazel, D. M., Rotondi, V., Block, P., Ding, X., ... & Mills, M. C. (2020). Demographic science aids in understanding the spread and fatality rates of COVID-19. *Proceedings of the National Academy of Sciences*, 117(18), 9696-9698.

- 81.) Gaye, B, Khoury S, Cene CW, Kingue S, N'Guetta R, Lassale C, Balde D, Diop IB, **Dowd JB**, Mills MC, Jouven X. (2020) Sociodemographic and epidemiological considerations of Africa's COVID-19 response: what is the possible pandemic course? in press, *Nature Medicine*
- 80.) Verhagen, M. D., Brazel, D. M., **Dowd, JB**, Kashnitsky, I., & Mills, M. (2020). Mapping hospital demand: demographics, spatial variation, and the risk of "hospital deserts" during COVID-19 in England and Wales. <https://doi.org/10.31219/osf.io/g8s96>, in press, *BMC Medicine*
- 79.) Rotondi, V., Andriano, L., Dowd, J. B., & Mills, M. C. (2020). Early evidence that social distancing and public health interventions flatten the COVID-19 curve in Italy. <https://osf.io/preprints/wah4e/>
- 78.) Renson, A., K. Mullan Harris, **J. B. Dowd**, L. Gaydos, M. B. McQueen, K. S. Krauter, M. Shannahan and A. E. Aiello (2020). Early signs of gut microbiome aging: biomarkers of inflammation, metabolism, and macromolecular damage in young adulthood. *The Journals of Gerontology: Series A*.
- 77.) Hayward S, **Dowd JB**, Fletcher HA, Nellums L, Wurie F, Boccia D (2019). A systematic review of the impact of psychosocial factors on immunity: implications for enhancing BCG response against tuberculosis. *Social Science and Medicine-Population Health*, in press
- 76.) Renson A, Herd P, **Dowd JB** (2019). Sick Individuals and Sick (Microbial) Populations: Challenges in Epidemiology and the Microbiome. *Annual Reviews of Public Health*, in press
- 75.) Renson A, Jones HE, Beghini F, Segata N, Zolnik C, Usyk M, Thorpe L, Burk R, Waldron L., **Dowd JB** (2019). Sociodemographic patterning of the oral microbiome of a diverse sample of New Yorkers. *bioRxiv*. <https://doi.org/10.1101/189225>, *Annals of Epidemiology* 35(73-80.e2).
- 74.) Beghini, F., Renson A, Zolnik C, Geistlinger L, Usyk M, Moody TU, Thorpe L, **Dowd JB**, Burk R, Segata N, Jones HE and Waldron LD (2019). Tobacco exposure associated with oral microbiota oxygen utilization in the New York City Health and Nutrition Examination Study. *bioRxiv* 470286; doi: <https://doi.org/10.1101/470286>, in press, *Annals of Epidemiology* 34(18-25.e3).
- 73.) Schiffer L, Rimsha A, Shephard L, Ramos M, Geistlinger L, Huttenhower C, **Dowd JB**, Segata N, Waldron L. (2019). HMP16SData: Efficient Access to the Human Microbiome Project through Bioconductor. *bioRxiv*: <https://www.biorxiv.org/content/early/2018/04/17/299115>, *American Journal Epidemiology*, epub January 2019
- 72.) Bowyer, RCE, Jackson MA, Le Roy C, Lochlainn MN, Spector TJ, **Dowd JB** and Steves CJ (2019). Socioeconomic Status and the Gut Microbiome: a TwinsUK Cohort Study, *Microorganisms* 7 (1), 17.
- 71.) Rosenbaum J, Chen Z, Jones HE, Waldron LD, **Dowd JB**, Thorpe LE and Burk RB (2019). Evaluation of Eight DNA Isolation Methods for Comparison of DNA Quantity and Microbial Diversity in the Oral Cavity, *Scientific Reports* 9(1), 1531
- 70.) Courtin, E, Nafilyan V, Avendano M, Meneton P, Berkman L, Goldberg M, Zins M, **Dowd JB** (2018). Longer schooling but no better off? A quasi-experimental study of the effect of compulsory schooling on biomarkers in France, *Social Science & Medicine* 200, 379-386.

- 69.) Steptoe, A, Hiltl TJ, **Dowd JB**, Hamer M (2018). Socioeconomic status and central adiposity as determinants of stress-related biological responses relevant to cardiovascular disease risk. *Brain, Behavior, and Immunity*, epub Nov 22.
- 68.) Herd, P, Palloni A, Rey F, **Dowd JB** (2018). Social and population health science approaches to understand the human microbiome, *Nature Human Behavior*, epub Oct 22.
- 67.) **Dowd, JB** and Renson A. (2018). “Under the skin” and into the Gut: Social Epidemiology of the Microbiome, *Current Epidemiological Reviews*, epub Sep 20
- 66.) **Dowd, JB**, Fletcher HA, Boccia D (2018). Social determinants and BCG efficacy: a call for a socio-biological approach to TB prevention, F1000Research, 2018
- 65.) Simanek, AM, Parry A, **Dowd JB** (2017). Differences in the Association Between Persistent Pathogens and Mood Disorders Between Young- to Middle-Aged Women and Men in the U.S., *Brain, Behavior, and Immunity*, epub Sep 28.
- 64.) Pasolli, E, Schiffer, L, Renson, A., Obenchain, V, Manghi, P, Truong, DT, Beghini F, Malik F, Ramos M, **Dowd JB**, Huttenhower C, Morgan M, Segata N, Waldron, L. (2017). Accessible, curated metagenomic data through ExperimentHub. *Nature Methods*, 14(11):1023-1024.
- 63.) Aiello, AE, Jayabalasingham B, Simanek AM, Diez-Roux A, Feinstein L, Meier H, Needham BL, Seeman T, **Dowd JB** (2017). The impact of pathogen burden on leukocyte telomere length in the Multi-Ethnic Study of Atherosclerosis, *Epidemiology and Infection*, epub Sept 17.
- 62.) Courtin, E, **Dowd JB**, Avendano M (2017). The Mental Health Benefits of Acquiring a Home in Older Age: A Fixed-Effects Analysis of Older Americans, *American Journal of Epidemiology*, epub Aug 11, <https://doi.org/10.1093/aje/kwx278>
- 61.) **Dowd, JB**, Bosch JA, Steptoe AS, Jayabalasingham B, Lin J, Yolken R, Aiello AE (2017). Persistent herpesvirus infections and telomere attrition over 3 years in the Whitehall II cohort, *Journal of Infectious Disease*, epub July 22, 2017.
- 60.) Chang, VW, Alley DE, **Dowd JB** (2017). Trends in the Relationship of Obesity and Disability, 1988-2012, *American Journal of Epidemiology*, epub July 28, 2017.
- 59.) Meier, HS, Haan MN, Mendes de Leon CF, Simanek AM, **Dowd JB**, Aiello AE (2016). Early life socioeconomic status and immune response to persistent infections among elderly latinos, *Social Science and Medicine* 166, 77-85.
- 58.) Aiello, AE, Feinstein L, **Dowd JB**, Pawalec G, Derhovanessian E, Galea S, Simanek AM, (2016). Income and markers of immunological cellular aging in Detroit, *Psychosomatic Medicine*, 78(6), 657-666.
- 57.) Aiello, AE, **Dowd JB**, Jayabalasingham B, Feinstein L, Uddin M, Simanek AM, Cheng CK, Galea S Wildman D, Koenen K, Pawalec G. (2016). PTSD is associated with an increase in aged T cell phenotypes in adults living in Detroit, *Psychoneuroendocrinology*, 67 (133-141).

- 56.) Zajacova, A, **Dowd JB**, Schoeni RF, Wallace R. (2015) Employment and income losses among cancer survivors: Estimates from a national longitudinal survey of American families. *Cancer*, 121(24), 4425-4432. Epub Oct 26<sup>th</sup>.
- 55.) Rector, JL, GN Thomas, VE Burns, **JB Dowd**, RM Herr, PA Moss, MN Jarczok, K Hoffman, JE Fischer and J. A. Bosch (2015). Elevated HbA1c levels and the accumulation of differentiated T cells in CMV+ individuals. *Diabetologia*: 58(11), 2596-2605.
- 54.) Romo, ML, McCrillis AM, Brite J, Reales D, **Dowd JB**, Schooling CM (2015). Pharmacologic Androgen Deprivation and Cardiovascular Disease Risk Factors: a Systematic Review. *European journal of clinical investigation*, 45(5), 475-484
- 53.) **Dowd, JB** and Hamoudi A (2015). Life Expectancy and Education, *American Journal of Public Health*, 105 (1).
- 52.) Simanek, AM, **Dowd JB**, Zajacova A, Aiello AE (2015). Unpacking the “Black Box” of Total Pathogen Burden: Is Number or Type of Pathogens Most Predictive of All-Cause Mortality in the U.S? *Epidemiology and Infection*, 143(12) 2624-2634.
- 51.) **Dowd, JB** and Hamoudi A (2014). Is life expectancy really falling for low SES groups? Lagged selection bias and artifactual trends in mortality, *International Journal of Epidemiology*, 43:4 983-988.
- 50.) **Dowd, JB** and Zajacova A (2014). Long-term obesity and physical functioning in older Americans, *International Journal of Obesity*, epub July 31.
- 49.) **Dowd, JB**, Palermo T, Chyu L, Adam E, McDade TW (2014). Race/ethnic and socioeconomic differences in stress and immune function in the National Longitudinal Study of Adolescent Health (2014), *Social Science and Medicine*, 115:49-55.
- 48.) Zajacova, A and **Dowd JB** (2014). Happiness and health in U.S. adults: is the association explained by socioeconomic status? *Public Health*, epub Aug 28.
- 47.) **Dowd, JB** and Zajacova A (2014). Long-term obesity and cardiovascular, inflammatory, and metabolic risk in U.S. adults, *American Journal of Preventive Medicine*, 46(6):578-84, epub May 6.
- 46.) **Dowd, JB** and Zajacova A., (2014). Re: Long-term Body Mass Index and Mortality, *American Journal of Epidemiology*, Epub April 30.
- 45.) Zajacova, A, Walsemann, K and **Dowd JB** (2014). The long arm of adolescent health: Do educational attainment and income explain its association with mid-adulthood health? *Population Research and Development Review*, epub April 6.
- 44.) Tarter, KD, Simanek AM, **Dowd JB**, Aiello, AE (2014). Re: Herpes Simplex Virus I and Cognition in Different Stages of Life. *Journal of Infectious Diseases*, Epub Feb 6.
- 43.) Rector, JL, **Dowd JB**, Loerbroks A, Moss P, Jarczok MN, Simpson RJ, Burns VE, Stalder T, Hoffman K, Fischer JE, Bosch JA. Consistent Associations between Measures of Psychological Stress and CMV Reactivation in a Large Occupational Sample (2014), *Brain, Behavior, and Immunity*, Epub Jan 26

- 42.) Tarter, KD, Simanek AM, **Dowd JB**, Aiello, AE. Persistent Viral Pathogens and Cognitive Impairment across the Lifecourse in the Third National Health and Nutrition Examination Survey (2013). *Journal of Infectious Diseases*, Epub Dec 23
- 41.) Hamoudi, A and **Dowd JB**, Housing wealth, psychological well-being and cognition in older Americans (2013). *Journals of Gerontology: Social Sciences*, Epub Dec 14
- 40.) **Dowd, JB**, Palermo T, Chyu L, Adam EK, McDade TM (2013). Re: Childhood adversity and cell-mediated immunity in young adulthood, Epub Aug 11, *Brain Behavior, and Immunity*.
- 39.) **Dowd, JB**, Palermo T, Brite J, McDade TW, Aiello AE (2013). Seroprevalence of Epstein-Barr Virus Infection in U.S. children ages 6-19, 2003-2010, *PLoS One*, epub May 22;8(5):e64921.
- 38.) Schooling, CM, **Dowd JB**, Jones HE (2013). Helicobacter pylori is associated with lower androgen activity among men in NHANES III, *Gut*, Sep;(9):1384-5 epub April 30.
- 37.) Hamoudi, A and **Dowd JB** (2013). Physical health effects of the housing “boom”: quasi-experimental evidence from the U.S. Health and Retirement Study, *American Journal of Public Health*, June;103(6):1039-45, epub April 18.
- 36.) **Dowd, JB**, Bosch JA, Steptoe A, Blackburn EH, Lin J, Rees-Clayton E, Aiello A. (2013). Cytomegalovirus is associated with reduced telomerase activity in the Whitehall II cohort, *Experimental Gerontology* 48(4) 385-390.
- 35.) Hale, L, Parente V, **Dowd JB**, Sands JS, Berger JS, et al. (2013). Does fibrinogen mediate the relationship between sleep duration and coronary heart disease? *Journal of Sleep Research*, 22(3):305-14, Epub Dec 6, 2012.
- 34.) Palermo, T and **Dowd JB** (2012). Childhood obesity and human capital accumulation. *Social Science & Medicine*, 75(11):1989-98, Epub Aug 16.
- 33.) Karb, RA, Elliott, MR, **Dowd JB**, Morenoff JD (2012). Neighborhood-level stressors, social support, and diurnal patterns of cortisol: the Chicago Community Adult Health Study, *Social Science & Medicine*, 75(6): 1038-47
- 32.) **Dowd, JB** (2012). Whiners, deniers, and self-rated health: What are the implications for measuring health inequalities? A commentary on Layes, et al. *Social Science & Medicine*, 75(1) 10-3.
- 31.) **Dowd, JB**, Palermo T, Aiello AE (2012). Family poverty is associated with CMV antibody titers in U.S. children, *Health Psychology*, 31(1):5-10, Epub Sep 5, 2011
- 30.) Zajacova, A, **Dowd, JB** (2011). Reliability of self-rated health in U.S. adults, *American Journal of Epidemiology*, 174(8):977-83. Epub September 2.
- 29.) **Dowd, JB**, Todd M (2011). Does self-rated health impact the measurement of health inequalities by education in U.S. adults? Evidence using vignettes from the Health and Retirement Study, *Journals of Gerontology: Social Sciences*, 66(4):478-89, Epub June 10

- 28.) Dowd, JB, Weinstein M, Goldman, N (2011). Sleep duration, sleep quality, and biomarkers of inflammation in a Taiwanese population, *Annals of Epidemiology*, 21(11), 799-806.
- 27.) Olden, K, Freudenberg N, Dowd, JB, Shields AE (2011). Discovering how environmental exposures alter genes could lead to new treatments for chronic illness, *Health Affairs*, 30(5) 833-841.
- 26.) Dowd, JB, Aiello AE, Chyu, L, Huang Y, McDade TW (2011). Cytomegalovirus antibodies in whole blood spots: a minimally invasive method for assessing stress, immune function, and aging, *Immunity and Aging*, 8:3
- 25.) Simanek, AM, Dowd JB, Pawelec G, Melzer D, Dutta A, Aiello AE, (2011). Seropositivity to Cytomegalovirus, Inflammation, All-Cause and Cardiovascular Disease-Related Mortality in the US, *PLoS One* 6(2): e16103.
- 24.) Dowd, JB, Ranjit N, Young EA, Do DP, House JS, Kaplan GA (2011). Education and Levels of Salivary Cortisol Over the Day, *Annals of Behavioral Medicine*, 41(1) 13-20.
- 23.) Dowd, JB, Kaplan GA, Schoeni RF, LeClere F, Albright J (2011), Deeper and Wider: Income and mortality in the U.S. over three decades, *International Journal of Epidemiology*, 40(1): 183-8.
- 22.) Dowd, JB and A. Zajacova (2011), Response to Commentary, "About the Role of Socioeconomic Position on the Relation Between Objective Health Status and Self-Rated Health: A Rapid Commentary on Dowd's article" *Annals of Epidemiology*, 21(5): p. 388-389.
- 21.) Clayton, ER, Todd MA, Dowd JB, Aiello AE (2010). The impact of triclosan and bisphenol A on immune parameters in the US population, NHANES 2003-2006, *Environmental Health Perspectives*, Epub Nov 9
- 20.) Dowd, JB, Zajacova, A (2010). Does Self-Rated Health Mean the Same Thing Across Socioeconomic Groups? Evidence from Biomarker Data, *Annals of Epidemiology*, 20(10):743-9.
- 19.) Zajacova, A, Dowd JB, Burgard S (2010). Overweight Adults May Have the Lowest Mortality--Do They Have the Best Health? *American Journal of Epidemiology* 173(4) 430-7.
- 18.) Dowd, JB, Zajacova A, Aiello AE (2010). Predictors of inflammation in U.S. children aged 3-16, *American Journal of Preventive Medicine*, 39(4):314-320.
- 17.) Roberts, E, Haan MN, Dowd JB, Aiello AE (2010). Cytomegalovirus Antibody Levels, Inflammation, and Mortality among Elderly Latinos over 9 years of Follow-up, *American Journal of Epidemiology*, 172:363-371, Epub July 21.
- 16.) Roberts, E, Haan MN, Dowd JB, Aiello AE (2010). Response to "Human CMV, Inflammation, and Mortality," *American Journal of Epidemiology*, 172: 375-376, Epub July 21.
- 15.) Zajacova, A, Dowd JB, Schoeni RF, Wallace R (2010). Consistency and Precision of Cancer Reporting in a Multi-wave National Panel Survey, *Population Health Metrics*, Jun 25; 8:20.

- 14.) Do, D Phuong, **Dowd JB**, Ranjit N, House, JS, Kaplan GA (2010). Hopelessness, Depressive Symptoms and Early Markers of Endothelial Dysfunction in U.S. Adults, *Psychosomatic Medicine*, 72(7):613-9.
- 13.) Goldman N and **Dowd JB** (2009). Considering the Addition of Cardiovascular and Metabolic Biomarkers to the Panel Study of Income Dynamics, *Biodemography and Social Biology*; 55:2:140-158.
- 12.) **Dowd, JB** and Aiello AE (2009). Socioeconomic Differentials in Immune Response in the U.S., *Epidemiology*; 20(6):902-8.
- 11.) **Dowd, JB**, Simanek A, Aiello, AE (2009). Socioeconomic Status, Cortisol, and Allostatic Load: A Review of the Literature, *International Journal of Epidemiology*; 38(5):1297-309.
- 10.) Zajacova A, **Dowd JB**, Aiello AE (2009). Socioeconomic and Racial/Ethnic Patterns in Persistent Infection Burden among U.S. adults, *The Journals of Gerontology: Biological Sciences and Medical Sciences*, Feb; 64(2):272-9.
- 9.) **Dowd, JB**, Zajacova A, and Aiello AE (2009). Early Origins of Health Disparities: Burden of Infection, Health and Socioeconomic Status in U.S. children, *Social Science and Medicine*, 68: 699-707.
- 8.) **Dowd, JB**, Aiello AE, Alley DE (2009). Socioeconomic Gradients in the Seroprevalence of Cytomegalovirus Infection in the U.S.: NHANES III. *Epidemiology and Infection*, 137(1) 58-65.  
\*Designated one of the 10 most-read articles in *Epidemiology and Infection* in 2009
- 7.) Simanek, AM, **Dowd JB**, Aiello AE (2008). Persistent Pathogens Linking Socioeconomic Position and Cardiovascular Disease: NHANES III, *International Journal of Epidemiology*, 38(3): 775-87.
- 6.) **Dowd, JB** and Zajacova A. (2008). Response to ‘Is the use of self-rated health measures to assess health inequalities misleading?’ *International Journal of Epidemiology*, 37: 1438-1439. Epub Oct 19 2008
- 5.) **Dowd, JB** and Aiello AE (2008). Did National Folic Acid Fortification Reduce Socioeconomic and Racial Disparities in Folate Status? *International Journal of Epidemiology*, 37(5): 1059-66. Epub May 2 2008.
- 4.) **Dowd, JB**, Haan MN, Blythe L, Moore K, Aiello AE. (2008). Socioeconomic Gradients in Immune Response to Latent Infection, *American Journal of Epidemiology* 167: 112-120.
- 3.) **Dowd, JB** and Zajacova A, (2007). Does the Predictive Power of Self-Rated Health for Subsequent Mortality Risk Vary by Socioeconomic Status? *International Journal of Epidemiology*, 36(6):1214-21.  
\*Designated one of the most cited articles in *IJE* in 2008
- 2.) **Dowd, JB**. (2007). Early Childhood Origins of the Income-Health Gradient: The Role of Maternal Health Behaviors, *Social Science and Medicine* 65:1202-1213.
- 1.) **Dowd, JB**, and Goldman N. (2006). Do Biomarkers of Stress Mediate the Relationship Between Socioeconomic Status and Health? *Journal of Epidemiology and Community Health*, 60:633-639.

## **BOOK CHAPTERS**

Aiello, AE and **Dowd JB**, “Socioeconomic Status and Immunosenescence” (2013). In: J.A. Bosch, A.C. Phillips & J.M. Lord (Eds.). *Immunosenescence: Psychosocial and Behavioral Determinants*. Springer, New York.

Aiello AE, Simanek AM, Stebbins RC, **Dowd JB**. “Psychosocial Influences on Infectious Disease” (2017). In: M. Kivimaki, G David Batty, A Steptoe, I Kawachi (Eds). *The Routledge Handbook of Psychosocial Epidemiology*. Routledge, London and New York.

## GRANTS

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### ***In Progress:***

Wellcome Trust Longitudinal Population Studies Grant (P.I. T. Spector) 01/01/2019-01/01/22

Title: TwinsUK—An Epidemiological and Genomic Resource

Total: £3,000,000

Role: Co-investigator, Lead Bio-Social Data Programme

The purpose of this grant is to support the on-going operation and management of the TwinsUK cohort, including new enhancements in health records linkage and sociological and environmental data.

1U01CA230551-01A1 (P.I. L. Waldron) 07/31/19-6/30/24

Exploiting Public Metagenomic Data to Uncover Cancer-Microbiome Relationships

Total: \$2,318,425

Role: Co-investigator

This project improves the ability to identify new roles of the human microbiome in cancer by 1) enabling comprehensive comparisons of microbiome studies to previously published results and known microbial physiology, 2) developing higher- resolution approaches to identifying viruses and bacterial strains from metagenomic shotgun data, and 3) making all methods and resources easily usable by a broad research community.

### ***Completed:***

NIH 1R21 AI21784-01 (P.I. Dowd) 02/18/16-07/31/19

Title: The representative microbiome: social determinants and tools for population research

Total: \$275,000, direct costs

Role: P.I

The goal of this project is to test the association of oral microbiome characteristics and sociodemographic factors in a large, nationally representative survey, examine associations between the oral microbiome and biomarkers of risk, and develop a web-based tool-kit for population health researchers to more easily incorporate microbiome data into their analysis.

King’s SSPP Faculty Research Fund Award (P.I. Dowd) 01/01/19-30/06/19

Title: Gene X Environment Interactions and Cognition

Total: £10,000

Role: P.I.

The goal of this project is to investigate interactions of the social environment over the lifecourse with genetic liability for cognitive decline using data from the English Longitudinal Study of Ageing.

VALIDATE Network Pump Priming Grant (P.I. Boccia) 12/02/17-11/30/18

Title: Enhancing BCG efficacy: the Social Technology Lab Initiative

Total: £49933

Role: Co-investigator

This project aims to start the Social Technology Lab Initiative, a multidisciplinary research partnership aiming to assess how social determinants manifest biologically via the immune response and evaluate how vaccines efficacy can be enhanced by acting on these social determinants through poverty-reduction strategies



NIA R24AG045061 (P.I Dowd) 7/1/16-6/30/17  
 Title: Assessing the Importance of Changing Educational Selection for Education-Mortality Trends in the U.S.”  
 Total: \$10,000 total costs  
 Role P.I.  
 This pilot project was selected to be part of the Network on Life Course Health Dynamics and Disparities in 21<sup>st</sup> Century America, hosted by the University of Michigan

NIH 1R01AG040115 (P.I: A. Aiello) 5/1/12-3/30/16  
 Title: Infectious Links Between Psychosocial Stress and Aging  
 Total: \$1,200,000 direct costs  
 Role: Co-P.I  
 The goal of this project is to add immunoassays for several common pathogens to a sub-sample of the Whitehall II epidemiological cohort in order to study the interaction of the social environment, psychosocial stress, immune function, and telomere length.

Hunter College Center for Gene Structure and Function 6/1/13-12/31/13  
 Title: Pilot Study: Analysis of oral specimens from 2013 NYC HANES for microbiome characterization and human papillomavirus  
 Total: \$5000  
 Role: Co-PI

National Institutes of Health 5R03CA149072-2 (P.I.: A. Zajacova) 7/1/10-7/1/12  
 Title: Cancer and Economic Well-being  
 Total, \$100,000 direct costs  
 Role: Co-Investigator  
 The goal of this grant is to estimate the economic impacts of cancer on cancer survivors using longitudinal data from the Panel Study of Income Dynamics

National Institutes of Health 1R21NR011181-01 (PI: J. Dowd) 9/1/08-6/30/11  
 Title: Understanding the role of stress and immune function in health disparities  
 Total: \$ 418,000 total costs  
 The goal of this grant is to examine the role of infection, immunity and inflammation as factors linking social factors to health and mortality in the US population.  
 Role: P.I.

Robert Wood Johnson Foundation (PI: A. Hamoudi) 06/01/08-06/01/09  
 Total: \$ 22,000  
 Title: Assets and Stress: Using the housing market to explore health effects of wealth

National Institutes of Health 1R21AG031358-01A1 (PI: G. Kaplan) 9/1/08-8/31/10  
 Title: *International Study of Income Gradients*  
 Total: \$ 300,000  
 Role: Co-investigator

National Institutes of Health: (P.I. N. Goldman) 07/01/09-8/31/09  
 Total: \$ 36,259 (subcontract)  
 Title: Biodemography of Health, Social Factors, and Life Challenges

Role: Co-investigator

Robert Wood Johnson Foundation (PI: J. Dowd)

05/01/07-08/31/08

Total: \$33,253

Title: Under the skin: Understanding the links between socioeconomic status, stress, immune function and health

Role: P.I.

## **AWARDS/FELLOWSHIPS**

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- King's College London Leading Researchers Programme, 2019
- Teaching Excellence Award Nomination, King's College London, 2017, 2018
- Marie Curie Incoming European Union Fellowship, 2012 (declined)
- Robert Wood Johnson Health and Society Scholar, University of Michigan, 2006-2008
- RAND Summer Institute: Demography, Economics, and Epidemiology of Aging Conference and Mini-Medical School Travel award, 2004
- Woodrow Wilson School Dissertation Write-up Award, Princeton University, 2003-2004
- Mathematica Policy Research, Inc. Summer Fellowship, 2003
- National Institutes of Health Traineeship in Demography, 2002-2003
- National Science Foundation Graduate Fellowship, 1999-2002
- Karl E. Prickett Fellowship in Public and International Affairs, Princeton University, 1998
- Luce Scholar, The Henry Luce Foundation, 1996-97
- Francis P. Gaines Honor Scholarship, Washington and Lee University, 1992-1996
- Phi Beta Kappa, 1995
- Omicron Delta Kappa (National Leadership Honor Society), 1995
- Spanish Departmental Scholarship, Washington and Lee University, 1995
- The Robinson Award in Languages, Washington and Lee University, 1996
- The Edward Lee Pinney Prize, Washington and Lee University, 1996

## **SELECTED PRESENTATIONS**

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- “The effect of a targeted cash transfer on cognitive function in later life: Evidence from a gene-environment interaction.” University College London, September 2019 and Nuffield College, University of Oxford, February 2020
- “Trends in Mid-life Mortality: Is the US an Anomaly?” presented at the REVES/TRENDS joint meeting, Institute of Social Research, University of Michigan, May 2018, British Society of Population Studies Meeting, July 2019
- “Innovations in Biosocial Linkages Across the Life Course,” invited discussant for Keynote Panel, Annual Meeting of the Interdisciplinary Association of Population Health Science (IAPHS), U.S. National Academies of Science, Washington, D.C., October 2018.
- “Is Compulsory Education Associated with Biomarkers of Health in Mid-life? Evidence from a French quasi-experiment,” presented at the meeting of the International Union for the Scientific Study of Population (IUSSP), Cape Town, South Africa, October 2017 and the annual meeting of the Population Association of America (PAA), Denver, CO, April 2018.
- “Of Men and Microbes: Social determinants of the Microbiome,” invited presentation, Carolina Population Center, University of North Carolina-Chapel Hill and Duke University Population Research Institute, September 2017 and Center for Demography and Ecology, University of Wisconsin-Madison, May 2018, and Nuffield College, Oxford University, June 2018.

- "Trends in Mortality by SES: overview and subgroup cautionary tales" invited presentation at the National Academy of Sciences, Planning Meeting on Socioeconomic Status and Increasing Mid-Life Mortality, Washington D.C., June 2017
- "Is Life Expectancy Really Falling for the Least Educated Americans?" invited presentation at the NYU Population Center, April 2015, University of Pennsylvania Population Studies Center, April 2015, Department of Sociology, Oxford University, November 2015, and the London School of Economics, June 2016.
- "Infectious Links Between Social Factors and Chronic Disease." Invited presentation at Cambridge University, November 2016.
- "Income trajectories and biomarkers of inflammation and metabolic risk," Understanding Society Biomarker Meeting, London, March 2017
- "Social determinants of the Microbiome", presented at Biomarker Network Meeting, Annual Meeting of the Population Association of America, April 2017
- "Exploring the role of selection in education-mortality trends," presented at Life Course Health Dynamics Network Meeting, Annual Meeting of the Population Association of America, April 2017
- "Long-term obesity and physical functioning in older Americans." presented at the Annual Meeting of the Population Association of America, Boston, MA May 2014.
- "Population immunology and health disparities"-invited presentation at the California Center for Population Research, UCLA, January 2014 and the Center for Demography and Ecology, University of Wisconsin-Madison, March 2014, and the CU Population Center, University of Colorado Boulder, October 2014
- "Herpesviruses, Inflammation, and Leukocyte Telomere Length in the Whitehall II Heart Scan Study," Poster presentation at the Society for Epidemiological Research, Seattle, WA, June 2014.
- "Associations between measures of early and current psychological stress and CMV and EBV antibody levels." Poster presentation at the Society for Epidemiological Research, Seattle, WA, June 2014.
- "Income Level, Cytomegalovirus and CD4 and CD8 T Cell Repertoire Among Adults Living in Detroit." Poster presentation at Annual Meeting of the Gerontological Society of America, Washington, D.C., November 2014.

## **ADDITIONAL TRAINING**

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- Panel Data Analysis using STATA, course at the Inter-university Consortium for Political and Social Research (ICPSR) Summer Institute, University of Michigan, June 2008.
- Training in Enzyme-Linked Immunoassay (ELISA) laboratory technique, Laboratory for Human Biology Research, Northwestern University, July 2009.
- Genome-Wide Association Study (GWAS) Workshop, University of Colorado at Boulder, October 2013

## **PROFESSIONAL SERVICE**

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Board of Directors, Population Association of America (PAA), 2019-2022  
 Social Epidemiology Section Editor, Current Epidemiology Reports (2018-2019)  
 Award Committee, International Association of Population Health Science (IAPHIS) 2018-present  
 Editorial Board, PLoS One, April 2013-present  
 Editorial Board, Journals of Gerontology: Social Sciences (2013-2018)

## **COURSES TAUGHT**

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*University of Oxford, Leverhulme Centre for Demographic Science*

- Advanced Quantitative Methods (Masters Level)

*King's College London, Department of Global Health and Social Medicine*

- Applied Epidemiology and Social Statistics (Undergraduate level)
- Quantitative Data Analysis (Masters level)
- Data Management and Manipulation with STATA (Master's level)
- Ageing in a Global Perspective (Undergraduate level)

***Graduate Center, City University of New York:***

- Cities, Society and Health (Doctoral level)
- Introduction to Demography (Doctoral level)
- Special Topics in Biodemography (Doctoral level)

***Hunter College, CUNY School of Public Health, City University of New York:***

- Principles of Epidemiology (Masters level)
- Social Epidemiology (Masters/Doctoral level)

***Princeton University:***

- WWS/ECON 508 Generalized Linear Statistical Models (Masters/Doctoral level), Teaching Assistant