



Dr Laura Howe
BSc(Sus.), MSc(Lond.), PhD(Lond.)

Reader in Epidemiology and Medical Statistics

Office OF23
Oakfield House,
Oakfield Grove, Clifton BS8 2BN
([See a map](#))

+44 (0) 1173310134
laura.howe@bristol.ac.uk

Summary

I am a statistical epidemiologist. My two main interests are: i) the life course epidemiology of obesity and cardiovascular disease, and ii) the complex and bidirectional relationships between social factors (socioeconomic disadvantage, adverse childhood experiences) and health.

I have experience of statistical techniques for repeated measures data, and in the integration of genetic data into epidemiological studies.

Biography

I currently hold an MRC Career Development Award (2015-2020), and was previously funded by an MRC Population Health Scientist fellowship (2011-2015). I joined the University of Bristol in 2008 after completing my MSc and PhD in Epidemiology at the London School of Hygiene and Tropical Medicine.

I am PI on a project funded by the Health Foundation that seeks to investigate the role of health in shaping wellbeing, social support, educational attainment, and employment. I lead the Interstela project, funded by the ESRC and BBSRC, which examines the influence of early life adversity on DNA methylation. I previously led an R01 grant funded by the US National Institute on Aging and ESRC to investigate the association between early life adversity and health in mid-life.

Teaching

I contribute to several short courses within the Social and Community Medicine (including Statistical Methods for Mediation Analysis). I became a fellow of the Higher Education Academy in August 2014.

Keywords

- obesity
- cardiovascular
- socioeconomic inequalities
- adverse childhood experiences
- longitudinal
- trajectories
- mediation

Skills

- obesity
- cardiovascular disease
- healthy ageing

Methodologies

- multilevel modelling
- causal inference

Memberships

Organisations

[Bristol Medical School \(PHS\)](#)

Other sites

- [Populationhealth](#)

Centres, collaborations and units

- [MRC Integrative Epidemiology Unit](#)

Research groups

- [Medical Statistics in the School of Social and Community Medicine](#)

Recent publications

- O'Keefe, L, Simpkin, A, Tilling, K, Anderson, E, Hughes, A, Lawlor, D, Fraser, A & Howe, L, 2019, ['Data on trajectories of measures of cardiovascular health in the Avon Longitudinal Study of Parents and Children \(ALSPAC\)'](#). *Data in Brief*, vol 23.
- Schultz, MG, Park, C, Fraser, A, Howe, LD, Jones, S, Rapala, A, Smith, GD, Sharman, JE, Lawlor, DA, Chaturvedi, N, Deanfield, J & Hughes, AD, 2019, ['Submaximal exercise blood pressure and cardiovascular structure in adolescence'](#). *International Journal of Cardiology*, vol 275., pp. 152-157
- O'Keefe, L, Simpkin, A, Tilling, K, Anderson, E, Hughes, A, Lawlor, D, Fraser, A & Howe, L, 2018, ['Sex-specific trajectories of measures of cardiovascular health during childhood and adolescence: A prospective cohort study'](#). *Atherosclerosis*, vol 278., pp. 190-196
- Bell, J, Carslake, D, O'Keefe, L, Frysz, M, Howe, L, Hamer, M, Wade, K, Timpson, N & Smith, GD, 2018, ['Associations of body mass and fat indexes with cardiometabolic traits'](#). *Journal of the American College of Cardiology*, vol 72., pp. 3142-3154
- O'Keefe, LM, Howe, L, Fraser, A, Hughes, AD, Wade, K, Anderson, E, Lawlor, D, Erzurumluoglu, M, Smith, GD, Rodriguez, S & Stergiakouli, E, 2018, ['Associations of Y chromosomal haplogroups with cardiometabolic risk factors and subclinical vascular measures in males during childhood and adolescence'](#). *Atherosclerosis*, vol 274., pp. 94-103
- Park, C, Fraser, A, Howe, L, Jones, S, Smith, GD, Lawlor, D, Chaturvedi, N & Hughes, A, 2018, ['Elevated Blood Pressure in Adolescence Is Attributable to a Combination of Elevated Cardiac Output and Total Peripheral Resistance: Evidence Against a Hyperkinetic State'](#). *Hypertension*, vol 72., pp. 1103-1108
- , , , Tedja, MS, Wojciechowski, R, Hysi, PG, Eriksson, N, Furlotte, NA, Verhoeven, VJ, Iglesias, AI, Meester-Smoor, MA, Tompson, SW, Fan, Q, Khawaja, AP, Cheng, CY, Höhn, R, Yamashiro, K, Wenocur, A, Grazal, C, Haller, T, Metspalu, A, Wedenoja, J, Jonas, JB, Wang, YX, Xie, J, Mitchell, P, Foster, PJ, Klein, BE, Klein, R, Paterson, AD, Hosseini, SM, Shah, RL, Williams, C, Teo, YY, Tham, YC, Gupta, P, Zhao, W, Shi, Y, Saw, WY, Tai, ES & others 2018, ['Genome-wide association meta-analysis highlights light-induced signaling as a driver for refractive error'](#). *Nature Genetics*, vol 50., pp. 834-848
- Caleyachetty, R, Hardy, R, Cooper, R, Richards, M, Howe, LD, Anderson, E, Kuh, D & Stafford, M, 2018, ['Modeling Exposure to Multiple Childhood Social Risk Factors and Physical Capability and Common Affective Symptoms in Later Life'](#). *Journal of Aging and Health*, vol 30., pp. 386-407
- Houtepen, L, Heron, J, Suderman, M, Tilling, K & Howe, L, 2018, ['Adverse childhood experiences in the children of the Avon Longitudinal Study of Parents and Children \(ALSPAC\)'](#). *Wellcome Open Research*, vol 3.
- De Vocht, F, Suderman, M, Tilling, K, Heron, J, Howe, L, Campbell, R, Hickman, M & Relton, C, 2018, ['DNA methylation from birth to late adolescence and development of multiple-risk behaviours'](#). *Journal of Affective Disorders*, vol 227., pp. 588-594

[View complete publications list](#) in the University of Bristol publications system

Projects

- [Active for Life Year 5](#)
- [Avon Longitudinal Study of Parents and Children \(ALSPAC\)](#)
- [Epigenetics and Social Science Network](#)
- [Interpreting epigenetic signatures in studies of early life adversity \(Interstela project\)](#)