KURT TAYLOR

Bristol ◇ UK

Phone: (+44)7425608190 ◇ Email: kurt.taylor@bristol.ac.uk ◇ Website: https://www.kurttaylor.io

CURRENT POSITION

Senior Research Associate in Medical Statistics and Health Data Science - University of Bristol

EDUCATION

University of Bristol, UK *September 2017-February 2022*
Doctor of Philosophy (PhD), Integrative Cardiovascular Science (Epidemiology)
Thesis title: *The epidemiology of congenital heart disease: identifying causal maternal risk factors*
Fully funded studentship via the British Heart Foundation

University of Surrey, UK *September 2014-July 2017*
Bachelor of Science (BSc Hons), Sport and Exercise Science; First

EXPERIENCE

University of Bristol February 2022-Current
Senior Research Associate in Medical Statistics and Health Data Science *Bristol, UK*

· Conducting research within the Longitudinal Health and Wellbeing COVID-19 National Core Study.

University of Copenhagen January 2020
Visiting researcher *Copenhagen, Denmark*

· Visiting researcher for 2 weeks undertaking analyses as part of a wider project.

Population Health Sciences, University of Bristol January 2019 - January 2020
Teacher *Bristol, UK*

· After completing the *'starting to teach'* training course, I was enrolled as a teacher on the Bristol Medical School short course: *Introduction to Epidemiology.*

Aspire Scientific August 2019 - ongoing
Freelance medical writer *Remote work*

· As a freelance medical writer, I help produce a diverse range of high-quality scientific materials. This role often has strict deadlines.

MRC Integrative Epidemiology Unit, University of Bristol 2019
Events organisation *Bristol, UK*

· I was part of the organisation committee for the 2019 International Mendelian Randomization conference.

Surrey Human Performance Institute May 2016 - August 2016
Clinical exercise science intern *Surrey, UK*

· A patient-facing position located within a lab at Surrey Sports Park, as well as carrying out Cardiopulmonary Exercise Testing at Ashford and St Peter's Hospital.

PUBLICATIONS AND RESEARCH

I am an advocate of open science and the publication of pre-specified analysis plans to improve reproducibility and prevent publication bias. A list of my past, current and future projects can be found here: OSF Page. My Google Scholar Profile can be found here: Google Scholar Profile.

Published research

1. **Taylor K**, McBride N, Zhao J et al.The Relationship of Maternal Gestational Mass Spectrometry-Derived Metabolites with Offspring Congenital Heart Disease: Results from Multivariable and Mendelian Randomization Analyses. *Journal of Cardiovascular Development and Disease*; (2022). Open-Access link
2. Cocmello L, **Taylor K**, Caputo M, Cornish RP, Lawlor DA. Health and Well-Being in Surviving Congenital Heart Disease Patients: An Umbrella Review With Synthesis of Best Evidence. *Frontiers in Cardiovascular Medicine*; (2022). Open-Access link
3. Hughes DA, **Taylor K**, McBride N, et al. Metaboprep: an R package for pre-analysis data description and processing. *Bioinformatics*; (2022). Open-Access link
4. Corbin LJ, Taylor AE, White SJ, Williams CM, **Taylor K**, den Bosch MT van, et al. Epigenetic Regulation of F2RL3 Associates with Myocardial Infarction and Platelet Function. *Circulation Research*; (2022). Open-Access link
5. McBride N, Yousefi P, Sovio U, **Taylor K**, Vafai Y, Yang T, et al. Do mass-spectrometry-derived metabolomics improve prediction of pregnancy-related disorders? Findings from a UK birth cohort with independent validation. *Metabolites*; (2021). Open-Access link
6. **Taylor K**, Elhakeem A, Nader JLT, Yang T, Isaevska E, Richiardi L, et al. The effect of maternal pre-/early-pregnancy BMI and pregnancy smoking and alcohol on congenital heart diseases: a parental negative control study. *Journal of the American Heart Association*; (2021). Open-Access link
7. Richardson TG, Mykkänen J, Pahkala K, Ala-Korpela M, Bell JA, **Taylor K** et al. Evaluating the direct effects of childhood adiposity on adult systemic metabolism: A multivariable Mendelian randomization analysis. *International Journal of Epidemiology*, dyab051 (2021). Open-Access link
8. **Taylor K**, McBride N, J Goulding N et al. Metabolomics datasets in the Born in Bradford cohort. *Wellcome Open Res* (2020), 5:264 Open-Access link
9. **Taylor K**, Thomas R, Mumme M et al. Ascertaining and classifying cases of congenital anomalies in the ALSPAC birth cohort. *Wellcome Open Res* (2020), 5:231 Open-Access link
10. **Taylor, K.**; L. Santos Ferreira, D.; West, J.; Yang, T.; Caputo, M.; A. Lawlor, D. Differences in Pregnancy Metabolic Profiles and Their Determinants between White European and South Asian Women: Findings from the Born in Bradford Cohort. *Metabolites* 9, 190 (2019). Open-Access link
11. **Taylor, K.**, Davey Smith, G., Relton, C.L. et al. Prioritizing putative influential genes in cardiovascular disease susceptibility by applying tissue-specific Mendelian randomization. *Genome Med* 11, 6 (2019). Open-Access link

Pre-prints under review

1. **Taylor K**, Wootton R, Yang Q et al.The effect of maternal BMI, smoking and alcohol on congenital heart diseases: a Mendelian randomization study. *medRxiv*; (2022). Pre-Print link

Media

1. Press release: Smoking during pregnancy associated with child's risk of having congenital heart disease (May 2021). I co-wrote this press release with help from the UoB media team. Link to press release

PRIZES, GRANTS AND AWARDS

1. University of Bristol Open Research Prize for Increasing Quality (£100 prize), March 2021 - *Why and how I have adopted Open Research practices to improve the quality of my research.* Link
2. British Heart Foundation Accelerator Award Pump Priming Grant (£50,000), March 2020 - *Cardiovascular risk factors other than the heart defect in children with congenital heart disease.* Cocomello L, **Taylor K**, Cornish R, Skeffington K, Lawlor D.A., Caputo M.

SUPERVISION

1. Academic dental student placement - final year research project (2021, Qui-Yi).
2. Visiting PhD student from Denmark including a 6-week in-person visit to Bristol and subsequent remote supervision (2022, Walker C).

PRESENTATIONS, TALKS AND PUBLIC SPEAKING

Oral presentations

Royal Statistical Society International Conference 2022, *Aberdeen, UK* *September 2022*
The risk of incident diabetes following SARS-CoV-2 infection in unvaccinated and vaccinated populations: A cohort study of up to eighteen million people.

University of Bristol Open Research Awards, *Virtual* *March 2021*
Why and how I have adopted Open Research practices to improve the quality of my research.

Longitudinal Studies Conference, *Virtual* *March 2021*
The effect of maternal pre-/early-pregnancy BMI and pregnancy smoking and alcohol on congenital heart diseases: a parental negative control study.

Society for Epidemiologic Research, *Boston, USA* *June 2020*
Invited for oral presentation (meeting cancelled due to COVID-19 pandemic) - *Using an untargeted metabolomics platform to explore associations between maternal metabolites and congenital heart disease in the offspring.*

University of Surrey, *Surrey, UK* *October 2019*
I was invited to give a one hour talk about my time at the University of Surrey and how I progressed to a PhD student.

Born in Bradford Science Festival, *Bradford, UK* *September 2019*
Sofa session lasting 70 minutes talking to a mixed audience including members of the public, researchers and policy makers about my research and what we use blood samples for in the Born in Bradford cohort.

Poster presentations

DOHaD 2019, *Melbourne, Australia* *October 2019*
Differences in Pregnancy Metabolic Profiles and Their Determinants between White European and South Asian Women: Findings from the Born in Bradford Cohort.

TRAINING AND SKILL DEVELOPMENT

Training courses: Introduction to Epidemiology (5 days), Introduction to Statistics (5 days), Mendelian randomisation (3 days), Systematic reviews and meta-analyses (4 days), Causal inference in epidemiology (3 days), Genetic epidemiology (5 days), Biostatistical analysis of genotype data (2 days), Simulation studies (2 days), Biostatistical methods for analysing electronic medical record data (2 days).

Statistical packages / Programming: R (proficient), Stata (familiar), Python (familiar), Microsoft Office (proficient), GitHub (proficient), Command Line Tools (proficient), Shell Scripting (familiar).

General: Statistics, Coding, Data Viz, Project Management, Public Speaking, Writing (scientific and lay), Student Supervision, Collaboration.