REBECCA (BECKI) GREEN, PHD

Passionate epidemiologist with a strong background in data science. Pronouns: she/her.



EDUCATION

2022 2019

PhD, Neuroscience

Maurice Wohl Clinical Neuroscience Institute - King's College London

- · NIHR Biomedical Research Centre PhD studentship. Project: "Linking blood metabolites to early dementia using systems biology' Supervisors: Dr Petroula Proitsi & Professor Marcus Richards.
- · Twice awarded the highly competitive Alan Turing Institute Enrichment Scholarship to carry out my research at the Alan Turing Institute.

2018 2017

MSc, Genes, Environment and Development in Psychology and **Psychiatry**

SGDP Centre - King's College London

2015 2014

MSc, Biomedical Sciences Research

Medical Sciences - University of Bristol

2013 2010

BSc, Physiological Science

Medical Sciences - University of Bristol



RESEARCH & INDUSTRY EXPERIENCE

2023 2022

Research Fellow (Epidemiology)

MRC Unit for Lifelong Health and Ageing at UCL

- · Working on several projects investigating i) relationships between common infections, brain health, and dementia in large population-based cohort studies (grant led by Dr Dylan Williams), and ii) risk factors of long COVID.
- · Supervision or co-supervision of MSc and PhD students. Line management of internships.
- · Planning research through writing research protocols and contributing to grant proposals.
- · Writing up research for publication and peer-reviewing other work. Presenting research at international and national conferences and events.

2022 2021

DECOVID Project Collaborator

The Alan Turing Institute

- · Characterising electronic health record data collected during the COVID-19 pandemic in two large hospital trusts.
- · Creating reproducible pipelines to enable collaboration across teams.
- · Assessing data quality and evaluating against a data ethics framework. Led by Dr Kirstie Whitaker.

CONTACT

- bgreen0242@gmail.com
- github.com/beckigreen
- in linkedin.com/in/rebecca-egreen

KEY SKILLS

Mentoring and supervision

Coding (Highly skilled with R & Python; Competent with Stata, SQL, bash, git, GitHub/GitLab)

Data analysis & reproducible research

HOBBIES

RESOURCES

CV made with the R package pagedown. Code available here.

2022 | 2019

Graduate Teaching Assistant

King's College London

- · Course design and material creation, seminar and practical leader or assistant, marking, forum management.
- · Module lead: Big Data in Python (BSc).
- Teaching/workshop assistant: Statistics in R (MSc), Reproducible Reporting Using Markdown (Worldwide), Research Methods (MSc & BSc), Mendelian Randomisation (MSc), Origins of Individual Differences (BSc).

2019 | 2018

Freelance Editor/Science Writer

Cactus Communications - Worldwide

• Editing, formatting, and proofreading scientific manuscripts prior to journal submission in the field of Life Sciences.

2017 | 2016

Assistant Research Officer

NIHR Clinical Research Network West of England - Bristol

• Managing the set up and delivery of clinical research studies in primary care sites across Bristol, North Somerset, and South Gloucestershire. Leading research events. Performing audits into research delivery and performance.

2016

Research Assistant (Healthcare)

NIHR Clinical Research Network West of England - Bristol

• Supporting the delivery of clinical research. Leading study-specific training and using clinical skills to carry out and document research studies.



PRESENTATIONS

Conferences

Presented at international and national conferences (oral and/or poster):

- · 2023: Alzheimer's Association International Conference
- \cdot 2021: Alzheimer's Association International Conference; Turing Research Showcase
- · 2020: International Society of Clinical Biostatistics Annual Conference; Alzheimer's Research UK Conference
- 2019: World Congress of Psychiatric Genetics (Los Angeles, USA); Maudsley BRC Annual Conference (London, UK).

Seminars & Events

Speaker (and invited speaker) for a range of seminars and audiences:

- 2023: DEMON Network, Biomarkers Working Group (Worldwide) Invited speaker, RANG Seminar (UCL) Invited speaker, Mendels Coffee Club (UCL)
- 2022: DEMON Network, Prevention Working Group (Worldwide) *Invited* speaker, Epidemiological Methods Meeting (UCL); Leeds OMICS Research in Progress Seminar (University of Leeds) *Invited speaker*
- 2021: Turing Community Week (Alan Turing Institute); Turing Student Seminar (Alan Turing Institute)
- 2020: Maurice Wohl Centre Seminar (King's College London); Dementia Platforms UK Datathon (University of Oxford).

E PUBLICATIONS & PREPRINTS

2023 • Common infections and neuroimaging markers of dementia in three UK cohort studies

medRxiv

- <u>Green, R.</u>, Sudre, C., Warren-Gash, C., Butt, J., Waterboer, T., Hughes, A.D., ... Williams, D.M.
- Investigating the genetic relationship between depression symptoms and Alzheimer's Disease in clinically diagnosed and proxy cases

medRxiv

- · Gilchrist, L., Spargo, T., <u>Green, R.</u>, Coleman, J., Howard, D., Thorp, J., ... Proitsi,
- Investigating associations between blood metabolites, later life brain imaging measures, and genetic risk for Alzheimer's disease

Alzheimer's Research & Therapy

- · <u>Green, R.</u>, Lord, J., Scelsi, M.A., Xu, J., Wong, A., Naomi-James, S., ... Protisi, P.
- Multiomics profiling of human plasma and CSF reveals ATN derived networks and highlights causal links in Alzheimer's disease

Alzheimer's and Dementia

- · Shi, L., Xu, J., <u>Green, R.</u>, Wretlind, A., Homann, J., Buckley, N.J., ... Legido-Quigley, C.
- Metabolic correlates of late midlife cognitive outcomes: findings from the 1946 British Birth Cohort

Brain Communications

- · Green, R., Lord, J., Xu, J., Maddock, J., Kim, M., Dobson, R., ... Protisi, P.
- Sex-Specific Metabolic Pathways Were Associated with Alzheimer's
 Disease (AD) Endophenotypes in the EMIF for AD Multimodal
 Biomarker Discovery Cohort

Biomedicines

- · Xu, J., <u>Green, R.</u>, Kim, M., Lord, J., Ebshiana, A., Westwood, S., ... Legido-Quigley, C.
- Assessing Genetic Overlap and Causality Between Blood Plasma Proteins and Alzheimer's Disease

Journal of Alzheimer's Disease

- · Handy, A., Lord, J., Green, R., Xu, J., Aarsland, D., Velayudhan, L., ... Proitsi, P.
- Disentangling independent and mediated causal relationships between blood metabolites, cognitive factors, and Alzheimer's Disease

Biological Psychiatry: Global Open Science

· Lord, J., <u>Green, R.</u>, Choi, S.W., Hubel, C., Aarsland, D., Velayudhan, L., ... Proitsi, P.

2021

Mendelian randomization identifies blood metabolites previously linked to midlife cognition as causal candidates in Alzheimer's disease

PNAS

· Lord, J., Jermy, B., <u>Green, R.</u>, Wong, A., Xu, J., Legido-Quigley, C., ... Proitsi, P.

2020

Integrated lipidomics and proteomics network analysis highlights lipid and immunity pathways associated with Alzheimer's disease

Translational Neurodegeneration

· Xu, J., Bankov, G., Min, K., Wretlind, A., Lord, J., <u>Green, R.</u>, ... Legido-Quigley, C.

2019

Investigating the role of blood metabolites as biomarkers of cognitive function and dementia in the MRC 1946 British Birth Cohort

European Neuropsychopharmacology [Conference Abstract]

· Green, R., Lord, J., Maddock, J., Kim, M., Dobson, R., Legido-Quigley, C., ... Proitsi, P.

2019

Investigating the role of modifiable risk factors on the causal pathway to Alzheimer's disease

European Neuropsychopharmacology [Conference Abstract]

· Lord, J., Green, R., Hubel, C., Richards, M., Sham, P., Legido-Quigley, C., ... Proitsi, P.



BOOK CHAPTERS

2019

The Turing Way: A Handbook for Reproducible Data Science

Cowrote Creating Project Repositories and virtual collaboration [WIP] chapters. Reviewed multiple chapters.

· The Turing Way Community, Arnold, B., Bowler, L., Gibson, A.,, Herterich, P., Higman, R., ... Whitaker, K.