

# BECKI GREEN, PHD

Epidemiologist with a strong background in data science, highly motivated by improving public health. Pronouns: she/her.

## EDUCATION

- 2022  
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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*".
- 2018  
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2017 ● **MSc, Genes, Environment and Development in Psychology and Psychiatry**  
SGDP Centre - King's College London
- 2015  
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2014 ● **MSc, Biomedical Sciences Research**  
Medical Sciences - University of Bristol
- 2013  
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2010 ● **BSc, Physiological Science**  
Medical Sciences - University of Bristol

## EMPLOYMENT

- Present  
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2023 ● **Principal Scientist (Epidemiology)**  
UK Health Security Agency
  - Managing a team of senior scientists working on the surveillance of respiratory viruses in the community and secondary care.
  - Overseeing the development, analysis, and international/national outputs from these surveillance systems, including as official statistics forming part of the [weekly](#) and [annual national surveillance reports](#).
  - Providing expert advice on surveillance data in response to enquiries or requests.
  - Supervising and leading on research projects.
- Present  
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2023 ● **Honorary Research Fellow in Epidemiology**  
MRC Unit for Lifelong Health and Ageing at UCL
  - PhD supervision (tertiary) for a project in the field of infections and dementia.
- 2023  
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2022 ● **Postdoctoral Research Fellow in Epidemiology**  
MRC Unit for Lifelong Health and Ageing at UCL
  - Working on several projects primarily investigating relationships between common infections & dementia, as well as risk factors of long COVID as part of one of the UK's national core studies.
  - Supervision or co-supervision of MSc/PhD students.
  - Leading the set up and delivery of the [HDR UK Black Internship Programme](#) in the department, including line management and project supervision of internships.
- 2022  
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2021 ● **DECOVID Project Collaborator**  
The Alan Turing Institute
  - Characterising electronic health record data collected during the COVID-19 pandemic in two large hospital trusts.
  - Assessing data quality and creating reproducible pipelines to enable collaboration across teams.

## CONTACT

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🐙 [github.com/beckigreen](https://github.com/beckigreen)  
in [linkedin.com/in/rebecca-e-green](https://www.linkedin.com/in/rebecca-e-green)

## KEY SKILLS

Mentoring and supervision

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

Data analysis & reproducible research

Team and community building

Science communication

## RESOURCES

CV made with the R package [pagedown](#). Code available [here](#).

- 2022  
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2019
- **Big Data Module Lead & Graduate Teaching Assistant**  
King's College London
    - **Module lead:** Big Data in Python (BSc). Responsible for course design and material creation, seminar and practical leader or assistant, marking, forum management.
    - **Teaching assistant:** Multiple modules encompassing research methods and statistics. Examples include Statistics in R (MSc), Reproducible Reporting in Markdown (external), Mendelian Randomisation (MSc), Research Methods (MSc/BSc).
- 2019  
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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  
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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 in the West of England.
- 2016
- **Research Assistant (Healthcare)**  
NIHR Clinical Research Network West of England - Bristol
    - Using clinical (acquired through hospital placements) and research skills to support with data collection and documentation for a variety of clinical research studies across the West of England.

## PRESENTATIONS

- **Conferences**  
Presented at international and national conferences (oral and/or poster):
  - 2023: **Alzheimer's Association International Conference**
  - 2021: **Alzheimer's Association International Conference**
  - 2020: **International Society of Clinical Biostatistics Annual Conference; Alzheimer's Research UK Conference**
  - 2019: **World Congress of Psychiatric Genetics; Maudsley BRC Annual Conference**
- **Seminars & Events**  
Speaker (and invited speaker) for a range of seminars and audiences:
  - 2024: **Population Health Sciences PhD Symposium (Careers event)** (UCL)
  - 2023: **DEMON Network, Biomarkers Working Group** (Worldwide) *Invited speaker*; **New Scientist Live Science Booth (London)**, **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)

## GRANTS & AWARDS

- **Grants**  
Project grants & travel grants
  - Co-PI for a successful project grant of approx. £250,000 (2023; awarded prior to move to UKHSA with involvement discontinued following award due to new role).
  - Travel awards: Guarantors of Brain £600 (2023); Guarantors of Brain £1000 (2019); Alzheimer's Research UK (2019).
- **Scholarships**  
PhD and additional scholarships
  - Twice awarded the prestigious [Alan Turing Institute Enrichment Scholarship](#) to enhance my research through collaborations with the Institute (2020,2021).
  - [NIHR Biomedical Research Centre PhD Studentship](#) (2019-2022).



## PUBLICATIONS & PREPRINTS

- 2024 ● **Depression symptom-specific genetic associations in clinically diagnosed and proxy case Alzheimer's Disease**  
In press  
• Gilchrist, L., Spargo, T., **Green, R.**, Coleman, J., Howard, D., Thorp, J., ... Proitsi, P.
- 2024 ● **Setting thresholds to determine COVID-19 activity levels using the mean standard deviation (MSD) method, England, 2022–2024**  
Eurosurveillance  
• Sinnathamby, M.S. .. **Green, R.**.. Allen, A.
- 2024 ● **Associations of several common infections with amyloid- $\beta$  pathology in vivo: a population-based study**  
AAIC [Conference Abstract]  
• Felici, C., **Green, R.**, Warren-Gash, C., Butt, J., Waterboer, T., Hughes, A.D., ... Williams, D.M.
- 2024 ● **No clear evidence for relationships of Apolipoprotein E genotype with measures of common infections in three UK cohorts**  
medRxiv  
• **Green, R.**, Fernandez-Sanles, A., Felici, C., Warren-Gash, C., Butt, J., Waterboer, T., ... Williams, D.M.
- 2024 ● **Common infections and neuroimaging markers of dementia in three UK cohort studies**  
Alzheimer's and Dementia  
• **Green, R.**, Sudre, C., Warren-Gash, C., Butt, J., Waterboer, T., Hughes, A.D., ... Williams, D.M.
- 2023 ● **Investigating the genetic relationship between depression symptoms and Alzheimer's Disease in clinically diagnosed and proxy cases**  
medRxiv  
• Gilchrist, L., Spargo, T., **Green, R.**, Coleman, J., Howard, D., Thorp, J., ... Proitsi, P.
- 2023 ● **Investigating associations between blood metabolites, later life brain imaging measures, and genetic risk for Alzheimer's disease**  
Alzheimer's Research & Therapy  
• **Green, R.**, Lord, J., Scelsi, M.A., Xu, J., Wong, A., Naomi-James, S., ... Protisi, P.
- 2023 ● **Multimomics 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., **Green, R.**, Wretling, A., Homann, J., Buckley, N.J., ... Legido-Quigley, C.
- 2022 ● **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.
- 2021 ● **Sex-Specific Metabolic Pathways Were Associated with Alzheimer's Disease (AD) Endophenotypes in the EMIF for AD Multimodal Biomarker Discovery Cohort**  
Biomedicines  
• Xu, J., **Green, R.**, Kim, M., Lord, J., Ebshiana, A., Westwood, S., ... Legido-Quigley, C.
- 2021 ● **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.

- 2021 ● **Disentangling independent and mediated causal relationships between blood metabolites, cognitive factors, and Alzheimer's Disease**  
Biological Psychiatry: Global Open Science  
• Lord, J., **Green, R.**, 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., **Green, R.**, 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., Wretling, A., Lord, J., **Green, R.**, ... 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

- **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.