

BECKI GREEN, PHD

Passionate researcher with a strong background in data science and epidemiology. Pronouns: she/her.



EDUCATION

2022
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2019



PhD, Neuroscience

Institute of Psychiatry, Psychology and Neuroscience - 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.

2018
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2017



MSc, Genes, Environment and Development in Psychology and Psychiatry

Institute of Psychiatry, Psychology and Neuroscience - King's College London

- Project: "*Investigating relationships between hypothalamic pituitary axis polygenic scores, stressful life events, and anxiety and depression.*" Supervisor: Professor Edmund Sonuga-Barke.

2015
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2014



MSc, Biomedical Sciences Research

Medical Sciences - University of Bristol

- Project: "*Developing and evaluating the use of a cognitive-motor task as a quantitative measure of fatigue using functional fMRI in healthy volunteers.*" Supervisor: Dr Jade Thai.

2013
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2010



BSc, Physiological Science

Medical Sciences - University of Bristol

- Project: "*Investigating the role of glucose toxicity in the development of Alzheimer's disease*". Supervisor: Professor Elek Molnar.



RESEARCH & INDUSTRY EXPERIENCE

2100
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2023



Principal Scientist (Epidemiology) - Start Dec 2023

UK Health Security Agency

- I will be managing scientific and administrative staff within the team, overseeing the maintenance, development, statistical analysis, research outputs, and reporting from flu and COVID-19 surveillance datasets.

2023
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2022



Postdoctoral Research Fellow

MRC Unit for Lifelong Health and Ageing at UCL

- Investigating relationships between common infections, brain health, and neuropathologies in large population-based cohort studies (led by Dr Dylan Williams).

2023
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2022



Visiting Research Fellow

Maurice Wohl Clinical Neuroscience Institute - King's College London

CONTACT

✉ rebecca.e.green@ucl.ac.uk

🐦 [becki_e_green](https://twitter.com/becki_e_green)

🐙 github.com/beckigreen

📧 beckigreen.netlify.app

in linkedin.com/in/rebecca-e-green

KEY SKILLS

Data preprocessing and analysis

Coding (R, Python, SQL, bash, git, GitHub/GitLab, Jupyter, RMarkdown)

Reproducible research

Science communication

Mentoring and teaching

HOBBIES

Adventure sports, music, comedy, travel.

RESOURCES

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

- 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. Creating reproducible pipelines to enable collaboration across teams. Assessing data quality and evaluating against a data ethics framework. Led by Dr Kirstie Whitaker.
- 2021

● **Transfer Learning Project Collaborator**
The Alan Turing Institute

 - Developing and applying transfer learning methodologies to build prediction models for dementia. Led by Professor David Llewellyn.
- 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 primary care clinical research studies in 59 sites. Leading events to promote patient and public involvement. Undertaking audits into research delivery and performance.
- 2016

● **Research Assistant (Healthcare)**
NIHR Clinical Research Network West of England - Bristol

 - Supporting the delivery of clinical trials. Leading study specific training and utilising clinical skills to carry out and document trials.



SUPERVISION & MANAGEMENT EXPERIENCE

- 2025
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2022

● **PhD (tertiary supervisor)**
UCL

 - *"The relationship between common infections, education, and Alzheimer's Disease"*
- 2023

● **Health Data Science Black Internship Programme**
HDR UK & MRC Unit for Lifelong Health and Ageing at UCL

 - Line management for two interns working on health data science projects (8-weeks)
- 2023

● **MSc Cardiovascular Sciences (primary supervisor)**
UCL

 - *"Investigating associations between herpesviruses and arterial stiffness"*
- 2021

● **MSc Developmental Psychopathology (co-supervisor)**
King's College London

 - *"Investigating the presence of shared genetic architecture between Major Depressive Disorder and Alzheimer's Disease"*
- 2019

● **MSc Neuroscience (co-supervisor)**
King's College London

 - *"Assessing Genetic Overlap and Causality Between Blood Plasma Proteins and Alzheimer's Disease"*



TEACHING EXPERIENCE

2022
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2020



Module Lead

BSc, King's College London

- **Courses:** Big Data in Python (BSc)
- Course design and material creation, seminar and practical leader, marking, forum management.

2021
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2019



Graduate Teaching Assistant

BSc & MSc, King's College London

- **Courses:** Statistics in R (MSc), Research Methods (MSc & BSc), Mendelian Randomisation (MSc), Big Data in Python (BSc), Origins of Individual Differences (BSc).
- Material creation, seminar and practical leader, marking and feedback.

2021
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2019



Workshop Assistant

Global researchers

- **Courses:** Reproducible Reporting Using Markdown (DEMON Network; 2021), Polygenic Summer School (King's College London; 2019).
- Assisting with design and delivery.



PRESENTATIONS



Conferences (International)

Presented work from UCL & King's College London internationally:

- **2023:** Alzheimer's Association International Conference (Amsterdam, Netherlands)
- **2021:** Alzheimer's Association International Conference (Amsterdam, Netherlands - Virtual)
- **2020:** International Society of Clinical Biostatistics Annual Conference (Krakow, Poland - Virtual)
- **2019:** World Congress of Psychiatric Genetics (Los Angeles, USA)



Conferences (National)

Presented work from UCL & King's College London nationally:

- **2021:** Turing Research Showcase (Alan Turing Institute)
- **2020:** Alzheimer's Research UK Conference (Cardiff, Wales - Virtual)
- **2019:** 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 *Invited speaker*, RANG Seminar (UCL) *Invited speaker*, Mendels Coffee Club (UCL)
- **2022:** DEMON Network, Prevention Working Group *Invited speaker*, 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).

PUBLIC ENGAGEMENT

● Charities and Events

Speaker at a charity event, research open day, and volunteering at a public event:

- 2023: Volunteer at New Scientist Live (London, UK)
- 2022: Talk at Kissing it Better charity *Invited speaker to discuss long-term health conditions and academic careers*
- 2019: Talk at Dementia Research Open Day (King's College London)

VOLUNTEER WORK

2019
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2010

● Volunteer

Regular volunteer work a nursing home and for a range of charities:

- Rethink Mental Illness (2018-19), Crisis at Christmas (2014-17), Kissing it Better (2012-14), Cherry Trees Nursing Home (2010-12)

GRANTS & AWARDS

2023

● Guarantors of Brain Travel Grant - £600

Brain

2022
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2020

● Alan Turing Institute Enrichment Scholarship

The Alan Turing Institute

- Awarded funding to carry out my research at the Institute, with access to facilities, mentoring, and courses.)

2019
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2022

● NIHR Biomedical Research Centre PhD Studentship

NIHR Maudsley Biomedical Research Centre, South London and Maudsley NHS Trust

2019

● Guarantors of Brain Travel Grant - £1000

Brain

2018

● King's Experience Interdisciplinary Award in Art, Science & Mental Health

King's College London

LEADERSHIP ROLES

2022
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2020

● Steering Group Member

The Alan Turing Institute

- Representing Turing Enrichment & Engage Scheme researchers at Steering Group meetings.
- Application Panel Reviewer for the Turing Enrichment Scheme

2015
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2012

● Elected Student Representative

University of Bristol

- Student Council Representative (MSc, 2014-5); Co-chair and Co-founder of Medical Sciences Society (BSc, 2012-3).



PUBLICATIONS & PREPRINTS

- 2023 ● **Common infections and neuroimaging markers of dementia in three UK cohort studies**
medRxiv
• [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., ... Proitsi, 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., ... Proitsi, P.
- 2021 ● **Sex-Specific Metabolic Pathways Were Associated with Alzheimer's Disease (AD) Endophenotypes in the EMIF for AD Multimodal Biomarker Discovery Cohort**
Biomedicine
• 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

- 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.