BECKI GREEN

Passionate doctoral researcher with a keen interest in open, collaborative science and dementia research. Pronouns: she/her.

🎓 EDUCATION

2022 | 2019

PhD, Neuroscience Research

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

- Awards: [Enrichment scholarship student](#) at the Alan Turing Insititute (2020-2022) with access to facilities, mentoring and courses.
- Additional responsibilities: Member of the Turing Steering Group as a student representative.

2018 | 2017

MSc, Genes, Environment and Development in Psychology and Psychiatry (Distinction, 78%)

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

- Awards: King's Interdisciplinary Award in Art, Science & Mental Health.

2015 | 2014

MSc, Biomedical Sciences Research (Merit, 69%)

Medical Sciences - University of Bristol

- Additional responsibilities: Elected student council representative.

2013 | 2010

Bsc, Physiological Science (2:1)

Medical Sciences - University of Bristol

- Additional responsibilities: Elected chair and cofounder of MedSciSoc (BSc Medical Sciences society).

💻 RESEARCH & INDUSTRY EXPERIENCE

2022 | 2021

DECOVID project collaborator

The Alan Turing Institute

- Working with and characterising electronic health record data contained in a PostGres database in a data safe haven. Creating reproducible pipelines to enable collaboration across research teams. Assessing data quality and evaluating against a data ethics framework. Led by Dr Kirstie Whitaker.
- Contributing to [The Turing Way](#) - a community-driven handbook for reproducible, ethical and collaborative data science.

2022 | 2019

PhD Student

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

- Thesis: Linking blood metabolites to early dementia using systems biology. Supervisors: Dr Petroula Proitsi & Professor Marcus Richards.
- Utilising network, pathway and metabolome-wide approaches to highlight key metabolites influencing early markers of dementia - including imaging, blood and cognition measures - in large cohort studies. Teasing apart the involvement of risk factors across the life course. Using statistical genetics approaches, such as mendelian randomisation and polygenic scores, to further understand the nature of these relationships.

CONTACT

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- in linkedin.com/in/rebecca-green-b8264b138

KEY SKILLS

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

Data preprocessing and analysis

Reproducible research

Teaching and community building

Science communication

HOBBIES

Triathlon, climbing, snowboarding, music, comedy, travel.

RESOURCES

CV made with the R package [pagedown](#). Code available [here](#). Last updated on 2021-10-06.

2021 ● **Transfer learning project collaborator**

The Alan Turing Institute

· Developing and applying transfer learning methodologies to map non-overlapping features and build prediction models for conversion to dementia. Led by Professor David Lewellyn.

2019
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2018 ● **Freelance Editor**

Cactus Communications - Worldwide

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

2018 ● **Masters Student**

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

· Investigating the relationships between polygenic risks scores for hypothalamic pituitary axis function, stressful life events, and the development of emotional problems.

2017
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2016 ● **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. Championing research in the West of England, and 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 in the West of England as well as utilising clinical skills to carry out and document trials.

2015 ● **Masters Student**

Clinical Research Imaging Centre - Bristol

· Developing and evaluating the use of a cognitive-motor task as a quantitative measure of fatigue using functional fMRI in healthy volunteers.

TEACHING EXPERIENCE

2022
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2020 ● **Big Data with Python**

Skill lead (2021-22), Teaching assistant (2020), BSc Psychology - King's College London

· Roles: Course design and material creation, seminar and practical leader, marking, forum management, evaluation and feedback.
· Content: Data wrangling, visualisation, and intro to machine learning.

2022
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2019 ● **Origins of Individual Differences**

Teaching assistant, BSc Psychology - King's College London

· Roles: Course design and material creation, seminar and practical lead, marking.
· Content: Social, genetic and environmental contributions to individual differences.

2021 ● **Reproducible Reporting Using Markdown**

Workshop assistant, open to all researchers - DEMON Network

· Roles: Assisting with workshop design and delivery.
· Content: Markdown, git and GitHub.

2020 ● **Research Methods**

Teaching assistant, BSc Psychology - King's College London

· Roles: Marking.
· Content: Statistical methods in SPSS and R.

2020 | 2019

● **Mendelian Randomisation**

Teaching assistant, MSc Neuroscience - King's College London

· Roles: Assisting with seminar design and delivery.
· Content: Mendelian Randomisation in R.

2019

● **Polygenic Summer School**

Workshop assistant, open to all researchers - London

· Roles: Assisting with workshop delivery.
· Content: Genome-wide association studies and polygenic risk scores.

🌐 VOLUNTEER WORK

2019 | 2018

● **Rethink Mental Illness**

London, UK

· Raising funds and participating in photoshoots and blogs to encourage others to fundraise.

2017 | 2014

● **Crisis at Christmas**

Birmingham, UK

· Assisting with the set up and delivery of food, shelter and entertainment for Crisis service users over the Christmas period.

2014 | 2012

● **Kissing it Better**

Warwick, UK

· Assisting and implementing strategies to improve care environments for inpatients with dementia.

2012 | 2010

● **Cherry Trees Care Home**

Alcester, UK

· Assisting with care and entertainment in a local nursing home for individuals with dementia.

📖 PUBLICATIONS

2021

● **The Turing Way: A Handbook for Reproducible Data Science**

Zenodo

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

2021

● **Metabolic correlates of late midlife cognitive function: findings from the 1946 British Birth Cohort**

Under review

· **Green., R.**, Lord, J., Xu, J., Maddock, J., Kim, M., Dobson, R., ... Protisi, P.

2021

● **Sex-specific metabolic pathways associate with Alzheimer's Disease (AD) endophenotypes in the European Medical Information Framework for AD Multimodal Biomarker Discovery (EMIF-AD MBD) cohort**

medRxiv (preprint)

· 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., Wretlind, 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.

PRESENTATIONS

2021	**Turing Community Week**	
	Oral	📍 The Alan Turing Institute
2021	**Turing Student Seminar**	
	Oral	📍 The Alan Turing Institute
2021	**Research Showcase**	
	Oral & poster	📍 The Alan Turing Institute
2020	**Maurice Wohl Clinical Neuroscience Institute Centre Talk**	
	Oral	📍 King's College London
2020	**Maudsley BRC Training Conference**	
	Oral & poster	📍 King's College London
2020	**International Society of Clinical Biostatistics Annual Conference**	
	Oral & poster	📍 Krakow (virtual)
2020	**Alzheimer's Association International Conference**	
	Poster	📍 Amsterdam (virtual)
2020	**Alzheimer's Research UK Conference**	
	Poster	📍 Cardiff (virtual)
2019	**World Congress of Psychiatric Genetics**	
	Poster (Guarantors of Brain Travel Award - £1000)	📍 Anaheim, USA
2019	**Maudsley BRC Annual Conference**	
	Oral & poster	📍 King's College London
2019	**Dementia Research Open Day**	
	Oral (to public)	📍 King's College London