

BECKI GREEN, PHD

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

EDUCATION

2022
|
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.
- **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.
- **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.
- **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.

2015
|
2014

2013
|
2010

RESEARCH & INDUSTRY EXPERIENCE

2100
|
2023

2023
|
2022

- **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.
- **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). Contributing to the **CONVALESCENCE** consortium exploring risk factors of long COVID.

CONTACT

- ✉️ rebecca.e.green@ucl.ac.uk
🐦 [becki_e_green](https://twitter.com/becki_e_green)
🔗 github.com/beckigreen
🔗 beckigreen.netlify.app
🔗 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
|
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

- |
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 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
|
2022

- **PhD (tertiary supervisor) - UCL**
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 (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
|
2021
- **Module Lead**
BSc, KCL
 - Courses: Big Data in Python (BSc; 2021, 2022)
 - Course design and material creation, seminar and practical leader, marking, forum management, evaluation and feedback.
- 2021
|
2019
- **Graduate Teaching Assistant**
BSc & MSc, KCL
 - Courses: Origins of Individual Differences (BSc; 2019, 2020, 2021), Statistics in R (MSc; 2021), Big Data in Python (BSc; 2020), Research Methods (MSc & BSc; 2019, 2020), Mendelian Randomisation (MSc; 2019, 2020).
 - Material creation, seminar and practical leader, marking, evaluation and feedback.
- 2021
|
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.

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.

ORAL PRESENTATIONS

- 2023
- DEMON Network (Biomarkers Working Group) [Invited speaker]
- 2023
- Research and Academic Networking Group Seminar
- 📍 UCL
- 2022
- Kissing it Better charity [Invited speaker to discuss academic careers]
- 📍 Warwickshire
- 2022
- DEMON Network (Prevention Working Group) [Invited speaker]

- 2022 ● Leeds OMICS Research in Progress Seminar [Invited speaker]
University of Leeds
- 2021 ● Turing Community Week
The Alan Turing Institute
- 2021 ● Turing Student Seminar
The Alan Turing Institute
- 2021 ● Research Showcase
The Alan Turing Institute
- 2020 ● Maurice Wohl Clinical Neuroscience Institute Centre Talk
King's College London
- 2020 ● Maudsley BRC Training Conference
King's College London
- 2020 ● Dementias Platform UK Datathon
University of Oxford (virtual)
- 2020 ● International Society of Clinical Biostatistics Annual Conference [Invited speaker]
Krakow (virtual)
- 2019 ● Maudsley BRC Annual Conference
King's College London
- 2019 ● Dementia Research Open Day (Patients & Public)
King's College London

📄 POSTER ONLY PRESENTATIONS

- 2023 ● Alzheimer's Association International Conference
Amsterdam
- 2020 ● Alzheimer's Association International Conference
Amsterdam (virtual)
- 2020 ● Alzheimer's Research UK Conference
Cardiff (virtual)
- 2019 ● World Congress of Psychiatric Genetics
Anaheim, USA

🏆 GRANTS & AWARDS

- 2023 ● [Guarantors of Brain Travel Grant - £600](#)
Brain
- 2022 | 2021 ● [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.

- 2021
|
2020
- **Alan Turing Institute Engage (Virtual Enrichment) Scholarship**
The Alan Turing Institute
- 2019
|
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
- **Application Panel Reviewer for the Turing Enrichment Scheme**
The Alan Turing Institute
- 2021
|
2020
- **Turing Steering Group: Student Member**
The Alan Turing Institute
- 2015
|
2014
- **MSc Student Council Representative**
University of Bristol
- 2013
|
2012
- **Co-chair and Co-founder of MedSciSoc (BSc Medical Sciences Society)**
University of Bristol

COURSES

- **ONS Accredited Researcher**
Expiry date: 14/07/2027
- **Courses ranging from statistical genetics to software engineering, and a national datathon.**
Highlights: Mendelian Randomisation, Research Software Engineering, Ethical Data Science, High Performance and High Throughput Computing, Data Skills for Open Research, Dementias Platforms UK Datathon, Prediction Modelling, Machine Learning, Advanced Python for Biologists, Molecular Pathways and Networks.

MEMBERSHIP

- **Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART)**
Member

PUBLICATIONS

- 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., ... Protisi, P.
- 2023
- **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., Green, R., Wretlind, 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 European Medical Information Framework 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., 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.
 - 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.