

# 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**  
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.
- 2018**  
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**2017**  
**MSc, Genes, Environment and Development in Psychology and Psychiatry**  
SGDP Centre - 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  
  - Managing scientific and administrative staff, overseeing the maintenance, development, statistical analysis, epidemiological outputs, and reporting from flu and COVID-19 surveillance datasets. Initiating research projects to address key public health questions.
- 2023**  
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**2022**  
**Postdoctoral Research Fellow**  
MRC Unit for Lifelong Health and Ageing at UCL  
  - Working on several projects investigating relationships between common infections, brain health, and neuropathologies in large population-based cohort studies (led by Dr Dylan Williams). Contributing analyses to large consortia-led projects.
- 2023**  
|  
**2022**  
**Visiting Research Fellow**  
Maurice Wohl Clinical Neuroscience Institute - King's College London

## CONTACT

✉ [rebecca.e.green@ucl.ac.uk](mailto:rebecca.e.green@ucl.ac.uk)  
🐦 [becki\\_e\\_green](https://twitter.com/becki_e_green)  
🔗 [github.com/beckigreen](https://github.com/beckigreen)  
🌐 [beckigreen.netlify.app](https://beckigreen.netlify.app)  
🌐 [linkedin.com/in/rebecca-e-green](https://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  
|  
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 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 trials.



## SUPERVISION & MANAGEMENT EXPERIENCE

- 2025  
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2022

● **PhD (tertiary supervisor)**  
MRC Unit for Lifelong Health and Ageing at 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 of two interns working on health data science projects (8-weeks).
- 2023

● **MSc Cardiovascular Sciences (primary supervisor)**  
Institute of Cardiovascular Sciences - UCL

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

● **MSc Developmental Psychology & Psychopathology (co-supervisor)**  
SGDP Centre - King's College London

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

● **MSc Neuroscience (day-to-day support)**  
Maurice Wohl Clinical Neuroscience Institute - King's College London

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



## TEACHING EXPERIENCE

2022  
|  
2021



### Module Lead

BSc, King's College London

- **Courses:** Big Data in Python (BSc, 2021 & 22).
- Course design and material creation, seminar and practical leader, marking, forum management.

2021  
|  
2019



### Graduate Teaching Assistant

BSc & MSc, King's College London

- **Courses:** Statistics in R (MSc, 2021), Research Methods (MSc & BSc, 2019 & 20), Mendelian Randomisation (MSc, 2019 & 20), Big Data in Python (BSc, 2020), Origins of Individual Differences (BSc, 2019, 20 & 21).
- Material creation, seminar and practical leader, marking 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.



## PRESENTATIONS



### Conferences (International)

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

- **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 at national conferences (oral and/or poster):

- **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 (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).

## PUBLIC ENGAGEMENT

### ● Charities and Events

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

- 2023: Booth 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* (Warwickshire, UK)
- 2019: Talk at Dementia Research Open Day (King's College London).

## VOLUNTEER WORK

2019  
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2010

### ● Volunteer

Volunteer work at 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  
|  
2020

### ● Alan Turing Institute Enrichment Scholarship

The Alan Turing Institute

- Twice 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  
|  
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  
|  
2012

### ● Elected Student Representative - BSc and MSc

University of Bristol

- Student Council Representative (MSc), Co-chair Medical Sciences Society (BSc).



## 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 ● [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.](#), 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](#)  
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

- 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.