

# KAREN JEFFREY

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## SUMMARY

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I am a Research Fellow in Medical Informatics, passionate about using data to improve health outcomes. I have advanced statistical and data science skills, and eight years' professional experience in research, leading project teams, fundraising, and stakeholder engagement.

## EDUCATION

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2017 - 2021 **Ph.D., Political Economy (Pass with no corrections)** King's College London  
2009 - 2010 **M.Sc., Ecological Economics (Distinction)** University of Edinburgh  
2003 - 2007 **B.A. (Hons.), Media (2:1)** Queen Margaret University

## EMPLOYMENT

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2023 - present **Research Fellow, Medical Informatics** University of Edinburgh  
2022 - 2023 **Postdoctoral Data Analyst, Medical Informatics** University of Edinburgh  
2021 - 2022 **Senior Intelligence Analyst, Public Health** NHS Lothian  
2017 - 2018 **Senior Research Consultant** BBC Media Action (International development)  
2013 - 2016 **Researcher** New Economics Foundation (Economic think tank)  
2011 - 2013 **Consultant** Delta Energy and Environment (Energy consultancy)  
2010 - 2011 **Energy Advisor** Energy Saving Trust/Changeworks (Charity)

## AWARDS AND ACHIEVEMENTS

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2024 **Reproducibility Recognition, Health Data Research UK** awarded to the EAVE II Team for commitment to transparency throughout the research lifecycle.

2023 **Florence Nightingale Award, Royal Statistical Society** awarded to the EAVE II Long COVID team for excellence in healthcare data analytics. (Role: Lead Analyst).  
**Mary Somerville Medal, Royal Society of Edinburgh** awarded to the EAVE II Team for exceptional achievement in teamwork and collaborative endeavour.  
**Postdoc Recognition Award, University of Edinburgh's College of Medicine & Veterinary Medicine** for academic citizenship.  
**Press coverage** of the EAVE II Long COVID study, including online, and interviews on TV (BBC) and radio (BBC Good Morning Scotland, BBC Radio 5 Live).

2017 **GRE verbal reasoning & analytical writing** at the 94th & 93rd percentile of test-takers.

2013-16 **Press coverage** of publications produced at the New Economics Foundation, including coverage by the BBC, Daily Mail, Financial Times, Herald, Independent, ITV, Observer, Telegraph, Forbes and international press in more than 30 countries worldwide.

## PEER-REVIEWED PUBLICATIONS

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1. **Jeffrey, K.**, Woolford, L., Maini, R., et al. (2024). Identifying long COVID using electronic health records: a national observational cohort study in Scotland. *eClinicalMedicine*. 71(102590).
2. **Jeffrey, K.** & Matakos, K. (2024). Automation anxiety, fairness perceptions, and redistribution: How past experience conditions the response to future job loss. *Journal of Economic Behavior & Organization*. 221, 174-190.
3. Shi, T., Millington, T., Robertson, C., **Jeffrey, K.**, et al. (2024). Risk of winter hospitalisation and death from acute respiratory infections in Scotland: national retrospective cohort study. *Journal of the Royal Society of Medicine*. (In press.)
4. Millington, T., Morrison, K., **Jeffrey, K.** et al. (2024). Caveats in reporting of national vaccine uptake. *Journal of Global Health*. 14(03006)
5. Amele, S., McCabe, R., Kibuchi, E., et al. (2024). Quality of ethnicity data within Scottish health records: the implications of misclassification for the observation of ethnic inequalities in severe COVID-19: A national linked data study. *Journal of Public Health*. 46(1).
6. Macdonald, C., Palmateer, N., McAuley, A., et al. (2024) Association between antibody response post-vaccination and severe COVID-19 outcomes: national population-based cohort study in Scotland. *npj Vaccines*. (In press.)
7. Kerr, S., Greenland, S., **Jeffrey, K.**, et al. (2023). Understanding and reporting odds ratios and rate ratios in case-control studies. *Journal of Global Health* 13(04101).
8. Morrison, K., Cullen, L., James, A., et al. (2023). Predictors of incomplete COVID-19 vaccine schedule among adults in Scotland: Two retrospective cohort analyses of the primary schedule and third dose. *Vaccine* 41(40), 5863-5876
9. Kerr, S., Millington, T., Rudan, I., et al. (2023). External validation of the QCovid 2 and 3 risk prediction algorithms for risk of COVID-19 hospitalisation and mortality in adults: a national cohort study in Scotland. *BMJ Open* 13:e075958.
10. **Jeffrey, K.** (2021). Automation and the future of work: how rhetoric shapes the response in policy preferences. *Journal of Economic Behavior & Organization* 192, 417-433.

## UNDER REVIEW

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1. **Jeffrey, K.**, Hammersley, V., Maini, R., et al. *Deriving and validating a risk prediction model for long COVID: population-based, retrospective cohort study in Scotland*.
2. Shah, S.A., **Jeffrey, K.**, Robertson, C. and Sheikh, A. *NHS Scotland's elective care backlog: national, regional, and speciality-based analysis and modelling to estimate capacity needs*.

## SELECTED THINK TANK PUBLICATIONS

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1. **Jeffrey, K.**, Abdallah, S. & Michaelson, J. (2017). The Cost of Loneliness to UK Employers. London: New Economics Foundation.
2. **Jeffrey, K.**, Wheatley, H. & Abdallah, S. (2016). The Happy Planet Index 2016: A Global Index of Sustainable Wellbeing. London: New Economics Foundation.
3. **Jeffrey, K.** and Michaelson, J. (2015). Five Headline Indicators of National Success: A Clearer Picture of How the UK is Performing. London: New Economics Foundation.
4. **Jeffrey, K.**, Mahony, S., Michaelson, J. and Abdallah, S. (2014). Well-being at Work: A Review of the Literature. London: New Economics Foundation.

## INVITED TALKS AND CONFERENCE PRESENTATIONS

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| 2024 | <b>International Conference</b>  | Royal Statistical Society                           |
| 2023 | <b>Medical Informatics Seminar</b>                                       | University of Edinburgh                             |
| 2022 | <b>National Strategic Network for Long COVID</b>                         | NHS National Services Scotland                      |
|      | <b>Academic GPs Meeting on Long COVID</b>                                | University of Edinburgh                             |
|      | <b>Primary Care Practitioners' Session</b>                               | Public Health Scotland                              |
| 2021 | <b>Political Science &amp; Political Economy Seminar</b>                 | London School of Economics                          |
| 2020 | <b>Political Behaviour Colloquium</b>                                    | European University Institute                       |
|      | <b>Global Online Meeting</b>   | Economic Science Association                        |
|      | <b>Early Career Network Conference</b>                                   | Political Studies Association                       |
|      | <b>Early Career Researcher Seminar</b>                                   | University of Southampton                           |
|      | <b>NORFACE TECHNO Group</b>  | Norwegian University of Science and Technology      |
|      | <b>Quantitative Political Economy Seminar</b>                            | King's College London                               |
|      | <b>Centre for Experimental Social Sciences Conference</b>                | New York University                                 |
| 2019 | <b>Centre for British Politics, PhD Conference</b>                       | King's College London                               |
| 2018 | <b>AI Safety and Policy Event</b>  | Artificial Intelligence Strategy and Policy Network |
| 2016 | <b>Parliamentary Roundtable: How Should We Measure National Success?</b> | UK Government                                       |
| 2015 | <b>Five Headline Indicators of National Success: Report Launch</b>       | Royal Statistical Society                           |
| 2014 | <b>European Social Survey Policy Seminar</b>                             | OECD  |

## TEACHING & SUPERVISION

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| 2018-20 | <b>Teaching Assistant</b>         | The Political Economy of Inequality, King's College London |
| 2018-19 | <b>Teaching Assistant</b>         | Microeconomics 1, King's College London                    |
| 2016    | <b>Volunteer GCSE Maths Tutor</b> | Action Tutoring  |
| 2015-16 | <b>Masters Supervision</b>        | for MSc in Ecological Economics, University of Edinburgh.  |

## GRANTS, FELLOWSHIPS & FUNDRAISING

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2024	<b>Usher Institute Small Grant</b> University of Edinburgh (£650)
2022	<b>Data Skills for Work</b> The Data Lab (£300)
2020	<b>London Interdisciplinary Social Sciences Scholarship</b> ESRC (£9,000) <b>Small Academic Expenses Grant</b> Royal Economic Society (£450) <b>Post-Graduate Research Bursary Grants</b> King's College London (£1,000)
2019	<b>Post-Graduate Research Bursary Grants</b> King's College London (£500) <b>Cohort Activity Grant</b> ESRC (£1,600)
2018	<b>Research Development Fund</b> King's College London (£2,000)
2017	<b>London Interdisciplinary Social Sciences Doctoral Scholarship</b> ESRC (£68,000) <b>Bentham PhD Fellowship</b> University College London (£64,000, declined)
2011-16	Contributed to successful tenders for funding from European Commission, E.On, British Gas, Vattenfall, Bosch, Vaillant, DECC, Co-op, & Kingfisher Group.

## PROFESSIONAL SERVICE

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2023-present	<b>Impact Committee</b> Usher Institute, University of Edinburgh
2021-present	<b>Reviewer</b> BMJ Open; Oxford Bulletin of Economics and Statistics; European Journal of Political Economy; European Economic Review.
2021-2023	<b>Journal Club Organiser</b> Medical Informatics Group, University of Edinburgh.
2018	<b>Conference Organiser and Chair</b> AI and Automation: Implications for researchers in the social sciences. One-day conference hosted at King's College London.
2018-20	<b>Reading Group Organiser</b> Formal Theory Group, King's College London.
2016	<b>Event Organiser and Chair</b> An evening in conversation with Ed Miliband MP and Nick Srnicek. The Future of Work: Harnessing new technologies to benefit all.
2014-16	<b>Secretariat</b> for the All-Party Parliamentary Group on Wellbeing Economics.

## PROFESSIONAL MEMBERSHIPS

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2024-present	Office for National Statistics Accredited Researcher
2021-present	European Association of Labour Economists
2020-21	Royal Economic Society American Economic Association Economic Science Association
2011-14	Institute for Environmental Management and Assessment (Associate Member)
2010-11	International Society for Ecological Economics

## TRAINING

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- 2024 **Research, GDPR and Confidentiality (renewal)** Medical Research Council  
**Safe Researcher Training** UK Data Service  
**Data Science for Domain Scientists** Data Science Unit, University of Edinburgh
- 2023 **Aspiring Manager Program** University of Edinburgh  
**Data Science in Stratified Healthcare & Precision Medicine** University of Edinburgh
- 2022 **Machine Learning with Python** ED-DaSH, University of Edinburgh  
**High-Dimensional Statistics in R** ED-DaSH, University of Edinburgh  
**GIT for Me: Introduction to GitHub** Jumping Rivers
- 2021 **Managing Difficult Conversations** NHS Professionals
- 2018 **Introduction to R for Biostatistics and Health Informatics** King's College London  
**PhD Summer School: Applied Microeconomics** University of Lancaster
- 2017 **Principles of Economics with Calculus (MOOC)** California Institute of Technology  
**Calculus 1a and Calculus 1b (MOOC)** Massachusetts Institute of Technology
- 2014 **Introduction to Statistics Using SPSS** Imperial College London
- 2013 **Statistics: Making Sense of Data (MOOC)** University of Toronto  
**Introduction to Computer Science and Programming in Python (MOOC)** MIT

## SOFTWARE SKILLS

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R, L<sup>A</sup>T<sub>E</sub>X, Qualtrics, SPSS, Microsoft Office

## REFEREES

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### **Prof. Sir Aziz Sheikh**

Professor of Primary Care Research and Development, Director of Usher Institute  
Usher Institute, University of Edinburgh  
`aziz.sheikh@ed.ac.uk`

### **Dr. Philip Conaglen**

Lead Consultant in Public Health  
Directorate of Public Health and Health Protection, NHS Lothian  
`philip.conaglen@nhslothian.scot.nhs.uk`

### **Prof. Konstantinos Matakos**

Professor of Economics  
Department of Political Economy, King's College London  
`konstantinos.matakos@kcl.ac.uk`