Dr. David Simons

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Profile:

I am a qualified medical doctor with a background in natural sciences, specifically ecological sciences. I investigate associations between local environmental conditions on the emergence of zoonotic infectious diseases and human health.

Qualifications

2019-2023 - The Royal Veterinary College, University College London and the London School of Hygiene and Tropical Medicine: **PhD in Emerging Zoonotic Disease Epidemiology**

2018-2019 - The London School of Hygiene and Tropical Medicine:

MSc Tropical Medicine and International Health (distinction)

2018 - The London School of Hygiene and Tropical Medicine:

Professional Diploma in Tropical Medicine and Hygiene (DTM&H)

2017 - Royal College of Physicians, London:

Membership of the Royal College of Physicians exam part 1

2012-2016 - King's College London:

Bachelor of Medicine and Bachelor of Surgery (merit)

2010-2011 - University of Leeds:

MSc Natural Sciences (Biodiversity and Conservation) (merit)

2006-2010 - University of Leeds:

BSc Natural Sciences (with Industrial Placement) (2:1)

Clinical

2021-2022: Senior analyst with the Outbreak Surveillance Team at the UK Health Security Agency, working on the COVID-19 and Monkeypox response as an epidemiologist.

2016-ongoing: Qualified medical doctor, primarily working in an infectious disease department in London.

Current research grants

2019-2023 - PhD studentship awarded through the London Interdisciplinary Doctoral Programme funded by the Biotechnology and Biological Sciences Research Council. 48 month funding of £300,000 based at the Royal Veterinary College, London, London School of Hygiene and Tropical Medicine and University College London.

First Author Publications

Simons, D., Shahab, L., Brown, J., & Perski, O. (2020). The association of smoking status with SARS-CoV-2 infection, hospitalization and mortality from COVID-19: a living rapid evidence review with Bayesian meta-analyses (version 7). *Addiction*.

Simons, D., Brown, J., Shahab, L., & Perski, O. (2020). Smoking and COVID-19: Rapid evidence review for the Royal College of Physicians, London (UK). *Qeios*.

Simons, D., Perski, O., Shahab, L., Brown, J., & Bailey, R. (2021). The association of smoking status with hospitalisation for COVID-19 compared with other respiratory viruses a year previous: A case-control study at a single UK National Health Service trust. *F1000Research*.

Simons, D., Attfield, L. A., Jones, K. E., Watson-Jones, D., Kock, R. (2023). Rodent trapping studies as an overlooked information source for understanding endemic and novel zoonotic spillover. *PLOS NTD*.

Simons, D. (2022) Lassa fever cases suffer from severe under-reporting based on reported fatalities. *International Health.*

Selected Other Publications

Andrews, N., Stowe, J., ... **Simons, D.,** ... Lopez Bernal, J., (2022) Covid-19 vaccine effectiveness against the Omicron (B. 1.1. 529) variant, *New England Journal of Medicine* - responsible for the development and maintenance of the Omicron variant linelist for UKHSA.

Haider, N., Yavlinsky, A., **Simons, D.**, Osman, A. Y., Ntoumi, F., Zumla, A., Kock R., (2020) Passengers' destinations from China: low risk of novel coronavirus (2019-nCoV) transmission into Africa and South America. *Epidemiology and Infection* - responsible for model development, interpretation and additional analyses.

Vivancos, R., Anderson, C., ... **Simons, D.**, ... Susan Hopkins, (2022) Community transmission of monkeypox in the United Kingdom, April to May 2022. *Eurosurveillance* - responsible for the development and maintenance of the Monkeypox outbreak linelist for UKHSA including additional analyses.

Arruda, L. B., Haider, N., ... **Simons, D**., ... Kock, R. (2021) The niche of One Health approaches in Lassa fever surveillance and control. *Annals of Clinical Microbiology and Antimicrobials.* - responsible section on Lassa mammarenavirus reservoirs and analysis of geographic location of cases.

Additional publications are available via my Google Scholar profile or above ORCID.

COVID-19 research

I have been a member of the Centre for Mathematical Modelling of Infectious Diseases COVID-19 working group and have made substantial contributions to a number of projects that are recognised with group authorship. The list is available here: https://cmmid.github.io/topics/covid19/

I currently work with the UK Health Security Agency in the Outbreak Surveillance Team where I was responsible for developing the pipeline to identify and record cases of the newly emergent Omicron variant. I have been involved in several studies (currently being submitted) investigating vaccine effectiveness, secondary attack rates and spatial analysis of variant emergence and establishment.

Programming

I am competent at using the R programming language and use it for all of my research projects. I have produced an RShiny app to explore a dataset I collated for a project on rodent trapping (available here https://diddrog11.shinyapps.io/scoping_review_app/).

Awards and Prizes

2023-03-01

The Sir John McNee Prize, The Medical Society of London	2015
Mary Clark Travel Award, King's College London	2013
Bronze Achievement Award, GlaxoSmithKline	2009

References

Available on request