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

1956 Jubilee Prize, King's College London   2015

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