Sam Abbott

RESEARCH FELLOW

London School of Hygiene and Tropical Medicine

✉ contact@samabbott.co.uk | ⌂ samabbott.co.uk | ⬚ seabbs | 🐦 seabbs

My main research interest lies in developing, evaluating, and applying methods for improving our understanding of infectious disease dynamics in real-time. I am committed to doing science in the open, and collaboratively, with the aim of producing useful and actionable output.

Positions

RESEARCH PLACEMENT - UNIVERSITY OF GLASGOW	*2015–2015,*
DATA SCIENTIST - FUNDING CIRCLE	*2017–2019*
RESEARCH ASSISTANT - UNIVERSITY OF BRISTOL	*2019–2019*
RESEARCH FELLOW - LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE	*2020—*
RESEARCH ASSOCIATE - SOUTH AFRICA CENTRE OF EXCELLENCE IN EPIDEMIOLOGICAL MODELLING AND ANALYSIS	*2021—*

Qualifications

PHD IN EPIDEMIOLOGY - UNIVERSITY OF BRISTOL	*2015–2019*
MSC ADVANCED MATHEMATICAL BIOLOGY - UNIVERSITY OF YORK	*2014–2015*
MMATH MATHEMATICS - UNIVERSITY OF DURHAM	*2010–2014*

Skills

Analytical

MATHEMATICAL MODELLING, STATISTICAL MODELLING, BAYESIAN STATISTICS, REPRODUCIBLE RESEARCH, SOFTWARE DEVELOPMENT

Programming

R (ADVANCED), STAN (ADVANCED), PYTHON, JULIA, TURING.JL, C/C++, BASH, SQL, GIT, DOCKER, AWS, GCS, AZURE

Selected publications

See here for a full list of my publications.

Selected software

scoringutils	*epiforecasts.io/scoringutils*
UTILITIES FOR SCORING AND ASSESSING PREDICTIONS	*2023*
epinowcast	*epiforecasts.io/epinowcast*
HIERARCHICAL NOWCASTING OF RIGHT CENSORED EPIDEMOLOGICAL COUNTS	*2022*
covidregionaldata	*epiforecasts.io/covidregionaldata*
SUBNATIONAL DATA FOR THE COVID-19 OUTBREAK	*2021*
EpiNow2	*epiforecasts.io/EpiNow2*
ESTIMATE REAL-TIME CASE COUNTS AND TIME-VARYING EPIDEMIOLOGICAL PARAMETERS	*2020*

Software that I have primarily developed has had over 30k downloads and been used in multiple public health organisations such as the WHO and the ECDC. Software that I have managed the development of has had over 20k downloads. See my GitHub for more on my software output.

Research (Co-) Supervision

Teaching

2019"

INTRODUCTION TO INFECTIOUS DISEASE MODELLING

<div align="right">Bristol Infectious Disease Dynamics:
University of Bristol
2018</div>

- bristolmathmodellers.github.io/ biddmodellingcourse, Responsible for developing and teaching two 1 hour practicals on model development and dynamics.

Presentations

HOW CAN GOVERNMENTS PLAN FOR THE NEXT PANDEMIC? LSHTM CENTRE FOR EPIDEMIC PREPARDNESS AND RESPONSE SYMPOSIUM	*2022*
ECDC FORECASTING HUB SEMINAR SERIES	*2021*
BRISTOLR	*2019*
UK CLINICAL VACCINE NETWORK CONFERENCE	*2019*
R/MEDICINE	*2019*
RESEARCH AND APPLIED EPIDEMIOLOGY SCIENTIFIC CONFERENCE	*2018*
RESEARCH AND APPLIED EPIDEMIOLOGY SCIENTIFIC CONFERENCE	*2017*
48TH UNION WORLD CONFERENCE ON LUNG HEALTH	*2017*
RESEARCH AND APPLIED EPIDEMIOLOGY SCIENTIFIC CONFERENCE	*2016*

See the details, slides, and recordings of my presentations here

Service

Outreach

- Blog - with over 2.5k unique hits each year - looking at infectious disease epidemiology and dynamics, developments in 'R', tool development and reproducible research. Link: samabbott.co.uk/post

Organisations

- Co-organiser of BristolR

Manuscript Reviews

- Journal of Open Source Software (2)
- Eurosurveillance (1)