Sam Abbott

RESEARCH FELLOW

London School of Hygiene and Tropical Medicine

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

ABBOTT, SAM, KATHARINE SHERRATT, MORITZ GERSTUNG, AND SEBASTIAN FUNK. 'ESTIMATION OF THE TEST TO TEST DISTRIBUTION AS A PROXY FOR GENERATION INTERVAL DISTRIBUTION FOR THE OMICRON VARIANT IN ENGLAND'. PREPRINT. EPIDEMIOLOGY, 10 JANUARY 2022. https://doi.org/10.1101/2022.01.08.22268920.

Davies, N.G., Abbott, S., Barnard, R.C., Jarvis, C.I., Kucharski, A.J., Munday, J.D., Pearson, C.A., Russell, T.W., Tully, D.C., Washburne, A.D. and Wenseleers, T., 2021. Estimated transmissibility and impact of SARS-CoV-2 lineage B. 1.1. 7 in England. Science.

Pavelka, M., Van-Zandvoort, K., Abbott, S., Sherratt, K., Majdan, M., CMMID COVID-19 working group, Inštitút Zdravotných Analýz, Jarčuška, P., Krajčí, M., Flasche, S., Funk, S., 2021. The impact of population-wide rapid antigen testing on SARS-CoV-2 prevalence in Slovakia. Science 372, 635–641. https://doi.org/10.1126/science.abf9648

SHERRATT, K.*, ABBOTT, S.*, MEAKIN, S.R., HELLEWELL, J., MUNDAY, J.D., BOSSE, N, JIT, M., FUNK, S., 2021. EXPLORING SURVEILLANCE DATA BIASES WHEN ESTIMATING THE REPRODUCTION NUMBER: WITH INSIGHTS INTO SUBPOPULATION TRANSMISSION OF COVID-19 IN ENGLAND. PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B: BIOLOGICAL SCIENCES 376, 20200283. https://doi.org/10.1098/rstb.2020.0283

ABBOTT, S., HELLEWELL, J., THOMPSON, R.N., SHERRATT, K., GIBBS, H.P., BOSSE, N.I., MUNDAY, J.D., MEAKIN, S., DOUGHTY, E.L., CHUN, J.Y. AND CHAN, Y.W.D., 2020. ESTIMATING THE TIME-VARYING REPRODUCTION NUMBER OF SARS-COV-2 USING NATIONAL AND SUBNATIONAL CASE COUNTS. WELLCOME OPEN RESEARCH, 5(112), P.112.

See here for a full list of my publications.

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SCORINGUTILS - UTILITIES FOR SCORING AND ASSESSING PREDICTIONS

EPINOWCAST - HIERARCHICAL NOWCASTING OF RIGHT CENSORED EPIDEMOLOGICAL COUNTS

COVIDREGIONALDATA - SUBNATIONAL DATA FOR THE COVID-19 OUTBREAK

EPINOW2 - ESTIMATE REAL-TIME CASE COUNTS AND TIME-VARYING EPIDEMIOLOGICAL PARAMETERS

epiforecasts.io/scoringutils epiforecasts.io/epinowcast epiforecasts.io/covidregionaldata

epiforecasts.io/EpiNow2

Software that I have primarily developed has had over 30k downloads and been used/is 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 | |
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| NIKOS BOSSE - PHD | 2020- |
| Teaching | |
| DISCRETE TIME DETERMINISTIC MODELS - MODERN TECHNIQUES IN INFECTIOUS DISEASE MODELLING SHORT COURSE | 2022 |
| Programming best practices - Modern techniques in infectious disease modelling short course | 2020-22, |
| INTRODUCTION TO INFECTIOUS DISEASE MODELLING SHORT COURSE - UNIVERSITY OF BRISTOL | 2018-2019, |
| Selected presentations | |
| How can governments plan for the next pandemic? LSHTM Centre for Epidemic Prepardness and Response Symposium | 2022 |
| ECDC Forecasting Hub Seminar Series | 2021 |
| 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 all my presentations here | |
| Service | |
| SACEMA - Providing support as part of the Omicron response | 2021- |
| GERMANY NOWCASTING HUB - DAILY NOWCASTS OF HOSPITAL ADMISSIONS BY DATE OF POSTIVE TEST. PART OF AN INTERNATIONAL COLLABORATION TO PROVIDE IMPROVED ESTIMATES IN REAL-TIME. | 2021- |
| ECDC Forecasting hub - Weekly short-term COVID-19 forecasts of cases and admissions | 2021- |
| CDC Forecasting hub - Weekly short-term COVID-19 forecasts of deaths | 2020-2022 |
| SPI-M/SAGE - Provided weekly estimates of the reproduction number; short-term forecasts; projections; and multiple ad-hoc reports | 2020-2022 |