# Rachel Lowe

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**Research interests**

Climate change; adaptation; mitigation; global health resilience; environmental change; planetary health; infectious disease epidemiology; statistical and mathematical modelling; impact-based forecasting.

## Higher Education

**Oct 2007 – Dec 2010: PhD in Mathematics (Statistical Modelling)**
University of Exeter, College of Engineering, Mathematics and Physical Sciences, Exeter, UK (6 months in Brazilian institutes including Oswaldo Cruz Foundation).
Successfully defended 10 Dec 2010 (PhD awarded 31 Jan 2011).
**Thesis:** Spatio-temporal modelling of climate sensitive disease risk: towards an early warning system for dengue in Brazil.
**Supervisors:** Prof. David Stephenson, Prof. Trevor Bailey, Dr. Richard Graham (Met Office)
**Sponsor:** The Leverhulme Trust.

**Oct 2006 – Aug 2007: MSc in Geophysical Hazards**
University College London, Department of Earth Sciences, London, UK.
**Result:** Distinction
**Scholarship:** UCL Graduate Master's Award 2006 – 2007.
**Units:** Geophysical Hazards, Advanced Volcanology, Research Methods, Meteorological Hazards, Advanced Meteorological and Hydrogeological Hazards, Advanced Seismology.
Independent Research Project: Volcano lateral collapse events in the Quaternary.
**Result:** 84%. Supervisor: Prof. Bill McGuire. Field work: Stromboli volcano - research conducted in flank instability, monitoring of an active volcano and tsunami risk (funded by University of Florence, Italy).

**Sep 2000 – Jun 2004: BSc (Hons.) Meteorology and Oceanography with a year in Europe**
University of East Anglia, School of Environmental Sciences, Norwich, UK.
**Result:** First Class
**Units:** Meteorology & Climate, Physical Oceanography, Mathematics for Geophysical Sciences, Dynamical Meteorology and Spanish.
**Dissertation:** Rainfall induced volcanic activity at the island of Montserrat: the viability of incorporating meteorological forecasts into volcanic hazard warnings.

**Oct 2002 – Aug 2003: Ciencias Ambientales** (Environmental Science)
Universidad de Granada, Spain (Erasmus Programme)
**Units:** Advanced Spanish, Meteorology, Statistics, and Economics (in Spanish).

## Professional Appointments

**Jan 2022 – present: ICREA Research Professor and Global Health Resilience Leading Researcher**
Barcelona Supercomputing Center (BSC), Earth Sciences Department
- Leader of the Global Health Resilience (GHR) Group
- Principal investigator of HARMONIZE and IDExtremes, funded by **The Wellcome Trust.**
- Co-coordinator of IDAlert and WP leader of E4Warning, funded by **Horizon Europe**.
- Director of Lancet Countdown in Europe 2021-2024 (supported by the **European Environment Agency** and **Horizon Europe** via IDAlert and CALALYSE).
- Contracts with Inter-American Institute for Global Change Research, European Space Agency, UCL, Uni Oslo.
- Expert consultant for the European Commission Joint Research Council.

**Jan 2017 – present: Royal Society Dorothy Hodgkin Fellow / Associate Professor**
London School of Hygiene & Tropical Medicine (LSHTM), Department of Infectious Disease Epidemiology, London, UK.
- Principal Investigator 'Modelling the impact of global environmental change on vector-borne disease risk', funded by **Global Challenge Research Fund**.
- Principal Investigator 'PhD studentship: The role of climate, cities and connectivity in the spread of vector-borne diseases in Brazil', funded by **Royal Society** 'Research Grants for Research Fellows'
- LSHTM Principal Investigator 'An integrated dengue early warning system driven by Earth Observations in Vietnam', Lead: HR Wallingford, funded by **UK Space Agency**.

**Professional Appointments**

- Principal Investigator 'Environmental change, climate extremes and emerging infectious disease threats', funded by **Royal Society** 'Enhancement Award'.
- Vector-borne disease theme leader for Centre for Mathematical Modelling of Infectious Diseases.
- Management Committee for Centre on Climate Change and Planetary Health.
- Consultancies with Pan American Health Organization, Inter-American Institute for Global Change Research, University of Texas, Red Cross Red Crescent Climate Centre, Wellcome Trust.

**Mar 2012 – Dec 2016: Postdoctoral Scientist / Head of Climate Services for Health**
Catalan Institute for Climate Sciences (IC3), Climate Dynamics and Impacts Unit, Barcelona, Spain (Maternity leave: Mar – Sep 2016).

- Involved in the EU FP7 projects: DENFREE (Dengue research Framework for Resisting Epidemics in Europe); QWeCI (Quantifying Weather and Climate Impacts on Health in Developing Countries); EUPORIAS (EUropean Provision Of Regional Impact Assessment on a Seasonal-to-decadal timescale), and SECTEUR (Sector Engagement for the Copernicus Climate Change Service: Translating European User Requirements).
- Research involved modelling climate-sensitive disease risk and finding novel ways to communicate probabilistic forecasts to public health decision makers.
- Lectured and supervised Master's students at the University of Barcelona.
- Extensive international travel to engage with public health stakeholders, disseminate research and train the next generation of climate and health leaders.

**Oct 2010 – Feb 2012: Postdoctoral Scientist**
UNESCO/IAEA International Centre for Theoretical Physics (ICTP), Earth System Physics, Trieste, Italy.

- Involved in the EU FP7 projects: QWeCI and Healthy Futures. Duties included the development and implementation of statistical models to predict vector-borne disease risk in Africa.
- Established links with the Malawi Ministry of Health, National Malaria Programme and Meteorological Services in Malawi. Collaboration involved regular online meetings with partners in the Ministry of Health, exchange of spatio-temporal datasets, invitation of Malawian scientists to ICTP for training and knowledge exchange, and the development of sophisticated tools to contribute to an integrated climate based epidemic early warning system for Malawi.
- Organised international training workshops in climate and health.
- Responsible for writing field visit reports, project deliverables and grant proposals.

**Oct 2007 – Dec 2010: Network Facilitator EURO-Brazilian Leverhulme research network**
Exeter Climate Systems, University of Exeter, UK. EUROBRISA: Euro-Brazilian initiative for improving South American seasonal climate forecasts, funded by the Leverhulme Trust.

- Responsibilities included strengthening collaboration and promoting exchange of expertise and information and data transfer between European and South American participating institutions (University of Exeter, Centre for Weather Prediction and Climate Studies (CPTEC/INPE) Brazil, European Centre for Medium-range Weather Forecasts (ECMWF), Met Office, Météo-France, Federal University of Paraná (UFPR) Brazil, Brazilian National Institute of Meteorology (INMET), University of São Paulo (USP).
- Organised research workshops for the network in Brazil and UK, prepared project summary reports.
- Annual long-term visits to CPTEC/INPE in Brazil. Collaborative research with health scientists at Oswaldo Cruz Foundation (Fiocruz), Brazilian Institute for Geography and Statistics (IBGE) and Brazilian Ministry of Health.

**Oct 2009 – May 2010: INTO University of Exeter**
University of Exeter, UK.

- Part-time mathematics teacher for a 'Foundation Programme for International Students' preparing for a degree in business, computer science, engineering, mathematics and science.
- Responsible for preparing and delivering lessons, marking coursework and exams.

**Feb – Mar 2005: Research Assistant** (voluntary)
Centre of Exchange and Research in Volcanology, Colima, Mexico.

- Monitoring of the active Colima volcano.
- Attended meetings between volcano observatory, civil protection and local politicians.

## Fellowships, Awards, Prizes & Recognition

**2024** Rockefeller Foundation Bellagio Center Climate Solutions Residency Program Fellowship.

**2024** 5000 most outstanding women scientists in Spain (ranked in top quartile).

**2024** Stanford University list of "World's Top 2%" scientists.

**2022** BSC Distinction for ICREA award and creation of the BSC Global Health Resilience team.

**2022** 5000 most outstanding women scientists in Spain.

**2022 – present** ICREA Research Professorship.

**2021** UNESCO/IRCAI Global Top 100 list of AI solutions for sustainable development: ESA/UNICEF project on AI-ensemble model for predicting dengue outbreaks based on Earth Observation in Brazil and Peru.

**2021** Big Data/IoT Project of the Year, Digital Technology Leaders Award for D-MOSS: Dengue forecasting MOdel Satellite-based System.

**2020** GEO Sustainable Development Goal Award for D-MOSS: Dengue forecasting MOdel Satellite-based System.

**2020** British Expertise International award for D-MOSS: Dengue forecasting MOdel Satellite-based System.

**2020 – 2021** Royal Society Enhancement Award.

**2019** Royal Society Public Engagement Masterclass Bursary.

**2018** International Society for Neglected Tropical Diseases (ISNTD) Water Award for Research.

**2018 – 2021** Royal Society Research Grant for Research Fellows.

**2017** Royal Society of Tropical Medicine & Hygiene Travel Scholarship.

**2017** eLife Travel Grant.

**2017 – 2025** Royal Society Dorothy Hodgkin Fellowship.

**2017 – 2019** Juan de la Cierva Incorporation Fellowship (declined in favour of Dorothy Hodgkin Fellowship).

**2015** American Society of Tropical Medicine and Hygiene / Bill & Melinda Gates Foundation Travel Award.

**2014** BBVA OpenMind five most impressive innovations of the World Cup in Brazil: #1 A pioneering system to predict the risk of epidemics in large events (Lowe et al. Lancet Infect. Dis. 2014).

**2009** Google's KML Research Prize (joint prize City University London and University of Exeter).

**2006 – 2007** UCL Graduate Master's Award.

## Research grants and contracts

1. TACTIC HealTh ImpAct ToolkIt for Climate change attribution. Funder: Wellcome Trust. Lead institution: University of Bern. Role: co-Principal Investigator, Mar 2025 – Feb 2028, €3,500,000 (BSC: €752,978).
2. Global Development Assistance (GDA) Agile EO Information Development (GDA AID): Public Health. Funder: European Space Agency. Lead institution: Brockmann Consult GmbH. Role: BSC Principal Investigator, Sep 2024 – Jun 2026, €1,500,000 (BSC: €231,540).
3. Knowledge support for the European Climate and Health Observatory and report on climate, water and health. Funder: European Environment Agency. Lead institution: Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), Role: BSC Principal Investigator, May 2023 – Dec 2024, € 150,000 (BSC: € 83,000).
4. Consultancy to develop, design and implement climate integrated early warning systems in the Caribbean. Funder: Caribbean Agency for Public Health. Lead institution: Inter-American Institute for Global Change Research. Role: BSC Principal Investigator, Jul 2023 – Jun 2025, € 192,800 (BSC: € 82,500).
5. The Lancet Countdown: Tracking Progress on Health and Climate Change. Funder: Wellcome Trust. Lead institution: UCL, Role: Regional Director for Europe, Sep 2021 – Aug 2024, €26,219.
6. Engagement and dissemination to enhance uptake of digital tools for public health resilience to climate change. HARMONIZE public engagement enrichment award, Funder: Wellcome Trust. Lead institution: BSC, Role: Principal Investigator, Nov 2022 – Oct 2026, €624,007 (BSC: €248,195).

### Research grants and contracts

7. Eco-Epidemiological Intelligence for early Warning and response to mosquito-borne disease risk in Endemic and Emergence settings (E4Warning), Funder: Horizon Europe, Lead institution: Consejo Superior de Investigaciones Científicas (CSIC), Role: WP leader, Jan 2023 – Dec 2026, €4,942,323 (BSC: €519,750.00).

8. IDExtremes: a modelling tool to predict the probability of infectious disease outbreaks given compound extreme climatic events, Funder: Wellcome Trust, Lead institution: BSC, Role: Principal Investigator, Jun 2023 – May 2026, €602,026 (BSC: €393,602.24).

9. European Eddy RIch Earth System Models (EERIE). Lead institution: AWI, Role: Co-Investigator, Jan 2023 – Dec 2026, €9,970,844 (BSC: €1,204,488.45).

10. Infectious Disease decision-support tools and Alert systems to build climate Resilience to emerging health Threats (IDAlert), Funder: Horizon Europe, Lead institution: Umea University, Role: Co-Coordinator and WP leader, Jun 2022 – May 2027, €9,188,294 (BSC: €1,405,063).

11. Climate Action To Advance HeaLthY Societies in Europe (CATALYSE), Funder: Horizon Europe, Lead institution: Barcelona Institute for Global Health, Role: Task Leader for Lancet Countdown in Europe, Sep 2022 – Aug 2027, €8,377,188 (BSC: €94,375).

12. Provision of expert support from the Lancet Countdown in Europe, Funder: European Environment Agency. Lead institution: BSC, Role: Principal Investigator / Executive Director, Jan 2022 – April 2023, €99,174.

13. Harmonizing multi-scale spatiotemporal data for health in climate change hotspots (HARMONIZE), Funder: Wellcome Trust, Lead institution: BSC, Role: Principal Investigator, May 2022 – April 2026, €3,115,229 (BSC: €947,437).

14. Landscaping tools at the intersection between climate and infectious diseases, Funder: Wellcome Trust. Lead institution: Inter-American Institute for Global Change Research (IAI), Role: Co-investigator, May 2021 – Sep 2021, £150,000 (LSHTM: £15,000).

15. Health and economic burden of dengue in South America, in the context of climate change, Funder: Swiss Re, Lead institution: University College London, Role: Supervisor of Lancet Countdown Research Fellow, Apr 2021 – Mar 2022, £70,647 (funding held at the Lancet Countdown South America office).

16. Integrating Climate Variability into the Surveillance Prevention and Control of Vector-Borne Diseases, Funder: International Development Bank Lead Institution: Inter-American Institute for Global Change Research, Role: Technical Lead, Sep 2020 – Aug 2021, Amount: £201,353 (LSHTM: £72,000).

17. Impact based Forecasting Methodology for Arbovirus diseases in the Caribbean, Funder: Red Cross Red Crescent Climate Centre, Lead institution: LSHTM, Role: Principal investigator, Jun 2020 – May 2021, £22,500.

18. Enhancement award: Environmental change, climate extremes and emerging infectious disease threats, Funder: Royal Society, Lead institution: LSHTM, Role: Principal investigator, Mar 2020 – Mar 2022, £38,480.

19. Research Grants for Research Fellows: PhD studentship on the role of climate, cities and connectivity in the spread of vector-borne diseases, Funder: Royal Society, Lead institution: LSHTM, Role: Principal investigator, Jan 2019 – Jan 2023, £105,056.

20. An integrated dengue early warning system driven by Earth Observations in Vietnam, Funder: UK Space Agency, Lead institution: HR Wallingford, Role: Principal investigator for LSHTM team, Feb 2018 – Mar 2022, €4,946,344 (LSHTM: €567,813)

21. Royal Society Dorothy Hodgkin Fellowship. Modelling the impact of global environmental change on vector-borne disease risk, Funder: Royal Society / Global Challenge Research Fund, Lead institution: LSHTM, Role: Principal investigator, Jan 2017 – Dec 2022, £422,157.

### Personnel fellowships

1. ERC Frontiers in Science Journalism, Danielle Fleming, European Research Council, 13 Jan 2025 – 7 Apr 2025.
2. AI4Science Postdoctoral Research Fellowship, Spanish Government, Dr Georgina Charnley, 16 Oct 2024 – 15 Oct 2028.

**Personnel fellowships**

3. AI4Science Research Engineer Fellowship, Spanish Government, Daniela Lürshen, 16 Oct 2024 – 15 Oct 2028.
4. Marie Skłodowska-Curie Actions, European Commission, Dr Raquel Martins Lana, 1 Sep 2024 – 31 Aug 2026.
5. PhD Sandwich Programme for black and indigenous women in Brazil, CAPES, Danielle Andreza da Cruz Ferreira, 16 Sep 2024 – 15 Mar 2025.
6. Schmidt Sceince Fellowship, Schmidt Foundation, Dr Sophie Belman, 1 Jul 2024 – 30 June 2026.
7. Beatriu de Pinós Programme, AGUAR, Dr Raquel Martins Lana, 1 Mar 2023 – 31 Aug 2024.
8. Integrative science and technology network to face infectious and reemerging diseases (RICEI) (PrInt-Fiocruz/CAPES), Dr Claudia Codeço, 1 Jan – 28 Feb 2022.

**Teaching: Postgraduate level**

**Barcelona Supercomputing Center, Jan 2022 – present**
BSC PhD Training Programme (PhD Journey).
Earth Sciences Discovery Days.

**London School of Hygiene & Tropical Medicine, Jan 2017 – Dec 2021**
Organiser of 'Modelling infectious Disease Risk in a Changing Climate' short course.
Lecturer for Introduction to Disease Agents and their Control Masters module.
Lecturer for Spatial Epidemiology for Public Health Masters module.
Facilitator for 'An introduction to spatial analysis in R' short course.
Exam marking for Basic Epidemiology module.
Marking MSc projects for distance learning MSc in Epidemiology.
MSc project supervision.

**International Society for Environmental Epidemiology (ISEE) Short Course, Apr 2021**
'Influence of meteorology on COVID-19 outcomes' lecture in ISEE short course on COVID-19 and the Environment.

**University of Bern, Apr 2020**
'Climate change and infectious diseases' lecture in MSc Environmental Epidemiology Applied to Climate Sciences module.

**University of Barcelona, Mar 2013 – Mar 2023**
'Climate Change and Human Health' in the 'Global Health' International Relations Masters module.

**Barcelona Institute for Global Health, Jul 2015**
Barcelona Global Health Summer School 12 – 17 July 2015 - Climate Change & Health: Addressing the Challenge, Exploring Solutions (officially accredited as a side-event of Our Common Future under Climate Change Conference and granted the COP21 label by the French Ministry of Ecology, Sustainable development and Energy).
Lecture: Climate change and human health.

**International Centre for Theoretical Physics (ICTP), Trieste, Italy: Lecturer**

**Apr – May 2013**
Workshop: Mathematical models of Climate Variability, Environmental Change and Infectious Diseases.
Provided lecture on: Spatio-temporal modelling of vector-borne diseases.

**Apr 2013**
Spring School on Modelling Tools and Capacity Building in Climate and Public Health, sponsored by ICTP and the World Meteorological Organization (WMO).
Role: Organiser. Provided lectures/practical sessions on:
- Challenges for modelling climate-sensitive diseases.
- Statistical modelling of malaria in Botswana using R.

**Sep 2011**
Summer School on Climate Impacts Modelling for Developing Countries: Water, Agriculture and Health, sponsored by ICTP and the World Meteorological Organization (WMO).
Provided lectures/practical sessions on:
- Spatio-temporal modelling of vector-borne disease: a case study of dengue in Brazil.
- Statistical modelling of malaria in Botswana using R.

**Teaching: International and regional training schools for climate and health postgraduate students and decision makers**

**Mar 2024**
Climate Resilient Early Warning Systems Implementation Training Workshop, Caribbean Agency for Public Health, Barbados.
Provided lectures/practical sessions on:
- Climate-informed disease early warning systems
- Navigating the early warning platform and interpreting disease risk forecasts
- Monitoring and evaluating early warning systems

**Feb 2024**
Early Warning Systems for Health online course, Caribbean Agency for Public Health PHLearning.
Provided a module on: Climate-informed dengue early warning systems.

**Oct 2023**
El Niño in The Americas: Protecting Health and Increasing Resilience - A Short Course, Columbia University Mailman School of Public Health and Pan-American Health Organization (PAHO).
Provided lecture on: Vector-borne and zoonotic diseases.

**Sep 2023**
Curso Andino de Clima y Salud, Columbia University Mailman School of Public Health and Pan-American Health Organization (PAHO).
Provided lecture (in Spanish) on: Vigilancia de enfermedades infecciosas sensibles al clima.

**May 2023**
Singapore–WHO Joint Training Programme, Seventh Singapore International Dengue Workshop.
Provided a plenary lecture on: Climate change and dengue.

**May 2022**
Curso Respuesta al cambio climático para la salud en Latinoamérica, Columbia University Mailman School of Public Health and Pan-American Health Organization (PAHO).
Provided lecture (in Spanish) on: Recolección de datos y vigilancia de enfermedades sensibles al clima.

**Feb 2022**
Climate Services for Dengue Early Warning in Costa Rica: a workshop to build capacity and establish a Community of Practice, NOAA Climate Program Office.
Provided lecture on: Development of a Dengue Early Warning System for Barbados.

**Jun 2018**
Climate and Health Webinar Series, Caribbean Institute for Meteorology and Hydrology (CIMH), Programme for Building Regional Climate Capacity in the Caribbean.
Provided lecture on: Climate-driven early warning systems for vector-borne diseases.

**Jul 2015**
School on Modelling Tools and Capacity Building in Climate and Public Health, sponsored by ICTP, FIOCRUZ and Global Framework for Climate Services (GFCS/WMO). Petropolis, Rio de Janeiro, Brazil
Role: Organiser. Provided lectures/practical sessions on:
- Climate services and health risk management.
- Seasonal climate forecasts and dengue fever in Brazil.
- Statistical modelling in R.

**Feb 2014**
Workshop: Integration of environmental remote sensing products to inform health early warning systems, Fiocruz, Rio de Janeiro, Brazil.
Provided lectures/practical session on:
- From climate science to climate services to benefit society.
- The role of climate in quantifying spatio-temporal health risk factors.
- Climate Explorer.
- Statistical modelling of malaria in Africa using R.

**Dec 2013**
International Conference Climate Services 3, Montego Bay, Jamaica.
Provided lecture/practical on: Statistical modelling of malaria in Africa using R.

**Nov 2011**
Inter-American Institute for Global Change Research (IAI) Training Institute on Climate and Health, sponsored by IAI/IRI/PAHO/MERCOSUR, Piriápolis, Uruguay (all material delivered in Spanish).

**Teaching: International and regional training schools for climate and health postgraduate students and decision makers**

Provided lectures/practical on:
- Spatio-temporal modelling of climate-sensitive disease risk.
- Statistical modelling of malaria in Botswana using R.
- Communicating the value of probabilistic forecasts with the weather roulette.

**May 2011**
Summer Institute on Climate Information for Public Health, International Research Institute for Climate and Society (IRI), New York, USA, (awarded Best Facilitator).
Provided lecture on spatio-temporal modelling of climate-sensitive disease risk.
Supervised participant projects.

**Teaching: Undergraduate**

**Apr 2008 – May 2010: Demonstrator 'Statistics' and 'Statistics of weather and climate'**
University of Exeter, College of Engineering, Mathematics and Physical Sciences
Provided 'statistical modelling' and 'statistics of weather and climate' tutorials to help students develop skills in analysing data with the statistical software R and the mathematical theory of statistics.

**Oct 2009 – May 2010: Mathematics and Statistics Teacher**
INTO University of Exeter – 'Foundation Programme for International Students' preparing for a degree in business, computer science, engineering, mathematics and science.

**Communicating research to a wider audience (STEM)**

**May 2023:** Climate change and planetary health class for year 5 (10-year-olds), Escola Auró, Barcelona.

**Mar 2019:** Climate change and vector-borne diseases. Gave a public lecture and participated in a round table as part of the City and Science Biennal, organised by the Barcelona town hall.

**Nov 2018:** A Day in the Life of a Climate and Health Scientist, Semana de la Ciencia, Centre d'Estudis Dolmen, Spain. Presented my research to a group of biomedical students, as part of the Women in Science cycle for Barcelona Science Week.

**Sep 2018:** Horizon lecture, King's College Taunton, UK. Delivered lecture on 'Climate change, planetary health and infectious diseases' to Mathematics, Science and Geography GCSE and A level students.
**Oct 2009:** Workers' Educational Association, UK. Prepared adult education lectures on climate impacts and climate change and human health.
**Jul 2008:** University of Exeter, UK. Prepared a hands-on statistics session for a summer school aimed at year 11 students (15-16 years). The aim was to show how statistics can be used in exciting situations and to apply some of the mathematics the students had learned at school to solve real-world problems.

**Supervision**

**Postdoctoral researchers, visiting scientists and consultants**

**2024 – present:** Dr Adrià San Jose Plana. Postdoctoral Scientist. Global Health Resilience Group. BSC (IDAlert/ESA).

**2024 – present:** Dr Ania Kawiecki. Postdoctoral Scientist. Global Health Resilience Group. BSC (IDExtremes).

**2024 – present:** Dr Georgina Charnley. Postdoctoral Scientist. Global Health Resilience Group. BSC (IDAlert/AI4Science).

**2023 – 2026:** Dr Sophie Belman. Postdoctoral Scientist (E4Warning / Schmidt Science Fellowship).

**2023 – 2025:** Dr Giovenale Moirano. Postdoctoral Scientist. Global Health Resilience Group. BSC (University Turin Postgraduate Medical School Biostatistics Fellowship/IDExtremes).

**2023 – 2025:** Dr Kim van Daalen. Lancet Countdown in Europe Research Fellow / Postdoctoral Scientist. Global Health Resilience Group. BSC (IDAlert/CATALYSE).

**2022 – 2025:** Remy Hoek Spaans. Recognised Researcher. Global Health Resilience Group. BSC (E4Warning).

**2022 – present:** Daniela Lührsen. Climate & Health Data Scientist. Global Health Resilience Group. BSC (HARMONIZE/AI4Science).

**2022 – 2025:** Dr Bruno Carvalho. Postdoctoral Scientist. Global Health Resilience Group. BSC (HARMONIZE/Mosqlimate).

**2022 – present:** Martín Lotto Batista. Research technician. Global Health Resilience Group. BSC (EERIE/IDAlert).

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**Supervision**

**2022 – 2026:** Dr Raquel Martins Lana. Postdoctoral Scientist. Global Health Resilience Group. BSC (Beatriu de Pinos & MCSA Fellowship).

**2022:** Dr Claudia Torres Codeço. Visiting Scientist. Global Health Resilience Group. BSC. Funding: Integrative science and technology network to face infectious and reemerging diseases (RICEI) (PrInt-Fiocruz/CAPES).

**2021 – 2022:** Kim van Daalen. Lancet Countdown in Europe Consultant (Wellcome Trust).

**2021 – 2022:** Dr Mauricio Santos-Vega. Lancet Countdown Research Fellow. Project: Health and economic burden of dengue in South America, in the context of climate change (Swiss Re).

**2020 – 2021:** Dr Rory Gibb. Postdoctoral Research Fellow, LSHTM. Project: 'An integrated dengue early warning system driven by Earth Observations in Vietnam (UK Space Agency).

**2019 – 2020:** Dr Leonardo Bastos. Postdoctoral Research Fellow, LSHTM. Project: 'An integrated dengue early warning system driven by Earth Observations in Vietnam (UK Space Agency).

**2018 – 2021:** Dr Felipe Colón-González. Postdoctoral Research Fellow/Assistant Professor, LSHTM. Project: 'An integrated dengue early warning system driven by Earth Observations in Vietnam (UK Space Agency).

**2020**: Dr David Soeiro. Visiting Scientist, LSHTM. Epidemic patterns of infectious diseases and their determinants in Brazil (CAPES, Brazil grant £15.690,00).

**2019**: Gabriel Carrasco Escobar. Visiting Scientist, LSHTM. Project: Bayesian spatio-temporal models to understand the impact of climatic factors on malaria epidemiology in the Peruvian Amazon (CONCYTEC, Peru grant £5,386).

**PhD**

**2024 – 2027:** Adriana Lucia Tibaduiza Torres. Health Data Science PhD candidate at Charite – Universitätsmedizin Berlin and Visiting Student at the Global Health Resilience Group, BSC. Project: Climatic and socio-economic drivers of dengue dynamics in Colombia. Role: co-supervisor. First supervisor: Prof. Stefan Flasche (Charite).

**2022 – 2025:** Chloe Fletcher. PhD Climate Change Epidemiology. Global Health Resilience Group, BSC. Project: A multi-model multi-hazard approach to build public health resilience to climate change in the Caribbean. Role: First supervisor. Second supervisor: Prof John Palmer (UPF).

**2021 – 2028:** Tilly Alcayna Stevens. PhD Epidemiology (part-time), LSHTM. Project: Climate risk information for impact-based forecasting of disease outbreaks in humanitarian crises. Role: first supervisor. Co-supervisors: Dr Bhargavi Rao & Prof. Sebastian Funk (LSHTM).

**2020 – 2024:** Emilie Finch. PhD MRC-LID programme, LSHTM Project: Modelling the role of immunity, climate and behaviour in viral outbreak dynamics and control. Role: second supervisor. First supervisor: Dr Adam Kucharski (LSHTM). Successfully defended 2 Sep 2024.

**2020 – 2022:** Martín Lotto Batista. PhD Epidemiology, Helmholtz Centre for Infectious Disease Research, Germany. Project: Predicting tick-borne disease transmission potential in Europe. Role: co-supervisor and committee member. First supervisors: Dr Stefanie Castell & Prof. Gérard Krause (HZI). Successfully defended 23 Dec 2024.

**2019 – 2022:** Sophie Lee. PhD Royal Society studentship, LSHTM. Project: Spatial modelling of emerging infectious diseases: Quantifying the role of climate, cities and connectivity on dengue expansion in Brazil. Role: first supervisor. Co-supervisors: Dr Theo Economou (Cyprus Institute) and Prof. John Edmunds (LSHTM). Successfully defended 9 Dec 2022.

**2018 – 2022:** Eleanor Rees. PhD MRC-LID programme, LSHTM. Project: Understanding complex drivers of infectious disease transmission dynamics. Role: second supervisor. First supervisor: Dr Adam Kucharski (LSHTM), third supervisor: Dr Colleen Lau. Successfully defended 5 Dec 2022.

**2018 – 2021:** Isabel Fletcher. PhD BBSRC-LIDO programme, LSHTM. Thesis: Assessing the impact of global environmental change on mosquito-borne disease: A Planetary Health approach. Role: first supervisor. Co-supervisor: Prof. Chris Drakeley (LSHTM) & Prof. Kate Jones (UCL). Successfully defended 14 Mar 2022.

**2014 – 2016:** Rafael De Castro Catão. PhD Geography, São Paulo State University, Brazil. Thesis: Geography of dengue fever in São Paulo state: the geographical barriers to spatial diffusion. International Internship Supervisor Nov 2014 – Jul 2015 (FAPESP/BEPE, Brazil grant). Supervisor in Brazil: Prof. Raul Borges Guimarães. PhD awarded 9 May 2016.

**Master's Degree**

**2020:** Rosa von Borries. MSc Public Health, LSHTM. Project: Modelling the role of climatic and environmental factors in driving space-time transmission dynamics of COVID-19: a systematic review. Role: First supervisor.

## Supervision

**2020:** Beatriz Calvo. MSc Epidemiology, LSHTM. Project: Socio-ecological drivers of dengue in Minas Gerais, Brazil: a causal inference ecological study. Role: First supervisor. Second supervisor: Sophie Lee. Awarded best Master's thesis in infectious disease epidemiology.

**2018:** Martín Lotto Batista. MSc Epidemiology, LSHTM. Project: El Niño-Southern Oscillation (ENSO) and leptospirosis in Entre Ríos, Argentina: a spatio-temporal modelling approach. Role: first supervisor. Second supervisor: Dr. Gabriela Müller (CONICET / National Littoral University, Argentina).

**2013 – 2014:** Aleksandra Karczewska-Gibert. MA International Relations, University of Barcelona. Thesis: Socio-economic and demographic aspects of dengue epidemiology evolution in Thailand, 1982-2012. Role: First supervisor. Successfully defended: 2 Jun 2014.

**2013 – 2014:** Sophie Steffen. MA International Relations, University of Barcelona. Thesis: Challenges in communicating climate forecast information to decision-makers. Co-supervised with Ms. Melanie Davis. Successfully defended: 28 May 2014.

**2010 – 2012:** James Chirombo. MSc Biostatistics, University of Malawi. Thesis: Geostatistical modelling and analysis of under-five malaria risk in Malawi. Co-supervisor: Dr. Lawrence Kazembe, University of Namibia. Successfully defended: 26 Jul 2013.

## Training

**Feb 2024:** EMBO Laboratory Leadership, LSHTM, UK.

**Oct 2023:** Leadership and Management Skills. ICREA, Barcelona, Spain.

**Jul 2023:** Modern time series methods for public health and epidemiology, European Educational Programme in Epidemiology (EEPE), Florence, Italy.

**Dec 2022:** Public speaking. PIMOOD. BSC, Barcelona, Spain.

**Jan 2021:** Running successful virtual teams, Academy of Medical Sciences, UK.

**Dec 2019:** Grant writing workshop, LSHTM, UK.

**Nov 2019:** Copernicus Climate Data Store Training Course, CosmoCaixa, Barcelona, Spain.

**Jul 2019:** Public Engagement Masterclass, Wellcome Genome Campus, UK.

**May 2019:** Presentation skills for Meeting of the Minds conference, Royal Society, London, UK.

**May 2019:** Dance your science - kinaesthetics for cognitive agility, Barcelona Biomedical Research Park, Spain.

**Feb 2019:** Mathematical Models for Infectious Disease Dynamics, Wellcome Genome Campus, UK.

**Jun 2018:** Computational and Data Literacy Course, Natural History Museum, UK.

**2018 – 2019:** Postgraduate Certificate in Learning and Teaching (PGCILT), LSHTM, UK.

**2017 – 2018:** SUSTAIN leadership development programme for women scientists. Funded by the Academy of Medical Sciences, the Medical Research Council and the Royal Society.

**2017 – 2019:** Royal Society training schemes: writing about your research; media skills training; introduction to public engagement; engaging with schools; presentation skills.

**2017 – 2024:** Talent and Educational Development Programme, LSHTM, UK. Courses taken in research degree supervision for new supervisors; starting a research grant at LSHTM - things you should know for the first year; writing skills; essential skills for line managers; research degree supervisor update; recruitment and selection skills; applying for research funding; effective performance development reviews - workshop for reviewers; understanding microaggression and being an active bystander; equity, diversity and inclusion.

**Nov 2017:** Outbreak analysis using R: An introduction to new tools. EPIDEMICS pre-conference workshop, Sitges, Spain.

**Sep 2017:** Health Applications of Google Earth Engine. GEOMED pre-conference workshop, University of Porto, Portugal.

**Jul 2017:** Vector Behavior in Transmission Ecology Research Coordination Network – VectorBiTE RCN 2017 Workshop. Royal Holloway University, UK.

**June 2017:** Introduction to the News Media, Science Media Centre, Francis Crick Institute, UK.

**Jan 2015:** DwB-Training Course: European Census Data. Centre for Demographic Studies (CED), Universitat Autònoma de Barcelona, Barcelona, Spain.

**Oct 2013:** Bayesian computing and spatial modelling with INLA. University of Bergamo, Italy.

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## Training

**Nov 2010:** United Nations Advanced Security in the Field. International Centre for Theoretical Physics/UNESCO**,** Italy.

**Jan 2010:** Learning and Teaching in Higher Education Programme Stage 1. University of Exeter, UK.

**Jun 2009:** IRI Summer Institute Climate Information for Public Health, International Research Institute for Climate and Society. New York, USA. Funded by: The Met Office.

**Jun 2008:** Bayesian Statistics Workshop. University of Exeter, Tremough Campus, UK.

**Academy for PhD Training in Statistics (APTS)**
Apr 2008: Statistical Modelling, Statistical Asymptotics. University of Oxford, UK.
Jul 2008: Applied Stochastic Processes, Computer Intensive Statistics. University of Bristol, UK.

**Jan 2008:** Advanced Statistics Course. Met Office, UK.

**2007 – 2010:** Effective Researcher Development Programme**,** University of Exeter, UK.
Courses taken in time and project management; how to network effectively; team development; preparing and presenting a conference paper; effective writing skills for scientific research.

**Jun 2007:** Research Communication Workshop – Research for Policy Makers, UCL, UK.

## Publications – Peer reviewed journal articles

1. Moirano G, Fletcher C, Semenza JC, **Lowe R**. (2025). Short-term effect of temperature and precipitation on the incidence of West Nile Neuroinvasive Disease in Europe: a multi-country case-crossover analysis. *The Lancet Regional Health–Europe* (https://doi.org/10.1016/j.lanepe.2024.101149).
2. Pepper M, Rebouças P, Falcao IR, Clemente NS, **Lowe R**, Schneider R, Pescarini JM, Dos Santos GF, Andrade RF, Cortes TR, Ranzani OT, Brickley EB, Barreto ML, Paixao ES. (2025). Prenatal exposure to ambient air pollution and subsequent risk of lower respiratory tract infections in childhood and adolescence: A systematic review. *International Journal of Hygiene and Environmental Health* (https://doi.org/10.1016/j.ijheh.2024.114473).
3. **Lowe R** & Codeço CT. (2025). Harmonizing Multisource Data to Inform Vector-Borne Disease Risk Management Strategies. *Annual Review of Entomology* (https://doi.org/10.1146/annurev-ento-040124-015101).
4. Treskova M, Montalvo T, Rocklöv J, Hatfield C, Bartumeus F, Dasgupta S, Encarnação J, **Lowe R**, Semenza JC, Stiles P, Noya J, Valsecchi A, Bärnighausen T, Palmer J, Bunker A. (2024). Effects of mosquito-proofing storm drains on adult and larvae mosquito abundance: protocol of the IDAlErt storm drAin randomiSed controlled trial (IDEAS). *MethodsX* (https://doi.org/10.1016/j.mex.2024.103102).
5. Feurer D, Riffe T, Kniffka MS, Acosta E, Armstrong B, Mistry M, **Lowe R**, …, Sera F. (2024). Meteorological factors, population immunity, and COVID-19 incidence: A global multi-city analysis. *Environmental Epidemiology* (https://doi.org/10.1097/EE9.0000000000000338).
6. van Daalen KR, Jung L, Dada S, Othman R, Barrios-Ruiz A, Malolos GZ, Wu KT, Garza-Salas A, El-Gamal S, Ezzine T, Khorsand P, …, **Lowe R**. (2024). Bridging the gender, climate, and health gap: the road to COP29. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(24)00270-5).
7. Romanello M, …, **Lowe R**., …, Costello A. (2024). The 2024 report of the Lancet Countdown on health and climate change: facing record-breaking threats from delayed action. *The Lancet* (https://doi.org/10.1016/S0140-6736(24)01822-1).
8. Carrasco-Escobar G, Villa D, Barja A, **Lowe R**, Llanos-Cuentas A, Benmarhnia T. The role of connectivity on malaria dynamics across areas with contrasting control coverage in the Peruvian Amazon. *PLoS Neglected Tropical Diseases* (https://doi.org/10.1371/journal.pntd.0012560).
9. Díaz AR, Rollock L, Boodram LL, Mahon R, Best S, Trotman A, Van Meerbeeck CJ, Fletcher C, Dunbar W, Lippi CA, Lührsen D, Sorensen C, Muñoz AG, Ryan SJ, Stewart-Ibarra AM, **Lowe R**. (2024). A demand-driven climate services for health implementation framework: A case study for climate-sensitive diseases in Caribbean Small Island Developing States. *PLoS Climate* (https://doi.org/10.1371/journal.pclm.0000282).
10. Finch E, Nilles EJ, Paulino CT, Skewes-Ramm R, Lau CL, **Lowe R**, Kucharski AJ. (2024). Effects of mobility, immunity and vaccination on SARS-CoV-2 transmission in the Dominican Republic: a modelling study. *The Lancet Regional Health–Americas* (https://doi.org/10.1016/j.lana.2024.100860).
11. Carvalho BM, Maia C, Courtenay O, Llabrés-Brustenga A, Lotto Batista M, Moirano G, van Daalen KR, Semenza JC, **Lowe R**. (2024). A climatic suitability indicator to support Leishmania infantum surveillance in Europe: a modelling study. *The Lancet Regional Health–Europe* (https://doi.org/10.1016/j.lanepe.2024.100971).

**Publications – Peer reviewed journal articles**

12. van Daalen KR, ..., **Lowe R**. (2024). The 2024 Europe report of the Lancet Countdown on health and climate change: unprecedented warming demands unprecedented action. *The Lancet Public Health* (https://doi.org/10.1016/S2468-2667(24)00055-0).

13. Klepac P, …, **Lowe R**, …, Ibrahima Socé Fall I. (2024). Climate change, malaria and neglected tropical diseases: a scoping review. *Transactions of The Royal Society of Tropical Medicine and Hygiene* (https://doi.org/10.1093/trstmh/trae026).

14. Cai W, Fanzo J, Glaser J, **Lowe R**, Lusambili AM, Marks E. (2024). Views on climate change and health. *Nature Climate Change* (https://doi.org/10.1038/s41558-024-01998-0).

15. van Daalen KR, Wyma N, Schauer-Berg J, Blom IM, Mattijsen J, Othman R, Eissa M, Parks RM, Wyns A, Aboushady AT, Hassan M, Ezzine T, Khan S, Zayed ME, Neggazi S, Alqodmani L, **Lowe R**. (2024). The global health community at international climate change negotiations. *BMJ Global Health* (https://doi.org/10.1136/bmjgh-2024-015292)

16. Barcellos C, Matos V, Lana RM, **Lowe R**. (2024). Climate change, thermal anomalies, and the recent progression of dengue in Brazil. *Nature Scientific Reports* (https://doi.org/10.1038/s41598-024-56044-y).

17. Sebastianelli, A., Spiller, D., Carmo, R. et al. Sebastianelli A, Spiller D, Carmo R, Wheeler J, Nowakowski A, Jacobson LV, Kim D, Barlevi H, Cordero ZE, Colón-González FJ, **Lowe R**, Ullo SL, Schneider R. (2024). A reproducible ensemble machine learning approach to forecast dengue outbreaks. *Nature Scientific Reports* (https://doi.org/10.1038/s41598-024-52796-9).

18. Hoek Spaans R, Drumond B, van Daalen KR, Rorato Vitor AC, Derbyshire A, Da Silva A, Lana RM, Vega MS, Carrasco-Escobar G, Sobral Escada MI, Codeço C, **Lowe R**. (2024). Ethical considerations related to drone use for environment and health research: A scoping review protocol. *PLoS ONE* (https://doi.org/10.1371/journal.pone.0287270).

19. Gibb R, Colón-González FJ, Lan PT, Huong PT, Nam VS, Duoc VT, Hung DT, Dong NT, Chien VC, Trang LTT, Quoc DK, Hoa TM, Tai NH, Hang TT, Tsarouchi G, Ainscoe E, Harpham Q, Hofmann B, Lumbroso D, Brady OJ, **Lowe R**. (2023). Interactions between climate change, urban infrastructure and mobility are driving dengue emergence in Vietnam. *Nature Communications* (https://doi.org/10.1038/s41467-023-43954-0).

20. Santos-Vega M, **Lowe R**, Anselin L, Desai V, Vaishnav KG, Naik A, Pascual M. (2023). Quantifying climatic and socioeconomic drivers of urban malaria in Surat, India: a statistical spatiotemporal modelling study. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(23)00249-8).

21. Ballester J, van Daalen KR, Chen Z, Achebak H, Antó JM, Basagaña X, Robine JM, Herrmann FR, Tonne C, Semenza JC, **Lowe R**. (2023). The effect of temporal data aggregation to assess the impact of changing temperatures in Europe: an epidemiological modelling study. *The Lancet Regional Health–Europe* (https://doi.org/10.1016/j.lanepe.2023.100779).

22. Romanello M, …, **Lowe R**., …, Costello A (2023). The 2023 report of the Lancet Countdown on health and climate change: the imperative for a health-centred response in a world facing irreversible harms. *The Lancet* (https://doi.org/10.1016/S0140-6736(23)01859-7).

23. Rees EM, Lotto Batista M, Kama M, Kucharski AJ, Lau CL, **Lowe R**. (2023). Quantifying the relationship between climatic indicators and leptospirosis incidence in Fiji: A modelling study. *PLoS Global Public Health* (https://doi.org/10.1371/journal.pgph.0002400).

24. Colón-González FJ, Gibb R, Khan K, Watts A, **Lowe R**, Brady OJ. (2023). Projecting the future incidence and burden of dengue in Southeast Asia. *Nature Communications* (https://doi.org/10.1038/s41467-023-41017-y).

25. Lührsen DS, Zavitsanou E, Cerecedo-Iglesias C, Pardo-Araujo M, Palmer JRB, Bartumeus F, Montalvo T, Michaelakis A, **Lowe R**. (2023). Adult *Aedes albopictus* in winter: implications for mosquito surveillance in southern Europe. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(23)00170-5).

26. Rocklöv J, Semenza JC, Dasgupta S, Robinson EJZ, …, **Lowe R**. (2023). Decision-support tools to build climate resilience against emerging infectious diseases in Europe and beyond. *The Lancet Regional Health–Europe* (https://doi.org/10.1016/j.lanepe.2023.100701).

27. van Daalen KR, Tonne C, Borrell C, Nilsson M, **Lowe R**. (2023). Approaching unsafe limits: climate-related health inequities within and beyond Europe. *The Lancet Regional Health–Europe* (https://doi.org/10.1016/j.lanepe.2023.100683)

28. Fletcher IK, Gibb R, **Lowe R**, Jones KE. (2023). Differing taxonomic responses of mosquito vectors to anthropogenic land-use change in Latin America and the Caribbean. *PLoS Neglected Tropical Diseases* (https://doi.org/10.1371/journal.pntd.0011450).

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29. Lotto Batista M, Rees EM, Gomez A, Lopez A, Castell S, Kucharski AJ, Ghozzi S, Müller GV, **Lowe R**. (2023). Towards a leptospirosis early warning system in North-Eastern Argentina. *J. R. Soc. Interface* (https://doi.org/10.1098/rsif.2023.0069).

30. Ryan SJ, Lippi CA, Caplan T, Diaz A, Dunbar W, Grover S, Johnson S, Knowles R, **Lowe R**, Mateen B, Thomson M, Stewart-Ibarra AM. (2023). The current landscape of software tools for the climate-sensitive infectious disease modelling community. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(23)00056-6).

31. van Daalen KR, Romanello M., Gordon-Strachan G, Peña SMH, Cai W, Tonne C. and **Lowe R**. (2023). Challenges in tracking climate, health, and justice over time and large geographical areas. *The Lancet Public Health* (https://doi.org/10.1016/S2468-2667(23)00051-8).

32. Di Napoli C, Romanello M, Minor K, Chambers J, Dasgupta S, Escobar LE, Hang Y, Hänninen R, Liu Y, Lotto Batista M, **Lowe R**, Murray KA, Owfi F, Rabbaniha M, Shi L, Sofiev M, Tabatabaei M, Robinson EJZ. (2023). The role of global reanalyses in climate services for health: Insights from the Lancet Countdown. *Meteorological Applications* (https://doi.org/10.1002/met.2122).

33. Brady OJ, Hofmann B, Colón-González FJ, Gibb R, **Lowe R**, G Tsarouchi, Harpham Q, Lumbroso D, Lan PT, Nam VS. (2023). Relaxation of anti-COVID-19 measures reveals new challenges for infectious disease outbreak forecasting. *The Lancet Infectious Diseases* (https://doi.org/10.1016/S1473-3099(23)00003-8).

34. Nottmeyer L, Armstrong B., **Lowe R**, ..., Sera F. (2023). The association of COVID-19 incidence with temperature, humidity, and UV radiation – A global multi-city analysis. *Science of The Total Environment* (https://doi.org/10.1016/j.scitotenv.2022.158636).

35. Freitas LP, **Lowe R**, Koepp AK, Valongueiro SA, Dondero M, Marteleto LJ. (2023). Identifying hidden Zika hotspots in Pernambuco, Brazil: A Spatial Analysis. *Transactions of the Royal Society of Tropical Medicine & Hygiene* (https://doi.org/10.1093/trstmh/trac099).

36. van Daalen, ..., **Lowe R** (2022). The 2022 Europe report of the Lancet Countdown on health and climate change: towards a climate resilient future. *The Lancet Public Health* (https://doi.org/10.1016/S2468-2667(22)00197-9).

37. Romanello M, …, **Lowe R**., …, Costello A (2022). The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. *The Lancet* (https://doi.org/10.1016/S0140-6736(22)01540-9).

38. Lee SA., Economou T & **Lowe R**. (2022). A Bayesian modelling framework to quantify multiple sources of spatial variation for disease mappingJ. *J. R. Soc. Interface* (http://doi.org/10.1098/rsif.2022.0440)

39. Rees EM, Lau CL, Kama M, Reid S, **Lowe R**, Kucharski AJ. (2022). Estimating the duration of antibody positivity and likely time of *Leptospira* infection using data from a cross-sectional serological study in Fiji. *PLoS Neglected Tropical Diseases* (https://doi.org/10.1371/journal.pntd.0010506).

40. Neta G, Pan W, Martin L, Buss DF, Castranio T, **Lowe R**, Ryan SJ, Stewart-Ibarra AM, Hapairai L, Sehgal M, Wimberly M, Rollock L, Lichtveld M, Ebi K, Balbus J. (2022). Advancing Climate Change Health Adaptation through Implementation Science. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(22)00199-1).

41. Fletcher IK, Grillet ME, Moreno J, Drakeley C, Hernandez-Villena J, Jones K, **Lowe R**. (2022). Synergies between environmental degradation and climate variation on malaria reemergence in southern Venezuela. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(22)00192-9).

42. Alcayna T, Fletcher I, Gibb R, Trembley L, Funk S, Rao B, **Lowe R**. (2022). Climate-sensitive disease outbreaks in the aftermath of extreme climatic events: A scoping review. *One Earth* (https://doi.org/10.1016/j.oneear.2022.03.011).

43. O'Callaghan-Gordo C, …, **Lowe R**, …, Antó, JM. (2022). Responding to the need of postgraduate education for Planetary Health: development of an online Master's Degree. *Frontiers in Public Health* (https://doi.org/10.3389/fpubh.2022.969065).

44. Zaitchik BF, Omumbo J, **Lowe R**, van Aalst M, Anderson LO, Fischer E, Norman C, Robbins J, Barciela R, Trtanj J, von Borries R, Luterbacher J. (2022). Planning for Compound Hazards during the COVID-19 Pandemic. The Role of Climate Information Systems. *BAMS Meeting Summary* (https://doi.org/10.1175/BAMS-D-21-0215.1).

45. Choisy M, …, **Lowe R**, …, Yacoub S. (2022). Climate change and health in Southeast Asia – defining research priorities and the role of the Wellcome Trust Africa Asia Programmes. *Wellcome Open Research* (https://doi.org/10.12688/wellcomeopenres.17263.3).

46. Stewart-Ibarra AM, Rollock L, Best S, Brown T, Diaz AR, Dunbar W, Lippi CA, Mahon R, Ryan SJ, Trotman A, Van Meerbeeck CJ, **Lowe R**. (2022). Co-learning during the co-creation of a dengue early warning system for the health sector in Barbados. *BMJ Global Health* (https://doi.org/10.1136/bmjgh-2021-007842).

# Rachel Lowe

**Publications – Peer reviewed journal articles**

47. Di Napoli C, …, **Lowe R**, …, Robison EJ. (2022). Tracking the impacts of climate change on human health via indicators: lessons from the Lancet Countdown. *BMC Public Health* (https://doi.org/10.1186/s12889-022-13055-6).

48. Finch E, **Lowe R**, …, Kucharski AJ on behalf of the CMMID COVID-19 working group and the SpaceX COVID-19 Cohort Collaborative (2022). SARS-CoV-2 antibodies protect against reinfection for at least six months in a multicentre seroepidemiological workplace cohort. *PLoS Biology* (https://doi.org/10.1371/journal.pbio.3001531).

49. Nightingale ES, Abbott S, Russell TW, **Lowe R**, Medley GF, Brady OJ. (2022). The local burden of disease during the first wave of the COVID-19 epidemic in England: estimation using different data sources from changing surveillance practices. *BMC Public Health* (doi: 10.1186/s12889-022-13069-0).

50. Lee SA, Economou T, de Castro Catão R, Barcellos C, **Lowe R**. (2021). The impact of climate suitability, urbanisation, and connectivity on the expansion of dengue in 21st century Brazil. *PLoS Neglected Tropical Diseases* (https://doi.org/10.1371/journal.pntd.0009773).

51. Sera F, Armstrong B, Abbott S, …, **Lowe R**. (2021). A cross-sectional analysis of meteorological factors and SARS-CoV-2 transmission in 409 cities across 26 countries. *Nature Communications* 12:5968 (https://doi.org/10.1038/s41467-021-25914-8).

52. Romanello M, van Daalen K, Anto JM, Dasandi N, Drummond P, Hamilton IG, Jankin S, Kendrovski V, **Lowe R**, Rocklöv J, Schmoll O, Semenza JC, Tonne C, Nilsson M. (2021). Tracking progress on health and climate change in Europe. *The Lancet Public Health* (https://doi.org/10.1016/S2468-2667(21)00207-3).

53. Romanello M, …, **Lowe R**, ..., Hamilton I. (2021). The 2021 report of the Lancet Countdown on health and climate change: code red for a healthy future. *The Lancet* (https://doi.org/10.1016/S0140-6736(21)01787-6).

54. Pollett S, …, **Lowe R**, …, Rivers C. (2021). Recommended reporting items for epidemic forecasting and prediction research: the EPIFORGE 2020 guidelines. *PLoS Medicine* (https://doi.org/10.1371/journal.pmed.1003793).

55. Coughlan de Perez EC, Stephens E, van Aalst M, Bazo J, Fournier-Tombs E, Funk S, Hess JJ, Ranger N, **Lowe R**. (2021). Epidemiological versus meteorological forecasts: best practice for linking models to policymaking. *International Journal of Forecasting* (https://doi.org/10.1016/j.ijforecast.2021.08.003).

56. Rees EM, Waterlow NR, CMMID COVID-19 working group, **Lowe R**, Kucharski AJ. (2021). Estimating the duration of seropositivity of human seasonal coronaviruses using seroprevalence studies. *Wellcome Open Research* (https://doi.org/10.12688/wellcomeopenres.16701.1).

57. Royé D, Sera F, Tobías A, **Lowe R**, Gasparrini A, Pascal M, de Donato F, Nunes B, Teixeira JP. (2021). Effects of Hot Nights on Mortality in Southern Europe. *Epidemiology* (https://doi.org/10.1097/ede.0000000000001359)

58. Colón-González FJ, Sewe MO, Tompkins AM, Sjödin H, Casallas A, Rocklöv J, Caminade C, **Lowe R**. (2021). Projecting the risk of mosquito-borne diseases in a warmer and more urbanised world: a multi-model multi-scenario intercomparison modelling study. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(21)00132-7).

59. Lee SA, Jarvis CI, Edmunds WJ, Economou T, **Lowe R**. (2021). Spatial connectivity and mosquito-borne diseases: a systematic review of modelling methods and assumptions. *J. R. Soc. Interface* (https://doi.org/10.1098/rsif.2021.0096).

60. Rees EM, Minter A, Edmunds WJ, Lau CL, Kucharski AJ, **Lowe R**. (2021). Transmission modelling of environmentally persistent zoonotic diseases: a systematic review. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(21)00137-6).

61. Pley C, Evans M, **Lowe R**, Montgomery H, Yacoub S. (2021). Digital and technological innovation in vector-borne disease surveillance to predict, detect, and control climate-driven outbreaks. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(21)00141-8).

62. **Lowe R**, Lee S, O'Reilly KM, Brady OJ, Bastos L, Carrasco-Escobar G, De Castro Catão R, Colón-González FJ, Barcellos C, Sá Carvalho M, Blangiardo M, Rue H, Gasparrini A. (2021). Combined effects of hydrometeorological hazards and urbanisation on dengue risk in Brazil: a spatiotemporal modelling study. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(20)30292-8).

63. Colón-González FJ, Bastos L, Hofmann B, Hopkin A, Harpham Q, Crocker T, Amato R, Ferrario I, Moschini F, James S, Malde S, Ainscoe E, Nam VS, Tan DQ, Khoa ND, Harrison M, Tsarouchi G, Lumbroso D, Brady OJ, **Lowe R**. (2021). Probabilistic seasonal dengue forecasting in Vietnam: A modelling study using superensembles. *PLoS Medicine* (https://doi.org/10.1371/journal.pmed.1003542).

64. Fletcher IK, Stewart-Ibarra AM, García-Díez M, Shumake-Guillemot J, **Lowe R**. (2021). Climate services for health: from global observations to local interventions. *Med* (https://doi.org/10.1016/j.medj.2021.03.010).

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65. Grillet ME, Moreno JE, Hernández JV, Vincenti-González MF, Noya O, Tami A, Paniz-Mondolfi A, Llewellyn M, **Lowe R**, Escalante AA, Conn JE. (2021). Malaria in Southern Venezuela: The Hottest Hotspot in Latin America. *PLoS Neglected Tropical Diseases* (https://doi.org/10.1371/journal.pntd.0008211).

66. Liu Y, Morgenstern C, Kelly J, **Lowe R**, Jit M, CMMID COVID-19 Working Group. (2021). The impact of non-pharmaceutical interventions on SARS-CoV-2 transmission across 130 countries and territories. *BMC Medicine* (https://doi.org/10.1186/s12916-020-01872-8).

67. Ortiz-Prado E, Rivera-Olivero IA, Freire-Paspuel B, **Lowe R**, Lozada T, Henriquez-Trujillo AR, Garcia-Bereguiain MA, UDLA COVID-19 Team. (2021). Testing for SARS-CoV-2 at the core of voluntary collective isolation: Lessons from the indigenous populations living in the Amazon region in Ecuador. *International Journal of Infectious Diseases* (https://doi.org/10.1016/j.ijid.2021.02.039).

68. Ortiz-Prado E, Simbana-Rivera K, Gomez-Barreno L, Diaz AM, Barreto A, Moyano C, Arcos V, Vasconez-Gonzalez E, Paz C, Simbana-Guaycha F, Molestina-Luzuriaga M, Fernandez-Naranjo R, Feijoo J, Henriquez AR, Adana L, Lopez-Cortes Sr A, Fletcher IK, **Lowe R** (2021). Epidemiological, socio-demographic and clinical features of the early phase of the COVID-19 epidemic in Ecuador. *PLoS Neglected Tropical Diseases* (https://doi.org/10.1371/journal.pntd.0008958).

69. **Lowe R**, Ryan SJ, Van Meerbeeck CJ, Mahon R, Trotman AR, Boodram L, Borbor-Cordova MJ, Stewart-Ibarra AM. (2020). Building resilience to mosquito-borne diseases in the Caribbean. *PLoS Biology* (https://doi.org/10.1371/journal.pbio.3000791).

70. **Lowe R**, Lee S, Lana R, Codeço C, Castro MC, Pascual M. (2020). Emerging arboviruses in the urbanized Amazon rainforest *BMJ*; 371: m4385 (https://doi.org/10.1136/bmj.m4385).

71. Murray KA, Escobar LE, **Lowe R**, Rocklöv J, Semenza JC, Watts N. (2020). Tracking infectious diseases in a warming world *BMJ* (https://doi.org/10.1136/bmj.m3086).

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73. Hess J, Boodram LL, Paz S, Ibarra AM, Wasserheit JN, **Lowe R**. (2020). Strengthening the global response to climate change and infectious disease threats. *BMJ* (https://doi.org/10.1136/bmj.m3081).

74. von Borries R, Guinto R, Thomson DJ, Abia WA, **Lowe R**. (2020). Planting sustainable seeds in young minds: the need to teach planetary health to children. *The Lancet Planetary Health* (https://doi.org/10.1016/S2542-5196(20)30241-2).

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8. Klepac P, Hsieh JL, Ducker CJ, Assoum M, Booth M, Byrne I, Dodson S, Turner MR, van Daalen KR, **Lowe R**, Hollingworth D, Solomon AW, Socé Fall. (2024). Climate Change, Malaria & Neglected Tropical Diseases: a Scoping Review. ISEE 36th Annual Conference, 25-28 Aug 2024, Santiago, Chile (e-poster presentation).
9. van Daalen KR, Tonne C, Semenza JC, Rocklöv J, Markandya A, Dasandi N, Jankin S, Kendrovski O, Schmoll O, Romanello M, Antó JM, Nilsson M, **Lowe R**. (2024). The Europe report of the Lancet Countdown: unprecedented warming demands unprecedented action. (2024). 36th Annual Conference of the International Society of Environmental Epidemiology, 25-28 Aug 2024, Santiago, Chile (e-poster presentation).
10. van Daalen KR, Wyma N., Schauer-Berg J, Blom IM, Mattijsen J, Othmann R, Eissa M, Parks RM, Wyns A, Aboushady AT, Hassan M, Ezzine T, Khan S, Elsayed Zayed MA, Neggazi S, Alqodmani L, **Lowe R**. (2024). The global health community at international climate change negotiations. 36th Annual Conference of the International Society of Environmental Epidemiology, 25-28 Aug 2024, Santiago, Chile (e-poster presentation).
11. Fletcher C, Lotto Batista M, Lührsen D, Carvalho BM, Llabrés-Brustenga A, Müller G, Gómez A, López S, Carcamo PM, Carrasco-Escobar G, Umaña JD, Santos-Vega M, Gracie R, Barcellos C, Rollock L, Diaz AR, Ryan SJ, Stewart-Ibarra AM, Borbor-Cordova M, **Lowe R**. (2024). ENDCast: A framework for El Niño driven disease forecasting in Latin America and

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the Caribbean. Research Perspectives on the Health Impacts of Climate Change, 19 February 2024, Brussels, Belgium (poster presentation).

12. Hoek Spaans R, Belman S, Fletcher C, Harpham Q, Tsarouchi G, **Lowe R**. (2024). A generalized modelling framework for dengue early warning systems in South and Southeast Asia. Research Perspectives on the Health Impacts of Climate Change, 19 February 2024, Brussels, Belgium (poster presentation).
13. Carvalho BM, Maia C, Courtenay O, Llabrés-Brustenga A, Lotto Batista M, Moirano G, van Daalen KR, Semenza JC, **Lowe R**. (2024). A climatic suitability indicator to support Leishmania infantum surveillance in Europe. (2024). Research Perspectives on the Health Impacts of Climate Change, 19 February 2024, Brussels, Belgium (poster presentation).
14. Diaz AR, Rollock L, Boodram L, Mahon R, Best S, Trotman A, Van Meerbeeck CJ, Fletcher C, Dunbar W, Lippi CA, Luhrsen D, Sorensen C, Muñoz AG, Ryan SJ, Stewart-Ibarra AM, **Lowe R**. (2023). A demand-driven climate services for health implementation framework: a case study for climate-sensitive diseases in Caribbean Small Island Developing States. American Geophysical Union (AGU) 2023, 11 – 15 Dec 2023.
15. **Lowe R**. (2023). K03 Decision-support tools to track and predict climate-sensitive infectious diseases at cascading spatial scales. GeoVet 2023 International Conference. 19-21 Sep 2023, Silvi Marina, Italy (keynote presentation).
16. van Daalen KR, Tonne C, Semenza JC, Rocklöv J, Markandya A, Dasandi N, Jankin S, Kendrovski O, Schmoll O, Romanello M, Antó JM, Nilsson M, **Lowe R**. (2023). Tracking climate change and health in Europe. 35th Annual Conference of the International Society of Environmental Epidemiology, 17-21 Sep 2023, Kaohsiung, Taiwan (oral presentation).
17. van Daalen K, Romanello M, Rocklöv J, Semenza JC, Tonne C, Markandya A, Dasandi N, Jankin S, Kendrovski V, Schmoll O, Anto JM, Nilsson M, **Lowe R**. (2023). Towards a climate-resilient healthy future: the Lancet Countdown in Europe. European Geophysical Union (EGU) 2023, 23 – 28 Apr 2023, Vienna, Austria (oral presentation).
18. van Daalen KR, Farooq Z, Batista ML, Sewe MO, Sjodin H, Urtaza JM, Trinanes J, Carvalho B, Kazmierczak A, Rocklov J, Semenza JC, **Lowe R**. (2023). Climate-sensitive infectious disease indicators for policy-making in Europe. Urban Spaces and Mosquitoes on a Changing Planet, 23-25 Mar 2023, Barcelona, Spain (oral presentation).
19. Lana RM, Codeço CT, Barcellos C, Monteiro M, Escada I, Carrasco-Escobar G, Santos-Vega M, Matos M, Stewart-Ibarra M, **Lowe R**. (2022). Harmonizing multi-scale spatiotemporal climate and health data in Brazil. 57th Congress of the Brazilian Society of Tropical Medicine, Belém, Brazil (oral presentation).
20. Lee SA, Economou T, Lana RM, Catão R, **Lowe R**. (2022). The contribution of human movement around an urban network to the expansion of the dengue transmission zone in Brazil. ASTMH 71st Annual Meeting, 30 Oct – 3 Nov 2022, Seattle, USA (poster presentation).
21. **Lowe R**, Armstrong B, Abbott S, Meakin S, O'Reilly K, on Borries R, Schneider dos Santos R, Roye D, Hashizume M, Pascal M, Tobias A, Vicedo-Cabrera AM, Gasparrini A, Sera F. (2021). Potential influence of meteorological conditions on early COVID-19 transmission dynamics in 409 cities across 26 countries. European Meteorological Society Annual Meeting 2021, 5 – 9 Sep 2021 (online presentation).
22. Sera F, Armstrong B, Abbott S, Meakin S, O'Reilly K, on Borries R, Schneider dos Santos R, Roye D, Hashizume M, Pascal M, Tobias A, Vicedo-Cabrera AM, Gasparrini A, **Lowe R**. (2021). Analysis of the potential drivers of seasonality in COVID-19 transmission dynamics in 409 locations across 26 countries. European Geophysical Union (EGU) 2021, 19 – 30 Apr 2021 (online presentation).
23. **Lowe R**, Lee S, O'Reilly KM, Brady OJ, Bastos L, Carrasco-Escobar G, De Castro Catão R, Colón-González FJ, Barcellos C, Sá Carvalho M, Blangiardo M, Rue H, Gasparrini A. (2020). Implications of extreme hydrometeorological events for dengue control and preparedness in Brazil. ASTMH 69th Annual Meeting, 15 – 19 Nov 2020 (e-poster presentation).
24. Lee S, Economou T, Barcellos C, De Castro Catão R, Edmunds WJ, Sá Carvalho M, **Lowe R**. (2020). Environmental and socio-economic drivers of dengue fever expansion in 21st century Brazil. ASTMH 69th Annual Meeting, 15 – 19 Nov 2020 (e-poster presentation).
25. Gibb R, Colón-González FJ, Brady OJ, **Lowe R**. (2020). Understanding the effects of socio-environmental and climatic factors on long-term dengue fever trends in Vietnam. ASTMH 69th Annual Meeting, 15 – 19 Nov 2020 (e-poster presentation).
26. Fletcher IK, Hernandez-Villena J, Carrasco-Escobar G, Moreno JE, Jones K, Grillet ME & **Lowe R**. (2020). Use of Earth observations to investigate environmentally driven malaria surges in Venezuela. ASTMH 69th Annual Meeting, 15 – 19 Nov 2020 (e-poster presentation).

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27. Colón-González FJ, Bastos L, Gibb R, Hofmann B, Harpham Q, Crocker T, Amato R , Harrison M, Lumbroso D, Tsarouchi G, Brady OJ, **Lowe R**. (2020). Probabilistic dengue forecasting using Earth observations and seasonal climate models, a case study in Vietnam. ASTMH 69th Annual Meeting, 15 – 19 Nov 2020 (e-poster presentation).
28. Sera F, O'Reilly KM, Armstrong B, Tobias A, Hashizume M, Schneider dos Santos R, von Borries R, Pascal M, Vicedo-Cabrera AM, Gasparrini A, **Lowe R**. (2020). Estimating the Role of Climate in Modulating SARS-Cov-2 Transmission Dynamics: An Ecological Analysis across 500 Cities. International Virtual Symposium on Climatological, Meteorological and Environmental factors in the COVID-19 pandemic, 4 – 6 Aug 2020 (keynote presentation).
29. von Borries R, Soeiro Barbosa D, Tobias A, Shumake-Guillemot J, O'Reilly KM, Sera F, **Lowe R**. (2020). Modelling the Role of Climatic and Environmental Factors in Driving Space-Time Transmission Dynamics of Covid-19: A Systematic Review. International Virtual Symposium on Climatological, Meteorological and Environmental factors in the COVID-19 pandemic, 4 – 6 Aug 2020 (e-poster presentation).
30. Quandelacy TM, Rodriguez I, **Lowe R**, Stewart-Ibarra AM, Vincenti M, Ortiz Prado E, Munayco C, Borbor-Cordova M, Rollock L, Figueroa L, Masis R, Rodriguez DM, Grillet ME, Paz-Bailey G, Waterman S, Cummings D, Johansson MA. (2019). Dengue epidemic synchrony across the Americas. EPIDEMICS[7], 3 – 6 Dec 2019, Charleston, SC, USA (poster presentation).
31. Rees E, Lau C, Togami E, Edmunds WJ, **Lowe R**, Kucharski A (2019). Using cross-sectional serology to infer leptospirosis transmission dynamics in Fiji. EPIDEMICS[7], 3 – 6 Dec 2019, Charleston, SC, USA (oral presentation).
32. Quandelacy TM, **Lowe R**, Stewart-Ibarra AM, Vincenti M, Ortiz Prado E, Munayco C, Borbor-Cordova M, Rollock L, Figueroa L, Masis R, Rodriguez DM, Grillet ME, Paz-Bailey G, Waterman S, Rodriguez I, Cummings D, Johansson MA. (2019). Dengue epidemic synchrony across the Americas. ASTMH 68th Annual Meeting, 20 – 24 Nov 2019, Maryland, USA (poster presentation).
33. **Lowe R**. (2019). A coupled model framework to detect nonlinear and delayed impacts of climate on dengue risk. GEOMED 2019, 27 – 29 Aug 2019, Glasgow, UK (oral presentation).
34. Lee S, Economou T, Barcellos C, Catão R, Cruz OG, Codeço C, Edmunds WJ, Carvalho MS, **Lowe R**. (2019). The role of climate, cities and connectivity in the spread of mosquito-borne diseases in Brazil. GEOMED 2019, 27 – 29 Aug 2019, Glasgow, UK (poster presentation).
35. Jarvis CI, Fletcher I, Hernandez JV, Carrasco-Escobar G, Edmunds WJ, Moreno JE, Grillet ME, **Lowe R**. (2019). Malaria upsurge and illegal gold mining activities in southern Venezuela. GEOMED 2019, 27 – 29 Aug 2019, Glasgow, UK (poster presentation).
36. **Lowe R**. (2019). Probabilistic forecasts of climate-sensitive disease risk. ENTO 19: Vectors of diseases, LSHTM, 20 – 22 Aug 2019, London, UK (invited oral presentation).
37. Dobson AP, Baeza A, Castro M, Codeco CT, Cucunuba ZM, Pascual M, Santos-Vega M, **Lowe R**. (2019). Modeling the interaction between land use change and vector-borne diseases in the Amazon. Ecological Society of America (ESA) Annual Meeting, 11 – 16 Aug 2019, Louisiana, USA.
38. **Lowe R**. (2018). Emerging infectious diseases in a new climate. International Meeting on Emerging Diseases and Surveillance (IMED), 9 – 12 Nov 2018, Vienna, Austria (invited oral presentation).
39. Fletcher I, Stewart-Ibarra AM, Silva M, Beltran-Ayala E, Ordonez T, Adrian J, Jones K, **Lowe R**. (2018). Exploring the role of environmental and socio-political drivers of malaria incidence in El Oro province, Ecuador. ASTMH 67th Annual Meeting, 28 Oct – 1 Nov 2018, New Orleans, USA.
40. Stewart-Ibarra AM, Romero M, Borbor-Cordova MJ, Cox S, Hinds AQ, **Lowe R**, Mahon R, Van Meerbeeck C, Rollock L, St. Ville S, Ryan SJ, Trotman A. (2018). Co-developing climate services for public health: stakeholder needs and perceptions for the prevention and control of *Aedes*-transmitted diseases in the Caribbean. ASTMH 67th Annual Meeting, 28 Oct – 1 Nov 2018, New Orleans, USA (poster presentation).
41. **Lowe R**, Stewart-Ibarra AM, Petrova D, García-Díez M, Borbor-Cordova MJ, Mejía R, Regato M, Rodó X. (2018). El Niño and probabilistic dengue outbreak prediction in Ecuador. IV International Conference on El Niño Southern Oscillation: ENSO in a warmer Climate, 16 – 18 Oct 2018, Guayaquil, Ecuador (poster presentation).
42. Borbor-Córdova MJ, **Lowe R**, Bayot B, Muñoz AG, Ryan SJ, Mejia R, Stewart-Ibarra AM. (2018). Climate Services for Public Health: the use of El Niño and other climate modes for arbovirus forecasting in Latin America and the Caribbean. IV International Conference on El Niño Southern Oscillation: ENSO in a warmer Climate, 16 – 18 Oct 2018, Guayaquil, Ecuador (oral presentation).
43. **Lowe R**. (2018). Nonlinear and delayed impacts of rainfall extremes on dengue risk in the Caribbean. Infectious Disease Dynamics Conference, 3 – 5 Sep 2018, Ambleside, UK (oral presentation, random selection).

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44. **Lowe R**. (2018). Modelling the impact of global environmental change on vector-borne disease risk. Planetary Health Annual Meeting, 29 – 31 May 2018, Edinburgh, UK (poster presentation).
45. **Lowe R**. (2018). Modelling the impact of environmental change on infectious diseases, 18th International Congress on Infectious Diseases, 1 – 4 March 2018, Buenos Aires, Argentina (invited oral presentation).
46. **Lowe R**, Stewart-Ibarra AM, Petrova D, García-Díez M, Borbor-Cordova MJ, Mejía R, Regato M, Rodó X. (2017). El Niño and dengue epidemic prediction in Ecuador. Sixth International Conference on Infectious Disease Dynamics EPIDEMICS6, 29 Nov – 1 Dec 2017, Sitges, Spain (poster presentation).
47. **Lowe R**, Stewart-Ibarra AM, Petrova D, García-Díez M, Borbor-Cordova MJ, Mejía R, Regato M, Rodó X. (2017). El Niño and dengue prediction in Ecuador. ASTMH 66th Annual Meeting, 5 – 9 Nov 2017, Baltimore, USA (poster presentation).
48. **Lowe R**. (2017). Probabilistic dengue predictions based on ensemble seasonal climate forecasts. GEOMED 2017: International Conference on Spatial Statistics, Spatial Epidemiology and Geographical Aspects of Public Health, 7 – 9 Sep 2017, Porto, Portugal (invited oral presentation).
49. **Lowe R**, Stewart-Ibarra AM, Petrova D, García-Díez M, Borbor-Cordova MJ, Mejía R, Regato M, Rodó X. (2017). Using climate forecasts to predict the 2016 dengue season in Machala, Ecuador. Impact of Environmental Changes on Infectious Diseases, 17 – 19 May 2017, Trieste, Italy (oral presentation).
50. Petrova D, **Lowe R**, Stewart-Ibarra A, Ballester J, Koopman SJ, Rodó X. (2017). Long-Lead El Niño Forecasts to Inform Public Health Decision Support Systems: Application to Predict Dengue in El Oro, Ecuador. Impact of Environmental Changes on Infectious Diseases, 17 – 19 May 2017, Trieste, Italy (poster presentation).
51. Petrova D, **Lowe R**, Stewart-Ibarra A, Ballester J, Koopman SJ, Rodó X. (2017). Climate services for the health sector: long-lead El Niño forecasts to predict dengue risk in El Oro, Ecuador. Fifth International Conference on Climate Services, 28 Feb – 2 Mar 2017, Cape Town, South Africa (poster presentation).
52. **Lowe R**, Ballester J, García-Díez M, Creswick J, Robine JM, Herrmann FR, Rodó X. (2017). Development of an early warning system for heat wave related mortality in Europe: key outcomes and lessons learnt. Fifth International Conference on Climate Services, 28 Feb – 2 Mar 2017, Cape Town, South Africa (oral presentation).
53. Petrova D, **Lowe R**, Stewart-Ibarra A, Ballester J, Koopman SJ, Rodó X. (2016). Long-Lead El Niño Forecast Information to Support Public Health Decision Making: Application to Dengue Epidemics in Ecuador. ASTMH 65th Annual Meeting, 13 – 17 Nov 2016, Atlanta, USA (poster presentation).
54. Chirombo J, **Lowe R**, Terlouw DJ, Read JM, Ceccato P, Thomson MC Diggle PJ. (2016). Mapping Climatic and Non-Climatic Determinants of Malaria in Malawi for Designing Transmission Reduction Tools. Health and Climate Colloquium 2016, International Research Institute for Climate and Society (IRI), 8 – 10 Jun 2016, Palisades, USA (poster presentation).
55. Petrova D, **Lowe R**, Stewart-Ibarra A, Ballester J, Koopman SJ, Rodó X. (2016). Long-Lead El Niño Forecast Information to Support Public Health Decision Making. Health and Climate Colloquium 2016, International Research Institute for Climate and Society (IRI), 8 – 10 Jun 2016, Palisades, USA (poster presentation).
56. **Lowe R**, García-Díez M, Ballester J, Creswick J, Robine JM, HerrmannFR, Rodó X. (2016). Evaluation of an early warning system for heat wave related mortality in Europe: implications for seasonal forecasting and climate services. European Geosciences Union General Assembly, 20 Apr 2016, Vienna, Austria (oral presentation).
57. **Lowe R**, Coelho CAS, Barcellos C, Sá Carvalho M, De Castro Catão R, Coelho GE, Massa Ramalho W, Bailey TC, Stephenson DB, Rodó X. (2015). Evaluation of a dengue decision support tool. ASTMH 64th Annual Meeting, 25 – 29 Oct 2015, Philadelphia, USA (poster presentation).
58. Petrova D, **Lowe R**, Stewart-Ibarra A, Rodó X. (2015). Long-Lead El Niño forecast information to support public health decision making. 15th European Meteorological Society Annual Meeting 2015. 7 – 11 Sep 2015, Sofia, Bulgaria (oral presentation).
59. **Lowe R**, Rodó X. (2015). Integrating climate information into decision support tools for public health. Our Common Future Under Climate Change, UNESCO, 7 – 10 Jul 2015, Paris, France (poster presentation).
60. **Lowe R**, Barcellos C, Coelho CAS, Bailey TC, Coelho GE, Graham R, Jupp TE, Massa Ramalho W, Sá Carvalho M, Stephenson DB, Rodó X. (2015). Hot topic talk: Evaluation of a climate-driven dengue early warning system. Human Health in the Face of Climate Change: Science, Medicine, and Adaptation, New York Academy of Sciences, May 14 – 15, 2015, CosmoCaixa, Barcelona, Spain (oral presentation).

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61. **Lowe R**, Barcellos C, Coelho CAS, Bailey TC, Coelho GE, Graham R, Jupp TE, Massa Ramalho W, Sá Carvalho M, Stephenson DB, Rodó X. (2015). Climate sensitive diseases: using climate forecasts to extend predictive lead time. 2015 Australian and New Zealand College of Anaesthetists (ANZCA) Annual Scientific Meeting, 2 – 5 May 2015, Adelaide, Australia (invited oral presentation).
62. **Lowe R**, Ballester, J, Creswick J, Robine JM, Herrmann FR, Rodó X. (2015). A climate-driven mortality modelling tool for Europe. European Geosciences Union General Assembly, 15 Apr 2015, Vienna, Austria (oral presentation).
63. **Lowe R** and Rodó X. (2015). Modelling climate-sensitive disease risk: A decision support tool for public health services. Impact of Environmental Changes on Infectious Diseases, 23 – 25 Mar 2015, Sitges, Spain (poster presentation).
64. **Lowe R**, Barcellos C, Coelho CAS, Bailey TC, Coelho GE, Graham R, Jupp TE, Massa Ramalho W, Sá Carvalho M, Stephenson DB, Rodó X. (2014). A real-time dengue early warning driven by seasonal climate forecasts. 14th European Meteorological Society Annual Meeting 2014. 08 Oct 2014, Prague, Czech Republic (oral presentation).
65. **Lowe R**, Ballester J, Robine J-M, Herrmann FR, Jupp TE, Stephenson DB, Creswick J, Rodó X (2014). A decision support service for temperature-related mortality in Europe. European Geosciences Union General Assembly, 30 Apr 2014, Vienna, Austria (poster presentation).
66. **Lowe R**, Cazelles B, Paul R, Rodó X. (2014). Towards a climate-driven dengue decision support system for Thailand. European Geosciences Union General Assembly, 30 Apr 2014, Vienna, Austria (oral presentation).
67. Dommar CJ, Robinson M, **Lowe R**, Conan A, Buchy P, Tarantola A, Rodó X. (2014). Climate-driven mathematical models to understand the spatio-temporal heterogeneity of a chikungunya outbreak in the presence of widespread asymptomatic infection. European Geosciences Union General Assembly, 30 Apr 2014, Vienna, Austria (poster presentation).
68. Steffen S, **Lowe R**, Davis M, Doblas-Reyes F, Rodó X. (2014). Visualisation and communication of probabilistic climate forecasts to renewable-energy policy makers. European Geosciences Union General Assembly, 30 Apr 2014, Vienna, Austria (poster presentation).
69. Rodó X, **Lowe R**, Karczewska-Gibert A, Cazelles B. (2013). Environmental and socio-economic change in Thailand: quantifying spatio-temporal risk factors of dengue to inform decision making. American Geophysical Union Fall Meeting, 9 Dec 2013, San Francisco, USA.
70. **Lowe R**, Ballester J, Robine JM, Herrmann FR, Jupp TE, Stephenson DB, Rodó X. (2013). A novel visualisation tool for climate services: a case study of temperature extremes and human mortality in Europe. American Geophysical Union Fall Meeting, 9 Dec 2013, San Francisco, USA.
71. Gelati E, Dommar C, **Lowe R**, Polcher J, Rodó X. (2013). Rainfall-runoff model for prediction of waterborne viral contamination in a small river catchment. American Geophysical Union Fall Meeting, 9 Dec 2013, San Francisco, USA.
72. Dommar C, **Lowe R**, Robinson M, Rodó X. (2013). Using climate information to understand the spatio-temporal heterogeneity of a chikungunya outbreak in the presence of widespread asymptomatic infection. American Geophysical Union Fall Meeting, 9 Dec 2013, San Francisco, USA.
73. Doblas-Reyes F, Steffen S, **Lowe R**, Davis M, Rodó X. (2013). The visualisation and communication of probabilistic climate forecasts to renewable energy policy makers. American Geophysical Union Fall Meeting, 9 Dec 2013, San Francisco, USA.
74. Dommar CJ, **Lowe R**, Robinson M, Rodó X. (2013). Using stochastic and agent-based models driven by tropical rainfall to understand the spatio-temporal evolution of a chikungunya outbreak. Chikungunya 2013, 28 – 30 Oct 2013, Langkawi Island, Malaysia.
75. **Lowe R**, Chirombo J, Tompkins AM, Rodó X. (2012). A combined statistical-dynamical approach to modelling spatio-temporal variations of malaria risk, 4th AMMA International Conference, 6 Jun 2012, Toulouse, France (oral presentation).
76. Tompkins AM, Ermert V, **Lowe R**. (2012). VECTRI: A new dynamical disease model for malaria transmission. European Geosciences Union General Assembly, 24 Apr 2012, Vienna, Austria.
77. Chirombo J, **Lowe R**, Kazembe L. (2012). Geostatistical modelling of household malaria in Malawi. European Geosciences Union General Assembly, 24 Apr 2012, Vienna, Austria.
78. Stewart AM & **Lowe R**. (2012). El Niño-Southern Oscillation and dengue early warning in Ecuador. European Geosciences Union General Assembly, 24 Apr 2012, Vienna, Austria.

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79. **Lowe R**. Chadza T, Chirombo J, Fonda C, Muyepa A, Nkoloma M, Pietrosemoli E,Radicella SM, Tompkins AM, Zennaro M. (2012). A platform to integrate climate information and rural telemedicine in Malawi. European Geosciences Union General Assembly, 24 Apr 2012, Vienna, Austria.
80. **Lowe R**, Chirombo J, Tompkins AM. (2012). Challenges for modelling spatio-temporal variations of malaria risk in Malawi. European Geosciences Union General Assembly, 24 Apr 2012, Vienna, Austria (oral presentation).
81. Stewart, AM & **Lowe R**. (2011). El Niño-Southern Oscillation and dengue early warning in Ecuador, ASTMH 60th Annual Meeting, 4-11 Dec 2011, Philadelphia, USA.
82. **Lowe R**, Stephenson DB, Bailey TC, Jupp TE, Graham R, Tompkins AM. (2011). Communicating probabilistic climate-sensitive disease risk forecasts, European Geosciences Union General Assembly 2011, 7 Apr 2011, Vienna, Austria.
83. **Lowe R**, Bailey TC, Stephenson DB. (2010). Spatio-temporal modelling of dengue risk sensitivity to climate variability in Brazil, XXVth International Biometric Conference, 5 – 10 Dec 2010, Floripa, Brazil (oral presentation).
84. McGuire WJ & **Lowe R**. (2010). Climate change as a driver of volcano lateral collapse, International Mountain Conference 2010: Global Change and the World's Mountains, Perth College, 26 – 30 Sep 2010, Scotland, UK.

**Invited talks, lectures & working groups**

1. Invited speaker. Retos para la salud. El calor y la salud en el territorio metropolitano de Barcelona. BSC, 21 Nov 2024, BSC, Spain.
2. Invited speaker: How is climate influencing dengue trends, a modelling approach. ASTMH 73rd Annual Meeting, 15 Nov 2024, New Orleans, USA.
3. Invited speaker: Webinar on Harnessing Models for Effective Dengue Prevention and Control, European Center for Disease Control and Prevention (ECDC), 23 Oct 2024 (online).
4. Invited speaker: Leveraging frontier technologies, supercomputing and equitable access to enhanced climate services for health. World Health Summit, 15 Oct 2024 Berlin, Germany.
5. Invited speaker: 1) Integrated climate-health surveillance plenary, 2) Co-learning and capacity sharing to integrate climate in health decision support tools in the Caribbean. Monitoring and Anticipating Climate Sensitive Health Risks: Operationalizing the agenda for Integrated Climate and Health Data and Surveillance. World Meteorological Organization, 10-11 Sep 2024, Geneva, Switzerland.
6. Invited speaker: Sistemas de alerta para enfermedades sensibles al clima. “Cambio Climático, Viajeros e Infecciones”, XIV Jornadas De Enfermedades Emergentes, 11 Jul 2024, Barcelona, Spain.
7. Invited speaker: Decision-support tools for climate-sensitive infectious diseases. CREAF Talks, 23 May, Barcelona, Spain.
8. Invited speaker: El impacto de cambio global en las enfermedades sensibles al clima. XVII Congreso Español y VII Congreso Iberoamericano de Salud Ambiental, 17 May 2024, Malaga, Spain.
9. Invited speaker: IV Frontiers Scientific Dialogues. Climate change, migration and emergent diseases. Academia Europe Barcelona Knowledge Hub. 15 May 2024, Reial Acadèmia de Ciències i Arts de Barcelona, Spain.
10. Invited speaker: Monitoring the effects of climate change on the distribution of infectious diseases. Symposium on climate change and the spectrum of infectious consequences. 34th annual congress of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID Global), 27-30 Apr 2024, Barcelona, Spain.
11. Invited speaker: Digital tools for building resilience against climate-sensitive infectious disease threats, BCN Analytics Data and Climate Modelling Event, 17 Apr 2024, Barcelona, Spain.
12. Invited speaker: Indicators for early-warning of climate-sensitive infectious disease risk. Parallel session: Models, tools, and technologies supporting decision-making on climate change and health. ‘Research Perspectives on the Health Impacts of Climate Change’, European Commission, 19-20 Feb 2024, Brussels, Belgium.
13. Invited speaker: Co-creating decision-support tools for climate-sensitive infectious disease prediction and preparedness. Session 7: Observation applications co-creation session on Capacity Building and Digital Platforms ESA EO4Health User Forum 2024, 15 Jan 2024.
14. Invited speaker: Decision-support tools for climate-sensitive infectious disease prediction and preparedness. Climate Change & Epidemics, Oxford University, UK, 10 Jan 2024.

**Invited talks, lectures & working groups**

15. Invited speaker: Climate and health data modelling. Workshop on climate indicators aimed at analyzing the health situation. Research and Development Institute IRD, 18 Dec 2023, Montpellier, France (online).
16. Invited speaker: How tracking the health impacts of climate change can support epidemic intelligence. Complexity of Pandemics: Confronting climate-sensitive infectious diseases. WHO Pandemic Hub, 6 Dec 2023, Berlin, Germany.
17. Invited seminar: Decision-support tools for climate-sensitive disease prediction and preparedness, Borneo Medical and Health Research Centre, Universiti Malaysia Sabah, 22 Nov, Sabah, Malaysia.
18. Invited speaker: Communicating climate-informed dengue forecasts to policy makers, the media and members of the public. MIDSEA Network Modelling for Policy Symposium, Saw Swee Hock School of Public Health, 13 Nov 2023, Singapore.
19. Invited panellist: 2023 State of Climate Services for Health Report High-Level Launch. WMO, 2 Nov 2023 (online).
20. Discussion panel: Climate change fuels infectious disease threats: from evidence to policy. World Health Summit, 16 Oct 2023, Berlin, Germany.
21. Invited speaker: Data and modelling tools for climate-sensitive infectious disease risk management Women in Data Science Barcelona Biomedicine, PPRB, 11 Oct 2023, Barcelona, Spain.
22. Keynote speaker: Earth system modelling to inform public health decision-making. Women in HPC Chapter, BSC, 9 Oct 2023, Barcelona, Spain.
23. Invited seminar speaker: Integrating Earth Observations in decision-support systems for climate-sensitive infectious diseases. European Space Agency Φ-lab, 22 Sep 2023, Frascati, Italy.
24. Keynote speaker: Decision-support tools to track and predict climate-sensitive infectious diseases at cascading spatial scales. International Conference of Spatial Epidemiology, Geostatistics and GIS applied to animal health, public health and food safety (GEOVET 2023),19-21 Sep 2023, Silvi Marina, Teramo, Italy.
25. Invited participant: How the Lancet Countdown in Europe is supporting the climate and health agenda of the WHO regional office for Europe. Seventh Ministerial Conference on Environment and Health: Accelerating action for healthier people, a thriving planet, a sustainable future. 5 – 7 Jul 2023, Budapest, Hungary.
26. Invited speaker: Climate change and vector-borne diseases: from global observations to local interventions. Vector-Borne Diseases Systems Ecology in the Context of Climate Change: Understanding the Transmission of Arthropod-borne Pathogens Across Biological & Ecological Scales. NIAID Virtual Workshop, 22 – 23 Jun 2023 (online).
27. Invited speaker: Digital decision-support tools for climate-sensitive disease prediction and preparedness. Climate Sensitive Disease: Adapting Early Warning to a Changing Environment in the Pasteur Network. Pasteur Institute, 13 – 15 Jun 2023, Paris, France.
28. Invited speaker: Climate services for health: co-developing a dengue early warning system in Barbados. 2023 Atlantic Hurricane/Wet Season CariCOF, 24 May, Jamaica (online).
29. Invited speaker: Evaluation and communication of climate-sensitive disease risk forecasts. Royal Society scientific meeting: Forecasting natural and social systems. 14 Mar 2023, Royal Society, London, UK.
30. Invited speaker: Harmonizing multi-source data to predict the risk of climate-sensitive disease outbreaks. IOA Network session Integrated Outbreak Analytics and Climate Change, 10 Mar 2023 (online).
31. Invited speaker: Harmonizing multi-source data for epidemic forecasting. Pan American Health Organization/World Health Organization (PAHO/WHO) Meeting of Arboviral Diseases Surveillance, 6 – 8 March 2023, Panama City, Panama.
32. Invited participant: Future Infectious Disease Threats: A Foresight Approach. ECDC Foresight Workshop on Scenarios, European Centre for Disease Prevention and Control, 23 – 24 Feb 2023, Stockholm, Sweden.
33. Invited speaker: Innovative Data Platforms and Tools for Monitoring Environmental and Health Threats. Prince Mahidol Award Conference 2023: Setting a New Health Agenda – at the Nexus of Climate Change, Environment and Biodiversity. Rockefeller Foundation side meeting. 25 Jan 2023, Bangkok, Thailand.
34. Invited speaker: The 2022 Europe report of the Lancet Countdown on health and climate change: towards a climate resilient future. Prince Mahidol Award Conference 2023: Setting a New Health Agenda – at the Nexus of Climate Change, Environment and Biodiversity. The Lancet Countdown on health and climate change side meeting. 25 Jan 2023, Bangkok, Thailand.

**Invited talks, lectures & working groups**

35. Invited speaker: The 2022 Europe report of the Lancet Countdown on health and climate change: towards a climate resilient future. From Evidence to Policy and Action: regional perspectives on responses to climate change impacts on health. COP27 WHO Pavilion side event. 10 Nov 2022, Sharm El-Sheikh, Egypt (online).
36. Invited speaker: Decision-support systems for preparedness and response to climate-sensitive disease outbreaks and emergence. Grand Challenges Annual Meeting Scientific Track: Novel Approaches to Reduce the Impacts of Climate Change on Health. 25-26 Oct 2022, Brussels, Belgium.
37. Invited speaker: Decision-support tools to enhance public health resilience in climate change hotspots. ISNTD Climate & Health conference, 24 Oct 2022 (https://www.youtube.com/watch?v=4MpCHip2E_E).
38. Keynote speaker: Climate services for health: from global observations to local interventions. 12 Congreso de la Asociación Española de Climatología: Retos del Cambio Climático: Impactos, Mitigación y Adaptación. 19-21 Oct 2022, Santiago de Compostela, Spain (https://www.youtube.com/watch?v=BDzYXHxqaNo).
39. Keynote speaker: The 2022 Europe Report of the Lancet Countdown on Health and Climate Change: towards a climate resilient future. Tenth meeting of the Working Group on Health in Climate Change. World Health Organization Regional Office for Europe, 11-12 Oct 2022 (online).
40. Invited speaker: Infectious disease decision-support tools to enhance resilience in climate change hotspots. 21st European Conference on Computational Biology: Planetary Health & Biodiversity. 21 Sep 2022, Sitges, Barcelona, Spain.
41. Invited speaker: Early warning systems to build climate change resilience for health in the Caribbean. Caribbean Vector Borne Diseases Network (CariVecNet) Webinar,14 Sep 2022, Jamaica (virtual).
42. Keynote speaker: Infectious disease decision-support systems for climate-resilient cities. International Conference on Urban Pests. Barcelona, 28 Jun 2022.
43. Invited speaker: Workshop on climate change, human behavior and vector-borne diseases, UCDavis, 19 May 2022 (online).
44. Invited speaker: Tracking and predicting vector-borne disease risk in a warming climate. World Malaria Day 2022: Climate change and vector-borne disease. LSHTM, 25 Apr 2022, London, UK (online).
45. Invited speaker: Impact-based forecasting to build climate change resilience for health in the Caribbean, French Red Cross, 21 Apr 2022 (online).
46. Invited speaker: Global distribution and population at risk. Global Dengue Outbreak Preparedness Webinar. International Society for Infectious Diseases, 15 Feb 2022 (online).
47. Invited speaker: Strengthening global health resilience to climate change. Bioinfo4Women Seminar. BSC, 20 Jan 2022.
48. Symposium Earth observations for infectious disease early warnings: What can we learn from climate and disaster communities? Invited speaker: Combined effects of hydrometeorological hazards and urbanisation on dengue risk in Brazil. ASTMH 67th Annual Meeting, 20 Nov 2021 (online).
49. CaixaResearch Conference: Pandemics: Overcoming Covid19 and preparing for the future. Invited speaker: Climate and emerging infections: past, present and future. 16 Nov 2021 (online).
50. UKRI/BBSRC Climate Change Bites: How climate change is driving the emergence and spread of animals, human and plant diseases transmitted by insects. Invited speaker: Modelling the impacts of climate change on vector-borne disease transmission. 21 Oct 2021.
51. International Workshop on Forecasting for Social Good. Invited speaker: Impact-based forecasting for climate-sensitive diseases. 25 Jun 2021.
52. Symposium COVID-19 - from vaccine strategies to effects in developing countries and green recovery. Invited speaker: Spread of COVID-19 and weather conditions. Umea University, 20 May 2021.
53. Closing the Gap Between Knowledge and Practice: Implementation Science Priorities for Health Adaptation for Climate Change. CUGH Annual Meeting Satellite Session. Invited speaker: Towards a dengue early warning system for Barbados, 9 Mar 2021.
54. 8th Global Dialogue Platform on Anticipatory Humanitarian. Session: Anticipatory Action for epidemics: Modelling across scientific disciplines. Invited speaker: Linking Earth observations and climate forecasts to early warnings of infectious disease risk, 10 Dec 2020.
55. British Paediatric Allergy Immunity & Infection Group winter meeting 2020. Invited speaker: Climate change and vector-borne diseases, 27 Nov 2020.

**Invited talks, lectures & working groups**

56. Space Health Symposium invited speaker: Linking Earth observations to infectious disease decision support systems, 6 Oct 2020.
57. UNGA75 Dengue side event: From local to global cooperation in dengue. Invited speaker: Hydrometeorological extremes and dengue control and preparedness, 24 Sep 2020.
58. Keynote speaker International Virtual Symposium on Climatological, Meteorological and Environmental factors in the COVID-19 pandemic, 4 – 6 Aug 2020.
59. World Meteorological Organization COVID-19 Research Task Team, Jun 2020 – Dec 2021.
60. Second WHO virtual expert meeting: Using climate and weather information for predicting and preparing for cholera and vector-borne diseases, 8 – 9 Jul 2020.
61. International Society for Neglected Tropical Diseases (ISNTD) Connect 2020 invited speaker: Linking climate information to dengue decision support systems, 15 Jun 2020.
62. Workshop on Climate Change: From Emerging Risk to real life danger, Swiss Re, 12 – 13 May 2020
63. Assessing Global Catastrophic Risk Potential of Communicable Chronic Diseases Workshop. 28 Jan 2020, Centre for the Study of Existential Risk. University of Cambridge, Cambridge, UK.
64. Meeting on Vector Borne Disease Studies of the Pilot Program for Climate Resilience (PPCR). 22 – 23 Jan 2020, Caribbean Public Health Agency, Trinidad & Tobago. Presentation: Nonlinear and delayed impacts of rainfall extremes on dengue risk in the Caribbean: a modelling study for Barbados.
65. Epidemic Forecasting Reporting Guidelines (EPIFORGE) Initiative. Delphi Panel Face to Face Meeting, 7 Jan 2020. Johns Hopkins Center for Health Security, Baltimore, USA.
66. Malaria No More expert presentation: Climate changes health: the impact of climate, land-use and control activities on malaria risk. 18 Dec 2019, Malaria No More, London, UK.
67. Barcelona Institute for Global Health Scientific Retreat, 30 Oct 2019, CosmoCaixa, Barcelona, Spain. Presentation: Early-warning systems for climate sensitive diseases.
68. Oxford-Berlin-LSHTM Dialogue: Healthy Planet – Healthy People, 24 Oct 2019, Museum für Naturkunde, Berlin, Germany. Presentation: Earth observations and forecasts to predict emerging infectious diseases.
69. Impact of Climate Seasonality on Arbovirus Workshop. 23 – 25 Sep 2019. Imperial College London, London, UK. Presentation: Climate-informed dengue early warning systems.
70. PAHO/WHO and CDC Meeting on Surveillance of Arbovirus Diseases, 31 Jul – 2 Aug 2019, Washington DC, USA. Presentation: Climate services for arboviral diseases in the Americas. Funded by: PAHO.
71. World Health Organization (WHO) Meeting on using climate and weather information for predicting and preparing for cholera and vector-borne diseases, 25 – 26 Jun 2019, Geneva, Switzerland. Presentation: Modelling tools and capacity building in climate and public health. Funded by: WHO.
72. Meeting of the Minds, 11 Jun 2019, Royal Society, London, UK. Presentation: Climate changes health:
73. can climate forecast predict disease epidemics?
74. IX Jornada de Enfermedades Emergentes, 29 May 2019, Barcelona Spain. Invited presentation: Early warning systems for climate-sensitive diseases (presentation in Spanish).
75. Dengue side event, 72nd World Health Assembly, 24 May 2019, Geneva, Switzerland. Invited presentation: Climate-driven early warning systems for dengue epidemics. Funded by: ISNTD.
76. International Society for Neglected Tropical Diseases (ISNTD) Water 2018, Natural History Museum, London, UK. Invited panellist: Water management, vector-borne diseases & climate change. Presentation: Extreme hydrometeorological events and early warning systems for vector-borne diseases. Funded by: ISNTD.
77. International Meeting on Emerging Diseases and Surveillance (IMED), 9 – 12 Nov 2018, Vienna, Austria. Invited speaker: Emerging infectious diseases in a new climate. Funded by: International Society for Infectious Diseases.
78. American Society of Tropical Medicine and Hygiene, ASTMH 67th Annual Meeting, 30 Oct 2018, New Orleans, USA. Invited speaker: Towards an early warning system for arboviral disease risk in Latin America and the Caribbean.
79. Climactivo: III International Climate Change Forum, 1 – 2 Oct 2018, Tucaman, Argentina. Invited speaker: Climate-driven early warning systems for dengue in Latin America and the Caribbean. Funded by: Argentinian Ministry of Health, Tucaman Government.

**Invited talks, lectures & working groups**

80. Synergistic interactions of environmental degradation, socio-economic development and infectious disease dynamics in the Amazon region working group, 2018 – 2020, PI: A Baeza & M Pascual. Funded by: Socio-Environmental Synthesis Center (SESYNC).
81. A Planetary Health Approach to Emerging Infectious Diseases Symposium, 18th International Congress on Infectious Diseases, 3 March 2018, Buenos Aires, Argentina. Invited speaker: Modelling the impact of environmental change on infectious diseases. Funded by: International Society for Infectious Diseases / Lancet.
82. Future Earth Early Career Researchers Workshop, 23 – 24th Jan 2018, British Academy, UK. Invited participant.
83. THET Annual Conference 'From National to Universal: The UK Contribution to Global Health', 23 – 25 Oct 2017, Resource for London, UK. Invited panellist: round table session on health and climate change. Presentation: Climate services and early warning systems for infectious disease outbreaks.
84. GEOMED 2017: International Conference on Spatial Statistics, Spatial Epidemiology and Geographical Aspects of Public Health, 7 – 9 Sep 2017, Porto, Portugal. Modelling climate-sensitive diseases part II session. Invited speaker: Probabilistic dengue predictions based on ensemble seasonal climate forecasts.
85. CDC/NIH Climate Sensitive Diseases and National Security: Predictions in Practice. Web Conference. 17 Aug 2017. Invited attendee.
86. CDC/NIH Climate Sensitive Diseases and National Security: State of the Science. Web Conference. 10 Aug 2017. Invited panellist.
87. Fourth meeting of the working group on health in climate change (HIC): strengthening risk communication on health and climate, World Health Organisation (WHO), 1 – 2 June 2015, Bonn, Germany. Temporary Advisor. Presentation: Examples of current applications of climate services for the health sector. Funded by: WHO.
88. Public Health England, Chilton, UK, 19 May 2015. Invited seminar: Climate services for health. Funded by: Public Health England.
89. Mathematical modelling session. Australian and New Zealand College of Anaesthetists (ANZCA) Annual Scientific Meeting, 2 – 5 May 2015, Adelaide. Invited speaker: Climate sensitive diseases: using climate forecasts to extend predictive lead time. Funded by: ANZCA.
90. Centre for Demographic Studies (CED), Universitat Autònoma de Barcelona, 9 Apr 2015, Barcelona, Spain. Invited seminar: Integrating climatic and demographic information into health impact models. Funded by: CED.
91. Climate Services side-event at the International Symposium CLIMATE-ES 2015: Progress on climate change detection and projections over Spain since the findings of the IPCC AR5 Report, 11-13 Mar 2015, Tortosa, Spain. Invited panellist/speaker: Climate services for health. Funded by: Universitat Rovira I Virgili.
92. White House Office of Science and Technology Policy (OSTP) workshop: Integrating Prediction and Forecasting Models for Decision-making: Dengue Epidemic Prediction, 15 Sep 2014, White House Conference Center, Washington DC, USA.
93. DengueTools modelling workshop, 03 – 04 Sep 2014, Royal Society of Medicine, London, UK. Lecture: Climate-driven mathematical models to understand the spatio-temporal heterogeneity of arboviral diseases.
94. World Meteorological Organization (WMO) expert meeting: Roadmap for Climate Services and Health, 30 Aug 2014, WMO Headquarters Geneva, Switzerland.
95. World Health Organization (WHO) Conference on Health and Climate, 27-29 Aug 2014, WHO Headquarters Geneva, Switzerland. Invited attendee.
96. European Climate Service Partnership kick-off meeting, 07 May 2014, Climate Service Center (CSC), Hamburg, Germany. Funded by: CSC.
97. The role of climate in disease decision support systems, International Conference Climate Services 3, 4–6 Dec 2013, Montego Bay, Jamaica. Invited speaker: Quantifying spatio-temporal risk factors of dengue. Funded by: Climate Services Partnership.
98. II Conference on Emerging Diseases: viral diseases transmitted by mosquitoes, 23-24 May 2013, Barcelona, Spain. Lecture: Impact of climate variability and change on mosquito-borne arboviruses (in Spanish). Funded by: Research Centre for Animal Health (CreSA).
99. Brazilian Climate and Health Observatory 5th Workshop: Malaria epidemiology and climatic change in the different biomes of Brazil, 20 – 21 Sep 2012, Rio de Janeiro, Brazil. Lecture: Challenges for modelling climate-sensitive diseases. Funded by: Brazilian Climate and Health Observatory.

**Invited talks, lectures & working groups**

100. Public Health Institute, University of Porto, 26 Jan 2011, Porto, Portugal. Seminar: Spatio-temporal modelling of climate-sensitive disease risk in Brazil. Funded by: University of Porto.

**Public engagement & outreach**

1. Interview with La Vanguardia “Las mujeres corren mayor riesgo de suffrir los efectos del cambio climático”, 11 Nov 2024.
2. Interview with TV3 “Cada cop més morts per fenòmens meteorològics extrems atiats per la crisi climàtica”, 30 Oct 2024.
3. Interview with Professor Rachel Lowe, Health Emergency Preparedness and Response (HERA) Newsroom, European Commission, 15 Oct 2024.
4. Exert comment in “Mosquito-borne diseases are surging in Europe — how worried are scientists?” Nature News, 16 Sep 2024.
5. Podcast Interview. *The Lancet Public Health* in conversation with Rachel Lowe on health and climate change in Europe, 11 Jul 2024.
6. Interview with Nature “How climate change is hitting Europe: three graphics reveal health impacts”, 18 Jun 2024.
7. Interview with Euronews “Heat-related deaths are on the rise in Europe as the effects of climate crisis take hold”, 15 May 2024.
8. Interview with El País “Más dolencias y muertes por calor, incendios, sequías y parásitos: la crisis climática golpea más la salud del sur de Europa”, 13 May 2024.
9. RTVE Interview for Telediario 2 new story “El cambio climático golpea según el sexo y la clase: las mujeres sufren el doble de muertes por calor en Europa”, 13 May 2024.
10. Expert comment in “Mosquito-borne diseases spreading in Europe due to climate crisis, says expert”, The Guardian, 25 Apr 2024.
11. Interview with BBC Earth “The Hidden Danger Being Fueled by Floods”, 6 Feb 2024.
12. TV Interview for BBC World Service on the significance of COP’s first designated health day and my research on prediction of mosquito-borne diseases, 3 Nov 2023.
13. Interview with BBC News “How scientists are fighting climate-fuelled disease”, 3 Dec 2023.
14. Interview with Nature “Climate change is also a health crisis – they graphics explain why”, 1 Dec 2023.
15. Expert comment in “El cambio climático ralentiza los avances en salud y amenaza con una trágica marcha atrás”, La Vanguardia, 2 Nov 2023.
16. Expert comment in “La Organización Meteorológica Mundial advierte: "Hay que adaptar los sistemas de salud a la crisis climática"”, El Periodico de Aragón, 2 Nov 2023.
17. Feature Interview with La Vanguardia “Los superordenadores muestran cómo el cambio climático afecta a nuestra salud”, 30 Jul 2023.
18. Interview with Yo Dona & El Mundo “A world of twins (digital ones)”, 24 Jun 2023.
19. Interview with BBC Radio Wales Drive on threat of mosquito-borne diseases in Europe, 22 Jun 2024.
20. BBC event to incorporate climate and health in BBC drama, May 2023.
21. BSC video for International Climate Day 2023, Mar 2023.
22. Public debate on “Cap a un pensament planetari en salut pública'”, Bienal Ciencia i Ciutat, CCCB, 25 Feb 2023.
23. Interview for International Day of Women and Girls in Science “Dia de la mujer y la niña en la ciencia - 10 Científicas Avances para el mañana” El Período, 11 Feb 2023.
24. Expert comment in “New digital tools use climate data to better predict and prepare for infectious diseases outbreaks”, Wellcome Trust, 3 Feb 2023.
25. Feature Interview with Cinco Dias “Rachel Lowe: Hay que poner la salud en el centro de la política climática”, 27 Jan 2023.
26. Expert comment in “el clima extremo perjudica seriamente nuestra salud”, El Mundo, 12 Jan 2023.
27. BSC Talks: Towards a climate-resilient healthy future. 20 Dec 2022.

**Public engagement & outreach**

28. Findings of Fletcher et al. *Lancet Planetary Health* 2022 reported in 'Un estudio cuantifica cómo la minería y la deforestación revivieron la malaria en Venezuela' El País, 22 Nov 2022.
29. TV and radio interviews with TV3, Radio Catalonia, Canal Sur and various media outlets for first indicator report of the Lancet Countdown in Europe, Oct 2022.
30. BSC experts featured in a special report by El Pais Semanal "En la sala de máquinas de la ciencia", 26 Jun 2022.
31. Speaker in Barcelona Science Festival activity 'How can we adapted to climate change?', 29 May 2022.
32. Expert comment in 'How technology can help fight climate-sensitive infectious diseases', Devex, 3 Mar 2022.
33. Expert guest on BBC World News 'Climate Crisis and Health' feature, 23 Feb 2022.
34. Short documentary 'Can supercomputers help stop mosquito diseases?', Royal Society, Nov 2021.
35. Expert comment in 'COP26: How virus can spread as climate changes', BBC news, Oct 2021.
36. Expert comment in 'Climate change threatens to reverse progress in fight against malaria'. Financial Times, Sep 2021.
37. WHO Podcast EYE on Yellow Fever 'Public Health in the Climate Crisis', Aug 2021.
38. Radio interviews for BBC World Service Newhour and Newsday on climate change and mosquito-borne disease projection research, Jul 2021.
39. Expert comment in 'Climate crisis 'may put 8bn at risk of malaria and dengue', The Guardian, Jul 2021.
40. Expert comment in 'Extra 4.7 billion could face malaria and dengue fever by 2100 without climate action', The Independent, Jul 2021.
41. LSHTM press release 'Malaria and dengue predicted to affect billions more people if global warming continues uncurbed', Jul 2021.
42. Anticipation Hub Blog: Linking early warnings to early action: compound hydrometeorological hazards and dengue outbreaks. Jun 2021.
43. LSHTM press release 'Brazil at high risk of dengue outbreaks after droughts because of temporary water storage', Apr 2021.
44. Expert guest on BBC Weather World episode: Coronavirus and our climate. Apr 2021.
45. Expert comment in 'Warmer weather by itself won't curtail the spread of covid-19, expert panel finds', Washington Post. Mar 2021.
46. Expert guest on Met Éireann podcast on Climate & Disease. Mar 2021.
47. Panelist for The Global Launch of the 2020 Lancet Countdown Report- Tracking Progress on Health and Climate Change, Dec 2020.
48. LSHTM Viral podcast: What do we know about climate change & COVID-19? Nov 2020.
49. Expert comment in 'Aún hay esperanza para erradicar el dengue', El Pais, Nov 2020.
50. Expert guest on BBC Weather World episode: Coronavirus and our climate. Aug 2020.
51. Expert comment in 'What will happen to COVID-19 cases in winter and how can we prepare?' New Scientist, Sep 2020.
52. Expert comment in 'Amazon gold mining drives malaria surges among Indigenous peoples', National Geographic, Aug 2020.
53. Expert comment in 'Coronavirus: How bad will winter really be?' BBC News, Jul 2020.
54. Mitjà O et al. (2020). Experts' request to the Spanish Government: move Spain towards complete lockdown. *The Lancet* (https://doi.org/10.1016/S0140-6736(20)30753-4).
55. Ortiz-Prado E, Henríquez-Trujillo AR, Lister A, Cevallos-Sierra G, Lowe R. (2020). COVID-19 in Latin America. BMJ Opinion, Aug 2020.
56. LSHTM Viral podcast: Anthropogenic pandemic: COVID-19 and climate change. Apr 2020.
57. Expert comment in 'How climate change threatens the fight against malaria'. Devex, Mar 2020.
58. Interview 'Latin America battles dengue fever'. CGTN America, Feb 2020.
59. Expert comment in 'Climate Change and Political Chaos: A Deadly Mix in Honduras Dengue Epidemic'. New York Times, Dec 2019.

**Public engagement & outreach**

60. Expert commentary in featured Q&A: Why Are Cases of Dengue Soaring in Honduras? Latin American Advisor, Inter-American Dialogue, Dec 2019.
61. Expert comment in 'Global heating driving spread of mosquito-borne dengue fever', The Guardian, Dec 2019.
62. LSHTM Expert Opinion by Yang Liu and Rachel Lowe: The dengue forecasting challenge: a step closer to better disease outbreak control and prevention? Nov 2019.
63. Royal Society Inside Science Blog: Public engagement in a new climate – let's dance. Nov 2019.
64. LSHTM Centre on Climate Change & Planetary Health Blog: A Triple Epidemic in Rio de Janeiro: Pinpointing resources for management. Oct 2019.
65. Guardian Letters. Protecting the planet for future generations. Dobson et al. Oct 2019.
66. Expert comment in 'Dengue cases are surging around the world. Some blame a changing climate.' Washington Post. Oct 2019.
67. Expert comment in 'How climate crisis is accelerating the global spread of deadly dengue fever', CNN Health, Sep 2019.
68. Expert comment in 'Dengue fever is ravaging South East Asia because the 'extremely warm temperatures' this year provide the 'ideal breeding grounds for mosquitoes', expert says'. Sep 2019.
69. Expert comment in 'As the climate shifts, Central America confronts a deadly dengue outbreak', Reuters, Aug 2019.
70. Expert comment in 'A 'perfect storm': the steady rise of dengue fever worldwide'. The Telegraph, Aug 2019.
71. Interview 'World in Progress: Climate change to help spread mosquito-borne viruses'. Deutsche Welle, May 2019.
72. Expert comment in 'Living with the consequences of Zika', Fraser & Alves, The Lancet Child & Adolescent Health, Apr 2019.
73. UK Space Agency project highlighted in 'British-funded dengue forecasting system in Vietnam aims to curb mosquito-borne virus'. The Telegraph, Mar 2019.
74. UK Space Agency project highlighted in 'New innovative tools to advance the dengue early warning system in Viet Nam'. UNDP press release, Mar 2019.
75. Public lecture and round table participant on climate change and vector-borne diseases as part of the City and Science Biennal, organised by the Barcelona town hall. Mar 2019.
76. British Council Blog: How Erasmus+ helped to kick-start my career. Feb 2019.
77. LSHTM Expert Opinion Blog / External newsletter: Could more frequent droughts in the Caribbean lead to a greater risk of dengue and Zika outbreaks? Jan 2019.
78. Expert comment in 'Air pollution, obesity and vaccine hesitancy climb WHO list of global health threats', The Telegraph, Jan 2019.
79. Expert comment in 'West Nile virus spreads in Europe', The Lancet Infectious Diseases, Nov 2018.
80. Expert comment in 'Urban sprawl behind growth in dengue fever', The Telegraph, Nov 2018.
81. ISNTD Infectious Thoughts Interview on global environmental change and dengue, Nov 2018.
82. 'A day in the life of a climate and health scientist', Semana de la Ciencia, Centre d'Estudis Dolmen, Spain. Women in Science cycle, Barcelona Science Week. Nov 2018.
83. Expert comment in 'Heavy rainfall and soaring temperatures behind spike in mosquito-borne fever in southern Europe', The Telegraph, Sep 2018.
84. TRT Roundtable guest 'Tropical Diseases: A growing threat caused by climate change?' Sep 2018.
85. Horizon lecture, King's College Taunton, UK. Delivered lecture on 'Climate change, planetary health and infectious diseases' to Mathematics, Science and Geography GCSE and A level students. Sep 2018.
86. Expert comment in 'Tropical disease outbreaks are growing threat in Europe as temperatures rise', The Guardian, Aug 2019.
87. Research (Lowe et al., *PLOS Med* 2018) featured in 'Scientists develop early warning system to predict dengue outbreak', The Telegraph, Jul 2018.
88. Research (Lowe et al., *PLOS Med* 2018) reported in 'The crystal ball: predicting the next outbreak', BMC Bug Bitten Blog, Jul 2018.

**Public engagement & outreach**

89. Health Is Global Blog: Science Moves – the Importance of International Mobility for Research.
90. Policy engagement: Parliament event on the importance of international mobility, Houses of Parliament 5 Jun, London, UK.
91. Public engagement: presenter at Royal Society 'The Next Big Things' platform, Hay Festival, 24 May 2018, Hay-on-Wye, UK.
92. Public engagement activity, LSHTM stand, New Scientist Live 2017, 28 Sep – 1 Oct, ExCel London, UK.
93. LSHTM Expert Opinion Blog: Can climate forecasts also predict disease outbreaks? May 2017.
94. TV interviews for RTVE weather and health report, Sep 2015 & NTN24 News, Latin America, Jun 2014.
95. SBS radio interview (in Spanish) about climate change and health in Australia, Apr 2015.
96. Participation in the White House 'Predict the Next Pandemic Initiative' reported in EFE Verde, Oct 2014.
97. Predicting dengue fever in Brazil: an interview with Dr. Rachel Lowe, Thought Leaders Series, Jun 2014.
98. Radio interviews for BBC World Service Health Check, BBC Radio Five Live, The Naked Scientists (University of Cambridge) and CBS Radio News, San Francisco (regarding dengue early warning system for Brazil), May 2014.
99. Research (Lowe et al. *Lancet Infect. Dis*. 2014) reported by BBC news, BBC World Service, New York Times, New Scientist, El Mundo, Es Materia, SciDevNet, Brazilian Ministry of Health Blog, May 2014.
100. Panellist in European Geosciences Union press conference: Geosciences and Health, 24 Apr 2012, Vienna, Austria.

**Professional activities & external visibility**

1. UNICEF Climate and Environmental Data Advisory Group (Jan 2025 – present).
2. Expert Consultant European Commission Joint Research Council, (Dec 2024 – present).
3. Grant Reviewer for Harvard University's Salata Institute for Climate and Sustainability (Nov – Dec 2024).
4. Grand Challenges Canada Climate and Health Expert Panel (Oct 2024 - present).
5. Symposium co-chair: "Earth Observation for Health: Integrating Novel Data Streams in Decision-Support Systems for Climate Sensitive Infectious Diseases" American Society of Tropical Medicine and Hygiene, ASTMH 73rd Annual Meeting, New Orleans, USA,15 Nov 2024.
6. Chair "Preparing for the 2025 dengue season: insights from predictive models", The Global Health Network – Latin America and the Caribbean Event, 31 Oct 2024 (online).
7. Wellcome/OKRE Climate and Health Researcher Network (April 2024 – present).
8. Reviewer Wellcome Trust Discretionary Awards, Mar 2024.
9. Expert Working Group Connecting Climate Minds (March 2024 – present).
10. Lancet Commission for Strengthening the Use of Epidemiological Modelling of Emerging and Pandemic Infectious Diseases (Jun 2023 - present).
11. World Meteorological Organization Steering Group for Sub-seasonal Applications for Agriculture and Environment (SAGE) project of the World Weather Research Programme (WWRP) (Sep 2023 - present).
12. Wellcome Trust Vector-borne disease experts meeting, 28 Sep 2023, London, UK.
13. Editorial Board for ClimaHealth, WHO - WMO Joint Office for Climate and Health (May 2023 – present).
14. Reviewer European Research Council, May 2023.
15. Organizer Royal Society Scientific Meeting: Forecasting natural and social systems, Mar 2023.
16. GeoHealth Position Statement Writing Panel Member ' GeoHealth: A Transdisciplinary Science for Global Environmental and Human Health', American Geophysical Union (Nov 2022 – Oct 2023).
17. Wellcome Committee - Climate Mitigation Policy Solutions (Jan – Feb 2023).
18. Advisory Board member Copernicus Thematic Hub on Health (Nov 2022 – present).
19. Evaluation panel member Barcelona Institute of Science and Technology 'Mothers of Science' programme (Mar – Jun 2022).

**Professional activities & external visibility**

20. Board member of the Lancet Countdown (Apr 2022 – Sep 2023).
21. Char of session: Showcase of new ideas and directions in climate change research. Climate change: science, responses and research needs. A conference to reflect on the implications for the UK of the IPCC Sixth Assessment Report and urgent policy and research needs. Royal Society, 11–12 April 2022, London, UK.
22. Symposium co-chair: Earth observations for infectious disease early warnings: What can we learn from climate and disaster communities? ASTMH 70th Annual Meeting, 20 Nov 2021 (online).
23. Director Lancet Countdown in Europe (Sep 2021 – Aug 2024).
24. Reviewer UKRI Future Leader Fellowships, Jul 2021.
25. Reviewer Wellcome Trust Data for Science and Health Award, Jun 2021.
26. Reviewer MRC New Investigator Research Grants, Jun 2021.
27. Expert reviewer: Quality criteria for the evaluation of climate-informed early warning systems for infectious diseases, World Health Organization 2021.
28. Expert advisor for European Space Agency – UNICEF dengue forecasting project, Mar 2021 – present.
29. Expert member of the Global Heat Health Information Network (https://ghhin.org), April 2020 – present.
30. Guest Editor special collection on climate change and communicable diseases, BMJ 2020.
31. Reviewer for Dasgupta Review on the Economics of Biodiversity, HM Treasury, Jul 2020.
32. Grant proposal reviewer Medical Research Council, Jul 2020.
33. World Meteorological Organization COVID-19 Research Task Team (Jun 2020 – May 2022).
34. World Meteorological Community Expert, 2020 – present.
35. Academic Committee for InterUniversitari Master's degree in Planetary Health, Open University of Catalonia (2020 – present).
36. Member of Models of Infectious Disease Agent Study (MIDAS) Network (2019 – present).
37. Member of Dengue Advisory Group, International Society for Neglected Tropical Diseases (2019 – present).
38. World Health Organization expert working group: Using climate and weather information for predicting and preparing for cholera and vector-borne diseases (Jun 2019 - present).
39. Symposium organiser: Climate services for health: improving public health decision-making in a new climate. American Society of Tropical Medicine and Hygiene, ASTMH 67th Annual Meeting, 30 Oct 2018, New Orleans, USA.
40. Evaluator for postdoctoral program at the University of Costa Rica, Aug 2018.
41. Grant proposal reviewer for Wellcome Trust, Aug 2018.
42. Grant proposal reviewer for Newton UNESCO Prize, Jul 2018.
43. Member of the Royal Society Rosalind Franklin Award Committee (Jan 2018 – Dec 2020).
44. Abstract reviewer for the 2018 Planetary Health Annual Meeting / Lancet Planetary Health Book of Best Abstracts.
45. Technical Advisor: 2017 Lancet Countdown on health and climate change.
46. External Assessor: PhD in dynamic modelling of zoonotic disease for environmental change. Imperial College London. Student: Lauren Enright. Supervisors: Prof. Christl Donnelly & Prof. Kate Jones (Nov 2017 – Nov 2020).
47. Scientific Advisor: Caribbean Institute for Meteorology and Hydrology (CIMH) Consultancy for the development of a health-climate spatio-temporal modelling framework for the Caribbean (Feb – Jul 2017).
48. Expert consultant: G7 HEALTH 2017 "The Impact of Environmental Factors on Health" - Delphi questionnaire consultation, Apr – Sep 2017.
49. Associate Editor: Reports in Public Health (Cadernos de Saúde Pública), published by Oswaldo Cruz Foundation, 2017 – 2019.
50. Organiser of session: Modelling climate sensitive disease risk part I, GEOMED, 7 – 9 Sep 2017, Porto, Portugal.
51. Chair of session: Entomology and environmental drivers of arboviral infections. BDEBATE Zika virus and other mosquito-borne viruses. Science for preparedness and response in the Mediterranean region. 23 – 24 May 2017, CosmoCaixa Museum, Barcelona, Spain.

**Professional activities & external visibility**

52. Visiting Scholar Barcelona Institute for Global Health (ISGlobal), 2017 – 2021.
53. Member of the European Science Foundation College of Expert Reviewers, 2016 – 2019.
54. Grant proposal reviewer for Medical Research Council (MRC), UK, Sep 2015.
55. Temporary advisor to the World Health Organisation Regional Office for Europe, Jun 2015.
56. Associate Editor of the African Review of Physics, 2014 – 2016.
57. External Organiser for International Centre for Theoretical Physics training activities: Modelling tools and capacity building in climate and public health. Apr 2013, Trieste, Italy; Jun 2015, Petropolis, Brazil.
58. Convener of session: Translating Science into Action: Innovative Services for the Geo- and Environmental- Sciences in the Era of Big Data. American Geophysical Union Fall Meeting, 9–13 Dec 2013, San Francisco, USA.
59. Organiser of session: Disease decision support systems, International Conference Climate Services 3, 4–6 Dec 2013, Montego Bay, Jamaica. Funded by: Climate Service Partnership.
60. Panellist at Arboviruses and Climate Change session, CosmoCaixa, 24 May 2013, Barcelona, Spain (in Spanish).
61. Organiser of Environment and Health in Africa: Climate and vector-borne diseases Symposium, East African Community Annual Health & Scientific Conference, 27 – 29 Mar 2013, Kigali, Rwanda.
62. Coordinating group of the Climate Services Partnership, 2012 – 2015.
63. Member of review panel and advisor for Inter-American Institute for Global Change Research (IAI) Training Institute Seed Grant (TISG) Program 2011-2012.
64. Lead convener: Climate and infectious disease interactions. European Geosciences Union General Assembly, 24 Apr 2012, Vienna, Austria.
65. Nominated Postdoctoral Committee Representative, International Centre for Theoretical Physics 2011 – 2012. Attended faculty meetings on behalf of the postdoc committee.
66. Reviewer: Science, Lancet Infectious Diseases, Lancet Global Health, Lancet Planetary Health, PNAS, Nature Climate Change, Nature Communications, Nature Scientific Reports, Eurosurveillance, Environmental Health Perspectives, Emerging Infectious Diseases, Journal of the Royal Society Interface, PLOS Medicine, PLOS Neglected Tropical Diseases, PLOS ONE, Epidemics, GeoHealth, Global Change Biology, Environmental Research Letters, Environmental Research, Environmental Modelling and Software, Transactions of the Royal Society of Tropical Medicine & Hygiene, International Journal of Health Geographics, Tropical Medicine & International Health, Malaria Journal, International Journal of Environmental Research and Public Health, Emerging Topics in Life Sciences, Spatial and Spatio-Temporal Epidemiology, Global Environmental Change, Cadernos de Saúde Pública, Bulletin of Mathematical Biology, Environmental Health, Science of the Total Environment, Environmental Health Insights, African Journal of Environmental Science and Technology, African Review of Physics, Wiley-Blackwell, Springer.

**Languages:** English (native), Spanish (advanced), Portuguese (intermediate), Italian (beginner), Catalan (beginner).

**References available upon request**

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