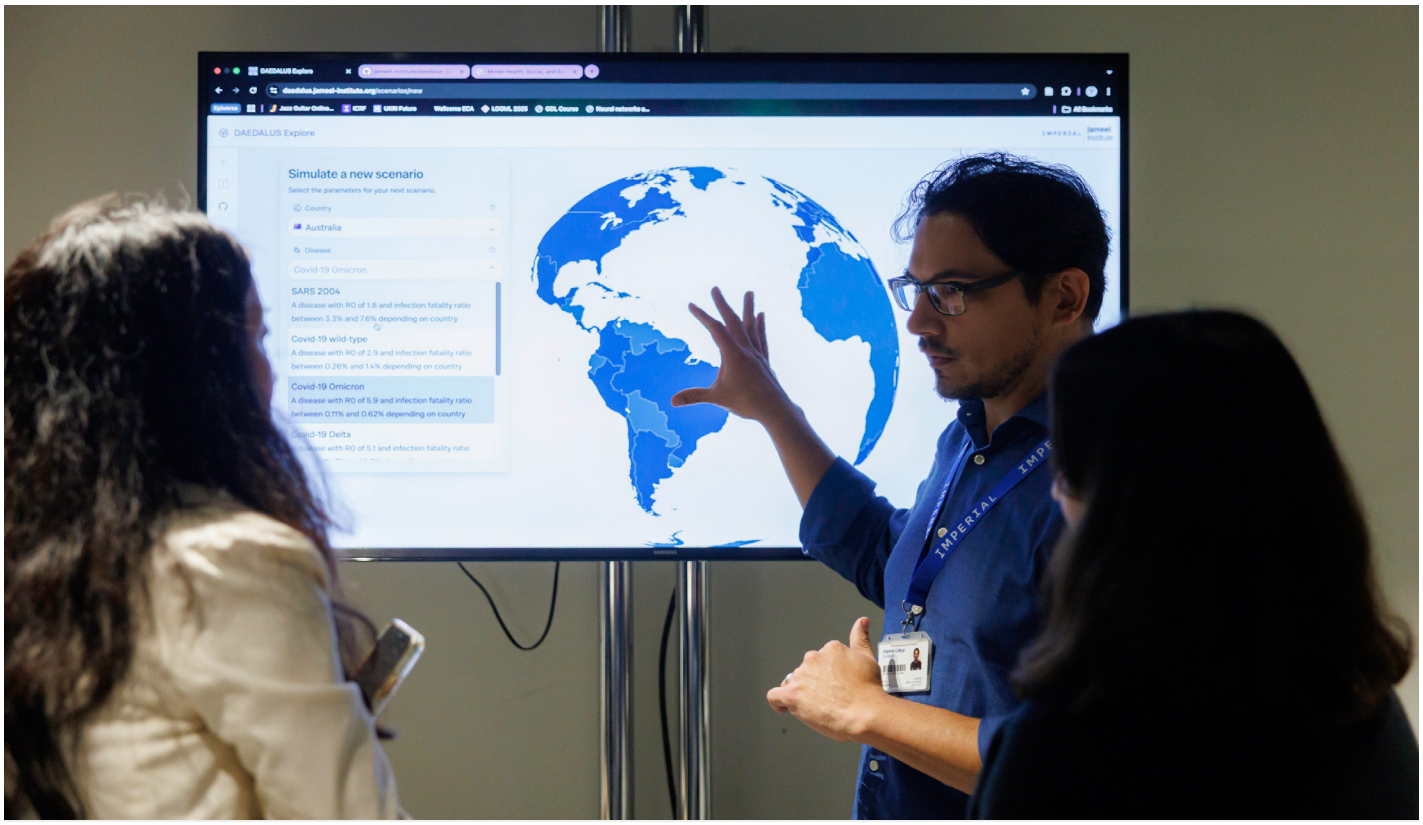
IMPERIAL

Jameel Institute

Combating disease threats worldwide



Jameel Institute

Annual Report

Looking back at a year of outcomes and progress.

December 2025

Executive summary and foreword

2025 has been a year that reminded us why evidence matters, and why collaboration matters even more. Across the globe, communities have continued to face overlapping pressures: widening health inequalities, protracted conflicts, climate-driven shocks and fragile health systems stretched well beyond capacity. These challenges are not abstract; they shape lives every day, often for those with the least protection. Yet, amidst this difficult landscape, we have also seen extraordinary commitment – from governments, humanitarian organisations, changemakers and researchers – to use better data, stronger analytics and innovative tools to drive change.

Much of our work this year has centred on helping decision-makers navigate complexity with clarity. A significant moment was the UK preview of DAEDALUS Explore, our interactive epidemiological–economic modelling platform that has been years in the making. Seeing policymakers, analysts, academics and leaders engage with the tool – testing scenarios, weighing trade-offs and asking new questions – was a powerful reminder of what evidence can achieve when it is made accessible, intuitive and actionable.

Our role as a bridge between research and real-world action was also on display during the visit of Dr Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization. His time with our colleagues, including researchers leading the Jameel Institute–RISE initiative, offered a chance to reflect on how modelling, surveillance and rapid analytics are shaping humanitarian response efforts in places like Gaza and other crisis-affected regions. These conversations underscored the practical value of rigorous science in moments of uncertainty and upheaval.

Pictured here are some of our Jameel Institute Advisory Board in front of our new artwork, as gifted by Community Jameel, from the 'Peoples of the World' series. L-R: Professor Timothy Hallett | Professor of Global Health and Jameel Institute Research Lead; Gunther Kraut | Global Head of Epidemic Risk Solutions, Munich Re; Uzma Sulaiman | Associate Director, Community Jameel; Rachel Bonnifield | Director, Global Health Policy Program and Senior Fellow, Centre for Global Development; Professor Katharina Hauck | Deputy Director, Jameel Institute; Professor Neil Ferguson | Director, Jameel Institute and School of Public Health

Throughout the year, our teams have continued to support partners confronting emerging infectious threats – from analysing the spread of H5N1 in cattle to refining strategies for Lassa fever, MERS-CoV and other priority pathogens. Our humanitarian modelling work has grown rapidly, informing vaccination planning, mortality estimation and early-warning systems through collaborations with WHO, Médecins Sans Frontières and local ministries of health. Our broader policy engagement, from European health-security discussions to global health-economics forums, ensured that our insights reached those shaping decisions at national and international levels.

We were proud to celebrate our Deputy Director, Professor Katharina Hauck, who received the 2025 Imperial College London's President's Medal for Excellence in Culture and Community in recognition of her exceptional leadership and commitment to fostering an inclusive and collaborative research environment.

These achievements sit within a larger mission that continues to guide us: to tackle disease threats at scale, strengthen the systems that protect population health, and do so with a lens

firmly focused on the world's most vulnerable. Looking ahead, we will continue to evolve our approaches – drawing on advances in AI and data science, expanding our modelling capabilities, and deepening partnerships that make solutions sustainable and scalable.

This year also reminded us of the leadership and values that underpin our work. We were deeply saddened by the passing of Professor Alice Gast, whose support was instrumental in founding the Jameel Institute. Her belief that science should serve society continues to guide our mission and inspire our teams.

As you read this report, I hope you see both the breadth of our work and the thread that ties it all together: a belief that better evidence, shared openly and used wisely, can save lives. I am immensely proud of the dedication of our teams and grateful to the many partners, funders and collaborators who enable this work. Together, we move into the coming year with determination, humility and the conviction that progress is possible, even in difficult times.

With thanks,

Professor Neil Ferguson

Director, Jameel Institute and School of Public Health

WHO Director-General, Dr Tedros Adhanom Ghebreyesus meeting with Dr Oliver (OJ) Watson and senior Imperial leadership to discuss the Jameel Institute-RISE initiative, and the boader role of WHO Collaborating Centres across the university in advancing global health. Pictured L-R: Dr Oliver (OJ) Watson, Professor Majid Ezzati, Professor Azra Ghani, Dr Tedros and Professor Hugh Brady.

Our Impact

The Jameel Institute has a proven track record of shaping global health policy. Our COVID-19 modelling informed decisions in 41 countries and 26 languages during the pandemic. Most recently, between January and June 2025, our work supported substantial projected reductions in mortality and morbidity across LMICs. We estimate that, if fully implemented, programmes evaluated by our researchers could have saved 32.9–55.8 million lives globally.

Examples of measurable impact:

- Thanzi La Onse programme: Saved an estimated 30 million life-years in Malawi over four years
- Tuberculosis interventions: Projected to avert 2.5 million deaths through strategies to combat undernutrition in Southeast Asia over 15 years
- UK Infected Blood Inquiry: Our economic analysis informed compensation decisions for affected families

Projected global impact if scaled:

- The Global Fund investment case: 140.6 billion investment (2027-29) against HIV, TB and Malaria could save 23 million lives
- Dengue vaccination: Reduce hospitalisations by 10–22%, avert 3,000–6,600 deaths over 10 years
- Maternal and newborn health: Prevent 2.4 million maternal deaths, 13.7 million stillbirths, and 10.5 million neonatal deaths by 2030
- Acute Lower Respiratory Infections (ALRI) interventions: Save 300,000–430,000 young lives annually

Collaboration and Capacity Building 2025

Collaboration is at the heart of our approach:

Collaborations with government agencies

Collaborations with Universities

- World Health Organization (WHO), including:
  - WHO Euro
  - WHO Hub for Pandemic and Epidemic Intelligence
  - WHO Department of Health Financing and Economics
- United National Office for the Coordination of Humanitarian Affairs (UNOCHA)

- West African Health Organisation (WAHO)
- G20 Health and Finance Taskforce
- East, Central & Southern Africa Health Community
- East African Community

Collaborations with multi-national agencies

- GAVI, The Vaccine Alliance
- The Coalition for Epidemic Preparedness Innovations (CEPI)
- Médecins Sans Frontières

- PAX Sapiens
- Institute for Government
- Overseas Development Institute
- Global Institute for Disease Elimination

Collaborations with non-profit organisations

Strategic Partnerships and Support

Our research and impact are powered by a diverse network of strategic partnerships and funding support, which we continually strengthen and expand to advance our core priorities:

- Vaccine Impact Modelling Consortium | Wellcome Trust
- Thanzi La Onse | Wellcome Trust
- NCD Risk Factor Collaboration (NCD-RisC) | Wellcome Trust
- Climate and Health Research Programme | Wellcome Trust
- Ervebo Optimal Stockpile Project | GAVI, US CDC, WHO
- Health Protection Research Unit in Health Analytics and Modelling | NIHR
- Pathogen Epidemiology Review Group (PERG) | Imperial Policy Fund
- Economic Vulnerability Advisory Work | G20 Joint Finance & Health Task Force
- Assessment of CEPI 100-Day Mission | CEPI
- Epidemic Preparedness Economic Modelling Capability | UKRI

These partnerships and co-funding arrangements underscore our commitment to delivering globally relevant research, enhancing health system resilience, and improving pandemic preparedness through strategic collaboration.

Research overview

Emerging threats

Economics of Pandemic Preparedness (EPPI)

- The Jameel Institute-Kenneth C. Griffin Initiative for the Economics of Pandemic Preparedness Initiative (EPPI), has developed an integrated economic-epidemiological model that simulates hypothetical pandemic scenarios. In doing so, the model demonstrates the associated trade-offs that different mitigation measures may have between protecting lives and livelihoods.
- EPPI is a Jameel Institute-led initiative supported by Imperial College Business School's Centre for Health Economics and Business Innovation and global partnerships with Singapore's Programme for Research in Epidemic Preparedness And Response (PREPARE), Singapore's National Centre for Infectious Diseases (NCID), and Umeå University in Sweden.
- In the last year, the EPPI team have further strengthened their research by supporting and collaborating with stakeholders from: the not-for profit sector (the Coalition for Epidemic Preparedness Innovations (CEPI) and Institute for Government); international universities (Ateneo de Manila University, Philippines); and government agencies, including the UK Health Security Agency (UKHSA); His Majesty's Treasury (HMT), Go Science and Cabinet Office.
- The team have continued to make refinements to the original DAEDALUS economic-epidemiological model and the associated online, open-access DAEDALUS Explore dashboard. The team have also amplified the impact of their research by sharing their learnings with the wider public health community.
    - By adapting the original model, the EPPI team have leveraged DAEDALUS to address real-world policy questions. For example, in collaboration CEPI and Linksbridge Consulting, the team modelled the costs and benefits of global and regional vaccine investments, including scenarios aligned with CEPI's 100 Day Mission. A report on these findings can be expected in 2026. The team have also used DAEDALUS to support the UKHSA in their response to PEGASUS, the government's internal pandemic simulation response exercise.
    - This year, a variety of engagement opportunities, such as the running of a pandemic simulation exercise with senior government officials, across a wide-range of departments for the UKHSA Away Day in June, enabled the team to gain insights on the usability and practicability of the DAEDALUS Explore tool for policymaking. This feedback led to further improvements to the online platform, such as building in a scenario comparison feature. A UK preview of the DAEDALUS Explore dashboard – incorporating this feedback – took place at this year's Jameel Institute Symposium.

Jameel Institute EPPI team running a pandemic simulation exercise at the UKHSA Away Day 2025.

- The EPPI team engaged in a series of multi-stakeholder roundtable discussions convened by the Institute for Government to address the benefits of integrated modelling for policymaking and how it can be improved. A report on the Institute's findings was published in November 2025.

Pathogen Epidemiology Review Group

- Dr Anne Cori continues to lead a multi-pathogen review project. The pathogen epidemiology review group (PERG) is building a catalogue of mathematical modelling parameters facilitating rapid response to potential outbreaks of nine WHO priority pathogens. Further detail on the project can be viewed here, via the 'Science in Context'

video and the PERG website.

- Within PERG, Jameel Institute researchers Dr Patrick Doohan, Dr Thomas Rawson and Dr Anne Cori, together with other colleagues, published a systematic review on Severe Acute Respiratory Syndrome (SARS) supporting ongoing response tool for the WHO's priority pathogen list. This review identified who is most at risk, how the disease progresses, and how severe it can be. It also looked at how researchers have modelled the virus and measured different aspects of its transmission, using a specially designed tool to collect and assess the information. The review found that healthcare workers and people in close contact with infected individuals had the highest risk of catching the virus. Older adults and people with existing health conditions were more likely to develop severe illness or die.
- Work on similar reviews for Lassa fever and Zika virus is ongoing, with Dr Patrick Doohan, Dr Thomas Rawson and Tristan Naidoo as lead and contributing authors, respectively.
- Additionally, Dr Patrick Doohan and other PERG members have contributed to a perspectives paper submitted to The Lancet ID titled: The impact of ambiguously reported epidemiological parameters for infectious disease modelling and recommended best practice. This paper highlights how poor reporting of epidemiological parameters can lead to misleading conclusions in public health and offers practical recommendations to improve clarity, consistency, and reusability in future research.
- In addition to his thesis, Dr Tristan Naidoo has continued to work with the Pathogen Epidemiology Review Group (PERG). He is currently leading work on Nipah virus, which will be completed soon, and continues to provide software infrastructure for the PERG.

H5N1 Highly Pathogenic Avian Influenza

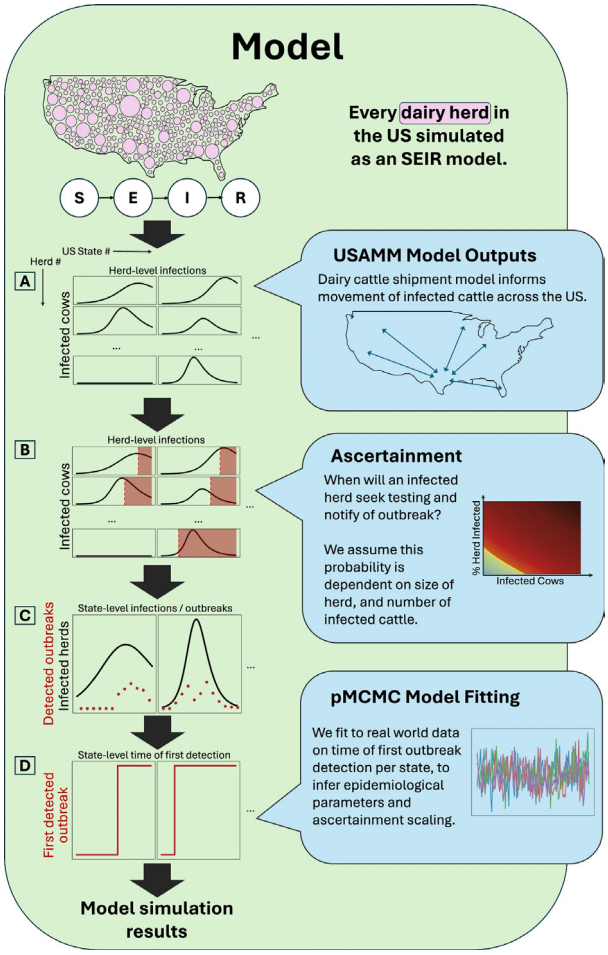
- Led by Professor Katharina Hauck, the EPPI team is analysing the economic impact of the H5N1 outbreak on the U.S. dairy industry; their study finds it could reduce national output by up to 0.9% and dairy production by as much as 20% with current subsidies insufficient to incentivise stronger biosecurity.
- Dr Thomas Rawson headed up advanced epidemiological modelling to analyse H5N1 avian influenza outbreaks in U.S. dairy cattle. By integrating veterinary records with reported cases, his study maps virus transmission pathways across states, identifies likely under-reported regions, and clarifies outbreak connections. This work informs targeted surveillance, provides robust disease burden estimates, and improves understanding of cattle operation linkages, offering crucial insights for effective disease control and policy planning.

The impact of Highly Pathogenic Avian Influenza H5N1 on US domestic and international dairy and beef markets

Guillaume Morel[1,2*], Anh Pham[1*], Christian Morgenstern[1], Joseph T. Hicks[1], Thomas Rawson[1], Victoria Y. Fan[3], W. John Edmunds[4], Giovanni Forchini[1,2] & Katharina Hauck[1,5]

[1]MRC Centre for Global Infectious Disease Analysis & WHO Collaborating Centre for Infectious Disease Modelling, Imperial College London, United Kingdom.
[2]Umeå School of Business, Economics and Statistics, Umeå Universitet, Umeå, Sweden
[3]Center for Global Development, Washington (DC), USA
[4]Centre for Mathematical Modelling of Infectious Diseases, London School of Hygiene & Tropical Medicine, London, UK
[*]Equal contribution

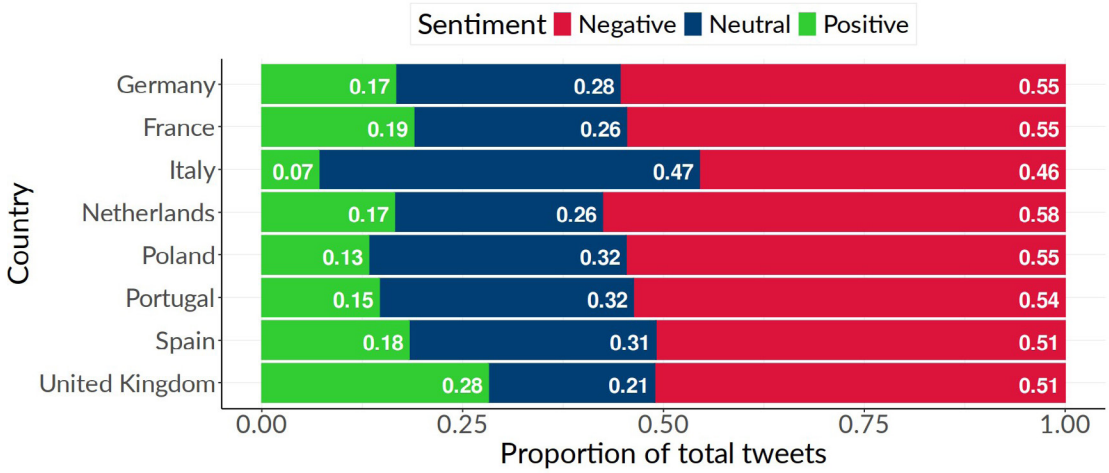
Katharina Hauck and the EPPI team's study.



Schematic overview of the advanced epidemiological modelling to analyse H5N1 avian infuenza outbreaks in U.S dairy cattle, developed by Dr Thomas Rawson.

Learning from the COVID-19 pandemic

- Dr Tristan Naidoo recently completed his PhD, whereby he explored how X (formerly, Twitter) discourse could support real-time epidemiological insight during COVID-19. He built a novel multilingual tweet dataset, tested multiple AI methods to extract sentiment, including Large Language Models (LLMs), and found that fine-tuned encoder models performed best, while LLMs offer a practical, scalable alternative for future outbreaks. His analysis showed that tweet volume and sentiment were moderately associated with COVID-19 trends and policy stringency, though with variation across countries. Dr Naidoo's work highlights the growing potential of social media analytics and advanced AI to provide rapid behavioural intelligence during public health emergencies, laying a strong foundation for future research.



Dr Tristan Naidoo's results which show that tweet volume and sentiment were moderately associated with COVID-19 trends and policy stringency.

Climate and health

- Professor Neil Ferguson continues to lead a Wellcome Trust-funded research programme focused on understanding how environmental conditions influence the transmission of five key diseases (malaria, dengue, yellow fever, cholera, and meningitis A), publishing a study on the efficacy, public health impact and optimal use of the Takeda dengue vaccine. The project also explores the broader implications of climate change on the health burden of these diseases and the effectiveness of existing control policies.

How much vaccine to stockpile for Ebola outbreaks

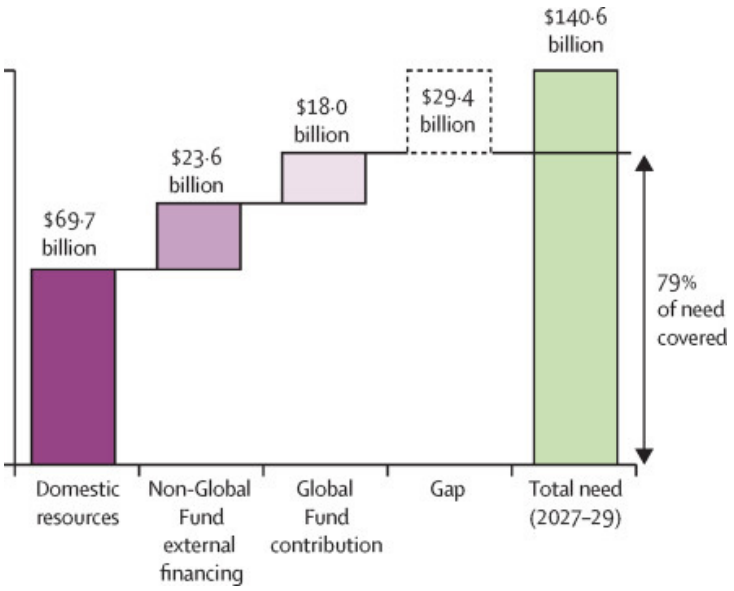
- In a 2023 collaboration that has continued into 2025, Dr Anne Cori, Professor Katharina Hauck and Professor Neil Ferguson have been instructed by a global consortium of donors including WHO, GAVI and the Centres for Disease Control (USA) to inform on the optimal vaccination strategies and stockpile size of the Ervebo vaccine held by the international agencies. The team has finalised work comparing ring- and geographic vaccination strategies and is currently evaluating the benefits and costs of preventive vaccination of healthcare workers.
- Further funding for this project was secured through GAVI.

Strengthening health systems

- Professor Timothy Hallett continues to lead the Thanzi La Onse project, a flagship collaboration applying epidemiological and economic modelling to help low-income countries—particularly across Africa—set smarter health priorities. By quantifying population-level health loss, the initiative equips governments with evidence to allocate resources more effectively and shape policies that deliver the greatest impact.
- Professor Tim Hallett led the case for optimal investment in combating HIV, tuberculosis, and malaria – key analysis underpinning the Global Fund's campaign to raise $18B – showing the potential health outcomes, economic value and the contributions to health security and health system strengthening. 2025 outputs from the TLO team include:
  - Health System Strengthening: Thanzi La Onse modelling shows that targeted investments in core health system functions can deliver major gains in population health.
  - Medical oxygen in primary care: Expanding access to medical oxygen at primary facilities could avert thousands of preventable deaths across low-income settings.
  - Extreme weather disruptions: Service interruptions during climate-related events can significantly increase

mortality and morbidity, underscoring the need for resilient health systems.

- Long-term funding shifts: Changes in global health financing may lead to substantial long-term health losses without strategic investment and prioritisation.

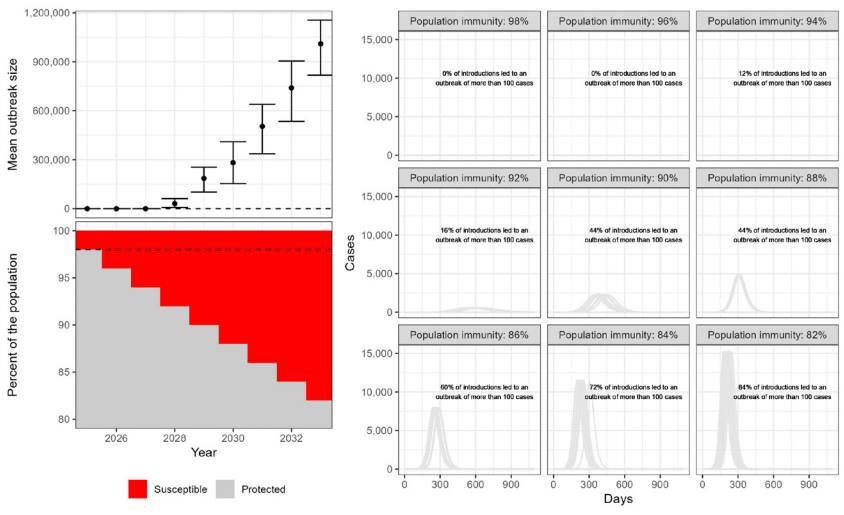


Estimated resources needed and resources potentially available (in US$) for HIV, tuberculosis, and malaria in 2027-29 in countries eligible for Global Fund funding.

- Professor Majid Ezzati continues leading the NCD Risk Factor Collaboration (NCD-RisC). The NCD Risk Factor Collaboration (NCD-RisC) is a network of health scientists around the world with the core group of researchers based at Imperial College London.
- One of the latest outputs of the NCD-RisC is a paper published by The Lancet, Worldwide trends in diabetes prevalence and treatment from 1990 to 2022: a pooled analysis of 1108 population-representative studies with 141 million participants. The study finds that in low- and middle-income countries, where diabetes prevalence is rising, treatment has not kept pace. This means it is vital to strengthen health insurance and primary care with targeted diabetes programs for early detection and effective management.
- Dr Bin Zhou, in collaboration with NCD-RisC, contributed to analysis and interpretation in two international papers on the metabolic health of Chinese children and adolescents and the hypertension prevention and treatment status in Australian adults.

Jameel Institute – RISE

- Since launching in late 2024, Jameel Institute Realtime Intelligent Support for Emergencies (Jameel Institute-RISE) has made strong progress in strengthening real-time decision-making for public health emergencies. A key milestone was the development of an early version of the Crisis Vaccination Planner, a modelling tool designed to support rapid, evidence-based vaccination decisions in humanitarian settings. The tool has been presented at major international scientific meetings and refined through engagement with partners including WHO, MSF and UN agencies, with a public soft launch planned for December 2025. The Jameel Institute-RISE team also convened a high-profile symposium highlighting how data and modelling can improve responses to immunisation disruptions, excess mortality and disease risks in crisis-affected populations at the American Society of Tropic Medicine and Hygiene annual meeting in November 2025.



The Jameel Institute Crisis Vaccination Planner

- Alongside this, work has advanced on improving how mortality and health risks are measured and acted upon in conflict settings. This includes research to strengthen mortality reporting, early warning and surveillance

systems, and collaboration with operational partners to better understand health needs in active crises. To ensure research translates into impact, the Institute has strengthened its policy engagement through the appointment of a dedicated consultant to lead policy integration, maintain close links with WHO, and represent the initiative at international humanitarian forums. Together, these efforts position Jameel Institute–RISE as a bridge between academic insight and practical humanitarian action.

Building partnerships, capacity and policy engagements

Over the past year, the team has expanded and deepened its relationships by working closely with international collaborators from national and international organisations, government bodies and academic institutions, and by engaging with high-level policy-makers in a variety of advisory roles. Some recent examples of our successful and much-valued collaborations:

- In partnership with the WHO, the team contributed to the G20 Joint Finance and Health Task Force by assessing economic vulnerabilities to pandemics and helping to strengthen global preparedness.
- The EPPI team work closely and consistently with our Singapore partners, investing time, training, weekly calls and modelling support. In particular, the EPPI team and Singapore partners have begun planning for the joint workshop and official launch of the DAEDALUS Explore dashboard in Spring 2026.
- The team concluded their roundtable engagements with the Institute for Government, which led to the publication of the Institute's report on the benefits and challenges of utilising integrated modelling for policymaking.
- A collaboration between the Jameel Institute and Ateneo de Manila University has been established to build a novel integrated model applied to the Philippines context.
- The team continue working with CEPI and Linksbridge Consulting to evaluate the costs and benefits of global and regional vaccine investments, including scenarios aligned with CEPI's 100 Day Mission.
- In autumn 2025, the team used DAEDALUS to suppot the UKHSA in their response to PEGASUS - the government's internal pandemic simulation response exercise.
- Together, with the WHO Hub for Pandemic and Epidemic Intelligence, we co-hosted a roundtable and produced a report for the 2025 Munich Security Conference.
- Dr Thomas Rawson co-ran the Imperial College London annual short course, teaching global participants, predominantly from international health ministries, how to perform robust epidemiological modelling techniques. Furthermore, Dr Rawson also helped deliver these materials at the 'Infectious Disease Modelling and Analytics for Pandemic Preparedness: A focus on Latin America (IDMAPP-LATAM)' 2-week course in Quito, Ecuador, October 2025.

Participants of the annual course at Imperial College London (left) and the Quito (right).

- Professor Hauck was invited to join the Pandemic Compensation Initiative by PAX Sapiens Foundation. The Pandemic Compensation Initiative Working Group brings together experts from medicine, law, finance, and civil society, including Gates Foundation, Imperial, Johns Hopkins, and WHO. It builds on PAX's $200M pandemic prevention program to design a mechanism that balances global health, legal, and financial considerations to address the consequences of early disease outbreak reporting.
- The Jameel Institute and MRC GIDA were awarded funding to host three early-career fellows from Thailand through the International Science Partnerships Fund (ISPF) Early Career Fellowships Programme. Their proposal was selected by the British Council to facilitate collaboration with Thailand.
- The Jameel Institute-RISE initiative works with a number of external partners including LSHTM, MSF, UNOCHA, Geneva Water Hub and WHO.

External engagement

In 2025, Jameel Institute researchers continued to shape global policy discussions on pandemic preparedness, health equity and crisis response through high-impact external engagements:

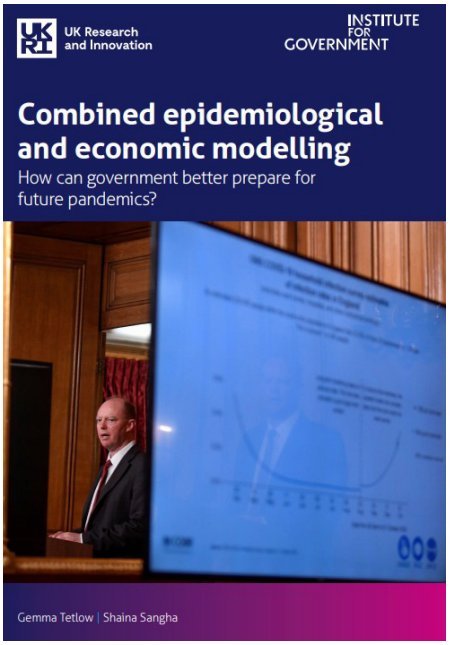
- In February, the Institute co-hosted a major roundtable at the **Munich Security Conference** with the WHO Hub for Pandemic and Epidemic Intelligence, exploring how to balance routine and emergency surveillance, set data standards for rapid response, strengthen cross-border intelligence sharing, and advance multisector collaboration across epidemiology, defence, policy and data science. The resulting report underscored the critical need to boost surveillance capacity in LMICs, integrate human–animal–environmental health data, support outbreak reporters, communicate clearly to counter misinformation, and ensure military cooperation complements rather than overshadow public health efforts.

Dr Oliver Morgan (WHO) and Dr Anne Cori (Jameel Institute) at the Munich Security Conference 2025.

Professor Hauck presenting at the European Health Forum.

- Professor Katharina Hauck presented research on the economics of infectious diseases at the History Medical Research Club in London, and later delivered a keynote for the World Federation of Public Health Associations' Global Public Health Week, highlighting the role of economic strategies in equitable pandemic preparedness.
- At the European Humanitarian Forum in May, Dr Paula Christen showcased how Jameel Institute-RISE supports real-time decision-making in crisis zones, followed by the team's presentation of the Crisis Vaccination Planner at MSF Scientific Day - demonstrating new tools for vaccination and health planning in conflict settings.
- Professor Hauck also joined a high-level panel at the **European Health Forum Gastein**, discussing Europe's health security and the economic imperative of investing in preparedness. She underscored the need for spare capacity, adaptable systems and standing research capability to generate rapid evidence for policy.
- The Jameel Institute-RISE team will further contribute to global dialogue at the **ASTMH 2025 Annual Meeting**, organising the symposium "Bridging Academia and Humanitarian Response: Data, Modelling, and Policy for Crisis-Affected Populations.". The session will examine modelling of immunisation disruptions, child mortality estimation, excess mortality in Gaza, epidemic early-warning systems, and WASH interventions for antimicrobial resistance, concluding with a panel on strengthening collaboration between academia and humanitarian operations. The event will also feature the soft launch of the Crisis Vaccination Planner in December 2025.

The team's session, "Bridging academia and humanitarian response: Data, modelling and policy for crisis-affected populations," showcased how real-time analytics and epidemiological modelling are transforming decision-making in some of the world's most challenging crises. Jameel Institute-RISE delegation: Bhargavi Rao, Hanan Abukmail, Arran Hamlet, Catherine McGowan, Ruwan Ratnayake, and Reem Alyazouri.



The Institute for Government report, with contributions from the Jameel Institute.

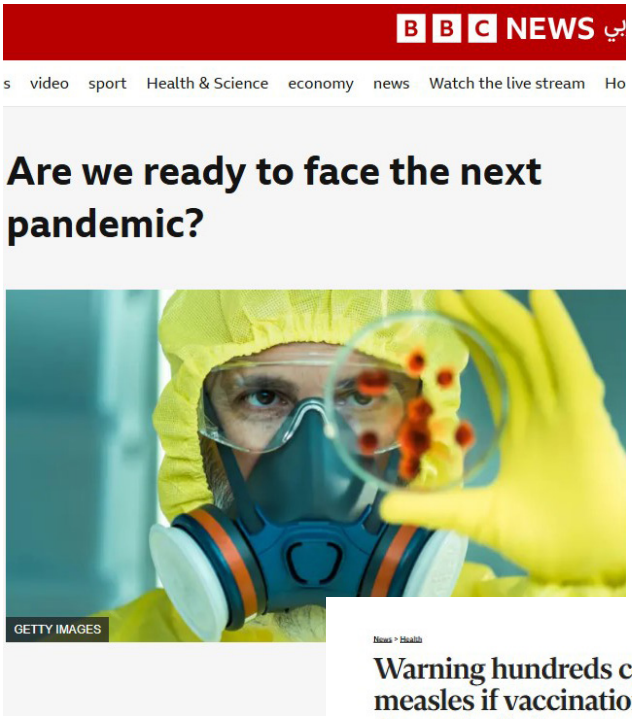
- This year also saw the publication of the report Combined Epidemiological and Economic Modelling: How Can Government Better Prepare for Future Pandemics, produced by the Institute for Government. The Jameel Institute's EPPI team contributed evidence, analysis and real-time simulations, demonstrating how integrated epi-econ models can reveal feedback between health and the economy, clarify data needs and support more robust decision-making. As part of this work, the team advanced the **DAEDALUS Explore** dashboard, enabling policymakers to interrogate model scenarios more intuitively through workshops and consultation events.
- The Jameel Institute participated in the WHO Berlin Hub 'Workshop on epidemiological parameters to refine the GREP database'. This was jointly organised by the MRC Centre for Global Infectious Disease Analysis, World Health Organisation, WHO Pandemic HUB and the London School of Hygiene and Tropical Medicine (LSHTM). The Priority Pathogen Review Group, including Jameel Institute members, Dr Patrick Doohan, Dr Anne Cori and Christian Morgenstern presented their research.

Communications

Media coverage

A compilation of media coverage highlights featuring Jameel Institute staff and research. Jameel Institute continues to work closely with Fleishman Hillard to leverage media opportunities to promote and raise awareness around our research.

- **6 January 2025** – INews, Bird flu is one mutation from becoming the next Covid - how the UK is preparing Dr Thomas Rawson
- **13 January 2025** – Food Navigator Europe, Blue flu fight: 'A step along the line to panic taken'
- **23 March 2025** – BBC News Arabic, Are we ready for the next pandemic? Professor Katharina Hauck
- **30 March 2025** – INews, Bird fly 'no longer just an avian virus' as cases found in sheep and cattle Dr Thomas Rawson
- **23 August 2025** – The Independent, Warning: Hundreds could die from measles if vaccination rates don't dramatically improve Professor Katharina Hauck



Events

Throughout 2025, our events and training programmes played a central role in strengthening collaboration, building capacity and expanding partnerships across academia, industry, and the next generation of public health leaders. These gatherings served not only as platforms for knowledge exchange, but also as catalysts for new networks, new insights and new approaches to solving global health challenges.

- The year began with a high-level workshop hosted by our EPPI team in collaboration with the Institute for Government. Using the integrated econ-epi model **DAEDALUS**, senior policymakers engaged in an immersive simulation of a novel respiratory pathogen arriving in the UK. The session, held under Chatham House rules, explored the health, economic and educational impacts of different mitigation strategies while navigating the uncertainties that inevitably accompany the early stages of an outbreak. Another simulation session was held mid-year in collaboration with the Institute for Government at the UK Health Security Agency (UKHSA) Away Day. Bringing together data, economics and epidemiology to tackle real world challenges and explore better preparedness for future health challenges.

Attendees of a high-level workshop hosted by the EPPI team in collaboration with the Institute for Government.

- In March, we co-hosted the first **Equitable Leadership in Global Health** seminar with the School of Public Health and The George Institute. Featuring leaders from across the global health landscape - including the Minister of Public Health for Uruguay, senior editors from The Lancet, and emerging voices such as an MPH candidate displaced by conflict—the discussion examined leadership journeys, and the barriers women continue to face in global health. A second seminar later in the year welcomed Professor Mely Caballero-Anthony to reflect on the geopolitical tensions laid bare by the pandemic, and their impact on health equity and regional security in Southeast Asia.

Pictured here are attendees of the Equitable Leadership in Global Health seminar.

- Our focus on methodological excellence and global collaboration continued in June with the second **Workshop on the Economics of Pandemic Preparedness** in Stockholm, where researchers refined approaches to integrating macroeconomic impacts into health policy modelling. Planning is already underway for the next iteration in 2026.
- Throughout 2025, we significantly deepened engagement around **DAEDALUS Explore**, soft-launching the platform at workshops in Bangkok and at Imperial's School of Convergence Science. These sessions provided invaluable feedback ahead of formal launches in Singapore and at the Jameel Institute Symposium. Additional real-time modelling exercises with senior UK civil servants helped strengthen understanding of how integrated

models can support decision-making under uncertainty.

- Our commitment to global education remained a cornerstone of the year. The annual course, Introduction to Mathematical Models of the Epidemiology & Control of Infectious Diseases, brought together **29 participants from 17 countries** at Imperial in September- including representatives from 11 LMICs. A second delivery in Quito, Ecuador welcomed 40 participants from 25 institutions across 12 Latin American countries, further expanding regional modelling capacity.
- These activities culminated in our flagship event, the Jameel Institute Symposium 2025, held on 19 November at Imperial's White City Campus. Bringing together global experts, academics and policymakers, this year's theme, 'Health Economics for Improving Healthcare under Constrained Budgets', examined how to optimise spending, strengthen prevention, and manage future pandemic risks across both high- and low-income settings. The symposium also marked a major milestone with the formal launch of **DAEDALUS Explore**, reflecting our commitment to tools that make data-driven decision-making more accessible and impactful.

Jameel Institute Symposium guests trialling the DAEDALUS Explore dashboard

The Jameel Institute Symposium Panel. L-R: Chair: Pete Baker, Deputy Director, Global Health Policy Program and Policy Fellow, Center for Global Development; Dr Kalipso Chalkidou | Director Health Finance and Economics, WHO; Dr Michael Borowitz | Chief Economist, UKHSA; Prof Carol Propper | Chair in Economics, Department of Economics and Public Policy, Imperial Business School; Prof Paul Revill | Head of Global Health Team, Centre for Health Economics, University of York

Publications

- Prevalence, awareness, treatment, and control rates of hypertension in the general population of Australia: a systematic review and meta-analysis. Wang X, Shaw JE, Yu J, Jennings G, Stavreski B, Magliano D, Gill TK, Adams R, Rodgers A, Woodward M, Schlaich MP, Singleton R, Zhou B, Schutte AE. J Hypertens. 2025 Feb 1;43(2):185-190. doi: 10.1097/HJH.0000000000003854. Epub 2024 Aug 26. PMID: 39248145
- Trends and predictions to 2030 in demographic structures and metabolic health for children and adolescents in China: analysis of national school health surveys from 2000 to 2019. Song X, Zhou B, Baird S, Lu C, Song Z, Zhang Y, Wang R, Jiang J, Chen L, Liu J, Yuan W, Liu Y, Dang J, Hu P, Ma J, Dong Y, Song Y, Ezzati M, Sawyer SM. Lancet Child Adolesc Health. 2025 Aug;9(8):530-543. doi: 10.1016/S2352-4642(25)00140-3. Epub 2025 Jun 19. PMID: 40544851
- Associations between antibiotic consumption intensity and extended-spectrum cephalosporin resistance in nursing homes: a retrospective ecological study. Glampedakis E, Niquille A, Cuiña Iglesias P, Cassini A, Plüss-Suard C, Kronenberg A, Nahimana Tessemo MI, Brewer TR, Rawson T. JAC Antimicrob Resist. 2025 May 23;7(3):dlaf088. doi: 10.1093/jacamr/dlaf088. eCollection 2025 Jun. PMID: 40416931
- Socioeconomic and temporal heterogeneity in SARS-CoV-2 exposure and disease in England from May 2020 to February 2023. Morgenstern C, Rawson T, Hinsley W, Perez Guzman PN, Bhatt S, Ferguson NM. Sci Adv. 2025 May 23;11(21):eadu8678. doi: 10.1126/sciadv.adu8678. Epub 2025 May 21. PMID: 40397734
- Severe acute respiratory syndrome (SARS) mathematical models and disease parameters: a systematic review. Morgenstern C, Rawson T, Routledge I, Kont M, Imai-Eaton N, Skarp J, Doohan P, McCain K, Johnson R, Unwin HJT, Naidoo T, Dee DP, Parchani K, Cracknell Daniels BN, Vicco A, Drake KO, Christen P, Sheppard RJ, Leuba SI, Hicks JT, McCabe R, Nash RK, Santoni CN, Cuomo-Dannenburg G, van Elsland S, Bhatia S, Cori A; Pathogen Epidemiology Review Group. Lancet Microbe. 2025 Jul 23:101144. doi: 10.1016/j.lanmic.2025.101144. Online ahead of print. PMID: 40713974
- A mathematical model of H5N1 influenza transmission in US dairy cattle. Rawson T, Morgenstern C, Knock ES, Hicks J, Pham A, Morel G, Murillo AC, Sanderson MW, Forchini G, FitzJohn R, Hauck K, Ferguson N. Nat Commun. 2025 May 8;16(1):4308. doi: 10.1038/s41467-025-59554-z. PMID: 40341525
- Artificial intelligence for modelling infectious disease epidemics. Kraemer MUG, Tsui JL, Chang SY, Lytras S, Khurana MP, Vanderslott S, Bajaj S, Scheidwasser N, Curran-Sebastian JL, Semenova E, Zhang M, Unwin HJT, Watson OJ, Mills C, Dasgupta A, Ferretti L, Scarpino SV, Koua E, Morgan O, Tegally H, Paquet U, Moutsianas L, Fraser C, Ferguson NM, Topol EJ, Duchêne DA, Stadler T, Kingori P, Parker MJ, Dominici F, Shadbolt N, Suchard MA, Ratmann O, Flaxman S, Holmes EC, Gomez-Rodriguez M, Schölkopf B, Donnelly CA, Pybus OG, Cauchemez S, Bhatt S. Nature. 2025 Feb;638(8051):623-635. doi: 10.1038/s41586-024-08564-w. Epub 2025 Feb 19. PMID: 39972226
- Efficacy, public health impact and optimal use of the Takeda dengue vaccine. Cracknell Daniels B, Ferguson NM, Dorigatti I. Nat Med. 2025 Jun 25. doi: 10.1038/s41591-025-03771-y. Online ahead of print. PMID: 40563017
- Inferring transmission risk of respiratory viral infection from the viral load kinetics of SARS-CoV-2, England, 2020 to 2021 and influenza A virus, Hong Kong, 2008 to 2012. Jonnerby J, Fenn J, Hakki S, Zhou J, Madon KJ, Koycheva A, Nevin S, Kundu R, Crone MA, Pillay TD, Ahmad S, Derqui N, Conibear E, Varro R, Luca C, Freemont PS, Taylor GP, Zambon M, Barclay WS, Dunning J, Ferguson NM, Cowling BJ, Lalvani A.ATACCC Study Investigators. Euro Surveill. 2025 Feb;30(6):2400234. doi: 10.2807/1560-7917.ES.2025.30.6.2400234. PMID: 39949319
- Evaluation of the Performance and Utility of Global Gridded Precipitation Products for Health Applications and Impact Assessments in South America. Jahn S, Gaythorpe KAM, Wainwright CM, Ferguson NM. Geohealth. 2025 Jun 18;9(6):e2024GH001260. doi: 10.1029/2024GH001260. eCollection 2025 Jun. PMID: 40535094
- Does enhanced HIV prevention, diagnosis, and linkage to care reduce hospitalisation in high HIV-burden communities in Zambia and South Africa? findings from the HPTN 071 (PopART) randomised trial. Burger R, Bell-Mandla N, Harper A, Richardson S, Kanema S, Thomas R, Mwenge L, Wilson E, Floyd S, Bock P, Ayles H, Fidler S, Hayes R, Hauck K; HPTN 071 (PopART) study team. PLOS Glob Public Health. 2025 May 8;5(5):e0004373. doi: 10.1371/journal.pgph.0004373. eCollection 2025. PMID: 40339051
- Estimating the potential impact of surveillance test-and-treat posts to reduce malaria in border regions in sub-Saharan Africa: a modelling study. Topazian HM, Charles GD, Schmit N, Pianella M, Marshall JM, Kleinschmidt I, Hauck K, Ghani AC. Malar J. 2025 Apr 18;24(1):127. doi: 10.1186/s12936-025-05367-w. PMID: 40251530
- Quantifying the potential value of entomological data collection for programmatic decision-making on malaria control in sub-Saharan African settings.
  Schmit N, Topazian HM, Pianella M, Charles GD, Winskill P, Hancock PA, Sherrard-Smith E, Hauck K, Churcher TS, Ghani AC. Malar J. 2025 Jan 30;24(1):31. doi: 10.1186/s12936-025-05251-7. PMID: 39885514
- Quality of life in patients with HBV infection: A systematic review and meta-analysis. Fu MX, Lambert G, Cook A,

Ndow G, Haddadin Y, Shimakawa Y, Hallett TB, Harvala H, Sicuri E, Lemoine M, Nayagam S. JHEP Rep. 2025 Jan 8;7(4):101312. doi: 10.1016/j.jhepr.2024.101312. eCollection 2025 Apr. PMID: 40115166

- Estimates of resource use in the public-sector health-care system and the effect of strengthening health-care services in Malawi during 2015-19: a modelling study (Thanzi La Onse). Hallett TB, Mangal TD, Tamuri AU, Arinaminpathy N, Cambiano V, Chalkley M, Collins JH, Cooper J, Gillman MS, Giordano M, Graham MM, Graham W, Hawryluk I, Janoušková E, Jewell BL, Lin IL, Manning Smith R, Manthalu G, Mnjowe E, Mohan S, Molaro M, Ng'ambi W, Nkhoma D, Piatek S, Revill P, Rodger A, Salmanidou D, She B, Smit M, Twea PD, Colbourn T, Mfutso-Bengo J, Phillips AN. Lancet Glob Health. 2025 Jan;13(1):e28-e37. doi: 10.1016/S2214-109X(24)00413-3. Epub 2024 Nov 14. PMID: 39549712
- Association of life-course events with predictors of HIV risk behaviour and HIV acquisition in Manicaland, Zimbabwe: a longitudinal analysis of a population cohort. Pickles M, Gregson S, Moorhouse L, Maswera R, Tsenesa B, Dzamatira F, Mandizvidza P, Bagnay S, Dadirai T, Kumbirai Moyo B, Mugurungi O, Nyamukapa C, Hallett TB. Lancet HIV. 2025 Mar;12(3):e214-e222. doi: 10.1016/S2352-3018(24)00317-5. Epub 2025 Feb 14. PMID: 39961318
- An individual-based modelling study estimating the impact of maternity service delivery on health in Malawi. Collins JH, Allott H, Ng'ambi W, Lin IL, Giordano M, Graham MM, Janoušková E, Kachale F, Kawaza K, Mangal TD, Mfutso-Bengo J, Mnjowe E, Mohan S, Molaro M, Nkhoma D, Revill P, Rodger A, She B, Tamuri AU, Tann CJ, Twea PD, Cambiano V, Hallett TB, Phillips AN, Colbourn T. Nat Commun. 2025 Apr 25;16(1):3925. doi: 10.1038/s41467-025-59060-2. PMID: 40280923
- Modelling health outcomes of a decade of HIV, malaria and tuberculosis initiatives, Malawi. Mangal TD, Molaro M, Nkhoma D, Colbourn T, Collins JH, Janoušková E, Graham MM, Lin IL, Mnjowe E, Mwenyenkulu TE, Mohan S, She B, Tamuri AU, Twea PD, Winskill P, Phillips A, Mfutso-Bengo J, Hallett TB Bull World Health Organ. 2025 May 1;103(5):304-315. doi: 10.2471/BLT.24.292439. Epub 2025 Mar 7. PMID: 40357264
- The impact and cost-effectiveness of pulse oximetry and oxygen on acute lower respiratory infection outcomes in children in Malawi: a modelling study. Lin IL, McCollum ED, Buckley E, Collins JH, Graham MM, Janoušková E, King C, Lufesi N, Mangal TD, Mfutso-Bengo J, Mnjowe E, Mohan S, Molaro M, Nkhoma D, Nsona H, Rothkopf A, She B, Smith L, Tamuri AU, Revill P, Cambiano V, Phillips AN, Hallett TB, Colbourn T. Lancet Glob Health. 2025 Aug;13(8):e1466-e1475. doi: 10.1016/S2214-109X(25)00202-5. PMID: 40712617
- Measurement and interpretation of the Harare HIV combination prevention cascade in priority populations: A population survey of adolescent girls and young women and young men in Zimbabwe. Moorhouse L, Imai-Eaton JW, Dadirai T, Maswera R, Museka T, Mandizvidza P, Dzamatira F, Tsenesa B, Hallett TB, Nyamukapa C, Gregson S. medRxiv [Preprint]. 2025 Jan 8:2025.01.08.25320195. doi: 10.1101/2025.01.08.25320195. PMID: 39830272
- The case for optimal investment in combating HIV, tuberculosis, and malaria: a global modelling study. Hallett TB, Menzies NA, Resch S, Pretorius C, Stover J, Su JS, Winskill P, Gordon M, Grahn R, Mahmood F, Smit M, Hosseini M, Hunger J. Lancet. 2025 Jul 19;406(10500):261-270. doi: 10.1016/S0140-6736(25)00831-1. Epub 2025 Jul 3. PMID: 40618766
- The 2025 report of the Lancet Countdown to 2030 for women's, children's, and adolescents' health: tracking progress on health and nutrition. Amouzou A, Barros AJD, Requejo J, Faye C, Akseer N, Bendavid E, Blumenberg C, Borghi J, El Baz S, Federspiel F, Ferreira LZ, Hazel E, Heft-Neal S, Hellwig F, Liu L, Maïga A, Munos M, Pitt C, Shawar YR, Shiffman J, Tam Y, Walker N, Akilimali P, Alkema L, Behanzin P, Binyaruka P, Bhutta Z, Blanchard A, Blencowe H, Bradley E, Brikci N, Caicedo-Velásquez B, Costello A, Dotse-Gborgbortsi W, El Arifeen S, Ezzati M, Freedman LP, Guillot M, Hanson C, Heidkamp R, Huicho L, Izugbara C, Jiwani SS, Kabiru C, Kiarie H, Kinney M, Kirakoya-Samadoulougou F, Lawn J, Madise N, Mady GRM, Masquelier B, Melesse D, Nilsen K, Perin J, Ram U, Romanello M, Saad GE, Sharma S, Sidze EM, Spiegel P, Tappis H, Tatem AJ, Temmerman M, Victora CG, Villavicencio F, Wado Y, Waiswa P, Wakefield J, Walton S, You D, Chopra M, Black RE, Boerma T. Lancet. 2025 Apr 26;405(10488):1505-1554. doi: 10.1016/S0140-6736(25)00151-5. Epub 2025 Apr 10. PMID: 40222381
- Obesity-related glomerulopathy: How it happens and future perspectives. Lee-Boey JS, Tan JK, Lim ZF, Zaccardi F, Khunti K, Ezzati M, Gregg EW, Lim LL. Diabet Med. 2025 Jun;42(6):e70042. doi: 10.1111/dme.70042. Epub 2025 Apr 14. PMID: 40226862
- Clinical Heterogeneity and Transitions of Obesity in Mexico. A Longitudinal Analysis of Multiple Representative National Surveys. Soto-Mota A, Carrillo-Larco R, Gregg E, Rojas-Martínez R, Ezzati M, Aguilar-Salinas C. J Clin Endocrinol Metab. 2025 Mar 11:dgaf158. doi: 10.1210/clinem/dgaf158. Online ahead of print. PMID: 40067968
- Trends and predictions to 2030 in demographic structures and metabolic health for children and adolescents in China: analysis of national school health surveys from 2000 to 2019. Song X, Zhou B, Baird S, Lu C, Song Z, Zhang Y, Wang R, Jiang J, Chen L, Liu J, Yuan W, Liu Y, Dang J, Hu P, Ma J, Dong Y, Song Y, Ezzati M, Sawyer SM.

Lancet Child Adolesc Health. 2025 Aug;9(8):530-543. doi: 10.1016/S2352-4642(25)00140-3. Epub 2025 Jun 19. PMID: 40544851

- Benchmarking progress in non-communicable diseases: a global analysis of cause-specific mortality from 2001 to 2019. NCD Countdown 2030 Collaborators. Lancet. 2025 Sep 20;406(10509):1255-1282. doi: 10.1016/S0140-6736(25)01388-1. Epub 2025 Sep 10.PMID: 40945529
- Worldwide trends in diabetes prevalence: the NCD-RisC study - Authors' reply. Zhou B, Gregg EW, Danaei G, Ezzati M; NCD Risk Factor Collaboration (NCD-RisC). Lancet. 2025 Jul 12;406(10499):133-134. doi: 10.1016/S0140-6736(25)01085-2. PMID: 40651818
- Unsupervised deep clustering of high-resolution satellite imagery reveals phenotypes of urban development in Sub-Saharan Africa. Metzler AB, Nathvani R, Sharmanska V, Bai W, Moulds S, Owoo NS, Fynn IEM, Muller E, Dufitimana E, Akara GK, Owusu G, Agyei-Mensah S, Ezzati M. Sci Total Environ. 2025 Aug 1;988:179739. doi: 10.1016/j.scitotenv.2025.179739. Epub 2025 Jun 5. PMID: 40480170
- Moving beyond the noise: geospatial modelling of urban sound environments in a sub-Saharan African city. Clark SN, Arku RE, Ezzati M, Bennett J, Nathvani R, Alli AS, Nimo J, Moses JB, Baah S, Hughes A, Agyei-Mensah S, Owusu G, Toledano M, Brauer M. Sci Rep. 2025 Jul 1;15(1):21403. doi: 10.1038/s41598-025-06537-1. PMID: 40594832
- Measurement of urban vitality with time-lapsed street-view images and object-detection for scalable assessment of pedestrian-sidewalk dynamics. Nathvani R, Cavanaugh A, Suel E, Bixby H, Clark SN, Metzler AB, Nimo J, Moses JB, Baah S, Arku RE, Robinson BE, Baumgartner J, Bennett JE, Arif AM, Long Y, Agyei-Mensah S, Ezzati M. ISPRS J Photogramm Remote Sens. 2025 Mar;221:251-264. doi: 10.1016/j.isprsjprs.2025.01.038. PMID: 40027117
- Advancing knowledge, maps and tools to address obesity and related socio-economic disparities in Europe: the OBCT project. Lam TM, Aarestrup J, van den Akker ELT, Baker JL, Banik A, Berntzen BJ, Bertoni L, Beulens JWJ, Bjørnsbo K, Bryant S, Cereijo L, Choudhary P, Cuenca Cuenca VC, Diez J, Ekelund U, Ezzati M, O'Flynn M, Franco M, van de Geest J, Gullon P, Heggie L, Herstad SH, Holm S, Leach RJ, Lien N, Lobstein T, Luszczynska A, Mackenbach J, Meeusen R, Meijer P, Meshkovska B, Miettunen J, Nedelec R, Olney J, Paduszyńska N, Patel N, Powis J, Mohan Raju JS, Roseboom T, van Rossum EFC, Sanchez-Lastra MA, Sarker F, Sassi F, Sebert S, Siwa M, Stuber J, Tarp J, Toft U, Torp KAB, van Uhm J, Valiente Borox R, Wagtendonk A, Wetzel M, Woodward E, Zhu J, Lakerveld J; OBCT consortium. Glob Health Action. 2025 Dec;18(1):2517492. doi: 10.1080/16549716.2025.2517492. Epub 2025 Jul 18. PMID: 40679473
- Modelling transmission of Middle East respiratory syndrome coronavirus in camel populations and the potential impact of animal vaccination. Dighe A, Jombart T, Ferguson N.Nat Commun. 2025 Aug 18;16(1):7679. doi: 10.1038/s41467-025-62365-x.PMID: 40825940
- Evaluation of the Performance and Utility of Global Gridded Precipitation Products for Health Applications and Impact Assessments in South America. Jahn S, Gaythorpe KAM, Wainwright CM, Ferguson NM. Geohealth. 2025 Jun 18;9(6):e2024GH001260. doi: 10.1029/2024GH001260. eCollection 2025 Jun.PMID: 40535094
- Broadening the lens: a commentary on Sheard and Cauana-Finkel's account of women's progress in UK academic health economics. Patel A, Jofre-Bonet M, Hauck K, Miraldo M, Mistry H, Premji S.Soc Sci Med. 2025 Oct;382:118411. doi: 10.1016/j.socscimed.2025.118411. Epub 2025 Sep 9.PMID: 40935494
- Quantifying the impact of a broadly protective sarbecovirus vaccine in a future SARS-X pandemic. Whittaker C, Barnsley G, Mesa DO, Cox V, Laydon DJ, Tan CW, Zhu F, Johnson R, Doohan P, Whittles LK, Nedjati-Gilani G, Winskill P, Hogan AB, Deol A, Mukandavire C, Hauck K, Lye DCB, Wang LF, Watson OJ, Ghani AC. Nat Commun. 2025 Sep 26;16(1):8495. doi: 10.1038/s41467-025-63399-x. PMID: 41006237
- Competing societal objectives in epidemic mitigation: a modeling study of COVID-19 in the Philippines. Johnson R, Castillo RCJT, Lubangco C, Teng TR, Tolentino M, Morgenstern C, Doohan P, Haw D, Forchini G, de Lara-Tuprio EP, Sescon JT, Hauck K.Front Public Health. 2025 Nov 3;13:1662043. doi: 10.3389/fpubh.2025.1662043. eCollection 2025.PMID: 41256275
- The impact of precipitation on ANC service utilisation and healthcare access in Malawi. Murray-Watson RE, Molaro M, Murray-Watson RJ, Mohan S, She B, Mangal T, Collins JH, Bhatia S, Janoušková E, Hallett TB.Sci Rep. 2025 Oct 29;15(1):37896. doi: 10.1038/s41598-025-21645-8.PMID: 41162463
- Financial risk protection from vaccines in 52 Gavi-eligible low- and middle-income countries: A modeling study. Jiao B, Sato R, Mak J, Patenaude B, de Villiers M, Deshpande A, Gamkrelidze I, Gaythorpe KAM, Hallett TB, Jit M, Li X, Lopman B, Nayagam S, Razavi-Shearer D, Tam Y, Woodruff KH, Hogan D, Mengistu T, Verguet S. PLoS Med. 2025 Nov 4;22(11):e1004764. doi: 10.1371/journal.pmed.1004764. eCollection 2025 Nov. PMID: 41187138
- The potential impact of declining development assistance for health on population health in Malawi: A modelling study. Molaro M, Revill P, Chalkley M, Mohan S, Mangal TD, Colbourn T, Collins JH, Graham MM, Graham W,

Janoušková E, Manthalu G, Mnjowe E, Mulwafu W, Murray-Watson RE, Twea PD, Phillips AN, She B, Tamuri AU, Nkhoma D, Mfutso-Bengo J, Hallett TB.PLoS Med. 2025 Aug 21;22(8):e1004488. doi: 10.1371/journal.pmed.1004488. eCollection 2025 Aug.PMID: 4083955

- Measurement and interpretation of the Harare HIV combination prevention cascade in priority populations: a population survey of adolescent girls and young women and young men in Zimbabwe. Moorhouse L, Imai-Eaton JW, Dadirai T, Maswera R, Museka T, Mandizvidza P, Dzamatira F, Tsenesa B, Hallett TB, Nyamukapa C, Gregson S.BMJ Public Health. 2025 Aug 28;3(2):e002860. doi: 10.1136/bmjph-2025-002860. eCollection 2025.PMID: 40919017
- The impact and cost-effectiveness of pulse oximetry and oxygen on acute lower respiratory infection outcomes in children in Malawi: a modelling study. Lin IL, McCollum ED, Buckley E, Collins JH, Graham MM, Janoušková E, King C, Lufesi N, Mangal TD, Mfutso-Bengo J, Mnjowe E, Mohan S, Molaro M, Nkhoma D, Nsona H, Rothkopf A, She B, Smith L, Tamuri AU, Revill P, Cambiano V, Phillips AN, Hallett TB, Colbourn T. Lancet Glob Health. 2025 Aug;13(8):e1466-e1475. doi: 10.1016/S2214-109X(25)00202-5. PMID: 40712617
- From the 100 Day Mission to 100 lines of software development: how to improve early outbreak analytics. Tamayo Cuartero C, Carnegie AC, Cucunuba ZM, Cori A, Hollis SM, Van Gaalen RD, Baidjoe AY, Spina AF, Lees JA, Cauchemez S, Santos M, Umaña JD, Chen C, Gruson H, Gupte P, Tsui J, Shah AA, Millan GG, Quevedo DS, Batra N, Torneri A, Kucharski AJ.Lancet Digit Health. 2025 Feb;7(2):e161-e166. doi: 10.1016/S2589-7500(24)00218-8. Epub 2024 Dec 20.PMID: 39709281
- Improving modelling for epidemic response: a progress update from a community of UK infectious disease modellers. Sherratt K, Carnegie AC, Kucharski A, Cori A, Pearson CAB, Hill EM, Fearon E, Nightingale E, Villabona-Arenas J, Pi L, Davies NG, van Elsland S, Funk S, Liu Y, Abbott S.Interface Focus. 2025 Sep 26;15(4):20250007. doi: 10.1098/rsfs.2025.0007. eCollection 2025 Sep 26.PMID: 4101790
- Examining gender and ethnic disparities in scientific authorship to promote a culture of equity, diversity and inclusion at a university school of public health. Christen P, Michalow J, Naidoo T, Topazian H, van Elsland SL, Arif AM, Baguelin M, Clunie G, Essilfie-Quaye S, Fecht D, Garske T, Hassounah S, Husbands J, Kwok W, Leuba S, McCormack C, Mitchell KM, Pianella M, Pickles M, Ruybal SP, Schmit N, Udeh-Momoh C, Cori A, Blake I, Okell LC. Proc Biol Sci. 2025 Nov;292(2059):20250313. doi: 10.1098/rspb.2025.0313. Epub 2025 Nov 26.PMID: 41290157
- Contrasting the impact and cost-effectiveness of successive intervention strategies in response to Ebola in the Democratic Republic of the Congo, 2018-2020. Jombart T, Zeng W, Yao M, Cori A, Ahuka-Mundeke S, Samaha H, Wilkinson T, Mossoko M, Lokonga JP, Baabo D, El Kadiri El Yamini F, Eozenou PH, Yuma S, Mobula L. BMJ Glob Health. 2025 Apr 15;10(4):e015822. doi: 10.1136/bmjgh-2024-015822. PMID: 40234051
- Artificial intelligence for modelling infectious disease epidemics. Kraemer MUG, Tsui JL, Chang SY, Lytras S, Khurana MP, Vanderslott S, Bajaj S, Scheidwasser N, Curran-Sebastian JL, Semenova E, Zhang M, Unwin HJT, Watson OJ, Mills C, Dasgupta A, Ferretti L, Scarpino SV, Koua E, Morgan O, Tegally H, Paquet U, Moutsianas L, Fraser C, Ferguson NM, Topol EJ, Duchêne DA, Stadler T, Kingori P, Parker MJ, Dominici F, Shadbolt N, Suchard MA, Ratmann O, Flaxman S, Holmes EC, Gomez-Rodriguez M, Schölkopf B, Donnelly CA, Pybus OG, Cauchemez S.Bhatt S.Nature. 2025 Feb;638(8051):623-635. doi: 10.1038/s41586-024-08564-w. Epub 2025 Feb 19. PMID: 39972226
- Competing societal objectives in epidemic mitigation: a modeling study of COVID-19 in the Philippines. Johnson R, Castillo RCJT, Lubangco C, Teng TR, Tolentino M, Morgenstern C, Doohan P, Haw D, Forchini G, de Lara-Tuprio EP, Sescon JT, Hauck K. Front Public Health. 2025 Nov 3;13:1662043. doi: 10.3389/fpubh.2025.1662043. eCollection 2025.PMID: 41256275

Tribute to Professor Alice Gast

It is with deep sadness that we reflect on the passing of Professor Alice Gast (1958-2025).

As President of Imperial College London from 2014 to 2022, Alice helped shape one of the foremost global institutions in science, technology and medicine, and alongside that, played a pivotal role in the founding of the Jameel Institute in 2019, setting a foundation for rapid-response research in disease modelling and emergency analytics.

Under her leadership, the institute joined the front lines of the pandemic response, turning shared data into real-world policy and action.

Alice left a lasting legacy of international collaboration, scientific excellence, and the principle that research must serve society - one we strive to continue through our mission to combat disease threats worldwide. We will honour that legacy by redoubling our commitment to global health, to innovation, and to partnership across disciplines and borders.

Our heartfelt condolences go to Alice's family, her many colleagues and mentees, and the broader scientific community she inspired.