BUILDING A GLOBAL HEALTH COMMUNITY

Over the past 40 years, Oxford-linked teams have been building expertise in well-established research centres with headquarters in Kenya, Thailand and Vietnam. These Africa and Asia Programmes are born out of collaborations within low and middle-income countries (LMIC). The Programmes house some of the world's leading scientists working on health issues affecting some of the world's poorest people.

The **NDM Centre for Global Health Research** provides a new and extra dimension to this important work. Over the past decade, we have evolved from a small collection of researchers based in Oxford with strong links to these established Africa and Asia Programmes, to a large group of international experts working in partnerships across the world on issues impacting health globally.

Our vision is of a global health community working together to transform health for everyone, especially the most disadvantaged.

Investment in health research and development globally does not reflect global public health demands and needs.

Every year, lack of knowledge and poor disease management results in millions of people dying and many millions more suffering in LMICs from conditions that can be prevented or treated. Despite this, the world's research effort is focused predominantly on the health of highincome country populations while by far the greatest burden of preventable mortality and morbidity is in disadvantaged populations and low resource settings.

Inadequate health research across Africa, Asia and South America, reflects wider global inequalities. Researchers from LMICs need to be at the forefront of all efforts to generate and use knowledge that affects health in their countries. They should be part of and able to work with a global research community to develop better prevention, management, and treatment strategies so that good evidence can inform contextually appropriate and global policies and be delivered through stronger health systems that protect the most vulnerable.

The NDM Centre for Global Health Research is an enabling environment for globally connected health research.

Our mission is to be committed partners in world-leading global research networks that promote equitable knowledge sharing to advance and protect the health of the most vulnerable.

We are working towards this by:

- Building partnerships to tackle global health challenges especially those affecting the most disadvantaged.
- Advancing equitable international research collaborations and the methods and platforms that support these.
- Fostering interdisciplinary research and shared learning.
- Building capacity through a focus on the excellence of our postgraduate education and providing scientists' opportunities to develop their careers and research networks.
- Engaging with decision makers and practitioners to increase the impact from our shared research.

Building capacity and supporting research leaders in LMICs is central to the NDM Centre for Global Health Research's contribution to collective research efforts tackling health issues that affect the most disadvantaged. Our focus is to build truly global research networks which foster equitable

collaboration and promote actionable knowledge generation, sharing and use to improve health for everyone now and in the future.

We believe in a culture of knowledge sharing, where we learn from each other. We are building a global health community, bringing people together in equitable research partnerships based on trust, shared goals and recognition of our interdependent futures.

Working together

"We use the strength and research expertise we collectively have in global health and embed this within our teaching."

The NDM Centre for Global Health Research enables networking, collaborating, and sharing. The Centre comprises internationally recognised research groups, as well as Principal Investigators working in key areas of global importance. It also includes our highly successful MSc in International Health and Tropical Medicine. Our wider network includes our well-established partnerships and collaborations within the Africa and Asia Programmes and beyond.

Together we are improving the health of the world's most vulnerable people.

Africa Oxford Initiative (AFOX)

AfOx is a cross-university platform based at the University of Oxford with the aim of facilitating equitable and sustainable collaborations between researchers based at the University of Oxford and African universities, as well as increasing the number of African students pursuing postgraduate degrees in Oxford.

Antimicrobial resistance, antimicrobial consumption and burden estimation (MICRoBE)

MICRoBE is investigating and quantifying levels and trends of antimicrobial resistance and antimicrobial consumption to help inform policy and interventions. This includes quantifying health loss due to drug resistant infections (in collaboration with the Global Burden of Disease study), investigating the drivers of resistance as well as the impact of health system structures.

Drug resistant infections and disease dynamics (DRIaDD)

DRIaDD is improving health by reducing the burden of drug resistant infections and disease. This includes quantifying the burden of drug resistant infection globally, understanding how resistance genes circulate in the population, and developing effective interventions.

The Global Health Network (TGHN)

TGHN is working across all aspects of health research to embed it in places, diseases and regions where evidence is lacking, drive equity in who takes part and who benefits from the research, and to build lasting capable research teams in low resource settings.

Health Systems Collaborative

The Health Systems Collaborative works with partners in LMICs to strengthen health systems and improve health services delivery globally. The group employs methods spanning clinical epidemiology and the social sciences to tackle improvement in quality and safety, including patient

experiences, design and implementation in digital health, and work on human resources for health and community engagement.

Infectious Diseases Data Observatory (IDDO)

Launched in 2016, IDDO is a scientifically independent, multidisciplinary coalition of the global infectious disease community. It provides an environment for equitable data sharing as well as the methods and infrastructure to harmonise and translate data into evidence that improves outcomes for patients worldwide.

WorldWide Antimalarial Resistance Network (WWARN)

Established in 2009, WWARN is a collaborative data-sharing framework that proved it was possible to produce policy-changing scientific evidence from historical data.

International Health and Tropical Medicine MSc (IHTM MSc)

A full-time one-year multidisciplinary and interdisciplinary programme examining major challenges to the health of populations in resource limited contexts. The course embraces the breadth and complexity of global health challenges facing resource limited settings and equips candidates with the tools and awareness to contribute to innovative solutions.

Medicine Quality Research Group (MQRG)

Medicine Quality is researching substandard and falsified (SF) medicines to address key gaps in the evidence base in order to inform policy and interventions. This includes monitoring the epidemiology of SF medicines and investigating their impact, as well as providing innovative insights into how we can detect them and investigate them forensically.

Tropical Immunology

The Tropical Immunology group is focussed on developing vaccines for neglected tropical diseases and investigating the immune response to outbreak pathogens. Other research interests include exploring the interaction between diabetes and global infections.

We also have research expertise in neglected tropical diseases, a wealth of experience in clinical trials including challenge models, and in global health ethics and governance.

The NDN Centre for Global Health Research in numbers

Text for the diagram can be found at https://www.cghr.ox.ac.uk/about-us/impact/alternative-text-to-ndm-cghr-in-numbers

Data correct as of June 2022

Collaborating

Nuffield Department of Medicine

Centre for Tropical Medicine and Global Health:

- NDM Centre for Global Health Research
- OUCRU
- MORU
- KWTRP

University of Oxford

Our unique location enables us to collaborate in an interdisciplinary way with colleagues across Medical Sciences, Mathematical and Physical Life Sciences, and Social Sciences at the University of Oxford.

Globally

We build equitable partnerships with organisations and individuals to deliver practical solutions to health challenges which impact some of the world's poorest people. We also leverage our collective expertise to influence international efforts focused on tackling the most current and significant global health challenges.

"The NDM Centre for Global Health Research has a culture of collaboration, and together we create a positive joined-up environment in which to do research."

Global health challenges

"The NDM Centre for Global Health Research brings together global partners who have different perspectives, which maximises the advantages of us working together."

Our research is tackling current and emerging threats to health.

We are identifying, increasing understanding of, and developing solutions to some of the world's most serious health challenges through global partnerships. Our worldleading research on infectious diseases and neglected tropical diseases includes immunology, microbiology, diagnostics, therapeutics and vaccines, with established programmes on antimicrobial resistance (AMR) and the management of severe illness within poorly resourced health systems. From these foundations our multidisciplinary work encompasses research on medicines quality, implementation science and broader health systems challenges spanning governance to care quality.

The NDM Centre for Global Heath Research is using this expertise to develop programmes of work in strategic cross-cutting platforms, which are providing the opportunities for us to tackle the wider issues currently impacting global health together.

Better data and evidence

We actively promote improvements in research practice to ensure all trials and studies can produce and share better data, as well as fully harness the power of secondary analysis, regardless of their resource level. This enables the development of the highest quality evidence required by decision makers at practice and policy levels.

Innovation and implementation

New health practices, technologies and innovations are being developed all the time. Our research is identifying and evaluating these, as well as examining the mechanisms by which countries can implement them. We are using this knowledge about the most effective, evidence-based practices, technologies and innovations to improve health globally. SHARING KNOWLEDGE

Sharing knowledge and strengthening capacity

Working with our partners, we are developing tools and enhancing approaches for sharing knowledge within the global health community. The NDM Centre for Global Health Research currently offers internationally available and recognised training, including our MSc in International Health and Tropical Medicine which is supported by teaching from the Africa and Asia programmes. We are also continuing to evolve more bespoke training and development opportunities, to ensure that capacity strengthening efforts address the current and future needs of different global regions, providing early-career researchers with the foundation they require to launch successful research or policy careers in global health. This includes the huge range of evidence-based online courses offered by The Global Health Network, which are available worldwide.

Enhancing policy and practice

We are working with policymakers and practitioners at all levels, in order to ensure that decisionmaking related to health is based on the most up-to-date evidence. As part of this our research staff are active members of a range of advisory boards, contribute to policy discussions, as well as regularly provide evidence to bodies such as the World Health Organization. The NDM Centre for Global Health Research is also building understanding more widely for a range of global health issues by developing public engagement and stakeholder engagement activities.

Strengthening health and research systems

The NDM Centre for Global Health Research is strengthening health and health research systems through applied research. We are conducting comparative multi-country research, as well as developing systems and strategies which enable health service redesign, promote appropriate ethical oversight and moreeffective governance.

Our community

"In the NDM Centre for Global Health Research we are sharing values, sharing connections, sharing ideas and sharing resources."

The NDM Centre for Global Health Research is building a global health community through equitable partnerships and collaborations that promote knowledge sharing and mutual learning. Together we will improve health for everyone.

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