

NATIONAL
RESEARCH
FOUNDATION
PRIME MINISTER'S OFFICE
SINGAPORE

Health Data Research UK and National Research Foundation Singapore formalise landmark partnership in health data science

London, 2 October 2024 - Health Data Research UK (HDR UK) and the National Research Foundation Singapore (NRF) are pleased to have signed a Memorandum of Understanding (MoU) today, that formalises a collaborative partnership in healthcare and data science. The partnership will leverage cutting-edge data science and research, with a focus on trustworthy data use to power improvements in healthcare, research and innovation, strengthening existing links between the UK and Singapore.

The MoU was signed by Permanent Secretary for National Research and Development Professor Tan Chorh Chuan and Director of Health Data Research UK, Professor Andrew Morris. The signing was witnessed by Deputy Prime Minister and Chairman of the National Research Foundation, Mr Heng Swee Keat.

A visionary collaboration for impactful health data research at scale

This partnership reinforces the UK's position as a leader in health data science, and Singapore as a centre of research excellence that is transforming health through precise medicine. The partnership offers HDR UK and its UK partners a unique opportunity to share their expertise on an international stage, whilst learning from key international partners and institutions. Together, HDR UK and NRF will explore opportunities to use health data research to address pressing healthcare challenges, ensuring the benefits of this collaboration extend beyond their borders, impacting healthcare systems and patient outcomes worldwide.

Professor Andrew Morris, Director of Health Data Research UK said:

"To revolutionise healthcare, we must harness the power of whole system intelligence. This involves monitoring patient trajectories through primary, secondary, and tertiary care continuously and in real time. By collaboratively enhancing our capabilities, we can not only improve patient outcomes but also build a robust global research platform. This will power the ethical and trustworthy use of data worldwide.

"This partnership represents our collective dedication to unlocking the vast potential of health data. It ensures that our joint advancements will deliver tangible, worldwide benefits, setting new standards in medical research and innovation."

The collaboration represents a partnership of multiple Institutions; The University of Nottingham, Swansea University Medical School, the Agency for Science Technology and Research (A*STAR) and the Trusted Research and Real-world Utilisation and Sharing Tech (TRUST) Office, MOHT, will strengthen the partnership's ability to drive impactful health data research on a global scale.

Mr John Lim, Chief Executive Officer of the National Research Foundation, Singapore said:

"One of the key goals of Singapore's research, innovation and enterprise vision for health and biomedical sciences is to improve patient outcomes through new insights into the Asian genome and data-driven healthcare solutions. The data revolution in health, coupled with digitalisation in healthcare and advances in Artificial Intelligence (AI) including generative AI, has opened new frontiers in precision and predictive healthcare. The secure and responsible use of patient data has tremendous potential to transform healthcare systems and enable a healthier population through the early detection and treatment of diseases and chronic illnesses.

This collaboration will help advance the use of data science to improve healthcare at scale, bringing benefits to Singapore, the UK and beyond."

Key focus areas for the partnership

The HDR UK-NRF partnership will focus on several priority areas for collaboration, including:

- Accelerating trustworthy data use: By developing and sharing best practices in information governance, trusted research environments, and public engagement, the partnership aims to promote safe and trustworthy use of health data to foster public trust.
- International scale research: Cross-border research initiatives will be prioritised, utilising open data standards and federated analysis to address global health challenges, demonstrating the potential of large-scale data science collaborations between countries.
- Shaping the future of health data research: The partnership will drive innovation in health data research through joint publications, conference presentations, and educational initiatives, encouraging thought leadership, training and knowledge exchange.
- **Promoting equality, diversity, and inclusion**: With a focus on fostering positive research cultures, the collaboration will work to ensure that research outputs benefit everyone, everywhere, building a more inclusive global health ecosystem.

Exemplar projects paving the way

This collaboration builds on the work of a number of key partner initiatives in the areas of trustworthy information governance and frameworks, federated analysis of data and use of trusted research environments.

Professor Tom Rodden, Pro Vice Chancellor for Research and Knowledge Exchange, University of Nottingham said:

"The University of Nottingham is proud to be a signatory to this memorandum of understanding. Our teams within Health Informatics in the School of Medicine have been leading the way to help forge the relationships such that together the organisations can tackle global health challenges. Led by Prof Philip Quinlan and with support from our excellent Digital Research Service, they have been developing tools using open-source software and open standards to assist partnering organisations'

ability to rapidly share access to data and insights to improve response times to crises such as pandemics or natural disaster. Critically, they have helped to foster interdisciplinary research by bringing experts from different fields to work on complex health problems and further facilitate development of tools, models and platforms saving time while also fostering innovation in health data analytics and visualisation."

Simon Thompson, Professor of Health Informatics and Co-Director of SAIL Databank based in Population Data Science at Swansea University Medical School said:

"This collaboration demonstrates our commitment to utilising health data and advanced in-house technology to make a real-world impact. By collaborating with international partners, we can accelerate the development of innovative solutions that improve healthcare outcomes, not just in the UK but globally. This partnership between the UK and Singapore exemplifies the power of shared knowledge and expertise in addressing important health challenges. By sharing best practices in data governance and fostering cross-border collaboration, we can ensure that our research not only delivers scientific breakthroughs but also upholds the highest standards of data security, inclusivity, and public trust. We are excited to continue contributing to the success of this partnership and to help shape the future of healthcare."

Dr Sebastian Maurer-Stroh, Executive Director, A*STAR Bioinformatics Institute (A*STAR BII) said:

"With our knowledge, expertise and experience in biomedical data analytics and data governance, A*STAR BII is well-positioned to advance secure cross-border population-level data analytics and research. As we evolve towards a more personalised and integrated healthcare system, we are committed to developing and testing use cases that will enhance patient care and drive towards better healthcare outcomes for Singapore, UK and beyond."

Mingshi Koh, Director, TRUST Office, MOHT said:

"The TRUST (Trusted Research and Real-world Utilisation and Sharing Tech) platform is proud to collaborate with partners in the UK and Singapore to advance global health data research.

Through partnerships with these trusted research environments and partners, we are excited to participate in the development of common standards, secure data sharing, analytics tools, as well as best practices in data governance and skills building. This will create many new opportunities for world-class, cross-border research collaboration that will lead to meaningful benefits for both countries and beyond."

This partnership represents a significant step in unlocking the power of data globally to improve health and care, with both organisations committed to working closely with researchers, clinicians, and patients to ensure that the benefits of data science reach people worldwide.

Notes for Editors:

- Photos of the signing ceremony will be issued by 7pm on 2 October 2024. NRF's media contact will disseminate the photos to news desks.
- Health Data Research UK is the national institute for health data accelerating trustworthy use of health data to enable discoveries that improve people's lives. It is a charity funded by UK Research and Innovation, the Department of Health and Social Care in England and equivalents in Northern Ireland, Wales and Scotland, and leading medical research charities.
- Read more about the HDR UK COALESCE study of the whole UK population here: https://www.hdruk.ac.uk/news/first-whole-uk-population-study-reveals-impact-of-covid-19-under-vaccination/
- The National Research Foundation, Singapore (NRF) sets the national direction for research and development (R&D) by developing policies, plans and strategies for research, innovation and enterprise. It also funds strategic initiatives and builds up R&D capabilities by nurturing research talent. Learn more about the NRF at www.nrf.gov.sq.
- Read more about Singapore's efforts in transforming healthcare and improved patient outcomes through new insights into the Asian genome and data-driven healthcare solutions at https://www.npm.sg

For further information or interview requests, contact:

Suzanne Walker National Research Foundation Suzanne_walker@nrf.gov.sg

Mobile: 98738181

HDR UK Communications team media@hdruk.ac.uk +44 7594 514007 Or visit https://www.hdruk.ac.uk/