



ODeSI

Operational Research and Decision Support for Prevention, Control and Elimination of Infectious Diseases

Emerging infectious diseases (EIDs), vaccine preventable diseases (VPDs), and neglected tropical diseases (NTDs) are of international significance, especially in Asia-Pacific, and present many mutual challenges.

Shared critical needs include more timely and sensitive surveillance, rapid evidence synthesis, transparent risk-benefit analysis, effective risk communication, accountable decision making, and user-friendly decision support tools.

The ODeSI Program aims to address these critical needs and provide practical solutions for effective management of EIDs, NTDs, and VPDs, with a focus on the unique challenges in Australia and Asia-Pacific.

Research undertaken as part of this Program will support evidence-based, data-driven, transparent, and accountable decision making by providing operational frameworks and technological platforms that can be rapidly adapted for different diseases and countries.

The Program will harness advances in data science, digital health, and information technology to develop innovative digital solutions and tools to combat infectious diseases. Active engagement with decision-makers from leading institutions in Australia and globally will ensure rapid translation of outcomes into clinical and public health policy and practice.

The ODeSI Program will extend the capability and reach of UQ's ID-NET team - internationally recognised for their expertise in neglected tropical diseases, emerging infectious diseases, vaccine preventable diseases, and travel medicine.

Our Partners

Our partners are involved in operational research and/or decision making for infectious diseases at clinical or public health levels. Many of them are already actively engaged with UQ experts and will be crucial to the success of the ODeSI Program.

Coalition for Operational Research on NTDs (COR-NTD), Task Force for Global Health, USA:

A community of researchers, program implementers and country partners with the shared goal of optimizing NTD control and elimination through operational research on NTDs, advocacy, and translation.

James Cook University (JCU) - WHO Collaborating Centre for Vector-borne and Neglected Tropical Diseases:

JCU has been supporting control of vector-borne and neglected tropical diseases since the initial designation as a World Health Organization Collaborating Centre (WHOCC) in 1996. The ODeSI program will continue UQ's longstanding collaborations with JCU on operational research into NTDs and global health, with a focus on the Asia-Pacific region.

Harvard Humanitarian Initiative (Program on Infectious Diseases and Epidemics):

The Harvard Humanitarian Initiative (HHI) is a university-wide academic and research center in humanitarian crisis and leadership. UQ is a collaborator for the HHI's Infectious Diseases and Epidemics Program, sharing operational research to inform interventions and policies to prevent and control of emerging infectious diseases.

Immunisation Coalition: Australia's leading voice in immunisation, collaborating with professional bodies and government to champion education, information sharing, and translation through engagement with clinicians and the public.

National Centre for Immunisation Research & Surveillance (NCIRS): NCIRS is the leading research organisation in Australia that provides objective expert advice on all aspects of vaccine preventable diseases to inform policy and planning for immunisation services in Australia.

Royal Australian College of General Practitioners (RACGP): The RACGP is the professional body for general practitioners in Australia and is responsible for maintaining standards for quality clinical practice, education and training, and research in Australian general practice.

Clinical Research & Evidence Synthesis at Travel Medicine Alliance (CRESTMA): The Travel Medicine Alliance is a network of travel medicine clinics around Australia and CRESTMA is a national leader in research in clinical travel medicine research and vaccine preventable diseases in travellers.

QIMR Berghofer: One of Australia's most successful medical research institutes, translating discoveries from bench to bedside for a better future of health. As part of the ODeSI partnership, the Institute will work with UQ across the areas of operational research on mosquito-borne diseases, surveillance, laboratory diagnostics, and translation.

Australian Defence Force Malaria and Infectious Diseases Institute (ADFMI): The ADFMI is a world-recognised centre for malaria research and training with expertise and research programs in drug resistance and diagnostics, drug evaluation, clinical studies and surveillance, vector surveillance and control, and arboviruses.

CSIRO eHealth: CSIRO manages national research facilities and scientific infrastructure on behalf of Australia to assist with the delivery of research. The Australian e-Health Research Centre is CSIRO's digital health research program, enabling digital transformation of healthcare to improve services for Australia and the world.

Queensland University of Technology (QUT) Centre for Data Science: QUT is a major Australian university partnering on the ODeSI program in the area of data-driven decision science to solve complex problems in health and medicine.

Australian National University (ANU): A major Australian university partnering with the ODeSI program in the application of software engineering, information systems, and spatial analytics to develop data-driven decision support tools.

Further Queries

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Facts at a Glance

Through the Vice-Chancellor's **Health Research Accelerator (HERA)** initiative, the University of Queensland (UQ) is investing in a new health and medical research model and capabilities to address the most pressing health and medical research challenges of our time.



\$50M

UQ commitment to the HERA Programs to recruit outstanding researchers



115+

UQ researchers and collaborations



75+

Partner organisations involved in one or more HERA program



9

UQ Faculties and Institutes contributing expertise



7

HERA programs of Research and Innovation

