



INDEMIC
Indonesia Infectious Disease
Modelling Community



“Infectious Diseases Modeling for Health Policy and Research” 13-16 October 2025

Iqbal Elyazar

Principal Lead of SHIELD PAPUA

Indonesia Partner Representative of SPARKLE

Head of Geospatial Epidemiology Program OUCRU Indonesia

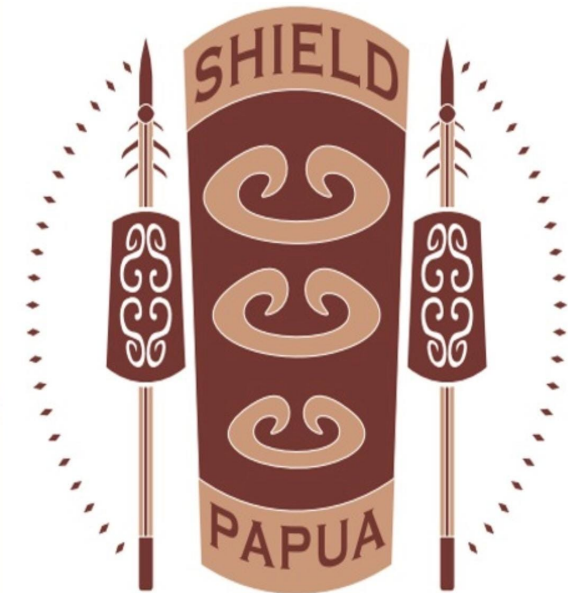
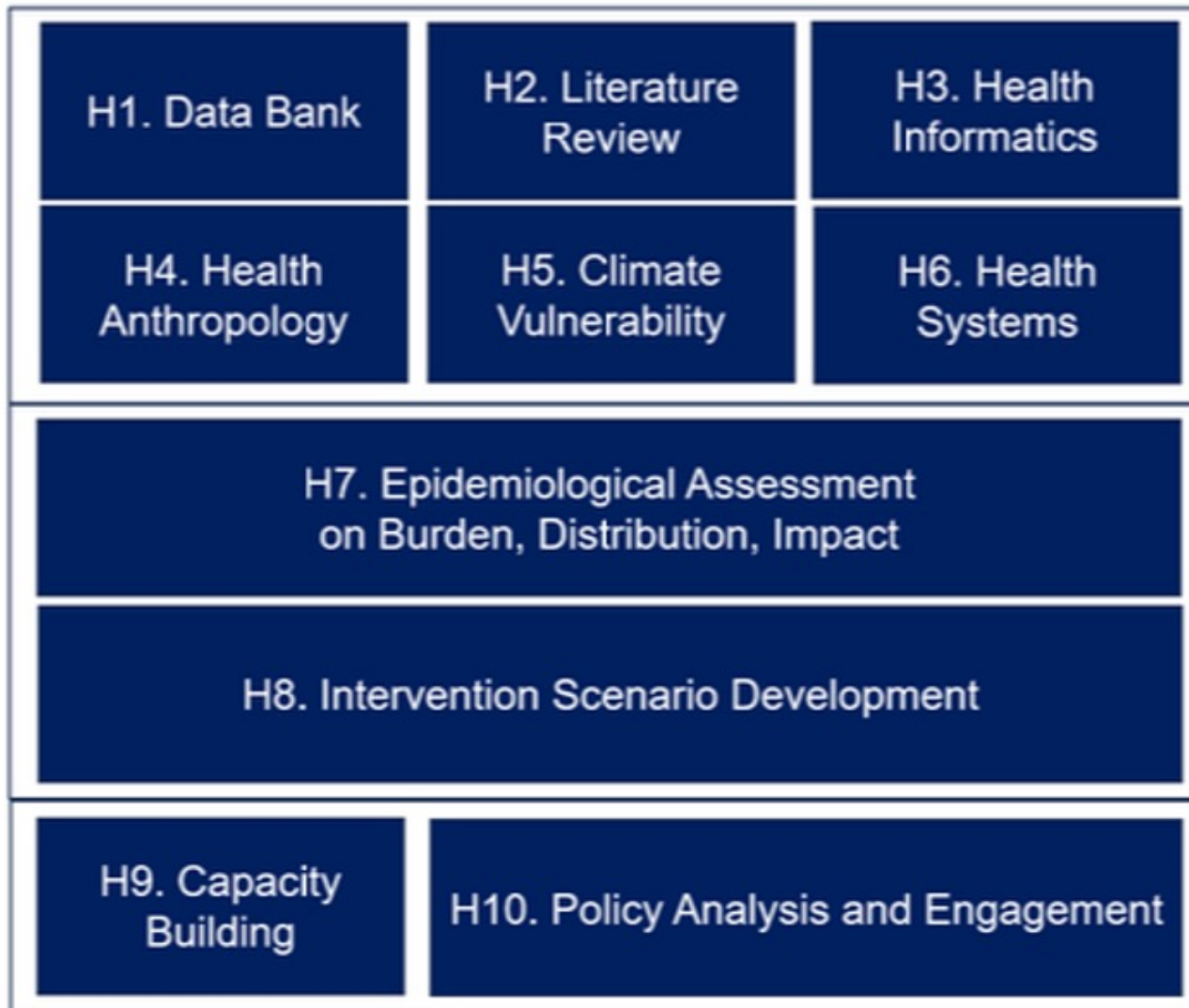
Adjunct Associate Professor Monash University Indonesia

Associate Research Fellow University of Oxford

Our Motivation

- 1) To obtain better knowledge of **infectious disease problems** in Papua
- 2) To pioneer and maintain a **research network** on infectious disease modeling in Papua
- 3) To facilitate **partnerships** between **modelers** and **policymakers** for evidence-based public health interventions
- 4) To strengthen mathematical **modeling skills** among local health researchers by introducing the application of R software in infectious disease modeling

Strengthening Health Initiatives for Eliminating Infectious Diseases in Papua (SHIELD PAPUA)



Ethical Approval from
the Ethical Committee of
Faculty Medicine,
Universitas Indonesia,
2025

H1. Data Bank

H2. Literature
Review

H3. Health
Informatics

H4. Health
Anthropology

H5. Climate
Vulnerability

H6. Health
Systems

H7. Epidemiological Assessment
on Burden, Distribution, Impact

13-16 Oct

H8. Intervention Scenario Development

13-16 Oct

H9. Capacity
Building

H10. Policy Analysis and Engagement

SUPPORTERS



A program supported by the Australian Government
and implemented by the Doherty Institute



SPARKLE

Strengthening Preparedness in the Asia-Pacific Region
through Knowledge, Learning and Education

Australian Government Department of Foreign Affairs and
Trade's Centre for Health Security funded initiative

2024 -2027

Asia-Pacific Strategic Partnership for Infectious Diseases

Objectives

Improve equitable health outcomes by anticipating, preventing, detecting, and controlling communicable diseases threats.

Themes for program delivery

- Partnerships for systems strengthening
- Workforce development
- Data for decision making
- Laboratory strengthening
- Global emergency preparedness

5 priority work areas



eLABorate

Enhancing laboratory accuracy and biosafety for outbreak response in the Asia-Pacific through education



COMBAT-AMR

Combating the threat of antimicrobial resistance across the Asia-Pacific region



BRIDGe

Building resilience to infectious diseases globally through genomics



HIT3

Hepatitis B integration into Triple Elimination



SPARKLE

Supporting preparedness in the Asia-Pacific region through knowledge, learning and engagement



A program supported by the Australian Government and implemented by the Doherty Institute

Asia-Pacific Strategic Partnership for Infectious Diseases SPARKLE



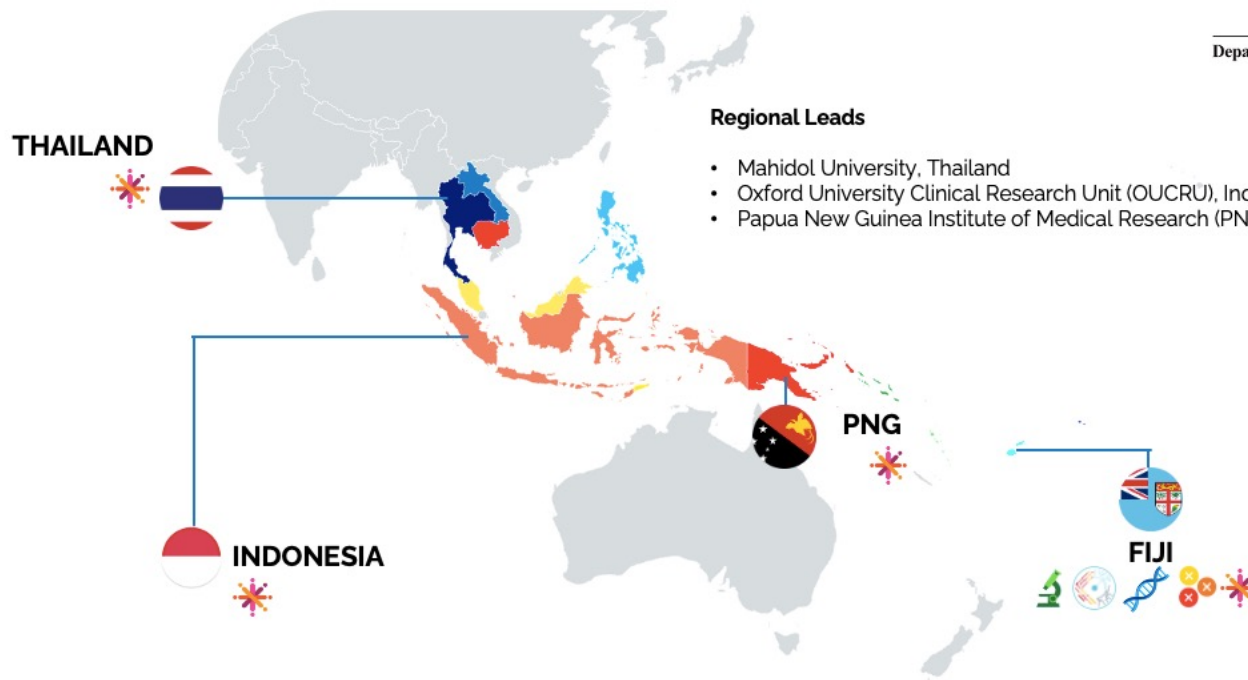
A joint venture between The University of Melbourne and The Royal Melbourne Hospital



Australian Government
Department of Foreign Affairs and Trade



Prof Jodie McVernoon



Regional Leads

- Mahidol University, Thailand
- Oxford University Clinical Research Unit (OUCRU), Indonesia
- Papua New Guinea Institute of Medical Research (PNG IMR), Papua New Guinea

**PRIORITY
WORK
AREAS**



eLABorate
Laboratory
strengthening



COMBAT-AMR
Antimicrobial
Resistance



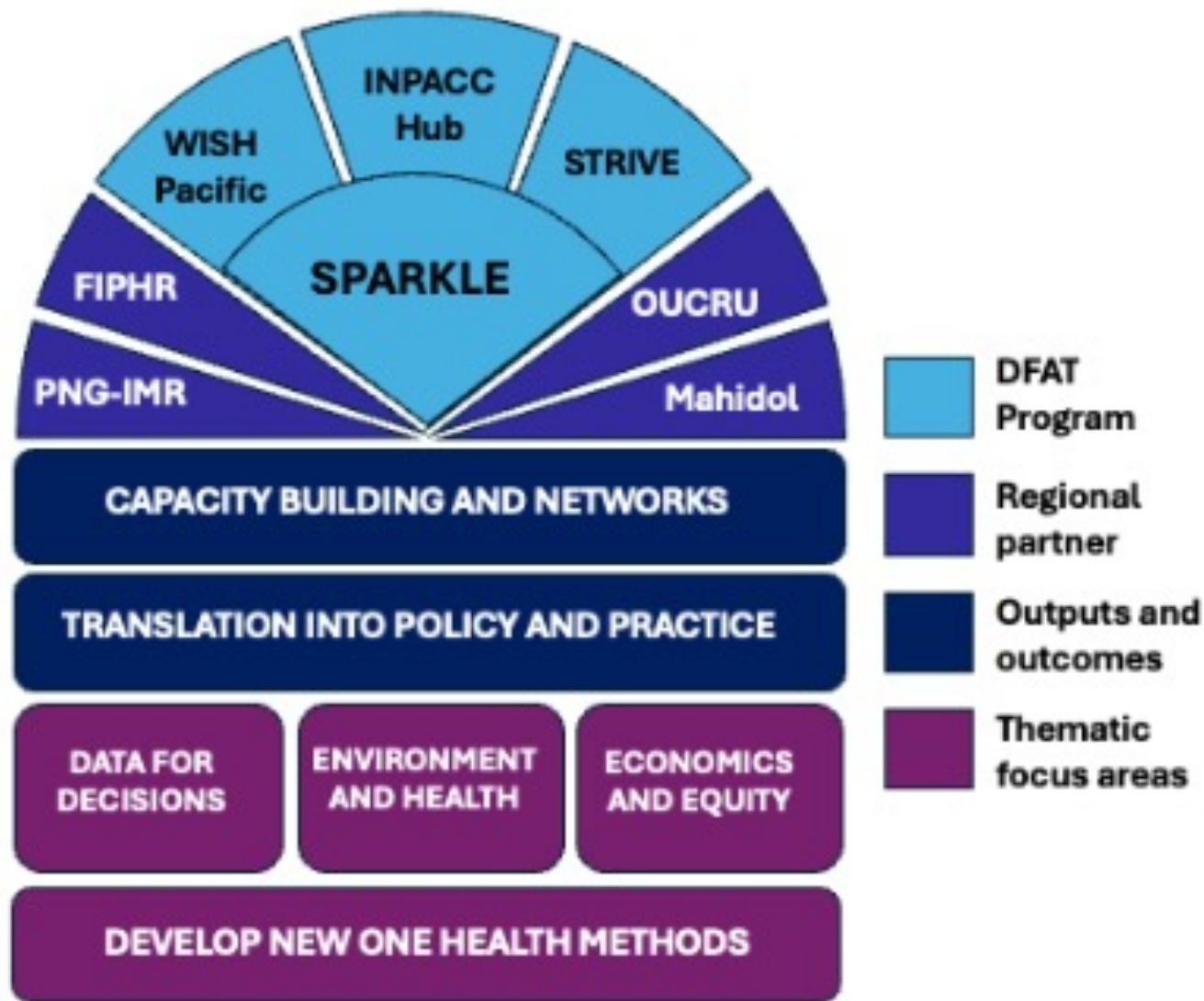
BRIDGE
Pathogen
genomics



HIT3
Elimination of
Hep B



SPARKLE
Data for
decision making



SPARKLE works at the intersection of climate science, health systems, policy and community knowledge, turning research into real-world solutions that enable the region to prepare for and adapt to endemic and emerging infectious disease outbreaks.

GEDSI is considered at all levels of project planning and implementation.

PNG-IMR: Institute Medical Research

FIPHR: Fiji Institute of Pacific Health Research

WISH Pacific: Watershed Interventions for Systems Health

STRIVE: Stronger Surveillance for Vector-borne Pathogens

Strengthen regional data for decision capability by enhancing surveillance systems, analysis methods and skills to gather, integrate, report and act on cross-sectoral data using a One Health approach

A. Augment surveillance systems, data and knowledge in collaboration with existing DFAT regional programs

- STRIVE
- WISH-Pacific
- INPACC-Hub

B. Partner directly with regional Institutes and Universities to support in country capability strengthening of skilled individuals

- PNG-IMR
- FIPHR (FNU)
- Mahidol University
- OUCRU Indonesia

C. Provide training and capacity development opportunities for regional EMCRs and decision makers

- Workshops/courses
- Fellowships, exchange
- EMCR network
- Seed funding

Included Countries:



PNG



Fiji



Indonesia



Thailand



Viet Nam

Oxford Clinical Research Unit Indonesia - OUCRU



Nuffield Department of Medicine
CENTRE FOR TROPICAL MEDICINE AND GLOBAL HEALTH

[Site Map](#) [Accessibility](#) [Contact](#) [Cookies](#) [Log in](#)

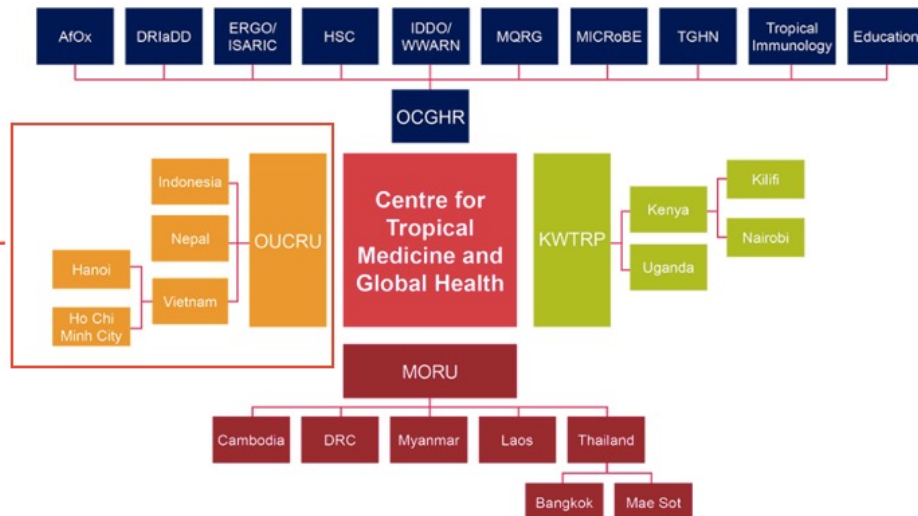


[NEWS](#) [RESEARCH](#) [MEET OUR RESEARCHERS](#) [TEAM](#) [PUBLICATIONS](#) [EVENTS](#) [STUDY](#) [PER](#) [JOBS](#) [SOPS](#) [ABOUT](#)

Search

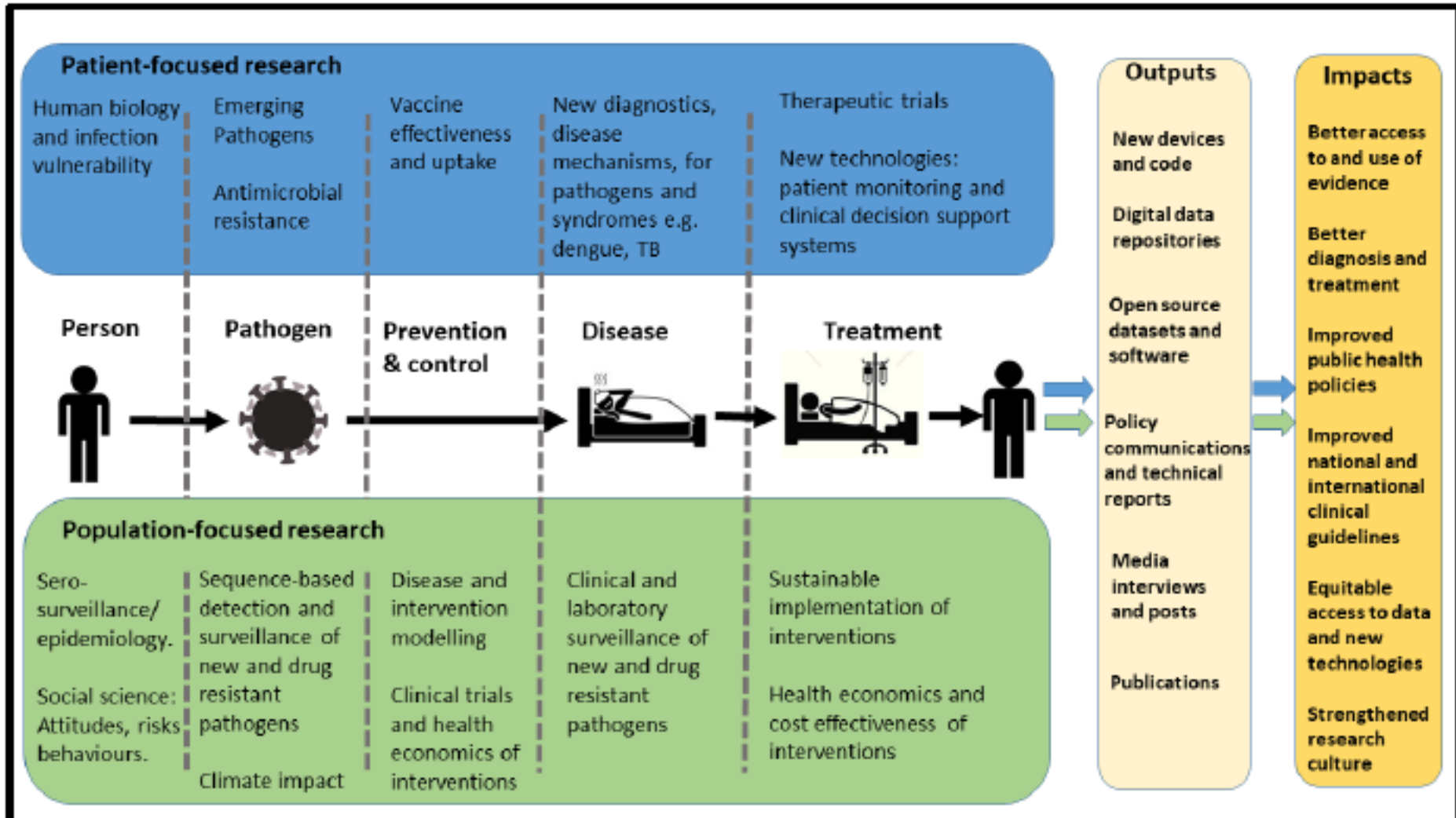


OUCRU Programme



RESEARCH ORIENTATION

The **Oxford University Clinical Research Unit (OUCRU)** is a large-scale clinical and public health research unit with site offices in Viet Nam, Indonesia, and Nepal.



OUR ACHIEVEMENTS

What We Accomplish Through The Years

178

Clinical Trials Completed

2,500

Publications

+80

Local Partnerships

128

PhD Graduates



OUCRU Indonesia - established since 2008 (n= ~ 250).



Expected Outcomes

- 1) Better knowledge of infectious disease problems in Papua
- 2) Start a research network on infectious disease modeling in Papua
- 3) Early partnerships between modelers and policymakers
- 4) Better mathematical modeling skills



Dr Bimandra
Djaafara



Dr Kartika
Saraswati



Prof Hasmi



Dewi Christina
MSc



Tyas Widayati
MSc



Rahmat
Sagara MSc



Dr Ihsan
Fadilah



Dr Asik
Surya



Dr Lenny
Ekawati



A/Prof Henry
Surendra



Prof Pandji
Dewantara



Jatri Ningrum



Dr Trish
Campbell



Dr Michael
Lydeamore



A/Prof Roslyn
Hickson



Laura
Bannerman

