





# Australian Institute of Tropical Health and Medicine (AITHM), James Cook University, Cairns

# **PARTNER TYPE:**

Academic

# **MEMBER SINCE:**

2012

### **CONTACT PERSON:**

Prof Tom Burkot tom.burkot@jcu.edu.au

### WEBSITE:

www.aithm.jcu.edu.au

# INSTITUTION BACKGROUND

The Australian Institute of Tropical Health and Medicine (AITHM) is a flagship research institute of James Cook University (JCU) and Australia's only dedicated tropical health and medicine research institute. AITHM is focused on solving problems of importance to the tropics, leading to improvements in health systems and healthcare delivery, improved biosecurity, and enhanced health outcomes for Australians and its neighbouring nations.

### PARTNER INSTITUTION ENGAGEMENT WITH APMEN

JCU and APMEN jointly conducted research in multiple Asia Pacific countries (Bangladesh, Bhutan, Cambodia, China, Indonesia, Lao PDR, Malaysia, Nepal, Papua New Guinea, Philippines, Sri Lanka, Solomon Islands, Thailand, Viet Nam) assessing the needs and capabilities of national malaria programs in conducting vector surveillance activities.

Together with APMEN's Vector Control Working Group (VCWG), JCU has provided technical oversight and mentoring in the course on Malaria Vector Surveillance for Elimination (MVSE) in 2019. Through the MVSE course, JCU has helped train participants from APMEN countries in different trapping methods. JCU has also contributed to the design of interventions for a proof-of-concept study on alternative vector surveillance methods in Thailand and Viet Nam.

JCU investigated country and regional surveillance activities, and their alignment with indicators for priority vector surveillance objectives as recommended by the WHO. The study has revealed opportunities for increasing vector data collection on priority indicators and using these data for decisions for proactive insecticide resistance management and enhanced vector control in the region.

# **CORE EXPERTISE AND FUNCTIONS**

# **Technical Support, Training and Operational Research**

JCU has research teams that work to understand, contain and prevent outbreaks and spread of vector-borne diseases, focusing on malaria (Anopheles) and dengue (Aedes). Three target areas include:

- 1. Improving vector surveillance through capacity building in developing countries
- 2. Providing a biological understanding of vectors to identify vulnerabilities and select novel interventions
- 3. Defining the interactions of humans and mosquitoes (where and when transmission to humans occurs residual transmission)

