Dr Patchara Sriwichai is currently an instructor and research scientist at the Department of Medical Entomology at Mahidol University in Thailand. She gained her PhD in tropical Medicine in 2007, from Mahidol University, which built on her Bachelors and Masters of Science in Medical Technology conferred at the same institution.

For her fellowship, Dr Sriwichai studied under Professor Ivo Mueller, Joint Head of the Population Health and Immunity Division at the Walter and Eliza Hall Institute of Medical Research, based in Melbourne, Australia.

Currently the border regions of Thailand, in particular those borders it shares with Cambodia and Myanmar, are some of the worst areas affected by malaria. In addition to environmental reasons, these border regions also host many migratory groups, which complicates the response during malaria outbreaks. In these situations, accurate and informative epidemiological models are important for responding correctly.

In consultation with the statisticians and epidemiologists working at the Walter and Eliza Hall Institute, Dr Sriwichai analysed data on malaria cases along the Thai-Myanmar border. This data was used to develop statistical models to help predict and respond to malaria issues in the Thai-Myanmar border region.

Following on from the work done during her fellowship, Dr Sriwichai, with collaborators, has authored two new research articles on topics relating to malaria epidemiology: ‘Imported P. falciparum and locally transmitted P. vivax: Cross-border malaria transmission scenario in Northwestern Thailand’ and ‘Evaluation of CDC light traps for mosquito surveillance in a malaria endemic area on the Thai-Myanmar border’.

The information and techniques learned during her stay in Australia have helped Dr Sriwichai to develop new epidemiological studies to help get a better picture of the region surrounding the border and to make her research more effective. Other techniques learned during the fellowship will help Dr Sriwichai create new vector trapping techniques and early warning systems for the border regions.