



Researchers from Faculty of Tropical Medicine won the NRCT Outstanding Research Award 2013 from National Research Council of Thailand

## Radio Australia interviews Dr. Direk

Sepsis: what it is and why it's a public health challenge

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Print

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Thailand, Vietnam and Indonesia will join forces to study the deadly medical condition, Sepsis.

Sepsis, or the body's poor response to an infectious disease, accounts for a substantial number of deaths in the region.

Preliminary results from a Thai study show that one in six patients died, after presenting with sepsis.

Presenter: Sen Lam

Speaker: Dr Direk Limmathurotsakul, assistant professor, Faculty of Tropical Medicine, Mahidol University, and Director of the Southeast Asia Infectious Clinical Research Network



Sepsis is caused by the immune system's response to a serious infection, most commonly bacteria. (Photo: Mariana Bazo) (Credit: Reuters)



## Silom Community Clinic @TropMed

### Faculty Board Meeting in July



Dr. Timothy H. Holtz introduced Silom Community Clinic @TropMed to the Board members. He talked about the history/background, roles, mission and major interesting projects/activities of Silom Community Clinic @TropMed.

## TM Green

5 June 2014







## WorldWide Antimalarial Resistance Network (WWARN) Asia Regional Centre

**R**oof garden at the MAEMOD (Mathematical And Economic Modelling) and WWARN on 11<sup>th</sup> floor., Chamlong Harinasuta Building. The opening party was held on 26<sup>th</sup> June with food, drinks and fun games. Hope the people who joined had learned some basic modelling concepts!



▲ Ball activity at the party where people can simulate how diseases spread without Maths Equations and Computer Programming.

◀ Prof. Sasithon joined the party with staff from the malaria molecular staff and modelling team.



### New Research Assistant

**B**IKEN Endowed Department of Dengue Vaccine Development is really a small unit, where we have only three staffs including a secretary. Fortunately, Ms. Duangjai Oddgun, called "Meaw" joined us as a research assistant on 1st May 2014. On her profile, she was born in Uttaradit Province, North of Thailand. She received the Degree of Master of Science in Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University. After graduation, she worked as a research assistant for one year to study on influenza viruses and enteroviruses at Siriraj Influenza Collaborative Research Center, Siriraj Hospital. Unfortunately, there was a background that the project will be completed and her contract will expire soon.



*(Meaw with BIKEN staffs: the second left)*

Changing the research area may sharpen and improve one's skills. Now, she feels that it is a great opportunity to learn several things that she never could do before. Specifically, she is involved in two research projects. One is Indonesia-Japan-Thailand (INiTha) collaboration on dengue previously described in our Inter News (No.3). Another is a newly initiated project collaborating with MOCID, Mahidol-Osaka Center for Infectious Diseases. In both projects, she is working for analyzing dengue virus-neutralizing and enhancing antibodies in patients and healthy individuals in Thailand.



*(Meaw working in our lab)*

By the way, what does Meaw like to do in her free time? She is a member of South Korean Dramas and Television Series Fan Club. She enjoys her time for watching Korean series. When the new episode is released, she never misses it. The most favorite series is "Heartstrings" (2011): a youth drama about love, friendship and dreams, set against the backdrop of a performing arts college.



*(Welcome new staff party with Pizzas)*

### Visitor from Japan



*(Ms. Nanayo Yada visited our lab: middle)*

Ms. Nanayo Yada visited us on 12th May 2014. She is a 6th grade student at Faculty of Medicine, Kyoto University, Japan. This Faculty has a unique education program at 4th grade called 'My Course', in which students can make a research/training plan by themselves: the research/training can be done even at foreign laboratories/hospitals. In this education course, she stayed for 3 weeks in the Christian Medical College and Hospital, Vellore, India. This time at her 6th grade, she was interested in spending a part of her 6-grade training period in Thailand. She stayed in the Hospital for Tropical Diseases, Faculty of Tropical Medicine, Mahidol University for the first week starting from 12th May, followed by 2-week training at Khon Kaen Hospital.

Ms. Yada was able to apply Clinical Observership at the Hospital for Tropical Diseases by kind introduction of Dean Yaowalark Sukthana and Deputy Dean Emsri Pongponratn. Ms. Yada had a precious time at the Travel Clinic and Fever Clinic under the supervision of Dr. Watcharapong Piyaphanee and Dr. Teera Kusolsuk. Her experience also extended to observation at physicians visiting their inpatients at the hospital ward, as well as another hospital in Chonburi Province to which she was taken by physicians at the Hospital for Tropical Diseases. She was happy learning so many things during her stay at the Hospital. She greatly appreciated warm hospitalities provided by everybody in Thailand.



### Dengue partners' coordination meeting

On June 16, Malaria Consortium supported the National Dengue Control Programme and World Health Organization in Cambodia to convene the first dengue partners' coordination meeting. The meeting was held during the same week as Association of Southeast Asian National (ASEAN) Dengue Day meeting on June 15th, where regional health ministers met to address priority actions and key messages surrounding the disease. The focus of the first meeting was on sharing information about the surveillance of dengue in order to inform what needs to happen next to further strengthen surveillance and response. The next meeting will focus on vector control methods.

### Improving malaria outcomes through a positive deviance approach

A new Learning Paper recently published by Malaria Consortium reflects on the impact of malaria on mobile and migrant populations in north-west Cambodia, through an approach known as positive deviance. The project is the first time positive deviance has been used for malaria prevention and control and findings from the project indicate that this innovative community-based approach can be a successful behaviour change communication tool for malaria prevention and control. The paper also provides a range of recommendations covering many different aspects of positive deviance and malaria, and is available at: [www.malariaconsortium.org/resources/pubdev/301/](http://www.malariaconsortium.org/resources/pubdev/301/).

### Pneumonia diagnostics

A new programme, launched by Malaria Consortium and supported by the Bill & Melinda Gates Foundation, aims to improve diagnosis of pneumonia in rural areas where there is an urgent need for easy-to-use and accurate diagnostic tools to detect symptoms of pneumonia. Working in partnership with ministries of health, the programme covers Cambodia, Uganda, South Sudan and Ethiopia – four countries which have a high proportion of under-five deaths caused by pneumonia. A key element of the project is the creation of a multi-disciplined Scientific Advisory Committee, which brings together pneumonia experts, biomedical engineers, device manufacturers, from around the world and international agencies such as the World Health Organization and UNICEF.

The programme, which started last year and finishes in June 2015, is reviewing existing respiratory rate mobile phone apps and timing tools and pulse oximetry devices appropriate for low resource settings. It will also explore the acceptability and usability of these as perceived by caregivers, community health workers and front-line health facility workers. To learn more and keep updated about the project, visit [www.malariaconsortium.org/projects/pneumonia-diagnostics](http://www.malariaconsortium.org/projects/pneumonia-diagnostics).

### Malaria Consortium joins APMEN

Malaria Consortium has recently become a member of the Asia Pacific Malaria Elimination Network (APMEN), a network comprising 14 Asia Pacific country partners with the common goal of malaria elimination in the region. "The elimination of malaria and containment of resistance in Asia – both drug resistance and insecticide resistance – are key priorities for Malaria Consortium and we are delighted to join the APMEN network," said Malaria Consortium's Asia Programme Director, Henry Braun.

Malaria Consortium has been working in Southeast Asia since 2003 and currently provides support to national malaria control programmes in the Greater Mekong Sub-region (GMS) to strengthen the region's capacity to scale up malaria elimination activities. This includes working with ministries of health and other key partners on plans to move toward the pre-elimination and elimination stages of malaria control as appropriate. More of Malaria Consortium's work in Asia at: [www.malariaconsortium.org/where-we-work/asia-mainpage.htm](http://www.malariaconsortium.org/where-we-work/asia-mainpage.htm).

### Download Malaria Consortium's new brochure for Myanmar, which outlines our work and focus in Myanmar: \_

#### Understanding vector behaviour

On World Health Day 2014, Malaria Consortium highlighted the increasing risk to populations worldwide from vector-borne diseases. Despite significant international investment, malaria remains the most deadly vector-borne disease. A scale up of malaria prevention and control measures have also resulted in a reduction in mortality rates, but the malaria parasite and its mosquito vector have developed a resistance to previous control measures.

Understanding vector behaviour is a key component of Malaria Consortium's work, and the Beyond Garki project, funded by UKaid /Department for International Development seeks to understand recent changes in the malaria epidemic. The project is currently being carried out in Ethiopia, Uganda and Cambodia and aims to support health services to monitor changes in malaria and understand the impact of current interventions. The project will also enable recommendations to reduce the global impact of malaria. More information on the project can be found at [www.malariaconsortium.org/beyondgarki/](http://www.malariaconsortium.org/beyondgarki/).





### Webinar on community health worker motivation and performance

An online webinar by Malaria Consortium's inSCALE project discussed some of the main obstacles faced by community health workers (CHWs) and what is being done to address them through work being currently implemented in Mozambique and Uganda. The inSCALE project aims to improve CHW motivation and performance in order to provide better treatment for sick children.



The webinar panel discussed how both technology and community-based interventions were designed and implemented. Preliminary findings from a process evaluation were also discussed, including how the provision of mobile phones, solar lamps and chargers has impacted on CHW supportive supervision, performance and other aspects which may influence CHW motivation. The presentations, full discussion and Q&A session can be accessed at: [www.malariaconsortium.org/news-centre/malaria-consortium-presents-at-webinar-on-community-health-worker-motivation-and-performance.htm](http://www.malariaconsortium.org/news-centre/malaria-consortium-presents-at-webinar-on-community-health-worker-motivation-and-performance.htm)

### New Comer



Pavan Singh is a Pharmaceuticals Sales & Marketing professional with over 13.5 years of experience in diverse therapy areas ranging from cardiovascular & diabetes, anti-infective, antibiotics, dermatological, respiratory and pain management. Currently working as Group Product Manager in marketing department of GSK India based at Mumbai. His current responsibilities at GSK include - devising strategies for furthering the assigned brands, plan brand initiatives for creating differentiation and make annual brand plans. He has successfully conducted more than 200 scientific promotional meetings and implemented many PMPs (patient management programs) in field. He is a science graduate and has completed his executive MBA from Indian Institute of Management-Lucknow.

At Malaria Consortium Bangkok, he will be working as an external communication volunteer. He is looking forward for a wonderful learning and hope that he can add some value to achieve mission of Malaria consortium - to improve lives in Africa and Asia through sustainable, evidence-based programmes that combat targeted diseases and promote child and maternal health.



## Collaboration with Airlangga University, Indonesia

On 30<sup>th</sup> April to 4<sup>th</sup> May, Dr. Okabayashi visited Institute of Tropical Disease (ITD), Airlangga University, Indonesia for a collaboration on “Development and clinical evaluation of a new rapid immunochromatographic diagnostic test kit to detect chikungunya virus antigen”. To evaluate the cross-reactivity for the rapid diagnosis kit, under development by MOCID, chikungunya virus isolated in Indonesia and serum samples of chikungunya case in Indonesia, kindly provided by ITD, were used. From Indonesia-side, Dr. Soegeng Soegijanto, Dr. Kris Cahyo Mulyantno, Ms. Siti Churrotin, and Dr. Tomohiro Kotaki have supported and joined this project.



Dr. Kotaki and Dr. Kris



Dr. Kotaki



Dengue/ Chikungunya suspected case

## Visiting MOCID by Ministry of Education, Culture, Sports, Science and Technology, (MEXT), Japan

On 27<sup>th</sup> June, MEXT, Japan (Dr. Tsuchiya Sadayuki, Deputy Minister, Mr. Arakawa Atushi, Director for International Cooperation and Mr. Ozawa Takashi, International Science and Technology Affair Division) visited MOCID. Dr. Okabayashi

(MOCID) and Dr. Takeda (RCC-ERI) from the headquarters of Thai-research groups joined and introduced the activities of each research group.



Dr. Tsuchiya (center) and Mr. Arakawa (right)



Dr. Takeda (left) and Dr. Tsuchiya (right)



### Dr. Masanori Kameoka from Kobe University Graduate School of Health Sciences paid a visit to the Faculty of Tropical Medicine, Mahidol University

On July 4, 2014, Dr. Tamaki Okabayashi, Deputy Director of MOCID introduced Dr. Masanori Kameoka, HIV expert, from Division of Infectious Diseases, Department of International Health, Kobe University Graduate School of Health Sciences to Dr. Emsri Pongponratn, Deputy Dean for International Affairs of the Faculty of Tropical Medicine, Mahidol University. They had discussed on possible research and student exchange collaborations in the future between Kobe University and Faculty of Tropical Medicine, Mahidol University.



### Researchers from Faculty of Tropical Medicine won the NRCT Outstanding Research Award 2013 from National Research Council of Thailand



The National Research Council of Thailand announced the NRCT Outstanding Research Award 2013 goes to Assoc. Prof. Dr. Pongrama Ramasoota, Director, Center of Excellence for Antibody Research (CEAR), Faculty of Tropical Medicine and team; Dr. Pannamthip Pitaksajjakul, Dr. Ladawan Sariya, Dr. Chonlatip Pipattanaboon, Dr. Chayane Setthapramote, Ms. Sujittra Keadsanti and Mr. Surachet Benchatummuruk together with Collaborators from Osaka University, Japan; Prof. Dr. Kazuyoshi Ikuta, Assoc. Prof. Dr. Tadahiro Sasaki and Assoc. Prof. Dr. Tamaki Okabayashi, for their Research work entitled "Therapeutic and Diagnostic Monoclonal Antibodies Against Tropical Diseases".

### MOCID's new publication

Neutralization of chikungunya virus by a monoclonal antibody that recognizes the envelope 1 protein and inhibits virus release. Promsin Masrinoul, Orapim Puiprom, Atsushi Tanaka, Miwa Kuwahara, Panjaporn Chaichana, Kazuyoshi Ikuta, Pongrama Ramasoota, and Tamaki Okabayashi. Virology, in press.

Chikungunya virus (CHIKV) causes an acute clinical illness characterized by sudden high fever, intense joint pain, and skin rash. Recent outbreaks of chikungunya disease in Africa and Asia are a major public health concern; however, there is currently no effective licensed vaccine or specific treatment. This study reported the development of a mouse monoclonal antibody (MAb), CK47, which recognizes domain III within the viral envelope 1 protein and shows neutralizing activity. CK47 inhibited the viral release process, thereby preventing the production of progeny virus. The MAb had no effect on virus entry and replication processes. Thus, CK47 may be a useful tool for studying the mechanisms underlying CHIKV release and may show potential as a therapeutic agent.





## Bill and Melinda Visit MORU's Pailin TME site



*All photos © Bill & Melinda Gates Foundation*

**19** April 2014 - Bill and Melinda Gates, their team and representatives of other malaria NGOs visited the Targeted Malaria Elimination (TME) study in Pailin, Cambodia. The TME study looks at the epidemiology and role of treatment of subclinical falciparum malaria, and is a collaboration between MORU and the Cambodian National Malaria Control Program.

Hosted by Prof Arjen Dondorp and Drs Rupam Tripura and Tom Peto, the Gates visited Phnom Dambang village. There, they chatted with the village malaria worker and met villagers whose families suffered from malaria before effective malaria control and people successfully treated this year. Cambodia has seen an amazing decline in malaria incidence and mortality over the past decade and the government has committed to eliminating falciparum malaria completely.

The Gates Foundation has pushed the malaria elimination agenda. MORU is thankful for this, for their funding of the TME studies in South-East Asia, and for sharing these photos from Melinda and Bill's visit to Pailin. All photos © Bill & Melinda Gates Foundation.

Shown here, clockwise from top left: Lek Dysoley, Char Meng Chuor, Tom Kanyok, Bill Gates, Alan McGill, Melinda Gates, Arjen Dondorp and Chris White; Rupam shows Bill and Melinda the study; Bill and Melinda are welcomed by Tom Peto, Nou Sanann and Rupam Tripura; and the Gates listen to villagers experiences of malaria.

To read more about the visit and malaria in Cambodia, go to Bill Gates' blog, <http://www.gatesnotes.com/Health/What-It-Takes-to-Kill-Malaria-Mosquito-Week>



## MAEMOD's jamboree garden party

26 June 2014 - Grey skies and a steady dripping rain couldn't dampen the mood as MORU's Mathematical Modeling Department (MAEMOD) and the World Wide Anti-Malaria Resistance Network (WWARN) welcomed colleagues to their offices and freshly landscaped rooftop garden atop the Chamlong Harinasuta Bldg. After Lisa, Wan, Ben and colleagues ran visitors through an analog mathematical modeling exercise, folks settled down to snacks, libations and taking in the garden and its Mahidol and Bangkok views.



## Saving brains in Ghana



9 June 2014 - Jem Chalk (left) and Tom Peto (right) conducted a monitoring visit to Navrongo Health Research Centre in Ghana, one of the sites for Prof Abul Faiz and Dr Melba Gomes' Saving Brains Study. They are shown here with study field workers and Dr. Selasi Sefanu (far right, blue shirt), the team leader and senior study physician

Funded by Grand Challenges Canada (GCC) and sponsored by Oxford University, the Saving Brains study is conducting neurocognitive assessments of survivors among the severely ill children in Bangladesh and Africa who, as part of a WHO study in 2001-2006, received artesunate suppository treatment to quickly treat their severe malaria. Besides Navrongo, other study sites are Kilosa and Handemi, Tanzania, and in Chittagong, Bangladesh.

Although malaria mortality has decreased in the years since the WHO's 2001-2006 rectal artesunate study, malaria control remains a health priority in Ghana. Principal Investigator Dr Frank Baiden will help implement new treatment and testing guidelines this year.

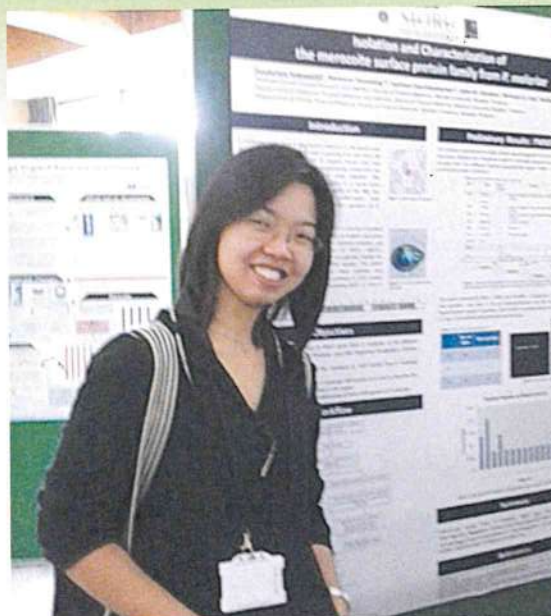


## GEM 2014: Congratulations, Supatchara!

16 June 2014 - Last week was a big one for MORU's Supatchara Nakeesathit, whose poster won the Most Challenging Project prize at GEM 2014, the fifth annual Genomic Epidemiology of Malaria conference, held 8-11 June at the Wellcome Trust Genome Campus, in Hinxton, Cambridge, UK.

GEM provides a common forum for malaria scientists and clinicians working at the interface of genome science and technology, epidemiology, and statistical and population genetics, with an interest in understanding the clinical and biological consequences of genome variation in malaria-exposed populations.

This year's GEM explored the genomic epidemiology of the host, vector and parasite, highlighting the practical relevance of this research to global health, including anti-malarial drug resistance, insecticide resistance, vaccine design, and mechanisms of protective immunity. MORU speakers at GEM 2014 included Arjen Dondorp, Olivo Miotto and Lisa White.



## Frank's poster wins top prize

Shown here with MORU Pharmacology PhD students, MORU PK/PD post-doc researcher (pharmacometrician) Frank Klopogge (centre) won the Best Poster Award at the



7<sup>th</sup> Noordwijkerhout Symposium on Pharmacokinetics, Pharmacodynamics and Systems Pharmacology. Held April 23-25, 2014 in Noordwijkerhout, The Netherlands, the meeting brings together scientists with an interest in in vivo pharmacodynamic investigations to discuss the latest developments in pharmacokinetic-pharmacodynamic (PKPD) modelling. This year, the symposium focused on the emerging discipline, Systems Pharmacology.

Titled, 'Pregnancy lowers the exposure of dihydroartemisinin; what is next, increase the dose or extend the treatment?', Frank's study aimed to characterize the population pharmacokinetics of oral and intravenous artesunate in pregnant and non-pregnant women in Thailand.

It found that malaria and pregnancy had opposite effects on the pharmacokinetics, and suggested that more modeling (pooled analyses) and confirming clinical studies to optimize the dosing regimens for pregnant women in their second and third trimester with uncomplicated malaria be undertaken.

## Thai colleagues visit MORU BSL 3 lab

MORU hosted visitors from Khon Kaen University and Thailand's National Institute of Animal Health (NIAH) who came to observe MORU's BSL3 lab operations and get guidance on BSL3 lab construction, management and maintenance.

On 28 May, MORU Safety Officer Dr. Stuart Blacksell, Senior Microbiologist Vanaporn (P'Lek) Wuthiekanun and Biosafety Administrator Soiratchaneekorn (Tarn) Ruanchaiman organized a visit to MORU's BSL3 Lab by Khon Kaen University staff and BSL3 building committee members Dr Kaichai Faksri and Dr Umaporn Yordpratum.

On 3 June, Stuart, P'Lek and Tarn welcomed Dr. Preecha Wongwicharn and his BSL3 building committee members from Thailand's National Institute of Animal Health (NIAH).





## TRAC 2 gets DFID funding

2 June 2014 - Last week Nick White brought the good news that the UK's Department for International Development (DFID) had agreed to allocate £6.9m for the Tracking Resistance to Artemisinin Collaboration (TRAC) 2 study extension. Liz Ashley says they hope to sign the contract in the coming days so preparations can start in earnest to hire key project staff, including a new coordinator.

As with TRAC – which studied artemisinin resistance in 1,200 patients from 15 sites in 10 countries – the main objective for TRAC 2 is to provide information and tools to delay the spread of artemisinin resistant malaria. Again there will be three principal components to TRAC 2 research, all coordinated by MORU, with WWARN responsible for lab quality assurance for the clinical studies.

Clinical, the first TRAC 2 component, will build on TRAC's work with more detailed mapping of artemisinin resistance particularly in Myanmar, in strategic locations in Asia, and baseline artemisinin resistance data from Africa. The clinical component will also evaluate if artemisinin resistance compromises the efficacy of IV artesunate for severe malaria in Vietnamese patients.

The demand factors component will conduct research to determine the critical socio-behavioural factors contributing to the emergence and spread of drug resistance. It will be led by Shunmay Yeung at London School of Hygiene and Tropical Medicine (LSHTM) and include behavioural studies linked to the clinical research, to studies looking at the acceptability and cost-effectiveness of malaria elimination strategies, to mathematical modelling of population risk of the spread of artemisinin resistance, and to policy analyses to understand better the gap between artemisinin resistance research and policy and programme implementation.

Entomological research, led by SMRU and Institut Pasteur, Paris, will determine whether artemisinin resistant *P.falciparum*



*TRAC around the world: A make-shift clinic in a tea-garden, Jalpaiguri, West Bengal*

from Cambodia can infect important anopheline vectors in India and Africa – a key question when considering the likelihood of inter-continental spread.

In the last decade, artemisinin-based combination therapies (ACTs) and insecticide-treated nets have contributed to significant reductions of the malaria burden in many areas of the world. Losing ACTs to resistance would be a disaster for the control and treatment of malaria and bring elimination efforts to a standstill – and cause the deaths of millions worldwide to malaria.

TRAC was started in 2011 in response to the threat posed by the emergence of artemisinin-resistant malaria on the Cambodia-Thailand border. TRAC was a unique multi-centre, multinational collaboration led by MORU and funded by DFID and others to describe the epidemiology and spread of artemisinin-resistant *falciparum* malaria in South-East Asia and beyond.

## SMRU holds Border Health Malaria and Infectious Disease Forum

27 May 2014 - The Shoklo Malaria Research Unit (SMRU) held its annual meeting with non-governmental organisations (NGO) and other partners at the Huen Kam Fah Golf Resort in Mae Sot, Tak Province. Participants to the XXIV Border Health Malaria and Infectious Disease Forum exchanged data, experiences and the latest information on the current malaria situation in the uprooted populations living along the Thai-Myanmar border.

Presentations made by SMRU staff and NGO healthcare practitioners included emerging drug resistance among *P. falciparum* parasites; the appropriate treatment of *P. vivax*; the management of malaria in pregnant women; targeted malaria elimination (TME); and an overview of malaria epidemiology.

Other issues that were discussed included developing clinical emergency skills for medics and nurses; a review of lab-based tools in diagnosing malaria; melioidosis; new and future interventions to tackle the growing caseload of tuberculosis in the uprooted population; and other maternal and child health challenges including acute respiratory infections and neonatal sepsis.





## Off to Chittagong!



On 27 May, MORU researchers left for Chittagong, Bangladesh, where they will conduct severe malaria studies with Bangladeshi colleagues at the Chittagong Medical College Hospital, a large 1,000-bed facility that includes an intensive care unit that MORU helped establish a few years ago by providing courses in critical care management. They are shown here arriving at Bangkok's Suvarnaphumi Airport and with some of their baggage at check in.

The Chittagong group is part of MORU's Malaria research team. Led by Arjen Dondorp (Department Head and Deputy Director of the MORU) and Kesinee Chotivanich (Head of Laboratory Malaria), the Malaria Research team conducts treatment studies in severe and uncomplicated malaria, investigates the ever increasing problem of antimalarial drug resistance, and uses innovative tools to investigate the complicated pathophysiology of malaria.

## Testing Bangkok's rice fields for melioidosis



On Tuesday 27 May, a MORU team led by Viriya (Oh) Hantrakul conducted their last melioidosis soil sampling trip of this year at three Bangkok area sites – in Klong Sam Wa, Minburi and Nhong Jok. The sites were among 21 villages surveyed in 2014 in seven central Thailand provinces.

The soil sampling is part of a long-term study, set up at the initiative of Direk Limmathurtsakul, Head of Microbiology at MORU, that seeks to determine the distribution across Thailand of *Burkholderia pseudomallei* (Bp), the soil-based bacteria that causes melioidosis, a little-known, serious infection that kills nearly 500 people in Thailand every year.

Begun in 2013, the study aims to conduct soil surveys in 61 villages in 20 provinces across Thailand's central, eastern and northeastern regions, making it the largest environmental sampling ever conducted there for melioidosis. Last year, the study surveyed Thailand's eastern provinces. It will conclude in 2015 after surveying villages in northeast Thailand – the country's hotspot for melioidosis.

The number of people dying from melioidosis in northeast Thailand is now comparable to deaths from tuberculosis – and exceeds those from malaria, diarrheal illnesses and measles combined. Ubon Ratchathani province alone sees nearly 500 melioidosis cases a year. Patients who survive acute infection need to take oral antibiotics for 20 weeks to eradicate the bacteria and prevent relapse.

By combining this risk map of melioidosis in Thailand with true incidences of melioidosis as determined from another MORU project, the study hopes to lead to a greater understanding and awareness of the public health burden of the disease.



Although Thailand has more melioidosis cases than any other country – with over 2,000 melioidosis infections a year, 40% of which are fatal – *B. pseudomallei* is not uniformly distributed across the country's regions. Surveys show that the overwhelming majority of Thais have never heard of melioidosis and do not know how to protect themselves from it.

Although there is currently no promising vaccine candidate for melioidosis on the horizon, work done since 1986 by MORU in collaboration with Thai colleagues at Sapprasitprasing Hospital in Ubon Ratchathani have significantly reduced the mortality rate from patients diagnosed with melioidosis from 80 per cent to just under 40 per cent.

In addition, the 2013 eastern Thailand soil survey discovered a special variant of *B. thailandensis* that may show promise for vaccine development.

Soil sampling demands both physical and mental strength, says Oh, who thanked Direk, MORU Senior Microbiologist and a team that included BSL3 Lab Manager Premjit (Kung) Amornchai, Sayan Langlah (Lab Tech Micro), Ubon Lab Manager Gumphol Wongsuwan, and Palm, Ma and Jik for their hard work and support.



## Oxford management training in Bangkok



From 6-9 May, the Oxford Management Training team worked their magic at MORU Bangkok. Trainers Bill Dunn (Learning Advisor, OLI with Jonathan), Elena Mc Philbin (Head of HR, NDM) and Bethany Valentine (Senior HR Officer, NDM) gave courses on Time Management; Handling Conflict; Line Management: Giving and Receiving Feedback; Writing Personal Development Reviews or Appraisals; Bullying & Harassment; Unconscious Bias; and Recruitment & Selection to colleagues based in Bangkok and beyond. We caught up with folks in the midst of some focused work groups, the last day of training.



## Lab staff trained in biosafety



MORU Safety Officer Stuart Blacksell gave biosafety training to laboratory staff on 4 April. Over 65 participants attended included MORU scientists, lab technicians and physicians from Microbiology, Malaria and PK/PD Lab. Training covered the basics of biological safety, emergency scenarios, correct use of biosafety cabinets, appropriate disinfectants and a number of safety training videos. The training was organized by Soiratchaneekorn (Tarn) Ruanchaiman, MORU Biosafety & Occupational Health Safety Administrator. If you would like any specific safety training is then please contact [Tarn@tropmedres.ac](mailto:Tarn@tropmedres.ac) or [stuart@tropmedres.ac](mailto:stuart@tropmedres.ac). Stay safe!

## Data Analysis Training

Dr. Gamon Savatsomboon, faculty member of at Mahasarakham Business School (MBS) held a practical N-Vivo 10 Qualitative Data Analysis training workshop 4 April at MORU Bangkok. N-Vivo software helps organize and analyze qualitative research data and is also a resource for planning, literature reviews, team coordination, research designs and reporting.

The workshop aimed to give research team members from OUCRU, COMRU, Thammasat University, MORU, Mathematical Modelling and MORU Ubon Ratchathani a clear understanding of N-Vivo basic and advanced features, including coding in nodes, and creating graphs and diagrams. The workshop was initiated by the Data-sharing Project, with support from the Ethox Centre, a Wellcome Trust-funded multidisciplinary bioethics research centre in the University of Oxford's Nuffield Department of Population Health.







## Southeast Asian Ministers of Education Organization Regional Tropical Medicine and Public Health Network (SEAMEO TROPMED)

### SEAMEO Centre Directors Meeting (CDM 2014)



★ CDM 2014 was convened 24-26 June 2014 participated by Directors and high officials of the 21 Regional Centres of SEAMEO. Highlights of accomplishments of each centre were presented as well as future SEAMEO activities for further submission to the High Officials Meeting and SEAMEO Council Conference.

★ SEAMEO TROPMED Network was represented by Dr. Pratap Singhasivanon, Secretary General/Coordinator, Dr. Ma. Sandra B. Tempongko, Deputy Coordinator from the Network Office; Dr. Zakiah Ismail, Acting Director, and Dr. Noor Rain Abdullah of TROPMED Malaysia; Prof./ Engr. Romeo Quizon, Director & DR. Carmen Tulabing, SEAMEO Focal person from TROPMED Philippines; and Dr. Emsri Pongponratn, Focal person from TROPMED Thailand.

### SEAMEO Regional Study and Development of Post 2015 Regional Agenda



★ SEAMEO TROPMED Network Officials, Dr. Ma. Sandra B. Tempongko & Dr. Emsri Pongponratn, participated in two workshops related to this Regional Study and Development of Post 2015 Regional Agenda.

- Preparation of the Delphi Survey Questionnaire for the Regional Study
- Follow-up Meeting and Finalization of the Delphi Survey Questionnaire



## University of Tsukuba- SEAMEO Symposium” Bridging the ASEAN Community and Japan through Education”

Participants to the joint University of Tsukuba-SEAMEO symposium on “Bridging the ASEAN Community and Japan through Education” pose in a group photo at the University of Tsukuba campus, Ibaraki Prefecture, Japan. The symposium was convened on 21-23 February 2014 through the initiative of the Centre for Research on International Cooperation in Educational Development (CRICED), University of Tsukuba in collaboration with the SEAMEO Secretariat and with support of MEXT Japan.

A second symposium dubbed as “New Directions in Higher Education for the Development of Global Human Resources: Launching AIMS Programme in Japan” was also convened back-to-back with the first activity. The symposium was coordinated by SEAMEO RIHED.



★ Dr. Pratap Singhasivanon- Secretary- General/Coordinator of SEAMEO TROPED Network and Prof. Romeo Quizon, Director TROPED Philippines, participated in two symposium: (i) Joint University of Tsukuba-SEAMEO Symposium on “Bridging the ASEAN Community and Japan through Education; (ii) “New Directions in Higher Education for the Development of Global Human Resources: Launching AIMS Programme in Japan” at the University of Tsukuba campus, Ibaraki Prefecture, Japan.

## Inter-Regional Post intervention Evaluation of Disaster and Emergencies



★ Dr. Ma. Sandra B. Tempongko, Deputy Coordinator of SEAMEO TROPED Network, was invited to participate in the Inter-Regional Post intervention Evaluation of Disaster & Emergencies: Typhoon Haiyan Experience, by the Department of Health, Philippines in Camiguin Island, 17-19 June 2014.

## 2014 SEAMEO-Japan ESD Award

The competition is open to all public and private schools in Southeast Asian countries\*



**MEXT**  
SEAMEO-Japan ESD Award

**Call for Entries**



**Theme for 2014:**  
Fostering  
Global Citizenship for  
Sustainable Future

**Submission Deadline: 15 September 2014**

Do you have educational activities in your school to promote sustainable development by fostering students towards becoming good citizens of Southeast Asia and the World?

If yes, then we invite your school to participate in the **2014 SEAMEO-Japan Education for Sustainable Development (ESD) Award**. Grab the opportunity to win a study tour in Japan, cash prizes and to be recognized as a model of best practices in Southeast Asia.

The competition is open to all public and private schools in Southeast Asian countries.

Organisers:



Supporting Partner:



For more information, please visit [http://www.seameo.org/index.php?option=com\\_content&view=category&layout=blog&id=103&Itemid=558](http://www.seameo.org/index.php?option=com_content&view=category&layout=blog&id=103&Itemid=558)

For enquiry, please send an email to: [seameojapan.award@seameo.org](mailto:seameojapan.award@seameo.org) or contact us by telephone number: +66 (0) 2391 0144.



## 2014 SEAMEO-Jasper Research Award



The Southeast Asian Ministers of Education Organization and the Government of Canada  
**2014 SEAMEO-Jasper Research Award**

Theme:  
**"ACCELERATING REGIONAL MOBILITY IN SOUTHEAST ASIA  
THROUGH EDUCATION, SCIENCE AND CULTURE"**



For more information, please visit [http://www.seameo.org/index.php?option=com\\_content&view=category&layout=blog&id=109&Itemid=556](http://www.seameo.org/index.php?option=com_content&view=category&layout=blog&id=109&Itemid=556)

## SEAMEO-Australia Education Links Award 2014

**CALL FOR APPLICATIONS**  
 Last day of submission: 6 March 2015

SEAMEO-Australia  
Education Links Award 2014

For more information, please visit [http://www.seameo.org/index.php?option=com\\_content&view=article&id=511:seameo-australia-education-links-award-2014&catid=152&Itemid=591](http://www.seameo.org/index.php?option=com_content&view=article&id=511:seameo-australia-education-links-award-2014&catid=152&Itemid=591)

**SEAMEO-ACC SPORTS EDUCATION INNOVATION AWARD**

THEME:  
**Amity, Creativity and Development  
through Sports Education**

For more information, please visit [http://www.seameo.org/index.php?option=com\\_content&view=article&id=510&Itemid=595](http://www.seameo.org/index.php?option=com_content&view=article&id=510&Itemid=595)

**1st SEAMEO Youth Leadership Forum**  
 1-4 October 2014, Holiday Inn Sukhumvit 22, Bangkok, Thailand

**CALL FOR PARTICIPANTS**

We are looking for participants who are eager to develop their leadership knowledge and skills.

Young people with strong potential to lead the future generations of ASEAN citizens are invited to apply.

**THEMES**

- Developing future leaders of Southeast Asia
- Effective professional values and skills
- Managing the development of a changing world

**WHO CAN JOIN?**

- Nationals of SEAMEO member countries
- 18-24 years old
- Seniors or recent graduates of an undergraduate program
- With leadership experience

Funding for qualified participants is available

Application deadline: 8 August 2014

For more information visit

Website: [www.seameo-spafa.org/youthLeadershipForum2014.htm](http://www.seameo-spafa.org/youthLeadershipForum2014.htm)

Facebook: [www.facebook.com/seameoyouthleadershipforum](https://www.facebook.com/seameoyouthleadershipforum)

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Instagram: Seameo SPFAFA

For more information, please visit <http://www.seameo-spafa.org/youthLeadershipForum2014.html>

### Fellowships:

SEAMEO TROPED Network has recently provided fellowships to participants from SEAMEO TROPED Thailand to attend the following courses at the Institute for Medical Research, Kuala Lumpur, Malaysia.

- Diploma in Applied Parasitology and Entomology (14 July - 12 December 2014)
- Diploma in Medical Microbiology (3 February - 4 July 2014)

**Consultant:** Dr. Yaowalark Sukthana, Dean, Faculty of Tropical Medicine, Mahidol University  
**Editors:** Dr. Emsri Pongponratn, Deputy Dean for International Affairs and Jittapim Na Bangchang  
**Coordinators:** Peerawat Maipanich, Rattanawadee Nanlar, Siriprang Chotchaimongkol and Pimrumpai Boonyarit  
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