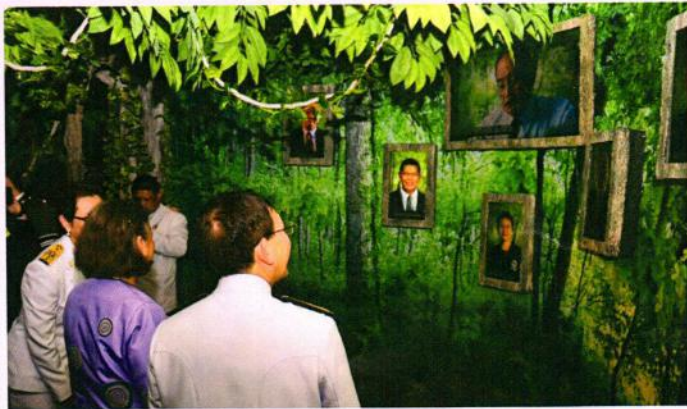




## The Opening Ceremony of Discovery Museum of Tropical Diseases







On 11 April 2016, Her Royal Highness Princess Maha Chakri Sirindhorn graciously presided over the Opening Ceremony of Discovery Museum of Tropical Diseases at the Faculty of Tropical Medicine, Mahidol University. Her Royal Highness was welcomed by Clin. Prof. Udom Kachinthorn, President of Mahidol University, Prof. Emeritus Santasiri Sornmani and Prof. Emeritus Tan Chongsuphajaisiddhi, Former Deans of the Faculty of Tropical Medicine, Mahidol University, Prof. Yaowalark Sukthana, Dean of the Faculty of Tropical Medicine, Mahidol University and the Faculty personnel.

## Congratulation messages from FTM's international collaborators





## Malaria Consortium symposium focuses on strengthening links between regional health systems and infectious disease control

More than 120 participants from the Greater Mekong Subregion attended a three-day symposium in Bangkok from 9-11 March. Participants included high-level representatives from seven national Southeast Asia malaria control programmes, donors, implementing partners, scientists, advocates, and community representatives.

Dr. Amnuay Gajeena, Director-General of the Thai Department of Disease Control, opened the symposium, advocating for harmonisation across national responses in order to eliminate malaria by 2030 and thanked Malaria Consortium for organising the event.

Delegates at the symposium discussed regional challenges and explored ways in which they could collaborate better to promote mutual exchanges of learning on key aspects of disease control and elimination, such as infectious disease management, strengthened surveillance and new advances through mobile technologies.

"We need to help those most at risk of malaria and neglected tropical diseases," said Charles Nelson, Malaria Consortium Chief Executive, during his closing remarks. "This is a matter of urgency. It is time to turn cross-border dialogue into cross-border action."

For more information, visit: <http://goo.gl/cXJnbx>



*Greater Mekong Subregion experts explored how strong health systems can respond to infectious disease challenges (©Malaria Consortium)*



*Participants at the workshop on the insecticide-treated clothing study (©Malaria Consortium)*



## Malaria Consortium workshop in Yangon explores public-private partnerships

Malaria Consortium hosted a dissemination and policy uptake workshop, in partnership with Insect Shield and the Myanmar Health and Development Consortium, following a recently completed insecticide-treated clothing (ITC) study in Yangon, Myanmar on 3rd March.

The workshop resulted in the development of key messaging around scaling up insecticide-treated clothing and the targeting of migrant and mobile populations in Myanmar as crucial steps in moving towards malaria elimination in Myanmar. Insecticide-treated clothing partly fills a gap in the personal protection of vulnerable populations who are exposed to bites during the night when malaria mosquitoes are most active and could become another tool for use by Myanmar's growing malaria control and elimination programme. Malaria Consortium's insecticide-treated clothing

study, the first of its kind in Myanmar, engaged rubber tappers, a high risk group in rural malaria-endemic areas, to understand their perceptions of ITC, and was conducted in collaboration with the Department of Medical Research, Ministry of Health.

More than fifty participants from health and other government bodies, public and private sector representatives, donors and non-governmental organisations discussed what role ITC could play in contributing to malaria elimination in Myanmar. Policy focused discussions looked at recommendations around the scale-up of ITC and public-private partnerships.

A press briefing took place alongside the workshop bringing together a panel of Malaria Consortium senior technical advisors and Ministry of Health representatives. Media coverage can be found in Myanmar Times, Myanmar Business Today and Frontier Myanmar.

For more information, visit: <http://goo.gl/5YDUS>



*Interactive session on next steps and recommendations around the scale-up of ITC and public-private partnerships (©Malaria Consortium)*



Two exchange medical students from Osaka University, Japan (Mr. Kananart Kongsakorn and Mr. Zhuan Jin) visited MOCID for learning and observation of infectious diseases research for 2 weeks (January 18th – February 5th, 2016).

**Welcome new staff to MOCID!**



Mr. Zhuan Jin and Mr. Kananart Kongsakorn who are exchange medical students from Osaka University, Japan (from the left to the right)

During their visit, exchange medical students from Osaka University, Japan performed experiments on infectious diseases such as Dengue and Chikungunya virus infections.



Dr. Orapim Puiprom and two exchange medical students from Osaka University, Japan were working in MOCID laboratory



Ms. Chatchailai Buasri

Ms. Chatchailai Buasri (Cartoon) (General Administrative Officer)

My name is Chatchailai Buasri, a new General Administrative Officer of MOCID. I studied at the Faculty of Liberal Arts, Mahidol University majoring in Thai language. I am glad to join MOCID. I will do my best. Nice to meet you all!



Ms. Juthamas Padungsombat

Ms. Juthamas Phadungsombat (Tack) (Research Assistant)

Juthamas Phadungsombat, a new Research Assistant of MOCID studied Microbiology in a field of Virology at Faculty of Medicine Siriraj Hospital, Mahidol University. I worked as a technician in Shoklo Malaria Research Unit and took responsibility for Malaria emulation survey in part of molecular PCR. It is my pleasure to work at MOCID and be at the Faculty of Tropical Medicine, Mahidol University.



During February 26th – March 27th, 2016, Dr. Orapim Puiprom and Mr. Aekkachai Tuekprakhon as MOCID team went to the Department of Viral Infections, Research Institute for Microbial Diseases, Osaka University, Japan to perform hybridoma screening together with Japanese researchers aiming for development of rapid diagnostic kit of Chikungunya virus infection.



Mr. Aekkachai Tuekprakhon performed experiments together with a Japanese researcher at Osaka University, Japan (on the left)



Dr. Orapim Puiprom performed experiments at Osaka University, Japan



Dr. Orapim Puiprom and Mr. Aekkachai Tuekprakhon at Osaka University, Japan

On March 7th, 2016, Prof. Tatsuo Shioda and Assoc. Prof. Emi C. Nakayama organized a private party for acknowledging the hard work of MOCID team during an entire year at Ban Puengchom restaurant.



Big Thank you to MOCID team



Mr. Dusit Promrug presented his proposal

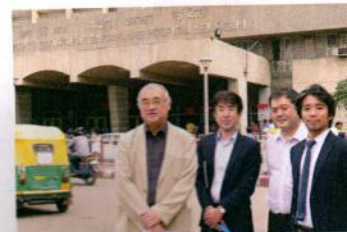
Antimicrobial activities for Antibiotic-Resistance bacteria and Dengue and Chikungunya virus".

Prof. Tatsuo Shioda visited Safdarjung Hospital and International Centre for Genetic Engineering and Biotechnology (ICGEB) in New Delhi, India during March 13th – 19th, 2016 for collaboration on Chikungunya virus research with Dr. Tadahiro Sasaki, Dr. Tamaki Okabayashi and Mr. Yasuyuki Kosaka (Arkray Company).



the left to the right) at Department of Microbiology, Safdarjung Hospital

Prof. Tatsuo Shioda, Mr. Yasuyuki Kosaka, Dr. Sasaki and Dr. Tamaki Okabayashi at Out-patient building of Safdarjung Hospital (from the left to the right)



developed in MOCID at Safdarjung Hospital (from the left to the right)

Prof. Tatsuo Shioda, Dr. Tadahiro Sasaki and Dr. Tamaki Okabayashi together with Indian researchers perform demonstration of Chikungunya detection kit which was



## Hatty New Year Party 2016

The "Hatty New Year Party 2016" was held on 25th December 2015 at the Faculty of Tropical Medicine. The members of our centre and Ms. Chatchailai, MOCID secretary joined this special event for celebrating the year of 2016, but unfortunately Dr. Konishi was in Japan and Lt1.Paweena worked at Hospital on this day. For the next New Year Party 2017, they should not miss to join together with us. In connection with the New Year week, we received 2016 New Year gift from Dean Yaowalark and Administrative Board. We thank them and greatly appreciate their kind support to us.



From left, Ms. Chatchailai, Ms. Chayada, Dr. Yamanaka and Ms. Varaporn at the New Year Party



2016 New Year gift

## Interview for Annual Review 2016

Office of Research Services (ORS) made an appointment with Dr. Eiji Konishi for an interview to prepare the Faculty Annual Review 2016. On 13th January 2016, Mr. Argon Steel, Assistant Research Administrator, Faculty of Tropical Medicine, visited our lab. Dr. Konishi told him about the recent progress in our research study on dengue and our international collaborative activity with the Faculty of Tropical Medicine.



Mr. Argon Steel and Dr. Konishi at Kanjika Devakul Conference Room

## Status of Graduate Students' Academic Research

First Lieutenant (Lt1.) Paweena Manmee is a Master student (Major in Infectious Diseases and Epidemiology) at the Faculty of Public Health (FPH), Mahidol University but makes experiments in BIKEN laboratory. She received an approval from the Ethical Committee for serum sample collection in 4 hospitals at 4 parts of Thailand; the North, South, Northeast and Central regions. Recently, she made a success in dengue virus isolation from collected sera. Now, she continues her efforts to isolate more virus samples.



Lt1.Paweena was trained for virus isolation by Dr. Yamanaka



## Dinner at Caf' G

On 25th February 2016, our centre had a special dinner for 2016 New Year Celebrations and the progress of academic researches on dengue made by 3 graduate students; Ms. Chayada Khamsawad and First Lieutenant (Lt1.) Paweena Manmee, Master students at the Faculty of Public Health, Mahidol University, and Dr. Hisham Ahmed Imad, a PhD student in Clinical Tropical Medicine at the Faculty of Tropical Medicine. At this time, we went to Café G Restaurant, Holiday Inn Bangkok for happy hour and happy meal.



At Café G; from left, Lt1. Paweena, Ms. Chayada, Drs. Hisham and Konishi, Ms. Varaporn and Dr. Yamanaka (left photo)/ Lt1. Paweena and Ms. Chayada (right photo)

## Visit by Dr. Meng Ling Moi

Dr. Meng Ling Moi (nickname; Sherry) had visited our BIKEN Laboratory in 2013 for a part of collaborative activities with Department of Virology 1, National Institute of Infectious Diseases, Tokyo, Japan as previously described in Tropical Inter News (January 2014). At this time, during 7 - 10 March 2016, Dr. Meng Ling Moi again visited our BIKEN laboratory. She is now an Associate Professor at Nagasaki University, Japan and continues to study on various aspects of dengue diseases. We are still collaborating with her on dengue antibody study and evaluation of serodiagnosis systems.



Drs. Meng Ling Moi and Atsushi Yamanaka at BIKEN Laboratory

At lunchtime, we have a mini welcoming party for Dr. Meng Ling Moi at Som Tum Khun Nuch Restaurant at the Faculty of Tropical Medicine. She ordered green papaya salad with crab (preserved crab with salt) and Pla Ra (fermented fish). She very much enjoyed this Northeast Thai food also known as "Isan food".



At Som Tum Khun Nuch Restaurant (from left, Ms. Varaporn Pongjaroen and Drs. Meng Ling Moi and Atsushi Yamanaka)



## Melioidosis paper makes headlines around the world



Figure 3 | Priority countries where microbiological diagnostic facilities and disease reporting systems for melioidosis should be strengthened. Countries where melioidosis is predicted to be endemic but is underreported or never reported are shown in red and pink, respectively.

Clockwise from top left: pale mauve *B. pseudomallei* colonies among non-pathogenic soil bacteria ©MORU 2016); Field workers gathering soil samples outside Bangkok as part of a long-running MORU study to determine the extent of *B. pseudomallei* presence in the environment (Photo by Gerhard Jörén, ©MORU 2016); Priority countries where microbiological diagnostic facilities and disease reporting systems should be strengthened (© Nature Microbiology 2016).

On 11 January, Nature Microbiology published online a paper, Predicted global distribution of *Burkholderia pseudomallei* and burden of melioidosis. Co-authored by MORU Head of Microbiology Direk Limmathurotsakul, with contributors who included LOMWRU's David Dance, MORU SEA Director Nick Day and Sharon Peacock, the paper raised global awareness of melioidosis. Predicting that melioidosis is present in 79 countries, including 34 that have never reported the disease, it called on public health authorities to give a higher priority to the disease.

The study is the first to provide an evidence-based estimate of the global extent of melioidosis, which is caused by *Burkholderia pseudomallei*, a highly pathogenic bacterium commonly found in soil and water in South and Southeast Asia and northern Australia.

Led by researchers at Oxford University (UK), the Mahidol Oxford Tropical Medicine Research Unit (MORU) in Bangkok, Thailand, the University of Washington in Seattle, and Mahidol University (Thailand), among others, the study is funded by the Wellcome Trust (UK).

## SMRU paper calls for artemisinins to replace quinine to treat falciparum malaria in 1st trimester pregnancies



A doctor and colleague examine a pregnant patient at an antenatal clinic at the Shoklo Malaria Research Unit (SMRU) on the Thai-Myanmar border. Photo by Gerhard Jörén, ©MORU/SMRU 2016.

Noting quinine's low efficacy, a paper published on 9 February by The Lancet Infectious Diseases urged health authorities to endorse artemisinins, the most effective antimalarials available, in the first trimester of pregnancy to ensure optimal treatment of falciparum malaria in pregnant women.

"Because of the risk of miscarriage or congenital abnormalities, doctors are justifiably worried about drugs in the first trimester of pregnancy. We found no evidence that treatment of malaria with artemisinins in the first trimester increased the risk of miscarriage compared with quinine treatment," said Ms. Kerry Moore, the study's author (photo right).



Malaria infects 125 million pregnant women annually, increasing the risk of maternal and infant death and impairing the development of children born to mothers infected during pregnancy.

"The study adds to the body of evidence that artemisinins do not cause adverse effects in pregnancy," said Nick White, South-East Asia chairman of MORU. "Its findings should help international authorities and national health programmes reconsider their treatment recommendations for women in early pregnancy and reassure women who receive artemisinins that the drugs are safe and unlikely to harm their unborn child."

Although malaria increases the risk of miscarriage, the study – which assessed all medical records of 55,636 women who visited Shoklo Malaria Research Unit (SMRU) antenatal clinics since 1994 – found no evidence that treatment with an artemisinin derivative was associated with an increased risk of miscarriage or congenital malformations. The study includes the largest number of confirmed first-trimester malaria treatments with artemisinins or quinine.

"Pregnant women are at high risk of malaria and miscarriage in first trimester, so effective treatment is imperative," said Rose McGready, Deputy Director of SMRU. "Artemisinin treatments are widely available, have excellent tolerability, and are very effective."

Led by researchers at the Shoklo Malaria Research Unit (Thailand), The University of Melbourne (Australia), and the Burnet Institute (Australia), among others, the study was funded by the Wellcome Trust (UK) and the Bill & Melinda Gates Foundation (US).



## MORU commended in risk group 3 microorganisms audit



On 11 February, staff from Thailand's Department of Medical Sciences, Ministry of Public Health led by Deputy Director Ms. Kwanruedee Limtongcharoen (centre) audited MORU. The audit primarily involved an assessment of security processes and staff matters regarding the obtaining, storage and distribution of risk group 3 microorganisms to ensure compliance with Thailand's Bureau of Pathogens and the Animal Toxins Act.

MORU was commended on running a first-class facility with high-quality security processes. The audit indicated that no rectifications were required. Based on the audit results MORU was issued with an import and export permit and a license to hold risk group 3 microorganisms.

MORU safety administrator Soiratchaneekorn (Tarn) Ruanchaiman, microbiology laboratory manager Premjit (Kung) Amornchai, and Lab Technician Ms. Malinee Oyuchua coordinated the visit. They were assisted by MORU Quality Manager Ms. Anna Annerberg, QA officer Ms. Pattira Intanil and MORU Unit Safety Officer Dr. Stuart Blacksell.

## TRACII holds its second investigators' meeting

The second investigators' meeting for the Tracking Resistance to Artemisinin Collaboration II (TRACII) study was held in Bangkok on 7 March. In all, 76 investigators representing 18 nationalities attended, including investigators from TRACII study sites in Laos, Cambodia, Vietnam, Thailand, Myanmar, Bangladesh, India and the Democratic Republic of the Congo together with collaborators from the London School of Hygiene and Tropical Medicine (LSHTM) and Institut Pasteur.

The TRACII study investigates the efficacy, safety and tolerability of triple artemisinin combination therapies (TACTs) compared to the dual therapies in conventional ACTs for the treatment of uncomplicated falciparum malaria. Testing this new approach is urgently needed because of increasing artemisinin and partner drug resistance in the region.

TRACII has started recruiting recently, with 175 subjects enrolled thus far in 11 sites in six countries. Six more sites will open in the upcoming malaria season. At the meeting, local investigators presented TRACII's progress in their sites. In addition the results of the first interim analysis were discussed. These showed good efficacy of Triple ACTs (TACTs) in the sites where reduced ACT efficacy is suspected or confirmed. Furthermore, the novel TACT regimes were well tolerated.

In addition to discussions on the core study, TRAC II collaborators from the London School of Hygiene and Tropical Medicine (LSHTM), Institut Pasteur and the Armed Forces Research Institute of Medical Science (AFRIMS) presented preliminary results and future plans for their TRACII related projects.

- With thanks to Arjen Dondorp and Rob van der Pluijm for text and Mehul Dhorda for photos



## CDC audits MORU's biosafety and biosecurity



On 7 - 11 March, MORU was audited by staff from the Centers for Disease Control and Prevention, Division of Select Agents and Toxins headed by Dr. James Blaine (3rd from left, back row) and Dr. Natalie DeGraaf (far left). The audit primarily involved an assessment of MORU's biosafety and biosecurity and occupational health and safety processes, the freezer work system and staff matters relating to the obtaining, storage and distribution of risk group 3 microorganisms to ensure compliance with safety regulations.

The results of the audit indicated that no rectifications were required. MORU was commended on running a first-class facility with high-quality security processes.

## News from Shoklo Malaria (SMRU), Mae Sot

### METF presents results

On 26 January, Mr. Poe Wah from SMRU outlined to partners the activities and results of the Malaria Elimination Task Force (METF) in Myanmar's Karen state and explained the importance of effective malaria posts. The presentation took place at the same time as the release of the METF's Interim Report February 2016.



### Mental health training at Mae

On 4 - 5 March, Burma Border Projects, a local NGO focusing on psychosocial issues, provided mental health and counselling training at SMRU's Maela Clinic. The two-day interactive training course covered common mental disorders, suicide and how to identify and support those affected. One session dealt with post-natal wellbeing, as this is a period of increased risk of mental disorders. Training was well attended by medics, midwives and counsellors. Study participants enjoyed the course and left feeling empowered to better meet the needs of patients with mental health disorders.



## SMRU hosts Singapore visitors



Pablo Bifani (right) from the Novartis Institute for Tropical Diseases (NITD) in Singapore and Nicholas Gascoigne (2nd from right) Head of the Microbiology and Immunology Department at National University of Singapore (NUS) visited SMRU with Bruce Russell (left) as part of the collaboration with SMRU on malaria. Bruce, affiliated with NUS in Singapore, is a long time collaborator of SMRU and a leading expert on the biology of *P.vivax*.

## Send your books for TB patients at SMRU



In 2009, SMRU began a TB treatment program to deal with the large number of TB cases in the Thai-Myanmar

border population coming to its clinics. SMRU now has two TB treatment centres on the border near Mae Sot for patients from Myanmar. The Wang Pha TB centre hosts 90+ patients under treatment including some with multi-drug resistant TB or co-infection with HIV.

In the photo left, Dr Lei Lei Shwe (on knees) and her team treat a patient at Wang Pha. The team also provides support and advice to patients' families and organised activities for them. TB treatment can be long and keeping patients active is a constant challenge. Some love reading books and any donation of books (including books for children) to SMRU's TB centres is welcome. To donate, contact [suphak.nosten@gmail.com](mailto:suphak.nosten@gmail.com).

## Supporting midwives for safe obstetrics at SMRU

Safe obstetrics services require competent skilled birth attendants. SMRU is grateful for the help they receive from experienced volunteers like Virginia Proust, a



professional midwife and ALSO® (Advanced Life Support in Obstetrics) Instructor from Australia who earlier this year volunteered at SMRU for eight weeks supporting midwives in SMRU's three birthing centres. Together, the SMRU birthing centres handle 2,500 deliveries a year. Here, Virginia gives feedback on the midwives' work as part of a review of all deliveries at Wang Pha site in 2015.

## Maela Surveillance and Rapid Response Team (SART) meets

On 13 January, SMRU Deputy Director Rose McGready attended the Maela Camp's Surveillance and Rapid Response



Team (SART) meeting. SART members are camp population representatives who meet once or twice a month to discuss and respond to outbreaks and other Maela issues. The frank discussions saw SART members ask questions, give suggestions and comment openly about health service issues affecting displaced people at Maela that need improvement. SMRU admin staffer Saw Billion Lay facilitated the meeting.

## Congratulations to MORU's new PhDs and DPhils!



January - March 2016 brought several new MORU PhDs and DPhils. Clockwise from top left: Prof. Sasithorn Pukritayakamee, Deputy Dean for Education, Faculty of Tropical Medicine, Mahidol University, hugs LOMWRU Microbiology Laboratory Director Dr. Rattanaphone

Phetsouvanh who successfully defended her PhD thesis, The Clinical Epidemiology and Genetic Diversity of Scrub Typhus in the Lao PDR, at Mahidol; On 13 January, MORU Malaria research specialist physician Katherine Plewes (shown at Oxford's Royal Oak with external examiner Kathryn Maitland and thesis co-supervisor Gareth Turner) defended at Oxford her DPhil thesis, Intravascular haemolysis, oxidative stress and acute kidney injury in severe falciparum malaria identifies important pathways of kidney injury in malaria; on 16 February, MOCRU student Dr. Kyaw Myo Tun (shown with examiners Prof. Brian Angus, Director of the Oxford Centre for Clinical Tropical Medicine and LHTMH Prof. Christ Whitty) earned his DPhil thesis, Artemisinin resistant falciparum malaria in Myanmar, at Oxford. Kyaw is; and LOMWRU's Céline Caillet successfully defended her PhD thesis at the University of Toulouse on 18 February.

*Please join us in extending heartiest congratulations to all!*



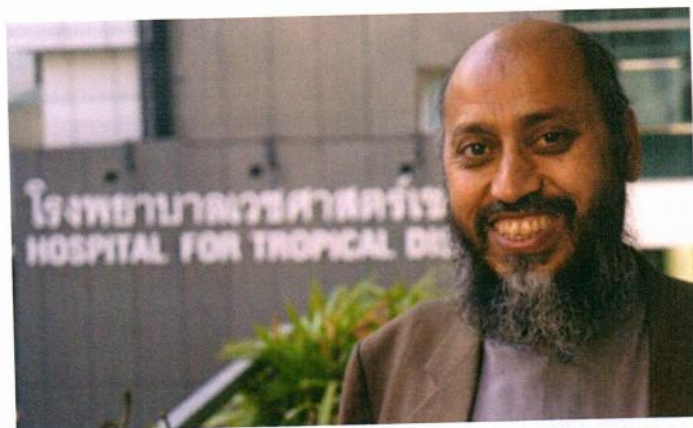
## CRP study team scouts potential study site in Chiang Rai



Tri Wangrangsamakul, Pieter Smit, Yoel Lubell, Thomas Althaus, Suthathip Kaewta and Rachel Greer, with Dr. Supalert Natesuwan and other Primary Care Department staff of the Chiang Rai Prachanukroh Hospital

In December 2015, the study team for the randomised control trial (RCT) on C-reactive protein (CRP) guided antibiotic treatment in febrile illness visited a proposed study site in Chiang Rai. Funded by the Wellcome Trust Institutional Strategic Support Fund with OxTREC approval on its way, the MORU study aims to safely reduce antibiotic prescribing in patients with undifferentiated fever. The study began recruiting patients in late March 2016 with a total sample size of 2,400 patients. Study sites will include primary care facilities in Chiang Rai and the outskirts of Yangon.

## Dr. Awab made Wellcome Trust Fellow



In February, we received word that MORU's Dr. Ghulam Rahim Awab won a Wellcome Trust Training Fellowship in Public Health and Tropical Medicine.

Dr. Awab is a public health doctor based at Nangarhar University, Afghanistan. His main priority is to improve malaria management in Afghanistan based on locally conducted research. During this Fellowship Awab will assess the safety and uptake of point-of-care G6PD testing and linked primaquine administration for vivax malaria at several levels of the healthcare system. He

will do the work in collaboration with colleagues in Thailand and Australia (on clinical trial management, genetics and pharmacology) and Kenya (on health systems). The work promises to close the gap between policy and practice for vivax malaria across Afghanistan and other locations.

## Research ethics workshop in Yangon



On 14 February, Phaik Yeong Cheah, Head of Bioethics and Engagement at MORU, led a Research Ethics training workshop in Yangon organised by the Military Medical Research Department of Myanmar. Attended by 25 army medical doctors and scientists and hosted by Brig Gen Tin Maung Hlaing, the workshop covered included basics principles of research ethics, ethical study designs and valid consent. The first of a programme of research ethics workshops planned with the Brig Gen Tin's team, the event was also pre-conference workshop of the 23rd Myanmar Medical Conference. MORU Director Nick Day gave an introduction and set the scene on how important bioethics in general and research ethics in particular are in our work.

- Text and photo courtesy of Phaik Yeong Cheah

## Melioidosis workshop promotes SEA research and collaborations



The Research Coordination Network (RCN) on melioidosis held its first Stakeholder Working Group Meeting 23-24 February in Bangkok. The 40+ attendees came from Australia, Cambodia, Lao PDR, the Philippines, Malaysia, Singapore, Thailand and Vietnam.

Sponsored by the U.S. Defense Threat Reduction Agency Cooperative Biologic Engagement Program (CBEP) with DTIC Chemical/Biological Technologies, the meeting promoted regional capacity and cross border, multidisciplinary research and coordination for melioidosis. Participants discussed country level melioidosis research, advances in melioidosis research and collaborative networks among countries in Southeast Asia, and met funders from the US.

Workshop steering committee members included Dr. D. Limmathurotsakul, Head of Microbiology at MORU, representing Thailand and Dr. David Dance, Clinical Research Microbiologist at LOMWRU, representing Laos.



### Biosafety visitors from WHO and UK



On 6 March, Dr. Kaz Kojima, Head of Biosafety at WHO, Geneva and Dr. Jane Shallcross and Dr. Suzanna Hawkey from Public Health England Porton Down visited MORU. Dr. Kojima works with MORU Biosafety officer Dr. Stuart Blacksell on the WHO Biosafety Advisory Group. Dr. Shallcross and Dr. Hawkey are experienced biosafety trainers and have a lot of experience in the hands-on aspects of laboratory diagnosis of Ebola and associated biosafety matters.

### Biosafety training at NIH Indonesia



On 22-26 February, MORU biosafety trainers Stuart Blacksell and Paul Selleck ran the Biosafety Officer Training of Trainers Workshop at the National Institute of Health for Research and Development in Jakarta, Indonesia. A total of 15 trainees from across Indonesia participated in the training, which was sponsored by WHO and funded by the European Union regional biosafety program.

### UK-Thai Education Day in Bangkok



At the British Ambassador to Thailand's residence, Nick Day and Direk Limmathurotsakul represented MORU at the UK-Thailand Science Innovation Fair. Held Monday 8 February in Bangkok, the fair was presided by HRH Princess Maha Chakri Sirindhorn, shown here with Nick and Direk. Among MORU activities at the fair, Direk presented his recent work on melioidosis published in *Nature Microbiology* 11 January 2016.

### COMRU helps young people get a voice in their healthcare



On 14 February, COMRU held the first meeting of its newly formed Young Persons Advisory Group. Run by COMRU's Sreymom Pol and made up of young Cambodians 10-15 years of age, the group aims to give young people a voice in the healthcare and research conducted within the Angkor Hospital for Children (AHC).

The kids were self-selected by replying to ads and flyers given to patients and hospital staff. Sreymom supervises them and relays their feedback to AHC Managing Director Claudia Turner, who takes their suggestions to AHC's executive committee.

The initiative is funded by MORU's head of Bioethics and Engagement Phaik Yeong Cheah's Wellcome Trust grant Provisions for Public Engagement. Ten young people attended the first meeting where they introduced themselves, played games and ate snacks. The group will meet every month and review what it means for children to get involved in research, advise on hospital operations, and design health education material for other young people.

### MORU training strengthens Thai disease outbreak response



In February, MORU led a workshop to train Thai animal health experts in the FAO's new laboratory mapping tool (LMT) and biosafety laboratory mapping tool (BLMT). Available as Android Apps with iPhone versions on the way, the LMT and BLMT are audit tools that identify lab capacity and biosafety procedures' strengths and weakness. They will increase Thai veterinary labs' capability to detect pathogens, provide disease surveillance and respond to disease outbreaks.

Organized by MORU with the Thai Department of Livestock Development (DLD) and sponsored by DTRA's Cooperative Biological Engagement Program (CBEP) and the FAO Region Asia Pacific (RAP), the workshop was held 15-18 February at the DLD's National Institute for Animal Health (NIAH) at Kasetsart University. More than 80 participants attended, including regional laboratory directors, quality managers and biosafety officers from national and local veterinary labs.



## MORU in the News

In early November 2015, a group of international journalists visited MORU and SMRU as part of a malaria study tour organised by Malaria No More and the International Committee of Journalists (ICJ). Coverage generated by visits to SMRU and MORU includes:

**The biggest obstacles to the full elimination of malaria may be more political and economic than biological.**

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by Joshua Keating, Slate, 5 January 2016; How Drug-Resistant Parasites in Asia Could Lead to a Global Comeback for Malaria, by Sydney Lupkin, VICE News, 27 December 2015; Southeast Asia Journal: Is Malaria Resurgence in the Offing? 'When no one is worried, that's when we have to worry', by Sydney Lupkin, MedPage Today, 27

December 2015; Drug Resistance Threatens Malaria Elimination War, by Jyoti Shelar, Mumbai Mirror, 4 December 2015; Malaria Control: Nigeria, other Countries Get Wake-up Call, by Chioma Umeha, Newswatch Times (Nigeria), 26 November 2015;

The Unrelenting Spectre of Drug-Resistant Malaria, by Sarika Bansal, The Development Set (Medium), funded by the Bill & Melinda Gates Foundation (29 March 2016).

## Other coverage

Malaria crisis looms as bug mutates, The Straits Times (Singapore), 20 February 2016. Note: includes video that showcases SMRU's work and includes Dr. Aung and François Nosten. Joel Tarning, Head of Clinical Pharmacology at MORU, wrote an editorial, Treatment of Malaria in Pregnancy, in the 10 March issue of the NEJM. Joel's comments about how the findings presented by two articles in the same issue of the Journal (the PREGACT Study Group and Kakuru et al) supported using artemisinin-based combination therapy in both the prevention and the treatment of uncomplicated *P. falciparum* malaria in pregnancy were covered on NPR (USA), Studies Reinforce The Urgency Of Treating Pregnant Women With Malaria, by Susan Brink, 9 March 2016.

## WT board members visit SMRU and MORU



On 21 March, Wellcome Trust (WT) governor Tobias Bonhoeffer and WT science portfolio advisor Michael Chew visited SMRU's Wang Pha clinic and the Wang Pha TB centre, then the SMRU laboratories in Mae Sot. After a short presentation by SMRU director Prof. Francois Nosten, the visitors held a

brief discussion with the heads of SMRU departments and community engagement teams. The visit was brief but fruitful and gave Tobias and Michael a good overview of SMRU activities and its plans for the future. On Wednesday 23 March, Michael Chew then visited the MORU unit in Bangkok and met with several researchers to discuss individual WT funding opportunities.

## MORU sets up Economics and Translational Research Group

At the end of March, the MORU management committee approved a new group within MAEMOD, the Economics and Translational Research Group (ETRG). Headed by Yoel Lubell, ETRG seeks to bridge the gap between cutting edge health research and health policy and reduce the lead-in time between scientific results and implementation.

Primarily working on health technology evaluations in real-life settings, ETRG group members will explore the cost-effectiveness of new interventions and their clinical, social and ethical implications, in close collaboration with relevant MORU departments and units.

## World TB Day at SMRU



Every 24 March, World TB Day public awareness activities remind governments and the public that although tuberculosis (TB) remains epidemic in much of the world, there is also hope that it can be stopped. To mark World TB Day, SMRU staff from Maela to Wang Pha and KouKo held activities where they engaged with partners, TB patients and their families.

At SMRU's KouKo TB Centre, community representatives, patients and staff gathered on the 24th to share and encourage each other, and deliver important TB messages urging patients to follow medical advice and TB treatment protocols. On 22 March at the Wang Pha TB centre, patients and staff played a fun soccer game, read poems and told stories. The local Wang Pha public health officer and community representative joined patients and staff in a World TB Day event that included speeches, awards for best poem, most touching story and best participating patient and staff. Later, at the Wang Pha Clinic, staff delivered TB awareness messages to pregnant women attending their regular ANC consultation. In the Maela refugee camp, a team from Mae Sot hospital joined SMRU staff in providing TB screening and delivering awareness messages in several local languages.



## SEAMEO TROPMED Network: Highlights of Activities



*34th Session of WHO South-East Asia Advisory Committee on Health Research South East Asia Regional Office, New Delhi, India*



*Expert Consultation on Adoption and Operationalization of WHO Global Policies, Guidance and Strategies in Malaria in the South-East Asia Region and the Greater Mekong Sub-region, New Delhi, India*





*Asia Dengue Summit  
"Are we ready for a New  
Vaccine Era?" Bangkok,  
Thailand*



*SEAMEO College Module 3: "Education Leaders Innovation Forum", Vung Tau City, Vietnam*

Theme: Innovative Solutions for the 21st Century Curriculum, Teacher Development and Educational Leadership/Management in Southeast Asia

*Workshop on the  
Establishment of SEAMEO  
Centers Policy Research  
Network (CPRN), SEARCA  
College, Los Baños, Philippines*



**Workshop on the Establishment of SEAMEO Centers  
Policy Research Network (CPRN)**

8-10 March 2016 | SEARCA, College, Los Baños, Laguna, Philippines





## HIV Forum Celebration of 25th Anniversary of Collaboration between Thailand MOPH and U.S. CDC (TUC) on HIV/STIs



On February 9, 2016, the Thailand Ministry of Public Health – U.S. CDC Collaboration (TUC) hosted the 25th Anniversary HIV Forum Celebration of the Collaboration between the Thai MOPH and U.S. CDC programs on HIV and STIs prevention research, treatment and public health interventions. The objectives of this forum were to: (1) Celebrate the collaborative relationship and honor the contribution of collaborators in HIV prevention, care and treatment (2) Highlight accomplishments in HIV programs and research and (3) Strategize on the way forward for future HIV collaboration. More than a hundred participants from various government HIV/AIDS agencies, public health partners and community based organizations attended the one-day forum which combined an internationally-recognized plenary speaker, MOPH and TUC speakers, roundtable discussions, and poster displays.

## Strengthening SCC @TropMed's Capacity through Sensitivity Training



brainstorming, group discussions, case studies and role-playing exercises to help participants understand and prevent personal belief and barriers that may affect their ability to address the specific needs of clients at the clinic. Strengthening the sensitivity of health care workers is a critical step to improving health care access and the quality of services on HIV prevention, testing, care and treatment as well as conducting clinical research in people with sexual diversity.

## CROI 2016

### MTN-017

A Phase 2 Randomized Sequence Open Label Expanded Safety and Acceptability Study of Oral Emtricitabine/Tenofovir Disoproxil Fumarate Tablet and Rectally-Applied Tenofovir Reduced-Glycerin 1% Gel



The Silom Community Clinic @TropMed organized the refresher course on "Sensitivity Training for Working with Sexual Diversity" during February 18-19, 2016. Over 30 people attended the two-day session that included facilitator presentations,

TUC staff attended the 2016 annual Conference on Retroviruses and Opportunistic Infections (CROI 2016) in Boston, Massachusetts, U.S. from February 21-24, 2016. Several new findings in HIV prevention were presented, many of them relevant to HIV prevention research and services for high risk groups in Thailand.



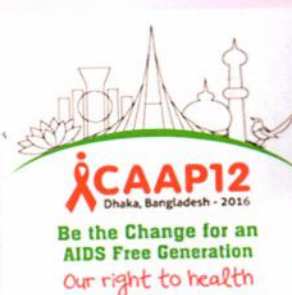
The key presentation highlight for our team was the release of results from the MTN-017 study of 1% tenofovir gel as a rectal microbicide, a study that TUC had been working on for nearly five years as one of eight sites worldwide. The study compared the safety and acceptability of oral emtricitabine/tenofovir disoproxil fumarate (FTC/TDF) for pre-exposure prophylaxis (PrEP) with the rectal gel either in daily use or used before and after the participant has anal sex as the receptive partner. In four countries, 195 participants each tried three different prevention regimens for eight weeks – the rectal gel used each day, the rectal gel used before and after anal sex as the receptive partner, and oral FTC/TDF PrEP tablets. In terms of safety, the rate of side-effects was exactly the same for the daily gel as for daily tablets, and somewhat lower during occasional use. Adherence was generally good, but a little lower for daily gel users. Participants rated the gel as almost as easy to use as oral PrEP and said that they would be willing to use the gel again before and after sex. However, if offered the choice between the gel and the tablet as the one method they could use, it was clear that most participants preferred the pill. Daily use of the gel was less popular than application before and after sex.

Perhaps the most exciting news for HIV prevention were the results from the first phase 2 (safety, acceptability and dose-finding) study of a long-lasting, injectable formulation of the integrase-inhibitor drug cabotegravir for use as PrEP in HIV-negative people. The long-acting injectable CAB was tolerated well and was acceptable for male volunteers, but the every 12 week dose was found to be too low. Future dosing will likely be an injection every eight weeks. SCC @TropMed is going to participate in "A Phase 2b/3 Double Blind Efficacy Study of Quarterly Injectable Cabotegravir Compared to Daily Oral Tenofovir Disoproxil Fumarate/Emtricitabine (Truvada), for Pre-Exposure Prophylaxis in HIV-Uninfected Men and Transgender Women who have Sex with Men".

In a clinical presentation that generated a great deal of discussion, there was a case report of a man in Toronto who became infected with a multi-drug-resistant strain of HIV despite apparently very consistent adherence to PrEP. The findings showed that not all prevention strategies are 100% effective.

Lastly, the next generation of PrEP, and even HIV treatment, may consist of antibodies that could be given as an intravenous infusion or an injection into muscle, two presenters at the conference said. There are dose-finding trials of antibody-based drugs for HIV Prevention starting soon. The rapidly changing HIV prevention field continues to be an exciting one to follow. Read more the news stories on study results presented at CROI 2016 on [www.aidsmap.com](http://www.aidsmap.com).

## 12th International Congress on AIDS in the Asia and the Pacific (ICAAP12), Dhaka, Bangladesh



Representatives from SCC @TropMed, Multiple-sexuality persons Community Advisory Board (M-CAB) and Community Working Group (CWG) attended the 12th International Congress on AIDS in the Asia and the Pacific (ICAAP12), Dhaka, Bangladesh, during March 12-14, 2016 under the theme



"I'm the Change for an AIDS Free Generation". The SCC @TropMed representative also gave an oral presentation on the topic of the analysis of HIV incidence and condom use by partner type, Bangkok Men Who Have Sex With Men Cohort Study (BMCS), Thailand, 2006–2015. For further information, inquiry, please e-mail Wipas Wimonasate at [hpx2@cdc.gov](mailto:hpx2@cdc.gov).





Her Royal Highness Princess Maha Chakri Sirindhorn Mobile Service Center in cooperation with Hospital for Tropical Diseases Foundation Medical Mobile Unit and Faculty of Dentistry, Mahidol University provided medical services to people including health investigation and parasitic assessment at Cognis Thai Border Patrol Police School, Sakon Nakhon province during 27 February – 1 March 2016



Training Program in Technology of Medicine and Public Health for health personnel from Lao PDR under Her Royal Highness Princess Maha Chakri Sirindhorn Project during 8 February – 17 March 2016



On 12 April 2016, Dean Yaowalark Sukthana chaired the opening ceremony for three academic courses; Graduate Diploma in Tropical Medicine and Hygiene (D.T.M. & H.), Master of Clinical Tropical Medicine (M.C.T.M.) and Master of Clinical Tropical Medicine (Tropical Pediatrics) [M.C.T.M. (Trop. Ped.)] for the academic year 2016



The University of Miyazaki team led by Prof. Naoaki Misawa, Director of the Center for Animal Disease Control (CADIC) paid a visit to the Faculty of Tropical Medicine, Mahidol University on 19 February 2016





## FTM Researchers and Lecturers received 2015 Outstanding Researcher and 2016 Research Awards from the National Research Council of Thailand (NRCT) on 2 February 2016



• Prof. Punnee Pitisuttithum, Deputy Dean for Translational Medicine and Innovation received National Outstanding Researcher Awards 2015 in Medical Science

• Assoc. Prof. Pongrama Ramasoota, Director of Center of Excellence for Antibody Research (CEAR), Lecturer Dr. Pannamthip Pataksajakul and their team received Invention Awards 2016 (Excellent Level) from the research on 'Therapeutic human antibodies against Dengue virus'



• Asst. Prof. Direk Limmathurotsakul, Department of Tropical Hygiene, Assoc. Prof. Narisara Chantratita, Department of Microbiology and Immunology and Lecturer Dr. Wirongrong Chierakul, Department of Clinical Tropical Medicine received Excellent Distinction Research Awards 2015 (Medical Science) from the research on 'Trimethoprim-sulphamethoxazole versus trimethoprim-sulphamethoxazole plus doxycycline as oral eradication treatment for melioidosis (MERTH): a multicentre, double-blind, non-inferiority, randomized controlled trial'



Bangkok Hospital for Tropical Diseases received Hospital Accreditation Certificate from Clin. Prof. Emeritus Piyasakol Sakolsatayadorn, Minister of Public Health in 17th HA National Forum organized by The Healthcare Accreditation Institute on 9 March 2016

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