# Greetings from the Dean

would like to express my heartfelt appreciation on the launch of the Faculty of Tropical Medicine's publication of FTM Inter News.

This newsletter will be published every three months, starting from October 2013, and aims to create a stronger international community on campus. It is a wonderful opportunity to highlight the international centers located within the Faculty, and also serves as a channel for providing information and updated internal news to not only other international centers, but to all Faculty members. It is our hope that this newsletter will act as a valuable resource in strengthening relationships within our international network.

Over the past few decades, we have enjoyed a number of outstanding academic successes in international collaborative activities, and we take great pride in these achievements. It is our belief that the Faculty will continue to grow and attain the status as a center of excellence, and become one of the best research institutes in the world.

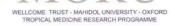
On this auspicious occasion, I would like to extend my best wishes and thank all the international centers and staff members for their valuable contributions and continued support. I hope that friendship and cooperation will build strong connections and encourage further fruition of academic collaborations, thereby allowing us to fulfill the Faculty's mission, vision and goal, "To Be A World Leader in Tropical Medicine".

I wish them all great health, happiness and prosperity. Thank you.



Assoc. Prof. Yaowalark Sukthana, M.D., D.V.M., D.T.M. & H. Dean, Faculty of Tropical Medicine, Mahidol University





















**BIKEN Endowed Department of Dengue Vaccine Development** 



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



Congratulations to Assoc. Prof. Pratap Singhasivanon on his appointment as the Secretary General/ Coordinator of SEAMEO TROPMED Network for another term.



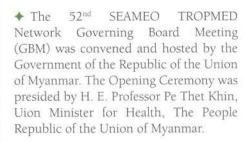








52nd Governing Board Meeting SEAMEO TROPMED Network 29-30 August 2013, Park Royal Yangon Hotel, 33 Alan Pya Phaya Road, Dagon Township, Yangon, Myanmar





→ SEAMEO TROPMED Network organized a Discussion Forum on Evaluation, Strategic Perspectives: Advancing Evaluation Practice in SEAMEO attended by Directors and other high officials of SEAMEO Regional Centres and Secretariat last 4 July 2013 in Marriott Hotel Bangkok.

♦ The 6<sup>th</sup> China-ASEAN Education Cooperation Week (CAECW), 16- 22 September 2013 in Guiyang, Guizhou Province, P. R. China sponsored by the Ministry of Foreign Affairs, P. R. China, the Ministry of Education, P. R. China, the Guizhou Provincial Department of Education (GPDE) and the People's Government of Guizhou Province.

This year's theme of CAECW is "Pragmatic Cooperation, Harmonious Development and Mutual Prosperity" which aims to highlight the importance of establishing mutually-beneficial educational and cultural collaborations for the development and growth of ASEAN countries and China with activities to be hosted by different universities and education institutions in Guiyang, Guizhou Province, P. R. China.

♦ SEAMEO and ASEAN-China Centre (ACC) signed a memorandum of understanding (MOU) for the establishment of a general framework for cooperation on the development and promotion of education and culture in Southeast Asia and the People's Republic of China on 13 August 2013 at the S31 Hotel, Bangkok, Thailand.















♦ SEAMEO TROPMED Network kindly facilitated a study visit and knowledge sharing program for scientists and other related staff from SEAMEO TROPMED/ Thailand, Faculty of Tropical Medicine, Mahidol University concerning Laboratory Standard and Management and Facility/ Equipment Standard and Management at SEAMEO TROPMED/ Malaysia, Institute for Medical Research (IMR) and the University of Malaya, Malaysia on August 2, 2013.

- ♦ SEAMEO TROPMED Network has recently provided scholarships to students and participants from Thailand and also from many international countries for the following programs stated below;
  - Regional Course on Advanced Epidemiology (7-18 October 2013)
  - 11<sup>th</sup> International Training Course on Management of Malaria (16-20 September 2013)
  - International Training Course on Dengue (5-9 August 2013)
  - Master of Science in Tropical Medicine [M.Sc. (Trop. Med.)] (Academic year 2013)
  - Doctor of Philosophy in Clinical Tropical Medicine [Ph.D. (C.T.M.)] (Academic year 2013)



## Southeast Asia in Quest of Food Security

DEADLINE OF ENTRIES
31 OCT 2013
(24:00 GMT +8:00)

Third Place
People's Choice USD 100

♦ SEARCA has launched its annual photo contest with the theme "Southeast Asians in the Quest for Food Security." The contest guidelines are posted and online submission can be made through this link/url: <a href="http://photocontest.searcabackup.org/contest.php">http://photocontest.searcabackup.org/contest.php</a>

Winners will be notified via e-mail. SEARCA has the right to offer the prize to the next winning entry if and only if the winner does not initiate any contact by 20 December 2013.

→ Call for applications for the positions of 1 Project Manager (21 person-months) and 3 Project Officers (21 person-months each) for the day-to-day implementation and operation of SEAMEO College. Applicants may submit resume with recent photo and expected salary by 18 October 2013. Application form may be downloaded on SEAMEO website <a href="http://www.seameo.org/">http://www.seameo.org/</a>

For more information, please contact SEAMEO Secretariat, Mom Luang Pin Malakul, Centenary Building, 920 Sukhumvit Road, Bangkok 10110, Thailand, <a href="mailto:Email



## WORLDWIDE ANTIMALARIAL RESISTANCE NETWORK (WWARN) ASIA REGIONAL CENTRE

WWARN Malaria Molecular External Quality Assessment (EQA) Programme

Tn October, WWARN will initiate its sixth round of biannual malaria molecular EQA proficiency Lesting to distinguish P. falciparum recrudescence (treatment failure) from re-infection (new infection). This program was developed and implemented by the Mekong Molecular Surveillance Network, established in 2010 by the University of Maryland School of Medicine, Faculty of Tropical Medicine, Mahidol University and WWARN with financial support from USAID. This program assists laboratories to identify technical difficulties with parasite genotyping. Technical experts provide advice for correcting problems to improve performance in subsequent analyses, and ultimately improve the quality of antimalarial drug resistance monitoring data made available to public policymakers. This program has expanded from four participating laboratories from Southeast Asia in 2010 to 25 labs from 18 countries in Asia, Africa, South America and Europe in 2013.





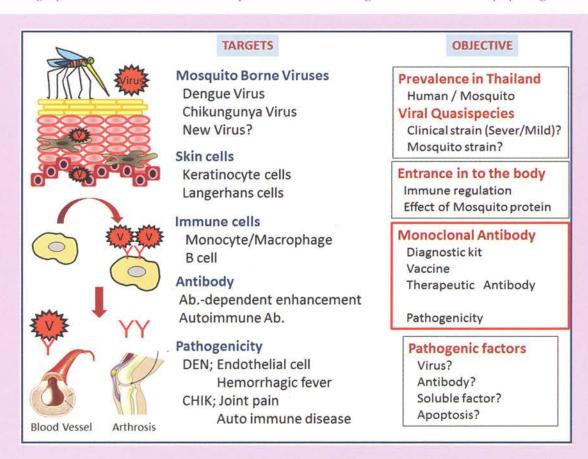
## Research Group

Director Professor (SUP) Associate Professor Postdoctoral Fellow Postdoctoral Fellow Postdoctoral Fellow Research Fellow Yoshiharu Matsuura, DVM, Ph.D. Tamaki Okabayashi, DVM, Ph.D. Mikiko Sasayama, Ph.D. Miwa Kuwahara, Ph.D. Orapim Puiprom, Ph.D. Panjaporn Chaichana, M.Sc.

## **Current Center Activity**

he MOCID interest focuses on several tropical infectious diseases that are of human health importance in Thailand, especially mosquito-borne viral infectious diseases such as dengue fever/dengue hemorrhagic fever and chikungunya fever. We focus on the development of

rapid diagnosis kits for the viral diseases, and the studies of the prevalence of the viral infections in human and mosquitoes and the pathogenesis of the viruses. We would like to raise young scientists' interest and research skills on the infectious diseases through our collaborating with Mahidol University by using clinical samples.



## Our main research project

- 1) Epidemiology of mosquito-borne virus infections in human and mosquitoes in Thailand.
- Generation and characterization of human and mouse monoclonal antibodies against dengue virus and chikungunya virus.
- 3) Development of diagnosis kits for the viral diseases.

## **Current Center Service**

Apart from our core research, we also support to molecular diagnosis (Dengue, Chikungunya and unknown viruses) of the Hospital for Tropical Diseases, Mahidol University.

## Collaborations with Faculty of Tropical Medicine, Mahidol University

- 1. Dengue virus monoclonal antibody research (Center for Excellence for Antibody Research)
- 2. Detection of virus from mosquito. Role of the salivary gland protein of mosquito to Dengue and Chikungunya viruses (Dept. Medical Entomology)
- 3. Detection of enteric virus (HEV, HEV, Norovirus) in human, animal and environment. (The Enteric Group, Dept. Microbiol. Immunology, Dept. Trop. Hygiene).
- 4. Vaccine development (Dept. Trop. Pediatrics)



A On August 19, 2013, Dr. Tamaki Okabayashi, Deputy Director of MOCID and Dr. Ronald Enrique Morales Vargas from the Department of Medical Entomology introduced Prof. Katsuro Hagiwara and Assoc. Prof. Jun Noda from School of Veterinary Medicine, Rakuno Gakuen University, Japan to Assoc. Prof. Yaowalark Sukthana, Dean, Faculty of Tropical Medicine, Mahidol University and Assoc. Prof. Emsri Pongponratn, Deputy Dean for International Affairs to discuss on an academic exchange and collaboration with Rakuno Gakuen University at Office of the Dean.



## **Current Center Achievements**

Detection and characterization of enteric viruses in flood water from the 2011 Thai flood. Ngaosuwankul N., Thippornchai N, Yamashita A, Morales Vargas RE, Tunyong W, Mahakunkijareon Y, Ikuta K, Singhasivanon P, Okabayashi T, Leaungwutiwong P. Japanese Journal of Infectious Diseases (in press).

Cross reactivity of human monoclonal antibodies generated with peripheral blood lymphocytes from dengue patients with Japanses encephalitis virus. Pipattanaboon C, Sasaki T, Nishimura M, Setthapramote C, Pitaksajjakul P, Leaungwutiwong P, Limkittikul K, Puiprom O, Sasayama M, Chaichana P, Okabayashi T, Kurosu T, Ono K, Ramasoota P, Ikuta K. Biologics. 2013;7:175-87.

Characterization of chikungunya virus infection of a human keratinocyte cell line: Role of mosquito salivary gland protein in suppressing the host immune response. Puiprom O, Morales Vargas RE, Potiwat R, Chaichana P, Ikuta K, Ramasoota P, Okabayashi T. Infect. Genet. Evol. 2013, 10, 210-215.

Dengue virus neutralization and antibody-dependent enhancement activities of human monoclonal antibodies derived from dengue patients at acute phase of secondary infection. Sasaki T, Setthapramote C, Kurosu T, Nishimura M, Asai A, Omokoko MD, Pipattanaboon C, Pitaksajjakul P, Limkittikul K, Subchareon A, Chaichana P, Okabayashi T, Hirai I, Leaungwutiwong P, Misaki R, Fujiyama K, Ono K, Okuno Y, Ramasoota P, Ikuta K. Antiviral Res. 2013, 98, 423-31.

Human monoclonal antibodies to neutralize all dengue virus serotypes using lymphocytes from patients at acute phase of the secondary infection. Setthapramote C, Sasaki T, Puiprom O, Limkittikul K, Pitaksajjakul P, Pipattanaboon C, Sasayama M, Leuangwutiwong P, Phumratanaprapin W, Chamnachanan S, Kusolsuk T, Jittmittraphap A, Asai A, Arias JF, Hirai I, Kuhara M, Okuno Y, Kurosu T, Ramasoota P, Ikuta K. Biochem Biophys Res Commun. 2012 Jul 13;423(4):867-72.

Co-existence of major and minor viral populations from two different origins in patients secondarily infected with dengue virus serotype 2 in Bangkok. Puiprom O, Yamashita A, Sasayama M, Limkittikul K, Boonha K, Jittmitraphap A, Leaungwutiwong P, Kurosu T, Ramasoota P, Ikuta K. Biochem Biopys Res Commun. 2011, 143: 136-142.

Fab MAbs specific to HA of influenza virus with H5N1 neutralizing activity selected from immunized chicken phage library. Pitaksajjakul P, Lekcharoensuk P, Uparagarin N, Barbas C, Ibrahim MS, Ikuta K, and Ramasoota P. Biochem Biopys Res Commun. 2010, 395: 496-501.

#### **Center Invitations**

TV Conference: Cooperation and Collaboration Programs with ASEAN Universities, Thailand-Japan Research Seminar on Global Health and Infectious Diseases

## TV Conference Cooperation and Collaboration Programs with ASEAN Universities

## Thailand-Japan Research Seminar on Global Health and Infectious Diseases

Date: 18 October 2013, 13:00-16:00 hrs.

Venue: 4508 conference room, 5th Fl., Chamlong Harinasuta Building, Faculty of Tropical Medicine, Mahidol University

## Program:

- ♦ Opening remarks 13:00 hr.
  - Yasuhiro Minami, Vice Dean, Kobe University Graduate School of Medicine
  - Assoc. Prof. Yaowalark Sukthana, Dean, Faculty of Tropical Medicine, Mahidol University
- ♦ Session 1: Faculty of Tropical Medicine, Mahidol University 13:10-13:40 hrs.
  - Chonlatip Pipattanaboon, (Cloning and expression of Dengue recombinant proteins for Dengue vaccine design)
  - Phanthila Sirichaiyakul, (Gambicin: An antibicrobial peptide as the therapheutic option for treatment of antibiotic-resistant bacteria and tropical pathogens)
- Session 2: Mahidol-Osaka Center for Infectious Diseases (MOCID), Osaka University 13:40-14:10 hrs.
  - Orapim Puiprom, (Characterization of chikungunya virus infection of a human keratinocyte cell line: Role of mosquito salivary gland protein in suppressing the host immune response)
  - Panjaporn Chaichang, (Sequence variation of Dengue virus 2 premembrane and envelope derived from patient plasma shows significantly different biological characteristics in human K562 cells.)
- ♦ Session 3: Kobe University Graduate School of Health Sciences, Kobe University Graduate School of Medicine 14:10-14:55 hrs.
  - Eriko Iwasaki, Graduate School of Health Sciences (Bone mineral density and bone turnover among young women in Chiang Mai, Thailand)
  - Shuhei Ueda, School of Medicine Faculty of Health Sciences (Detection of anti-dengue virus antibodies and viral RNA in serum samples derived from Thai patients with febrile illness)
  - Chyntia Jasirwan, Graduate School of Medicine (The human herpesvirus 6 U21-U24 gene cluster is not essential for virus growth)
- ♦ Session 4: Lecture seminar 15:00-16:00 hrs.
  - Pongrama Ramasoota, Faculty of Tropical Medicine, Mahidol University (Thailand-Japan research collaboration on development of therapheutic products against Dengue virus)
  - Masanori Kameoka, Kobe University Graduate School of Health Sciences (HIV/AIDS research at oversea research collaboration centers)
- ♦ Closing remarks 16:00 hr.
  - Satoshi Takada, Dean, Graduate School of Health Sciences, Kobe University

## **Joint International Tropical Medicine Meeting 2013**

(JITMM 11-13 December 2013)

MOCID session "Therapeutic and Diagnostic Antibodies against Viral Diseases"

Date: 12 December 2013, 11:00-12:30 hrs.

Venue: Centara Grand & Bangkok Convention Centre at Central World

## BIKEN Endowed Department of Dengue Vaccine Development

## **Current Center Activity**

his Department started in October 2011 by the endowment from the Research Foundation for Microbial Diseases of Osaka University, so-called BIKEN, to the Research Institute for Microbial Diseases, Osaka University, and by the courtesy of the Faculty of Tropical Medicine for the laboratory space at the 5th floor of Chalermprakiat Building, as well as installed equipments and instruments and so on. Currently, the Department works on basic studies for dengue vaccine development. Dengue fever is the most important mosquito-borne viral disease, which is distributed in tropical regions and producing an estimated 300,000 patients daily. Dengue hemorrhagic fever is its severer form and has a mortality up to 20% if an appropriate treatment is not done. Unfortunately, no approved vaccines or specific antivirals have been developed.

#### **Current Center Achievement**

Assay methods to evaluate immune responses against asymptomatic and symptomatic infections in humans are currently incomplete. In our Department, a simple alternative to the dengue antibody-dependent enhancement (ADE) assay was established. The new assay method utilizes cells attached to microplate wells, thereby eliminating cumbersome procedures typical of the conventional ADE assay that utilizes suspension cells. Semi-adherent K562 cells bearing the Fc-gamma receptor (FcgR) were cultured on poly-l-lysine-coated plates. The procedure consisted of (i) preparation of a virus-antibody-cell mixture in wells, (ii) cultivation at 37 °C for 24 h and (iii) fixation and immunostaining to count infected cells. Using monoclonal antibodies against dengue type 2 virus, the new system correlated with three conventional systems. Additionally, K562 cells were employed in a neutralization test. For this purpose, the virus-antibody mixture was incubated at 37 °C for 2 h prior to the addition of cells. As expected, K562 cells provided lower neutralizing antibody titers than did a conventional neutralization test using Vero cells, which do not have FcgR, in monoclonals showing both neutralizing and enhancing activities. Since antibodies are present in polyclonal form in circulation, neutralization tests using K562 cells are considered to reveal a more accurate in vivo status than those using Vero cells. Human sera, positive for dengue virus antibodies, showed neutralizing and enhancing activities in a dose-dependent manner.

## Staff Information



**Dr. Eiji Konishi** Endowed Chair and Professor



**Dr. Atsushi Yamanaka** Endowed Assistant Professor



Ms. Varaporn Pongjaroen Secretary

a decade in communicable disease control and child health

## A new cross-border approach in the move to malaria elimination

aunched three weeks ago, as part of current activities along the Thailand/Cambodia border, Malaria Consortium is leading an innovative new study focused on the special challenge Cambodia faces in identifying and treating migrants and other difficult-to-reach populations who may be at risk from malaria and transmission of drug-resistant parasites. Over 500 people have already been screened at checkpoints in Steung Treng, Rattanakiri and Pailin provinces.

The goal is to develop a screening strategy that will help reduce the number of malaria parasites crossing Cambodia's borders. Doing so could make a big contribution towards elimination of malaria and containment of drug resistance, goals of both Cambodia and the Greater Mekong Sub-Region.

By locating check points in three different border provinces, this study presents a unique opportunity to compare and contrast their findings, enriching the strength of the recommendations that will be shared with the Cambodian National Programme for Parasitology, Entomology and Malaria Control (CNM) and others across the region next spring.

Please read on: <a href="http://www.malariaconsortium.org/blog/a-new-cross-border-approach-in-the-move-to-malaria-elimination/">http://www.malariaconsortium.org/blog/a-new-cross-border-approach-in-the-move-to-malaria-elimination/</a>

A Learning Paper will be launched next month highlighting Malaria Consortium's experience in developing a diverse set of tools to improve malaria surveillance, providing information for staff managing the national malaria programme, responding to both malaria outbreaks and to individual cases as they move towards elimination.

Malaria Consortium has been working in Cambodia since 2009, initially as part of a Bill & Melinda Gates Foundation funded project to contain artemisinin resistant malaria along the Thai-Cambodia border and since 2011 with the Global Fund. The organisation has been providing overall monitoring

and evaluation (M&E) support and technical assistance to the national malaria program for strengthening surveillance by developing efficient, timely systems for ongoing information management and feedback.

The Learning Paper aims to highlight a combination of tools developed, including routine reporting systems (eHealth) and a number of mobile phone based (mHealth) solutions designed specifically for resource-constrained environments to provide real time data for immediate action. The paper documents lessons learnt in choosing appropriate tools, the development process and specific considerations in the implementation of mHealth solutions.

For further information, please contact Malaria Consortium Asia Programmes Director Henry Braun at <a href="https://henry.ncm.ncg">h.braun@malariaconsortium.org</a>

Malaria: blood, sweat, and tears was conceived by Malaria Consortium and award-winning photographer Adam Nadel to highlight the complex relationship between malaria and poverty, and the need for international support to combat the disease. The images provide highly personal stories of the physical, emotional, economic and scientific spectrum of malaria, illustrating the impact of the disease on families, health workers, malaria researchers and local communities. The collection was developed to show the history of the disease, its devastating effect, and the science that underpins a positive way forward.

The exhibition was first launched for World Malaria Day 2010 at the United Nations Headquarters in New York and has since been held in Ghana, Geneva, Paris and Chicago. A 'pop up' version of the exhibition will be shown during the Joint International Tropical Medicine Meeting in Bangkok in December, as part of Malaria Consortium's 10th Anniversary celebrations.

For more information, please visit  $\frac{http://malaria consortium.}{org/tears/}$ 

During the Joint International Tropical Medicine Meeting 2013 (JITMM 11-13 December 2013)

Malaria Consortium is planning to hold a symposium

"Taking the resistance out of elimination"

Date: 11 December 2013, 13:30-17:00 hrs. Venue: Centara Grand & Bangkok Convention Centre at Central World

## wellcome trust







WELLCOME TRUST - MAHIDOL UNIVERSITY - OXFORD TROPICAL MEDICINE RESEARCH PROGRAMME



→ Professors Nick White (top left), Nick Day (bottom centre) and Arjen Dondorp (top right), and Dr. Elizabeth Ashley (bottom right) of Wellcome–Mahidol-Oxford Tropical Medicine Research Unit (MORU) gave lectures to the Graduate Diploma in Tropical Medicine and Hygiene (D.T.M. & H.) program students (April-September 2013).



♦ On 16 September 2013, Prof. Arjen Dondorp (MORU) gave a lecture on "Antimalarial Drug Resistance" to participants of the 11<sup>th</sup> International Training Course on Management of Malaria.

ver 300 of the world's leading medical researchers and experts in melioidosis from 22 countries gathered together in Bangkok for the 7th World Melioidosis Congress 2013 (WMC 2013).

Organized by a tireless team led by Dr. Wirongrong Chierakul, Chairperson of WMC2013 Organizing Committee and Dr. Direk Limmathurotsakul, Head of Microbiology at MORU, WMC 2013 was hosted by MORU and the Faculty of Tropical Medicine, Mahidol University, and held 18-20 September at the Royal Orchid Sheraton Hotel.

WMC 2013 social highlights included a well-attended welcoming opening evening cocktail and a live performance from *Survival Games* by B-Floor, Thailand's vanguard physical theatre company. Commissioned by the Wellcome Trust as part of their worldwide "Art in Global Heatlh" campaign, *Survival Games* playfully explores evolution, survival, the scientific

research process and the battle between mankind and rapidly mutating diseases.

Directed by Teerawat Mulvilai and Nana Dakin, *Survival Games* was created after B-Floor artists investigated first-hand malaria and melioidosis research efforts at MORU and Shoklo Malaria Research Unit.

One of WMC 2013's most talked-about activities was a two-day pre-congress workshop 16-17 September in Ubon Ratchathani province, where nearly 500 cases of melioidosis occur every year. The enormously successful and jampacked two-day event was attended by an excited party of 32 participants and a dozen international melioidosis experts from nine countries.

WMC 2013 concluded with a gala dinner – and a touching video tribute to Vanaporn Wuthiekanun, Senior Microbiologist, and a MORU colleague since 1982.



For more photos of faces and scenes from WMC 2013, go to the WMC 2013 Facebook page.

## Dr. Charles Woodrow appointed Visiting Professor



♦ Mahidol University's Department of Molecular Tropical Medicine and Genetics, Faculty of Tropical Medicine, last week made Dr. Charles Woodrow their Visiting Professor for the 2013-2014 academic year. Above, Charlie with some of his Mahidol-MORU colleagues.

## Fire safety drill









♦ MORU and the FTM held a fire safety drill and building evacuation on Friday 6 September. Successfully coordinated by Biosafety Administrator Soiratchaneekorn Ruanchaiman, assisted by assembly point wardens Juntima Sritabal (1st fl malaria), Premjit Amornchai (2nd fl Microbiology), and on the 3rd fl, Kanchana Pongsaswat (Admin and HR), Tadsanawan Wannakham (Clinical Trial Support Group), Sompob Saralamba (Modelling & Bioinformatics) and Sawanya Ismael (Director's Executive Assistant), the fire drill began with a safety demonstration, followed by an evacuation of controlled urgency to assembly points outside. Well done, all!

## Molecular Malariology Lab opens





♦ On 28 August, Dr. Mallika Imwong, Head of Malaria Molecular at MORU and the Molecular Malaria team unveiled MORU's new molecular malaria lab suite on the 7<sup>th</sup> floor of the Rajanagarindra Building. A demonstration of TME molecular lab processing followed a brief tour of the new lab.

#### Dr. Julie Black visits MORU



♦ From 5-12 August, MORU hosted Dr. Julie Black (right), the University Safety Officer from the University of Oxford Safety Office, seen here with MORU's Dr. Stuart Balcksell.



♦ Julie began her visit with a three-day Health and Safety Management Profile (HASMAP) assessment of the MORU safety program. She reported that she was extremely happy with high level of health and safety compliance at MORU, with only a few areas requiring attention to bring them up to Oxford safety standard. Importantly, Julie confirmed that the MORU BSL (CL) 3 laboratory conforms to the Oxford containment standard. We will soon have a certificate hanging outside the BSL3 to confirm this status. On 8-9 August, Julie provided well-attended training to area safety staff (photos above). Topics covered included safety risk and display screen assessments, and on chemical, electrical, and manual handing safety. We will share this information with all staff in due course. Any questions about safety training? Please contact stuart@tropmedres.ac

## Saving Lives at Birth

29 July 2013 - Grand Challenges Canada has awarded Prof. Nick White and MORU a two-year, C\$ 250,000 seed grant to develop a rectal antibiotic formulation to reduce child mortality from neonatal sepsis, the single greatest cause of preventable death in children living in tropical countries.

Most deaths from neonatal sepsis occur in or near home. Prompt parenteral administration of effective antibiotics is life saving, but seldom possible in the rural tropics. Millions of infant lives could be saved each year if an appropriate antibiotic could

be provided in a stable and adequately bioavailable formulation.

Rectal administration is a simple, safe, and acceptable method of treating sick children. MORU will use the Grand Challenges Grant funding to conduct pharmaceutical and preclinical studies to develop a stable rectal antibiotic formulation appropriate to the tropics. It will also perform preliminary animal studies, and then conduct an exploratory Phase 1 study in healthy adult volunteers.



## WHO Collaborating Centre for Clinical Management of Malaria



11" International Training Course on Management of Malaria
16-20 September 2013

Faculty of Tropical Medicine, Mahidol University Bangkok, Thailand

he Faculty of Tropical Medicine, Mahidol University on behalf of WHO Collaborating Centre for Clinical Management of Malaria in collaboration with the World Health Organization Regional Office for South East Asia (WHO SEARO) organized 11th International Training Course on Management of Malaria during 16 - 20 September 2013 at the Faculty of Tropical Medicine, Mahidol University.

The training aims to provide and update the participants about malaria current situation, diagnosis, treatment, management, prevention and control as well as sharing experiences among respective countries. There were 33 distinguished Physicians, Scientists and Health Experts from 14 respective countries attending the training which are Afghanistan, Bangladesh, Canada, Cambodia, Ethiopia, Indonesia, Italy, Japan, Nigeria, Myanmar, Philippines, Solomon Islands, Tajikistan and Thailand.

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 Pimrampai Boonyarit

Information Support: Malaria Consortium Asia, MOCID-BIKEN, MORU, SEAMEO, Silom Community Clinic @TropMed, WHO CC and WWARN

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