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ACTMalaria Special Executive Board Meeting

By Ms Joy Ann Lico

ACTMalaria holds its Special Board Meeting on March 8 at the Intercontinental Bali Resort, Bali Indonesia. Program Managers and Country Representatives from its eleven member countries namely: Bangladesh, PR China, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines; Timor Leste; Thailand and Vietnam are the attendees of the meeting.

Among the highlights of the event is the turn-over of the 2013-2014 ACTMalaria CCD Post/ Chairmanship from Myanmar to Bangladesh and selection of the Vice Chairmanship. The event also formalizes the partnership with the Asia Pacific Malaria Elimination Network (APMEN) and discussed the joint capacity building activities with APMEN. Ms Maxine Whittaker, Professor of International and Tropical Health, Director of the Australian Centre for International and Tropical Health, School of Population Health, University of Queensland is the APMEN representative during the meeting.

The activity also gives way in welcoming Nepal as a new member to the ACTMalaria Network. Nepal representative Director Garib Das Thakur receives the Membership Certificate. 2013 ACTMalaria activities and other future plans like the forthcoming Executive Board and Partners Meeting in October and the International training on Malaria Management for Field Operations (MMFO) course this August to October 2013 are among the important matters discussed during the event.

Photo Gallery



Membership of Nepal to ACTMalaria — Dr Thar Tun Kyaw (Myanmar) on the right to Dr Garid Das Thakur (Nepal).



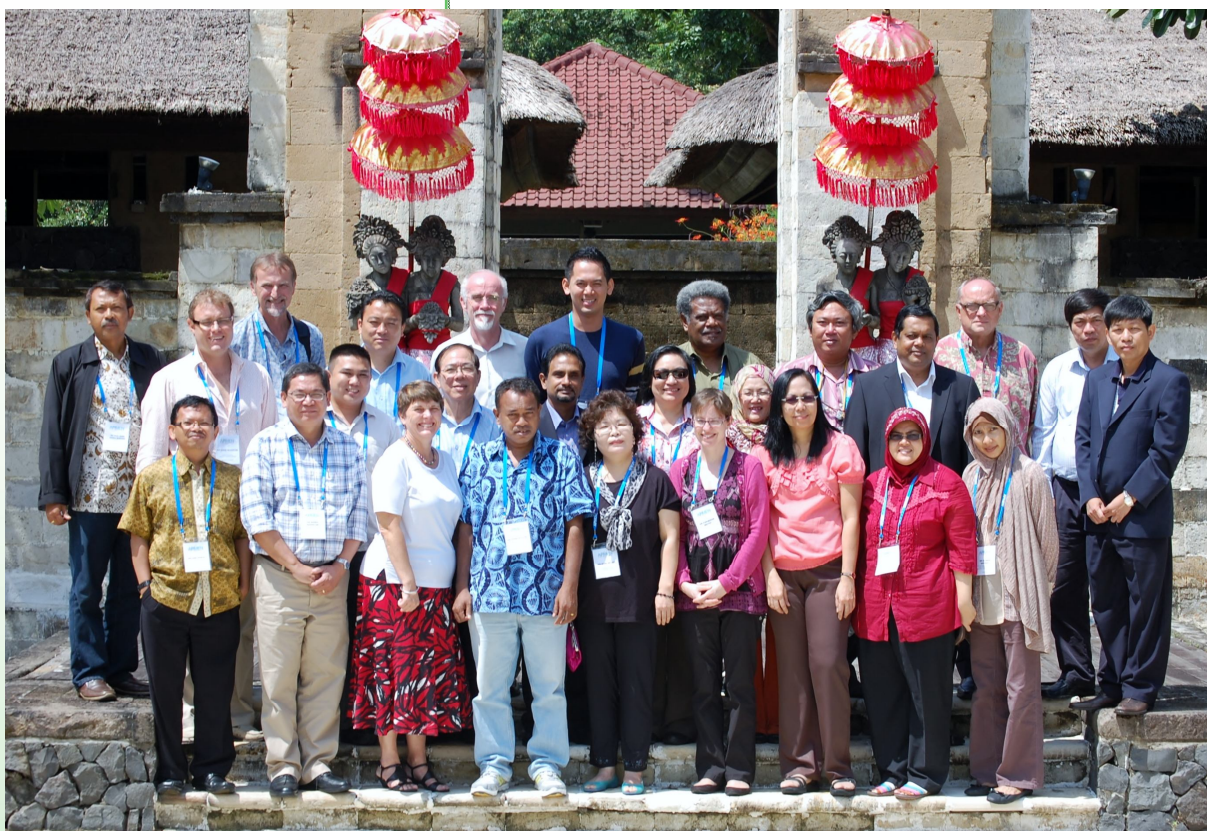
The transfer of the CCD post— Dr Thar Tun Kyaw (Myanmar) on the right to Dr Ben-Azir Ahmed (Bangladesh).



ACTMalaria welcomes Dr. Garib Das Thakur, Director, National Malaria Program, Ministry of Health, Nepal as the new board member of the network.



During the past decade, global malaria prevention and control efforts have been scaled up, with notable progress in sub-Saharan Africa. On the occasion of World Malaria Day, 25 April 2012, the World Health Organization launches a new initiative to urge countries and donors to reinforce the malaria fight. The initiative seeks to focus the attention of policy-makers and donors on the importance of adopting WHO's latest evidence-based recommendations on diagnostic testing, treatment and surveillance, and updating existing malaria control and elimination strategies, as well as country-specific operational plans.



Vector control remains the most generally effective measure to prevent malaria transmission. The principal objective of vector control is the reduction of malaria morbidity and mortality by reducing the levels of transmission. The need to review the current vector control strategies, interventions and their effectiveness in various operational and eco-epidemiological settings is a key focus for the Asia Pacific Malaria Elimination Network (APMEN). In order to make recommendations compatible with best practice and the latest research findings, the APMEN Vector Control Working group (VcWG) requires a detailed understanding of what the Country Partners are currently doing. Along with this year's fellowship of APMEN, is the yearly meeting of the group last March 2013.

It was attended by 10 member countries of APMEN, Dr. Ugyen Wangdi (Bhutan), Dr. Siv Sovanaroeth (Cambodia), Dr. Asik Surya (Indonesia), Dr. Rose Nani Mudin (Malaysia), Dr. Won Ja Lee (Korea), Dr. Mario Baquilod (Philippines), Mr. Hugo Bugoro (Solomon Island), Dr. Meragalde Ranjith Sunil Bandara (Sri Lanka), Dr. Piti Mongkalangoon (Thailand), Mr. Timothy Quai (Vanuatu), Dr. Ho Dihn Trung (Vietnam). Also present during the meeting are the partner institutions from James Cook University, University of Oxford and University of California. Partners from WHO-Nepal, Unicef, Sumba Foundation, AFRIMS, IVCC. Curriculum for entomologist was discussed during the meeting. The group discussed issues on bed nets, Insecticide resistance, GAPS, new technology to enhance vector control and work plan of the group for 2013. With the consensus of the members, the group came up with a plan and recommendations on current vector control, capacity building and operational support tools.

Dr. Chang Moh Seng was elected as the chairman of VCWG and Dr. Siv Sovanaroeth and Ms. Cecilia Hugo was elected as co-chair

Try some online educational malaria games at [Nobelprize.org](http://nobelprize.org). Click this link for more information:

http://nobelprize.org/educational_games/medicine/malaria/index.html

You may also play the Mosquito Splat game in the Facebook page of ACTMalaria.

APMEN V



In the largest meeting of the Network to date, over 120 representatives from 13 of the 14 APMEN Country Partners (Bhutan, China, Indonesia, Malaysia, Philippines, the Solomon Islands, Democratic Republic of Korea, Sri Lanka, Republic of Korea, Thailand, Vanuatu Vietnam, Cambodia & Nepal), partner institutions, meeting observers, and friends of APMEN converged on the beautiful, tropical surrounds of Bali to once again share valuable knowledge on malaria elimination within the Asia Pacific region.

Affectionately referred to as “APMEN Lima”, the annual meeting celebrated the Network’s successes from ongoing efforts to reduce malaria across the Asia Pacific region, and acknowledged the collective progress over the previous 12 months.

Day One began with a focus on host country Indonesia, whose significant achievements in malaria elimination were shared with the main meeting. These achievements were further supported by a report back from the APMEN Site Tour delegation conducted the week prior to APMEN V. The Site Tour travelled to Aceh province and the island of Sabang in the most Western part of the Indonesian archipelago, to examine the extensive progress in malaria elimination. The group was split into two teams, surveillance and political and community commitment, and over a very busy three day schedule met with the Planning and Development office of Sabang, Provincial and District health officials, staff and volunteers from sub-district community health centres (Puskesmas), and with the Mayor of Sabang and the Vice-Governor of Aceh.

APMEN Lima was the first opportunity to welcome newest Country Partners, Vietnam and Nepal, and representatives Dr Quang Thieu and Dr Garib Das Thakur gave valuable insight into challenges for malaria elimination in their countries. Recipients of APMEN’s research grants and fellowship programs were showcased and demonstrated the vital role that partner institutions play within the Network. Research grant poster presentations from both Vivax and Vector Working groups provided an informative backdrop for the APMEN products and tools launch which introduced the APMEN Vector Pocket Guide and a Standard Operating Procedures DVD on *Plasmodium vivax* DNA extraction, amongst other materials.

The first day concluded with a dinner reception hosted by the Vice Minister of Health, Professor Ali Gufron who presented alongside APMEN V co-chairs of the meeting Director General of Disease Control and Environmental Health Dr TjandraYoda Aditama and Sir Richard Feachem (Director, University of California, San Francisco, Global Health Group), and Australian Ambassador for HIV/AIDS, TB and Malaria, Mr James Gilling (AusAID First Assistant Secretary, Policy and Sector Division).

Sessions on Day Two focused on ‘Action’, and attendees discussed technical targeting of ‘Hotspots and Hot-pops’; using surveillance, GIS for active case-detection, vector control measures and accurate dosage of primaquine in high-risk settings for *Plasmodium falciparum* elimination.

... APMEN V

In a strategic session on sustainable financing for malaria elimination, APMEN heard from special guest, Dr Scott Filler, from The Global Fund who explained the new funding mechanism and the implications for the Network. Two case studies from APMEN Country Partners, the Philippines and Malaysia gave an overview of their respective involvement with various government departments, non-governmental organizations, and the private sector to tackle malaria elimination, with particular regard to migrant populations.

The business meeting began with an overview of the Network's achievements in 2012, and presentations and recommendations from the Vector and Vivax Working Groups, Country Partners and Partner Institutions. These recommendations were voted on by the Country Partners during the meeting, and will form the changes to the current 2012 work plan, and the basis for strategic prioritization for APMEN's second 5-year plan. APMEN Lima concluded with the announcement that APMEN VI will be hosted by The Philippines in 2014. We very much look forward to seeing everyone again for "APMEN Anim"!

APMEN would like to thank the Ministry of Health, Indonesia, and the team from the National Malaria Control Program who took the lead in making APMEN V such a success, the UQ Secretariat team (Professor Maxine Whittaker, Ms Arna Chancellor, Ms Amanda Lee and Ms Melanie Kawa), GHG Secretariat team (Dr Roly Gosling, Ms Cara Smith Gueye and Ms Hyunju Woo), the Vivax Coordinating team (Dr Ric Price, Dr Lorenz von Seidlein, Ms Amanda Murphy and Dr Sarah Auburn) and Vector working Group chair Moh Seng Chang, and the Vector working group transition support team from ACT Malaria.

ANNOUNCEMENT**The Third International Conference on Dengue and Dengue Haemorrhagic Fever 2013 (Dengue 2013).**

The Third International Conference on Dengue and Dengue Haemorrhagic Fever 2013 (Dengue 2013). The conference will be held on 21-23 October 2013 at The Imperial Queen's Park Hotel in Bangkok, Thailand. The theme of this conference is "*Global Dengue: Challenges and Promises*".

Building on the highly successful conferences held previously in Chiang Mai (2001) and Phuket (2008), this international conference will bring together leading scientists, clinicians, researches and scholars with a common interest and concern in the global situation of dengue, and will provide a venue for conference participants to exchange research findings, clinical experiences, encountered challenges and solutions in dengue treatment and control. The goal of conference is to enhance cross-disciplinary collaboration between delegates with different backgrounds and experiences, with the ultimate goal of improving the health of neglected world population affected by dengue. The conference will host keynote lectures by noted authorities, plenary session and themed symposiums with invited speaker, oral and poster presentations. We encourage participants to submit their abstracts.

<http://www.malarianomore.org/>

malaria
NO MORE

Malaria No More is determined to end malaria deaths in Africa by 2015. Malaria is a preventable and treatable disease and recent progress shows that malaria's days are numbered — but we need your help. Together, we can make malaria no more.

CLICK

11th International Training Course on Management of Malaria, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand 16 - 20 Sept 2013

This course is organized jointly by the Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, the World Health Organization Regional Office for South-East Asia Region, New Delhi, India and Mekong Malaria Programme, c/o Faculty of Tropical Medicine, Mahidol University, Thailand.

The objectives of the course are:

- To teach the participants in the management of severe and uncomplicated malaria both in well-equipped hospital and places with limited facilities
- To be updated with anti-malarial drugs in the treatment of severe malaria
- To review and train participants in the laboratory diagnosis of malaria
- To understand the recent pathogenesis of malaria

The course will be held at the WHO Collaborating Centre for Clinical Management of Malaria, Faculty of Tropical Medicine, Mahidol University, 420/6 Ratchawithi Road, Bangkok, 10400, Thailand.

8th MMFO

The Asian Collaborative Network for Malaria (ACTMalaria) and the Bureau of Vector Borne Disease (BVBD), Department of Disease Control, Ministry of Public Health, Bangkok, Thailand will launch the eight international training on the **"Management of Malaria Field Operations"** (MMFO) during 19 August to 4 October 2013 in Bangkok, Thailand. The curriculum is performance-based training, using current educational approach such as problem-based learning and inquiry-led that allows participants to develop critical thinking and life-long learning skills. Participatory method is applied to make the course student-centered and to ensure active participation of course participants. Case studies used in the course are based on real events, which include actual data. This training course was developed by the BVBD in collaboration with and support from:

- ACTMalaria;
- World Health Organization; SEARO/WPRO;
- USAID Bureau of Global Health;
- Malaria Consortium, UK;
- Center for Disease Control and Prevention (CDC, USA);
- Faculty of Tropical Medicine, Mahidol University.

Upon completion this training course, participants should be able to:

- apply critical thinking & management principles to improve evidence-based malaria control;
- engage in participatory-based approaches to malaria control;
- Advocate for malaria control.

The duration of the course is 7 weeks from 19 August to 4 October 2013 in Bangkok, Thailand. Course work will mainly take place in Bangkok and Field study will take place in a malaria endemic province.



Discovery of New Drug to Combat Malaria

Mar. 20, 2013 — University of South Florida researchers played a key role in an international multidisciplinary project that has yielded a promising new antimalarial drug with the potential to cure the mosquito-borne disease and block its transmission with low doses

Roman Manetsch, PhD, USF associate professor of chemistry, and Dennis Kyle, PhD, USF professor of global health, were co-leaders of the USF team, which helped to discover and develop a series of potent compounds to combat malaria known as the 4-(1H)-quinolone-3-diarylethers, or quinolones.

The USF researchers were part of larger Medicines for Malaria Venture (MMV) project team including Oregon Health & Science University in Portland, Drexel University in Philadelphia, and Monash University in Australia.

The researchers narrowed the most effective drug candidates in the quinolones series to one lead drug -- ELQ-300 -- now moving toward clinical testing.

The project team's findings are published today in the journal *Science Translational Medicine*. USF's Alexis LaCrue, PhD, a research associate in Kyle's laboratory, was a co-first author for the paper along with Aaron Nilssen, PhD, of Portland VA Medical Center.

In initial preclinical tests, the lead drug demonstrated impressive preventive and transmission-blocking -- and a low likelihood for developing rapid resistance to major strains of malaria parasites.

In addition, ELQ-300 could likely be produced more cheaply than existing antimalarial drugs -- a major advantage in treating a tropical disease that kills nearly one million people a year and causes recurring bouts of severe and incapacitating illness, most often among poor people in developing countries.

"This is one of the first drugs ever to kill the malaria parasite in all three stages of its life cycle," said Kyle, a member of the USF College of Public Health's Global Infectious Diseases Research team. "So, it may become part of a new-generation therapy that not only treats sick people and prevents them from getting ill, but also blocks the transmission of malaria from mosquitoes to humans ... If the drug can break the parasite life cycle, we may ultimately eradicate the disease."

New life from an old class of compounds

The new drug class identified by the researchers were derived from the first antimalarial quinolone, endochin, discovered more than 60 years ago but never pursued as a treatment because it appeared not to work in humans.

Using new technology to optimize the quinolones, the MMV project team demonstrated that these compounds were indeed highly effective against *Plasmodium falciparum*, the most lethal strain of malaria, and *Plasmodium vivax*, the major cause of malaria outside Africa. The quinolones target both the liver and blood stages of the parasite as well as the forms critical for disease transmission.

"This was a very challenging project requiring years of hard work, collaboration across disciplines, and a good portion of luck," said Manetsch, whose laboratory specializes in medicinal chemistry, drug discovery and development of novel chemical probes to characterize drug-protein interactions.

Optimizing drug success against a complex parasite life cycle

In humans, the malaria parasite targets the liver after it enters the bloodstream through the bite of an infected mosquito. Once inside the liver, the infecting parasites for most types of malaria multiply and rupture liver cells, escaping back into the bloodstream -- although sometimes parasites can remain dormant in the liver for extended periods. The parasites, now modified to attack red blood cells, rapidly create more parasites, which spread throughout the bloodstream in waves.

The researchers needed to find and fine-tune a drug with a long half-life both to prevent malaria and to [offer](#) long-term protection against reinfection. "It was a balancing act to optimize an antimalarial drug so that it was soluble and metabolically stable, without compromising its potency," Manetsch said. "We wanted a compound that within an individual would not break down too quickly, remain circulating in the blood for a long enough period to kill the parasites, and be highly active in blocking transmission in rodent models of malaria." The antimalarial drug developed needed to be potent enough to work without harmful or bothersome side effects.

ELQ-300 targets a protein complex of the mitochondria that is integral for the energy household of a cell, Manetsch said. That's good when you're trying to incapacitate a malaria parasite's powerhouse, but the same hit in a human's mitochondria could be disastrous, he added.

So, Manetsch, with the help of Kyle's expertise in parasitology, structurally modified the quinolone scaffold so that the drug candidate ELQ-300 would selectively hit only the malaria parasite's target while sparing the human mitochondria.



Antimalarial drug resistance: A global health threat

With the rapid emergence of multi-drug resistant strains of malaria, the need to find new drugs capable of delaying or preventing drug resistance has become even more pressing, researchers say.

The quinolones, including ELQ-300, target the same biological pathway as atovaquone, the main component of Malarone, one of the newest combination drugs used to treat malaria. But, in repeated experiments ELQ-300 did not generate drug-resistant strains of the malaria parasite -- making it a significant improvement over atovaquone.

In addition, the new drug's design makes it more effective at lower doses, hopefully meaning fewer and smaller pills for patients at a lower cost, said Kyle, a technical advisor for the MMV team preparing ELQ-300 for clinical trials.

USF's Kyle and Manetsch, funded by National Institutes of Health grants totaling more than \$2.5 million, continue to collaborate on research to identify and develop novel antimalarial drugs.

Source: University of South Florida (USF Health) (2013, March 20). Discovery of new drug to combat malaria. *ScienceDaily*. Retrieved March 25, 2013

Country Updates: Philippines

Consultative Workshop on Assessing the Feasibility of Malaria Elimination in the Philippines

Department of Health conducted a consultative workshop to establish technical and operational feasibilities of planned targets and activities, review the malaria situation of the country, current strategies and targets for elimination to determine the required investment in the health system to meet the goals of elimination.

The consultative workshop was held at the Bayview Park Hotel last January 29-31, 2013. This event of conferring to the regional and provincial malaria coordinators, entomologists, QA managers, resource persons, public health managers, and partners were deemed necessary in establishing operational plan towards elimination of malaria disease.

The consultation has two objectives; 1) to gather sufficient evidences/practices from different stakeholders relevant to making informed decision in developing the malaria elimination plan for the Philippines; and 2) to determine the required investment in the health system in order to meet the goals of malaria elimination.

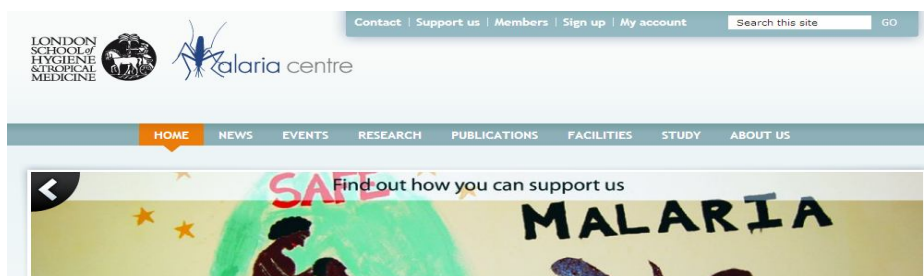


Malaria Centre

The Malaria Centre at the London School of Hygiene and Tropical Medicine houses the largest number of malaria researchers, students and support staff in Europe. The Centre is unique in its size and breadth and draws together the diverse research and teaching activities carried out at the School.

As well as developing tools, techniques and knowledge about malaria, a strong emphasis is placed on translating research outcomes into practice. Centre staff also play an instrumental role in the world-class teaching and training of malaria students and professionals across the world.

The Centre has a range of facilities that contribute to the diagnosis, treatment and research of malaria. The Centre brings members together through regular seminars and events and provides support to research projects in malaria endemic countries.





A bunch of photographs can now be accessed at the online photo gallery of ACTMalaria:

http://www.actmalaria.net/home/photo_gallery.php#base



Asian Collaborative Training Network for Malaria



ACTMalaria (Asian Collaborative Training Network for Malaria) is a training network to which the National Malaria Control Programmes of Bangladesh, Cambodia, PR China, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Timor-Leste and Vietnam are members. The network aims at 2 major activities:

- Provide collaborative training for member countries to meet the needs of malaria control in Southeast Asia and the Mekong Sub-region;
- Improve information and communication exchange among member countries, partners and other stakeholders on malaria problems affecting the region.

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