

**APMEN III**  
**ANNUAL BUSINESS AND TECHNICAL MEETING**  
**SUMMARY NOTES**



**Report of the Third Annual Business and Technical Meeting of the  
Asia Pacific Malaria Elimination Network (APMEN)**

**9-12 May, 2011**

**Shangri-La Tanjung Aru Resort, Kota Kinabalu,  
Sabah, Malaysia**

APMEN Co-Chairs

Sir Richard Feachem and Dr. Lokman Hakim bin Sulaiman

APMEN Secretariat

Prof. Maxine Whittaker, Dr. Michelle Hsiang, Dr. Roly Gosling,  
Arna Chancellor, Cara Smith Gueye, Amanda Lee

## Day One – Monday 9 May, 2011

### Welcome Reception

MC: Prof. Maxine Whittaker

#### *Welcome and Introductions*

Dr. Rabindra Abeyasinghe  
APMEN Advisory Board Chair & Prior Co-Chair  
Project Director, Ministry of Health, Sri Lanka

Dr. Lokman Hakim bin Sulaiman  
APMEN Co-Chair  
Deputy Director General of Health, Ministry of Health, Malaysia

Sir Richard Feachem  
APMEN Co-Chair  
Director, Global Health Group University of California, San Francisco, USA

Datuk Rosnah binti Abd. Rashid Shirlin,  
Honourable Deputy Minister of Health, Malaysia

*Formal Dinner inclusive of a Cultural Show supported by the Tourism Board of Sabah*

## Day Two – Tuesday 10 May, 2011

### Opening Remarks

Sir Richard Feachem, APMEN Co-Chair Director, Global Health Group, University of California, San Francisco, USA

Dr. Rabindra Abeyasinghe, APMEN Advisory Board Chair & Prior Co-Chair Project Director, Ministry of Health, Sri Lanka

Dr. Lokman Hakim bin Sulaiman, APMEN Co-Chair, Deputy Director General of Health, Ministry of Health, Malaysia

Dr. Aafje Rietveld, Medical Officer, on behalf of Dr. Robert Newman, Director of the Global Malaria Program, World Health Organization

Dr. John Ehrenberg, Director Communicable Diseases, on behalf of Prof. Shin Young-soo, WPRO Regional Director

Dr. Leonard Ortega, Malaria Officer, on behalf of Dr. Samlee Plianbangchang, SEARO Regional Director

- Thank you to Datuk Rosnah Abdul Rashid Shirlin Deputy Minister of Health, Malaysia and the local Ministry of Health teams that have helped plan and support APMEN III in Kota Kinabalu.

- APMEN has grown dramatically from APMEN I in Brisbane, Australia, to APMEN II in Kandy, Sri Lanka, to APMEN III in Malaysia.
- WHO continues to be an important partner and collaborator of APMEN, and APMEN is a welcome forum for exchange of practical experience and research in elimination. Major challenges in the region include Artemisinin resistance, widespread G6PD deficiency, mobile populations, and environmental degradation.
- APMEN recognizes the presence of the Global Fund, which is a major source of financing for malaria work. The Australian Government (AusAID) was also thanked for their support.

### **Session 1: Overview of malaria elimination in Malaysia**

Chair: Dr. John Ehrenberg

Presenter:

Dr. Christina Rundi

[see presentation slides]

#### Key epidemiological and programmatic information

- Population at risk is low in Western Malaysia, higher in Sabah and Sarawak; Sabah contributes to more than half of the cases. There has been a 50% reduction in number of cases.
- Elimination target: Western Malaysia – 2015, Sabah and Sarawak – 2020

#### Discussion:

- Malaysia has a long history of malaria control, moving from eradication to control, then back to elimination. Recent gains have resulted from strong program components and committed domestic resources, both financial and in in-country expertise.
- *P. vivax* is currently the dominant malaria species. In Western Malaysia, over half of the cases are due to *vivax* - in Sabah the proportion is higher. Key challenges include migrant workers, ethnic minority groups and border malaria.
- Vector control in remote areas of Sabah and Sarawak is difficult, however, as the number of cases in localities is reduced, it becomes more manageable. Currently, IRS coverage is 80%.
- Management of outbreaks requires that the programme is able to anticipate outbreaks, based on reported cases and ecological conditions. Good surveillance needs to be in place.
- Regarding G6PD deficiency, prevalence is different across geographic locations. In principle, primaquine should only be used following G6PD screening. Patients in Malaysia receive cards recording their G6PD status when screened at birth, but many do not keep their cards.
- Managing cross-border population movements requires a current knowledge of where migrant populations are and where they are moving and intersectoral collaboration (e.g., with plantation owners). Some imported cases are from across national boundaries and some are locally imported (another district or state). Officials in other states or districts from which an individual contracted malaria are informed in order to investigate contacts and institute control measures.
- There is no strategy as yet concerning *P knowlesi*. It is still considered a research issue.
- Malaysia is considered a leader in the region, well on way to elimination.

### **Session 2: Elimination Profiles**

Chair: Dr. Aafje Rietveld

Presenters:

Dr. Nguyen Manh Hung - *Vietnam: From Control to Elimination*  
Mr. Kamaludin Mohamad Yassin - *Brunei: From Elimination to Prevention*

[see presentation slides]

### Vietnam

- Strategy is to control malaria actively in the moderate and highly malaria-endemic areas, and to eliminate in areas where malaria has been reduced to a low level for many years.
- Challenges include large populations living in the endemic areas, people going to and staying overnight in the forests, coverage and quality of malaria control activities in the malaria endemic areas is limited, drug resistance of *P. falciparum*, diagnosis quality of village health workers and microscopists, and funding and resources.

### Discussion

- Some suspected cases remain undiagnosed. 60% cases diagnosed at community level and 20% at district level.

### Brunei Darussalam

- 1953-1962: DDT spray in limited scale, unsystematic distribution of Paludrine. In 1962: joined the Global Malaria Eradication Programme.
- Maintenance phase began in 1970 – operations included surveillance, screening of migrant workers from malarious areas, case investigation, and case registration.
- The last case was in 1970. In 1987, WHO certified the country as malaria-free.
- In 2010, there were seven imported cases with 56,000 blood slides taken that year.

### Discussion

- The Government has been dedicated to malaria control and elimination, which has resulted in great progress.
- Breeding habitat rapidly reduced as a result of urbanization and vector control among other factors.
- Prophylaxis (chloroquine) given to forest rangers and army in forested areas (e.g. the border along Sabah and Sarawak).
- Radical treatment: 3 days chloroquine and 14 days primaquine.
- Concern growing about *P. knowlesi*.

### **Session 3: *P. knowlesi* and the Elimination Agenda**

Chair: Dr. Mario Baquilod

Presenters:

Prof. Balbir Singh

Dr. Indra Vythilingam

Dr. Moh Seng Chang (for Dr. Eva Christophel WPRO )

[see presentation slides]

- Overview of *P. knowlesi* was given, which was recently found to infect humans. *P. knowlesi* cases may be missed because blood smears have early ring stages resembling *P. falciparum*, with later stages resembling *P. malariae*.

- Further work is needed to improve surveillance of *P. knowlesi*, which can cause high parasite densities and deaths, a threat to malaria elimination efforts.
- There was a recent WHO informal consultation on the public health importance of *P. knowlesi*, which took place in Kuching, Sarawak, in February 2011. Plans were made for a follow-up consultation in two years.

#### Discussion

- For elimination, there are two important issues in terms of geographic spread: the distribution of *P. knowlesi* in humans needs to be defined and east of the Wallace line, there are no non-human primates, thus *P. knowlesi* should not be present in the Pacific Islands.
- There may be a role for APMEN to take forward some of the recommendations made in the information WHO consultation.
- Elimination of the four human species will be easier, elimination of *P. knowlesi* may be the last step.
- At present, PCR is the only validated diagnostic tool. Countries should consider ways in which they could do *P. knowlesi* surveillance using PCR.

#### **Session 4: Cross Border and Regional Collaborations**

Chair: Dr. Roly Gosling

Presenters:

- Dr. Thinley Yangzom - Bhutan/India
- Prof. Tang Linhua - China/Myanmar
- Prof. Wichai Satimai -Thailand/Cambodia
- Dr. Charles Delacollette - Mekong Malaria Program

[see presentation slides]

#### Bhutan

- Migrant workers enter the country from highly endemic areas of origin.
- In the past, there have been collaborations with India.
- No capacity to do thorough screening in the hospitals, so border screening centres will be implemented.

#### China

- Target population for malaria control is 580,000 residents of five special regions of Myanmar, bordering Yunnan Province.

#### Thailand

- Border areas with Malaysia and Myanmar are important, in terms of stability and potential emergence of Artemisinin resistance.
- High population movement along the border occurs from both sides, especially during peak agriculture seasons.

#### Discussion

- There is a major need for cross-border meetings between countries, to deal specifically with the issue of case management on both sides of the border.
- Do we see changes over time in asymptomatic cases?
- Further tools to identify infections are necessary, such as PCR to identify *P. falciparum* carriers.

- Most collaborations for cross-border activities have failed. Assam and Bhutan will have major challenges and will need assistance at different levels.
- A higher level of advocacy for cross border malaria work is needed, up to ministerial level meetings. Challenges to these countries include the need for all sectors to be involved, and innovative ways to work together at the ground level must be explored (e.g., role of NGOs). It is difficult to coordinate different Ministries of Health - vertical programs, borders, conflict, and migrants are issues shared by many programs, which can lead to Artemisinin resistance.
- Is there a government agency that can facilitate the communication between governments? Is there a natural forum for this conversation to take place, or another organization such as ASEAN?  
The WHO has a role in moving this issue forward, such as convening meetings and facilitating dialogue.

#### **Session 5: APMEN Business Meeting**

Chair: Dr. Leonard Ortega

Presenters:

Prof. Maxine Whittaker

Dr. Michelle Hsiang

Dr. Rob Condon

[see presentation slides]

Please refer to the Business Meeting minutes.

#### **Session 6: Breakout Sessions**

Breakout Sessions Overview: Arna Chancellor and Cara Smith Gueye

Advocacy and Resourcing for the network, Chair Dr. George Taleo

Capacity Building, Chair Dr. Gawrie Galappaththy

Cross Border and Regional Collaboration, Chair Dr. Wichai Satimai

Emerging themes, Chair Prof. Gao Qi

[see presentation slides for Session 8]

#### **Evening Session 7: New Drugs and Vaccines for Vivax Elimination**

Chair: Dr. Rabindra Abeyasinghe

Presenters:

Dr. Ian Bathurst – *MMV*

Dr. Joerg-Peter Kleim - *GSK*

[see presentation slides]

### **Day Three – Wednesday 11 May, 2011**

#### **Session 8: Breakout Session Report Back**

Chair: Dr. Albino Bobogare

Presenters:

Dr. George Taleo – *Advocacy and Resourcing for the network*  
Dr. Gawrie Galappaththy – *Capacity Building*  
Dr. Wichai Satimai – *Cross Border and Regional Collaboration*  
Prof. Gao Qi – *Emerging Themes*

[see presentation slides]

### **Advocacy and Resourcing for the Network - Group feedback**

- There needs to be evidence-building activities to support advocacy efforts, such as case studies on resource needs post-elimination, and economic and business cases developed for elimination.
- High-level advocates should be identified and approached.
- Format – Messages and products to relevant groups (RBM, ASEAN, GMP, Global Fund Board).
- More Secretariat hours needed for the development of advocacy tools, materials and strategic visits.

#### Discussion

- The elimination agenda needs to be promoted in each APMEN country.
- Case study topic areas and leaders in this will be prioritized and undertaken, as is feasible with the APMEN budget.
- APMEN needs to source and secure other funding sources, potentially by engaging with those in the region who have eliminated.
- Purpose of APMEN – to move the agenda of elimination forward. This is done through identifying the gaps in achieving elimination and make progress in those areas. WHO provides technical expertise.

### **Capacity Building - Group feedback**

- The need for GIS/Mapping training was confirmed. Necessary work on this includes the need for an inventory of what is available in each country, what type of training is most useful (basic, medium-level, and advanced) and who would the participants be. Proposed duration is two weeks for the short-term, basic training.
- Capacity building through APMEN research grants is considered valuable
- Fellowships – review of the experiences to date, lessons learnt and suggestions for next round

#### Discussion

- Previous Fellows may only apply after three years.
- Countries have one fellowship opportunity every year, unless there are less than five total applicants, and priority is given to those that have not already received fellowships.
- If there is funding for a sixth fellowship position and there are valid applicants, use the funding for fellowships and not other budget items.
- A related, useful activity is to take an inventory of human resources and what is needed in human resource capacity, training, and resources.

### **Cross Border and Regional Collaborations - Group feedback**

#### Discussion

- Lack of progress in this area may be due to the fact that we use the term cross-border, and an idea was put forward that APMEN could move the focus toward technical issues instead of continuing in the framework of cross border as a political issue.
- A case study on strategies to support cross border collaborations is needed (thematic case study across several countries).

- Pursue support via advocacy efforts at forums such as APEC and ASEAN, targeting high level (e.g., Prime Ministers).

### **Emerging themes - Group feedback**

- Four areas of work identified: Community participation, *P. knowlesi*, G6PD deficiency, and ACT resistance

#### Discussion

- Examine research that will be published on community participation in elimination, then prioritize actions.
- Cambodia called for MDA to be a priority and for the development of an RDT.
- MDA case study work is already in the APMEN activities and has some budget allocation.
- *P. knowlesi* work could be integrated into *Vivax* work stream, but no firm conclusion as to it being a priority in a *vivax* focused network, lead established for *P. knowlesi* work.
- Brief discussion occurred on benefits to certification of elimination and suggestions made for APMEN to possibly advocate to World Tourism Association.

### **Session 9: Surveillance and the Role of Geo-referenced Data for Malaria Elimination**

Chair: Prof. Gao Qi

Presenters:

Dr. Albino Bobogare and Dr. George Taleo – *Surveillance and the use of geo-spatial data for malaria elimination in the Solomon Islands and Vanuatu*

Dr. Mario Baquilod – *Parasite Surveillance in the Philippines*

Dr. Catherine Moyes and Rosalind Howes – *APMEN Atlas and G6PD Deficiency map*

[see presentation slides]

#### Solomon Islands and Vanuatu

- GIS in Temotu, Tafea and Isabella provinces very focused on vector control activities. Now GIS is used to detect where cases are located; all houses are mapped using PDA. They map areas by zones then give to team on ground to use for IRS. Also used for evaluation and surveillance. Mapping household distribution and follow up of LLIN distribution. Exploring linking the data updates to the use of SMS.
- It is possible to overlay with other information, such as socio-economic variables, climate, census data, data from other stakeholders (statistics departments, other health division's).
- For identification of last case, you will need household level mapping.
- Use of geo-referenced data to map Artemisinin resistance, as is done in Thailand, can now be shared within the network - share the experiences and uses of technologies

#### Philippines

- Most investigations are not done in malaria-free areas.
- Challenges include population movements; porous border areas show the need for cross border collaboration.

#### MAP

- MAP provides a global view and uses a consistent methodology, peer-reviewed and internationally recognized, and can be potentially a useful advocacy tool. Funded by the Wellcome Trust.
- Map development consists of extensive literature review, personal contact and survey completion. The quality of maps depends on the data obtained.

- The development of G6PD deficiency maps, which are based on prevalence surveys, can assist countries by more specifically targeting areas where primaquine should be contraindicated. However there are limitations to such a map. There is not enough data on ethnicity, which affects G6PD deficiency maps. There is also a need for more localized maps rather than country-wide maps which are too general.
- For the G6PD deficiency map, inclusion criteria is based on the strict use of neonatal screening, school screening and blood bank screening, the first map only including data from males. Caveats on the G6PD deficiency input data include that there are different methodologies used to measure, different tests (more than 10 used in data reviewed), and differences between male and female data.

### **Session 10: Working Group Updates**

#### Vector Control Working Group (VcWG)

Chair: Prof. Won-Ja Lee

Presenter: Dr. Kevin Palmer

#### Vivax Working Group (VxWG)

Chair: Dr. George Taleo

Presenter: Dr. Ric Price

[see presentation slides]

#### Vivax Working Group

- The network looks forward to seeing some of the initial research published soon.
- A major challenge is adherence to 14 days of treatment - education or capacity-building is a need in this area.
- The role of tafenoquine was raised.
- More money is needed for *P. vivax* research - NIH does not prioritize it, and Gates predominately focusing funding for *P. falciparum*. Advocacy for research in this area needs clear messaging regarding the importance of it. Themes could be *P. vivax* and infant anaemia, co-morbidity and co-mortality, and otherwise making the link with the MCH agenda.
- Improve collaboration between *P. vivax* groups.

#### Vector Control Working Group

- A call for research on other innovative vector control interventions (such as banding, slow moving streams), noting that larviciding may not be suitable for monsoonal countries.
- Advocates for the role for environmental management, noting that elimination plans do not normally have larviciding to any great extent. There is a possibility for APMEN to undertake multi-country larviciding studies and share experiences and best practices.

### **Session 11: APMEN Study Tour**

*Sabah Primary Health Care Volunteers Program*

Chairs: Dr. Moh Seng Chang and Dr. Jenarun Jelip

[see presentation slides and report on Sabah PHCVs]

#### Overview of study tour:

- The study tour was arranged to understand the primary health care volunteers (PHCV) for malaria control in Sabah. Kiulu Health Centre, in the district of Tuaran was selected in view of the close proximity to Kota Kinabalu.
- Briefings included: the malaria elimination plan in the State of Sabah, roles of primary health care volunteers, organization of district health and rural health services in Sabah, and there was an opportunity to interact with the PHCVs and to visit Kiulu Health Centre. Rural health centres provide malaria microscopic diagnosis facility for prompt diagnosis and treatment. The malaria blood slide collections are performed by the PHCV and are sent for examination by health centre staff.

#### Day Four – Thursday 12 May, 2011

##### Session 12: Global Fund Q&A

Chair: Dr. Rabindra Abeyasinghe

Presenter: Sandii Lwin

- Funding in the future is not known, given the current economic climate. Demand is exceeding the money available, prioritization screens are being implemented based in part upon burden of the illness.
- Low burden countries are concerned that their proposals may be screened out because of their low burden. There is a need for a strategy to sensitize the Global Fund Board and TRP members on this concern, clearly articulating what distinguishes malaria elimination priorities from malaria control. WHO has a role as they are involved in meetings and technical partners to the TRP.
- APMEN should package its elimination efforts as value for money for the Global Fund, the investment they make in countries for malaria control makes good dividends.
- The additionality of grants needs to be clear, especially now that there is an aid effectiveness team and reporting on effectiveness indicators. When shifting from low-income to lower-middle income status, with a low malaria burden, countries are concerned that it will be difficult to have success in getting a Global Fund grant. The Global Fund Board is currently examining these issues; by focusing on specific groups and populations there are fewer restrictions.

##### Session 13: APMEN Fellowship Program Panel

Chair: Dr. Cecil Hugo

Presenters:

**Dr Jun Cao** (APMEN Fellow), Prof. Gao Qi (NMCP), Dr. Chris Drakeley (Host mentor)

**Mr Pema Samdrup** (APMEN Fellow), Dr. Thinley Yangzom (NMCP)

**Ms Tshering Dema** (APMEN Fellow), Dr. Thinley Yangzom (NMCP), Dr. Rita Kusriastuti (Host mentor)

**Ms Ervi Salwati** (APMEN Fellow), Dr. Rita Kusriastuti (NMCP), Prof. Dennis Shanks, on behalf of Dr. Qin Cheng (Host mentor)

**Ms Majhalia Torno** (APMEN Fellow), Dr. Mario Baquilod (NMCP)

[see presentation slides]

An overview of each fellowship and feedback from the mentor and host country program was given.

Discussion:

- Fellows gained skills in a range of areas: molecular analysis, Seroepidemiology analysis for *P. vivax*, GIS application, vector taxonomy, and community engagement and ownership in malaria elimination.
- The diversity of Fellowship topic areas in the elimination arena was noted as was the amount of information and skill- sharing across so many APMEN Country Partners and Partner Institutions, all to occur within the program's first year. This sharing has resulted in at least one formal memorandum of understanding being developed to formalise skills exchange and information sharing.
- Further collaborating with WHO could increase activities in capacity-building, such as developing a relationship between the program and the WHO collaborating centres.
- A database of training opportunities should be available for potential Fellowship applicants, identifying both training needs and opportunities available. A variation of this is currently being developed by the APMEN Secretariat.
- Widespread commendation expressed towards the Fellowship Program and its outcomes and support for this activity of APMEN.

**Session 14: Priorities for APMEN Work plan 2011 and 2012 meeting**

Chair: Prof. Dennis Shanks

Presenters:

Prof. Maxine Whittaker

Dr. Michelle Hsiang

[see presentation slides]

Please refer to the Business Meeting Minutes

**Session 15: Strategic Direction / Conclusions**

Dr. Aafje Rietveld (on behalf of all WHO participants including Dr. John Ehrenberg, Dr. Leonard Ortega, Dr. Moh Seng Chang, Dr. Charles Delacollette, Dr. Maria Dorina Bustos, Dr. Jeffrey Hii and Dr. Lasse Vestergaard)

Dr. Lokman Hakim bin Sulaiman

Dr. Won-Ja Lee

Sir Richard Feachem

Closing remarks

- WHO will undertake a pilot test of a malaria elimination training course in 2011. A two-week course will be ready in October or November. This course will later be made available to everyone so they can run courses in other locations. The WHO can provide teachers, but need sponsors for training fellowships and local costs.
- Malaria elimination needs national advocacy and a strong public health system. For elimination to be successful, program needs to target foci. Entomologists are important, as is the reorientation of staff to elimination activities from control.

- APMEN has bright future as it brings together many partners. To be sure of what we want to achieve, we need to stay focused, and partner countries need to maintain focus. Cross border issues are sensitive and this is a challenge for elimination.
- The Republic of Korea is pleased to host the fourth APMEN meeting in Korea in 2012.
- APMEN is coming of age, as seen by the following examples: Research Grants and the Fellows Program are moving forward, there is an increase in information-sharing. Advocacy should be elevated as it is a priority, with new and better ways to do this.
- There are tremendous successes in malaria in the region: 11 countries have reduced their cases and API. The story must be shared with the world. We need the political commitment, continued finance (international and national), and we need to mobilize APMEN to bring this story to APEC, ASEAN, the Board of the Global Fund. We need to approach and engage the Global Fund members from APMEN countries. We need continued funding, and need policy that supports malaria elimination.

## APMEN III: Agenda

Shangri-La, Kota Kinabalu, Sabah, Malaysia

Monday May 9 – Thursday May 12, 2011



Day/Date	Time and Session	
Monday, May 9	19:00 – 19:30  19:45         20:15	<p><b>Welcome Reception</b></p> <p><b>Welcome and Introductions</b>            Dr. Rabindra Abeyasinghe            APMEN Advisory Board Chair &amp; Prior Co-Chair            Project Director, Ministry of Health, Sri Lanka</p> <p>Dr. Lokman Hakim bin Sulaiman            APMEN Co-Chair            Deputy Director General of Health, Ministry of Health, Malaysia</p> <p>Sir Richard Feachem            APMEN Co-Chair            Director, Global Health Group University of California, San Francisco, USA</p> <p>Datuk Rosnah binti Abd. Rashid Shirlin,            Honourable Deputy Minister of Health, Malaysia</p> <p><b>Formal Dinner</b> inclusive of a Cultural Show supported by the Tourism Board of Sabah</p>
Tuesday, May 10	08:30 – 09:00	<p><b>Opening Remarks</b></p> <p>Sir Richard Feachem            APMEN Co-Chair            Director, Global Health Group, University of California, San Francisco, USA</p> <p>Dr. Rabindra Abeyasinghe            APMEN Advisory Board Chair &amp; Prior Co-Chair            Project Director, Ministry of Health, Sri Lanka</p> <p>Dr. Lokman Hakim bin Sulaiman            APMEN Co-Chair            Deputy Director General of Health, Ministry of Health, Malaysia</p> <p>Dr. Aafje Rietveld            Medical Officer, on behalf of Dr. Robert Newman, Director of the Global Malaria Program, World Health Organization</p> <p>Dr. John Ehrenberg            Director Communicable Diseases, on behalf of Professor Shin Young-soo, WPRO Regional Director</p> <p>Dr. Leonard Ortega            Malaria Officer, on behalf of Dr. Samlee Plianbangchang, SEARO Regional Director</p>

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09:00 – 10:00	<p><b>Session 1: Overview of malaria elimination in Malaysia</b>            Chair: Dr. John Ehrenberg            Presenter: Dr. Christina Rundi</p>
10:00 – 10:30	Coffee & Tea
10:30 – 11:30	<p><b>Session 2: Elimination Profiles</b>            Chair: Dr. Aafje Rietveld            Presenters:                Dr. Nguyen Manh Hung - Vietnam: From Control to Elimination                Mr. Kamaludin Mohamad Yassin - Brunei: From Elimination to Prevention of Reintroduction</p>
11:30 – 12:30	<p><b>Session 3: P. knowlesi and the Elimination Agenda</b>            Chair: Dr. Mario Baquilod            Presenters:                Professor Balbir Singh                Dr. Indra Vythilingam                Dr. Moh Seng Chang</p>
12:30 – 13:30	<b>Lunch</b> ATLAS meeting (one representative per Country Partner)
13:30 – 14:30	<p><b>Session 4: Cross Border and Regional Collaborations</b>            Chair: Dr. Roly Gosling            Presenters:                Dr. Thinley Yangzom - Bhutan/India                Professor Linhua Tang - China/Myanmar                Dr. Wichai Satimai - Thailand/Cambodia                Dr. Charles Delacollette - Mekong Malaria Program</p>
14:30 – 15:30	<p><b>Session 5: APMEN Business Meeting</b>            Chair: Dr. Leonard Ortega            Presenters: Professor Maxine Whittaker, Dr. Michelle Hsiang, Dr. Rob Condon</p>
15:30 – 16:00	Coffee & Tea and <b>Group Photo</b>
16:00 – 17:30	<p><b>Session 6: Breakout Sessions</b>            Breakout Sessions Overview: Arna Chancellor and Cara Smith Gueye</p> <p>Breakout Sessions:                Advocacy and Resourcing for the network, Chair Dr. George Taleo                Capacity Building, Chair Dr. Gawrie Galappaththy                Cross Border and Regional Collaboration, Chair Dr. Wichai Satimai                Emerging themes, Chair Professor. Gao Qi</p>
17:30 -18:15	<p><b>Session 7: New Drugs and Vaccines for Vivax Elimination</b> (includes refreshments)            Chair: Dr. Rabindra Abeyasinghe            Presenters:                Dr. Ian Bathurst – MMV                Dr. Joerg-Peter Kleim - GSK</p>

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<b>Wednesday, May 11</b>	08:30 – 10:00	<p><b>Session 8: Breakout Session Report-Back</b>            Chair: Dr. Albino Bobogare            Advocacy and Resourcing for the network, Dr. George Taleo            Capacity Building, Dr. Gawrie Galappaththy            Cross Border and Regional Collaboration, Dr. Wichai Satimai            Emerging Themes, Chair Professor Gao Qi</p>
	10:00 – 10:30	Coffee & Tea
	10:30 – 11:30	<p><b>Session 9: Surveillance and the role of Geo referenced data for malaria elimination</b>            Chair: Professor Gao Qi            Presenters:            Vector Surveillance in the Pacific Islands – Dr. Albino Bobogare, Dr. George Taleo            Parasite Surveillance in the Philippines - Dr. Mario Baquilod            APMEN Atlas and G6PD deficiency map - Dr. Catherine Moyes, Rosalind Howes</p>
	11:30 – 12:15	<p><b>Session 10: Working Group Updates</b>            Chair: Professor Won-Ja Lee            Vector Control Working Group (VcWG)            Presenter: Dr. Kevin Palmer</p> <p>Chair: Dr. George Taleo            Vivax Working Group (VxWG)            Presenter: Dr. Ric Price</p>
	12:15 – 13:00	<b>Lunch</b>
	13:00 – 17:30	<p><b>Session 11: APMEN Study Tour</b>            Chairs: Dr. Moh Seng Chang and Dr. Jenarun Jelip</p>
	19:30	Dinner for the Country Partner Representatives meeting No other scheduled evening events
<b>Thursday, May 12</b>	8:30 – 9:30	<p><b>Session 12: Global Fund Q&amp;A (Questions and Answers)</b>            Chair: Dr. Rabindra Abeyasinghe            Presenter: Sandii Lwin</p>
	9:30 – 10:30	<p><b>Session 13: APMEN Fellowship Program Panel</b>            Chair: Dr. Cecil Hugo            Presenters: APMEN 2010 Fellows and Mentors</p>
	# 10:30 – 11:00	Coffee & Tea
	11:00 – 12:00	<p><b>Session 14: Priorities for APMEN 2011 Work plan and 2012 meeting</b>            Chair: Professor Dennis Shanks            Presenters: Professor Maxine Whittaker and Dr. Michelle Hsiang</p>
	12:00 – 12:30	<p><b>Session 15: Strategic Direction / Conclusions</b>            Presenters:            Dr. John Ehrenberg            Dr. Leonard Ortega            Dr. Aafje Rietveld</p>

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	12:30 – 13:30 <i>(14:30 – 17:30)</i>	Dr. Lokman Hakim bin Sulaiman Professor Won-Ja Lee Sir Richard Feachem  <b>Lunch</b>  <b><i>(Advisory Board Meeting and Dinner )</i></b>
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