

## Technical Review Panel Member

### Curriculum Vitae

Name: Jeffrey Hii

Nationality: Australian

Additional languages: Neo-Melanesian pidgin, Chinese (Hokkien)

Expertise: Malaria: epidemiology, vector control, entomology, monitoring and evaluation; program implementation; institutional development and capacity building; operational research

### Qualifications

Qualification	Institution	Department	Year
B. Sc (Hons)	University of New England, NSW Australia	Zoology	1972
Diploma of Applied Parasitology & Entomology	Institute of Medical Research, Malaysia	Ministry of Health	1975
Doctor of Philosophy	University of London, England	London School of Hygiene and Tropical Medicine	1982

### Employment History

Employer	Position	Place	Year
Malaria Consortium	Senior Vector Control specialist	Bangkok, Thailand	2014-present
Vector Works Ltd	Vector consultant	Malaysia	2012-2014
World Health Organization	Malaria Scientist	Philippines	2009-2012
World Health Organization	Malaria Scientist	Solomon Islands	2003-2009
AusAID, Australia	Public Health adviser	Canberra, Australia	1999-2003
James Cook University	Research Fellow	Townsville, Australia	1994-1999
Papua New Guinea Institute of Medical Research	Research Fellow	Madang, Papua New Guinea	1989-1994
Ministry of Health	Medical Entomologist	Kota Kinabalu, Malaysia	1975-1989

### Relevant Publications

1. **Hii J**, Sang VY, Chin KF, Chua R, Tambakau S, Binisol ES, et al. 1987. The influence of permethrin-impregnated bednets and mass drug administration on the incidence of

*Plasmodium falciparum* malaria in children in the Upper Kinabatangan, Sabah, Malaysia. Medical and Veterinary Entomology 1, 397-407.

2. Leake DW & **Hii, JLK**. 1993. Giving bednets "fair" tests in field trials against malaria: a case from Sabah, East Malaysia. Southeast Asian Journal of Tropical Medicine and Public Health 20, 379-384.
3. **Hii J**, Kanai L, Foligela A, Kan SKP, Burkot TR, Wirtz RA. 1993. Impact of permethrin-impregnated mosquito nets compared with DDT house-spraying against malaria transmission by *Anopheles farauti* and *An. punctulatus* in the Solomon Islands. Medical and Veterinary Entomology 7, 333-338.
4. Genton B, **Hii J**, Al-Yaman F, Paru R, Beck H-P, Ginny M, et al. 1994. The use of untreated bednets and malaria infection, morbidity and immunity. Annals of Tropical Medicine and Parasitology 8, 263-270.
5. Leake Jr DW & **Hii JLK**. 1994. Observations of human behaviour influencing the use of insecticide-impregnated bednets to control malaria in Sabah. Asia Pacific Journal of Public Health, 7, 92-97.
6. **Hii JLK**, Birley MH, Kanai L, Foligeli A, Wagner J. 1995. Comparative effects of permethrin-impregnated bed nets and DDT house spraying on survival rates and oviposition interval of *Anopheles farauti* No. 1 (Diptera:Culicidae) in Solomon Islands. 1995. Annals of Tropical Medicine and Parasitology, 89, 521-529.
7. **Hii JLK**, Alexander N, Chee KC, Hassan AR, Safri A, Chan MKC. 1995. Lambda-cyhalothrin-treated bednets control malaria in Sabah, Malaysia. Southeast Asian Journal of Tropical Medicine and Public Health, 26, 371-374.
8. Woolhouse MEJ, Dye C, Etard J-F, Smith T, Charlwood JD, **Hii JLK**, et al 1996. Heterogeneous host-vector contact and the control of vector-borne parasitic diseases. Proc Natl Acad Sc USA, 94, 338-342.
9. Chang MS, **Hii J**, Buttner P & Mansur F. 1997. Changes in abundance and behaviour of vector mosquitoes induced by land use during the development of an oil palm plantation in Sarawak, East Malaysia. Transactions of the Royal Society of Tropical Medicine and Hygiene, 91, 382-386.
10. **Hii J**, Frances SP & Canyon D. 1997. Personal protective measures against disease vectors. In: Primer of Travel Medicine (ed. P. Leggat), Chap 19, 173-182 pp, 2<sup>nd</sup> edition. Australasian College Tropical Medicine.
11. **Hii J**, Smith T, Genton B, Alexander N, et al 2001. Area effects of bed net use in a malaria endemic area in Papua New Guinea. Transactions of the Royal Society of Tropical Medicine and Hygiene, 95, 7-13.
12. Smith T, **Hii J**, Muller I, Genton B, et al. 2001. Associations of peak shifts in age-prevalence for human malarias with bednet coverage. Transactions of the Royal Society of Tropical Medicine Hygiene, 95, 1-6.

13. Truong Van Co, Le Khanh Thuan & **Hii J**. 2001. A modified WHO bioassay cone for pyrethroid-impregnated bed nets. *Mekong Malaria Forum*, 6: 16-17.
14. Cibulskis R, Bell D, Christophel, E-M, **Hii, J**, Delacollette C, et al. 2007. Estimating trends in the burden of malaria at country level. *American Journal Tropical Medicine & Hygiene*, 77(6 Suppl): 133-137.
15. Van den Berg, **Hii J**, et al 2011. Status of pesticide management in the practice of vector control: a global survey in countries at risk of malaria or other major vector-borne diseases. *Malaria Journal* 10: 125.
16. Matthews G, Zaim M, Yadav RS, Soares A, **Hii J**, Ameneshewa B, Mnzava A, et al. van den Berg, H, 2011. Status of legislation and regulatory control of public health pesticides in countries endemic with or at risk of major vector-borne diseases. *Environmental Health Perspectives*, 119: 1517-1522.
17. **Hii J**, Rueda LM. 2013. Malaria vectors in the Greater Mekong Subregion: overview of malaria vectors and remaining challenges. 2013. *Southeast Asian J Trop Med Public Health* 44 Suppl 1:73–165.
18. Wini L, Appleyard B, Bobogare A, Pikacha J, Seke J, Tuni M, Hou L, **Hii J**, McCarthy J, van Eijk AM. 2013. Intermittent preventive treatment with sulfadoxine-pyrimethamine versus weekly chloroquine prophylaxis for malaria in pregnancy in Honiara, Solomon Islands: a randomised trial. *Malaria World Journal* 4: 12.
19. Vythilingam I, **Hii J**. 2013. Simian malaria parasites: special emphasis on *Plasmodium knowlesi* and their Anopheles vectors in Southeast Asia. In *Anopheles mosquitoes – new insights into malaria vectors*; Prof Sylvie Manguin (Editor), InTech, DOI: 10.5772/54491.
20. **Hii J**, Thakur GD, Marasini BR, Pokhrel YR, Upadhyay MP, Rijal KR, Adhikar NR, Pant SK, Ortega L, Singh N, Ghimere P. 2014. Monitoring the durability of long-lasting insecticidal nets in field conditions in Nepal. *WHO South East Asia Journal Public Health* 3: 81-84.
21. Overgaard J, Suwonkerd W, **Hii J**. 2015. The malaria landscape: mosquitoes, transmission landscape, insecticide resistance, and integrated control in Thailand. In: *Socio-Ecological Dimensions of Infectious Diseases in Southeast Asia*; Editors: Morand S, Dujardin JP, Lefait-Robin R, Apiwathnasorn, Springer, NY.
22. Hustedt J, Duom D, Keo V, Sokha L, Sam BL, Vibol C, Alexander N, Bradley J, Lopes S, Rithea L, **Hii J**. 2017. Determining the efficacy of guppies and pyriproxyfen (Sumilarv 2MR) combined with community engagement on dengue vectors in Cambodia: study protocol for a cluster randomized trial. *Trials* 18: 367.
23. Crawshaw, A, Maung Maung T, Kyaw MP, Myo Win Tin, Sint N, Aung YNW, Celhay O, Nicholas N, Roca-Feltrer A, Shafique M, **Hii J**. 2017. Preference and acceptability of insecticide-treated clothing for malaria prevention among rubber tappers in Myanmar: a cluster-randomised non-inferiority crossover trial. *Malaria Journal* 16: 92.

## Additional Information

International Vector Control Consultant, Aug 2012 - present

Participated and conducted more than 20 assignments covering 10 countries in Africa, Asia and the Pacific.

### Annex 1. Assignments 2012-present

Assignment	Location	Duration	Client
<b>Vector control specialist:</b> Team leader for Timor Leste Malaria Programme Review focusing on Vector Surveillance and control and community engagement	MoH, Timor Leste (Feb 2017)	8 days	MoH Timor Leste
<b>Vector control specialist:</b> Team leader for DPRK External Malaria Programme Review focusing on Vector Surveillance and control and community engagement	MoH, Pyongyang, Democratic People's Republic of Korea (Feb-Mar 2017)	17 days	MoH DPRK
<b>IVM specialist:</b> Resource person, 6 <sup>th</sup> International Integrated Vector Management training course for national and international entomologists and programme staff	MoH, Kuala Lumpur, Malaysia (Sep-Oct 2016)	5 days	WHO-WPRO
<b>Temporary Adviser:</b> Review and update synergist bioassay methodology for the detection of metabolic resistance mechanisms and intensity of resistance in malaria vectors.	Wits Research Institute for Malaria, Johannesburg, South Africa (Apr 2016)	3 days	WHO-GMP
<b>Observer:</b> Finalize WPR Action Plan for dengue prevention and control 2016 and beyond.	WHO Manila, Philippines; Jun 2016	3 days	WHO-WPRO
<b>Observer:</b> Participate in the 67 <sup>th</sup> of the WHO Regional Committee for the Western Pacific.	WHO Manila, Philippines; Jun 2016	5 days	WHO-WPRO
<b>Vector control specialist:</b> Team leader for Thailand Malaria Program Review focusing on Community Capacity Strengthening: Vector control and prevention assessment (4 team members).	Bangkok, Ubon Ratchathani province: Aug-Sep 2015	24 days	WHO-SEARO
<b>Vector control specialist:</b> Desk review of malaria vectors, vector control and technical support to design a study on durability and efficacy of Long Lasting Insecticidal nets in Bangladesh	Dhaka, Bangladesh; Sep-Nov 2015	45 days	WHO-SEARO
<b>Vector control specialist:</b> Wrote a paper "Vector Control and personal protection of Migrant and Mobile populations in GMS – a matrix guidance on what are best options and methodologies in the context of Artemisinin Resistance."	Desk-based assignment: Jul-Aug 2014	30 days	WHO-SEARO
<b>Vector control specialist:</b> Conducted orientation of field researchers and key staff from the program regarding collection and data quality assurance for monitoring the durability of LLINs in the field in Nepal.	Kathmandu and Dhulikhel, Nepal: Dec 2013	6 days	WHO-SEARO
<b>Malaria control specialist.</b> Wrote paper for Global Strategic Plan on <i>P. vivax</i> control and elimination (2016-2025). Provided a presentation to the writing committee at WHO GMP, Geneva.	Desk-based assignment: Nov 2013	30 days	WHO GMP
<b>Vector control specialist:</b> Conduct Malaria Program Review (MPR) with a focus on current program services delivery systems by vector control and assess progress towards achievement	Vientiane, Lao PDR: Oct 2013	12 days	CMPE, MOH

of targets in terms of burden of disease, trends and impact of interventions.			
<b>Vector control specialist:</b> Conduct capacity building and training assessment of insecticide resistance monitoring, efficacy of LLIN and community acceptability, SOPs for the bundling strategy of insecticide-treated hammock nets, outbreak preparedness and emergency response capacity, and evaluation of IRS implementation.	Vientiane, Lao PDR: Oct-Dec 2013	60 days	CMPE, MOH
<b>Vector control specialist:</b> Team leader for Malaria Program Review programme areas on entomology, vector control and other preventive measures and identify supplies for mosquito surveillance (5 team members)	Trongsa and Zhemgang districts, Bhutan: Sep 2013	10 days	WHO-SEARO
<b>Vector control specialist:</b> Team Leader for a scoping mission to assess the feasibility study of community acceptance and preference of insecticide-treated clothing in a rubber forest (7 team members)	Yangon and Thanphuzayat Mon State, Jun 2013	7 days	Malaria Consortium
<b>Vector control specialist:</b> Team leader for Malaria Program Review focusing on entomology, vector control and other preventive measures. Designed a retrospective study on the durability of LLIN (4 team members)	Kathmandu, Kailali and Kanchanpur, Nepal: Jun 2013	21 days	WHO-SEARO
<b>Vector control specialist:</b> Team leader for Malaria Program Review programme areas on entomology, vector control and other preventive measures and assist in strengthening the national entomology laboratory, capacity strengthening of master trainee in indoor residual spraying, identify supplies for mosquito surveillance (5 team members)	Pyongyang, May 2013: 29 days	29 days	WHO-SEARO
<b>Malaria control specialist:</b> Conduct capacity building of entomology staff on IVM, guidelines on the management and judicious use of public health pesticides, annual reporting of insecticide usage, indoor residual spraying, insecticide resistance monitoring, rapid assessment of community acceptance of LLIN, bioassay methods of LLIN.	Vientiane, Lao PDR: Feb-Apr 2013	60 days	CMPE, MOH
<b>Malaria control specialist:</b> Monitoring Quality and Coverage of Indoor Residual Spraying 2013	Honiara, Solomon Islands: Nov-Dec 2012	23 days	PacMIS-AusAID
<b>Malaria control specialist.</b> Write paper for Mekong Malaria III series "Malaria vectors in the Mekong Sub-region: an overview of malaria vectors and remaining challenges."	Desk-based assignment: Nov-Dec 2012	20 days	WHO MMP
<b>Project coordinator:</b> Wrote a protocol and SOP manual for a case control study of risk factors affecting <i>P. knowlesi</i> transmission, manage procurement and supply of consumables and equipment, staff recruitment and projects office.	Kota Kinabalu & Kudat, Sabah, Malaysia: Oct-Dec 2012	30 days	MOH-Menzies School of Health Research

<b>IVM Training specialist:</b> Conducted MMFO training workshop for NMCP personnel	Manila, Philippines: Aug 2012	3 days	ACT Malaria
<b>Malaria control specialist:</b> Evaluation of the Agusan Del Sur Malaria Control and Prevention Project Community Trust Fund (2-person team)	Agusan del Sur, Manila, Philippines: Aug 2012	12 days	AusAID
<b>IVM specialist:</b> Team leader for Malaria Programme Review in Bayelsa and Cross River states, Nigeria (5 team members).	Abuja, Nigeria; Aug-Sep 2012	29 days	Malaria Consortium
<b>Malaria control specialist:</b> Conduct capacity building of entomology staff on IVM, guidelines on the management and judicious use of public health pesticides, annual reporting of insecticide usage, indoor residual spraying, insecticide resistance monitoring, rapid assessment of community acceptance of LLIN, bioassay methods of LLIN.	Vientiane, Lao PDR: Apr-May 2012	60 days	CMPE, MOH