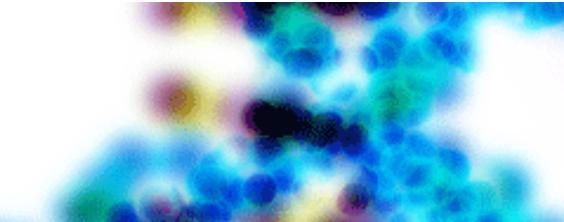


# MEEGID XII

12th International Conference on Molecular Epidemiology  
and Evolutionary Genetics of Infectious Diseases



**11-13 December 2014**  
The Royal River Hotel,  
Bangkok

## Wednesday, 10 December 2014

Room	<i>Phanurangsi Foyer</i>
17:00-19:00	Registration
Room	<i>Phanurangsi A &amp; B</i>
19:00-20:00	<b>Welcome Drinks Reception</b>

## Thursday, 11 December 2014

<b>Plenary Session</b>	
Room	<i>Phanurangsi C</i>
Chair	<b>M. Tibayrenc, Institut de recherche pour le développement, France</b>
09:45-10:15	<b>PL01: Genomic epidemiology of bacterial pathogens</b> S. Brisse, <i>Institut Pasteur, France</i>
Chair	<b>S. Brisse, Institut Pasteur, France</b>
10:15 -10:45	<b>PL02: Exploring the evolution and epidemiology of parasitic helminths in the -omics age</b> R.B. Gasser, <i>The University of Melbourne, Australia</i>
Room	<i>Phanurangsi A &amp; B</i>
10:45-11:15	<b>Coffee Break</b>
Room	<i>Phanurangsi C</i>
Chair	<b>J. Heitman, Duke University, USA</b>
11:15-11:45	<b>PL03: Ebola viruses: from the wild to humans</b> Prof. Jean-Claude Piffaretti, <i>Interlifesciences, Massagno, Switzerland; President of the Federation of European Microbiological Societies</i>
Chair	<b>Prof. Jean-Claude Piffaretti, Interlifesciences, Massagno, Switzerland; President of the Federation of European Microbiological Societies</b>
11:45-12:15	<b>PL04: Unisexual reproduction and the evolution of eukaryotic microbial pathogens</b> J. Heitman, <i>Duke University, USA</i>
Room	<i>Phanurangsi A &amp; B</i>
12:15-13:30	<b>Lunch &amp; poster session 1</b>

Rooms	<i>Phanurangsi C</i>	<i>Bongkotrat A</i>	<i>Bongkotrat B</i>	<i>Busabongkot A</i>
<b>13:30-15:30</b>	<b>Symposium 1-Modelling</b>	<b>Symposium 2-Molecular epidemiology parasitic protozoa 1</b>	<b>Symposium 3-Host parameters 1</b>	<b>Symposium 4-In silico approaches</b>
<b>Chairs</b>	<b>R. Duboz, CIRAD, France, A. Stern, Tel Aviv University, Israel</b>	<b>A. Das, Birla Institute Of Technology and Science, India</b>	<b>J-P. Hugot, UMR-CNRS 7205, MNHN, France D.H. Rubin,Vanderbilt University, USA; VA TVHS, USA</b>	<b>J.F. Pothier, ZHAW Zurich University of Applied Sciences, Switzerland P. Munk, Technical University of Denmark, Denmark</b>
	<b>13:30-14:00 [O01.1] Temporal modeling of Crimean-Congo hemorrhagic fever in Iran E. Mostafavi*<sup>1,5</sup>, A.A. Haghdoost<sup>2</sup>, A. Doost Irani<sup>1,3</sup>, S. Bokaei<sup>4</sup>, S. Chinikar<sup>1</sup>, <sup>1</sup>Pasteur Institute of Iran, Iran, <sup>2</sup>Kerman University of Medical Sciences, Iran, <sup>3</sup>Tehran University of Medical Sciences, Iran, <sup>4</sup>University of Tehran, Iran, <sup>5</sup>Research Centre for Emerging and Reemerging Infectious Diseases (Akanlu), Iran</b>	<b>13:30-14:00 [O02.1] Molecular detection of vector-borne haemoparasites in wild rodent species in South Africa M.C. Oosthuizen<sup>*1</sup>, M. Troskie<sup>1</sup>, I. Vorster<sup>1</sup>, R. Jansen<sup>2</sup>, B.L. Penzhorn<sup>1</sup>, S. Matthee<sup>3</sup>, <sup>1</sup>University of Pretoria, South Africa, <sup>2</sup>Tshwane University of Technology, South Africa, <sup>3</sup>Stellenbosch University, South Africa</b>	<b>13:30-13:54 [O03.1] Genetic variability of <i>Talpa europea</i> and <i>Nova hantavirus (NVAV)</i> in France J-P. Hugot<sup>*1</sup>, C. Feliu<sup>2</sup>, A. Ribas<sup>2</sup>, J. Dormion<sup>3</sup>, S.H. Gu<sup>4</sup>, V. Nicolas<sup>1</sup>, <sup>1</sup>UMR-CNRS 7205, MNHN, France, <sup>2</sup>UNIV-BARCELONA, Spain, <sup>3</sup>TAUP'GREEN FRANCE BP 19 92201 Neuilly sur Seine, France, <sup>4</sup>University of Hawaii, USA</b>	<b>13:30-14:00 [O04.1] Withdrawn</b>
	<b>14:00-14:30 [O01.2] Japanese encephalitis in a peri-urban pig slaughterhouse of Cambodia : A deterministic meta-population model to quantify the risk of transmission to humans M. Yakovleff<sup>1,2</sup>, J. Cappelle<sup>1,2</sup>, V. Chevalier<sup>1</sup>, R. Duboz<sup>*1</sup>, <sup>1</sup>CIRAD, France, <sup>2</sup>Institut Pasteur, Cambodia</b>	<b>14:00-14:30 [O02.2] Making sense out of antisense in clinical isolates of the Plasmodium spp. A. Das<sup>*1</sup>, P.A. Boopathi<sup>1</sup>, A.K. Boopathi<sup>1</sup> et al, <sup>1</sup>Birla Institute Of Technology and Science, India, <sup>2</sup>Sardar Patel Medical College, India, <sup>3</sup>Genotypic Technology Pvt. Ltd., India, <sup>4</sup>University of Health Sciences, India</b>	<b>13:54-14:18 [O03.2] Systems biology-based host-virus pathogen gene interaction network analysis F. Cheng<sup>1</sup>, J. Murray<sup>2</sup>, J. Sheng<sup>1</sup>, Z. Zhao<sup>1</sup>, D.H. Rubin<sup>*3,1</sup>, <sup>1</sup>Vanderbilt University, USA, <sup>2</sup>Zirus, USA, <sup>3</sup>VA TVHS, USA</b>	<b>14:00-14:30 [O04.2] Sequence-based analysis reveals plasmid-borne ESBL genes encoding resistance to critically important antimicrobials most often linked with other resistance genes in swine and pork <i>E. coli</i> isolates P.Munk*, Y. Agersø, Technical University of Denmark, Denmark</b>
	<b>14:30-15:00 [O01.3] To be or not to be diverse: Dilemmas of a virus A. Stern<sup>*1</sup>, S. Bianco<sup>2</sup>, M. Te Yeh<sup>3</sup>, C. Wright<sup>3</sup>, K. Butcher<sup>3</sup>, R. Nielsen<sup>4</sup>, R. Andino<sup>3</sup>, <sup>1</sup>Tel Aviv University, Israel,</b>	<b>14:30-15:00 [O02.3] Diversity of Cryptosporidium from rodents in Thailand A. Masakul<sup>1</sup>, N. Thapraphrom<sup>1</sup>, K. Chaisiri<sup>2</sup>, A. Anamika Karnchanabanthoeng<sup>1</sup>, M.</b>	<b>14:18-14:42 [O03.3] Association of the HLA-B*52 allele with non-progression to AIDS in Brazilian HIV-1-infected individuals S.L.M. Teixeira<sup>*1</sup>, N.B.R. De Sa<sup>1</sup>, D.P. Campos<sup>2</sup>, A.B. Coelho<sup>2</sup>, M.L.</b>	<b>14:30-15:00 [O04.3] The <i>Salmonella</i> In Silico typing resource (SISTR), a platform for rapid analysis and interpretation of <i>Salmonella</i> draft genome sequence data</b>

	<p><sup>2</sup>IBM Research - Almaden, USA, <sup>3</sup>UCSF, USA, <sup>4</sup>UC Berkeley, USA</p>	<p>Desquesnes<sup>3,1</sup>, S. Morand<sup>4</sup>, S. Herder<sup>5,1</sup>, A. Binot<sup>6,1</sup>, S. Jittapalapong<sup>*1</sup>, <sup>1</sup>Kasetsart University, Thailand, <sup>2</sup>Mahidol University, Thailand, <sup>3</sup>Centre de Coopération Internationale en Recherche Agronomique pour le Développement; Cirad-Bios, UMR-InterTryp, France, <sup>4</sup>CNRS-CIRAD AGIRs, Centre d'Infectiologie Christophe Mérieux du Laos, France, <sup>5</sup>IRD - UMR177-Intertryp, France, <sup>6</sup>CIRAD-UPR AGIRs, France</p>	<p>Guimaraes<sup>1</sup>, T.C.N.F. Leite<sup>1</sup>, V.G. Dos Santos<sup>2</sup>, M.G. Morgado<sup>1</sup>, <sup>1</sup>IOC/FIOCRUZ, Brazil, <sup>2</sup>INI/FIOCRUZ, Brazil</p>	<p>P. Kruczkevicz<sup>1</sup>, C. Yoshida<sup>1</sup>, E. Linghor<sup>1</sup>, D. Barker<sup>1,2</sup>, C.R. Laing<sup>1</sup>, V.P.J. Gannon<sup>1</sup>, J.H.E. Nash<sup>1</sup>, E.N. Taboada<sup>*1</sup>, <sup>1</sup>Public Health Agency of Canada, Canada, <sup>2</sup>University of Lethbridge, Canada</p>
	<p><b>15:00-15:30</b> [O01.4] <b>On the risk of severe dengue during secondary infection: Mathematical modeling coupled with a systematic review</b> K. Mizumoto<sup>*1</sup>, K. Ejima<sup>2</sup>, T. Yamamoto<sup>3</sup>, H. Nishiura<sup>1</sup>, <sup>1</sup>The University of Tokyo, Japan, <sup>2</sup>The University of Alabama, USA, <sup>3</sup>Nagasaki University, Japan</p>	<p><b>15:00-15:30</b> [O02.4] <b>Molecular identification of Cryptosporidium parvum from roaming Long-tailed macaque (<i>Macaca fascicularis</i>) in Lopburi province, Thailand</b> W. Sricharern<sup>*1,2</sup>, S. Saengow<sup>1</sup>, P. Simking<sup>1,2</sup>, B. Yimming<sup>1</sup>, A. Panthawong<sup>1</sup>, K. Saeng-chuto<sup>1</sup>, J. Supanam<sup>3</sup>, S. Morand<sup>4</sup>, S. Jittapalapong<sup>*1</sup>, <sup>1</sup>Kasetsart University, Thailand, <sup>2</sup>Center of Excellence on Agricultural Biotechnology: (AG-BIO/PERDO-CHE), Thailand, <sup>3</sup>Private Animal Clinic, Thailand, <sup>4</sup>CNRS-CIRAD AGIRs, Centre d'Infectiologie</p>	<p><b>14:42-15:06</b> [O03.4] <b>Adaptation of pandemic H1N1 influenza viruses in experimental model of mammals</b> E.A. Prokopeva<sup>*1,2</sup>, A.V. Gluschenko<sup>2</sup>, S.G. Sayfutdinova<sup>1</sup>, M.V. Sivay<sup>2</sup>, S.V. Alkhovskiy<sup>3</sup>, A.M. Schetinin<sup>3</sup>, M.Y. Shchelkanov<sup>3</sup>, L.V. Shestopalova<sup>1</sup>, A.M. Shestopalov<sup>2,1</sup>, <sup>1</sup>Novosibirsk State University, Russia, <sup>2</sup>Research Center of Clinical and Experimental Medicine, Siberian Division of the Russian Academy of Medical Sciences, Russia, <sup>3</sup>D. I. Ivanovsky Inst. of Virology, Russian Academy of Medical Sciences, Russia</p>	<p><b>15:00-15:30</b> [O04.4] <b>MALDI-TOF MS for microorganism identification: From pattern recognition towards marker based approaches</b> J.F. Pothier<sup>*1</sup>, V. Pflüger<sup>2</sup>, D. Ziegler<sup>2</sup>, G. Vogel<sup>2</sup>, B. Duffy<sup>1</sup>, <sup>1</sup>ZHAW Zurich University of Applied Sciences, Switzerland, <sup>2</sup>Mabritec AG, Switzerland</p>

		<i>Christophe Mérieux du Laos, France</i>	<b>15:06-15:30 [O03.5]</b> <b>Association study between Japanese encephalitis vaccine immunity and single nucleotide polymorphisms (SNPs) of TNF-<math>\alpha</math>, IL-2, IL-4 and IL-10 genes</b> X.W. Xu*, J. Zhou, Y. Li, Y. Zhang, J.K. Yu, L. Shi, Y.F. Yao, M.B. Sun, <i>Institute of Medical Biology, Chinese Academy of Medical Sciences &amp; Peking Union Medical College, China</i>	
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**Plenary Session**

<i>Room</i>	<i>Phanurangsi C</i>			
<b>Chair</b>	<b>N. Mideo, University of Toronto, Canada</b>			
15:30-16:00	<b>PL05: The greatest experiment in evolution: Viral biocontrol of rabbits</b> E.C. Holmes, <i>The University of Sydney, Australia</i>			
<i>Room</i>	<i>Phanurangsi A &amp; B</i>			
16:00-16.30	<b>Coffee Break</b>			
<i>Room</i>	<i>Phanurangsi C</i>			
<b>Chair</b>	<b>E.C. Holmes, The University of Sydney, Australia</b>			
16.30-17:00	<b>PL06: New tools for detecting drug resistance in malaria infections</b> N. Mideo, <i>University of Toronto, Canada</i>			
<i>Rooms</i>	<i>Phanurangsi C</i>	<i>Bongkotrat A</i>	<i>Bongkotrat B</i>	<i>Busabongkot A</i>
<b>17:00-19:00</b>	<b>Symposium 5-Modern epidemiological approaches</b>	<b>Symposium 6-Phylogeny virus 1</b>	<b>Symposium 7-Mycobacterial diseases 1</b>	<b>Symposium 8-Population genetics/evolution vectors</b>
<b>Chairs</b>	<b>E.N. Taboada, V.P.J. Gannon, Public Health Agency of Canada, Canada B.A. Wilcox, Tufts University, USA</b>	<b>T. Stadler, ETH Zürich, Switzerland K. Tohma, Tohoku University, Japan</b>	<b>T. Wirth, EPHE, Paris, France; Natural History Museum, France</b>	<b>T. De Meeûs, IRD, Burkina Faso, France S.J. Jacquet, Cirad, France; INRA, France</b>
	<b>17:00-17:30 [O05.1] Detection of tick-borne infections in birds in West Siberia I.G. Korobitsyn<sup>1</sup>, N.S. Moskvitina<sup>1</sup>, O.Y. Tyuten'kov<sup>1</sup>, S.I. Gashkov<sup>1</sup>, Y.V.</b>	<b>17:00-17:30 [O06.1] A unified framework for phylodynamic inference of epidemic spread T. Stadler<sup>*1</sup>, A. Drummond<sup>2</sup>, D.</b>	<b>17:00-17:30 [O07.1] Mycobacterium tuberculosis Beijing lineage: Origin, spread and selection signatures T. Wirth<sup>*1,2</sup>, M. Merker<sup>3</sup>, P. Supply<sup>4,5</sup>, S.</b>	<b>17:00-17:24 [O08.1] Ecotype evolution in <i>Glossina palpalis</i> subspecies, major vectors of sleeping sickness T. De Meeûs<sup>*1,3</sup>, J. Bouyer<sup>2,4</sup>, S. Ravel<sup>3</sup></b>

	Kononova <sup>2</sup> , S.S. Moskvitin <sup>1</sup> , V.N. Romanenko <sup>1</sup> , T.P. Mikryukova <sup>2</sup> , E.V. Protopopova <sup>2</sup> , M.Y. Kartashov <sup>2</sup> et al, <sup>1</sup> <i>Tomsk State University, Russia</i> , <sup>2</sup> <i>State Research Center for Virology and Biotechnology "Vector", Russia</i>	Kühnert <sup>1</sup> , S. Bonhoeffer <sup>1</sup> , <sup>1</sup> <i>ETH Zürich, Switzerland</i> , <sup>2</sup> <i>University of Auckland, New Zealand</i>	Niemann <sup>3</sup> , <sup>1</sup> <i>EPHE, Paris, France</i> , <sup>2</sup> <i>Natural History Museum, France</i> , <sup>3</sup> <i>Research Center Borstel, Germany</i> , <sup>4</sup> <i>INSERM, Lille, France</i> , <sup>5</sup> <i>CNRS-UMR 8204, Lille, France</i>	P. Solano <sup>1,3</sup> , <sup>1</sup> <i>IRD, Burkina Faso</i> , <sup>2</sup> <i>CIRAD, Senegal</i> , <sup>3</sup> <i>IRD, France</i> , <sup>4</sup> <i>CIRAD, France</i>
	<b>17:30-18:00</b> [O05.2] <b>SuperPhy: Molecular epidemiology and predictive genomics for bacterial pathogens</b> M.D. Whiteside, C.R. Laing, A. Manji, P. Kruczakiewicz, E.N. Taboada*, V.P.J. Gannon, <i>Public Health Agency of Canada, Canada</i>	<b>17:30-18:00</b> [O06.2] <b>Pattern of HRSV epidemics in Iran: Molecular epidemiology of the G protein over seven years</b> E. Faghihloo, J. Yavarian *, T. Mokhtari Azad, <i>School of Public Health, Tehran University of Medical Sciences, Iran</i>	<b>17:30-18:00</b> [O07.2] <b>The N-Terminal Region Of M. tuberculosis PPE Protein RvXXXX Induces Strong B Cell Response In Active TB Patients</b> P.R. Abraham*, G. Suman Lata <sup>2</sup> , S. Mukhopadhyay <sup>1</sup> , <sup>1</sup> <i>Center for DNA Fingerprinting and Diagnostics, India</i> , <sup>2</sup> <i>Mahavir Hospital and Research Centre, India</i>	<b>17:24-17:48</b> [O08.2] <b>Detecting isolation by distance with different genetic distances, with and without null alleles of insect vectors (tsetse flies)</b> M. Ségré*, S. Thévenon <sup>2</sup> , A.M.G. Belem <sup>3</sup> , T. De Meeûs <sup>1,2</sup> , <sup>1</sup> <i>Centre International de Recherche-Développement sur l'Elevage en zone Subhumide (CIRDES), 01 BP 454 Bobo-Dioulasso 01, Burkina Faso</i> , <sup>2</sup> <i>Interactions hôtes - vecteurs - parasites dans les infections par des trypanosomatidae - (INTERTRYP), UMR IRD/CIRAD 177, France</i> , <sup>3</sup> <i>Université Polytechnique de Bobo-Dioulasso, 01 BP 1091 Bobo-Dioulasso 01, Burkina Faso</i>
	<b>18:00-18:30</b> [O05.3] <b>Ecology, evolution and genetics in education and infectious disease research in Southeast Asia</b> P. Saenna <sup>1</sup> , H. Nguyen-Viet <sup>2</sup> , J. Steele <sup>3</sup> , I. Mendenhall <sup>4</sup> , B.A. Wilcox * <sup>5,3</sup> , <sup>1</sup> <i>Khon Kaen University, Thailand</i> , <sup>2</sup> <i>Hanoi School of Public Health, VietNam</i> , <sup>3</sup> <i>Tufts University, USA</i> , <sup>4</sup> <i>Duke-NUS, Singapore</i> , <sup>5</sup> <i>Mahidol University, Thailand</i>	<b>18:00-18:30</b> [O06.3] <b>Recently observed island-to-island transmission of rabies in Romblon, the Philippines</b> K. Tohma*, M. Saito <sup>1</sup> , C.S. Demetria <sup>2</sup> , D.L. Manalo <sup>2</sup> , B.P. Quiambao <sup>2</sup> , T. Kamigaki <sup>1</sup> , H. Oshitani <sup>1</sup> , <sup>1</sup> <i>Tohoku University, Japan</i> , <sup>2</sup> <i>Research Institute for Tropical Medicine, The Philippines</i>	<b>18:00-18:30</b> [O07.3] <b>MixTB: An optimization-based method for classifying complex TB infections</b> L. Chindelevitch*, C. Colijn <sup>3</sup> , P. Moodley <sup>4</sup> , D. Wilson <sup>4,5</sup> , T. Cohen <sup>1,2</sup> , <sup>1</sup> <i>Brigham and Women's Hospital, USA</i> , <sup>2</sup> <i>Harvard School of Public Health, USA</i> , <sup>3</sup> <i>Imperial College, UK</i> , <sup>4</sup> <i>University of KwaZulu-Natal, South Africa</i> , <sup>5</sup> <i>Edendale Hospital, South Africa</i>	<b>17:48-18:12</b> [O08.3] <b>Phylogeography of Culicoides imicola (Diptera: Ceratopogonidae), biting midge vector species of Orbivirus: expansion and colonization?</b> S.J. Jacquet*, K.H. Huber <sup>2,1</sup> , J.B. Bouyer <sup>1,3</sup> , C.C. Chevillon <sup>4</sup> , T.B. Balenghien <sup>1,2</sup> , C.G. Garros <sup>1,2</sup> , <sup>1</sup> <i>Cirad, France</i> , <sup>2</sup> <i>INRA, France</i> , <sup>3</sup> <i>ISRA, Senegal</i> , <sup>4</sup> <i>IRD, France</i>

	<b>18:30-19:00 [005.4]</b> <b>Liver fluke infection and associated diseases in southeast asia: An eco-evolutionary perspective</b> P. Echaubard* <sup>1,2</sup> , C. Richter <sup>3,4</sup> , B. Wilcox <sup>5,6</sup> , <sup>1</sup> <i>Laurentian University, Canada</i> , <sup>2</sup> <i>Khon Kaen University, Thailand</i> , <sup>3</sup> <i>Kunming Institute of Botany, China</i> , <sup>4</sup> <i>Graduate University of Chinese Academy of Sciences, China</i> , <sup>5</sup> <i>Mahidol University, Thailand</i> , <sup>6</sup> <i>Tufts University, USA</i>	<b>18:30-19:00 [006.4]</b> <b>Tick-borne Encephalitis virus in Ixodes ticks and wild birds in the Russia</b> V.B. Loktev <sup>*1,4</sup> , T.P. Mikryukova <sup>1</sup> , E.V. Protopopova <sup>1</sup> , Y.V. Kononova <sup>1</sup> , V.N. Romanenko <sup>2</sup> , E.V. Chausov <sup>1</sup> , V.A. Ternovoi <sup>1</sup> , I.G. Korobitsyn <sup>2</sup> , I.V. Korabel'nikov <sup>3</sup> , N.S. Moskvitina <sup>2</sup> , <sup>1</sup> <i>State Research Center for Virology and Biotechnology Vector, Russia</i> , <sup>2</sup> <i>Tomsk State University, Russia</i> , <sup>3</sup> <i>Desinfection of Rospotrebnadzor, Russia</i> , <sup>4</sup> <i>Institute of Cytology and Genetics, Russia</i>	<b>18:30-19:00 [007.4]</b> <b>Thioethers - active against Mycobacterium tuberculosis</b> M.I. Konaklieva <sup>*1</sup> , R. Kuskovsky <sup>1</sup> , K. Arora <sup>2</sup> , H.I. Boshoff <sup>2</sup> , C.E. Barry III <sup>2</sup> , <sup>1</sup> <i>American University, USA</i> , <sup>2</sup> <i>Tuberculosis Research Section, LCID, NIAID, NIH, USA</i>	<b>18:12-18:36 [008.4]</b> <b>Anopheles darlingi microgeographic population structure</b> M. Campos*, D.P. Alonso, P.E.M. Ribolla, <i>Sao Paulo State University, Brazil</i>
				<b>18:36-19:00 [008.5]</b> <b>Molecular phylogenetics of anopheline (Anophelinae: Culicidae) mosquitoes from the oriental and afrotropical zoogeographic zones</b> K. Munawar*, A. Saleh, E.I. Khater, <i>King Saud University, Saudi Arabia</i>

Friday, 12 December 2014

## Plenary Session

Room	Phanurangsi C
Chair	<b>M. Tibayrenc, Institut de recherche pour le développement, France</b>
08:45-09:15	<b>PL07: Human nature: Genes to culture</b> F.J. Ayala, <i>University of California, USA</i>
Chair	<b>F.J. Ayala, University of California, USA</b>
09:15-09:45	<b>PL08: Molecular epidemiology of Group A rotaviruses: Implications for vaccine introduction into countries of South East Asia</b> M.D. Bowen, <i>Centers for Disease Control and Prevention, USA</i>
Room	Phanurangsi A & B
09:45-10:15	<b>Coffee Break</b>
Rooms	Phanurangsi C
10:15-12:15	<b>Symposium 9-Molecular epidemiology parasitic protozoa 2</b>
Chairs	<b>G.L.A. Harrison, Infection and Immunity Division, Walter and Eliza Hall Institute, Australia</b> <b>L. González-Cerón, Instituto Nacional de Salud Pública, Mexico</b>
	<b>10:15-10:45 [009.1]</b> <b>First case of cryptic speciation in avian <i>Plasmodium</i> parasites, with remarks on</b>
	<b>10:15-10:45 [010.1]</b> <b>Co-evolution of the parasitic fungi <i>Pneumocystis</i> and their Muridae</b>
	<b>10:15-10:45 [011.1]</b> <b>Adamantane and neuraminidase resistant influenza A/H3N2 isolated in</b>
	<b>10:15-10:35 [012.1]</b> <b>Molecular epidemiology of <i>Vibrio cholerae</i> associated with flood in</b>

	<b>molecular characterization, virulence and sporogony</b> V. Palinauskas*, R. Žiegyte, M. Ilguinas, T. Iezhova, R. Bernotiene, G. Valkiunas, <i>Nature Research Centre, Lithuania</i>	<b>rodent hosts in Southeast Asia</b> A. Latinne <sup>*1,2</sup> , F. Bezé <sup>3</sup> , S. Morand <sup>4,5</sup> , M. Chabé <sup>6</sup> , <sup>1</sup> <i>University of Liege, Belgium</i> , <sup>2</sup> <i>Université Montpellier 2, France</i> , <sup>3</sup> <i>Dunkerque Hospital, France</i> , <sup>4</sup> <i>CIRAD, France</i> , <sup>5</sup> <i>CNRS-CIRAD, People's Democratic Republic of Lao</i> , <sup>6</sup> <i>Institut Pasteur de Lille, France</i>	<b>Iran from 2005 to 2013</b> J. Yavarian*, T. Mokhtari Azad, N.Z. Shafiei Jandaghi, <i>Tehran University of Medical Sciences, Iran</i>	<b>Brahmaputra river, Assam, India</b> P. Kumar <sup>*1</sup> , S.K. Bhuyan <sup>1</sup> , M.G. Vairale <sup>2</sup> , N. Arya <sup>1</sup> , V. Veer <sup>2</sup> , L. Singh <sup>3</sup> , P.K. Yadava <sup>1</sup> , <sup>1</sup> <i>Jawaharlal Nehru University, India</i> , <sup>2</sup> <i>Defence Research Laboratory, India</i> , <sup>3</sup> <i>DRDO, India</i>
	<b>10:45-11:15</b> <b>[O09.2]</b> <b>Rewriting the evolutionary history of <i>Plasmodium falciparum</i> with whole mitochondrial genome sequence analyses</b> S. Tyagi, A. Das*, <i>National Institute of Malaria Research, India</i>	<b>10:45-11:15</b> <b>[O10.2]</b> <b>Diversity of chigger mites (Acari: Trombiculidae) and their microbiomes across stratified habitats in Thailand</b> K. Chaisiri <sup>*1</sup> , A.C. Gill <sup>1</sup> , A. Stekolnikov <sup>2</sup> , A.C. Darby <sup>1</sup> , S. Morand <sup>3</sup> , J.W. McGarry <sup>1</sup> , B.L. Makepeace <sup>1</sup> , <sup>1</sup> <i>University of Liverpool, UK</i> , <sup>2</sup> <i>Russian Academy of Sciences, Russia</i> , <sup>3</sup> <i>Centre d'Infectiologie Christophe Mérieux du Laos, People's Democratic Republic of Lao</i>	<b>10:45-11:15</b> <b>[O11.2]</b> Withdrawn	<b>10:35-10:55</b> <b>[O12.2]</b> <b>Molecular prospecting for an elusive pathogen: The detection, molecular phylogeny, and host associations of <i>Neorickettsia</i></b> S.E.G. Greiman*, J.A.V. Vaughan, V.V.T. Tkach, <i>University of North Dakota, USA</i>
	<b>11:15-11:45</b> <b>[O09.3]</b> <b>Molecular epidemiology of <i>Plasmodium vivax</i> in Nicaragua</b> L. González-Cerón <sup>*1</sup> , A. Montoya <sup>2</sup> , F. Santillán <sup>1</sup> , J.C. Corzo-Gómez <sup>1</sup> , M.T. Ovilla-Muñoz <sup>1</sup> , R. Cerritos <sup>3</sup> , R. Avendaño <sup>1</sup> , M.A. Sandoval <sup>1</sup> , J. Martínez-Barnetche <sup>1</sup> , <sup>1</sup> <i>Instituto Nacional de Salud Pública, Mexico</i> , <sup>2</sup> <i>CNDR-Ministerio de Salud, Nicaragua</i> , <sup>3</sup> <i>Universidad Nacional Autónoma de México, Mexico</i>	<b>11:15-11:45</b> <b>[O10.3]</b> <b>Inhibitory effects of organic acids produced by <i>Clostridium ramosum</i> on enterohaemorrhagic <i>Escherichia coli</i> O157:H7</b> Y.K. Koyanagi <sup>*1</sup> , R.S. Suzuki <sup>1</sup> , M.M. Masuda <sup>1</sup> , H.I. Isogai <sup>1</sup> , T.A. Ando <sup>1</sup> , H.Y. Yoneyama <sup>1</sup> , E.I. Isogai <sup>1</sup> , <sup>1</sup> <i>Tohoku University, Japan</i> , <sup>1</sup> <i>Sapporo Medical University, Japan</i>	<b>11:15-11:45</b> <b>[O11.3]</b> <b>Deep sequencing for metagenomics-based molecular epidemiology</b> V. Furtak <sup>1</sup> , M. Roivainen <sup>2</sup> , O. Mirochnichenko <sup>1</sup> , M. Laassri <sup>1</sup> , B. Bidzhieva <sup>1</sup> , T. Zagorodnyaya <sup>1</sup> , C. Chizhikov <sup>1</sup> , K. Chumakov <sup>*1</sup> , <sup>1</sup> <i>Food and Drug Administration, USA</i> , <sup>2</sup> <i>National Institute for Health and Welfare, Finland</i>	<b>10:55-11:15</b> <b>[O12.3]</b> <b>Epidemiology and evolution of the genetic variability of <i>Anaplasma marginale</i> in South Africa</b> A.M. Mutshembele <sup>*1,2</sup> , A. Cabezas-Cruz <sup>3,4</sup> , M.S. Mtshali <sup>*1,2</sup> , O.M.M. Thekisoe <sup>2</sup> , R.C. Galindo <sup>4</sup> , J. de la Fuente <sup>5</sup> , <sup>1</sup> <i>National Zoological Gardens of South Africa, South Africa</i> , <sup>2</sup> <i>University of the Free State, South Africa</i> , <sup>3</sup> <i>Instituto de Investigación en Recursos Cinegéticos IRES-CSIC-UCLM-JCCM, Spain</i> , <sup>4</sup> <i>Université Lille Nord de France, France</i> , <sup>5</sup> <i>Oklahoma State University, USA</i>

	<b>11:45-12:15 [O09.4]</b> <b>The population genomic structure of Plasmodium falciparum in Papua new guinea</b> G.L.A. Harrison <sup>*1</sup> , N. Tessier <sup>2</sup> , L. Tavul <sup>3</sup> , M. Manske <sup>4</sup> , O. Miotto <sup>5,6</sup> , I. Betuela <sup>3</sup> , P. Siba <sup>3</sup> , I. Mueller <sup>1</sup> , M. Bahlo <sup>2</sup> , A. Barry <sup>1</sup> et al, <sup>1</sup> Infection and Immunity Division, Walter and Eliza Hall Institute, Australia, <sup>2</sup> Bioinformatics Division, Walter and Eliza Hall Institute, Australia, <sup>3</sup> Papua New Guinea Institute of Medical Research, Papua New Guinea, <sup>4</sup> Wellcome Trust Sanger Institute, UK, <sup>5</sup> University of Oxford, UK, <sup>6</sup> Mahidol University, Thailand	<b>11:45-12:15 [O10.4]</b> <b>Role of saliva in Dengue virus transmission</b> P. Surasombatpana <sup>*2</sup> , D. Misse <sup>1</sup> , R. Hamel <sup>1</sup> , S. Patramool <sup>1</sup> , S. Thongrungkiat <sup>4</sup> , M. Debizot <sup>6</sup> , P. Delaunay <sup>3</sup> , F. Thomas <sup>1</sup> , N. Luplertlop <sup>4</sup> , H. Yssel <sup>1</sup> et al, <sup>1</sup> Laboratoire MIVEGEC, UMR CNRS 5290/IRD 224/UM1, France, <sup>2</sup> Prince of Songkla University, Thailand, <sup>3</sup> Hôpital de l'Archet, CHU de Nice-Université de Nice-Sophia Antipolis/Inserm U1065, France, <sup>4</sup> Mahidol University, Thailand, <sup>5</sup> Inserm, U844, France, <sup>6</sup> CNRS-UMR 5236/UM1/UM2, France	<b>11:45-12:15 [O11.4]</b> <b>Hepatitis C virus genotype diversity among general population in Yunnan Province, southwestern China</b> Y.F. Yao <sup>1</sup> , Y.S. Shen <sup>2</sup> , D.F. Cao <sup>1</sup> , S.Q. Zhang <sup>3</sup> , Y.L. Li <sup>2</sup> , L. Shi <sup>1</sup> , M.B. Sun <sup>1</sup> , L. Shi <sup>*1</sup> , <sup>1</sup> Chinese Academy of Medical Sciences & Peking Union Medical College, China, <sup>2</sup> The First People's Hospital in Yunnan Province & The Affiliated Hospital of Kunming Science and Technology University, China, <sup>3</sup> The Third People's Hospital of Kunming, China	<b>11:15-11:35 [O12.4]</b> <b>Molecular identification of Nocardia spp. collected from patients with symptom Tuberculosis</b> S. Zaker Bostanabad, <i>Islamic Azad University, Iran</i>
			<b>11:35-11:55 [O12.5]</b> <b>Occurrence and characterization of verotoxigenic escherichia coli O157:H7 in healthy cattle (<i>Bos taurus L.</i>) in Luzon, Philippines</b> M.C. Dela Cruz*, J.C Santos, <i>Cavite State University, The Philippines</i>	<b>11:55-12:15 [O12.6]</b> <b>A model for assessing the concordance between genetic and epidemiological similarity of microbial isolates</b> B. Hetman <sup>*1,2</sup> , S.K. Mutschall <sup>1</sup> , V.P.J. Gannon <sup>1</sup> , J. Thomas <sup>2</sup> , E.N. Taboada <sup>1</sup> , <sup>1</sup> Public Health Agency of Canada, Canada, <sup>2</sup> University of Lethbridge, Canada

<i>Room</i>	<i>Phanurangsi A &amp; B</i>			
12:15-13:45	<b>Lunch &amp; Poster Session 2</b>			
<i>Rooms</i>	<i>Phanurangsi C</i>	<i>Bongkotrat A</i>	<i>Bongkotrat B</i>	<i>Busabongkot A</i>
13:45-15:45	<b>Symposium 13-Molecular epidemiology bacteria 2</b>	<b>Symposium 14-Drug/antibiotic resistance 1</b>	<b>Symposium 15-Phylogeny virus 2</b>	<b>Symposium 16- Host parameters 2</b>
<i>Chairs</i>	R.S. Kaas, <i>Technical University of Denmark, Denmark</i>	O.L. Franco, <i>Universidade Católica de Brasília, Brazil; Universidade de</i>	M. Calzolari, <i>Istituto Zooprofilattico Sperimentale della Lombardia e</i>	H.A.F. Stephens, <i>Mahidol University, Thailand; University College London,</i>

		<i>Brasília, Brazil</i> <b>E. Talundzic, Center for Disease Control and Prevention, USA; Atlanta Research and Education Foundation, USA</b>	<i>dell'Emilia Romagna, Italy</i> <b>I.A. Sobolev, State Research Center of Clinical and Experimental Medicine, Russia</b>	<b>UK</b> <b>Y. Li, Institute of Medical Biology, Chinese Academy of Medical Sciences &amp; Peking Union Medical College, China</b>
	<b>13:45-14:09</b> [O13.1] <b>Whole-genome MLST: Effect of sequence data quality on strain typeability and optimization of parameters for improved analysis</b> D. Barker* <sup>1,2</sup> , P. Kruczkievicz <sup>1</sup> , S. Mutschall <sup>1</sup> , C.R. Laing <sup>1</sup> , V.P.J. Gannon <sup>1</sup> , J. Thomas <sup>2</sup> , E.N. Taboada <sup>1</sup> , <sup>1</sup> Public Health Agency of Canada, Canada, <sup>2</sup> University of Lethbridge, Canada	<b>13:45-14:09</b> [O14.1] <b>The utilization of multi-omics tools to shed some light on resistance and infectivity processes in two bacterial models</b> K.C. Almeida <sup>1,2</sup> , A.E.A.D. Barbosa <sup>1</sup> , A.M. Murad <sup>3</sup> , G. Fernandes <sup>1</sup> , C. Farias Jr <sup>4</sup> , S.C. Dias <sup>1</sup> , O.L. Franco * <sup>1,2</sup> , <sup>1</sup> Universidade Católica de Brasília, Brazil, <sup>2</sup> Universidade de Brasília, Brazil, <sup>3</sup> EMBRAPA Recursos Genéticos e Biotecnologia, Brazil, <sup>4</sup> Núcleo de Bacteriologia, Laboratório Central de Saúde Pública Distrito Federal, Brazil	<b>13:45-14:15</b> [O15.1] <b>A group of flaviviruses detected only in insects</b> M. Calzolari* <sup>1</sup> , L. Zé-Zé <sup>2</sup> , A. Vazquez <sup>3</sup> , M.P. Sánchez Seco <sup>3</sup> , F. Amaro <sup>2</sup> , M. Dottori <sup>1</sup> , <sup>1</sup> Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna, Italy, <sup>2</sup> National Institute of Health, Portugal, <sup>3</sup> Institute of Health "Carlos III", Spain	<b>13:45-14:15</b> [O16.1] <b>The association study between inactivated Japanese encephalitis vaccine immunity and HLA class II genes and its haplotypes</b> M.B. Sun, Y.F. Yao, H.J. Yang, X.W. Xu, Y. Li, L. Shi, J.K. Y., L. Shi* ,Institute of Medical Biology, Chinese Academy of Medical Sciences & Peking Union Medical College, China
	<b>14:09-14:33</b> [O13.2] <b>Identification of a cellular receptor for Clostridium difficile toxin B</b> M.E. LaFrance <sup>1</sup> , M.A. Farrow <sup>1</sup> , J. Sheng <sup>1</sup> , D.H. Rubin* <sup>2,1</sup> , D.B. Lacy <sup>1</sup> , <sup>1</sup> Vanderbilt University, USA, <sup>2</sup> VA TVHS, USA	<b>14:09-14:33</b> [O14.2] <b>Modulations in cell-membrane composition confer pediocin resistance in Enterococcus faecalis</b> Rashmi Kumariya * <sup>1</sup> , Anita Kumari Garsa, S. K. Sood and Y. S. Rajput, <i>National Dairy Research Institute, India</i>	<b>14:15-14:45</b> [O15.2] <b>Investigation of the influenza A/H3N2 virus circulated in the human population in Siberia, 2008-2013</b> I.A. Sobolev* <sup>1</sup> , O.G. Kurskaya <sup>1</sup> , T.N. Ilyicheva <sup>2</sup> , A.G. Durymanov <sup>2</sup> , A.M. Shestopalov <sup>1</sup> , <sup>1</sup> State Research Center of Clinical and Experimental Medicine, Russia, <sup>2</sup> State Research Center of Virology and Biotechnology "Vector", Russia	<b>14:15-14:45</b> [O16.2] <b>Lipoprotein lipase and PPAR alpha gene polymorphisms, increased very-low-density lipoprotein levels, and decreased high-density lipoprotein levels as risk markers for the development of visceral leishmaniasis by Leishmania infantum</b> M.D.T. Carvalho <sup>1</sup> , D.P. Alonso* <sup>2</sup> , C.M.V. Vendrame <sup>1</sup> , D.L. Costa <sup>3</sup> , C.H.N. Costa <sup>3</sup> , G.L. Werneck <sup>4,5</sup> , P.E.M. Ribolla <sup>2</sup> , H. Goto <sup>1</sup> , <sup>1</sup> Universidade de São Paulo, Brazil, <sup>2</sup> Universidade Estadual Paulista, Brazil, <sup>3</sup> Universidade Federal do Piauí, Brazil, <sup>4</sup> Universidade do Estado do Rio de Janeiro, Brazil, <sup>5</sup> Universidade Federal do Rio de Janeiro, Brazil

	<p><b>14:33-14:57</b> [O13.3] <b>Genomic characterization of pathogenic Leptospires by variable-number Tandem-repeat method</b> P. khaki*, M. Abdollahpour Alitappeh, S. Moradi Bidhendi, M. Esmaelizad, K. Tadayon, R. Ghaderi, A. Zarei, <i>Razi Vaccine &amp; Serum Research Institute, Iran</i></p>	<p><b>14:33-14:57</b> [O14.3] <b>The detection of oseltamivir-resistant influenza A/H3N2 viruses using a Real-time RT- PCR assay and comparison the results with direct sequencing</b> J. Yavarian*, T. Mokhtari Azad, M.H. Karbalaie Niya, <i>School of Public Health, Tehran University of Medical Sciences, Iran</i></p>	<p><b>14:45-15:15</b> [O15.3] <b>Molecular epidemiology of FMD in the Republic of Kazakhstan 2011-2013</b> M. Orynbayev*, K. Sultankulova, V. Strochkov, A. Kerimbayev, G. Musayeva, Z. Omarova, A. Sansyzbay, <i>Research Institute for Biological Safety Problems, Kazakhstan</i></p>	<p><b>14:45-15:15</b> [O16.3] <b>HLA class I supertype associations with dengue in Bangkok</b> S. Vejbaesa<sup>1</sup>, H.A.F. Stephens<sup>*1,2</sup>, <sup>1</sup><i>Mahidol University, Thailand,</i> <sup>2</sup><i>University College London, UK</i></p>
	<p><b>14:57-15:21</b> [O13.4] <b>Molecular epidemiology of human clinical <i>Campylobacter jejuni</i> isolates in the urban area of Brussels, Belgium</b> L. Mekkaoui<sup>1,2</sup>, D. Martiny<sup>1,2</sup>, C. Ragimbeau<sup>3</sup>, L. Vlaes<sup>2</sup>, M.-J. Stouten<sup>2</sup>, O. Vandenberg<sup>1,2</sup>, M. Hallin<sup>*1,2</sup>, <sup>1</sup><i>Université Libre de Bruxelles, Belgium,</i> <sup>2</sup><i>Saint-Pierre University Hospital, Belgium,</i> <sup>3</sup><i>National Health Laboratory, Luxembourg</i></p>	<p><b>14:57-15:21</b> [O14.4] <b>Detection of Panton-valentine leukocidin gene by polymerase chain reaction in Methicillin-resistant <i>Staphylococcus aureus</i> isolates from tertiary care hospital</b> N. Nagalakshmi*, G. Sreejith, I. Bairy, G. Shenoy, <i>Manipal University, India</i></p>	<p><b>15:15-15:45</b> [O15.4] <b>Detection and molecular characterization of noro, astro and adenoviruses circulating in children under five years of age in several regions of Angola</b> C. Tavares<sup>1</sup>, A. Esteves<sup>2</sup>, C. Mendes<sup>1</sup>, J. Nordgren<sup>3</sup>, J. Piedade<sup>2</sup>, F. Fortes<sup>4</sup>, P.R. Dimbu<sup>4</sup>, N. Saraiva<sup>4</sup>, C. Istrate<sup>*1</sup>, <sup>1</sup><i>Universidade Nova de Lisboa, Portugal,</i> <sup>2</sup><i>Unidade de Parasitologia e Microbiologia Médicas, Portugal,</i> <sup>3</sup><i>Linköping University, Sweden,</i> <sup>4</sup><i>Departamento do Controlo de Doenças da Direção Nacional de Saúde Pública, Angola</i></p>	<p><b>15:15-15:45</b> [O16.4] <b>Association study of TAP1 and TAP2 polymorphisms with hepatitis C virus chronic infection in Han population in Yunnan province of China</b> Y. Li*, X.W. Xu, J. Zhou, J.K. Yu, Y.F. Yao, M.B. Sun, L. Shi, <i>Chinese Academy of Medical Sciences &amp; Peking Union Medical College, China</i></p>
	<p><b>15:21-15:45</b> [O13.5] <b>Largest <i>Vibrio cholera</i> outbreak in Cameroon history studied using whole genome sequencing</b> R.S. Kaas<sup>*1</sup>, M.C. Fonkoua<sup>2</sup>, A. Ngandjio<sup>2</sup>, F.M. Aarestrup<sup>1</sup>, R. Hendriksen<sup>1</sup>, <sup>1</sup><i>Technical University of Denmark, Denmark,</i><sup>2</sup><i>Centre Pasteur du Cameroun, Cameroun</i></p>	<p><b>15:21-15:45</b> [O14.5] <b>Selection and spread of artemisinin resistant alleles in Thailand prior to the malaria containment campaign</b> E. Talundzic<sup>*1,2</sup>, S. Akinyi<sup>2</sup>, K. Congpuong<sup>3,4</sup>, L. Morton<sup>1</sup>, I. Gorlzman<sup>1</sup>, S.P. Kachur<sup>1</sup>, C. Wongsrichanalai<sup>5</sup>, W. Satimai<sup>3</sup>, J.S. Barnwell<sup>1</sup>, V. Udhayakumar<sup>1</sup> et al, <sup>1</sup><i>Center for Disease Control and Prevention, USA,</i><sup>2</sup><i>Atlanta Research and Education Foundation, USA,</i> <sup>3</sup><i>Bureau of Vector Borne Diseases, Ministry of Public Health, Thailand,</i> <sup>4</sup><i>Bansomdej-chaopraya Rajabhat</i></p>		

		<i>University, Thailand,<sup>5</sup>Independent Scholar, Thailand</i>		
<b>Plenary Session</b>				
<i>Room</i>	<i>Phanurangsi C</i>			
<i>Chair</i>	<b>RM. Pitchappan, Chettinad Academy of Research &amp; Education, India</b>			
15:45-16:15	<b>PL09: Molecular epidemiology of giardia and cryptosporidium infections</b> RC A. Thompson, Murdoch University, Australia			
<i>Chair</i>	<b>RC A. Thompson, Murdoch University, Australia</b>			
16:15-16:45	<b>PL10: Human genomic diversities &amp; disease susceptibility in India</b> RM. Pitchappan, Chettinad Academy of Research & Education, India			
<i>Room</i>	<i>Phanurangsi A &amp; B</i>			
16:45-17:15	<b>Coffee Break</b>			
<i>Rooms</i>	<i>Phanurangsi C</i>	<i>Bongkotrat A</i>	<i>Bongkotrat B</i>	<i>Busabongkot A</i>
<b>17:15-19:15</b>	<b>Symposium 17-Drug/antibiotic resistance 2</b>	<b>Symposium 18-Molecular epidemiology Salmonella</b>	<b>Symposium 19-Molecular epidemiology Virus 2</b>	<b>Symposium 20-Mycobacterial diseases 2</b>
<i>Chairs</i>	<b>T. Chookajorn, Mahidol University, Thailand</b> <b>V. Chaumeau, Université Montpellier 1, France; Centre hospitalo-universitaire de Montpellier, France</b>	<b>R. Ghaderi, Razi Vaccine &amp; Serum Research Institute, Karaj, Iran</b> <b>E. Litrup, Statens Serum Institute, Denmark</b>	<b>A. Lacroix, Réseau international des Instituts Pasteur, Cambodia</b>	<b>U.G. Gurjav, The University of Sydney, Australia; Institute of Clinical Pathology and Medical Research – Pathology West, Australia</b> <b>C.A. Ahlstrom, University of Calgary, Canada</b>
	<b>17:15-17:39</b> [O17.1] <b>Global health crisis in the making: How malaria parasites improve robustness to become drug resistance</b>	<b>17:15-17:45</b> [O18.1] <b>Salmonella Typhimurium core genome typing and its public health significance for phylogeny inference</b>	<b>17:15-17:39</b> [O19.1] <b>Evolution of the influenza A H1N1 HA1 receptor-binding site</b> M.E. Cueno*, K. Ochiai, Nihon	<b>17:15-17:45</b> [O20.1] <b>Genetic diversity of the mycobacterium tuberculosis Beijing family based on multiple genotyping</b>

	T. Chookajorn, <i>Mahidol University, Thailand</i>	<b>and epidemiological investigation</b> S.F. Fu*, S.O. Octavia, M.T. Tanaka, R.L. Lan, <i>UNSW, Australia</i>	<i>University School of Dentistry, Japan</i>	<b>profiles in eastern Asian areas</b> Y. Liu, Y. Zhang, B. Xu, Q. Zhao, W.B. Wang*, <i>Fudan University, China</i>
	<b>17:39-18:03</b> [O17.2]  <b>Moved to Symposium 12: Molecular epidemiology bacteria 1</b>	<b>17:45-18:15</b> [O18.2] <b>Iranian clonal population of <i>Salmonella enterica</i> serovar <i>Enteritidis</i>, recovered by multi-locus sequence typing (MLST) method</b> R. Ghaderi*, K. Tadayon, P. Khaki, S. Moradi Bidhendi, L. Djozebayat, S.R. Banihashemi, M. Sekhavati, A. Zarei, N. Mosavari, <i>Razi Vaccine &amp; Serum Research Institute, Karaj, Iran</i>	<b>17:39-18:03</b> [O19.2] <b>Detection of coronaviruses in bats in Cambodia and Laos</b> A. Lacroix <sup>1</sup> , V. Duong <sup>1</sup> , V. Hul <sup>1</sup> , S. San <sup>1,2</sup> , K. Omaliss <sup>1,2</sup> , R. Frutos <sup>1,3</sup> , W. Theppangna <sup>1,5</sup> , Z. Greatorex <sup>1,6</sup> , L. Keatts <sup>1,4</sup> , P. Buchy <sup>1</sup> et al, <sup>1</sup> <i>Réseau international des Instituts Pasteur, Cambodia</i> , <sup>2</sup> <i>Ministry of Agriculture Forestry and Fisheries, Cambodia</i> , <sup>3</sup> <i>Université Montpellier 2, France</i> , <sup>4</sup> <i>Wildlife Conservation Society, Cambodia</i> , <sup>5</sup> <i>National Animal Health Laboratory, Ministry of Agriculture Forestry and Fisheries, People's Democratic Republic of Lao</i> , <sup>6</sup> <i>Wildlife Conservation Society, People's Democratic Republic of Lao</i>	<b>17:45-18:15</b> [O20.2] <b><i>Mycobacterium tuberculosis</i> reactivation in New South Wales, Australia</b> U.G. Gurjav <sup>*1,2</sup> , P.J. Jelfs <sup>2,3</sup> , G.H.C. Hill-Cawthorne <sup>1</sup> , B.M. Marais <sup>1</sup> , V.S. Sintchenko <sup>1,3</sup> , <sup>1</sup> <i>The University of Sydney, Australia</i> , <sup>2</sup> <i>Institute of Clinical Pathology and Medical Research – Pathology West, Australia</i> , <sup>3</sup> <i>Centre for Infectious Diseases and Microbiology – Public Health, Australia</i>
	<b>18:03-18:27</b> [O17.3] <b>Genomic epidemiology of <i>Klebsiella pneumoniae</i> in Italy provides novel insights into the origin of resistance to carbapenem antibiotics</b> F. Comandatore <sup>*1,2</sup> , S. Gaiarsa <sup>1,3</sup> , P. Gaibani <sup>4</sup> , M. Corbella <sup>3</sup> , C. Dalla Valle <sup>3</sup> , S. Epis <sup>1</sup> , E. Scaltriti <sup>5</sup> , E. Carretto <sup>6</sup> , C. Farina <sup>7</sup> , M. Labonia <sup>8</sup> et al, <sup>1</sup> <i>Università degli studi di Milano, Italy</i> , <sup>2</sup> <i>Università degli Studi di Pavia, Italy</i> , <sup>3</sup> <i>Fondazione IRCCS Policlinico San Matteo (Pavia), Italy</i> , <sup>4</sup> <i>St. Orsola University Hospital (Bologna), Italy</i> , <sup>5</sup> <i>Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna</i> ,	<b>18:15-18:45</b> [O18.3] <b>Global genomic epidemiology and evolutionary genetics of <i>Salmonella Typhimurium</i> DT104</b> P. Leekitcharoenphon*, R.S. Hendriksen, F.M. Aarestrup, <i>Technical University of Denmark, Denmark</i>	<b>18:03-18:27</b> [O19.3] <b>siRNA Silencing: mRNA expression knockdown of Potato Leaf Roll Virus-Capsid Protein gene Co-transfection with mammalian (CHO-k) cell line in-vivo</b> M.B. Hossain <sup>*1</sup> , I.A. Nasir <sup>1</sup> , T. Husnain <sup>1</sup> , <sup>1</sup> <i>Sher-e-Bangla Agricultural University, Bangladesh</i> , <sup>2</sup> <i>University of the Punjab, Pakistan</i> , <sup>3</sup> <i>University of the Punjab, Pakistan</i>	<b>18:15-18:45</b> [O20.3] <b>The epidemiology and phylogenomics of <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> on a global, national, and provincial level</b> C.A. Ahlstrom <sup>*1</sup> , H.W. Barkema <sup>1</sup> , K. Stevenson <sup>2</sup> , R.N. Zadoks <sup>2,3</sup> , R. Biek <sup>3</sup> , R.R. Kao <sup>3</sup> , H. Trewby <sup>3</sup> , J. De Buck <sup>1</sup> , <sup>1</sup> <i>University of Calgary, Canada</i> , <sup>2</sup> <i>Moredun Research Institute, UK</i> , <sup>3</sup> <i>University of Glasgow, UK</i>

	<i>Italy, <sup>6</sup>IRCCS Arcispedale S. Maria Nuova (Reggio Emilia), Italy, <sup>7</sup>AO Papa Giovanni XXIII (Bergamo), Italy, <sup>8</sup>IRCCS Casa Sollievo della Sofferenza (San Giovanni Rotondo), Italy, <sup>9</sup>The Greater Romagna Area-Hub Laboratory (Pievesestina), Italy</i>			
	<b>18:27-18:51 [O17.4]</b> <b>Dynamic of malaria transmission along the Thai-Myanmar border in a context of Targeted Chemo elimination</b> V. Chaumeau <sup>*1,2</sup> , N. Kwansomboon <sup>4</sup> , C. Montazeau <sup>1</sup> , B. Fustec <sup>3,4</sup> , C. Andolina <sup>5,6</sup> , D. Cerqueira <sup>1</sup> , T. Chareonviriyaphap <sup>4</sup> , F. Nosten <sup>5,6</sup> , V. Corbel <sup>3,4</sup> , <sup>1</sup> Université Montpellier 1, France, <sup>2</sup> Centre hospitalo-universitaire de Montpellier, France, <sup>3</sup> Maladies Infectieuses et Vecteurs, Ecologie, Génétique, Evolution et Contrôle, Institut de Recherche pour le Développement, France, <sup>4</sup> Kasetsart University, Thailand, <sup>5</sup> Maidol-Oxford Research Unit, Thailand, <sup>6</sup> Shoklo Malaria Research Unit, Thailand	<b>18:45-19:15 [O18.4]</b> <b>Impact of prophages on the evolution of the salmonella infantis population</b> E. Litrup <sup>*1</sup> , P. Gymoese <sup>1</sup> , K. Kiil <sup>1</sup> , Z. Zhou <sup>2</sup> , G. Soerensen <sup>3</sup> , D. Guttman <sup>4</sup> , M. Torpdahl <sup>1</sup> , M. Achtman <sup>2</sup> , E.M. Nielsen <sup>1</sup> , <sup>1</sup> Statens Serum Institute, Denmark, <sup>2</sup> University of Warwick, UK, <sup>3</sup> National Food Institute, Denmark, <sup>4</sup> University of Toronto, Canada	<b>18:27-18:51 [O19.4]</b> <b>Population genetic analysis of pathogen sequences to infer prevalence of poliovirus infection</b> L.M. Li*, N.C. Grassly, C. Fraser, <i>Imperial College London, UK</i>	<b>18:45-19:15 [O20.4]</b> <b>Understanding impacts of pathogen genetics and host management on the phydynamics of <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i></b> C.A. Ahlstrom <sup>*1</sup> , H.W. Barkema <sup>1</sup> , J.D. Wasmuth <sup>1</sup> , C. Colijn <sup>2</sup> , J. De Buck <sup>1</sup> , <sup>1</sup> University of Calgary, Canada, <sup>2</sup> Imperial College London, UK
	<b>18:51-19:15 [O17.5]</b> <b>Attempts to control Trypanosoma lewisi in rats using intramuscular injection of veterinary trypanocidal drugs</b> M. Desquesnes <sup>*1,2</sup> , S. Herder <sup>2,3</sup> , S. Yangtarra <sup>2</sup> , S. Jittapalapong <sup>2</sup> , <sup>1</sup> CIRAD-Bios, France, <sup>2</sup> Kasetsart University, Thailand, <sup>3</sup> IRD, France		<b>18:51-19:15 [O19.5]</b> <b>Dengue virus serotypes and genotypes circulating in Indonesia for the last 13 years</b> H. Harapan <sup>1,2</sup> , A.M. Setiawan <sup>*2,3</sup> , <sup>4</sup> Syiah Kuala University, Indonesia, <sup>2</sup> The University of Western Australia, Australia, <sup>3</sup> Maulana Malik Ibrahim Islamic State University, Indonesia	
19:45-22:30	<b>Gala Dinner – Riverboat Cruise (Optional – tickets can be purchased)</b>			

**Saturday, 13 December 2014****Plenary Session**

<b>Room</b>	Phanurangsi C			
<b>Chair</b>	<b>A.F. Read, The Pennsylvania State University, USA; Fogarty International Center, NIH, USA</b>			
09:00-09:30	<b>PL11: Molecular epidemiology of chikungunya virus infection</b> Y. Poovorawan*, P. Linsuwanon, S. Vongpunsawad, Chulalongkorn University, Thailand			
<b>Chair</b>	<b>Y. Poovorawan, Chulalongkorn University, Thailand</b>			
09:30-10:00	<b>PL12: Vaccination and the emergence of virulent viruses. Evolutionary lessons from a poultry disease</b> A.F. Read <sup>*1,2</sup> , S.J. Baigent <sup>3</sup> , C. Powers <sup>3</sup> , L.B. Kgosana <sup>3</sup> , L. Blackwell <sup>3</sup> , L.P. Smith <sup>3</sup> , D.A. Kennedy <sup>1,2</sup> , S. Walkden-Brown <sup>4</sup> , V. Nair <sup>3</sup> , <sup>1</sup> The Pennsylvania State University, USA, <sup>2</sup> Fogarty International Center, NIH, USA, <sup>3</sup> Pirbright Institute, UK, <sup>4</sup> University of New England, Australia			
<b>Room</b>	Phanurangsi A & B			
10:00-10:30	<b>Coffee Break</b>			
<b>Room</b>	Phanurangsi C	Bongkotrat A	Bongkotrat B	Busabongkot A
<b>10:30-12:30</b>	<b>Symposium 21-Clonality vs recombination</b>	<b>Symposium 22-Diseases of veterinary relevance</b>	<b>Symposium 23-Molecular epidemiology helminths</b>	<b>Symposium 24-Molecular epidemiology bacteria 3</b>
<b>Chairs</b>	<b>M. Tibayrenc, Institut de recherche pour le développement, France</b> <b>K. Yahara, University of Tokyo, Japan</b>	<b>G. Kaewmongkol, Kasetsart University Thailand</b> <b>T. Forde, University of Calgary, Canada</b>	<b>A. Ito, Asahikawa Medical University, Japan</b> <b>J-P. Hugot, UMR-CNRS 7205, MNHN, France</b>	<b>L. Zhang, Michigan State University, USA</b> <b>E.C. Coopan, National Institute for Public Health and Environment (RIVM), The Netherlands; Wageningen University, The Netherlands</b>
	<b>10:30-10:54</b> [O21.1] <b>Phylogenetic analysis of a circulating hepatitis C virus recombinant 1b/1a strain isolated in a French hospital centre</b> V. Morel <sup>*1,2</sup> , F. Ghoubra <sup>3</sup> , L. Izquierdo <sup>1,2</sup> , E. Martin <sup>1,2</sup> , C. Grilo de Oliveira <sup>1</sup> , C. Francois <sup>1,2</sup> , E. Brochot <sup>1,2</sup> , F. Helle <sup>1</sup> , G. Duverlie <sup>1,2</sup> , S. Castelain <sup>1,2</sup> , <sup>1</sup> Jules Verne University of Picardie, France, <sup>2</sup> Amiens University Hospital, France, <sup>3</sup> Pasteur Institute of Tunis, Tunisia	<b>10:30-10:50</b> [O22.1] <b>Identification of uncultured-bacteria detected from abscesses of pet animals by broad range nested 16S rRNA PCR</b> G. Kaewmongkol <sup>*1</sup> , S. Kaewmongkol <sup>1</sup> , T. Duangurai <sup>1</sup> , K. Sutasha <sup>1</sup> , L. Areevijittrakul <sup>1</sup> , T. Sirinarumitr <sup>1</sup> , S. Jittapalapong <sup>1</sup> , S. Fenwick <sup>2</sup> , <sup>1</sup> Kasetsart University Bangkok, Thailand, <sup>2</sup> Murdoch University, Australia	<b>10:30-11:00</b> [O23.1] <b>Recent advances and perspectives in molecular epidemiology of <i>Taenia solium</i> cysticercosis</b> A. Ito*, T. Yanagida, M. Nakao, Y. Sako, M. Okamoto, Asahikawa Medical University, Japan	<b>10:30-11:00</b> [O24.1] <b>Molecular and phenotypic characterization of <i>Photobacterium damsela</i>, a pathogen of the grey mullet <i>Mugil cephalus</i></b> A. Abedian amiri <sup>*1,2</sup> , F. Naseri <sup>1</sup> , M. Heidarzadeh <sup>1</sup> , R. Zahedi <sup>1</sup> , P. Arabzadeh <sup>1</sup> , <sup>1</sup> Islamic Azad University, Iran, <sup>2</sup> Veterinary Office of Chabahar, Iran, <sup>3</sup> Sistan and Baluchestan Veterinary, Iran
	<b>10:54-11:18</b> [O21.2] <b>Chromosome painting <i>in silico</i> in a</b>	<b>10:50-11:10</b> [O22.2] <b>Molecular epidemiology of viral</b>	<b>11:00-11:30</b> [O23.2] <b>Dinosaurs had they pinworms ?</b>	<b>11:00-11:30</b> [O24.2] <b><i>E. coli</i> diversity and transmission of</b>

	<b>bacterial species reveals fine population structure</b> K. Yahara <sup>*1</sup> , Y. Furuta <sup>1</sup> , K. Oshima <sup>1</sup> , M. Yoshida <sup>1</sup> , T. Azuma <sup>1</sup> , M. Hattori <sup>1</sup> , I. Uchiyama <sup>1</sup> , I. Kobayashi <sup>1</sup> , <sup>1</sup> <i>University of Tokyo, Japan</i> , <sup>2</sup> <i>Max Planck Institute for Evolutionary Anthropology, Germany</i> , <sup>3</sup> <i>National Institute for Basic Biology, Japan</i> , <sup>4</sup> <i>Kobe University, Japan</i>	<b>infections of domestic animals</b> S. Vilcek <sup>*1</sup> , A. Jackova <sup>1</sup> , M. Vlasakova <sup>1</sup> , I. Sliz <sup>1</sup> , W. Rossmanith <sup>2</sup> , <sup>1</sup> <i>University of Veterinary Medicine and Pharmacy, Slovakia</i> , <sup>2</sup> <i>Office of the Government of Lower Austria, Dept. of Veterinary Affairs, Austria</i>	<b>(Origin of pinworm parasites: From mammalian reptiles to humans)</b> J-P. Hugot <sup>*1</sup> , S.L. Gardner <sup>2</sup> , V. Borba <sup>3</sup> , P. Araujo <sup>4</sup> , D. Leles <sup>4</sup> , A. Da-Rosa <sup>5</sup> , L. Dutra <sup>3</sup> , L.F. Ferreira <sup>3</sup> , A. Araujo <sup>1</sup> , <sup>1</sup> <i>Museum National d'Histoire Naturelle, OSEB, UMR 7205 CNRS, France</i> , <sup>2</sup> <i>University of Nebraska State Museum and School of Biological Sciences, University of Nebraska – Lincoln, USA</i> , <sup>3</sup> <i>Escola Nacional de Saúde Pública Sergio Arouca, Fundação Oswaldo Cruz, Rua Leopoldo Bulhões 1480, Brazil</i> , <sup>4</sup> <i>Universidade Federal Fluminense, Brazil</i> , <sup>5</sup> <i>Universidade Federal de Santa Maria, Brazil</i>	<b>pathogens in Northwestern Ecuador: Spatial trends across a landscape</b> L. Zhang <sup>*1</sup> , K. Levy <sup>2</sup> , G. Trueba <sup>3</sup> , W. Cevallos <sup>4</sup> , J.N. Eisenberg <sup>5</sup> , <sup>1</sup> <i>Michigan State University, USA</i> , <sup>2</sup> <i>Emory University, USA</i> , <sup>3</sup> <i>Universidad San Francisco de Quito, Ecuador</i> , <sup>4</sup> <i>Universidad Central del Ecuador, Ecuador</i> , <sup>5</sup> <i>University of Michigan, USA</i>
	<b>11:18-11:42</b> [O21.3]  Withdrawn	<b>11:10-11:30</b> [O22.3] <b>Distribution pattern of virulence genes in <i>Pasteurella multocida</i> strains associated with porcine and bovine diseases in Thailand</b> T. E-kobon <sup>*1</sup> , P. Thongkamkoon <sup>2</sup> , A. Thamchaipenet <sup>1</sup> , N. Hussarangsi <sup>2</sup> , P. Anuntasomboon <sup>1</sup> , R. Leeanan <sup>1</sup> , S. Pannoi <sup>1</sup> , <sup>1</sup> <i>Kasetsart University, Thailand</i> , <sup>2</sup> <i>National Institute of Animal Health, Ministry of Agriculture &amp; Cooperatives, Thailand</i>	<b>11:30-12:00</b> [O23.3] <b>The high prevalence of human intestinal fluke, <i>Haplorchis taichui</i> among the thiariid snails and cyprinoid fishes in Bo Kluea district, Nan province, Thailand</b> D. Boonmekam <sup>*1</sup> , S. Namchote <sup>1</sup> , W. Nak-ai <sup>2</sup> , D. Krailas <sup>1</sup> , <sup>1</sup> <i>Silpakorn University, Thailand</i> , <sup>2</sup> <i>Ministry of Public Health, Thailand</i>	<b>11:30-12:00</b> [O24.3] <b>MRSA colonizing the anterior nares of hospitalized patients; are they originating from the hospital or in the community?</b> S. Govindan <sup>*</sup> , A. Yong, M. Godinho, S. Raj, K.K. Gan, A. Dhillon, <i>Manipal University, India</i>
	<b>11:42-12:06</b> [O21.4] <b>The predominant clonal evolution (PCE) concept of microbial pathogens</b> M. Tibayrenc <sup>*1</sup> , F.J. Ayala <sup>1</sup> , <sup>1</sup> <i>Institut de recherche pour le développement, France</i> , <sup>2</sup> <i>University of California Irvine, USA</i>	<b>11:30-11:50</b> [O22.4] <b>Phylogenomic analyses suggest a recently emerged strain of <i>Erysipelothrix rhusiopathiae</i> is associated with muskox die-offs in the Canadian Arctic</b> T. Forde <sup>*1</sup> , K. Orsel <sup>1</sup> , R. Biek <sup>2</sup> , J. De Buck <sup>1</sup> , H. Trewby <sup>2</sup> , F. van der Meer <sup>1</sup> , R. Zadoks <sup>2</sup> , S. Kutz <sup>1,3</sup> , <sup>1</sup> <i>University of</i>	<b>12:00-12:30</b> [O23.4] <b>Phylogenetic relationships and taxonomy of cestodes of <i>Laonastes aenigmamus</i></b> J-P. Hugot <sup>*1</sup> , H. Henttonen <sup>2</sup> , B. Douangboupha <sup>3</sup> , V. Haukisalmi <sup>2</sup> , <sup>1</sup> <i>Hugot UMR-CNRS 7205, France</i> , <sup>2</sup> <i>University Of Helsinki, Finland</i> , <sup>3</sup> <i>Nafri Nongviengkham, People's</i>	<b>12:00-12:30</b> [O24.4] <b>Geodemographic analysis of <i>Borrelia burgdorferi sensu lato</i> using the 5S-23S rDNA spacer region</b> E.C. Coipan <sup>*1,2</sup> , M. Fonville <sup>1</sup> , E. Tijssse-Klasen <sup>1</sup> , J.W.B. van der Giessen <sup>1</sup> , W. Takken <sup>2</sup> , H. Sprong <sup>1,2</sup> , K. Takumi <sup>1</sup> , <sup>1</sup> <i>National Institute for Public Health and Environment (RIVM), The</i>

		<i>Calgary, Canada, <sup>2</sup>University of Glasgow, UK, <sup>3</sup>Canadian Wildlife Health Cooperative, Canada</i>	<i>Democratic Republic of Lao</i>	<i>Netherlands, <sup>2</sup>Wageningen University, The Netherlands</i>
	<b>12:06-12:30 [O21.5] Use of PCR-RFLP HSP70 sequence targeting to identify putative hybrids of Leishmania sp. isolated from patients with cutaneous leishmaniasis in the Amazon region of Brazil</b>  A.C.S. Lima <sup>*1</sup> , R.A. Zampieri <sup>2</sup> , T.Y. Tomokane <sup>1</sup> , C.M.C. Gomes <sup>1</sup> , L.M. Floeter-Winter <sup>2</sup> , F.T. Silveira <sup>1,3</sup> , C.E.P. Corbett <sup>1</sup> , <sup>1</sup> Medical School of University of São Paulo, Brazil, <sup>2</sup> Biosciences Institute of University of São Paulo, Brazil, <sup>3</sup> Evandro Chagas Institute, Brazil	<b>11:50-12:10 [O22.5] Heterogeneity of genes encoding the structural proteins of avian infectious bronchitis virus</b>  S.H. Abro <sup>*1,3</sup> , S. Zohari <sup>1,2</sup> , L. Renström <sup>2</sup> , D. Jansson <sup>2</sup> , F. Otman <sup>2</sup> , K. Ullman <sup>2</sup> , S. Belák <sup>1,2</sup> , C. Baule <sup>2</sup> , <sup>1</sup> Swedish University of Agricultural Sciences, Sweden, <sup>2</sup> National Veterinary Institute, Sweden, <sup>3</sup> Sindh Agriculture University Tandojam, Pakistan		
		<b>12:10-12:30 [O22.6] An innovative broad-range molecular screening of avian respiratory pathogens on a high throughput PCR microfluidic platform</b>  G. Croville*, A. Senet, C. Foret, M.F. Ducatez, J-L. Guérin, Université de Toulouse, INP, ENVT and INRA, France		

<b>Room</b>	<b>Phanurangsi A &amp; B</b>
12:45-14:00	<b>Lunch</b>
13:00-14:00	<b>Author Workshop</b>
<b>Plenary Session</b>	
<b>Room</b>	<b>Phanurangsi C</b>
<b>Chair</b>	<b>M. Tibayrenc, Institut de recherche pour le développement, France</b>
14:00-14:30	<b>PL13: Worldwide population structure and molecular evolution of the Leishmania donovani complex</b> G. Schoenian, Charité University Medicine Berlin, Germany
<b>Chair</b>	<b>C. Walton, University of Manchester, UK</b>
14:30-15:00	<b>PL14: From antiquity to present - dengue, a constantly evolving story</b> N. Vasilakis, UTMB, USA
<b>Room</b>	<b>Phanurangsi A &amp; B</b>
15:00-15:30	<b>Coffee break</b>
<b>Room</b>	<b>Phanurangsi C</b>

Chair	N. Vasilakis, UTMB, USA
15:30-16:00	<b>PL15: Population genetics and population genomics of Anopheles mosquitoes in SE Asia</b> C. Walton, University of Manchester, UK
16:00-16:30	<b>Closing Remarks &amp; Awards</b>