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FINAL PROGRAM

American Society of Tropical Medicine and Hygiene

58th Annual Meeting

ASTMH 58 2009 ANNUAL MEETING

November 18–22, 2009

Marriott Wardman Park

Washington, DC, USA

Supplement to

The American Journal of Tropical Medicine and Hygiene

The American Society of Tropical Medicine and Hygiene Final Program • Washington, DC, USA — 2009

ASTMH Thanks the 58th Annual Meeting Supporters

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American Society of Tropical Medicine and Hygiene

ASTMH 58TH Annual Meeting 2009

See the ASTMH 58th Annual Meeting Abstract Book, included with your registration packet, to view the full text of abstracts presented at the annual meeting

November 18–22, 2009

Marriott Wardman Park, Washington, D.C., USA

www.astmh.org

Advancing global health since 1903

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About the American Society of Tropical Medicine and Hygiene (ASTMH)

The American Society of Tropical Medicine and Hygiene (ASTMH), founded in 1903, is a worldwide organization of scientists, clinicians and program professionals whose mission is to promote global health through the prevention and control of infectious and other diseases that disproportionately afflict the global poor. Research, health care and education are the central activities of ASTMH members, whose work bridges basic laboratory research to international field work and clinics to countrywide programs.

Specific ASTMH Goals Include:

- Improving the health of people worldwide
- Advancing research on tropical diseases
- Fostering international scientific collaboration
- Supporting career development in tropical medicine and global health
- Educating medical professionals, policymakers and the public about tropical medicine and global health
- Promoting science-based policy regarding tropical medicine and global health
- Recognizing exceptional achievement in tropical medicine and global health

Join the American Society of Tropical Medicine and Hygiene

We invite you to join ASTMH and benefit from membership in the premier international organization for scientists involved in tropical medicine and global health. ASTMH provides a forum for sharing scientific advances, exchanging ideas, fostering new research and providing professional education. See the membership application on page 255.

Program Changes

Times and/or locations of activities or sessions are subject to change. A Program Update is included in your registration packet. Notices of schedule changes received after publication of the Program Update will be posted in the ASTMH registration area.

Questions

If you have any questions regarding the program or registration, visit the ASTMH registration desk in the Salon Foyer on the first floor.

American Society of Tropical Medicine and Hygiene
111 Deer Lake Road, Suite 100 • Deerfield, IL 60015 USA
Phone +1-847-480-9592 • Fax: +1-847-480-9282 • info@astmh.org • www.astmh.org

Wednesday, November 18, 2009

	Registration Desk Salon Foyer First Floor	Exhibit Hall A Lower Level	Exhibit Hall B South Lower Level	Salon 1 First Floor	Salon 2 First Floor	Salon 3 First Floor	Room 8217 First Floor	Room 8218 First Floor	Room 8219 First Floor
7 – 7:30 a.m.									
7:30 – 8 a.m.				Clinical Pre-Meeting Course: Neglected Tropical Diseases					
8 – 8:30 a.m.									
8:30 – 9 a.m.									
9 – 9:30 a.m.									
9:30 – 10 a.m.	Registration								
10 – 10:30 a.m.									
10:30 – 11 a.m.									
11 – 11:30 a.m.									ACAV SIE Meeting
11:30 a.m. – Noon									
Noon – 12:30 p.m.									ACAV SIRACA Meeting
12:30 – 1 p.m.									
1 – 1:30 p.m.									
1:30 – 2 p.m.									
2 – 2:30 p.m.									ACAV SALS Meeting
2:30 – 3 p.m.									
3 – 3:30 p.m.									
3:30 – 4 p.m.							ACME Council Meeting	Clinical Group Council Meeting	ACAV Council Meeting
4 – 4:30 p.m.			Student Reception						
4:30 – 5 p.m.									
5 – 5:30 p.m.									
5:30 – 6 p.m.				1 Opening Plenary Session and Awards Ceremony P. 55					
6 – 6:30 p.m.									
6:30 – 7 p.m.									
7 – 7:30 p.m.									
7:30 – 8 p.m.		Opening Reception Exhibits Open							
8 – 8:30 p.m.									
8:30 – 9 p.m.									
9 – 9:30 p.m.									
9:30 – 10 p.m.									

Wednesday, November 18, 2009

	Capitol Boardroom First Floor	Balcony C Second Floor	Jackson Second Floor	Jefferson Second Floor	Johnson Second Floor	Taylor Second Floor	Truman Second Floor	Wilson AB Second Floor
7 – 7:30 a.m.								
7:30 – 8 a.m.								
8 – 8:30 a.m.								ASTMH Council Meeting
8:30 – 9 a.m.								
9 – 9:30 a.m.								
9:30 – 10 a.m.								
10 – 10:30 a.m.								
10:30 – 11 a.m.								
11 – 11:30 a.m.			Young Investigator Award Session A P. 47	Young Investigator Award Session B P. 48	Young Investigator Award Session C P. 50	Young Investigator Award Session D P. 51	Young Investigator Award Session E P. 53	
11:30 a.m. – Noon								
Noon – 12:30 p.m.		Global Health Working Group Meeting						
12:30 –1 p.m.								
1 – 1:30 p.m.								
1:30 – 2 p.m.								
2 – 2:30 p.m.								
2:30 – 3 p.m.								
3 – 3:30 p.m.								
3:30 – 4 p.m.	ACMCIP Council Meeting							
4 – 4:30 p.m.								
4:30 – 5 p.m.								
5 – 5:30 p.m.								
5:30 – 6 p.m.								
6 – 6:30 p.m.								
6:30 – 7 p.m.								
7 – 7:30 p.m.								
7:30 – 8 p.m.								
8 – 8:30 p.m.								
8:30 – 9 p.m.								
9 – 9:30 p.m.								
9:30 – 10 p.m.								

Thursday, November 19, 2009

	Exhibit Hall A Lower Level	Exhibit Hall B South Lower Level	Salon 1 First Floor	Salon 2 First Floor	Salon 3 First Floor	Delaware A First Floor	Delaware B First Floor	Virginia AB First Floor
7 - 7:30 a.m.								
7:30 - 8 a.m.								
8 - 9:45 a.m.	Exhibits Open 9:30–10:30			2 Global Health Cornerstone Symposium 1 P. 56		3 Symposium Diagnostic Tests in VL P. 56	4 Symposium Q Fever Update P. 57	5 Scientific Session Malaria Drug Resistance P. 57
9:45 - 10:15 a.m.	Coffee Break	Poster Session A Set-Up						
10:15 - Noon		Poster Session A Viewing		13 Symposium, Global Funding in Finan Crisis P. 62		14 Symposium New Therapy in HAT & VL P. 63	15 Symposium Math Models in Malaria Control P. 63	16 Scientific Session Malaria Chemotherapy P. 64
Noon - 12:15 p.m.	Exhibit Hall Open Light Lunch	24 Poster Session A Presentations Light Lunch P. 68						
12:15 - 12:30 p.m.						25 Late Breakers Clinical Trop Med P. 91		26 Late Breakers Basic Science Mol Bio P. 91
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.	Exhibits Open 3–4	Poster Session A Viewing	29 Symposium Malaria Blood-Stage Vaccine P. 92	30 Symposium President's Malaria Initiative P. 92	31 Symposium Climate Change P. 92	32 Symposium SAFE Strategy in Trachoma P. 93	33 Symposium Risks to Health Care Workers P. 93	34 Scientific Session Malaria Drug Development P. 94
3:15- 3:45 p.m.	Coffee Break							
3:45 - 5:30 p.m.			41 Symposium Malaria Vaccine Immune Evasion P. 99	41A Symposium Child Mortality & Diarrheal Dz P. 100	42 Symposium Changing Climate Geospatial Aspects Dz P. 100	43 Symposium Azithromycin Mass Rx P. 101	44 Symposium Rapid Dx in Low Resource Setting P. 101	45 Symposium Malaria Resist Surveillance P. 102
5:30 - 6 p.m.								
6 - 6:45 p.m.				52 Plenary II Soper Lecture P. 106				
6:45 - 7 p.m.								
7 - 7:30 p.m.		Poster Session A Dismantle						7:15 p.m. Satellite Symposium Anti-Malarial Drug Development P. 106
7:30 - 8 p.m.								
8 - 8:30 p.m.								
8:30 - 9 p.m.								

Thursday, November 19, 2009

	Virginia C First Floor	Washington 1 Lower Level	Washington 2 Lower Level	Washington 3 Lower Level	Washington 4 Lower Level	Washington 5 Lower Level	Wilson AB Second Floor
7 - 7:30 a.m.							
7:30 - 8 a.m.							
8 - 9:45 a.m.	6 Scientific Session Ectoparasite Borne Disease P. 58	7 Symposium New Flaviviruses P. 59	8 ACMCIP Symposium Gene Expression P. 60	9 Symposium Schisto in China Eliminating Transmission P. 60	10 Scientific Session Mosquitoes Vector Bio Epi 1 P. 60	11 Symposium Career Development 1 P. 61	12 Symposium Advances in Tick Genome Research P. 62
9:45 - 10:15 a.m.							
10:15 - Noon	17 Symposium Rickettsioses in Asia P. 64	18 Scientific Session Flavivirus Dengue 1 P. 65	19 Symposium Gametocytes & Malaria Transmission P. 66	20 Scientific Session Kinetoplastida Molecular Bio Immunology P. 66	21 Symposium Vaccines for Diarrheal Dz P. 67	22 Symposium Career Development II P. 67	23 Symposium Tsetse Physiology Sleeping Sickness Control P. 68
Noon - 12:15 p.m.							
12:15 - 12:30 p.m.	27 Meet the Professors A Cases P. 91					28 Wellcome Grant Writing & Mentor P. 91	
12:30 - 12:45 p.m.							
12:45 - 1:15 p.m.							
1:15 - 1:30 p.m.							
1:30 - 3:15 p.m.	35 Symposium Pneumonia Burden & Etiology P. 95	36 Scientific Session Clin Trop Med I P. 95	37 Symposium Wellcome Trust Research Capacity Strength P. 96	38 Scientific Session Cestodes & Intestinal Nematodes P. 96	39 Scientific Session ACMCIP Cell Parasitology 1 P. 97	40 Symposium ACME 1 Space Repellents Vector Control P. 98	40A Symposium Urban Typhoid in Asia and Africa P. 99
3:15- 3:45 p.m.							
3:45 - 5:30 p.m.	46 Symposium Hantavrial Disease P. 102	47 Scientific Session Clin Trop Med II P. 102	48 Symposium Wellcome Trust Global Workforce Partnership P. 103	49 Scientific Session Filariasis Pathology & Treatment P. 104	50 Scientific Session ACMCIP Mol Para I P. 104	51 Symposium ACME II Space Repellents Vector Control P. 105	
5:30 - 6 p.m.							
6 - 6:45 p.m.							
6:45 - 7 p.m.							
7 - 7:30 p.m.							
7:30 - 8 p.m.							
8 - 8:30 p.m.							
8:30 - 9 p.m.							

Friday, November 20, 2009

	Exhibit Hall A Lower Level	Exhibit Hall B South Lower Level	Salon 1 First Floor	Salon 2 First Floor	Salon 3 First Floor	Delaware A First Floor	Delaware B First Floor	Virginia AB First Floor
7 - 7:30 a.m.					52A Gates EDD Strategy P. 107			
7:30 - 8 a.m.								
8 - 9:45 a.m.	Exhibits Open 9:30 – 10:30		53 Symposium Malaria Eradication Agenda P. 107	54 Scientific Session Malaria Bio & Pathogenesis I P. 108	55 Symposium Careers in Trop Med Research P. 108	56 Symposium Non-Typhoidal Salmonella in Africa P. 109	57 Symposium Rectal Artesunate in Rural Africa P. 109	58 Symposium TB Control in 21st Century P. 110
9:45 - 10:15 a.m.	Coffee Break	Poster Session B Set-Up						
10:15 - Noon		Poster Session B Viewing		67 Global Health Cornerstone Symposium II P. 115	68 Symposium Trop Med Research & Promoting Human Rights P. 115		70 Symposium Brain Dz in Developing World P. 116	70A Symposium Health of Travelers & Immigrants P. 116
Noon - 12:15 p.m.	Exhibit Hall Open Light Lunch	77 Poster Session B Presentations Light Lunch P. 121						
12:15 - 12:30 p.m.						78 Late Breakers in Clinical Tropical Medicine P. 144	79 ASTMH Journal P. 144	80 Late Breakers in Basic Science Molecular Bio P. 145
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.	Exhibits Open 3–4	Poster Session B Viewing	82 Symposium Acquired Immunity in Malaria P. 146	83 Symposium Clinical Group I P. 146	84 Symposium ACAV I Shope Fellows P. 146	85 Symposium Malaria Pharmaco-vigilance P. 147	86 Symposium Global Burden of Anemia P. 147	87 Symposium SCORE Schisto Consortium P. 148
3:15- 3:45 p.m.	Coffee Break							
3:45 - 5:30 p.m.			94 Symposium Sporozoite Vaccine Malaria P. 152	95 Symposium Clinical Group II P. 152	96 Symposium ACAV II History/ Discoveries P. 152	97 Symposium Integrated Mgt NTDs P. 153	98 Symposium Walter Reed Research in Vaccines P. 153	99 Symposium Bioinformatics P. 154
5:30 - 6 p.m.								
6 - 6:45 p.m.				105 Plenary III Comm Fund Lecture P. 157				
6:45 - 7 p.m.								
7 - 7:30 p.m.		Poster Session B Dismantle			7:15 p.m. 106 Symposium Malaria Genomics BWF p. 157			
7:30 - 8 p.m.								
8 - 8:30 p.m.								
8:30 - 9 p.m.								

Friday, November 20, 2009

	Virginia C First Floor	Washington 1 Lower Level	Washington 2 Lower Level	Washington 3 Lower Level	Washington 4 Lower Level	Washington 5 Lower Level	Wilson AB Second Floor
7 - 7:30 a.m.							
7:30 - 8 a.m.							
8 - 9:45 a.m.	59 Symposium Yellow Fever Risk Mapping P. 110	60 Scientific Session ACMCIP Immuno-parasitology I P. 111	61 Symposium Human Subjects in Vector Bio Research P. 111	62 Scientific Session Flavivirus Dengue II P. 112	63 Symposium Chagas Dz Blood Banking in U.S. P. 113	64 Scientific Session Mosquitoes Biochem/Mol Bio & Molec Gen I P. 113	65 Scientific Session HIV in Tropics P. 114
9:45 - 10:15 a.m.							
10:15 - Noon	71 Symposium 30 Yrs of CDC/KEMRI Collaboration P. 116	72 Scientific Session Schisto II Immunology-pathology P. 117	73 Scientific Session Mosquitoes Vector Bio & Epi II P. 118	74 Scientific Session Flavivirus Dengue III P. 118	75 Symposium Making Impact on Chagas Disease P. 119	76 Symposium NTD Control in Sub-Saharan Africa P. 120	76A Scientific Session Malaria Molecular Bio P. 120
Noon - 12:15 p.m.							
12:15 - 12:30 p.m.	81 Meet the Professors B Cases P. 145						81A Case Studies Global Health P. 145
12:30 - 12:45 p.m.							
12:45 - 1:15 p.m.							
1:15 - 1:30 p.m.							
1:30 - 3:15 p.m.	88 Symposium Molec Pathogen Leishmaniasis P. 148	89 Scientific Session ACMCIP Cell Parasitology II P. 148	90 Symposium Mosquito Interaction P. 149	91 Scientific Session Malaria Epi I P. 150		93 Scientific Session Filariasis Molec Bio P. 151	
3:15- 3:45 p.m.							
3:45 - 5:30 p.m.		100 Symposium Antimalarials Market in Africa P. 154	101 Symposium *Anopheles* Immunity to *Plasmodium* P. 155	102 Symposium Clean Water & Sanitation Strategies P. 155	103 Symposium Drug Discovery Human Helminthiases P. 155	104 Scientific Session Malaria Diagnosis P. 156	
5:30 - 6 p.m.							
6 - 6:45 p.m.							
6:45 - 7 p.m.							
7 - 7:30 p.m.							
7:30 - 8 p.m.							
8 - 8:30 p.m.							
8:30 - 9 p.m.							

Saturday, November 21, 2009

	Exhibit Hall A Lower Level	Exhibit Hall B South Lower Level	Salon 1 First Floor	Salon 2 First Floor	Salon 3 First Floor	Delaware A First Floor	Delaware B First Floor	Virginia AB First Floor
7 - 7:30 a.m.								
7:30 - 8 a.m.								
8 - 9:45 a.m.	Exhibits Open 9:30 – 10:30		107 Symposium Macrophages in Parasite Immunity P. 157	108 Symposium Global Dist of *Falciparum* Malaria 2007 P. 158	109 Symposium Cell Phones & Improving Human Health P. 158	110 Scientific Session Viruses I P. 159	111 Symposium Rapid Diagnostic Tools in Theory & Practice P. 159	112 Scientific Session Protozoa P. 160
9:45 - 10:15 a.m.	Coffee Break	Poster Session C Set-Up						
10:15 - Noon		26A Poster Session C Viewing	120 Scientific Session Mosquitoes Biochem Mol Bio Mol Geneticss II P. 165	121 Scientific Session Viruses II P. 166	122 Symposium Efficacy of Malaria Control Programs P. 167	123 Symposium Vaccines in Integrated Control of Helminth Dz P. 167	124 Symposium Assessing Disease Elimination P. 168	125 Scientific Session Pneumonia Respiratory TB P. 168
Noon - 12:15 p.m.	Exhibit Hall Open Light Lunch	133 Poster Session C Presentations Light Lunch P. 173						
12:15 - 12:30 p.m.						133A Getting Your Work Published P. 196	134 Salud Video Cuba's Role in Global Health P. 196	
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.		Poster Session C Viewing	136 Symposium Remote Sensing for Vector Dz Outbreaks P. 197	137 Symposium Sustaining Malaria Control in Africa P. 197	138 Scientific Session ACMCIP Immuno-parasitology II P. 198	139 Scientific Session Arthropods/ Entomology P. 199	140 Symposium Arboviral Infxn in Travelers P. 199	141 Symposium Meds From Pharma's Attic P. 200
3:15- 3:45 p.m.								
3:45 - 5:30 p.m.			149 Scientific Session Schisto Epi/Control P. 205	150 Scientific Session Malaria Control & Treatment Strategies P. 206	151 Symposium OneHealth Initiative P. 207	152 Symposium New Trends *Anopheles darlingi* P. 208	153 Symposium Vector-Borne Dz in People & Pets P. 208	154 Scientific Session Water, Sanitation & Hygiene P. 209
5:30 - 6 p.m.								
6 - 6:45 p.m.				161 Plenary IV Pres Address Business Mtg P. 214				
6:45 - 7 p.m.								
7 - 7:30 p.m.		Poster Session C Dismantle						
7:30 - 8 p.m.								

Saturday, November 21, 2009

	Virginia C First Floor	Washington 1 Lower Level	Washington 2 Lower Level	Washington 3 Lower Level	Washington 4 Lower Level	Washington 5 Lower Level	Wilson A Second Floor
7 - 7:30 a.m.							
7:30 - 8 a.m.							
8 - 9:45 a.m.	113 Scientific Session Schisto Vectors & Vector Bio P. 161	114 Scientific Session NTDs P. 161	115 Symposium Fetal Response in Placental Malaria P. 162	116 Scientific Session Bacteriology *E Coli* & Cholera P. 163	117 Symposium Global Health & Mass Travel Events P. 164	118 Symposium Malaria Control Indoor Spraying P. 164	119 Symposium Transitioning to Senior Investigator P. 165
9:45 - 10:15 a.m.							
10:15 - Noon	126 Symposium Education & Training in Global Health P. 169	127 Symposium Natural Selection Impact in Malaria P. 169	128 Symposium Malaria Control Bednets P. 170	129 Symposium Epi of Vector-Borne Dz in the Home P. 170	130 Symposium Communicable Dz in Post-Conflict Settings P. 171	131 Scientific Session Malaria Regulation of Cellular Immunity P. 171	132 Scientific Session Kinetoplastida Epi Dx Rx P. 172
Noon - 12:15 p.m.							
12:15 - 12:30 p.m.	135 Meet the Profs C Cases P. 196						
12:30 - 12:45 p.m.							
12:45 - 1:15 p.m.							
1:15 - 1:30 p.m.							
1:30 - 3:15 p.m.	142 Symposium Integrated Mgt of Malaria/Pneu/ Diarrhea P. 200	143 Symposium Spatial Scale of Dengue P. 201	144 Scientific Session Filariasis Control P. 201	145 Scientific Session Malaria Epi II P. 202	146 Scientific Session Malaria Vaccines I P. 203	147 Scientific Session Malaria Bio & Path II P. 204	148 Symposium Workforce Migration P. 205
3:15- 3:45 p.m.							
3:45 - 5:30 p.m.	155 Symposium Lymphedema Management P. 210	156 Symposium Acute Dengue 15-Year Experience P. 210	157 Symposium Monitoring Insecticide Resistance P. 211	158 Symposium Malaria Rapid Diagnostic Tests P. 211	159 Scientific Session Malaria Functional Assessment Antibodies P. 212	160 Symposium *Vivax* Malaria P. 213	160A Symposium Rotavirus Vaccine Trials P. 213
5:30 - 6 p.m.							
6 - 6:45 p.m.							
6:45 - 7 p.m.							
7 - 7:30 p.m.							
7:30 - 8 p.m.							

Sunday, November 22, 2009

	Marriott Foyer Second Floor	Salon 1 First Floor	Salon 2 First Floor	Salon 3 First Floor	Delaware A First Floor	Delaware B First Floor	Virginia AB First Floor	Virginia C First Floor
7 - 7:30 a.m.								
7:30 - 8 a.m.								
8 - 9:45 a.m.			163 Symposium Lit Update Clin Trop Med P. 214	164 Symposium Severe *Falciparum* Malaria P. 215	165 Symposium Affordable Meds in Malaria Rx P. 215	166 Symposium Improving IRB Processes P. 216	167 Scientific Session Filariasis Immunology P. 216	168 Symposium Malnutrition & Enteric Dz in Children P. 217
9:45 - 10:15 a.m.	Coffee Break							
10:15 - Noon		174 Symposium Cross Border Travel Bugs P. 222	175 Scientific Session Clin Trop Med III P. 222	176 Scientific Session ACMCIP Molecular Parasitology II P. 223	177 Symposium Habitat Loss Effects & Dz Transmission P. 224	178 Symposium Dendritic Cells in Parasite Immunity P. 225	179 Scientific Session Malaria Mosquitoes & Prevention P. 225	180 Symposium Childhood Pneumonia in Developing World P. 226
Noon - 12:15 p.m.								
12:15 - 12:30 p.m.								
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.								
3:15- 3:45 p.m.								
3:45 - 5:30 p.m.								
5:30 - 6 p.m.								
6 - 6:45 p.m.								
6:45 - 7 p.m.								
7 - 7:30 p.m.								
7:30 - 8 p.m.								

Sunday, November 22, 2009

	Washington 1 Lower Level	Washington 2 Lower Level	Washington 3 Lower Level	Washington 4 Lower Level	Washington 5 Lower Level	Washington 6 Lower Level	Balcony B
7 - 7:30 a.m.							
7:30 - 8 a.m.							ASTMH Council Meeting
8 - 9:45 a.m.	169 Scientific Session Mosquitoes Insecticide Resistance & Control P. 217	170 Scientific Session Flavivirus West Nile P. 218	171 Symposium Forest Dengue P. 219	172 Symposium Flu in Developing World P. 220	173 Symposium Hygiene Behavior & Health Outcomes P. 220	173A Scientific Session Malaria Vaccines II P. 221	
9:45 - 10:15 a.m.							
10:15 - Noon	181 Symposium *Anopheles gambiae* Population Genomics P. 226	182 Scientific Session Flavivirus P. 227	183 Scientific Session Schisto Biochem/Molec Bio P. 228	184 Scientific Session Global Health P. 228	185 Scientific Session Bacteriology Diarrhea Enteric Fever Leptospirosis P. 229	186 Symposium Babesia P. 230	
Noon - 12:15 p.m.							
12:15 - 12:30 p.m.							
12:30 - 12:45 p.m.							
12:45 - 1:15 p.m.							
1:15 - 1:30 p.m.							
1:30 - 3:15 p.m.							
3:15- 3:45 p.m.							
3:45 - 5:30 p.m.							
5:30 - 6 p.m.							
6 - 6:45 p.m.							
6:45 - 7 p.m.							
7 - 7:30 p.m.							
7:30 - 8 p.m.							

Related Organization Meeting Schedule

Note: These meetings are by invitation only.

Monday, November 16

Seattle Biomedical Research Institute Malaria Advisory Board Meeting
Room 8222
8 a.m. - 5 p.m.

Liverpool School of Tropical Medicine AWOL Consortium Winter Meeting 2009
Balcony B
8 a.m. - 6 p.m.

Novartis Vaccines Update/Ad Board
Balcony A
2 p.m. - 6 p.m.

Tuesday, November 17

Novartis Pharma AG. Meeting Room
Tyler
7 a.m. - 7 p.m.

Novartis Vaccines Update/Ad Board
Balcony A, Room 8218, Capitol Boardroom
7 a.m. - 10 p.m.

Liverpool School of Tropical Medicine AWOL ESAC and MC Winter Meeting 2009
Room 8219
9 a.m. - 5 p.m.

Seventh Annual IGGI Meeting
Ethan Allen - Wardman Tower
9 a.m. - 6 p.m.

Consortium for Parasitic Drug Development Governance Council
Jackson
Noon - 5 p.m.

Bill & Melinda Gates Foundation Integrated NTD Meeting
Nathan Hale - Wardman Tower
Noon - 6 p.m.

Medicines for Malaria Venture CRIMALDDI Meeting
Washington 6
1 p.m. - 6 p.m.

Wednesday, November 18

Bill & Melinda Gates Foundation Integrated NTD Meeting
Nathan Hale - Wardman Tower
7 a.m. - 6 p.m.

Novartis Pharma AG. Meeting Room
Tyler
7 a.m. - 7 p.m.

Pfizer Meeting Room
Balcony A
7 a.m. - 7 p.m.

Bill & Melinda Gates Foundation Meeting
Balcony D
7 a.m. - 7 p.m.

USAMMDA Meeting Room
Room 8216
9 a.m. - 9 p.m.

Bangladesh Cholera Behavior Change Team Meeting
Room 8211
9 a.m. - 5 p.m.

Investigators' Meeting - Update on U.S./Thai Collaborations on Dengue Research
Room 8212
9 a.m. - 5 p.m.

Seventh Annual IGGI Meeting
Ethan Allen - Wardman Tower
9 a.m. - 1 p.m.

MR4 Science Advisory Committee Meeting
Balcony B
10 a.m. - 3 p.m.

Consortium for Parasitic Drug Development Scientific Advisory Board
Capitol Boardroom
11 a.m. - 1:30 p.m.

CDC International Emerging Infections Program
Thomas Paine-Wardman Tower
Noon - 5 p.m.

International Society of Travel Medicine GeoSentinel Site Directors Meeting
Room 8210
1 p.m. - 5 p.m.

Medicines for Malaria Venture CRIMALDDI Meeting
Wilson C
1 p.m. - 6 p.m.

PATH Malaria Vaccine Initiative LaTrobe MSP2 Clinical Trial
Ethan Allen - Wardman Tower
3 p.m. - 5 p.m.

Novartis Vaccines Internal Briefing Meeting
Balcony C
4 p.m. - 6 p.m.

Thursday, November 19

Pfizer Meeting Room
Balcony A
7 a.m. - 7 p.m.

Novartis Pharma AG. Meeting Room
Tyler
7 a.m. - 7 p.m.

Bill & Melinda Gates Foundation Meeting
Balcony D
7 a.m. - 7 p.m.

International Society for Infectious Diseases - NTD Program Committee Meeting
Room 8217
8:30 a.m. - 10:15 a.m.

USAMMDA Meeting Room
Room 8216
9 a.m. - 9 p.m.

PATH Malaria Vaccine Initiative
Wilson C
6 p.m. - 9 p.m.

SCYNEXIS, Inc. Meeting
Wilson AB
6 p.m. - 10 p.m.

Friday, November 20

Pfizer Meeting Room
Balcony A
7 a.m. - 7 p.m.

Novartis Pharma AG. Meeting Room
Tyler
7 a.m. - 7 p.m.

Bill & Melinda Gates Foundation Meeting
Balcony D
7 a.m. - 7 p.m.

USAMMDA Meeting Room
Room 8216
9 a.m. - 9 p.m.

Novartis Pharma AG. Meeting
Wilson AB
7 p.m. - 9 p.m.

sanofi-aventis Groupe Meeting
Wilson C
5 p.m. - 8 p.m.

PATH Malaria Vaccine Initiative AMA-1 Investigators Consortium
Virginia C
5:45 p.m. - 9 p.m.

Johns Hopkins Malaria Research Institute Reunion
Balcony B
5:30 p.m. - 7 p.m.

WRAIR Commander's Reception
Delaware AB
7:15 p.m. - 9:15 p.m.

Saturday, November 21

Pfizer Meeting Room
Balcony A
7 a.m. - 7 p.m.

Novartis Pharma AG. Meeting Room
Tyler
7 a.m. - 7 p.m.

Bill & Melinda Gates Foundation Meeting
Balcony D
7 a.m. - 7 p.m.

USAMMDA Meeting Room
Room 8216
9 a.m. - 9 p.m.

Global TravEpiNet Consortium Meeting
Balcony B
12:15 p.m. - 1:15 p.m.

London School of Hygiene and Tropical Medicine Alumni Reception
Balcony C
7:30 p.m. - 10 p.m.

Sunday, November 22

Bill & Melinda Gates Foundation Meeting
Balcony D
7 a.m. - 5 p.m.

Pfizer Meeting Room
Balcony A
7 a.m. - Noon

Novartis Pharma AG. Meeting Room
Tyler
7 a.m. - Noon

International Society of Travel Medicine Executive Board Meeting
Room 8211
8 a.m. - 5 p.m.

UC Davis Activity Space
Room 8210
Noon - 6 p.m.

ASTMH Council, Committee and Subgroup Meetings

Wednesday, November 18

ASTMH Council Meeting
Wilson AB
8 a.m. - 3 p.m.

ACAV SIE Subcommittee Meeting
Room 8219
11 a.m. - Noon

ACAV SIRACA Subcommittee Meeting
Room 8219
Noon - 2 p.m.

ASTMH Global Health Working Group Meeting
Balcony C
Noon - 2 p.m.

ACAV SALS Subcommittee Meeting
Room 8219
2 p.m. - 3:30 p.m.

ACAV Council Meeting
Room 8219
3:30 p.m. - 5:30 p.m.

ACMCIP Council Meeting
Capitol Boardroom
3:30 p.m. - 5:30 p.m.

ACME Council Meeting
Room 8217
3:30 p.m. - 5:30 p.m.

Clinical Group Council Meeting
Room 8218
3:30 p.m. - 5:30 p.m.

Young Investigator Award Committee Meeting
Jackson
3:30 p.m. - 5 p.m.

Thursday, November 19

ASTMH Diploma Course Directors Meeting
Room 8212
7 a.m. - 8 a.m.

Public Policy and Advocacy Leadership Committee Meeting
Room 8211
7 a.m. - 8 a.m.

Clinical Group Education Curriculum Meeting
Room 8217
7 a.m. - 8 a.m.

Burroughs Wellcome Fund/ASTMH Fellowship Committee Meeting
Jackson
Noon - 2 p.m.

Certificate Exam Executive Committee Meeting
Room 8217
12:15 p.m. - 1:15 p.m.

Clinical Standards and Treatment Guidelines Committee
Room 8212
12:15 p.m. - 1:15 p.m.

Friday, November 20

ASTMH Journal Editorial Board Meeting
Wilson C
7 a.m. - 8 a.m.

Clinical Group Past Presidents Meeting
Room 8212
7 a.m. - 8 a.m.

Education Committee Meeting
Room 8211
7 a.m. - 8 a.m.

CME/Courses Committee Meeting
Room 8211
12:15 p.m. - 1:15 p.m.

Public Relations Committee Meeting
Room 8212
12:15 p.m. - 1:15 p.m.

Saturday, November 21

Scientific Program Committee Meeting
Balcony B
7 a.m. - 8 a.m.

Web Site Committee Meeting
Room 8217
7 a.m. - 8 a.m.

ASTMH Past Presidents Meeting
Balcony C
7 a.m. - 8 a.m.

Membership Committee Meeting
Room 8217
12:15 p.m. - 1:15 p.m.

Certificate Exam Committee Meeting
Room 8212
12:15 p.m. - 1:15 p.m.

Sunday, November 22

ASTMH Council Meeting
Balcony B
7:30 a.m. - 9:30 a.m.

Meeting Room Sign-Up
Rooms 8218 and 8219 on the first floor are designated for committee meetings and other group meetings. Meeting room reservations are available on a first-come, first-served basis. Use the sign-up sheets located outside these rooms to reserve meeting time for your group.

ASTMH Subgroup Tables
Visit the American Committee of Medical Entomology (ACME) and the American Committee on Arthropod-Borne Viruses (ACAV) information tables in the exhibit hall to learn about their programs and activities.

Officers

President
Thomas Wellems

President-Elect
Edward Ryan

Immediate Past President
Claire Panosian

Secretary-Treasurer
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Executive Director
Sally Finney

Councilors

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Steve Higgs
James Hughes
Regina Rabinovich
Frank Richards
Rick Steketee
Scott Weaver
Mary Wilson

Chair, Scientific Program Committee
Christopher King

Editor, ***American Journal of Tropical Medicine and Hygiene***
James Kazura

Editors, ***Tropical Medicine and Hygiene News***
William Collins and Geoffrey Jeffery

Web Site Editor
Jonathan Mayer

Advisor
Peter Weller

American Society of Tropical Medicine and Hygiene
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Deerfield, IL 60015 USA
Phone +1-847-480-9592
Fax: +1-847-480-9282
info@astmh.org
www.astmh.org

ASTMH Scientific Program Committee

Christopher King, Chair

Career Development/Education
Chair: Sarah Volkman
Michele Barry
Steve Higgs
Anne McCarthy

Clinical Tropical Medicine
Chair: Robert Gasser
Jean-Paul Chretien
John Gawoski
Davidson Hamer
Larry Laughlin
Jason Maguire
Alan Spira
Joe Vinetz

Bacteriology
Chair: Ed Ryan
James Hughes
Regina LaRocque

Entomology
Chair: William Black
Kate Aultman
Hilary Ranson
David Severson

Filariasis
Chair: Amy Klion
Peter Fischer
Edward Mitre
Frank Richards
Steven Williams

Global Health
Chair: Michele Barry
Don Burke
Wil Milhous
Jonathan Ripp

Intestinal and Tissue Helminths, Cestodes
Chair: A. Clinton White
David Abraham
Mark Eberhard
Peter Kern

Kinetoplastida
Chair: Diane McMahon-Pratt
Nisha Garg
Hira Nakhasi
Lynn Soong

Late Breakers in Clinical Tropical Medicine
Barbara Herwaldt
Jason Maguire

Late Breakers in Basic Science/ Molecular Biology
Greg Ebel
Stefan Kappe

Malaria
Chair: Carol Sibley
Johanna Daily
Mary Hamel
Chandy John
Sanjai Kumar
Miriam Laufer
Myaing Nyunt
Laurence Slutsker
Joe Vinetz
Sarah Volkman
Kim Williamson
Yimin Wu

Meet the Professors
Davidson Hamer

Molecular Parasitology
Chair: Sarah Volkman
David Abraham
John Adams
Daniel Carucci
Brian Cooke
Don Harn
Peter Kima
Barbara Mann
Diane McMahon-Pratt
Peter Melby
Evan Secor
Joe Vinetz
David Williams
Kim Williamson

Opportunistic and Anaerobic Protozoa
Chair: Thaddeus Graczyk
Beth Kirkpatrick
Barbara Mann
Upinder Singh

Pneumonia, Respiratory Infections and Tuberculosis
Chair: Abdullah Brooks
Rob Breiman
Davidson Hamer
Keith Klugman

Schistosomiasis-Helminths
Chair: Evan Secor
Miguel Stadecker
David Williams

Tick-Louse-Flea-Mite-Borne Diseases
Chair: Stephen Dumler
Bob Lane
Sam Telford

Tropical HIV and Co-Infections
Chair: Jean Nachega
Elizabeth Barnett
Davidson Hamer
Rocio Hurtado

Virology
Chair: Rebeca Rico-Hesse
Carol Blair
Scott Halstead
George Ludwig
Julia Lynch
Kate Rubins
Michael Turell

Water, Sanitation and Hygiene
Chair: Pavani Ram
Eric Mintz
Christine Moe

Archives
Donald Burke (2008-2010), Chair

Audit/Finance
Josh Berman (2009-2011), Chair
Sally Finney; Ed Ryan; Peter Weller

Awards
Myron Levine (2007-2009), Chair
Kent Campbell (2008-2010); Claire Panosian (2009-2011)

Benjamin H. Kean Traveling Fellowship in Tropical Medicine
Christopher Plowe, Chair (2007-2009)
Colette Kean (Honorary); Myaing Nyunt (2008-2010); William Stauffer (2009-2011); A. Clinton White (2009-2011); Martin Wolfe (2007-2009)

Burroughs Wellcome Fund-ASTMH Fellowship
Terrie Taylor (2007-2009), Chair
Stephen Calderwood (2007-2009); Ravi Durvasula (2008-2010); Richard Guerrant (2009-2011); Regina LaRocque (2008-2010); Victoria McGovern (standing); Peter Weller (2009-2011)

Certificate Examination
Susan McLellan, Chair (2007-2009)
Lin Chen (2007-2009); Jovita Fernandez (2008-2010); David Freedman (2009-2011); Gregory Juckett (2007-2009); Lisa Keep (2008-2010); Ali Khan (2009-2011); Victor Kovner (2007-2009); Walter Kuhn (2008-2010); James Maguire (2009-2011); Bonnie Smoak (2007-2009); William Stauffer (2008-2010); A. Clinton White (2009-2011)

Certificate Exam Executive Committee
James Maguire (2008-2010), Chair
Tom Wellems (2009); Josh Berman (2009-2011); Patricia Joyce (2007-2009); Larry Laughlin (2009-2011); Joe Vinetz (2009); Susan McLellan (2007-2009)

Clinical Standards and Treatment Guidelines
Ed Ryan, Chair (2010-2012)
Naomi Aronson (2010-2012); Josh Berman (2010-2011); Philip Coyne (2010-2012); Johanna Daily (2010-2011); David Freedman (2010-2012); Robert Gasser (2010-2011); Hector Gorbea (2010-2012); David Hill (2010-2011); Eric Houpt (2010-2012); Rocio Hurtado (2010-2011); Chandy John (2010-2012); Kevin Kain (2010-2011); James Maguire (2010-2012); Jean Nachega (2010-2011); Monica Parise (2010-2011); William Stauffer (2010-2011); Joseph Vinetz (2010-2012); Mary Wilson (2010-2011)

Commemorative Fund Lectureship
Tom Wellems, Chair (2009)

Communications Award
Claire Panosian, Chair (2008-2010)
John Donnelly (2008-2010); Michael Leahy (2008-2010); James Maguire (2009-2011); Frank Richards (2009-2011)

Corporate Liaison
Thomas Monath (2007-2009), Chair
Bradley Connor (2008-2010); Jaco Smit (2009-2011)

Continuing Medical Education/Courses Committee
Alan Magill (2008-2010), Chair
Tim Endy (2009-2011), CME Liaison
Jonathan Berman (2007-2009); Dan Carucci (2008-2010); Christina Coyle (2009-2011); David Hill (2008-2010); Eric Houpt (2009-2011); Christopher King (2009-2011); Desiree LaBeaud (2009-2011); Richard Pearson (2009-2011); Ed Ryan (2007-2009)

Credentialing Committee
Larry Laughlin (2009-2011), Chair
David Freedman (2007-2009); David Hill (2008-2010); Christopher Karp (2009-2011); Jay Keystone (2007-2009); Christopher King (2008-2010); Herbert Tanowitz (2009-2011)

Editorial Board, *American Journal of Tropical Medicine and Hygiene*
David Abraham; John Barnwell; Michael Cappello; William Collins; Hector Garcia; James Hughes; Jay Keystone; Philip LoVerde; Steven Meshnick; Thomas Nutman; Rebeca Rico-Hesse; Philip Rosenthal; Terrie Taylor; Robert Tesh; David Walker; Editorial Staff: James Kazura, Chair (Editor-in-Chief); McWilson Warren (Emeritus Editor); Joe Vinetz (Associate Editor); Cathi Siegel (Managing Editor); Laura Buckley (Editorial Assistant); Allen Hightower (Statistical Editor); Section Editors: J. Kevin Baird; J. Stephen Dumler; Diane McMahon-Pratt; Tom Scott; Scott Weaver; Clinical Group Editor: James Maguire

Education
Steve Higgs, Chair (2008-2010)
Noah Craft (2007-2009); Hector Gorbea (2008-2010); Laura Harrington (2009-2011); Risa Hoffman (2007-2009); Charles McGee (2008-2010); Victoria McGovern (2009-2011); Claire Panosian (2007-2009); Sarah Volkman (2008-2010); Steve Wikel (2009-2011); Jack Woodall (2007-2009); Peter Zimmerman (2008-2010)

Fundraising
Peter Weller (2009-2011), Chair
Michele Barry (2007-2009); Stephen Hoffman (2008-2010); Peter Hotez (2009-2011); James Kazura (2007-2009); Tom Monath (2008-2010); William Petri (2009-2011); Dyann Wirth (2007-2009)

Gorgas Memorial Institute Research Award
Kathryn Aultman (2008-2010), Chair
Patricia Dorn (2008-2010); Ynes Ortega (2009-2011); Jorge Osorio (2007-2009); Rebeca Rico-Hesse (2008-2010); Tom Yuill (2009-2011)

Honorary Membership
Tom Monath, Chair (2008-2010)
John David (2008-2010); Frank Neva (2007-2009); William Petri (2009-2011)

International Federation of Tropical Medicine Representative
Don Krogstad

Lecture (Fred L. Soper and Charles F. Craig)
Robert Tesh (2008-2010), Chair
Donald Burke (2007-2009); David Freedman (Gorgas representative, standing); Peter Hotez (2008-2010); William Petri (2009-2011)

Membership
Josh Berman (2009-2011), Chair
Charles McGee (2007-2009); Claire Panosian (2008-2010); Sarah Volkman (ACMCIP president); Ann Powers (ACAV chair); Jefferson Vaughan (ACME chair); Joe Vinetz (Clinical Group president)

Newsletter Editorial Board
William Collins, Editor; Geoffrey Jeffery, Editor
Kathryn Aultman; Latha Rajan; Mitzi Sereno; Karl Western

Nominations
Claire Panosian (2009-2010), Chair
Dan Bausch (2008-2009); Brenda Beerntsen (2009-2010); John Donelson (2009-2010); Mary Hamel (2008-2009); Anthony James (2009-2010); Diane McMahon-Pratt (2009-2010); Thomas Nutman (2008-2009); Carol Sibley (2009-2010); Gary Weil (2008-2009); Clinton White (2008-2009)

Pfizer Centennial Travel Award
Joe Vinetz (2009-2011), Chair
Michael Cappello (2007-2009); David Fidock (2008-2010); Diane McMahon-Pratt (2009-2011); Thomas Moore (2007-2009); Sarah Volkman (2008-2010)

Program Certification
James Maguire (2008-2010), Chair
Michele Barry (2007-2009); David Freedman (2008-2010); Richard Guerrant (2009-2011); Rocio Hurtado (2007-2009); James Kazura (2008-2010); Donald Krogstad (2009-2011); Larry Laughlin (2007-2009); Anne McCarthy (2008-2010); Alan Spira (2009-2011); Peter Weller (2007-2009)

Public Policy and Advocacy Leadership
Kent Campbell (2007-2009), Chair
Josh Hartzell (2009-2011); James Maguire (2007-2009); Larry Slutsker (2008-2010); Sarah Volkman (2007-2009)

Public Relations
Tom Wellems and Sally Finney, Co-Chairs
Kent Campbell; Steve Higgs; James Kazura; Christopher King; Jonathan Mayer; Ann Powers; Jeff Vaughan; Joe Vinetz

Robert E. Shope International Fellowship
Charles Calisher (2009-2011), Chair
Barry Beaty (2007-2009); Donald Burke (2008-2010); George Ludwig (2009-2011); Barry Miller (2007-2009); Philip Russell (2008-2010); Richard Shope (2009-2011); Peter Weller (2007-2009); Ann Powers (Ex-officio)

Scientific Program
Christopher King, Chair (2009-2010)

Travel Awards
James LeDuc (2009-2011), Chair
Bruce Christensen (2009-2011); Mark Eberhard (2007-2009); James Maguire (2008-2010); Dan Milner (2009-2011); Terrie Taylor (2007-2009); Eileen Villasante (2008-2010); Joe Vinetz (2009-2011); Sarah Volkman (2008-2010)

Update Course in Clinical Tropical Medicine and Travelers' Health
Christina Coyle, Co-Chair (2009-2011); Eric Houpt, Co-Chair (2009-2011)

Web Site Committee
Jonathan Mayer (2009), Chair
Kathryn Aultman (2007-2009); Stephen Cunnion (2008-2010); Ken Dardick (2009-2011); Akhil Vaidya (2009-2011); Dawn Wesson (2007-2009); Jack Woodall (2008-2010)

Young Investigator Award
Peter Zimmerman (2007-2009), Chair
Kate Aultman (2007-2009); Lyric Bartholomay (2009-2011); Brenda Beerntsen (2008-2010); Roland Cooper (2009-2011); Stephen Davies (2007-2009); Rick Fairhurst (2008-2010); Brian Grimberg (2009-2011); Julian Hillyer (2009-2011); Nick Komar (2007-2009); Sanjai Kumar (2008-2010); Miriam Laufer (2009-2011); Ed Mitre (2007-2009); Christine Petersen (2008-2010); Julian Rayner (2008-2010); Daniel Tisch (2009-2011); Joe Vinetz (2007-2009); Patricia Wilkins (2009-2011); David Williams (2008-2010); Yimin Wu (2009-2011)

American Committee of Medical Entomology (ACME)
Jefferson Vaughan, Chair

American Committee on Arthropod-Borne Viruses (ACAV)
Ann Powers, Chair

Clinical Group (American Committee on Clinical Tropical Medicine and Travelers' Health – ACCTMTH)
Joe Vinetz, President

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)
Sarah Volkman, President

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ASTMH Affiliate Members

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Affiliate membership is an opportunity for a company, corporation, foundation or other type of organization to support ASTMH and its mission. Affiliate members designate one individual to serve as the main contact and receive society mailings. Affiliate membership benefits include:

- Recognition in ASTMH publications and at the annual meeting
- Discounts on annual meeting exhibit space fees, journal advertising rates and list rentals

Affiliate membership is available at the Patron, Donor and Contributor levels.
Contact ASTMH headquarters for details or to request an application.

2009 Travel Awards

Supported with funding from the Bill & Melinda Gates Foundation

Yaw Afrane
Kenya Medical Research Institute
Kisumu, Kenya
Abstract 679

Some Anyirekun Fabrice
IRSS-Bobo
Bobo-Dioulasso, Burkina Faso
Abstract 377

Samuel Anyona
University of New Mexico/ KEMRI
Kisumu, Kenya
Abstract 140

Albert Auguste
University of the West Indies
St. Augustine, Trinidad and Tobago
Abstract 689

Joanne Baker
Australian Army Malaria Institute
Enoggera, Queensland, Australia
Abstract 860

James Bangura
Ministry of Health and Sanitation
*Kenema, Sierra Leon*e
Abstract 727

Jun Cao
Jiangsu Institute of Parasitic Diseases
Wuxi, People's Republic of China
Abstract 372

Andrea Conroy
University of Toronto
Toronto, Ontario, Canada
Abstract 1045

Maria Dantur Juri
Universidad Nacional de Tucumán
San Miguel de Tucumán - Tucumán, Argentina
Abstract 960

Iqbal Elyazar
Eijkman-Oxford Clinical Research Unit
Jakarta Pusat, Indonesia
Abstract 185

Mofolusho Falade
National Centre for Genetic Engineering and Biotechnology (BIOTEC)
Pathumthani, Thailand
Abstract 173

Rafael Maciel Freitas
Oswaldo Cruz Foundation
Rio de Janeiro, Brazil
Abstract 251

Jose Gaudier
University of Puerto Rico
San Juan, Puerto Rico
Abstract 385

Najia Ghanchi
Aga Khan University
Karachi, Pakistan
Abstract 177

Simon Glover
University of Malawi
Blantyre, Malawi
Abstract 1041

Vinay Gupta
University of California at San Francisco
San Francisco, California, USA
Abstract 895

Lina Gutiérrez Builes
Universidad de Antioquia
Medellin, Colombia
Abstract 958

Whitney Harrington
University of Washington/ Seattle Biomedical Research Institute
Seattle, Washington, USA
Abstract 1040

Md. Jahangir Hossain
ICDDR-B
Dhaka, Bangladesh
Abstract 725

Rosalind Howes
University of Oxford
Oxford, United Kingdom
Abstract 184

Anam Javed
University of Arizona
Tucson, Arizona
Abstract 231

Adela Jiram
Institute for Medical Research
Kuala Lumpur, Malaysia
Abstract 1113

Regina Joice
Harvard School of Public Health
Boston, Massachusetts, USA
Abstract 143

Basile Kamgang
Organisation de Coordination pour la lutte contre les Endémies en Afrique Centra
Yaounde, Cameroon
Abstract 957

Hae Ji Kang
Pacific Center for Emerging Infectious Diseases Research
Honolulu, Hawaii, USA
Abstract 686

Stephan Karl
The University of Western Australia
Perth, Western Australia, Australia
Abstract 186

Adama Keita
Centre pour le Developpement des Vaccins – Mali
Bamako, Mali
Abstract 63

David Langoi
Institute of Primate Research
Nairobi, Kenya
Abstract 279

Tatjana Keesen de Souza Lima
Federal University of Minas Gerais
Belo Horizonte, Brazil
Abstract 37

Hamma Maiga
MRTC
Bamako, Mali
Abstract 149

Swati Mandal
School of Life Sciences
New Delhi, India
Abstract 36

Dairo Marin
Centro Internacional de Entrenamiento e Investigaciones Medicas
Cali, Colombia
Abstract 253

Richard Maude
Wellcome Trust Mahidol-Oxford Tropical Medicine Research Unit
Bangkok, Thailand
Abstract 135

Alberto Mendoza
National Institute of Health
Lima, Peru
Abstract 606

Atis Muehlenbachs
University of Washington
Seattle, Washington, USA
Abstract 136

Cyrille Ndo
Organisation de Coordination pour la lutte contre les Endémies en Afrique Centra
Yaounde, Cameroon
Abstract 720

Quyen N. Nguyen
Oxford University Clinical Research Unit, Hospital for Tropical Diseases
Ho Chi Minh City, Vietnam
Abstract 1109

Abdisalan Noor
Kenya Medical Research Institute/Wellcome Trust Research Programme
Nairobi, Kenya
Abstract 1028

2009 Travel Awards

Supported with funding from the Bill & Melinda Gates Foundation

Michael Odera
Kenya Medical Research Institute
Kisumu, Kenya
Abstract 201

Bilha Ogola
Moi University
Kisumu, Kenya
Abstract 203

Lilian Ogonda
Kenya Medical Research Institute (KEMRI)/Walter Reed Project (WRP)
Kisumu, Kenya
Abstract 202

Emelda Okiro
KEMRI-Wellcome Trust Research Programme
Nairobi, Kenya
Abstract 192

Evans Okoth
University of New Mexico/ KEMRI
Kisumu, Kenya
Abstract 141

Richard Omore
Kenya Medical Research Institute, U.S. Centers for Disease Control and Prevention
Kisumu, Kenya
Abstract 1141

Robert Opoka
Makerere University
Kampala, Uganda
Abstract 863

Renzo Perales
Instituto de Medicina Tropical "Alexander von Humboldt"
Lima, Peru
Abstract 127

Panote Prapansilp
Wolfson College
Oxford, United Kingdom
Abstract 137

Wasiq Rawasia
Aga Khan University
Karachi, Pakistan
Abstract 176

Melissa Riedesel
University of Minnesota
Minneapolis, Minnesota, USA
Abstract 1031

Amy Savage
Yale University
New Haven, Connecticut, USA
Abstract 488

Karlee Silver
University of Toronto
Toronto, Ontario, Canada
Abstract 139

Richard Ssekitoleko
Mbarara University
Mbarara, Uganda
Abstract 322

Argon Steel
University of Hawaii
Honolulu, Hawaii, USA
Abstract 88

Sivapong Sungpradit
Chulalongkorn University
Bangkok, Thailand
Abstract 117

Marco Tovar
Universidad Peruana Cayetano Heredia
Lima, Peru
Abstract 734

Cristian Valencia
von Humboldt Institute of Tropical Medicine
Lima, Peru
Abstract 479

Nicolas Veland
Universidad Peruana Cayetano Heredia
Lima, Peru
Abstract 492

Esther Volper
University of Hawaii
Honolulu, Hawaii, USA
Abstract 91

Catherine Westbrook
Florida Medical Entomology Lab
Vero Beach, Florida, USA
Abstract 243

Kayla Wolofsky
University of Toronto
Toronto, Ontario, Canada
Abstract 343

2009 American Committee of Medical Entomology (ACME) Travel Awards

Lauren Cator
Cornell University
Ithaca, New York, USA
Abstract 590

Win Surachetpong
University of California at Davis
Davis, California, USA
Abstract 1110

Continuing Medical Education Accreditation
The American Society of Tropical Medicine and Hygiene is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Continuing Medical Education Credits
The American Society of Tropical Medicine and Hygiene designates this educational activity for a maximum of 33.5 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Register for CME Credit
The CME documentation fee is $125. CME certificates will be mailed in mid-January. Complete your CME evaluation form online. Visit the ASTMH Cyber Café and complete your online CME Attendance and Evaluation Form while at the meeting or access the evaluation form at www.astmh.org/source/cme.

Full Disclosure Policy Affecting CME Activities
Consistent with ASTMH policy, faculty for this meeting are expected to disclose any economic or other personal interests that create, or may be perceived as creating, a conflict related to the material discussed. All conflicts of interest must be resolved prior to the annual meeting. In addition, consistent with ASTMH policy, faculty are expected to disclose to attendees at the beginning of their presentation(s) any product mentioned during their presentation that is not labeled for the use under discussion or is still investigational. This policy is intended to allow you to form your own judgments about such material.

General Meeting Information

Pre-Meeting Course Registration Hours
Salon Foyer Registration Desk (First Floor)
Tuesday, November 17 ..... 7 a.m. – 1:30 p.m.

Annual Meeting Registration Hours
Salon Foyer Registration Desk (First Floor)
Wednesday, November 18 ..... 9:30 a.m. – 6 p.m.
Thursday, November 19 ..... 7 a.m. – 5 p.m.
Friday, November 20 ..... 7 a.m. – 5 p.m.
Saturday, November 21 ..... 7 a.m. – 5 p.m.
Sunday, November 22 ..... 7 a.m. – 10:30 a.m.

Messages and Emergency Calls
A message board will be available near the ASTMH registration desk. Check the message board often to retrieve your messages. Phone calls should be directed to +1-202-328-2000, the main switchboard of the Marriott Wardman Park. Callers should ask to be connected to the ASTMH registration desk. Faxes can be sent to the hotel at +1-202-234-0015.

Badges/Access Control
Participation in the ASTMH Annual Meeting is limited to registered attendees.

An official badge is required for admission to all sessions, social activities and exhibit area. Do not place a business card into your badge holder as identification. If there is an error on a badge, please have it corrected at the ASTMH registration desk.

Replacement Badge
If your badge is lost, you must purchase a replacement badge for a fee of $15. Bring your photo I.D. with you to the registration desk to have a new badge issued. This fee will not be refunded if you find your original badge.

Spouse/Guest Registration
(Only for those outside the tropical medicine field)
Spouse/guest registration includes admission to the opening reception on Wednesday and admission to the exhibit hall, plenary sessions and poster sessions only.

Food Functions
The following food functions are included in the registration fee:

- Opening reception (Wednesday)
- Late Breakers in Clinical Tropical Medicine and Basic Science/Molecular Biology light lunch (Thursday afternoon and Friday afternoon mid-day sessions)
- Poster session lunches (Thursday, Friday and Saturday)
- Coffee breaks

Hotel Information
The Marriott Wardman Park is the site of all annual meeting activities.
Marriott Wardman Park
2660 Woodley Road, N.W.
Washington, DC 20008
Phone +1-202-328-2000
Fax: +1-202-234-0015

Hotel Parking
Parking at the Marriott is currently $17 per hour or $32 (tax inclusive) per day. Valet parking service is available for $37 (tax inclusive).

Americans with Disabilities Act
ASTMH fully complies with the legal requirements of the ADA and the rules and regulations thereof.

Exhibits
Exhibit Hall A, Exhibition Level
The ASTMH 58th Annual Meeting features an exposition of displays by leading suppliers and vendors. A complete exhibitor and supporter directory is included on page 37.

Exhibit Hours
Wednesday, November 18 ..... 7:30 p.m. – 9:30 p.m.
Thursday, November 19 ..... 9:30 a.m. – 10:30 a.m.
Noon – 1:30 p.m.
3 p.m. – 4 p.m.
Friday, November 20 ..... 9:30 a.m. – 10:30 a.m.
Noon – 1:30 p.m.
3 p.m. – 4 p.m.
Saturday, November 21 ..... 9:30 a.m. – 10:30 a.m.
Noon – 1:30 p.m.

Solicitations
Sales and promotional activities are restricted to exhibitors and must take place in their assigned exhibit area. Solicitations by unauthorized persons are strictly prohibited.

Cyber Café
Visit the Cyber Café in the Marriott Foyer on the mezzanine level on the second floor. As a courtesy to other attendees, please limit your computer use to 10 minutes per visit.

Media Room
The media room (for professional journalists reporting on the conference) is located in rooms 8228 and 8229 on the first floor. ASTMH media kits are available. Media announcements and other details can be found here. Media room hours of operation are:
Wednesday, November 18 ..... 8 a.m. – 4 p.m.
Thursday, November 19 ..... 7:30 a.m. – 6:30 p.m.
Friday, November 20 ..... 7:30 a.m. – 6:30 p.m.
Saturday, November 21 ..... 7:30 a.m. – 6 p.m.
Sunday, November 22 ..... 7:30 a.m. – 1 p.m.

Employment Opportunities
Bulletin boards for posting employment opportunities are available in the ASTMH registration area.

Career Center
Our online Career Center, available at www.astmh.org, features a wide range of available positions in the tropical medicine and hygiene field. Members can post resumes anonymously and search for jobs by keyword, location and job type. Employers can set up an account, post open positions on the ASTMH Web site and search the ASTMH resume bank for qualified applicants.

Camera/Recording Restrictions
Only registered members of the media and attendees who receive prior approval from ASTMH staff may take cameras into the exhibit hall or use recording devices during sessions.

Disclaimer
ASTMH is not responsible for the opinions expressed by speakers or the content of speaker handout materials.

Meeting Evaluation
ASTMH needs your input to enhance future meetings. An online meeting evaluation survey will be e-mailed to you shortly after the meeting. Your participation in this survey is greatly appreciated. The scientific program committee welcomes your input concerning the format and planning of this and future ASTMH meetings. Organization of symposia and participation in educational program planning through the program committee is encouraged for all interested ASTMH members.

Meeting Room Directory

Exhibition Floor/ Lower Level
Exhibit Hall A
(Exhibit Hall)
Exhibit Hall B South
(Poster Hall)
Washington 1
Washington 2
Washington 3
Washington 4
Washington 5
Washington 6

First Floor/Lobby Level
Capitol Boardroom
Delaware A
Delaware B
Maryland A
(Speaker Ready Room)
Salon 1
Salon 2
Salon 3
Salon Foyer (Registration)
Virginia AB
Virginia C
Room 8210
Room 8211
Room 8212
Room 8216
Room 8217
Room 8218
(Meeting Room Sign-Up)
Room 8219
(Meeting Room Sign-Up)
Room 8222
Room 8223
Room 8228 (Press Room)
Room 8229 (Press Room)

Second Floor/ Mezzanine Level
Balcony A
Balcony B
Balcony C
Balcony D
Buchanan
Cleveland 1
Cleveland 2
Coolidge
Hoover
Jackson
Jefferson
Johnson
Marriott Foyer (Cyber Café)
Taft
Taylor
Truman
Tyler
Wilson A
Wilson B
Wilson C

Wardman Tower Building Lobby Level/First Floor
Embassy
Ethan Allen
Nathan Hale
Thomas Paine

The American Journal of Tropical Medicine and Hygiene

Trial Journal Subscriptions
The American Journal of Tropical Medicine and Hygiene has included a complimentary trial subscription number in your registration packet. Non-members can activate this 90-day trial to enjoy the benefits of an online journal subscription at no charge. Members already enjoy a subscription to the online journal and can pass the trial subscription number along to a non-member colleague.

Mid-Day Session 79

ASTMH Journal Symposium
Preparation and Review of Scientific Manuscripts for the *American Journal of Tropical Medicine & Hygiene*

Friday, November 20

12:15 p.m. - 1:15 p.m.

Delaware B

This symposium is aimed at trainees and others interested in understanding better how manuscripts are reviewed, edited and processed by the society's journal. Pointers on preparation and review of manuscripts will be stressed. The following topics will be covered: 1) Why publish your work in our society's journal; 2) Why and where to publish, i.e. selection of the "right" journal for your work; 3) Examples of a paper in progress; how to prepare and how to write a good paper; 4) The submission and review processes and how they work; 5) How to properly review a paper; 6) How to respond to reviewer comments; and 6) The publication process: what happens after your paper is accepted.

Program Information

Annual Meeting Audio Recordings
Can't figure out how to be in two places at once? Problem solved! With so much cutting-edge science available at the ASTMH conference, you can purchase audio recordings of sessions you missed. Visit the sales desk in the registration area to purchase a CD and/or multimedia CD-ROM of the conference sessions from IntelliQuest Media. Discounts will be extended for onsite orders. Contact IntelliQuest Media at +1-866-651-2586 or visit www.intelliquestmedia.com.

Late Breaker Abstracts
Late Breakers in Clinical Tropical Medicine
Late Breaker Abstract Session 25
Late Breaker Abstract Session 78
Thursday, November 19 and Friday, November 20
12:15 p.m. – 1:15 p.m.
Delaware A

Late Breakers in Basic Science/Molecular Biology
Late Breaker Abstract Session 26
Late Breaker Abstract Session 80
Thursday, November 19 and Friday, November 20
12:15 p.m. – 1:15 p.m.
Virginia AB

These sessions are designed for brief presentations of important new data obtained after the closing date for abstract submission. Oral late breaker presentations will take place on Thursday afternoon and Friday afternoon during the mid-day session period. Poster late breaker presentations will take place during the poster sessions on Thursday, Friday and Saturday. A schedule of late breaker abstract presentations can be found in your registration packet.

Meet the Professors
Meet the Professors sessions are small, interactive programs held on Thursday, Friday and Saturday during the mid-day session period. The sessions are open to all meeting participants and a light meal will be provided. While the professors will lead the program and have some prepared remarks, the sessions will be largely question-and-answer format.

ACMCIP Abstracts
Throughout this book, you will notice that some abstracts are followed by the notation "(ACMCIP abstract)." This notation means the abstract submitter indicated that the abstract pertains to molecular, cellular or immunoparasitology. ACMCIP refers to the American Committee of Molecular, Cellular and Immunoparasitology, an ASTMH subgroup. For more information, go to http://www.astmh.org/ACMCIP.htm.

American Committee on Arthropod-Borne Viruses (ACAV) Slide Presentation: History of Arbovirology and Hemorrhagic Fever Virology

We invite you to view the ACAV slide display, located in the exhibit hall. Slides will feature information about the group's founding in 1959 and profile members' contributions to the field. The presentation also reviews the history of arbovirology and hemorrhagic fever virology. Help ACAV celebrate its 50th anniversary and take a moment to view this special presentation.

Elsevier Student Book Award Applicants

This award recognizes excellence in clinically oriented research presented by students (within six months of completing undergraduate or master's level training, including medical undergraduate degrees) or those in graduate medical training, of work submitted and presented (oral or poster) at the ASTMH Annual Meeting. Support these young scientists by attending their presentations throughout the conference.

Corine Demanga
Abstract 560
A novel approach to design multicomponent blood stage malaria vaccines

Michael Hawkes
Abstract 985
CD36 deficiency and resistance to mycobacterial infection

Deepthi Kattula
Abstract 459
Efficacy of mass drug administration (MDA) of albendazole in the reduction of soil transmitted helminth infection in south India: Comparison of data from two adjacent districts of Tamil Nadu

An Na Park
Abstract 770
Immigrant screening in the inpatient setting in a municipal hospital

Voravuth Somsak
Abstract 209
Transgenic model for anti-P. vivax Dihydrofolate reductase-thymidylate synthase screening

Barclay Stewart
Abstract 371
Prevalence and correlates of helminth co-infection in HIV-1 infected Kenyan adults

Huong Vu
Late Breaker Abstract 2486
The role of nasopharyngeal load of Streptococcus pneumonia and its interaction with viral co-infection in the development of childhood pneumonia in Vietnam

Special Events for Trainees, Students, Fellows, Residents and Junior Faculty

Events featuring light meals denoted with an asterisk (*).

Young Investigator Award Presentations
Wednesday, November 18, 11 a.m. – 3:30 p.m.
Jackson, Jefferson, Johnson, Taylor, Truman

Student Reception*
Wednesday, November 18, 4 p.m. – 5 p.m.
Exhibit Hall B South

The ASTMH council invites students, postdoctoral fellows and residents to the student reception. This reception is an opportunity to meet fellow trainees and interact with society leaders.

Symposium 11
NIH and Tropical Medicine: Supporting International Research and Career Development - Part I
Thursday, November 19, 8 a.m. - 9:45 a.m.
Washington 5

Symposium 22
NIH and Tropical Medicine: Supporting International Research and Career Development - Part 2
Thursday, November 19, 10:15 a.m. – Noon
Washington 5

Meet the Professors 27*
Meet the Professors A: Enigmatic and Teaching Cases
Thursday, November 19, 12:15 p.m. - 1:15 p.m.
Virginia C

Mid-Day Session 28
Welcome Trust Seminar: Successful Research, Grant Writing, Mentorship and Career Advice
Thursday, November 19, 12:15 p.m. - 1:15 p.m.
Washington 5

Symposium 55
Launching Careers in Tropical Disease Research: Progress Reports from Burroughs Wellcome Fund/ASTMH and Fellows
Friday, November 20, 8 a.m. - 9:45 a.m.
Salon 3

Mid-Day Session 79
Preparation and Review of Scientific Manuscripts for the *American Journal of Tropical Medicine & Hygiene*
Friday, November 20, 12:15 p.m. - 1:15 p.m.
Delaware B

Meet the Professors 81*
Meet the Professors B: Enigmatic and Teaching Cases
Friday, November 20, 12:15 p.m. - 1:15 p.m.
Virginia C

Symposium 119
Transitioning to Senior Investigator: Experiences from Developing Countries
Saturday, November 21, 8 a.m. - 9:45 a.m.
Wilson A

Symposium 126
Crossing Boundaries: Models of North-South and Interprofessional Education
Saturday, November 21, 10:15 a.m. -Noon
Virginia C

Mid-Day 133A
Workshop on Manuscript Preparation: How to Get Your Work Published
Saturday, November 21, 12:15 p.m. - 1:15 p.m.
Delaware A

Meet the Professors 135*
Meet the Professors C: Enigmatic and Teaching Cases
Saturday, November 21, 12:15 p.m. - 1:15 p.m.
Virginia C

Clinical Pre-Meeting Course
The Highly Prevalent Neglected Tropical Diseases (NTDs): Update on Clinical Aspects and Novel Approaches to Control
Tuesday, November 17, 1 p.m. - 5:30 pm
Wednesday, November 18, 7:30 a.m. – 3 p.m.
Salon 1

Symposium 4
The Evolution of Q Fever: Updates on Recent Changes in Epidemiology, Diagnosis, Clinical Manifestations, Treatment and Follow-Up
Thursday, November 19, 8 a.m. - 9:45 a.m.
Delaware B

Symposium 14
New Drugs against Human African Trypanosomiasis and Visceral Leishmaniasis - Activities of the Consortium for Parasitic Drug Development
Thursday, November 19, 10:15 am - Noon
Delaware A

Late Breaker Session 25
Late Breakers in Clinical Tropical Medicine
Thursday, November 19, 12:15 p.m. - 1:15 p.m.
Delaware A

Meet the Professors 27
Meet the Professors A: Enigmatic and Teaching Cases
Thursday, November 19, 12:15 p.m. - 1:15 p.m.
Virginia C

Scientific Session 36
Clinical Tropical Medicine I
Thursday, November 19, 1:30 p.m. - 3:15 p.m.
Washington 1

Scientific Session 47
Clinical Tropical Medicine II
Thursday, November 19, 3:45 p.m. - 5:30 p.m.
Washington 1

Symposium 63
Update on Chagas Disease in the United States: Blood Bank Screening and Diagnostic Options
Friday, November 20, 8 a.m. - 9:45 a.m.
Washington 4

Symposium 70A
Improving the Health of Travelers and New Immigrants and Refugees: Evidence-Based Approaches
Friday, November 20, 10:15 a.m. - Noon
Virginia AB

Late Breaker Session 78
Late Breakers in Clinical Tropical Medicine
Friday, November 20, 12:15 p.m. - 1:15 p.m.
Delaware A

Meet the Professors 81
Meet the Professors B: Enigmatic and Teaching Cases
Friday, November 20, 12:15 p.m. - 1:15 p.m.
Virginia C

Symposium 83
Clinical Group I
Friday, November 20, 1:30 p.m. - 3:15 p.m.
Salon 2

Symposium 95
Clinical Group II
Friday, November 20, 3:45 p.m. - 5:30 p.m.
Salon 2

Symposium 117
Global Health and Mass Travel Events
Saturday, November 21, 8 a.m. - 9:45 a.m.
Washington 4

Symposium 130
Communicable Diseases in Post-Conflict Settings
Saturday, November 21, 10:15 am - Noon
Washington 4

Meet the Professors 135
Meet the Professors C: Enigmatic and Teaching Cases
Saturday, November 21, 12:15 p.m. - 1:15 p.m.
Virginia C

Symposium 142
Managing Childhood Illness at Community Level: Good News from Africa
Saturday, November 21, 1:30 pm - 3:15 pm
Virginia C

Symposium 155
International Programmatic Experience in Lymphedema Management for Lymphatic Filariasis
Saturday, November 21, 3:45 pm - 5:30 pm
Virginia C

Symposium 163
Clinical Update: What's New in Literature
Sunday, November 22, 8 a.m. - 9:45 am
Salon 2

Scientific Session 175
Clinical Tropical Medicine III
Sunday, November 22, 10:15 a.m. - Noon
Salon 2

Poster Sessions

Exhibit Hall B South, Lower Level
Three poster sessions will be held at the ASTMH 58th Annual Meeting in Exhibit Hall B South on the exhibition level. There are additional times for poster viewing (presenters need not be in attendance during these time periods). We encourage attendees to visit the poster hall throughout the day. Poster viewing time is scheduled each day in the morning and afternoon.

Poster Session Schedule

Poster Session A
Thursday, November 19

Set-Up .....9:45 a.m. – 10:15 a.m.
Presentations .....Noon – 1:30 p.m.
Viewing..... 10:15 a.m. – Noon
1:30 p.m. – 7 p.m.
Dismantle .....7 p.m. – 8 p.m.

Poster Session B
Friday, November 20

Set-Up .....9:45 a.m. – 10:15 a.m.
Presentations .....Noon – 1:30 p.m.
Viewing..... 10:15 a.m. – Noon
1:30 p.m. – 7 p.m.
Dismantle .....7 p.m. – 8 p.m.

Poster Session C
Saturday, November 21

Set-Up .....9:45 a.m. – 10:15 a.m.
Presentations .....Noon – 1:30 p.m.
Viewing..... 10:15 a.m. – Noon
1:30 p.m. – 7 p.m.
Dismantle .....7 p.m. – 8 p.m.

Online Program

Following the meeting, search the annual meeting program online by abstract word, title, subject, author and presentation time at http://www.astmh.org. Late breaker abstracts can be found in the Online Program Planner.

Speaker Ready Room and Audiovisual Guidelines

Maryland A, First Floor

Hours
Wednesday, November 18.....Noon – 6 p.m.
Thursday, November 19..... 7 a.m. – 6 p.m.
Friday, November 20..... 7 a.m. – 6 p.m.
Saturday, November 21..... 7 a.m. – 6 p.m.
Sunday, November 22 .....7 a.m. – Noon

Load your presentation in the Speaker Ready Room 24 hours prior to your session. If you are unable to do so and you are speaking that day, please visit the Speaker Ready Room as early as possible on the morning of your talk.

Presentation Format. All meeting rooms will be equipped with one Windows XP computer with CD/DVD drive and PowerPoint 2007 software, screen, LCD projector display device, microphone and laser pointer. You will not be permitted to connect your own computer to the LCD projector. Your presentation will be run from the AV technician's PC-based computer.

Bring only your presentation on CD/DVD or memory stick and bring a backup copy. Your CD/DVD must be in a format that is compatible with the equipment listed above.

Saving Your Presentation File. Save your presentation as MS PowerPoint slides in a format that is compatible with PowerPoint 2007 on Windows XP or as an Adobe PDF file. Macintosh and PC versions of PowerPoint, Canvas and Keynote allow you to save presentations in a variety of formats that meet these specifications.

If your presentation includes linked files, such as databases or spreadsheets, be sure to save those on the CD, as well. Test your presentation on a Windows machine running Windows XP to ensure your presentation runs properly.

For Macintosh PowerPoint users, please insert pictures using 'insert' - 'picture' - 'from file', rather than copying and pasting, to ensure they will display properly on a Windows PC.

Embedded Videos. If your presentation includes video, it is imperative that you visit the Speaker Ready Room in advance of your presentation to ensure compatibility with meeting equipment.

It is best to use a "wmv," "avi," or "mpg" format for embedded video, not QuickTime "mov." Please be sure NOT to use Sorenson compression on avi's from Mac computers.

You must upload your video files, as well as your PowerPoint file, for the videos to play.

We strongly encourage you to load your presentation in the Speaker Ready Room 24 hours prior to presentation time.

ASTMH Travel Awards

Supported with funding from the Bill & Melinda Gates Foundation

James LeDuc, Chair
University of Texas Medical Branch, Galveston, Texas, USA

The ASTMH travel awards program supports travel to the annual meeting by selected students and young investigators from developing countries and the United States.

See page 26 for a list of 2009 travel award recipients.

American Committee of Medical Entomology (ACME) Travel Awards

Edward Walker, Chair
Michigan State University, East Lansing, Michigan, USA

The ACME travel awards program supports travel to the ASTMH annual meeting by graduate students whose work involves arthropods of medical importance.

Lauren Cator
Cornell University, Ithaca, New York, USA

Win Surachetpong
University of California at Davis, Davis, California, USA

Young Investigator Awards

In Honor of William A. Petri, Sr.
In Memory of Annie Liberati
Supported with funding from TechLab, Inc.

Peter Zimmerman, Chair
Case Western Reserve University, Cleveland, OH, USA

Young Investigator Awards are given to young scientists who have completed the majority of work described in their accepted abstracts as undergraduates, graduate students or during the first two years of postdoctoral research. The young investigators hold a primary role in the reported experimental work, as evidenced by first-author status on their abstracts.

2008 Recipients (selected during ASTMH 57th Annual Meeting in December 2008)

Jacqueline Janka
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Bethesda, Maryland, USA

Agnes Mwakingwe
Albert Einstein College of Medicine, Bronx, New York, USA

Samantha McNulty
Washington University, St. Louis, Missouri, USA

Meera Venkatesan
Johns Hopkins School of Public Health, Baltimore, Maryland, USA

Shuyi Zhang
University of California at San Francisco, San Francisco, California, USA

Runners-Up

Pamela Orjuela-Sánchez
University of São Paulo, São Paulo, Brazil

James Potts
Massachusetts General Hospital, Boston, Massachusetts, USA

Jennifer Simpson
Yale University, New Haven, Connecticut, USA

Kristin Smith
University of Florida, St. Augustine, Florida, USA

Prakash Srinivasan
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Bethesda, Maryland, USA

Honorable Mentions

Charles Criscione
Texas A&M University, College Station, Texas, USA

Julio Croda
Oswaldo Cruz Foundation, Salvador, Brazil

David Larson
Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

Edwin Ochong
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Nikos Vasilakis
University of Texas Medical Branch, Galveston, Texas, USA

Burroughs Wellcome Fund-ASTMH Postdoctoral Fellowship in Tropical Infectious Diseases

Supported with funding from the Burroughs Wellcome Fund

Terrie Taylor, Chair
Michigan State University, East Lansing, Michigan, USA

This fellowship encourages long-term career development in tropical infectious diseases by providing support to individuals who will pursue careers focused on clinical research in tropical or developing areas of the world.

2008 Recipients

Nina Lin
Massachusetts General Hospital, Boston, Massachusetts, USA
"Characterization of HIV-1 subtype C infection in Botswana: Viral tropism and genetic diversity in transmission"

Scott Peterson
Harvard Medical School, Boston, Massachusetts, USA
"Who can safely formula-feed in Botswana? A prospective observational cohort study to assess counseling of HIV-infected women around infant feeding choices, and predictors of mortality among their formula-fed infants"

Joseph Tucker
Massachusetts General Hospital, Boston, Massachusetts, USA
"Optimizing integrated syphilis and HIV testing in south Chinese STI clinics"

Benjamin H. Kean Traveling Fellowship in Tropical Medicine

Christopher Plowe, Chair
University of Maryland, Baltimore, MD, USA

This fellowship is designed to provide travel support to medical students who arrange clinical tropical medicine or tropical medicine research electives overseas.

Sara Janne Aarsland
The University of Texas Medical Branch, Galveston, Texas, USA

Byron Berenger
University of Calgary, Calgary, Alberta, Canada

Rachel Bystritsky
Mount Sinai School of Medicine, New York, New York, USA

Youngjee Choi
Washington University School of Medicine, St. Louis, Missouri, USA

L. Emily Cotter
George Washington University, Washington, DC, USA

Dylan Davey
Yale University, New Haven, Connecticut, USA

Qyana Griffith
Boston University School of Medicine, Boston, Massachusetts, USA

Jenny Hsu
University of Vermont College of Medicine, Burlington, Vermont, USA

Alexis Kearney
Mount Sinai School of Medicine, New York, New York, USA

Kristina Krohn
University of Minnesota, Minneapolis, Minnesota, USA

Rodwell Mabaera
Dartmouth Medical School, Hanover, New Hampshire, USA

Tracy Mak
Weill Cornell Medical College, New York, New York, USA

Marilyn Michelow
Weill Cornell Medical College, New York, New York, USA

Grace Milad
University of Virginia School of Medicine, Charlottesville, Virginia, USA

Molly Paras
Mayo Clinic College of Medicine, Rochester, Minnesota, USA

Barclay Stewart
Medical University of South Carolina, Beaufort, South Carolina, USA

Scott Tolan
University of Texas School of Medicine at Houston, Houston, Texas

Aaron Tustin
Vanderbilt University School of Medicine, Nashville, Tennessee, USA

Richard Waters
Duke University School of Medicine, Durham, North Carolina, USA

April Wilhelm
Brown University Warren Alpert Medical School, Providence, Rhode Island, USA

Gorgas Memorial Institute Research Award

Kathryn Aultman, Chair
Bill & Melinda Gates Foundation, Seattle, Washington

This award supports short-term travel for young researchers from Panama, Central America, tropical and sub-tropical South America and the Caribbean Islands, and Mexico in order to facilitate scientific linkages between these regions and the United States and Canada. The award is also meant to foster collaborative biomedical research focused on tropical diseases afflicting residents of Latin America and to enable researchers to learn new techniques and approaches applicable to the study of such diseases.

The 2009 recipient will be announced in December.

Pfizer Centennial Travel Award in Basic Science Tropical Disease Research

Joseph Vinetz, Chair
University of California San Diego, San Diego, California, USA

This award provides support to individuals with doctoral-level degrees who travel to laboratories in the tropics to perform molecular, cellular or immunological studies of tropical infectious diseases.

Robert Comer
Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina, USA

Robert E. Shope International Fellowship in Infectious Diseases

Charles Calisher, Chair
Colorado State University, Fort Collins, Colorado, USA

This fellowship provides support for travel, living expenses, and research for doctoral-level scientists working in laboratories overseas on studies pertaining to arbovirology and/or emerging tropical infectious diseases.

Andrew Haddow
University of Texas Medical Branch, Galveston, Texas, USA
"The ecology of sylvatic arboviruses in eastern Senegal"

Sansanee Noisakran
Emory University, Atlanta, Georgia, USA
"Linkage of platelets and adaptive immunity in dengue virus infection"

Africa Health Placements, South Africa

Contact: Therese Hansen
Dunkeld West Centre
Suite 265
Johannesburg, South Africa 2196
Phone: +1-206-465-8824 USA
+27 011 3281300 (South Africa)
Fax: +27 11 328 1301 (South Africa)
E-mail: theresemhansen@gmail.com

Booth 406

Africa Health Placements (AHP) is a South African non-profit organization recruiting doctors to work in South Africa's rural hospitals. Broad-based clinical practice focuses on maternal and child health, infectious diseases and emergency care. AHP will assist you in finding a suitable position and provide you with highly-skilled registration/visa/logistical support.

American Society for Microbiology (ASM Press)

Contact: Alaina Scalercio
1752 N St., NW
Washington, DC 20036-2904 USA
Phone: +1-800-546-2416
Fax: +1-202-942-9342
E-mail: books@asmusa.org

Booth 204

ASM Press, the book publishing division of the American Society for Microbiology, will be exhibiting a selection of texts, references and general interest titles at the meeting. Be sure to stop by the ASM Press booth to see all the new offerings and classic titles in the microbiological sciences. ASM Press offers a 10% discount on all purchases made at the meeting.

Armed Forces Health Surveillance Center (AFHSC)

Contact: Jennifer Bondarenko
2900 Linden Lane
Suite 100
Silver Spring, MD 20970 USA
Phone: +1-301-319-9072
Fax: +1-301-319-9213
E-mail: jennifer.bondarenko@us.army.mil

Booth 600 and 602

The AFHSC's main functions are to analyze, interpret and disseminate information regarding the status, trends and determinants of the health and fitness of U.S. military (and military-associated) populations, and to identify and evaluate obstacles to medical readiness. AFHSC is the central epidemiological resource for the U.S. Armed Forces to provide regularly scheduled and customer-requested analyses and reports to policy makers, medical planners and researchers. It identifies and evaluates obstacles to medical readiness by linking various databases that contain information relevant to service members' health. This mission is accomplished by the following three divisions: Data and Analysis Division, Global Emerging Infections Surveillance and Response System (GEIS) Operations Division and Communications, Standards and Training (CST) Division.

Bill & Melinda Gates Foundation

P.O. Box 23350
Seattle, WA 98102
Phone: +1-206-709-3100
E-mail: info@gatesfoundation.org
Guided by the belief that every life has equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people's health and giving them the chance to lift themselves out of hunger and extreme poverty. In the United States, it seeks to ensure that all people – especially those with the fewest resources – have access to the opportunities they need to succeed in school and life. Based in Seattle, the foundation is led by CEO Jeff Raikes and co-chair William H. Gates, Sr., under the direction of Bill and Melinda Gates and Warren Buffett. www.gatesfoundation.org

Burroughs Wellcome Fund/The Wellcome Trust

Contact: Jean A. Kramarik
21 T.W. Alexander Drive
Research Triangle Park, NC 27709-3901 USA
Phone: +1-919-991-5122
Fax: +1-919-991-5182
E-mail: jkramarik@bwfund.org

Booth 502

The Burroughs Wellcome Fund is an independent private foundation dedicated to advancing the biomedical sciences by supporting research and other scientific and educational activities. The Wellcome Trust is an independent charity funding research to improve human and animal health.

Caister Academic Press

Contact: Annette Griffin
Rowan House
28 Queens Road, Hethersett
Norwich, Norfolk NR9 3DB
United Kingdom
Phone: +44-1953-603068
Fax: +44-1953-606952
E-mail: www.horizonpress.com

Take One Table

Caister Academic Press is an imprint of Horizon Scientific Press, a small, independent publisher specializing in publishing books in the areas of microbiology, molecular biology and genomics.

Carramore International Ltd

Contact: Alasdair Grant
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Thongsbridge Mills
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United Kingdom
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Carramore — a single source for your supplies and shipping diagnostic specimens
Carramore is an independent buying house specializing in supplying research laboratories based in the tropics. We can source from all over the world to meet all your particular requirements, and we will check and monitor all aspects of the logistics to ensure that you receive the products and specimens in your laboratory quickly and safely.
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Cooperative Pathology Laboratory, University of Georgia

Contact: Tamas Nagy
Department of Pathology, College of Vetinerary Medicine
501 DW Brooks Drive
Athens, GA 30602-7388 USA
Phone: +1-706-202-8608
Fax: +1-706-542-5828
E-mail: tnagy@uga.edu

Booth 313

Laboratory Animal Pathology Services: (1) Autopsy (Necropsy) of Research Animals, (2) Histopathology, (3) Immunohistochemistry, (4) Phenotyping of Genetically Engineered Mice, (5) Biochemedical Imaging, (6) Clinical Pathology (Hematology, Cytology, Bone Marrow Evaluation, etc.), (7) Infectious Disease Surveillance, (8) Serology, Bacteriology, Parasitology, and Molecular Biology for Laboratory Animals, (9) Research Collaboration and Consultation, (10) Assistance with Grant Applications.

Drugs for Neglected Diseases *initiative* (DND*i*)

Contact: Violaine Dällenbach
15 Chermin Louis-Donant
Geneva 1202
Switzerland
Phone: +41-22-906-93-47
Fax: +41-22-906-93-31
E-mail: vdallenbach@dndi.org

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The Drugs for Neglected Diseases *initiative* (DND*i*) is an independent, not-for-profit product development partnership working to research and develop new and improved treatments

for neglected diseases such as leishmaniasis, human African trypanosomiasis, Chagas disease and malaria. DND*i* was founded in 2003 by four publicly-funded research institutes from Malaysia, India, Kenya and Brazil, along with the Institut Pasteur and Médecins Sans Frontières (MSF). The UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) acts as a permanent observer.

Elsevier/Saunders

Contact: Brian Karafin
15807 Quince Orchard Rd.
N. Potomac, MD 20878 USA
Phone: +1-240-477-8564
Fax: +1-240-477-8571
E-mail: b.karafin@elsevier.com

Booth 207

Stop by and see Manson's - Tropical Diseases, Mandell's – Infectious Diseases, Keystone's – Travel Medicine, CDC – Health Information Guide, Infectious Disease Clinics of North America and many more titles of interest.

GlaxoSmithKline

Contact: Suzanne M. Kelly
3 Franklin Plaza 3FO525
Philadelphia, PA 19102 USA
Phone: +1-215-751-4000
Fax: +1-215-751-5050
E-mail: www.gsk.com

Booth 209

GlaxoSmithKline is a leading research-based pharmaceutical company with a powerful combination of skills to discover and deliver innovative medicines. We offer a number of programs to support effective health management strategies and improve patient care. Please visit our exhibit to learn more about our products.

ICF Macro

Contact: Erin Eckert
11785 Beltsville Dr.
Suite 300
Calverton, MD 20705 USA
Phone: +1-301-572-0255
Fax: +1-301-572-0898
E-mail: tommesha.allen@macrointernational.com

Booth 107

ICF Macro, an ICF International company, is dedicated to improving lives worldwide through social research and health informatics. We work with governments, businesses and international organizations to assess emerging public health challenges, improve interventions and expand the impact of successful programs.

International Association for Medical Assistance to Travelers (IAMAT)

2162 Gordon Street
Guelph, ON N1L 1G6 Canada
Phone: +1-519-836-0102
Fax: +1-519-836-3412
E-mail: info@iamat.org

IAMAT is a non-profit organization dedicated to travel health. As an advocate for travelers' health, IAMAT has provided independent and accurate travel health advice since 1960. The organization also coordinates a network of highly qualified doctors worldwide for travelers in need of medical attention during their journey. Since 2002, IAMAT has awarded scholarships and grants to doctors and nurses from developing countries to study and train in the field of travel medicine. IAMAT was founded by the late Dr. Vincenzo Marcolongo, a specialist in tropical medicine who dedicated his life to the prevention of infectious diseases in travelers.

IVCC (Innovative Vector Control Consortium)

Contact: Tom McLean
IVCC, c/o Liverpool School of Tropical Medicine
Pembroke Place
Liverpool, Merseyside L35QA
United Kingdom
Phone: +0151-705-3202
Fax: +0151-705-3345
E-mail: tmclean@liv.ac.uk

Booth 512 and 413

The IVCC is a Product Development Partnership established to overcome the barriers to innovation in the development of new insecticides for public health vector control and to develop information systems and tools which will enable new and existing pesticides to be used more effectively. Our strategy is to support those projects by the development of partnerships that bring together the complete set of resources to bring those products to market.

International Society for Infectious Diseases

Contact: Eric Summers
1330 Beacon Street
Suite 228
Brookline, MA 02446 USA
Phone: +1-617-277-0551
Fax: +1-617-278-9113
E-mail: info@isid.org

Take One Table

The ISID is an educational non-profit organization with over 30,000 members worldwide. Its objectives are to promote communication among those engaged in all aspects of infectious diseases. These goals are achieved through international scientific meetings, exchange fellowships, grants for infection control programs, a newsletter and the International Journal of Infectious Diseases.

Malaria Research and Reference Reagent Resource Center (MR4)

Contact: Timothy Stedman and Julie Dogil
10801 University Blvd
Manassas, VA 20110 USA
Phone: +1-703-365-2765
Fax: +1-703-365-2774
E-mail: malaria@atcc.org

Booth 301

The Malaria Research and Reference Reagent Resource Center (MR4) provides a central resource for reagents, protocols, information and workshops to the international malaria research community. Supported by the National Institute of Allergy and Infectious Diseases (NIAID), the MR4 repository acquires, preserves, authenticates and distributes parasites, mosquito vectors, and associated biological and molecular reagents for nominal shipping and handling fees to registered malaria research laboratories worldwide. MR4 is managed through the American Type Culture Collection (ATCC).

Mary Ann Liebert, Inc., Publishers

Contact: Lisa Pierce
140 Huquenot St.
New Rochelle, NY 10801 USA
Phone: +1-914-740-2100
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E-mail: info@liebertpub.com

Take One Table

Mary Ann Liebert, Inc. (www.liebertpub.com) is a privately held, fully integrated media company known for establishing authoritative peer-reviewed journals in new and promising areas of science and biomedical research. Vector-Borne and Zoonotic Diseases (www.liebertpub.com/vbz), the official Journal of SocZEE - Society for Zoonotic Ecology and Epidemiology, provides a unique platform for basic and applied disease research. A complete list of the firm's 60 journals, newsmagazines, and books is available at (www.liebertpub.com). Complimentary copies of the Journal are available at the Take One Tables.

National Institute of Allergy and Infectious Diseases

Contact: Hillary E. Turner
6610 Rockledge Dr., MSC 6612
Bethesda, MD 20892-6612 USA
Phone: +1-866-284-4107
Fax: +1-301-402-3573
E-mail: www.niaid.nih.gov

Booth 206

The National Institute of Allergy and Infectious Diseases conducts and supports basic and applied research to better understand, treat and ultimately prevent infectious, immunologic and allergic diseases. NIAID staff will distribute printed information and answer questions on these subjects. Representatives from the Employment Outreach Team will be present to discuss career opportunities at NIAID.

National Research Council of the National Academies

Contact: Judith K. Nyquist, PhD
500 5th Street NW, Keck 568
Washington, DC 20001 USA
Phone: +1-202-334-2760
Fax: +1-202-334-2759
E-mail: jnyquist@nas.edu

Booth 498

The National Research Council of the National Academies offers awards in all areas of science and engineering for graduate, postdoctoral and senior research to be conducted at participating U.S. government laboratories and affiliated institutions. Awards include competitive stipend, relocation, professional travel and health insurance. Detailed information and application instructions are at: www.national-academies.org/rap. Annual application deadlines are February 1, May 1, August 1, November 1.

Novartis Pharma AG.

Contact: Dr. Nadia elMasry
Forum 1, Novartis Campus
Basel 4055
Switzerland
Phone: +41-61-32-45015
Fax: +41-61-32-42146
E-mail: nadia.elmasry@novartis.com

Booth 507

Novartis provides healthcare solutions that address the evolving needs of patients and societies. Focused solely on healthcare, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, cost-saving generic pharmaceuticals, preventive vaccines, diagnostic tools and consumer health products. Headquartered in Basel, Switzerland, Novartis Group companies employ approximately 99,000 full-time-equivalent associates and operate in more than 140 countries around the world. For more information, please visit http://www.novartis.com.

Novartis Vaccines

Contact: Laura Wesolowski
350 Massachusetts Ave.
Cambridge, MA 02319 USA
Phone: +1-862-778-6299
E-mail: laura.wesolowski@novartis.com

Booth 506

Novartis Vaccines & Diagnostics is a division of Novartis focused on the development of preventive treatments. Novartis Vaccines is the world's fifth-largest vaccines manufacturer and second-largest supplier of flu vaccines in the US. The division's products also include meningococcal, pediatric and travel vaccines.

QBC Diagnostics

Contact: Chris Graham
168 Bradford Dr.
Port Malilda, PA 16870 USA
Phone: +1-814-692-7661
Fax: +1-814-692-7662
E-mail: qbcsales@qbcdiag.com

Booth 200

QBC Diagnostics combines point-of-care medicine with advanced tropical disease diagnosis, creating a versitile laboratory package serving remote locations with tropical health concerns. The QBC Autoread provides a unique, simple hematology system, affording a CBC analysis from a finger stick. Combined with the fluorescent capabilities of the ParaLens, clinicians are provided with the highest level of sensitivity for the diagnosis of many tropical diseases. The QBC suite of instruments will significantly expand your tropical diagnostic capabilities.

Paladin Labs, Inc.

Contact: Farrukh Rehan
100 Blvd. Alexis Nihon, #600
St. Laurent, Montreal, Quebec H4M 2P2
Canada
Phone: +1-514-340-1112
Fax: +1-514-344-4675
E-mail: frehan@paladinlabs.com

Booth 400

IMPAVIDO, The Breakthrough - Oral Leishmaniasis therapy.

Public Library of Science (PLoS)

Contact: Shabnam Sigman and Mary Kohut
185 Berry Street
Suite 3100
San Francisco, CA 94107 USA
Phone: +1-415-624-1200
Fax: +1-415-546-4090
E-mail: jashdown@plos.org

Booth 501

The Public Library of Science is committed to making the world's scientific and medical literature a freely available public resource. All of PLoS' open access, peer-reviewed journals are available to anyone with an internet connection. Shabnam Sigman, Publications Manager at PLoS Neglected Tropical Diseases and Mary Kohut, Publications Manager at PLoS Pathogens, will be at booth 501 to answer your questions. Learn more about our journals and our mission at www.plos.org.

Royal Society of Tropical Medicine and Hygiene

Contact: Gerri McHugh
50 Bedford Square
London WC1B 3DP
United Kingdom
Phone: +44-207-580-2127
Fax: +44-207-436-1389
E-mail: info@rstmh.org

Booth 202

RSTMH promotes and advances the study, control and prevention of disease in humans and other animals in the tropics and plays a leading role in increasing awareness of tropical medicine and international health issues. Through our international network of Fellows, we facilitate training, education and exchange of information across all disciplines in the field of tropical medicine and international health. Fellowship of the RSTMH brings a range of benefits including access to our peer-reviewed journals, and a calendar of scientific and academic meetings.

Rules-Based Medicine, Inc.

Contact: Kay Hallett
3300 Duval Rd.
Austin, TX 78759 USA
Phone: +1-703-795-0740
E-mail: kay.hallett@rbmmaps.com

Booth 307

RBM is a biomarker testing laboratory delivering reproducible, quantitative, multiplexed immunoassay data. We measure several to hundreds of proteins in a small sample in multiple sample types. This provides robust biomarker patterns for drug development, consumer product and diagnostic applications. RBM is CLIA certified and supports GLP studies.

Salix Pharmaceuticals, Inc.

Contact: Jason Mitchell
1700 Perimeter Park Drive
Morrisville, NC 27560 USA
Phone: +1-919-862-1000
Fax: +1-919-862-1829
E-mail: jason.mitchell@salix.com

Booth 101

Salix Pharmaceuticals, Inc. follows a competitive strategy of in-licensing late-stage pharmaceutical products to treat GI diseases. The Salix portfolio includes APRISO™, COLAZAL®, XIFAXAN®, OsmoPrep®, MOVIPREP®, AZASAN®, ANUSOL-HC®, PROCTOCORT®, PEPCID® Oral Suspension, and DIURIL® Oral Suspension. Exceptional customer service, a dedicated specialty sales force, and quality products underscore Salix's commitment to the gastroenterology community.

sanofi-aventis

Contact: Frederique Bornier
82 Avenue Raspil
94250 Gentilly
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Phone: +33-1-41-24-70-00
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E-mail: frederique.bornier@sanofi-aventis.com

Booth 201

sanofi-aventis, a leading global pharmaceutical company, discovers, develops and distributes therapeutic solutions to improve the lives of everyone.
sanofi-aventis is listed in Paris (EURONEXT : SAN) and in New York (NYSE : SNY).

SCYNEXIS, Inc.

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Durham, NC 27713 USA
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Fax: +1-919-544-8697
E-mail: terry.marquardt@scynexis.com

Booth 601

SCYNEXIS is a premier drug discovery and development company that delivers effective and innovative drug pipeline solutions for human and animal health to pharmaceutical and global health partners on either a fee-for-service or a shared risk basis. SCYNEXIS has developed highly productive capabilities to discover and develop drug compounds from early discovery with assay development and screening, through lead optimization and candidate selection, and beyond proof of concept in humans with cGMP synthesis and manufacturing.

Shin Poong Pharm. Co., LTD.

Contact: Dae Woo Hong
748-31 Yoksam-Dong, Kanfnam-Gu
Seoul 135-925
Korea
Phone: +82-2-2189-3473
Fax: +82-2-3452-2866
E-mail: dwhong2@shinpoong.co.kr

Booth 500

Shin Poong has been a major worldwide supplier of API, as well as finished formulation for mebendazole and albendazole, which are treatments for soil-transmitted helminthiasis, and praziquantel, which is a treatment for schistosomiasis, through public sector business with WHO and World Bank since the mid-1980s. Major schistosomiasis eradication campaigns carried out with praziquantel include Delta project in Egypt and China Project. Also, Shin Poong is developing a new ACT anti-malarial drug with Medicines for Malaria Venture (MMV) since 1999.

Southern Research Specialized Biocontainment Screening Center

Contact: Dr. Colleen Jonsson and Nichole Tower
2000 Ninth Ave. South
Birmingham, AL 35205 USA
Phone: +1-205-581-2341
Fax: +1-205-581-2097
E-mail: tower@southernresearch.org

Booth 402

Southern Research Institute was selected as one of nine screening centers in NIH's Molecular Libraries Probes Production Center Network for high throughput screening of small-molecule compounds. We provide support to the greater scientific community in low to high throughput screening in BSL-2 and BSL-3 environments for live bacterial and viral agents. We work with assay providers to discover small-molecule probes that can be further optimized for higher selectivity and activity against their intended targets.

SRI International

Contact: Regina Tihan
333 Ravenswood Avenue
Menlo Park, CA 94025 USA
Phone: +1-650-859-3000
Fax: +1-650-859-3041
E-mail: biosciences@sri.com

Booth 306

SRI International Biosciences provides complete discovery and preclinical development capabilities to take drugs and biologics from Idea to IND™. Our integrated program offers the scientific, technical and regulatory expertise you need to expedite the process. SRI's Center for Advanced Drug Research team (Harrisonburg, VA) focuses on improving the productivity of the pharmaceutical industry, helping our nation respond to bio threats, and developing life saving treatments for neglected and orphan diseases. Contact us: biosciences@sri.com

SSGCID and CSGID Structural Genomics Services

Contact: Robin Stacy
307 Westlake Ave. N
Suite 500
Seattle, WA 98109 USA
Phone: +1-206-256-7158
Fax: +1-206-256-7229
E-mail: robin.stacy@sbri.org

Booth 208

The NIAID-funded Centers for Infectious Disease (SSGCID and CSGID) are soliciting nominations for structure determination at no charge to the scientific community for potential drug targets, essential enzymes, virulence factors and vaccine candidates from NIAID priority organisms for biodefense and emerging and re-emerging diseases. Visit booth 208 to learn more (http://ssgcid.org and http://csgid.org/).

TechLab, Inc.

2001 Kraft Drive
Blacksburg, VA 24060-6358
Phone: +1-540-953-1664
Fax: +1-540-953-1665
E-mail: techlab@techlab.com
Techlab, Inc. develops, manufactures and distributes rapid non-invasive intestinal diagnostics in the areas of intestinal inflammation, antibiotic-associated diarrhea and parasitology. The company continues its research on markers of intestinal inflammation, the toxins of Clostridium difficile, amebiasis and vaccine development. TechLab is registered with the U.S. Food and Drug Administration and is ISO 13485 certified.

University of Pennsylvania

University of Pennsylvania
Contact: Omar Harb, PhD
1403 Blockley Hall
Center for Bioinformatics
Philadelphia, PA 10104-6021
Phone: +1-215-746-7019
Fax: +1-215-573-3111
E-mail: oharb@pcbi.upenn.edu

Booth 407

The Eukaryotic Pathogens database (www.EuPathDB.org) is an integrated database for protozoan pathogens and provides a functional resource for *Cryptosproridium spp., Giardia lamblia, Leishmania spp., Plasmodium spp., Toxoplasma gondii, Trichomonas vaginalis* and *Trypanosoma spp.* EuPathDB provides a venue to analyze and query functional data from each of the maintained organisms, including transcript and protein expression evidence, population biology data (isolates and single nucleotide polymorphisms), gene annotations and orthology profiles.

EuPathDB representatives will answer questions, help with queries and distribute materials.

University of Texas Medical Branch

Contact: Dr. Anne-Sophie Brocard, PhD, RBP
301 University Blvd.
Galveston, TX 77555
Phone: +1-409-772-8472
E-mail: anbrocar@utmb.edu

Booth 412

The University of Texas Medical Branch Laboratory Biosafety Training Program (LBT).
The LBT program provides laboratory and support staff training in BSL2 to 4 laboratory biosafety. The program offers extensive one on one customized hands-on training and theoretical classes. These courses allow staff to enter into mentorship with the appropriate skills to understand biocontainment, work safely and use good laboratory practices.

Web: www.utmb.edu/biosafetytraining
Email: biosafety.training@utmb.edu

Vestergaard Frandsen

Contact: Paul Chen
2300 Clarendon Blvd
Suite 603
Arlington, VA 22201 USA
Phone: +1-571-527-2180
Fax: +1-703-997-3235
E-mail: pqc@vestergaard-frandsen.com

Booth 109 and 111

Vestergaard Frandsen specializes in developing disease control textiles for the prevention of vector-borne (e.g. malaria), water-borne (e.g. cholera) and neglected tropical diseases.

The Walter Reed Army Institute of Research

Contact: Debra Yourick, PhD
503 Robert Grant Ave
Silver Spring, MD 20910 USA
Phone: +1-301-319-9471
E-mail: debra.yourick@us.army.mil

Booth 303

The Walter Reed Army Institute of Research (WRAIR) co-develops diagnostics, vaccines and drugs for traumatic injuries and infectious diseases, trauma and operational issues -- using human sleep suites; large animal surgery and X-ray; animal BSL-3; pilot GMP vaccine/biological manufacturing; laboratory/clinical/field trials where tropical diseases are endemic -- to improve soldier health and world health.

Tuesday, November 17

Pre-Meeting Course Registration

Salon Foyer
Tuesday, November 17, 7 a.m. - 1:30 p.m.

Basic Science Pre-Meeting Course

The Intersection of Nutrition and Infectious Disease: Challenges and Opportunities for Studying Nutrition-Disease Interactions in the Developing World

Washington 4
Tuesday, November 17, 8:30 a.m. – 5 p.m.

This course will target scientists, physicians, clinicians, graduate students and educators who wish to gain a better understanding of the consequences of undernutrition on infectious disease and other health outcomes, as well as an understanding of how infection contributes to nutritional deficiencies. Topics will include: an overview of the burden of malnutrition and enteric diseases in the developing world tools; technologies to identify normal gut flora and intestinal pathogens; nutrition and immune function and inflammation; maternal-child interactions; nutrition, infection and child development; and opportunities for interventions.

CHAIR

Daniel J. Carucci
United Nations Foundation, Washington, DC, United States

Laura Caulfield
Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD, United States

Michael Gottlieb
Foundation for the National Institutes of Health, Bethesda, MD, United States

8:30 a.m.

LIGHT CONTINENTAL BREAKFAST

9 a.m.

INTRODUCTION - COURSE GOALS AND OUTLINE

Daniel J. Carucci
United Nations Foundation, Washington, DC, United States

Laura Caulfield
Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD, United States

Michael Gottlieb
Foundation for the National Institutes of Health, Bethesda, MD, United States

9:15 a.m.

THE BURDEN OF NUTRITIONAL DEFICIENCIES AND ENTERIC DISEASES IN THE DEVELOPING WORLD

Laura Caulfield
Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD, United States

10 a.m.

THE INTESTINAL MICROBIOTA: ITS ROLE IN HEALTH AND DISEASE (PART 1)

Andrew Goodman
Washington University, St. Louis, MO, United States

10:45 a.m.

THE INTESTINAL MICROBIOTA: ITS ROLE IN HEALTH AND DISEASE (PART 2)

Cathy Lozupone
University of Colorado, Boulder, CO, United States

11:30 a.m.

LUNCH (ON YOUR OWN)

1 p.m.

NEW APPROACHES TO IDENTIFY ENTERIC PATHOGENS

Eric R. Houpt
University of Virginia, Charlottesville, VA, United States

1:30 p.m.

UNDERNUTRITION, MICRONUTRIENTS AND IMMUNE FUNCTION

Margherita Cantorna
Pennsylvania State University, University Park, PA, United States

2 p.m.

THE NEWBORN MEETS THE MICROBIAL WORLD: MOTHER-CHILD INTERACTIONS AND PROTECTION FROM INFECTION (BREASTFEEDING, ETC.)

Lars Hanson
Goteborg University, Goteborg, Sweden

2:30 p.m.

REFRESHMENT BREAK

3 p.m.

GUT FUNCTION, SIGNALING AND REPAIR

Fang Yan
Vanderbilt University Medical Center, Nashville, TN, United States

3:45 p.m.

PRE- AND PROBIOTICS: NUTRITIONAL PROPERTIES AND PHYSIOLOGICAL

Speaker to be announced

4 p.m.

NUTRITION, INFECTION AND CHILD DEVELOPMENT

Susan Walker
University of West Indies, Mona, Kingon, Jamaica

4:30 p.m.

WRAP-UP

Daniel J. Carucci
United Nations Foundation, Washington, DC, United States

Michael Gottlieb
Foundation for the National Institutes of Health, Bethesda, MD, United States

Clinical Pre-Meeting Course

The Highly-Prevalent Neglected Tropical Diseases (NTDs): Update on Clinical Aspects and Novel Approaches to Control

Salon 1

Tuesday, November 17, 1 p.m. - 5:30 p.m.

The neglected tropical diseases (NTDs) are a group of chronic infections whose major impact is in producing significant disability and suffering in those affected, who primarily consist of the world's poorest people. The most prevalent NTDs include the soil-transmitted helminths (ascariasis, trichuriasis, hookworm infection), schistosomiasis, lymphatic filariasis, trachoma and onchocerciasis. More recently, the food-borne trematodes (opisthorchiasis, clonorchiasis, fascioliasis, paragonimiasis) have emerged as important causes of morbidity in several areas of the world. Over one billion people are currently infected with at least one of these NTDs, and many are concurrently affected by more than one. Reduction of disease burden or interference with transmission of NTDs would have both immediate impact on global health and longer-term effects on economic growth and development. The course will provide updates on the highly-prevalent NTDs listed above, with special emphasis on the latest innovations in diagnosis and treatment, as well as current control strategies, including efforts at integration of interventions. In addition, updates will be provided on the state of current research on new control drugs, diagnostic materials, insecticides and vaccines. For each of the highlighted NTDs, the presentation will be divided into two parts: an update on the clinical aspects of the disease and an update on the latest and future control strategies.

CHAIR

Peter J. Hotez
The George Washington University and Sabin Vaccine Institute, Washington, DC, United States

David J. Diemert
The George Washington University and Sabin Vaccine Institute, Washington, DC, United States

1 p.m.

INTRODUCTION AND OVERVIEW: THE HIGHLY-PREVALENT NTDS

Peter J. Hotez
The George Washington University and Sabin Vaccine Institute, Washington, DC, United States

1:30 p.m.

SOIL-TRANSMITTED HELMINTHS

David J. Diemert
The George Washington University and Sabin Vaccine Institute, Washington, DC, United States

3 p.m.

REFRESHMENT BREAK

3:30 p.m.

FOOD-BORNE TREMATODES

Paul J. Brindley
The George Washington University and Sabin Vaccine Institute, Washington, DC, United States

4:30 p.m.

SCHISTOSOMIASIS: CLINICAL UPDATE

Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

5:15 p.m.

SUMMARY/REVIEW

Peter J. Hotez
The George Washington University and Sabin Vaccine Institute, Washington, DC, United States

Wednesday, November 18

Clinical Pre-Meeting Course

The Highly Prevalent Neglected Tropical Diseases (NTDs): Update on Clinical Aspects and Novel Approaches to Control

Salon 1

Wednesday, November 18, 7:30 a.m. - 3 p.m.

7:30 a.m.

LIGHT CONTINENTAL BREAKFAST

8 a.m.

SCHISTOSOMIASIS: CONTROL UPDATE

Alan Fenwick
Imperial College, London, United Kingdom

8:45 a.m.

LYMPATHIC FILARIASIS: CLINICAL UPDATE

Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

9:30 a.m.

LYMPHATIC FILARIASIS: CONTROL UPDATE

Eric A. Ottesen
Task Force for Global Health, Decatur, GA, United States

10:15 a.m.

REFRESHMENT BREAK

10:30 a.m.

ONCHOCERCIASIS: CLINICAL UPDATE

David O. Freedman
University of Alabama at Birmingham, Birmingham, AL, United States

11:15 a.m.

ONCHOCERCIASIS: CONTROL UPDATE

Thomas R. Unnasch
University of South Florida, Tampa, FL, United States

Noon

LUNCH (ON YOUR OWN)

1 p.m.

TRACHOMA: CLINICAL UPDATE

David Mabey
London School of Hybiene and Tropical Medicine, London, United Kingdom

1:45 p.m.

TRACHOMA: CONTROL UPDATE

Paul Emerson
The Carter Center, Atlanta, GA, United States

2:30 p.m.

WRAP-UP: REGIONAL APPROACHES TO NTD CONTROL

Patrick J. Lammie
Centers for Disease Control and Prevention, Atlanta, GA, United States

ASTMH Council Meeting

Wilson AB
Wednesday, November 18, 8 a.m. - 3 p.m.

Media Room

Rooms 8228/8229
Wednesday, November 18, 8 a.m. - 4 p.m.

Registration

Salon Foyer
Wednesday, November 18, 9:30 a.m. - 6 p.m.

ACAV SIE Subcommittee Meeting

Room 8219
Wednesday, November 18, 11 a.m. - Noon

Young Investigator Award Presentations

In Honor of William A. Petri, Sr.

In Memory of Annie Liberati

Supported with funding from TechLab, Inc.

ASTMH will present the Young Investigator Award to outstanding young researchers during the 58th Annual Meeting. This award encourages developing young scientists to pursue careers in various aspects of tropical disease research.

Young Investigator Award Session A

Jackson
Wednesday, November 18, 11 a.m. - 3:30 p.m.

JUDGES

Stephen Davies
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Edward Mitre
National Institutes of Health, Bethesda, MD, United States

Daniel J. Tisch
Case Western Reserve University, Cleveland, OH, United States

Patricia Wilkins
Centers for Disease Control and Prevention, Atlanta, GA, United States

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PROLONGED DIARRHEA IN A BRAZILIAN COMMUNITY BIRTH COHORT: EPIDEMIOLOGY, ETIOLOGIES, NUTRITIONAL IMPACT, AND LINKS TO PERSISTENT DIARRHEA

Sean R. Moore[1], Noélia L. Lima[2], Reinaldo B. Oriá[2], Relana C. Pinkerton[3], Alberto M. Soares[2], Richard L. Guerrant[3], Aldo A. Lima[2]
[1]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States, [2]Federal University of Ceará, Fortaleza, Brazil, [3]University of Virginia, Charlottesville, VA, United States

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CORRELATION OF DERMATOLOGICAL AND OPHTHALMOLOGICAL MORBIDITY IN ONCHOCERCIASIS (FOREST TYPE)

Luc E. Coffeng[1], Wilma A. Stolk[1], Sake J. de Vlas[1], Michel Boussinesq[2], Grace N.A. Fobi[2], Gladys A. Ozoh[2], Peter A. Enyong[2], Anne-Cécile Z.K. Bissek[2], Dik J.D.F. Habbema[1]
[1]Erasmus Medical Center, Rotterdam, The Netherlands, [2]African Programme for Onchocerciasis Control, Ouagadougou, Burkina Faso

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STIMULATION OF MONOCYTES BY FILARIAL EXCRETORY-SECRETORY PRODUCTS: A POTENTIAL ROLE IN MODULATION OF THE LYMPHATIC ENDOTHELIUM?

Tiffany S. Weinkopff[1], Patrick Lammie[2]
[1]University of Georgia, Athens, GA, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

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PATENT FILARIAL INFECTION MODULATES THE QUALITY OF T CELL RESPONSES TO MALARIAL ANTIGENS IN MALARIA/FILARIAL CO-ENDEMIC VILLAGE OF MALI

Simon Metenou[1], Benoit Dembele[2], Siaka Konate[2], Housseini Dolo[2], Lamine Soumaoro[2], Abdallah A. Diallo[2], Michel E. Coulibaly[2], Siaka Y. Coulibaly[2], Dramane Sanogo[2], Yaya I. Coulibaly[2], Sekou F. Traore[2], Siddhartha Mahanty[1], Amy D. Klion[1], Thomas B. Nutman[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Filaria Unit, FMPOS, University of Bamako, Mali, Bamako, Mali

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DECODING THE INVASION AND MOLTING PROCESSES OF *BRUGIA MALAYI* L3 LARVAE

Sasisekhar Bennuru, Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

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A NOVEL AND POWERFUL CLASS OF NEMATICIDES FOR SOIL-TRANSMITTED NEMATODE INFECTIONS

Yan Hu, Sophia Georghiou, Alan Kelleher, Cheng-Yuan Kao, Chang-Shi Chen, Raffi V. Aroian
University of California, San Diego, La Jolla, CA, United States

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INSECTICIDE TREATED NETS IN MALARIA PREVENTION: DOES DISTRIBUTION MODEL MATTER?

Hannah Chiu, Michael Hawkes, Kevin Kain
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PURINERGIC SIGNALING AND IMMUNE MODULATION AT THE SCHISTOSOME SURFACE

Rita Bhardwaj, Patrick J. Skelly
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INTEGRATED CONTROL STRATEGIES OF SCHISTOSOMIASIS TRANSMISSION INFORMED BY A BAYESIAN MULTILEVEL MODEL AT A LOCAL SCALE

Kun Yang
College of Public Health, The Ohio State University, Columbus, OH, United States

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MOLECULAR SIGNALING DURING THE MIRACIDIUM TO SPOROCYST TRANSFORMATION IN *SCHISTOSOMA MANSONI*

Andrew S. Taft, Francesca Norante, Timothy P. Yoshino
University of Wisconsin, Madison, Madison, WI, United States

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IN UTERO EXPOSURE TO MATERNAL SCHISTOSOMIASIS MODULATES ACUTE AND MEMORY CELLULAR AND HUMORAL IMMUNE RESPONSES OF OFFSPRING

Allison C. Brown, William J. Moss
The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

409

CLINICAL FACTORS PREDICTIVE OF ENCEPHALITIS CAUSED BY ANGIOSTRONGYLUS CANTONENSIS

Kittisak Sawanyawisuth[1], Ken Takahashi[2], Tsutomu Hoshuyama[2], Kanlayanee Sawanyawisuth[1], Vichai Senthong[1], Panita Limpawattana[1], Donald Wilson[2], Somsak Tiamkao[1], Suthipun Jitpimolmard[1], Verajit Chotmongkol[1]
[1]Khon Kaen University, Khon Kaen, Thailand, [2]University of Occupational and Environmental Health, Kitakyushu, Japan

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PREVIOUS EXPOSURE WITH CEPHALOSPORINS AND MACROLIDES BUT NOT COTRIMOXAZOLE AS A RISK FACTOR FOR COLONIZATION WITH MRSA IN HIV-INFECTED CHILDREN

Andrea Kalavska, Vladimir Krcmery, Anna Liskova
St. Elizabeth University College of Health and Social Sciences, Bratislava, Slovakia

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BED NET COVERAGE, USAGE AND CONDITION IN FISHING VILLAGES OF SUBA DISTRICT, WESTERN KENYA

Gabriel O. Dida[1], George O. Sonye[2], H. Horio[3], S. Kaneko[3], M. Shimada[3], F. Kyoko[3], N. Minakawa[3]
[1]School of Public Health, Maseno University, Kisumu, Kenya, [2]International Centre of Insect Physiology and Ecology, Mbita, Kenya, [3]Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan

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PREDICTED EFFECTS OF HOST RESERVOIR-TARGETED VACCINATION ON LYME DISEASE RISK

Kimberly Tsao, Durland Fish, Alison Galvani
Yale University, New Haven, CT, United States

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ANALYSIS OF *ANOPHELES ARABIENSIS* BLOOD FEEDING BEHAVIOR IN SOUTHERN ZAMBIA DURING THE TWO YEARS FOLLOWING THE INTRODUCTION OF INSECTICIDE TREATED BED NETS

Christen M. Fornadel[1], Shadreck Habbanti[2], Laura C. Norris[1], Douglas E. Norris[1]
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1040

PRESUMPTIVE TREATMENT INCREASES RISK OF INFLAMMATION AND POOR FETAL OUTCOMES IN WOMEN WITH PLACENTAL MALARIA AT DELIVERY

Whitney E. Harrington[1], Edward Kabyemela[1], Atis Muehlenbachs[1], Kathryn Williamson[1], Theonest K. Mutabingwa[2], Michal Fried[1], Patrick E. Duffy[1]
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Young Investigator Award Session B

Jefferson

Wednesday, November 18, 11 a.m. - 3:30 p.m.

JUDGES

Kathryn S. Aultman
Bill & Melinda Gates Foundation, Seattle, WA, United States

Lyric C. Bartholomay
Iowa State University, Ames, IA, United States

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Julian F. Hillyer
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Nicholas Komar
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MEK/ERK SIGNALING AND REACTIVE OXYGEN SPECIES REGULATE THE MOSQUITO ANTI-MALARIAL IMMUNE RESPONSE

Win Surachetpong, Shirley Luckhart
University of California Davis, Davis, CA, United States

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USING ENHANCED REPRODUCTION AS A NOVEL DRIVE MECHANISM FOR MOSQUITO POPULATION REPLACEMENT

Anam Javed[1], Jason L. Rasgon[2], Kendra M. Quicke[1], Michael A. Riehle[1]
[1]University of Arizona, Tucson, AZ, United States, [2]Johns Hopkins University, Baltimore, MD, United States

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AN EVOLUTIONARY CONSERVED FUNCTION OF THE JAK-STAT PATHWAY IN ANTI-DENGUE DEFENSES

Jayme A. Souza-Neto, George Dimopoulos
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

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INSENSITIVE ACETYLCHOLINESTERASE (ACE.1R): EVENTS OF INTROGRESSION AND DUPLICATION BETWEEN THE MOLECULAR M AND S FORMS OF *ANOPHELES GAMBIAE* S.S.

Luc S. Djogbénou[1], Mylène Weill[2], Jean-Marc Hougard[3], Fabrice Chandre[3], Roch Dabire[4]
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DUPLICATION AND CONCERTED EVOLUTION OF VITELLOGENIN GENES IN MOSQUITOES

Song Chen, Jason L. Rasgon
Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, United States

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THE EFFECT OF GENE DRIVE ON CONTAINMENT OF TRANSGENIC MOSQUITOES

John M. Marshall
University of California at Los Angeles, Los Angeles, CA, United States

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BIOLOGICAL DIVERSITY AND GENE POLYMORPHISMS ASSOCIATED WITH KNOCKDOWN RESISTANCE IN MEMBERS OF THE PAPUA NEW GUINEA *ANOPHELES PUNCTULATUS* SPECIES COMPLEX

Cara N. Henry-Halldin[1], Kogulan Nadesakumaran[1], Daphne Sepe[2], John B. Keven[2], Laurie Gray[1], Lisa Reimer[1], Nigel W. Beebe[3], Robert D. Cooper[4], Peter A. Zimmerman[1]
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OVIPOSITION SITE SELECTION IN THE DENGUE VECTOR, *AEDES AEGYPTI*

Jacklyn Wong, Amy C. Morrison, Helvio Astete, Steven T. Stoddard, Thomas W. Scott
University of California, Davis, Davis, CA, United States

250

TRAPPING MALARIA VECTORS USING SYNTHETIC ODORS THAT ARE MORE ATTRACTIVE THAN HUMANS

Fredros O. Okumu
Ifakara Health Institute, Ifakara, Morogoro region, United Republic of Tanzania

590

BIOACOUSTICS AND COURTSHIP IN *AEDES AEGYPTI* AND *ANOPHELES GAMBIAE*

Lauren J. Cator, Ronald R. Hoy, Laura C. Harrington
Cornell University, Ithaca, NY, United States

592

ASSESSING RISK IN FOCAL ARBOVIRAL INFECTIONS: ARE WE MISSING THE BIG OR LITTLE PICTURE?

Andrew D. Haddow[1], Carl J. Jones[2], Reid R. Gerhardt[2], Agricola R. Odoi[2]
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INVESTIGATIONS OF CLOSE CONTACTS OF PATIENTS WITH LABORATORY-CONFIRMED H5N1 INFECTION IN INDONESIA, IN 2007

Vivi Setiawaty, Siti Isfandari, Ni Ketut Susilarini, Krisnanur A. Pangesti, Endang R. Sedyaningsih
National Institute of Health Research and Development, Jakarta, Indonesia

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ANTIGENIC AND PHYLOGENETIC ANALYSIS OF INFLUENZA VIRUSES IN KENYA FROM 2006-08 WITHIN THE CONTEXT OF REGIONAL AND GLOBAL INFLUENZA DRIFT

David Schnabel[1], Wallace Bulimo[2], Rachel Achilla[2], Tom Gibbons[3], Scott Gordon[1]
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PREVENTING NIPAH VIRUS TRANSMISSION: UNDERSTANDING EFFICACY OF BAMBOO SKIRT TO IMPEDE DATE PALM SAP CONTAMINATION BY BATS

M. S. Khan[1], Emily S. Gurley[1], Md. Jahangir Hossain[1], Nazmun Nahar[1], Stephen P. Luby[2]
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SPATIAL ANALYSIS OF HEMORRHAGIC FEVER WITH RENAL SYNDROME IN SHANDONG PROVINCE, EASTERN CHINA, 1968-2005

Li-Qun Fang[1], Song Liang[2], Xian-Jun Wang[3], Sake J. de Vlas[4], Zhi-Qiang Wang[3], Shao-Xia Song[3], Wen-Yi Zhang[1], You-Fu Xu[1], Hong Yang[1], Wu-Chun Cao[1]
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ISOLATION AND PHYLOGENETIC ANALYSIS OF MUCAMBO VIRUS (VENEZUELAN EQUINE ENCEPHALITIS COMPLEX SUBTYPE IIIA) IN TRINIDAD

Auguste J. Auguste[1], Sara Volk[2], Nicole Arrigo[2], Raymond Martinez[1], Vernie Ramkissoon[1], A. Paige Adams[2], Abiodun Adesiyun[1], Dave Chadee[1], Jerome Foster[1], Amelia Travassos Da Rosa[2], Robert Tesh[2], Scott Weaver[2], Christine V. Carrington[1]
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SARS CORONAVIRUS ADAPTATION TO HUMAN IS PARTIALLY CONSTRAINED BY HOST ALTERATION

Xianchun Tang[1], Nikos Vasilakis[2], Zhenli Shi[3], Yang Zhong[4], Lin-fa Wang[5], Shuyi Zhang[1]
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1015

EFFICIENCY AND RELIABILITY OF RBCL AND CRCL3 IN MARKING *TRIATOMA BRASILIENSIS* NYMPHS: PERSISTENCE AND INFLUENCE OF TRACE ELEMENTS ON INSECT BIOLOGY

Rafael M. Freitas, Otilia Sarquis, Livia S. Oliveira, Jailey M. Gonçalves, Reginalo L. Rego, Marli M. Lima
Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

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DEMONSTRATION OF PARATRANSGENIC PHLEBOTOMUS ARGENTIPES

Heidi Hillesland[1], Ivy Hurwitz[1], Rajesh Kumar[2], Ravi Durvasula[1], Vijay Kumar[2], Pradeep Das[2], Annabeth Fieck[1]
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Young Investigator Award Session C

Johnson

Wednesday, November 18, 11 a.m. - 3:30 p.m.

JUDGES

Roland A. Cooper
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Rick Fairhurst
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Christine Petersen
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Julian C. Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

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GENOMIC INSIGHTS INTO LEPTOSPIRAL PATHOGENESIS

Jessica Ricaldi, Michael A. Matthias, Joseph Vinetz
University of California San Diego, San Diego, CA, United States

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GENETIC MAPPING IN TWO *P. FALCIPARUM* CROSSES IDENTIFIES A LOCUS ENCODING THE PLASMODIAL SURFACE ANION CHANNEL

Abdullah A. Bokhari, Sanjay A. Desai
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

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MAPPING THE GENETIC CONTROL OF THE GLOBAL METABOLITE PROFILE IN *PLASMODIUM FALCIPARUM*

Mark A. Wacker[1], Kellen A. Olszewski[2], Asako Tan[1], Geoffrey H. Siwo[1], Joshua D. Rabinowitz[3], Maneul Llinas[2], Michael T. Ferdig[1]
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DISRUPTION OF LIPOYLATION IN THE *P. FALCIPARUM* MITOCHONDRION AND APICOPLAST IS LETHAL

Maroya D. Spalding, Sean T. Prigge
Johns Hopkins School of Public Health, Baltimore, MD, United States

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TARGETING PFHSP90 IN *PLASMODIUM FALCIPARUM* MALARIA: A STRATEGY TO REVERSE RESISTANCE

Dea Shahinas[1], Gabriela Chiosis[2], Dylan R. Pillai[1]
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MOLECULAR CHARACTERIZATION OF RESISTANCE TO ARTEMISININ DRUGS IN *PLASMODIUM FALCIPARUM*

Matthew S. Tucker[1], Lucia Gerena[2], Katherine Sorber[3], Michelle Dimon[3], Azliyati Azizan[1], Zhinning Wang[2], Qin Cheng[4], Dennis E. Kyle[1]
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CALCULATING DRUG NEEDS AND COSTS FOR TREATING VISCERAL LEISHMANIASIS IN THE INDIAN SUBCONTINENT AND AFRICA USING LOCAL PATIENT ANTHROPOMETRIC DATA

Michael O. Harhay[1], François Chappuis[2], Suman Rijal[3], Shyam Sundar[4], Piero L. Olliaro[5]
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GENOME ORGANIZATION OF TANDEMLY-REPETITIVE DNA IN IXODES SCAPULARIS, THE LYME DISEASE TICK

Jason M. Meyer[1], Timothy J. Kurtti[2], Catherine E. Silva[1], Janice P. VanZee[1], Catherine A. Hill[1]
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IDENTIFYING MICRORNAS THAT ALTER MACROPHAGE SUSCEPTIBILITY TO INFECTION BY LEISHMANIA

Joel W. Graff, Anne M. Dickson, Mary E. Wilson
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ISOLATED AND PURIFIED NOVEL ANTILEISHMANIAL DRUG CANDIDATE FROM HIMATANTHUS SUCUUBA

Renzo Perales, Jorge Arevalo
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EVALUATION OF INHIBITORY EFFECT OF A *TRYPANOSOMA BRUCEI* CALCIUM CHANNEL ANTIBODY (ANTI-TBCC1) *IN VITRO*

Kiantra I. Ramey[1], Zuzana Kucerova[2], Winston Thompson[1], Jonathan K. Stiles[1]
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PHOSPHATIDYLSERINE EXPOSURE BY AMASTIGOTES OF LEISHMANIA AMAZONENSIS IS INDUCED BY HOST IMMUNE RESPONSES

Joao L. Wanderley[1], Poliana Deolindo[2], Marcello Barcinski[3], Lynn Soong[4]
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INVESTIGATING NOVEL DENGUE VIRUS INFECTION BIOMARKERS USING PROTEOMIC METHODS: VITRONECTIN PRECURSOR PROTEIN AS A NEW LEAD

Alexa Gilbert[1], Takol Takol Chareonsirisuthigul[2], Sukathida Ubol[2], Brian J. Ward[1], Momar Ndao[1]
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SCHISTOSOMA MANSONI PKA: A POTENTIAL NEW DRUG TARGET

Brett E. Swierczewski, Stephen J. Davies
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Young Investigator Award Session D

Taylor

Wednesday, November 18, 11 a.m. - 3:30 p.m.

JUDGES

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Sanjai Kumar
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Miriam Laufer
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Peter Zimmerman
Case Western Reserve University, Cleveland, OH, United States

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MULTIPLE GENETIC BACKGROUNDS OF THE AMPLIFIED *PLASMODIUM FALCIPARUM* MULTIDRUG RESISTANCE (PFMDR1) GENE AND SELECTIVE SWEEP OF 184F MUTATION IN CAMBODIA

Sumiti Vinayak[1], Md Tauqeer Alam[2], Rithy Sem[3], Naman K. Shah[4], Augustina I. Susanti[5], Pharath Lim[6], Sinuon Muth[3], Jason D. Maguire[5], William O. Rogers[5], Thierry Fandeur[7], John W. Barnwell[2], Ananias A. Escalante[8], Chansuda Wongsrichanalai[5], Frederick Ariey[6], Steven R. Meshnick[4], Venkatachalam Udhayakumar[2]
[1]Atlanta Research and Education Foundation and Malaria Branch, Division of Parasitic Diseases, National Center for Zoonotic Vector-Borne and Enteric Diseases, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Malaria Branch, Division of Parasitic Diseases, National Center for Zoonotic Vector-Borne and Enteric Diseases, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]National Malaria Center, Phnom Penh, Cambodia, [4]Department of Epidemiology, University of North Carolina School of Public Health, Chapel Hill, NC, United States, [5]United States Naval Medical Research Unit No. 2, Jakarta, Indonesia, [6]Institut Pasteur in Cambodia, Phnom Penh, Cambodia, [7]Institut Pasteur, Unité d'Immunologie Moléculaire des Parasites, Paris, France, [8]School of Life Sciences, Arizona State University, Tempe, AZ, United States

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INTERMITTENT PREVENTIVE TREATMENT USING ARTEMISININ-BASED COMBINATION THERAPY REDUCES MALARIA MORBIDITY AMONG SCHOOL-AGED CHILDREN IN MALI

Hamma Maiga[1], Breanna Barger[2], Oumar Bila Traore[1], Mamadou Tekete[1], Antimbe Timbine[1], Antoine Dara[1], Zoumana Isaac Traore[1], Soren Gantt[3], Ogobara Doumbo[1], Abdoulaye Djimde[1]
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ANTI-MALARIAL TREATMENT REGIMES FROM AN EVOLUTIONARY PERSPECTIVE

Silvie Huijben, Derek Sim, Brian Chan, Danielle Tomasello, Andrew Read
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SELECTION OF KNOWN RESISTANCE-MEDIATING POLYMORPHISMS BY ARTEMETHER-LUMEFANTRINE AND AMODIAQUINE/SULFADOXINE-PYRIMETHAMINE, BUT NOT BY DIHYDROARTEMISININ-PIPERAQUINE IN BURKINA FASO

Anyirekun Fabrice Some[1], Yves Sere[1], Issaka Zongo[1], Noel Rouamba[1], Chris Dokomajilar[2], Bryan Greenhouse[2], Jenny Legac[2], Shoba Subramanian[2], Jean-Bosco Ouedraogo[1], Philip J. Rosenthal[2]
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DETECTION AND VALIDATION OF COMPLEMENT COMPONENT C3A AS A NOVEL BIOMARKER FOR CEREBRAL MALARIA

Sarah J. Higgins, Karlee Silver, Shehzad Iqbal, Samir Patel, Kathleen Zhong, Andrea Conroy, Kevin C. Kain
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DYSREGULATION OF ANGIOPOIETINS IN LOW BIRTH WEIGHT OUTCOMES OF PLACENTAL MALARIA

Karlee L. Silver[1], Kathleen Zhong[1], Rose G. Leke[2], Diane Wallace Taylor[3], Kevin C. Kain[1]
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BIOLOGICAL AND CLINICAL IMMUNITY TO MALARIA INCREASE WITH AGE IN KENYAN HIGHLAND AREAS WITH UNSTABLE TRANSMISSION

Melissa A. Riedesel[1], Matthew McCarra[1], Ng'wena G. Magak[2], Kacey C. Ernst[3], Chandy C. John[1]
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USING DRIED BLOOD SPOTS TO MONITOR CHANGES IN ANTIBODY LEVELS TO *PLASMODIUM FALCIPARUM* IN A REGION OF DECLINING MALARIA TRANSMISSION

Tamaki Kobayashi[1], Sandra Chishimba[2], Philip Thuma[2], Sungano Mharakurwa[2], Nirbhay Kumar[1], William J. Moss[1]
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GENETIC DIVERSITY IN THE *P. FALCIPARUM* AND *P. VIVAX* MALARIA CELTOS GENE FROM SOUTHEAST ASIA, AFRICA, AND SOUTH AMERICA REVEALS A HIGHLY CONSERVED GENE WITH FOCAL REGIONS OF NON-SYNONOMOUS MUTATIONS UNDER IMMUNE SELECTIVE PRESSURE CONFIRMED BY GENE SEQUENCING, 3D STRUCTURE PREDICTION AND PEPTIDE MAPPING

Eric B. Ockenhouse[1], Elke Bergmann-Leitner[2], Matthew Riley[2], Jonathan D'Ambrozio[3], M. Lee[4], X. Hu[4], Anders Wallqvist[4], Paul Graf[5], John Waitumbi[6], Evelina Angov[2], Christian F. Ockenhouse[2]
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THE LONGITUDINAL PROROGATION OF COMPLEX P. *FALCIPARUM* INFECTIONS CULTIVATES GENETICALLY DISTINCT CLONAL POPULATIONS

Patrick L. Sutton[1], Lindsay Prado Torres[2], Claudia Silva[2], OraLee Branch[1]
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ANTIBODIES AGAINST THE ERYTHROCYTE BINDING ANTIGENS OF *PLASMODIUM FALCIPARUM* ARE STRONGLY ASSOCIATED WITH PROTECTION AGAINST CLINICAL MALARIA AND HIGH PARASITEMIA

Jack S. Richards[1], Danielle I. Stanisic[2], Pascal Michon[2], Elijah Dabod[2], Chetan E. Chitnis[3], David E. Narum[4], Jennifer K. Thompson[1], Alan F. Cowman[1], Ivo Mueller[2], James G. Beeson[1]
[1]Walter and Eliza Hall Institute of Medical Research, Parkville, Australia, [2]Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, [3]International Centre for Genetic Engineering and Biotechnology, New Delhi, India, [4]National Institutes of Health, Rockville, MD, United States

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ENDEMIC BURKITT LYMPHOMA IS NOT ASSOCIATED WITH COMMON SINGLE NUCLEOTIDE POLYMORPHISMS IN TOLL-LIKE RECEPTORS 4 OR 9

David H. Mulama
Kenya Medical Research Institute, Kisumu, Kenya

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SEROPREVALENCE OF IGG ANTIBODIES TO *PLASMODIUM VIVAX* MSP-1 ANTIGEN AND *PLASMODIUM FALCIPARUM* GLURP R2 ANTIGEN IN THE AMAZON AREA, IQUITOS-PERU

Katherine Torres[1], Elizabeth Villasis[1], Jorge Bendezu[1], Annette Erhart[2], Umberto D'Alessandro[2], Dionicia Gamboa[1]
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IDENTIFYING B-CELL EPITOPES WITHIN THE LIGAND DOMAIN OF *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN

Francis B. Ntumngia
University of South Florida, Tampa, FL, United States

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VALIDATION OF A MULTIPLEX MICROSPHERE-BASED IMMUNOASSAY FOR MEASUREMENT OF ANTI-DENGUE VIRUS IMMUNOGLOBULIN ANTIBODIES

Esther M. Volper, Haiyan Olekszak, Bruce Cropp, Janet Meeks, Allison J. Johnson, Allison Imrie, Duane J. Gubler, Vivek R. Nerurkar
University of Hawaii, Honolulu, HI, United States

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APOLIPOPROTEIN E4 STATUS INFLUENCES GROWTH AND COGNITIVE RESPONSES TO MICRONUTRIENT SUPPLEMENTATION IN CHILDREN FROM NORTHEAST BRAZIL

Sumeet S. Mitter[1], Reinaldo B. Oria[2], Michelle P. Kvalsund[3], Paula Pamplona[2], Rosa M. Mota[2], Peter D. Patrick[3], **Aldo A. Lima**[2], Richard L. Guerrant[3]
[1]David Geffen School of Medicine at University of California at Los Angeles, Los Angeles, CA, United States, [2]Federal University of Ceara, Fortaleza, Brazil, [3]University of Virginia, Charlottesville, VA, United States

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DENGUE VIRUS NONSTRUCTURAL PROTEINS INDUCE IL-8 TRANSCRIPTION: ROLE OF VIRAL PROTEINS IN DENGUE IMMUNOPATHOGENESIS

James F. Kelley, Pakieli Kaufusi, Vivek R. Nerurkar
John A. Burns School of Medicine, Honolulu, HI, United States

1094

WEST NILE VIRUS GENETIC DIVERSITY AND RNA INTERFERENCE IN THE MOSQUITO *CULEX PIPIENS QUINQUEFASCIATUS*

Doug E. Brackney[1], Jennifer E. Beane[2], Gregory D. Ebel[1]
[1]University of New Mexico, Albuquerque, NM, United States, [2]Boston University Medical Center, Boston, MA, United States

Young Investigator Award Session E

Truman

Wednesday, November 18, 11 a.m. - 3:30 p.m.

JUDGES

Subash Babu
NIH-TRC-ICER, Chennai, India

David Williams
Rush University Medical Center, Chicago, IL, United States

Yimin Wu
National Institutes of Health, Rockville, MD, United States

519

A DUAL-SPECIFICITY PHOSPHOTYROSINE PHOSPHATASE OF *PLASMODIUM FALCIPARUM* AND ITS POTENTIAL AS A NOVEL ANTIMALARIAL DRUG TARGET

Christopher O. Campbell, Bharath Balu, Steven P. Maher, Roman Manetsch, John H. Adams
University of South Florida, Tampa, FL, United States

1082

BASOPHILS AND MAST CELLS BECOME HYPORESPONSIVE IN CHRONIC HELMINTH INFECTIONS

David Larson, Marc P. Hübner, Marina N. Torrero, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

923

ASYMPTOMATIC MALARIA DETECTION BY PCR AMONG A COLLATERAL NATIVE POPULATION IN AN ENDEMIC REGION AT THE PERUVIAN-ECUADORIAN BORDER

Elizabeth Villasis[1], Jorge Cacho[1], Jorge Bendezu[1], Victor Neyra[1], Jaime M. Bernal[2], Dionicia Gamboa[1]
[1]Instituto de Medicina Tropical "Alexander Von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Lab. Referencial Santa Maria de Nieva, Red de Salud Condorcanqui, Amazonas, Amazonas, Peru

943

PFMSP3 N-TERMINUS AS A VACCINE TARGET: CROSS-REACTIVE ANTIBODIES IN A HYPOENDEMIC TRANSMISSION ENVIRONMENT

Stephen J. Jordan[1], Ana L. Oliveira[1], Robert A. Oster[1], Oralee H. Branch[2], Julian C. Rayner[3]
[1]University of Alabama at Birmingham, Birmingham, AL, United States, [2]New York University, New York, NY, United States, [3]Wellcome Trust Sanger Institute, Cambridge, United Kingdom

933

A POTENT MALARIA TRANSMISSION BLOCKING VACCINE BASED ON CODON-HARMONIZED PFS48/45

Debabani Roy Chowdhury[1], Evelina Angov[2], Thomas Kariuki[3], Nirbhay Kumar[1]
[1]Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [3]Institute of Primate Research, National Museums of Kenya, Nairobi, Kenya

860

GLOBAL SEQUENCE VARIATION IN THE HISTIDINE-RICH PROTEIN 2 OF *PLASMODIUM FALCIPARUM*: IMPLICATIONS FOR PERFORMANCE OF RAPID DIAGNOSTIC TESTS FOR MALARIA

Joanne T. Baker[1], Michelle Gatton[2], Mei-Fong Ho[2], Anita Pelecanos[2], David Bell[3], John Barnwell[4], Jeffery Hii[5], Bernhards Ogutu[6], Wellington Oyibo[7], ShanQing Wang[8], Jennifer Luchavez[9], Christopher Membi[10], Lyda Osario[11], Myat Phone Kyaw[12], Petra Clowes[13], Inge Kroidl[13], Dionicia Gamboa[14], Frederic Ariey[15], Djibrine Djalle[16], Didier Menard[17], Marinete Marins Povoa[18], Malti Adhin[19], Nanhua Chen[1], James McCarthy[2], Qin Cheng[1]

[1]Australian Army Malaria Institute, Enoggera, Australia, [2]Queensland Institute of Medical Research, Herston, Australia, [3]Western Pacific Regional Office of the World Health Organization, Manila, Philippines, [4]Centers for Disease Control and Prevention, Atlanta, GA, United States, [5]Western Pacific Regional Office of the World Health Organization, Solomon Islands, Solomon Islands, [6]Centre for Clinical Research, Kenya Medical Research Institute, Kisumu, Kenya, [7]College of Medicine, University of Lagos, Odoaraba, Lagos, Nigeria, [8]Hainan Provincial Centre for Disease Control and Prevention, Haikou, Hainan, China, [9]Research Institute for Tropical Medicine, Alabang, Philippines, [10]Bagamoyo/Ifakara Health Research and Development Centre, Ifakara, United Republic of Tanzania, [11]Centro Internacional de Entrenamiento e Investigaciones Medicas, Cali, Colombia, [12]Lower Myanmar Department of Medical Research, Yangon, Myanmar, [13]Mbeya Medical Research Programme, Mbeya, United Republic of Tanzania, [14]Instituto de Medicina Tropical Alexander Von Humboldt, Peru, Peru, [15]Pasteur Institute of Cambodia, Phnom Penh, Cambodia, [16]Institut Pasteur de Bangui, Bangui, The Democratic Republic of the Congo, [17]Institut Pasteur de Madagascar, Madagascar, Madagascar, [18]Evandro Chagas Institute, Belem, Brazil, [19]Anton de Kom Universiteit van Suriname, Paramibo, Suriname

895

COMPARISON OF GENOTYPING USING CAPILLARY VS. GEL ELECTROPHORESIS FOR TWO ANTIMALARIAL DRUG EFFICACY TRIALS IN UGANDA

Vinay Gupta, Grant Dorsey, Philip Rosenthal, Bryan Greenhouse

University of California, San Francisco, San Francisco, CA, United States

100

WORTH ITS WEIGHT IN GOLD - INTERVENOM - A GLOBALLY ACCESSIBLE INTERNET DATABASE TO DOCUMENT AND QUANTIFY THE GLOBAL BURDEN OF MORBIDITY AND MORTALITY FROM SNAKE ENVENOMATION AND TO IMPROVE MANAGEMENT AND OUTCOME

Alexander Kumar[1], Kathy Duong[2]

[1]Royal Sussex County Hospital, Brighton, United Kingdom, [2]Royal Free Hampstead NHS Trust, London, United Kingdom

1045

WHOLE BLOOD ANGIOPOIETIN-1 AND -2 LEVELS DISCRIMINATE CEREBRAL AND SEVERE MALARIA FROM UNCOMPLICATED MALARIA

Andrea L. Conroy[1], Erin I. Lafferty[1], Fiona E. Lovegrove[1], Srivicha Krudsood[2], Noppadon Tangpukdee[2], Sornchai Looareesuwan[2], W. Conrad Liles[3], Kevin C. Kain[3]

[1]McLauglin-Rotman Centre for Global Health, University of Toronto, Toronto, ON, Canada, [2]Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, [3]Tropical Disease Unit, Division of Infectious Diseases, Department of Medicine, University of Toronto, Toronto, ON, Canada

1041

RETINAL ANGIOGRAPHIC CHANGES IN PAEDIATRIC CEREBRAL MALARIA

Simon J. Glover[1], Simon P. Harding[2], Malcolm E. Molyneux[3], Terrie E. Taylor[4], Nicholas A. Beare[5]

[1]College of Medicine, Blantyre, Malawi, [2]University of Liverpool, Liverpool, United Kingdom, [3]Malawi-Liverpool-Wellcome Trust/College of Medicine, Blantyre, Malawi, [4]Blantyre Malaria Project, Blantyre, Malawi, [5]Royal Liverpool University Hospitals Trust, Liverpool, United Kingdom

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MALARIAL RETINOPATHY AND MICROCIRCULATION IN ADULTS WITH CEREBRAL MALARIA

Richard J. Maude[1], Nicholas A. Beare[2], Abdullah A. Sayeed[3], Prakaykaew Charunwatthana[1], M. Abul Faiz[4], Amir Hossain[4], Emran B. Yunus[4], M. Gofranul Hoque[3], Mahtab U. Hasan[3], Nicholas J. White[1], Nicholas P. Day[1], Arjen M. Dondorp[1]

[1]Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand, [2]St Paul's Eye Unit, Royal Liverpool University Hospital, Liverpool, United Kingdom, [3]Chittagong Medical College Hospital, Chittagong, Bangladesh, [4]Malaria Research Group, Chittagong, Bangladesh

345

IMMEDIATE NEUROPSYCHOLOGICAL AND BEHAVIORAL BENEFITS OF COMPUTERIZED COGNITIVE REHABILITATION IN UGANDAN PEDIATRIC CEREBRAL MALARIA SURVIVORS

Paul Bangirana[1], Bruno Giordani[2], Chandy C. John[3], Connie Page[4], Robert O. Opika[1], Michael J. Boivin[4]

[1]Makerere University, Kampala, Uganda, [2]University of Michigan, Ann Arbor, MI, United States, [3]University of Minnesota, Minneapolis, MN, United States, [4]Michigan State University, East Lansing, MI, United States

264

ANALYSIS OF STRAIN TRANSMISSION DURING AN EPIDEMIC OF MULTI-DRUG RESISTANT TUBERCULOSIS AMONG AIDS PATIENTS RECEIVING DIRECTLY OBSERVED THERAPY SHORT-COURSE (DOTS)

Maria-Graciela Hollm-Delgado[1], Fanny Arenas[2], Juliana Cordova[2], Patricia Sheen[2], Carlton A. Evans[3], Eduardo Ticona[4], Robert H. Gilman on behalf of TB Collaborative Group[5]

[1]Université de Montréal, Montréal, QC, Canada, [2]Universidad Peruana Cayetano Heredia, Lima, Peru, [3]Imperial College London, London, United Kingdom, [4]Hospital Dos de Mayo, Lima, Peru, [5]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

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ORGAN SPECIFIC ACCUMULATION AND DISTRIBUTION OF STRUCTURALLY RELATED ANTI-TRYPANOSOMAL COMPOUNDS: A POSSIBLE ROLE IN RENAL TOXICITY

Rachel Beaulieu Goldsmith, Richard R. Tidwell

University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

492

AN UNUSUAL HSP70 PRESENT IN RARE LEISHMANIA VIANNIA ISOLATES FROM PERU

Nicolas Veland[1], Rosa Pacheco[2], Jorge Arevalo[1]

[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Universidad Nacional San Antonio Abad, Cusco, Peru

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IDENTIFICATION OF COLONIZATION FACTOR ANTIGEN IN NON-ENTEROTOXIGENIC *E. COLI* STRAINS

Fulton P. Rivera[1], Maria Bernal[2], Theresa J. Ochoa[1], Rina Meza[2], Francesca Barletta[1], Erik Mercado[1], Maribel Riveros[1], David Cepeda[2], Ryan C. Maves[2], Eric R. Hall[3], Ann-Mari Svennerholm[4], Claudio F. Lanata[5]
[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]United States Naval Medical Research Center Detachment, Lima, Peru, [3]United States Naval Medical Research Center, Silver Spring, MD, United States, [4]Göteburg University, Göteburg, Sweden, [5]Instituto de Investigacion Nutricional, Lima, Peru

1145

HIGH THROUGHPUT GENE EXPRESSION PROFILING OF *SALMONELLA ENTERICA* SEROVAR PARATYPHI A IN THE BLOOD OF BACTEREMIC PATIENTS IN BANGLADESH

Richelle C. Charles[1], Alaullah Sheikh[2], Sean Rollins[1], Jason B. Harris[1], Md. Saruar Bhuiyan[2], Farhana Khanam[2], Archana Bukka[3], Anuj Kalsy[1], Steffen Porwollik[4], W. Abdullah Brooks[2], Regina LaRocque[1], Michael McClelland[4], Tanya Logvinenko[5], Alejandro Cravioto[2], Stephen B. Calderwood[1], James E. Graham[3], Firdausi Qadri[2], Edward T. Ryan[1]
[1]Massachusetts General Hospital, Boston, MA, United States, [2]International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [3]University of Louisville, Louisville, KY, United States, [4]Sidney Kimmel Cancer Center, San Diego, CA, United States, [5]Tufts University Medical Center, Boston, MA, United States

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INHIBITION OF DOWNSTREAM MEDIATORS OF THE TYPE I INTERFERON RESPONSE IN DENGUE VIRUS INFECTED MONOCYTE-DERIVED DENDRITIC CELLS AND BYSTANDER T CELL ACTIVATION

Amanda J. Chase, Freddy A. Medina, Jorge L. Muñoz-Jordán
Dengue Branch, Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention, San Juan, PR, United States

Cyber Cafe

Marriott Foyer
Wednesday, November 18, Noon - 6 p.m.

Speaker Ready Room

Maryland A
Wednesday, November 18, Noon - 6 p.m.

ACAV SIRACA Subcommittee Meeting

Room 8219
Wednesday, November 18, Noon - 2 p.m.

ASTMH Global Health Working Group Meeting

Balcony C
Wednesday, November 18, Noon - 2 p.m.

ACAV SALS Subcommittee Meeting

Room 8219
Wednesday, November 18, 2 p.m. - 3:30 p.m.

ACAV Council Meeting

Room 8219
Wednesday, November 18, 3:30 p.m. - 5:30 p.m.

ACMCIP Council Meeting

Capitol Boardroom
Wednesday, November 18, 3:30 p.m. - 5:30 p.m.

ACME Council Meeting

Room 8217
Wednesday, November 18, 3:30 p.m. - 5:30 p.m.

Clinical Group Council Meeting

Room 8218
Wednesday, November 18, 3:30 p.m. - 5:30 p.m.

Young Investigator Award Committee Meeting

Jackson
Wednesday, November 18, 3:30 p.m. - 5 p.m.

Student Reception

Exhibit Hall B South
Wednesday, November 18, 4 p.m. - 5 p.m.

The ASTMH council invites students, postdoctoral fellows and residents to the student reception. This reception is an opportunity to meet fellow trainees and interact with society leaders.

Plenary Session 1

Opening Plenary Session and Awards Ceremony

Salon 123
Wednesday, November 18, 5:30 p.m. - 7:30 p.m.

CHAIR

Thomas E. Wellems
ASTMH President, Rockville, MD, United States

Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

5:45 p.m.

Human Aspects of Scientific Discovery

Peter Agre
Johns Hopkins University, Baltimore, MD, United States

6:15 p.m.

AWARDS CEREMONY

RICHARD M. TAYLOR AWARD
Announced by Charles Calisher
Colorado State University, Fort Collins, CO, United States

COMMUNICATIONS AWARD
Vivienne Walt
Time Magazine, *Paris, France*
Presented by Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

HONORARY MEMBERS
Brian Greenwood
London School of Hygiene and Tropical Medicine, London, United Kingdom
Ralph Lainson
Instituto Evandro Chagas, Belem, Brazil
Presented by Thomas P. Monath
Kleiner Perkins Caulfiield & Byers, Harvard, MA, United States

HARRY HOOGSTRAAL MEDAL
William Collins
Centers for Disease Control and Prevention, Atlanta, GA, United States
Presented by Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

BAILEY K. ASHFORD MEDAL
Jesus Valenzuela
National Institutes of Health, Rockville, MD, United States
Presented by Jose Ribeiro
National Institutes of Health, Rockville, MD, United States

DONALD MACKAY MEDAL
Jane Cardosa
University Malaysia Sarawak, Kota Samarahan, Malaysia
Presented by Nikos Vasilakis
University of Texas Medical Branch, Galveston, TX, United States

JOSEPH AUGUSTIN LePRINCE MEDAL
Wilbur K. Milhous
University of South Florida, Tampa, FL, United States
Presented by Stephen L. Hoffman
Sanaria, Inc., Rockville, MD, United States

Opening Reception

Exhibit Hall A
Wednesday, November 18, 7:30 p.m. - 9:30 p.m.

Exhibit Hall Open

Exhibit Hall A
Wednesday, November 18, 7:30 p.m. - 9:30 p.m.

Thursday, November 19

Registration

Salon Foyer
Thursday, November 19, 7 a.m. - 5 p.m.

Cyber Cafe

Marriott Foyer
Thursday, November 19, 7 a.m. - 5 p.m.

Speaker Ready Room

Maryland A
Thursday, November 19, 7 a.m. - 6 p.m.

ASTMH Diploma Course Directors Meeting

Room 8212
Thursday, November 19, 7 a.m. - 8 a.m.

Clinical Group Education Curriculum Meeting

Room 8217
Thursday, November 19, 7 a.m. - 8 a.m.

Public Policy and Advocacy Leadership Committee Meeting

Room 8211
Thursday, November 19, 7 a.m. - 8 a.m.

Media Room

Rooms 8228/8229
Thursday, November 19, 7:30 a.m. - 6:30 p.m.

Symposium 2

Global Health Cornerstone Symposium I

Salon 2
Thursday, November 19, 8 a.m. - 9:45 a.m.

This session serves as a cornerstone to a range of symposia focusing on the topic of global health. This year marks the first ASTMH conference that features a formal series of symposia centered around globalization's impact on health, health disparities and global health partnerships. In this session, epidemiological transition will be discussed as it relates to global health. In addition, the economics of the recent rapid growth of development assistance for global health to low-income and middle-income countries will be explored during this session. A lively question and answer period is anticipated following the presenter's remarks.

CHAIR

Michele Barry
Stanford University, Stanford, CA, United States

Claire Panosian
University of California at Los Angeles School of Medicine, Los Angeles, CA, United States

8 a.m.

INTRODUCTION

Michele Barry
Stanford University, Stanford, CA, United States

8:15 a.m.

FROM TROPICAL DISEASE TO HEALTH IN THE TROPICS: A PERSPECTIVE FROM ECONOMICS

Dean Jamison
University of Washington, Seattle, WA, United States

9:05 a.m.

QUESTION AND ANSWER PERIOD

9:20 a.m.

GLOBAL HEALTH WORKING GROUP BUSINESS MEETING

Michele Barry
Stanford University, Stanford, CA, United States

Symposium 3

Diagnostic Tests for Visceral Leishmaniasis: The Next Generation

Delaware A
Thursday, November 19, 8 a.m. - 9:45 a.m.

The current generation of diagnostic tests for visceral leishmaniasis (VL) has significantly improved our ability to make a point of care diagnosis in the ill patient. However, the next generation of tests needs to have improved worldwide diagnostic sensitivity, allow for prognostic information, drug resistance prediction, predict test of cure and assess for transmission potential. This symposium will focus on 1) assessing the state of the art – from LD bodies to rk39, 2) identifying the needs in the field and the indications for the next generation of VL diagnostic tests, 3) Basic science approaches to new antigen discovery and qualification, and 4) new or novel platform technologies to translate best science from the bench to the bedside.

CHAIR

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Ajay Bhatia
IDRI, Seattle, WA, United States

8 a.m.

VL DIAGNOSTIC TESTS: FROM LD BODIES TO RK39

Shyam Sundar
Banaras Hindu University, Varanasi, India

8:25 a.m.

VL DIAGNOSTIC TESTS: THE NEXT GENERATION

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

8:50 a.m.

NEW ANTIGEN DISCOVERY APPROACHES FOR VL

Ajay Bhatia
IDRI, Seattle, WA, United States

9:15 a.m.

NOVEL ISOTHERMAL AMPLIFICATION METHODS FOR THE DIAGNOSIS OF LEISHMANIASIS

Emily R. Adams
Royal Tropical Institute (KIT), Amsterdam, The Netherlands

Symposium 4

The Evolution of Q Fever: Updates on Recent Changes in Epidemiology, Diagnosis, Clinical Manifestations, Treatment, and Follow-Up

Delaware B
Thursday, November 19, 8 a.m. - 9:45 a.m.

Q fever, caused by *Coxiella burnetii*, is an acute febrile illness with worldwide distribution. The disease, once considered a hazard of certain occupations and endemic only in specific geographic areas, has had a resurgence in the past several years. The number of reported cases has been increasing in the U.S. population and in returning travelers with appropriate exposure histories. A significant number of cases have been associated with military conflicts, including in U.S. troops deployed to Iraq and Afghanistan. In addition to an increasing number of reported cases, there have been multiple atypical presentations, resulting in delayed diagnosis and initiation of therapy. The disease is typically diagnosed clinically and then confirmed with serology; however, investigative polymerase chain reaction (PCR) assays are being employed in some settings. Serologic testing, while commercially available, is not necessarily standardized and can have significant inter-and intra-laboratory variation. Chronic disease (specifically endocarditis) can occur after acute infection and recent studies have attempted to identify patients who are at risk for persistent infection. Minor valvulopathy is reported to be a risk factor for chronic infection, and some researchers have recommended prophylactic therapy (12 months of doxycycline and hydroxychloroquine) in these patients in order to prevent endocarditis. Some researchers also recommend periodic serological testing and screening for endocarditis if Phase I IgG titers rise above 1:800. These recommendations are largely based on one institution and their applicability to other patient populations (younger and healthier) remains to be defined. The goal of this symposium is to review the epidemiology, diagnosis, treatment and areas of uncertainty related to Q fever.

CHAIR

Robert Massung
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

Q FEVER: ANOTHER GREAT IMITATOR

Michael W. Ellis
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8:25 a.m.

THE "R"S OF Q FEVER EPIDEMIOLOGY: RISKS, RATES, AND RECONNAISSANCE

Alicia D. Anderson
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:50 a.m.

CLINICAL LABORATORY METHODS AND TESTING STRATEGY FOR ACUTE AND CHRONIC Q FEVER

William L. Nicholson
Centers for Disease Control and Prevention, Atlanta, GA, United States

9:15 a.m.

ISSUES REGARDING LONG-TERM FOLLOW-UP AND PREVENTION OF ENDOCARDITIS FOLLOWING ACUTE Q FEVER

Todd D. Gleeson
National Naval Medical Center, Bethesda, MD, United States

Scientific Session 5

Malaria - Drug Resistance

Virginia AB
Thursday, November 19, 8 a.m. - 9:45 a.m.

CHAIR

Nanhua Chen
Australian Army Malaria Institute, Brisbane, Australia

Richard Eastman
Columbia University, New York, NY, United States

8 a.m.

1

ALTERATIONS IN *PLASMODIUM FALCIPARUM* GENETIC STRUCTURE AFTER INCREASED MALARIA CONTROL EFFORTS IN TWO DISTRICTS OF WESTERN KENYA

Anne M. Vardo-Zalik, Daibin Zhong, Guiyun Yan
University of California at Irvine, Irvine, CA, United States

8:15 a.m.

2

MULTIPLE GENETIC BACKGROUNDS OF THE AMPLIFIED *PLASMODIUM FALCIPARUM* MULTIDRUG RESISTANCE (PFMDR1) GENE AND SELECTIVE SWEEP OF 184F MUTATION IN CAMBODIA

Sumiti Vinayak[1], Md Tauqeer Alam[2], Rithy Sem[3], Naman K. Shah[4], Augustina I. Susanti[5], Pharath Lim[6], Sinuon Muth[3], Jason D. Maguire[5], William O. Rogers[5], Thierry Fandeur[7], John W. Barnwell[2], Ananias A. Escalante[8], Chansuda Wongsrichanalai[5], Frederick Ariey[6], Steven R. Meshnick[4], Venkatachalam Udhayakumar[2]
[1]Atlanta Research and Education Foundation and Malaria Branch, Division of Parasitic Diseases, National Center for Zoonotic Vector Borne and Enteric Diseases, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Malaria Branch, Division of Parasitic Diseases, National Center for Zoonotic Vector Borne and Enteric Diseases, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]National Malaria Center, Phnom Penh, Cambodia, [4]Department of Epidemiology, University of North Carolina School of Public Health, Chapel Hill, NC, United States, [5]United States Naval Medical Research Unit No. 2, Jakarta, Indonesia, [6]Institut Pasteur in Cambodia, Phnom Penh, Cambodia, [7]Institut Pasteur, Unité d'Immunologie Moléculaire des Parasites, Paris, France, [8]School of Life Sciences, Arizona State University, Tempe, AZ, United States

8:30 a.m.

3

COPY NUMBER VARIATION AND POINT MUTATIONS IN PFMDR1 IN *PLASMODIUM FALCIPARUM* ISOLATES FROM VENEZUELA

Tonya Mixson-Hayden[1], Sean Griffing[1], Luke Syphard[1], Sankar Sridaran[1], Andrea McCollum[1], Sumiti Vinayak[1], Leopoldo Villegas[2], John Barnwell[1], Ananias A. Escalante[3], Venkatachalam Udhayakumar[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Asociación Civil Impacto Social, Tumeremo, Venezuela, [3]Arizona State University, Tempe, AZ, United States

8:45 a.m.

4

SULFADOXINE-PYRIMETHAMINE, SULFADOXINE-PYRIMETHAMINE + ARTESUNATE, AND AL FOR UNCOMPLICATED MALARIA INFECTION IN TANZANIA FROM 2004 TO 2006

Julie R. Gutman[1], Abdunoor Mulokozi[2], Deborah Sumari[2], Allan Malisa[2], Peter B. Bloland[3], S. Patrick Kachur[3], Salim Abdulla[2], John R. MacArthur[3]
[1]Centers for Disease Control and Prevention and Emory University, Atlanta, GA, United States, [2]Ifakara Health Research and Development Centre, Dar-es-Salaam, United Republic of Tanzania, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

9 a.m.

5

IN VITRO* SELECTION OF PIPERAQUINE RESISTANT *PLASMODIUM FALCIPARUM

Richard T. Eastman[1], Neekesh V. Dharia[2], Elizabeth A. Winzeler[2], David A. Fidock[1]
[1]Columbia University, New York, NY, United States, [2]The Scripps Research Institute, La Jolla, CA, United States

9:15 a.m.

6

FREQUENT CHROMOSOMAL REARRANGEMENT IN *PLASMODIUM FALCIPARUM* RESISTANT TO ARTELINIC ACID *IN VITRO*

Nanhua Chen[1], Marina Chavchich[1], Michelle Gatton[2], Dennis E. Kyle[3], Qin Cheng[1]
[1]Australian Army Malaria Institute, Brisbane, Australia, [2]Queensland Institute of Medical Research, Brisbane, Australia, [3]University of South Florida, Tampa, FL, United States

9:30 a.m.

7

LARGE GENETIC POLYMORPHISM OF THE *PLASMODIUM FALCIPARUM* NA+/H+ EXCHANGER (PFNHE-1) AND ITS ASSOCIATION WITH QUININE RESISTANCE

Stéphane Pelleau[1], Lionel Bertaux[1], Sébastien Briolant[1], Michael T. Ferdig[2], Véronique Sinou[3], Bruno Pradines[1], Jacques Lebras[4], Frédéric Ariey[5], Daniel Parzy[1], Ronan Jambou[6]
[1]Institut de Médecine Tropicale du Service de Santé des Armées, Marseille, France, [2]University of Notre Dame, Notre Dame, IL, United States, [3]Université de la Méditerranée, Marseille, France, [4]Université Paris Descartes, Paris, France, [5]Institut Pasteur du Cambodge, Phnom Penh, Cambodia, [6]Institut Pasteur, Paris, France
(ACMCIP Abstract)

Scientific Session 6

Ectoparasite-Borne Diseases

Virginia C
Thursday, November 19, 8 a.m. - 9:45 a.m.

CHAIR

Jennifer M. Anderson
National Institutes of Health, Rockville, MD, United States

Yvette Girard
University of California - Berkeley, Berkeley, CA, United States

8 a.m.

8

ROLE OF ELEVATED TRANSCRIPTION OF GLUTATHIONE S-TRANSFERASES (GSTS) IN PYRETHROID RESISTANT SCABIES MITES

Cielo Pasay[1], Kate Mounsey[1], Larry Arlian[2], Marjorie Morgan[2], Deborah Holt[3], Bart Currie[4], Shelley Walton[3], James McCarthy[1]
[1]Queensland Institute of Medical Research, Brisbane, QLD, Australia, [2]Wright State University, Dayton, OH, United States, [3]Menzies School of Health Research, Darwin, Northern Territory, Australia, [4]Flinders University, Darwin, Northern Territory, Australia

8:15 a.m.

9

UNIQUE POPULATION STRUCTURE OF *BORRELIA BURGDORFERI* IN THE WESTERN BLACK-LEGGED TICK *(IXODES PACIFICUS)* IN NORTHERN CALIFORNIA

Yvette A. Girard[1], Bridgit Travinsky[2], Anna Schotthoefer[3], Natalia Fedorova[1], Rebecca J. Eisen[3], Lars Eisen[4], Alan G. Barbour[2], Robert S. Lane[1]
[1]University of California - Berkeley, Berkeley, CA, United States, [2]University of California - Irvine, Irvine, CA, United States, [3]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [4]Colorado State University, Fort Collins, CO, United States

8:30 a.m.

10

PREDICTED EFFECTS OF HOST RESERVOIR-TARGETED VACCINATION ON LYME DISEASE RISK

Kimberly Tsao, Durland Fish, Alison Galvani
Yale University, New Haven, CT, United States

8:45 a.m.

11

TICK BORNE RELAPSING FEVER IN MALI

Jennifer M. Anderson[1], Job Lopez[2], Nafomon Sogoba[3], Merry E. Schrumpf[2], Sandra J. Raffel[2], Tom G. Schwan[2]
[1]National Institutes of Health, Rockville, MD, United States, [2]National Institutes of Health, Hamilton, MT, United States, [3]Malaria Research and Training Center, Bamako, Mali

9 a.m.

12

REDUCED GENE FLOW BETWEEN DOG TICK DEMES ON MARTHA'S VINEYARD AS A BASIS FOR INSULAR METAPOPULATION STRUCTURE OF *FRANCISELLA TULARENSIS*

Heidi K. Goethert[1], Benjamin M. Rosenthal[2], Sam R. Telford, III[1]
[1]Tufts University School of Veterinary Medicine, N. Grafton, MA, United States, [2]United States Department of Agriculture, Beltsville, MD, United States

9:15 a.m.

13

***RICKETTSIA RICKETTSII* IN LONE STAR TICKS FROM KANSAS**

Zenda L. Berrada, Sam R. Telford, III
Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States

9:30 a.m.

14

IMPROVEMENT OF SEROLOGICAL ASSAYS FOR RICKETTSIAL AND RICKETTSIAL RELATED DISEASES BY RECOMBINANT ANTIGENS

Wei-Mei Ching, Hua-Wei Chen, Chien-Chung Chao, Erin Huber, Erin G. Glennon, Margarita T. Esteban, Zhiwen Zhang
Naval Medical Research Center, Silver Spring, MD, United States

Symposium 7

Newly Described Mosquito-Specific Flaviviruses: Geographic Distribution, Genetic Relatedness and Potential Role for Augmentation of Heterologous Infections

Washington 1
Thursday, November 19, 8 a.m. - 9:45 a.m.

Cell fusing agent virus (CFAV) was discovered in an *Aedes aegypti* cell line in the mid 1970s and for decades remained the sole known representative in a novel lineage of mosquito-specific flaviviruses within the family Flaviviridae. More than 25 years later, a similar mosquito-specific flavivirus, Kamiti River virus (KRV), was isolated from *Aedes macintoshi* mosquitoes in Kenya. Within the last few years, the study of mosquito-specific flaviviruses has exploded, with the discovery and characterization of numerous virus isolates related to CFAV and KRV from a diversity of culicine mosquito species around the world. This cosmopolitan clade of newly-recognized viruses has prompted many questions regarding the evolution of vector-borne flaviviruses, as well as the natural history and potential impact of mosquito-specific flaviviruses on the transmission efficiency of arboviruses of public health importance. Topics that will be discussed in this symposium include the discovery, growth, transmission mechanisms, geographic distribution and prevalence, genetic diversity, and host range of mosquito-specific flaviviruses, including KRV and western hemispheric Culex flaviviruses (CxFV) isolated from Canada to Guatemala. The potential for these viruses to modulate the transmission of West Nile virus will also be addressed. A closing discussion among the presenters and audience regarding research findings to date and future research directions for this field will be invited.

CHAIR

Rebekah J. Kent
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Aaron Brault
Centers for Disease Control and Prevention, Fort Collins, CO, United States

8 a.m.

HOW A CHANCE OBSERVATION LED TO THE DISCOVERY AND FIRST DESCRIPTION OF A MOSQUITO FLAVIVIRUS

Victor Stollar
Robert Wood Johnson Medical School, Piscataway, NJ, United States

8:25 a.m.

DISTRIBUTION AND GENETIC RELATEDNESS OF MOSQUITO-SPECIFIC FLAVIVIRUSES: FROM CANADA TO CALIFORNIA

Michael Drebot
National Microbiology Laboratory, Winnipeg, MB, Canada

8:50 a.m.

DYNAMICS OF AN INSECT-ONLY FLAVIVIRUS IN A NATURALLY INFECTED MOSQUITO COLONY

Bethany Bolling
Colorado State University, Fort Collins, CO, United States

9:15 a.m.

CHARACTERIZATION OF KAMITI RIVER VIRUS AND CULEX FLAVIVIRUS (CXFV) IZABAL STRAIN INFECTION IN MOSQUITOES, AND EFFECT OF CXFV INFECTION ON VECTOR COMPETENCE FOR WEST NILE VIRUS

Rebekah J. Kent
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Symposium 8

ACMCIP (American Committee of Molecular, Cellular and Immunoparasitology) Symposium: "Express Yourself": Strategies Used By Parasites to Regulate Genes

Supported with funding from The Burroughs Wellcome Fund

Washington 2

Thursday, November 19, 8 a.m. - 9:45 a.m.

Parasites use a variety of strategies to regulate genes. This symposium will explore some of the mechanisms employed by parasites to govern gene expression, such as regulating transcription and post-transcriptional processes.

CHAIR

Sarah K. Volkman
Harvard School of Public Health, Boston, MA, United States

Rick Fairhurst
National Institutes of Health, Bethesda, MD, United States

8 a.m.

EXPLORING TRANSCRIPTIONAL REGULATION IN *PLASMODIUM FALCIPARUM*

Manuel Llinas
Princeton University, Princeton, NJ, United States

8:35 a.m.

DEEP SEQUENCING OF SMALL AND LARGE TRANSCRIPTS REVEALS NOVEL ASPECTS OF RNA BIOLOGY IN *TRYPANOSOMA BRUCEI*

Elisabetta Ullu
Yale University, New Haven, CT, United States

9:10 a.m.

GENE REGULATION IN *ENTAMOEBA HISTOLYTICA*

Upinder Singh
Stanford University, Palo Alto, CA, United States

Symposium 9

Eliminating Transmission of *Schistosoma japonicum* in China: Opportunities and Challenges

Washington 3

Thursday, November 19, 8 a.m. - 9:45 a.m.

The past decades have witnessed China's overall success in combating schistosomiasis. In the 1950s, over 10 million people were infected in 12 provinces. A national control program was instituted in the 1950s and a cascade of control activities followed, resulting in a reduction of human cases to less than one 1 million in the early 2000s and transmission elimination in five provinces. The extensive control programs were suspended in the early 2000s until the outbreak of SARS in China prompted the government to launch a broad-scale campaign against major infectious diseases, including schistosomiasis. Control efforts toward schistosomiasis have been beefed up since then and further fueled by the passage of unprecedented Statute of Schistosomiasis Control by the State of Department of China in 2005. The implementation of such integrated programs has yielded great reward – transmission control of *S. japonicum* has been widely achieved in Sichuan province in 2008, marking a milestone in the history of schistosomiasis control in China. An ambitious proposal has been laid out – to eliminate transmission of the parasite in Sichuan and Yunnan provinces by 2015, and to expand the success to the rest of country to achieve transmission control at the same year. However, public health authorities in China have recognized challenges facing them in trying to achieve this goal. For example, there is a growing concern about re-emergence of schistosomiasis in areas where transmission control was previously achieved. In parallel with these control activities has been tremendous research work covering a wide range of areas by both domestic and international researchers. Research activities have evolved with an increasing understanding of the disease and control stages. The presentations in this session are based on previous and ongoing research and control work, and will share experiences and lessons learned from the work in China.

CHAIR

Xiao-nong Zhou
National Institute of Parasitic Disease, Chinese Center for Disease Control and Prevention, Shanghai, China

Song Liang
The Ohio State University, Columbus, OH, United States

8 a.m.

ELIMINATING TRANSMISSION OF *SCHISTOSOMA JAPONICUM* IN CHINA – OPPORTUNITY, CHALLENGES, AND FIELD EXPERIENCES

Xiao-nong Zhou
National Institute of Parasitic Disease, Chinese Center for Disease Control and Prevention, Shanghai, China

8:30 a.m.

EPIDEMIOLOGIC EVIDENCE AND MODELING OF HYDROLOGIC AND SOCIAL FACTORS ASSOCIATED WITH SUSTAINED *SCHISTOSOMA JAPONICUM* INFECTION

Edmund Seto
University of California at Berkeley, Berkeley, CA, United States

8:55 a.m.

UNDERSTANDING SCHISTOSOME SPREAD: ANALYTICAL METHODS FOR QUANTIFYING THE ROLE OF ENVIRONMENTAL PHENOMENA IN THE SPREAD AND CONTROL OF *S. JAPONICUM*

Justin Remais
Emory University, Atlanta, GA, United States

9:20 a.m.

LINKING REMOTE SENSING AND SCHISTOSOMIASIS TRANSMISSION USING BAYESIAN SPATIAL STATISTICS IN CHINA

Guo-Jing Yang
Jiangsu Institute of Parasitic Diseases, Wuxi, China

Scientific Session 10

Mosquitoes - Vector Biology - Epidemiology I

Washington 4

Thursday, November 19, 8 a.m. - 9:45 a.m.

CHAIR

Theodore G. Andreadis
The Connecticut Agricultural Experiment Station, New Haven, CT, United States

Peter Armbruster
Georgetown University, Washington, DC, United States

8 a.m.

15

MOLECULAR PHYSIOLOGY OF THE DIAPAUSE PROGRAM IN THE ASIAN TIGER MOSQUITO, *AEDES ALBOPICTUS*

Peter Armbruster[1], Jennifer Urbanski[1], M. Robert Michaud[2], Joshua Benoit[2], David L. Denlinger[2]
[1]Georgetown University, Washington, DC, United States, [2]The Ohio State University, Columbus, OH, United States

8:15 a.m.

16

EVIDENCE FOR COMPETITIVE REDUCTION OF NATIVE MOSQUITOES IN THE NORTHEASTERN UNITED STATES BY THE INVASIVE EXOTIC SPECIES, *OCHLEROTATUS JAPONICUS* JAPONICUS (DIPTERA: CULICIDAE)

Theodore G. Andreadis[1], Roger J. Wolfe[2]
[1]The Connecticut Agricultural Experiment Station, New Haven, CT, United States, [2]Connecticut Department of Environmental Protection, North Franklin, CT, United States

8:30 a.m.

17

VARIATIONS IN RESTING PATTERNS OF *AEDES AEGYPTI* IN RESPONSE TO MATERIAL TEXTURE AND COLOR USING EXPERIMENTAL HUTS

Krajana Tainchum[1], Suppaluck Polsomboon[1], Sungsit Sungvornyothin[2], Wannapa Suwonkerd[3], Nicole Achee[4], John Grieco[4], Theeraphap Chareonviriyaphap[1]
[1]Kasetsart University, Bangkok, Thailand, [2]Mahidol University, Bangkok, Thailand, [3]Office of Disease Prevention and Control No.10, Ministry of Public Health, Chiang Mai, Thailand, [4]Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8:45 a.m.

18

UNEXPECTED ANTHROPOPHILY IN THE POTENTIAL MALARIA VECTORS *ANOPHELES COUSTANI* AND *ANOPHELES SQUAMOSUS* IN MACHA, ZAMBIA

Laura C. Norris[1], Christen M. Fornadel[1], Shadreck Habbanti[2], Mulenga Musapa[2], Jessica Hollingsworth[1], Douglas E. Norris[1]
[1]Johns Hopkins School of Public Health, Baltimore, MD, United States, [2]Malaria Institute at Macha, Macha, Zambia

9 a.m.

19

ANALYSIS OF *ANOPHELES ARABIENSIS* BLOOD FEEDING BEHAVIOR IN SOUTHERN ZAMBIA DURING THE TWO YEARS FOLLOWING THE INTRODUCTION OF INSECTICIDE TREATED BED NETS

Christen M. Fornadel[1], Shadreck Habbanti[2], Laura C. Norris[1], Douglas E. Norris[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Malaria Institute at Macha, Choma, Zambia

9:15 a.m.

20

ANTHROPOPHILY OF SERGENTOMYIA SPECIES IN A LEISHMANIASIS OUTBREAK AREA IN THE HO DISTRICT OF GHANA

Kwame Desewu[1], Shirley C. Odoom[1], Naiki Puplampu[1], Greg Raczniak[2], Karl Kronmann[2], Millicent Cobblah[3], Maxwell Appawu[1], Michael D. Wilson[1], Daniel A. Boakye[1]
[1]Noguchi Memorial Institute for Medical Research, Legon, Accra, Ghana, [2]United States NAMRU 3/Noguchi Memorial Institute for Medical Research, Legon, Accra, Ghana, [3]Department of Zoology, University of Ghana, Legon, Accra, Ghana

9:30 a.m.

21

IDENTIFICATION OF A NATURAL POPULATION OF HYBRIDS BETWEEN TAXONOMIC GROUPS OF *TRIATOMA DIMIDIATA* IN THE YUCATAN PENINSULA, MEXICO, AND ITS EPIDEMIOLOGICAL IMPORTANCE

Melba Herrera-Aguilar[1], Leobardo Be-Barragan[1], Maria Jesus Ramirez-Sierra[1], Frederic Tripet[2], Patricia Dorn[3], **Eric Dumonteil**[4]
[1]Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico, [2]Keele University, Newcastle, United Kingdom, [3]Loyola University New Orleans, New Orleans, LA, United States, [4]Tulane University, New Orleans, LA, United States

Symposium 11

National Institutes of Health and Tropical Medicine: Supporting International Research and Career Development - Part I

Washington 5
Thursday, November 19, 8 a.m. - 9:45 a.m.

This symposium, organized by the ASTMH Education Committee in collaboration with the National Institutes of Health, is designed to educate young investigators, including graduate students, post-doctoral fellows, MD/PhD students, clinicians interested in research and others in the structure of NIH, the review process and grantsmanship in order to maximize the chances of obtaining competitive funding.

CHAIR

Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

Adriana Costero
National Institutes of Health, Bethesda, MD, United States

8 a.m.

PUBLIC AND SCIENTIFIC ACCOUNTABILITY: HOW WILL YOU MEASURE UP IN THE FUTURE?

John J. McGowan
National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

8:25 a.m.

REFLECTIONS ON NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES AND THE HISTORY OF TROPICAL MEDICINE

David M. Morens
National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

8:50 a.m.

NATIONAL INSTITUTES OF HEALTH RESEARCH OPPORTUNITIES AND PRIORITIES FOR HIV-ASSOCIATED CO-INFECTIONS

Robert W. Eisinger
National Institutes of Health, Bethesda, MD, United States

9:15 a.m.

IDENTIFYING RESEARCH FUNDING OPPORTUNITIES

Patricia Haggerty
National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

Symposium 12

The *Ixodes* Genome Project and Advances in Tick Genome Research

Wilson AB
Thursday, November 19, 8 a.m. - 9:45 a.m.

Ticks in the family *Ixodidae* (hard ticks) transmit the greatest variety of pathogens of any invertebrate vector and are second only to mosquitoes as vectors of human disease. In the U.S., the Lyme disease tick, *Ixodes scapularis*, transmits the causative agents of Lyme disease, babesiosis, and human granulocytic anaplasmosis. The *I. scapularis* genome was recently sequenced to 3.8 fold coverage with funding from the National Institutes of Health (NIH). This project is the first to sequence a medically significant tick species and a member of the subphylum *Chelicerata*. Genome data are proving a powerful resource for tick-borne-disease research and comparative evolutionary analyses. The goals of this symposium are two-fold, namely a) to publicize this landmark achievement to the broader scientific research community, and b) showcase some of the exciting new scientific advances made possible by this project. Many of these advances are helping scientists to address age-old questions in tick research and may ultimately lead to new approaches for control of tick-borne diseases. This symposium will highlight several research areas spawned by the *I. scapularis* genome project, including studies of genome organization and evolution, chromosome biology and population genetics. The genome of a rickettsial endosymbiont from *I. scapularis* was also assembled as part of the tick genome project. The symposium will feature comparative genome studies that suggest that this endosymbiont is a member of a novel sub-group within the genus *Rickettsia*. This event is timely as it is expected to coincide with the publication of multiple genome manuscripts. It will also set the stage for strategic planning efforts to generate recommendations for additional community driven tick genome sequencing initiatives. This symposium is expected to have broad appeal to scientists interested in ticks, tick-borne diseases and tick-endosymbiont interactions.

CHAIR

Catherine A. Hill
Purdue University, West Lafayette, IN, United States

Vishvanath Nene
International Livestock Research Institute, Nairobi, Kenya

8 a.m.

ASSEMBLY AND ANNOTATION OF THE GENOME OF THE LYME DISEASE TICK, *IXODES SCAPULARIS*

Ewen Kirkness
J. Craig Venter Institute, Rockville, MD, United States

8:30 a.m.

GENOME ORGANIZATION AND EVOLUTION OF THE *IXODIDAE*

Jason Meyer
Purdue University, West Lafayette, IN, United States

8:55 a.m.

GENOME ANALYSIS OF THE RICKETTSIAL ENDOSYMBIONT FROM *IXODES SCAPULARIS:* GENOME EXPANSION VIA EXTREME TRANSPOSITION AND A PROLIFERATED CONJUGATION SYSTEM

Joseph Gillespie
Virginia Bioinformatics Institute, Blacksburg, VA, United States

9:20 a.m.

***IXODES* POPULATION GENETICS AND EVOLUTIONARY GENOMICS OF TICK-MICROBE INTERACTIONS**

Joyce Sakamoto
Institute for Genome Sciences, Baltimore, MD, United States

Exhibit Hall Open

Exhibit Hall A
Thursday, November 19, 9:30 a.m. - 10:30 a.m.

Coffee Break

Exhibit Hall A
Thursday, November 19, 9:45 a.m. - 10:15 a.m.

Supported with funding from SCYNEXIS, Inc.

Poster Session A Set-Up

Exhibit Hall B South
Thursday, November 19, 9:45 a.m. - 10:15 a.m.

Poster Session A Viewing

Exhibit Hall B South
Thursday, November 19, 10:15 a.m. - Noon

Symposium 13

The Global Financial Crisis and Global Health

Salon 2
Thursday, November 19, 10:15 a.m. - Noon

The speakers will present their analyses of the impact that the downturn in the world economy is having on health programs worldwide, specifically on the control of malaria, HIV, TB and childhood vaccination. One presenter will explain the approach of the Gates Foundation to possible reduction in funds available for the malaria programs it supports. Impacts are expected on child survival, vaccine production and research on new drugs and vaccines, and health program support to needy countries. Projections of morbidity and mortality for the next decades will have to be revised. These effects will be set against possible positive results on health of the downturn, such as reduction in atmospheric pollution due to reduced industrial and motor vehicle emissions.

CHAIR

Jack Woodall
Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

10:15 a.m.

THE IMPACT OF THE GLOBAL ECONOMIC CRISIS ON FINANCING OF MALARIA CONTROL AND RESEARCH

Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Program in Africa (MACEPA), Seattle, WA, United States

10:40 a.m.

MALARIA FUNDING IN THE GATES FOUNDATION: A VICTIM OF ITS OWN SUCCESS

David Brandling-Bennet
Bill & Melinda Gates Foundation, Seattle, WA, United States

11:05 a.m.

THE IMPACT OF REDUCED GLOBAL FUNDING ON THE AIDS AND TB PANDEMICS

James Chin
University of California at Berkeley, Berkeley, CA, United States

11:30 a.m.

NEW VACCINES IN DEVELOPING COUNTRIES: WILL IT BE FEAST OR FAMINE?

Jon Andrus
Pan American Health Organization, Washington, DC, United States

Symposium 14

New Drugs against Human African Trypanosomiasis and Visceral Leishmaniasis - Activities of the Consortium for Parasitic Drug Development

Delaware A
Thursday, November 19, 10:15 a.m. - Noon

The mission of the non-profit Consortium for Parasitic Drug Development (CPDD) is to discover and develop new treatments for human African trypanosomiasis (HAT or sleeping sickness) and visceral leishmaniasis. These diseases threaten nearly half the world's population and cause massive disability, death and economic loss. Led by the University of North Carolina at Chapel Hill, the CPDD also benefits from the participation of numerous academic, public, and private partner institutions. The initial efforts of the CPDD were focused on the development of the diamidine prodrug DB289 (pafuramidine) as an oral agent for the treatment of first stage HAT. Through the efforts of CPDD partners, DB289 progressed through Phase I, II, and III trials, with the HAT trials being conducted under challenging conditions in central Africa (mainly in the Democratic Republic of the Congo). While diamidines remain a focus area for the CPDD, other classes of compounds are now being considered as candidates for second stage HAT and VL. The symposium will update the status of DB289 and will also discuss the various discovery and development efforts that are currently in progress.

CHAIR

Karl Werbovetz
The Ohio State University, Columbus, OH, United States

Richard Tidwell
The University of North Carolina School of Medicine, Chapel Hill, NC, United States

10:15 a.m.

CLINICAL EXPERIENCES WITH DB289

Carol Olson
Consortium for Parasitic Drug Development, Chapel Hill, NC, United States

10:45 a.m.

DEVELOPMENT OF CPD-0801 AS A CANDIDATE FOR SECOND STAGE HAT

James E. Hall
The University of North Carolina, Chapel Hill, NC, United States

11:10 a.m.

ARYLIMIDAMIDES – REVERSING THE LIMITATIONS OF DIAMIDINES AGAINST LEISHMANIASIS

Karl Werbovetz
The Ohio State University, Columbus, United States

11:35 a.m.

LOOKING AHEAD – NEW CANDIDATES FOR THE TREATMENT OF HAT AND VL

Michael Barrett
University of Glasgow, Glasgow, United Kingdom

Symposium 15

Mathematical Models to Support Malaria Control and Elimination

Delaware B
Thursday, November 19, 10:15 a.m. - Noon

Some of the first mathematical models for infectious disease transmission were developed by Ross as he organized a malaria control program in Mauritius. Subsequently, during the Global Malaria Eradication Program (1955-1969), Macdonald extended these models and integrated the ideas into the design and interpretation of outcomes. More recently, and with the availability of computing technologies, a range of different models have been developed to understand key features of malaria dynamics and to explore the impact of interventions on control of the parasite. This symposium will provide an overview of some of the ways in which models are currently being used to inform the fight against malaria in a form that is accessible to those with no technical background.

CHAIR

Azra Ghani
Imperial College London, London, United Kingdom

David L. Smith
University of Florida, Gainsville, FL, United States

10:15 a.m.

LEARNING FROM THE PAST: APPLICATIONS TO ELIMINATION IN ZANZIBAR

David L. Smith
University of Florida, Gainesville, FL, United States

10:35 a.m.

SETTING THE AGENDA: HOW MODELS CAN HELP TO IDENTIFY APPROPRIATE STRATEGIES

Azra Ghani
Imperial College London, London, United Kingdom

10:55 a.m.

TACKLING CURRENT PROBLEMS: MODELLING MALARIA ELIMINATION IN CAMBODIA

Richard Maude
Mahidol University, Bangkok, Thailand

11:15 a.m.

TACKLING CURRENT PROBLEMS: CONTEXT-SPECIFIC EFFECTS OF INTERVENTIONS

Phillip Eckhoff
Intellectual Ventures, Bellevue, WA, United States

11:40 a.m.

LOOKING TO THE FUTURE: COMBINING OLD AND NEW INTERVENTIONS

Nakul Chitnis
Swiss Tropical Institute, Basel, Switzerland

Scientific Session 16

Malaria - Chemotherapy

Virginia AB
Thursday, November 19, 10:15 a.m. - Noon

CHAIR

Yeka Adoke
Uganda Malaria Surveillance Project, Kampala, Uganda

Patrice Piola
Epicentre, London, United Kingdom

10:15 a.m.

22

EFFECTS OF INCREASING ARTESUNATE DOSE IN SEVEN-DAY MONOTHERAPY REGIMENS ON TREATMENT RESPONSE IN CAMBODIAN PATIENTS WITH UNCOMPLICATED *FALCIPARUM* MALARIA

Youry Se[1], Chanthap Lon[1], Duong Socheat[2], **Delia Bethell**[1], Sabaithip Sriwichai[1], David Saunders[1], Stuart Tyner[1], Sea Darapiseth[2], Phisit Khemawoot[1], Jessica Lin[1], Sok Poeu[2], Ses Sarim[3], Ans Timmermans[1], Wiriya Rutvisuttinunt[1], Paktiya Teja-Isavadharm[1], Kurt Schaecher[1], Bryan Smith[1], Mark Fukuda[1]
[1]Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand, [2]Center for Parasitology, Entomology and Malaria Control, Pnom Penh, Cambodia, [3]Tasanh Health Center, Samlot, Cambodia

10:30 a.m.

23

EFFICACY OF THREE DIFFERENT REGIMENS OF PRIMAQUINE FOR THE PREVENTION OF RELAPSES OF *PLASMODIUM VIVAX* MALARIA IN THE AMAZON BASIN OF PERU

Salomon Durand[1], Cesar Cabezas[2], Carlos Alvares Antonio[3], Mariella Galves Montoya[3], Carmen Montalvan[3], Andrea McCollum[4], Valeria Soberon[1], Venkatachalam Udhayakumar[4], Carmen M. Lucas[1], **Paul C. Graf**[1], David J. Bacon[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]National Health Institute (INS), Lima, Peru, [3]Regional Health Directorate of Loreto, Iquitos, Peru, [4]Centers for Disease Control and Prevention, Atlanta, GA, United States

10:45 a.m.

24

MEASURING PREVENTATIVE DRUG EFFICACY OF SULFADOXINE/PYRIMETHAMINE (SP) PLUS ARTESUNATE (ART) THREE DAYS IN THE CONTEXT OF AN INTERMITTENT PREVENTATIVE TREATMENT IN INFANT (IPTI) STUDY IN PAPUA NEW GUINEA

Nicolas Senn[1], Celine Barnadas[2], Michele Senn[3], Doris Manong[3], Ivo Mueller[2]
[1]Swiss Tropical Institute, Basel, Switzerland, [2]PNG Institute of Medical Research, Goroka, Papua New Guinea, [3]PNG Institute of Medical Research, Madang, Papua New Guinea

11 a.m.

25

THE BEST APPROACH TO RETREATING PATIENTS WITH RECURRENT MALARIA IN THE ERA OF ARTEMISININ BASED COMBINATION THERAPY

Yeka Adoke[1], Ambrose O. Talisuna[1], Umberto D'Alessandro[2]
[1]Uganda Malaria Surveillance Project, Kampala, Uganda, [2]Institute of Tropical Medicine, Antwerp, Belgium

11:15 a.m.

26

EFFICACY AND SAFETY OF QUININE VS. ARTEMETHER-LUMEFANTRINE IN UNCOMPLICATED MALARIA DURING PREGNANCY, MBARARA, UGANDA

Patrice Piola[1], Carolyn Nabasumba[2], Eleanor Turyakira[2], Mehul Dhorda[2], Carole Fogg[3], Georges Snounou[4], Elizabeth Ashley[5], Karen I. Barnes[6], Rose McGready[7], François Nosten[7], Philippe J. Guerin[8]
[1]Epicentre, Paris, France, [2]Epicentre, Mbarara, Uganda, [3]Drug Safety Research Unit, Southampton, United Kingdom, [4]INSERM UMR S 945, Paris, France, [5]Imperial College NHS Trust, London, United Kingdom, [6]Cape Town University, Cape Town, South Africa, [7]Shoklo Malaria Research Unit, Tak, Thailand, [8]WWARN, Oxford, United Kingdom

11:30 a.m.

27

EPOIETIN BETA-QUININE DRUG COMBINATION IN CHILDREN WITH CEREBRAL MALARIA

Stephane Picot[1], Anne-Lise Bienvenu[1], Salimata Konate[2], Sibiri Sissoko[2], Abdoulaye Barry[2], Elisabeth Diarra[2], Karidiatou Bamba[2], Abdoulaye Djimde[2], Ogobara Doumbo[2]
[1]Malaria Research Unit, University Lyon 1, Lyon, France, [2]Malaria Research and Training Center, University of Bamako, Bamako, Mali

11:45 a.m.

28

MASS DRUG ADMINISTRATION: IS IT NECESSARY FOR MALARIA ELIMINATION?

Michelle L. Gatton[1], Qin Cheng[2]
[1]Queensland Institute of Medical Research, Herston, Australia, [2]Australian Army Malaria Institute, Brisbane, Australia

Symposium 17

Rickettsioses in Asia - Recent Developments

Virginia C
Thursday, November 19, 10:15 a.m. - Noon

The symposium will present new and exciting information on the epidemiology and pathophysiology of scrub and murine typhus in Asia, on the rediscovery of sennetsu and on molecular markers of drug resistance in *Rickettsia* and *Orientia* species.

CHAIR

Paul Newton
University of Oxford, Oxford, United Kingdom

Nicholas Day
University of Oxford, Oxford, United Kingdom

10:15 a.m.

EPIDEMIOLOGY OF RICKETTSIAL INFECTIONS IN LAOS

Rattanaphone Phetsouvanh
Microbiology Laboratory, Vientiane, Lao People's Democratic Republic

10:40 a.m.

NEORICKETTSIA SENNETSU IN LAOS

Paul Newton
Mahosot Hospital, Vientiane, Lao People's Democratic Republic

11:05 a.m.

THE COMPARATIVE PATHOPHYSIOLOGY OF SCRUB AND MURINE TYPHUS

Daniel Paris
Mahidol University, Bangkok, Thailand

11:30 a.m.

MOLECULAR TARGETS OF ANTIBIOTIC RESISTANCE IN RICKETTSIAL INFECTIONS

Jean-Marc Rolain
University of Marseille, Marseille, France

Scientific Session 18

Flavivirus - Dengue I

Washington 1
Thursday, November 19, 10:15 a.m. - Noon

CHAIR

Aravinda M. de Silva
University of North Carolina School of Medicine, Chapel Hill, NC, United States

Allison Imrie
University of Hawaii at Manoa, Honolulu, HI, United States

10:15 a.m.

29

THE LENGTH AND NON-HYDROPHOBIC RESIDUES IN THE TRANSMEMBRANE DOMAIN OF DENGUE VIRUS ENVELOPE PROTEIN CRITICAL FOR RETENTION AND ASSEMBLY IN ENDOPLASMIC RETICULUM

Wei-Kung Wang[1], Szu-Chia Hsieh[2], Wen-Yang Tsai[2]
[1]University of Hawaii at Manoa, Honolulu, HI, United States, [2]Institute of Microbiology, College of Medicine, National Taiwan University, Taipei, Taiwan
(ACMCIP Abstract)

10:30 a.m.

30

IMMUNODOMINANCE IN DENGUE VIRUS INFECTION

Allison Imrie[1], Munkhzul Sukhbaatar[2], Janet Meeks[2], Claudine Roche[3], Van-Mai Cao-Lormeau[3]
[1]University of Western Australia, Perth, Australia, [2]University of Hawaii at Manoa, Honolulu, HI, United States, [3]Institut Louis Malardé, Papeete, French Polynesia

10:45 a.m.

31

DISSECTING THE POLYCLONAL HUMAN ANTIBODY RESPONSE TO DENGUE VIRUS

Aravinda M. de Silva, WMPB Wahala, Adamberage R. de Alwis, Anne Broadwater, Dirk P. Dittmer
University of North Carolina School of Medicine, Chapel Hill, NC, United States

11 a.m.

32

ASSESSING THE ACCURACY OF INFERRING THE SEROTYPE OF DENGUE VIRUS INFECTIONS BASED ON PRE- AND POST-INFECTION NEUTRALIZING ANTIBODY TITERS

Wilbert Van Panhuis[1], Robert V. Gibbons[2], Tim Endy[3], Donald S. Burke[4], Derek A. Cummings[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [3]SUNY-Buffalo, Buffalo, NY, United States, [4]University of Pittsburgh, Pittsburgh, PA, United States

11:15 a.m.

33

INVESTIGATION OF ANTIBODY DEPENDENT ENHANCEMENT IN HUMAN PRIMARY TARGET CELLS

Kobporn Boonnak, Kaitlyn M. Dambach, Gina C. Donofrio, **Mary A. Marovich**
The Henry M. Jackson Foundation, Rockville, MD, United States

11:30 a.m.

34

INHIBITION OF DOWNSTREAM MEDIATORS OF THE TYPE I INTERFERON RESPONSE IN DENGUE VIRUS INFECTED MONOCYTE-DERIVED DENDRITIC CELLS AND BYSTANDER T CELL ACTIVATION

Amanda J. Chase, Freddy A. Medina, Jorge L. Muñoz-Jordán
Dengue Branch, Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention, San Juan, PR, United States

11:45 a.m.

35

ANTIVIRAL ACTIVITY OF ANTI-DENGUE INHIBITORS IN HUMAN PRIMARY DENDRITIC CELLS

Hassan Javanbakht, Andreas Jekle, Suping Ren, Nick Cammack, Gabrielle Heilek

Roche, Palo Alto, CA, United States

Symposium 19

Gametocytes and Gametocytogenesis: Tackling Malaria Transmission in the Era of Elimination

Washington 2

Thursday, November 19, 10:15 a.m. - Noon

Gametocytes are essential for the transmission of the malaria parasite from the human to the mosquito host and present a potential focus for strategies to reduce the burden of malaria infection. Understanding their basic cell biology will help us develop new tools for malaria control en route to the ultimate goal of eradication. The speakers in this symposium will give an overview of research into gametocytes and gametocytogenesis in both lab- and field-based studies. Areas to be covered include *in vivo* studies based on murine models, field based studies of both *P. falciparum* and *P. vivax*, and methods for assessing the effect of antimalarial drugs on both commitment to gametocytogenesis and direct killing of mature stage gametocytes. Signaling mechanisms leading to commitment and gametocyte production will also be considered.

CHAIR

Katharine R. Trenholme
Queensland Institute of Medical Research, Brisbane, Australia

Donald L. Gardiner
Queensland Institute of Medical Research, Brisbane, Australia

10:15 a.m.

GAMETOCYTOGENESIS IN *P. FALCIPARUM* AND *P. VIVAX*: A FIELD PERSPECTIVE

Ric Price
Menzies School of Health Research, Darwin, Australia

10:40 a.m.

EXPERIMENTAL APPROACHES TO INVESTIGATING THE COMMITMENT TO GAMETOCYTOGENESIS

Joanne Thompson
University of Edinburgh, Edinburgh, United Kingdom

11:05 a.m.

A SIGNALING PATHWAY THAT IS ESSENTIAL FOR *P. FALCIPARUM* GAMETOCYTOGENESIS AND WHY WE THINK IT IS A GOOD DRUG TARGET

David Baker
London School of Hygiene and Tropical Medicine, London, United Kingdom

11:30 a.m.

THE EFFECT OF ANTIMALARIAL DRUGS ON GAMETOCYTOGENESIS IN *P. FALCIPARUM IN VITRO*

Chris Peatey
Queensland Institute of Medical Research, Brisbane, Australia

Scientific Session 20

Kinetoplastida: Molecular Biology and Immunology

Washington 3

Thursday, November 19, 10:15 a.m. - Noon

CHAIR

Alejandro Schijman
INGEBI-CONICET, Buenos Aires, Argentina

Lynn Soong
University of Texas Medical Branch, Galveston, TX, United States

10:15 a.m.

36

IDENTIFICATION OF POTENTIAL BIOMARKERS FOR ANTIMONY SUSCEPTIBILITY/RESISTANCE IN *L. DONOVANI*

Swati Dadhich[1], Mahendra Maharjan[1], Mitali Chatterjee[2], Angana Mukherjee[1], Rentala Madhubala[1]
[1]School of Life Sciences, New Delhi, India, [2]Institute of Post Graduate Medical Education and Research, Kolkata, India
(ACMCIP Abstract)

10:30 a.m.

37

CD4+ T CELLS SUBSETS IN HUMAN CUTANEOUS LEISHMANIASIS HAVE A DISTINCT RECEPTOR REPERTOIRES AND CYTOKINE EXPRESSION

Tatjana S. Keesen[1], Lis R. Antonelli[2], Luiz H. Guimarães[3], Edgar M. Carvalho[3], Walderez O. Dutra[1], Kenneth J. Gollob[1]
[1]Federal University of Minas Gerais, Belo Horizonte, Brazil, [2]National Institutes of Health, Bethesda, MD, United States, [3]Federal University of Bahia, Salvador, Brazil
(ACMCIP Abstract)

10:45 a.m.

38

MOLECULAR DIAGNOSIS, GENOTYPING AND FOLLOW-UP OF *TRYPANOSOMA CRUZI* LINEAGES IN CARDIAC SAMPLES FROM PATIENTS WITH CHAGAS HEART DISEASE AND BLOODSTREAM AND REACTIVATION LESIONS AFTER HEART TRANSPLANTATION

Alejandro G. Schijman[1], Juan M. Burgos[1], Mirta Diez[2], Carlos V. Vigliano[2], Tomas Duffy[1], Margarita Bisio[1], Liliana Favaloro[2], Carolina Cura[1], Mariano J. Levin[1], Roberto Favaloro[2]
[1]INGEBI, Buenos Aires, Argentina, [2]I CyCV, Fundacion Rene Favaloro, Buenos Aires, Argentina

11 a.m.

39

SERUM LIPID PROFILE, APOLIPOPROTEIN E GENOTYPE AND VISCERAL LEISHMANIASIS INFECTION IN A NORTHEASTERN BRAZILIAN POPULATION

Adam P. Simons[1], Gloria R. Monteiro[2], Nubia N. Pontes[2], Taysa M. Feitosa[2], Upasna Gaur[3], Richard D. Pearson[4], Mary E. Wilson[3], Selma M. Jeronimo[2]
[1]University of California-Davis, Sacramento, CA, United States, [2]Federal University of Rio Grande do Norte, Natal, Brazil, [3]University of Iowa, Iowa City, IA, United States, [4]University of Virginia, Charlottesville, VA, United States
(ACMCIP Abstract)

11:15 a.m.

40

CARBOHYDRATES DERIVED FROM PATHOGENS PROMOTE DIFFERENTIAL IL-12 PRODUCTION IN MACROPHAGES

Alex Osanya
Iowa State University, Ames, IA, United States
(ACMCIP Abstract)

11:30 a.m.

41

IMMUNOGENICIY OF TUBULIN-BASED SUBUNIT VACCINE CANDIDATES WHICH PROTECT ANIMALS AGAINST CHALLENGE WITH *TRYPANOSOMA BRUCEI BRUCEI*

Elisabeth Knapp[1], Monica Namayanja[2], Kirby Steger[1], Rosemary Flores[1], Ann Nanteza[2], Jessica Chichester[1], George Lubega[2], Roger Prichard[3], Douglas Holtzman[4], Vidadi Yusibov[1]
[1]Fraunhofer USA Inc., Center for Molecular Biotechnology, Newark, DE, United States, [2]Department for Veterinary Parasitology and Microbiology, Makerere University, Kampala, Uganda, [3]Institute of Parasitology, McGill University, Montreal, QC, Canada, [4]The Bill and Melinda Gates Foundation, Seattle, WA, United States

11:45 a.m.

42

QUANTIFICATION OF PARASITEMIA IN *LEISHMANIA DONOVANI*-INFECTED HAMSTERS BY REAL-TIME PCR

Brian A. Vesely, Anuradha Srivastava Azliyati Azizan, Mark Sweat, Dennis Kyle
University of South Florida, Tampa, FL, United States

Symposium 21

Improving Global Health by Vaccination against Bacterial Causes of Diarrheal Diseases

Washington 4

Thursday, November 19, 10:15 a.m. - Noon

Combined with clean water and sanitation, vaccination against enteric pathogens represents a key component necessary for optimal reduction of the health threat from diarrheal diseases. This symposium will focus on recent progress made towards achieving suitable vaccine candidates for the main bacterial causes of intestinal infections: ETEC, Shigella, cholera and typhoid.

CHAIR

Richard Ives Walker
Program for Appropriate Technology in Health, Washington, DC, United States

Jan Agosti
Bill and Melinda Gates Foundation, Seattle, WA, United States

10:15 a.m.

CURRENT APPROACHES TO VACCINES AGAINST ETEC AND SHIGELLA

Lou Bourgeois
Program for Appropriate Technology in Health, Washington, DC, United States

10:40 a.m.

NOVEL APPROACHES TOWARDS A PAN SHIGELLA VACCINE

Cecil Czerkinsky
International Vaccine Institute, Seoul, Republic of Korea

11:05 a.m.

PHASE 3 RESULTS FROM CHOLERA AND TYPHOID TRIALS

John Clemens
International Vaccine Institute, Seoul, Republic of Korea

11:30 a.m.

INTRODUCTION OF AN ENTEROTOXIN-BASED ADJUVANT INTO ENTERIC VACCINES

John Clements
Tulane University School of Medicine, New Orleans, LA, United States

Symposium 22

National Institutes of Health and Tropical Medicine: Supporting International Research and Career Development - Part 2

Washington 5

Thursday, November 19, 10:15 a.m. - Noon

This symposium, organized by the ASTMH Education Committee in collaboration with the National Institutes of Health, is designed to educate young investigators, including graduate students, post-doctoral fellows, MD/PhD students, clinicians interested in research and others in the structure of the NIH, the review process and grantsmanship in order to maximize the chances of obtaining competitive funding.

CHAIR

Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

Adriana Costero
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

THE PEER REVIEW PROCESS AT THE NATIONAL INSTITUTES OF HEALTH

Alexander D. Politis
National Institutes of Health, Bethesda, MD, United States

10:40 a.m.

GRANTS MANAGEMENT: WHAT YOU NEED TO KNOW AFTER AWARD

Mary Kirker
National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

11:05 a.m.

TRAINING FUNDING MECHANISMS

Milton Hernandez
National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

11:30 a.m.

FUNDING OPPORTUNITIES FOR INTERNATIONAL INVESTIGATORS

Barbara Sina
National Institutes of Health, Bethesda, MD, United States

Symposium 23

Exploiting Tsetse Physiology for Sleeping Sickness Control

Wilson AB

Thursday, November 19, 10:15 a.m. - Noon

This symposium will feature presentations that report on the recent discoveries related to tsetse's immune, reproductive symbiotic physiologies that can be exploited to prevent parasite transmission. Parasite infections in the vector in the field can also guide disease control efforts.

CHAIR

Serap Aksoy
Yale University, New Haven, CT, United States

Mike J. Lehane
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:15 a.m.

FACTORS DETERMINING THE ESTABLISHMENT OF TRYPANOSOMES IN THE MIDGUT OF TSETSE FLIES

Lee Hanes
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:40 a.m.

EXPLOITING TSETSE'S VIVIPAROUS REPRODUCTIVE PHYSIOLOGY FOR POPULATION CONTROL

Geoffrey Attardo
Yale University, New Haven, CT, United States

11:05 a.m.

IMPROVING THE COST-EFFECTIVENESS OF ARTIFICIAL VISUAL BAITS FOR CONTROLLING THE TSETSE FLY *GLOSSINA FUSCIPES FUSCIPES*

Stephen Torr
Natural Resources Institute, Kent, CT, United Kingdom

11:30 a.m.

POPULATIONS GENETICS DATA APPLIED FOR TSETSE CONTROL: A CASE IN UGANDA

Jon Beadell
Yale University, New Haven, CT, United States

Exhibit Hall Open/Light Lunch

Exhibit Hall A

Thursday, November 19, Noon - 1:30 p.m.

Poster Session 24/Light Lunch

Poster Session A (#43 – 294 and Late Breakers)

Exhibit Hall B South

Thursday, November 19, Noon - 1:30 p.m.

ARTHROPODS/ENTOMOLOGY - OTHER

43

MAPPING SANDFLY-PLANT INTERACTION IN RELATION TO THEIR BREEDING SITES IN PERKERRA IRRIGATION SCHEME, KENYA

Fred A. Amimo
University of Eastern Africa, Baraton, Eldoret, Kenya

44

SUPPORT OF FAR-FORWARD DISEASE SURVEILLANCE OPERATIONS WITH DEPLOYABLE, REAL-TIME VECTOR-BORNE DISEASE AGENT ANALYTIC CAPABILITY: ENHANCED AND EXPANDED APPLICATIONS

James A. Swaby
59th Medical Wing, Lackland Air Force Base, TX, United States

45

PREVALENCE AND FINE-SCALE DISTRIBUTION OF RIFT VALLEY FEVER VIRUS AND WEST NILE VIRUS IN MOSQUITOES DURING A RIFT VALLEY FEVER OUTBREAK IN NORTHEASTERN PROVINCE, KENYA

Laura J. Sutherland[1], Samuel Muiruri[2], Eric M. Muchiri[2], Laurie R. Gray[1], Peter A. Zimmerman[1], Amy G. Hise[1], Charles H. King[1], Angelle Desiree LaBeaud[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Ministry of Health, Kenya, Nairobi, Kenya

46

SPECIFICITY OF HOST CELLULAR IMMUNE RESPONSE AGAINST SAND FLY SALIVA

Iva Rohousova[1], Jan Drahota[1], Marie Lipoldova[2], Petr Volf[1]
[1]Charles University in Prague, Prague, Czech Republic, [2]Institute of Molecular Genetics, Academy of Science of the Czech Republic, Prague, Czech Republic

(ACMCIP Abstract)

47

DYNAMICS OF HOST ANTIBODY RESPONSE TO SAND FLY SALIVA

Michaela Vlkova, Iva Rohousova, Jitka Hostomska, Vera Volfova, Petr Volf
Charles University in Prague, Prague, Czech Republic

(ACMCIP Abstract)

48

DISCOVERY, RESEARCH, DEVELOPMENT AND EPA REGISTRATION OF A NEW INSECT AND TICK REPELLENT: COMPARATIVE STUDIES TO OTHER COMMERCIAL REPELLENTS

R. Michael Roe, Brooke W. Bissinger
North Carolina State University, Raleigh, NC, United States

49

GENOME ORGANIZATION OF TANDEMLY-REPETITIVE DNA IN *IXODES SCAPULARIS,* THE LYME DISEASE TICK

Jason M. Meyer[1], Timothy J. Kurtti[2], Catherine E. Silva[1], Janice P. VanZee[1], Catherine A. Hill[1]
[1]Purdue University, Lafayette, IN, United States, [2]University of Minnesota, St. Paul, MN, United States

50

MOLECULAR TYPING OF *TRYPANOSOMA CRUZI* STRAINS FROM VECTORS IN YUCATAN, MEXICO

Melba Herrera-Aguilar[1], Maria Jesus Ramirez-Sierra[1], **Eric Dumonteil**[2]
[1]Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico, [2]Tulane University, New Orleans, LA, United States

51

BREEDING HABITATS FOR MALARIA VECTORS ASSOCIATED WITH A LAKE

Noboru Minakawa[1], Gabriel Dida[2], George Sonye[3], Kyoko Futami[1]
[1]Nagasaki University, Nagasaki, Japan, [2]Maseno University, Maseno, Kenya, [3]Springs of Hope, Mbita, Kenya

52

IDENTIFICATION OF DAMAGED ADULT FEMALE CONTAINER-INHABITING *AEDES* MOSQUITOES IN LA CROSSE VIRUS ENDEMIC AREAS

Michael R. Singleton[1], Bruce A. Harrison[2], Brian D. Byrd[1]
[1]Western Carolina University, Cullowhee, NC, United States, [2]North Carolina DENR, Winston-Salem, NC, United States

53

A REMEDY FOR CHRONIC, NON-HEALING WOUNDS UNRESPONSIVE TO CONVENTIONAL THERAPY: MAGGOT DEBRIDEMENT THERAPY

Mehmet Tanyuksel[1], Engin Araz[1], Ozgur Koru[1], Senol Yildiz[2], Hakan Ay[2], Yuksel Yurttas[3], Bulent Besirbellioglu[4], Mustafa Deveci[5], Zeynep Guclu Kilbas[1]
[1]Gulhane Military Medical Academy, Division of Medical Parasitology, Ankara, Turkey, [2]Gulhane Military Medical Academy, Department of Underwater and Hyperbaric Medicine, Ankara, Turkey, [3]Gulhane Military Medical Academy, Department of Orthopaedics, Ankara, Turkey, [4]Gulhane Military Medical Academy, Department of Infectious Diseases, Ankara, Turkey, [5]Gulhane Military Medical Academy, Department of Plastic and Reconstructive Surgery, Ankara, Turkey

54

MULTIPLEX PCR ASSAY FOR THE DETECTION AND SIMULTANEOUS DIFFERENTIATION OF CONTAINER-INHABITING *AEDES* MOSQUITOES IN LA CROSSE VIRUS ENDEMIC AREAS

Brian D. Byrd[1], James A. Goggins[1], Dawn M. Wesson[2]
[1]Western Carolina University, Cullowhee, NC, United States, [2]Tulane University, New Orleans, LA, United States

CESTODES – ECHINOCOCCOSIS/HYTATID DISEASE

55

A RODENT SPECIES *(SPERMOPHILUS DAURICUS)* INFECTED WITH ECHINOCOCCUS GRANULOSUS IN NINGXIA,CHINA: A POTENTIALLY NEW MODE OF HYDATID TRANSMISSION

Yu R. Yang[1], Philip S. Craig[2], Akira Ito[3], Patrick Giraudoux[4], Jian Z. Zhang[1], Donald P. McManus[5]
[1]Ningxia Medical University, Yinchuan City, Ningxia Hui Autonomous Region, China, [2]Biomedical Sciences Research Institute and School of Environment and Life Sciences, University of Salford, Salford, Greater Manchester, United Kingdom, [3]Asahikawa Medical College, Asahikawa, Japan, [4]Chrono-environment UMR UFC/CNRS 6249 usc INRA WHO Collaborating Centre for Prevention and Treatment of Human Echinococcosis, University of Franche-Comte, Besancon, France, [5]Molecular Parasitology Laboratory, Queensland Institute of Medical Research, Brisbane, QLD, Australia

CESTODES - OTHER

56

MESOCESTOIDIASIS: A NEW U. S. CASE AND THE IMPORTANCE OF DIFFERENTIAL DIAGNOSIS IN CESTODE INFECTIONS

Blaine A. Mathison[1], Susan P. Montgomery[2], Henry S. Bishop[2], Stephanie P. Johnston[2], Kim Winpisinger[3], Robert Brems[4], Boris Tsorin[5], Steve York[5], Kevin Sohner[5], Alexandre J. da Silva[2]
[1]The Atlanta Education and Research Foundation, Decatur, GA and CDC-NCZVED-Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]CDC-NCZVED-Division of Parasitic Diseases, Atlanta, GA, United States, [3]Zoonotic Disease Program, Ohio Department of Health, Reynoldsburg, OH, United States, [4]Muskingum County Health Department, Reynoldsburg, OH, United States, [5]Ohio State Health Laboratory, Reynoldsburg, OH, United States

CESTODES – TAENIASIS AND CYSTICERCOSIS

57

AN UNUSUAL CASE OF MYOCUTANEOUS CYSTICERCOSIS MASQUERADING LUDWIG'S ANGINA

Sangita Bhandary, Rakesh Singh, Prahlad Karki, Arvind K. Sinha
BP Koirala Institute of Health Sciences, Koshi, Nepal

58

HELMINTH GLYCANS INDUCE REFRACTORINESS AGAINST IFN-G VIA TLR-2 LEADING TO MYELOID DERIVED SUPPRESSOR CELL (MDSC) MEDIATED IMMUNE REGULATION

Marwa Ibrahim, **Senarath Dissanayake**
UAE University, Al Ain, United Arab Emirates
(ACMCIP Abstract)

59

THE RELATIVE UTILITY OF RECOMBINANT PROTEINS AND ASSAY FORMATS FOR DETECTION OF CYSTICERCOSIS AND TAENIASIS

Patricia P. Wilkins[1], Sukwan Handali[1], Yeuk-Mui Lee[1], John Noh[1], Silvia Rodriguez[2], Robert H. Gilman[3], Armando Gonzalez[4], Hector H. Garcia[5], Victor C. Tsang[6]
[1]Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Instituto Nacional de Ciencias Neurológicas and Instituto Peruano de Parasitología Clínica y Experimental, Lima, Peru, [3]Department of International Health, Bloomberg School of Public Health, The Johns Hopkins University, Baltimore, MD, United States, [4]School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, [5]Instituto Nacional de Ciencias Neurológicas, Instituto Peruano de Parasitología Clínica y Experimental, and Department of Microbiology, Universidad Peruana Cayetano Heredia, Lima, Peru, [6]Division of Parasitic Diseases, Centers for Disease Control and Prevention and Georgia State University, Atlanta, GA, United States

CLINICAL TROPICAL MEDICINE

60

CYSTICERCOSIS IN AN ISLAMIC STATE: MAKING THE CONNECTION IN A GLOBAL ENVIRONMENT!

Parsotam R. Hira[1], Faiza Al-Ali[2], Nabila Khalid[1], Fatma Shelahi[2], Nadia A. Al-Enezy[3], Fetouh Asfoor[2], Jamshaid Iqbal[1], Abrar Al Saffar[2], Sayed M. Montazeri[2], Mehraj Sheikh[4]
[1]Department of Microbiology, Faculty of Medicine, Kuwait University, Kuwait City, Kuwait, [2]Department of Laboratories, Farwaniya Hospital, Kuwait City, Kuwait, [3]Department of Laboratories, Mubarak Al-Kabeer, Kuwait City, Kuwait, [4]Department of Radiology, Faculty of Medicine, Kuwait University, Kuwait City, Kuwait

61

DENGUE INFECTION IN DIFFERENT AGE GROUPS

Weerawan Hattasingh
King Chulalongkorn Memorial Hospital, Bangkok, Thailand

62

OUTPATIENT PNEUMOCOCCAL BACTEREMIA: RISK FACTORS AND OUTCOMES IN BAMAKO, MALI

Mamadou B. Sylla[1], Souleymane Diallo[1], Milagritos Tapia[2], Mama N. Doumbia[1], Samba O. Sow[1], Adama M. Keita[1], Seydou Sissoko[1], Nana Kourouma[1], Nouhoun Telly[1], Mamadou M. Keita[1], Myron Levine[3], Karen Kotloff[2]
[1]Centre pour le Developpement des Vaccins - Mali, Bamako, Mali, [2]University of Maryland School of Medicine, Center for Vaccine Development, Baltimore, MD, United States, [3]University of Maryland School of Medicine, Baltimore, MD, United States

63

CONCOMITANT MALARIA PARASITEMIA AND BACTEREMIA IN HOSPITALIZED CHILDREN IN BAMAKO, MALI

Adama M. Keita[1], Milagritos Tapia[2], Samba O. Sow[1], Souleymane Diallo[1], Mahamadou M. Keita[1], Mamadou B. Sylla[1], Seydou Sissoko[1], Nana Kourouma[1], Myron Levine[2], Karen Kotloff[2]
[1]Centre pour le Developpement des Vaccins - Mali, Bamako, Mali, [2]University of Maryland School of Medicine, Center for Vaccine Development, Baltimore, MD, United States

64

AN OUTBREAK OF PUFFER FISH EGG POISONING IN SOUTHERN, COASTAL BANGLADESH

Md. Saiful Islam[1], Stephen P. Luby[1], Mahmudur Rahman[2], Shahana Parveen[1], Nusrat Homaira[1], Nur Hur Begum[2], Dawlat Khan[1], Shammi Akhter[2], Emily S. Gurley[1]
[1]International Centre for Diarrheal Diseases Research, Bangladesh, Dhaka, Bangladesh, [2]Institute of Epidemiology, Disease Control and Research, Ministry of Health and Family Welfare, Government of Bangladesh, Mohakhali, Dhaka, Bangladesh

65

IDENTIFICATION OF MICROORGANISMS RELATES WITH SEPSIS IN ACUTE INFECTIONS IN THE INTENSIVE CARE UNIT OF AN INSTITUTION OF HEALTH ATENTION IN MONTERIA-CORDOBA, COLOMBIA

Linda M. Chams, Alberto Mestra, Maria F. Yasnot
Universidad de Córdoba, Monteria, Colombia

66

"I TOLD YOU SO"- WORDS OF WISDOM FROM YOUR WIFE IN PROTECTION FROM DENGUE FEVER

Lhissa N. Santana
Flushing Hospital Medical Center, Flushing, NY, United States

67

PHARMACOKINETIC PROFILES OF ARTESUNATE FOLLOWING MULTIPLE INTRAVENOUS DOSES OF 2, 4, AND 8 MG/KG IN HEALTHY VOLUNTEERS

R. Scott Miller[1], Qigui Li[1], Louis R. Cantilena[2], Kevin J. Leary[2], George A. Saviolakis[2], Victor Melendez[1], Peter J. Weina[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Uniformed Services University of the Health Sciences, Bethesda, MD, United States

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TRAVEL-RELATED DISSEMINATED *PENICILLIUM MARNEFFEI* INFECTION IN A RENAL TRANSPLANT PATIENT

Julie Hart, Ben Clark, Duncan McLellan, John Dyer
Fremantle Hospital, Perth, Australia

69

EMERGENCE OF ERYTHROMYCIN AND CLINDAMYCIN-RESISTANT *STREPTOCOCCUS PYOGENES* EMM 90 STRAINS IN HAWAII

Iris Chen, Carla Mizumoto, David Esaki, Guliz Erdem
John A. Burns School of Medicine, Honolulu, HI, United States

70

COMPARATIVE FEATURES AND OUTCOMES OF *P. FALCIPARUM* MALARIA INFECTION IN GLUCOSE-6-PHOSPHATE DEHYDROGENASE-NORMAL AND DEFICIENT CHILDREN AT A TERTIARY CARE HOSPITAL IN IBADAN, NIGERIA

Adebola E. Orimadegun[1], Olugbemiro Sodeinde[2]
[1]Institute of Child Health, College of Medicine, University of Ibadan, Ibadan, Nigeria, [2]Department of Paediatrics, College of Medicine, University of Ibadan, Ibadan, Nigeria

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MALARIA MISDIAGNOSIS IN UGANDA - IMPLICATIONS FOR POLICY CHANGE

Joaniter I. Nankabirwa[1], Dejan Zurovac[2], Julius N. Njogu[2], Helen Counihan Counihan[3], Robert W. Snow[2], James K. Tibenderana[4]
[1]Makarere University Kampala, Kampala, Uganda, [2]Malaria Public Health and Epidemiology Group, KEMRI/Wellcome Trust Research Programme, Nairobi, Kenya, [3]Malaria Consortium, London, United Kingdom, [4]Malaria Consortium, Africa Regional Office, Kampala, Uganda

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Gabriel O. Dida[1], George O. Sonye[2], H. Horio[3], S. Kaneko[3], M. Shimada[3], F. Kyoko[3], N. Minakawa[3]
[1]School of Public Health, Maseno University, Kisumu, Kenya, [2]International Centre of Insect Physiology and Ecology, Mbita, Kenya, [3]Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan

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Maggy Sikulu
University of Nairobi, Nairobi, Kenya

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Stella O. Akinleye
University of Ibadan, Ibadan, Oyo State, Nigeria

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Bryson A. Ndenga[1], Jemimah A. Simbauni[2], Jenard Mbugi[2], Andrew K. Githeko[1], Ulrike Fillinger[3]
[1]Kenya Medical Research Institute, Kisumu, Kenya, [2]Kenyatta University, Nairobi, Kenya, [3]University of Durham, Durham, United Kingdom

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Fredros O. Okumu
Ifakara Health Institute, Ifakara, Morogoro region, United Republic of Tanzania

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Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

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Simon P. Sawadogo[1], Antoine Sanon[2], Idrissa Dicko[3], Moussa Namountougou[1], Hyacinthe K. Toe[1], Ali Ouari[4], Abdoulaye Diabate[1], Carlo Costantini[5], Jean-Bosco Ouedraogo[1], Robert T. Guiguemde[4], Roch K. Dabire[1]
[1]Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, [2]University of Ouagadougou, Ouagadougou, Burkina Faso, [3]Université polytechnique de Bobo Dioulasso, Bobo-Dioulasso, Burkina Faso, [4]Centre muraz, Bobo-Dioulasso, Burkina Faso, [5]IRD/OCEAC, Yaoundé, Cameroon

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Dairo Marin[1], Cristina Ferro[1], Leonard Munstermann[2], Clara Ocampo[1]
[1]Centro Internacional de Entrenamiento e Investigaciones Medicas, CIDEIM, Cali, Colombia, [2]Yale University School of Public Health, New Haven, CT, United States

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Emory University, Atlanta, GA, United States

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[1]Case Western Reserve University, Cleveland, OH, United States, [2]Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, [3]School of Integrative Biology, University of Queensland, St. Lucia, Australia, [4]Australian Army Malaria Institute, Enoggera, Australia

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Joseph O. Mehus, Jeffery A. Bell, Jefferson A. Vaughan
University of North Dakota, Grand Forks, ND, United States

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Justin R. Anderson, Jonathan D. Joyce, Amber A. Bales
Radford University, Radford, VA, United States

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Guofa Zhou[1], Yaw Afrane[2], Andrew K. Githeko[3], Guiyun Yan[1]
[1]University of California at Irvine, Irvine, CA, United States, [2]International Center of Insect Physiology and Ecology, Nairobi, Kenya, [3]Kenya Medical Research Institute, Kisumu, Kenya

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Aderemi O. Kehinde[1], Abubakar Baba[2], Rasheed A. Bakare[1], Olusoji M. Ige[1], Confort Gbadeyanka[3]
[1]College of Medicine, University of Ibadan, University College Hospital, Ibadan, Nigeria, [2]University College Hospital, Ibadan, Nigeria, [3]Jericho Chest Hospital, Ibadan, Nigeria

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[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Asociación Benefica Prisma, Lima, Peru, [3]Johns Hopkins Bloomberg School of Hygiene and Public Health, Baltimore, MD, United States, [4]IFHAD: Innovation For Health And Development, London, United Kingdom, [5]London School of Hygiene and Tropical Medicine, London, United Kingdom

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[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Asociación Benefica Prisma, Lima, Peru, [3]Johns Hopkins Bloomberg School of Hygiene and Public Health, Baltimore, MD, United States, [4]Wellcome Centre for Clinical Tropical Medicine Imperial College, London, United Kingdom

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PREVALENCE OF FLUOROQUINOLONE RESISTANCE AMONG TUBERCULOSIS PATIENTS IN SHANGHAI, CHINA

Xia Li[1], Peng Xu[2], Qian Gao[1]
[1]Fudan University, Shanghai, China, [2]Shanghai Centers for Disease Control and Prevention, Shanghai, China

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AN EFFECTIVE INFLUENZA VACCINE CANDIDATE BASED ON BACULOVIRUS PSEUDOTYPING

Xianchun Tang, Ted Ross
University of Pittsburgh, Pittsburgh, PA, United States

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Maria-Graciela Hollm-Delgado[1], Fanny Arenas[2], Juliana Cordova[2], Patricia Sheen[2], Carlton A. Evans[3], Eduardo Ticona[4], Robert H. Gilman on behalf of TB Collaborative Group[5]
[1]Université de Montréal, Montréal, QC, Canada, [2]Universidad Peruana Cayetano Heredia, Lima, Peru, [3]Imperial College London, London, United Kingdom, [4]Hospital Dos de Mayo, Lima, Peru, [5]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

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EXAMINING THE ENVIRONMENTAL EFFECTS ON INFLUENZA TRANSMISSION IN WARM CLIMATE USING NEURAL NETWORK

Radina P. Soebiyanto, Farida Adimi, Richard Kiang
NASA Goddard Space Flight Center, Greenbelt, MD, United States

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Javeria Shakil, Deborah Asnis
Flushing Hospital Medical Center, Flushing, NY, United States

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Josefina Garcia[1], Merly Sovero[1], V. Alberto Laguna-Torres[1], Jorge Gomez[2], Wilson Chicaiza[3], Melvin Barrantes[4], Felix Sanchez[5], Mirna Jimenez[6], Guillermo Comach[7], Ivette De Rivera[8], Roberto Agudo[9], Ana E. Arango[10], Alma Barboza[11], Nicolas Aguayo[11], Tadeusz Kochel[1]
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RESISTANCE TO NEURAMINIDASE INHIBITORS IN INFLUENZA A/H1N1 IN LATIN AMERICA: EUROPEAN STRAINS ARRIVE TO THE NEW CONTINENT

Josefina Garcia[1], Merly Sovero[1], V. Alberto Laguna-Torres[1], Jorge Gomez[2], Wilson Chicaiza[3], Melvin Barrantes[4], Felix Sanchez[5], Mirna Jimenez[6], Guillermo Comach[7], Ivette De Rivera[8], Roberto Agudo[9], Ana E. Arango[10], Alma Barboza[11], Nicolas Aguayo[11], Tadeusz Kochel[1]
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Clinton K. Murray[1], Michael R. Gray[2], Katrin Mende[3], Guillermo Pimentel[4], Tina Parker[4], Ahmed Samir[4], Bassem Abdel Rahman[4], **Duane R. Hospenthal**[1]
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Naiki Puplampu[1], Shirley Odoom[1], Janice Tagoe[1], Engy Emil Habashy[2], Michael Wilson[1], Gregory Raczniak[3], Karl Kronmann[3], Edward Nyarko[4], Prince Agbenohevi[4], Moustapha Abdel Fadeel[2], Guillermo Pimentel[2], Kwadwo Koram[1]
[1]Noguchi Memorial Institute for Medical Research, Legon, Ghana, [2]Naval Medical Research Unit-3, Cairo, Egypt, [3]Noguchi Memorial Institute for Medical Research/Naval Medical Research Unit-3, Ghana Detachment, Legon, Ghana, [4]37th Military Hospital, Accra, Ghana

TREMATODES - OTHER

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EIGHT YEAR-STUDY OF HUMAN FASCIOLIASIS IN THE ANDEAN PERUVIAN REGION: A PUBLIC HEALTH PROBLEM

Luis A. Marcos[1], Angelica Terashima[2], Eduardo Gotuzzo[2]
[1]University of Texas, Houston, TX, United States, [2]Instituto de Medicina Tropical Alexander von Humboldt, Lima, Peru

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DEVELOPMENT OF A QUANTITATIVE REAL TIME PCR TO ANALYZE THE EXPRESSION PROFILE OF TH1/ TH2 CYTOKINES GENES IN A RABBIT MODEL OF FASCIOLIASIS

Ana M. Espino, Francheska Rivera
University of Puerto Rico, School of Medicine, San Juan, Puerto Rico
(ACMCIP Abstract)

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Sung-Jong Hong, Tae Im Kim, Won Gi Yoo, Hye Lim Kang, Ji Sung Jung, Byung Kook Kwak, Ju–Won Seok
Chung-Ang University, Seoul, Republic of Korea

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PROTEIN KINASES OF THE PARASITE *SCHISTOSOMA MANSONI*

Luiza F. Andrade[1], Lívia Avelar[1], Jerônimo Ruiz[1], Adhemar Zerlotini[2], Laila Nahum[1], Guilherme Oliveira[1]
[1]Fiocruz - CpQRR, Belo Horizonte, Brazil, [2]UFMG, Belo Horizonte, Brazil
(ACMCIP Abstract)

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***SCHISTOSOMA MANSONI* VACCINE CANDIDATE SCREENING BY BI-DIMENSIONAL WESTERN BLOT**

Fernanda Ludolf, Rosiane da Silva-Pereira, Paola Patrocínio, Rodrigo Corrêa-Oliveira, Guilherme Oliveira
Centro de Pesquisa Rene Rachou, Belo Horizonte, Brazil
(ACMCIP Abstract)

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RURAL TOURISM AND SCHISTOSOMIASIS: THE GEOGRAPHIC INFORMATION SYSTEM AS A TOOL FOR IDENTIFICATION OF PRIORITY AREAS FOR INTERVENTION

Ronaldo G. C. Scholte, Omar S. Carvalho, Guilherme C. Oliveira, Martin J. Enk
Centro de Pesquisas René Rachou/Fiocruz, Belo Horizonte, Brazil

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COMPARISON OF VECTOR SNAILS OF SCHISTOSOMIASIS IN TWO SITES ALONG THE WEIJAH LAKE IN GHANA

Naa Adjeley Tawiah[1], Godfred Futabi[2], Kwadwo K. Frempong[3], Joseph Otchere[3], Dominic Edoh[2]
[1]University of Ghana Medical School, Microbiology Department, Accra, Ghana, [2]Zoology Department, University of Ghana, Accra, Ghana, [3]Noguchi Memorial Institute for Medical Research, Accra, Ghana

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MULTICOMPONENT REACTION CHEMISTRY FOR NEW SCHISTOSOMIASIS DRUGS

Kareem Khoury
University of Pittsburgh, Pittsburgh, PA, United States
(ACMCIP Abstract)

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IMMUNOLOGICAL MEMORY IN OFFSPRING BORN TO BABOONS *(PAPIO ANUBIS)* INFECTED WITH *SCHISTOSOMIASIS MANSONI*

David Langoi[1], Thomas Kariuki[1], Michael Gicheru[2], Idle O. Farah[1], Hans-Erik Carlsson[3]
[1]Institute of Primate Research, Nairobi, Kenya, [2]Kenyatta University, Nairobi, Kenya, [3]Uppsala University, Uppsala, Sweden

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***SCHISTOSOMA MANSONI:* HOW TO MAKE A FEMALE**

Christoph Grunau, Jérôme Boissier, Céline Cosseau, Sophie Beltran, David Duval, Julien Portela, Benjamin Gourbal, André Theron, Guillaume Mitta
University of Perpignan, Perpignan, France

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CLONING, CHARACTERIZATION, AND EXPRESSION OF *SCHISTOSOMA MANSONI* MICRORNAS

Ms. Mariana C. Simoes
Oswaldo Cruz Foundation (Fiocruz) - Centro de pesquisas Rene Rachou (CPqRR), Belo Horizonte, Brazil

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STOCHASTIC MODELING OF SCHISTOSOMIASIS *JAPONICUM* TRANSMISSION

Yao Ning, Kin On Kwok, Steven Riley
School of Public Health, The University of Hong Kong, Hong Kong, China

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THE *SCHISTOSOMA MANSONI* RACK1 IS EXPRESSED IN THE GONADS AND IS LIKELY INVOLVED IN EMBRYOGENESIS

Livia Avelar[1], Colette Dissous[2], Christoph Grevelding[3], Guilherme Oliveira[1]
[1]Rene Rachou Institute of Research, Oswaldo Cruz Foundation, Belo Horizonte, Brazil, [2]Institut Pasteur, Lille, France, [3]Heinrich-Heine-Universität, Düsseldorf, Germany

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SCHISTOSOMA MANSONI PKA: A POTENTIAL NEW DRUG TARGET

Brett E. Swierczewski, Stephen J. Davies
Uniformed Services University of the Health Sciences, Bethesda, MD, United States
(ACMCIP Abstract)

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DETECTION AND DISCOVERY OF VIRAL PATHOGENS ASSOCIATED WITH ACUTE PEDIATRIC RESPIRATORY ILLNESS IN NICARAGUA

Nathan Yozwiak[1], Aubree Gordon[1], Saira Saborio[2], Peter Skewes-Cox[3], Guillermina Kuan[4], Angel Balmaseda[2], Eva Harris[1], Joseph L. DeRisi[3]
[1]University of California, Berkeley, CA, United States, [2]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, [3]University of California, San Francisco, CA, United States, [4]Centro de Salud Sócrates Flores Vivas, Ministerio de Saludornia, Managua, Nicaragua

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MOLECULAR EVIDENCE OF HANTAVIRUS DOBRAVA SPILLOVER INFECTION IN BANK VOLE

Miša Korva[1], Darja Duh[1], Nataša Knap[1], Tomi Trilar[2], Tatjana Avšič-Županc[1]
[1]Medical Faculty, Ljubljana, Slovenia, [2]Slovenian Museum of Natural History, Ljubljana, Slovenia

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PRECIPITATING AND NEUTRALIZING ANTIBODY RESPONSE TO HIGHLY PATHOGENIC AVIAN INFLUENZA, NIGERIA

Clement A. Meseko, Anthony Egbuji, Folorusho D. Fasina, Agnes T. Oladokun, Stella Idachaba
FAO Regional Lab for Avian Influenza, National Veterinary Research Institute, Jos Plateau State, Nigeria

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PROMOTING BAMBOO SKIRTS FOR DATE PALM SAP COLLECTION IN BANGLADESH: A COMMUNITY INTERVENTION TO PREVENT NIPAH VIRUS TRANSMISSION

Nazmun Nahar, Utpal Kumar Mondal, Emily S. Gurley, M. Jahangir Hossain, A. K. Khan, Elizabeth Oliveras, Rouha Anamika Sarkar, S.M. Azad, Rebeca Sultana, M.S. Khan, Stephen P. Luby
International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

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HUMAN MONKEYPOX GENOMIC DIVERGENCE AND DETERMINANTS OF PATHOGENICITY

Stephen K. Gire[1], Anjan Purkayastha[1], Jay Goff[2], Vicki Olsen[2], Inger Damon[3], John Huggins[2], Jean-Jacque Muyembe[4], Lisa Hensley[2], Kate Rubins[1]
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RELATIVE ROLES OF TLRS AND RNA-HELICASES IN IMMUNE RECOGNITION OF RIFT VALLEY FEVER VIRUS

Megan Ermler, Heidi Page, Lewis Yuan, A. Desiree LaBeaud, Charles King, James Kazura, Amy Hise
Case Western Reserve University, Cleveland, OH, United States

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DECTECTION AND QUANTIFICATION OF HUMAN HERPESVIRUS 8 IN SAMPLES OF PATIENTS WITH AIDS-ASSOCIATED KAPOSI'S SARCOMA BY REAL TIME PCR

Paula Renata Machado, Kleber Farias, Benedito Fonseca
University of São Paulo, Ribeirão Preto, Brazil

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SURVEILLANCE OF AVIAN INFLUENZA IN THE LIVE BIRD MARKETS OF PERU

Ana Patricia Mendoza[1], Bruno Ghersi[1], Marcela Uhart[2], Tadeusz Kochel[1], Joel Montgomery[1], Donald Brightsmith[1]
[1]Naval Medical Research Center Detachment, Washington, DC, United States, [2]Wildlife Conservation Society, New York, NY, United States

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HUMAN INNATE IMMUNE RESPONSE TO RIFT VALLEY FEVER VIRUS INFECTION

Angelle Desiree LaBeaud, Heidi E. Page, Megan E. Ermler, Amy G. Hise
Case Western Reserve University, Cleveland, OH, United States

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GEOGRAPHIC AND CLIMATOLOGIC RISK FACTORS ASSOCIATED WITH THE 2006-2007 KENYA RIFT VALLEY FEVER OUTBREAK: A POPULATION-BASED MULTIVARIABLE MODEL

Allen Hightower[1], Carl Kinkade[2], Patrick Nguku[3], Tom Ksiazek[4], S. K. Sharif[5], Samuel Amwayi[3], David Schabel[5], Daniel Feikin[1], Maurice Ombok[1], Kariuki Njenga[1], Robert Breiman[1]
[1]Centers for Disease Control and Prevention - Kenya, Nairobi, Kenya, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Ministry of Public Health, Nairobi, Kenya, [4]University of Texas, Medical Branch, Galveston, TX, United States, [5]US Army Medical Research Unit – Kenya, Nairobi, Kenya

Poster Session A ACMCIP Abstracts – Molecular, Cellular and Immunoparasitology
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Burroughs Wellcome Fund/ASTMH Fellowship Committee Meeting

Jackson
Thursday, November 19, Noon - 2 p.m.

Clinical Standards and Treatment Guidelines Committee

Room 8211
Thursday, November 19, 12:15 p.m. - 1:15 p.m.

Certificate Exam Executive Committee Meeting

Room 8217
Thursday, November 19, 12:15 p.m. - 1:15 p.m.

Late Breaker Abstract Session 25

Late Breakers in Clinical Tropical Medicine

Delaware A
Thursday, November 19, 12:15 p.m. - 1:15 p.m.

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. Presentations feature reports of clinical trials, preliminary data on new outbreaks of disease or individual case reports of interest. See the Late Breaker handout in your registration packet for the presentation schedule.

CHAIR
Barbara L. Herwaldt
Centers for Disease Control and Prevention, Atlanta, GA, United States

Jason D. Maguire
Naval Medical Center Portsmouth, Portsmouth, VA, United States

Late Breaker Abstract Session 26

Late Breakers in Basic Science/Molecular Biology

Virginia AB
Thursday, November 19, 12:15 p.m. - 1:15 p.m.

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. See the Late Breaker handout in your registration packet for the presentation schedule.

CHAIR

Gregory D. Ebel
University of New Mexico School of Medicine, Albuquerque, NM, United States

Stefan Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

Meet the Professors 27

Meet the Professors A: Enigmatic and Teaching Cases

Virginia C
Thursday, November 19, 12:15 p.m. - 1:15 p.m.

A panel of professors will present one clinical case each of a tropical disease specific to a particular region that they have found a challenge to manage or diagnose. If there is time, participants may be able to present enigmatic cases for the audience and panel to consider.

CHAIR

Davidson H. Hamer
Boston University School of Public Health, Boston, MA, United States

PANELISTS

David Boulware
University of Minnesota, Minneapolis, MN, United States

Hector H. Garcia
Universidad Peruana Cayetano Heredia, Lima, Peru

Mid-Day Session 28

Wellcome Trust Seminar: Successful Research: Grant Writing, Mentorship and Career Advice

Washington 5
Thursday, November 19, 12:15 p.m. - 1:15 p.m.

Health research funding opportunities are as competitive as ever and key skills are needed to create successful longstanding research programs. The Wellcome Trust has convened this session to explore two important topics relating to successful research programs: mentoring and grant writing. The session will open with a presentation on both of these topics and how their successful application can lead to longstanding large and sustainable research programs, such as the KEMRI-Wellcome Trust Research Programme based in Kilifi, Kenya. A discussion will follow regarding what constitutes good grant writing from the Wellcome Trust perspective. The next presentation will cover innovative research mentoring models being used by the Southern Africa Consortium for Research Excellence, one of the new Wellcome Trust-funded African Institutions awards. A contrasting perspective on mentorship will be provided from a longstanding program on African Malaria research in institutions across Africa. Finally, personal perspectives will be shared on successfully progressing in a career in tropical medicine.

CHAIR

Michael Chew
Wellcome Trust, London, United Kingdom

Philip T. LoVerde
Southwest Foundation for Biomedical Research, San Antonio, United States

12:15 p.m.

CAREER ADVICE ON SUCCESSFULLY BUILDING A SUSTAINABLE RESEARCH PROGRAM

Kevin Marsh
KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya

12:30 p.m.

WHAT MAKES A GOOD GRANT APPLICATION? THE WELLCOME TRUST PERSPECTIVE

Ruth Branston
Wellcome Trust, London, United Kingdom

12:45 p.m.

MENTORSHIP MODELS FROM THE SOUTHERN AFRICA CONSORTIUM FOR RESEARCH EXCELLENCE (SACORE)

Newton Kumwenda
University of Malawi, Blantyre, Malawi

1 p.m.

MENTORING MODELS AND A PERSONAL PERSPECTIVE FOR AFRICAN MALARIA RESEARCH - LESSONS LEARNED FROM THE GATES MALARIA PARTNERSHIP AND THE MALARIA CAPACITY DEVELOPMENT CONSORTIUM

Brian Greenwood
London School of Hygiene and Tropical Medicine, London, United Kingdom

Wilfred Mbacham
University of Yaounde, Yaounde, Cameroon

Poster Session A Viewing

Exhibit Hall B South

Thursday, November 19, 1:30 p.m. - 7 p.m.

Symposium 29

The Malaria Eradication Paradigm: Implications for Transmission Blocking Vaccines

Salon 1

Thursday, November 19, 1:30 p.m. - 3:15 p.m.

Malaria vaccines are an essential part of the tool kit needed if the long-term goal of eradication is to be achieved. This symposium will address the impact of the eradication agenda on vaccine research and development, with a focus on different aspects of transmission blocking vaccines.

CHAIR

Christian Loucq
PATH Malaria Vaccine Initiative, Bethesda, United States

Ashley Birkett
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

1:30 p.m.

BIOLOGY OF MALARIA VECTORS

Frank Collins
University of Notre Dame, Notre Dame, IN, United States

1:55 p.m.

VACCINE APPROACHES BASED ON VECTOR ANTIGENS

Rhoel Dinglasan
Johns Hopkins Malaria Research Institute, Baltimore, MD, United States

2:25 p.m.

PARASITE BIOLOGY AS IT RELATES TO TRANSMISSION BLOCKING VACCINE DEVELOPMENT

Robert Sinden
Imperial College London, London, United Kingdom

2:50 p.m.

VACCINE APPROACHES BASED ON PARASITE ANTIGENS

Nirbhay Kumar
Johns Hopkins University, Baltimore, MD, United States

Symposium 30

The President's Malaria Initiative (PMI): A Collaborative Model to Support National Malaria Control Programs in Africa

Salon 2

Thursday, November 19, 1:30 p.m. – 3:15 p.m.

This symposium will provide an introduction to the President's Malaria Initiative and the model by which it works with host governments and National Malaria Control Programs. The symposium will also provide data on the number of beneficiaries reached with PMI support to date, and early evidence of impact from selected countries. Case studies of successful scale-up will be presented by National Malaria Control Program managers from Angola, Malawi and Senegal.

CHAIR

Michelle Chang
Centers for Disease Control and Prevention, Atlanta, GA, United States

Bernard Nahlen
President's Malaria Initiative/United States Agency for International Development, Washington, DC, United States

1:30 p.m.

THE PRESIDENT'S MALARIA INITIATIVE: A COLLABORATIVE APPROACH FOR SCALING UP MALARIA CONTROL INTERVENTIONS

Trenton Ruebush
United States Agency for International Development, Washington, DC, United States

1:50 p.m.

PMI CONTRIBUTIONS TO REACHING ROLL BACK MALARIA TARGETS IN AFRICA

Michelle Chang
Centers for Disease Control and Prevention, Atlanta, GA, United States

2:10 p.m.

SCALING UP INDOOR RESIDUAL SPRAYING IN ANGOLA

Filomeno Fortes
National Malaria Control Program, Luanda, Angola

2:30 p.m.

SCALE-UP OF CASE MANAGEMENT WITH ARTEMISININ-BASED COMBINATION THERAPY (ACTS) AT THE HEALTH FACILITY LEVEL IN MALAWI

Doreen Ali
National Malaria Control Program, Lilongwe, Malawi

2:50 p.m.

INNOVATIONS IN REACHING UNIVERSAL COVERAGE WITH MALARIA DIAGNOSTICS AND ARTEMISININ CONTAINING COMBINATION THERAPY (ACTS) IN SENEGAL

Moussa Thior
Programme National de Lutte contre le Paludisme (PNLP), Dakar, Senegal

Symposium 31

Changing the Climate: A Data-Driven Discussion about Climate

Salon 3

Thursday, November 19, 1:30 p.m. - 3:15 p.m.

There is concrete evidence that the global climate is changing, and these changes are expected to have a major impact on human health as surface temperatures rise, agricultural belts shift, and extreme weather events become more commonplace, to name a few expected effects. Although most scientists agree that climate change is underway, the role it plays in infectious disease transmission is still in contention. As with all debates, data are needed to promote an informed understanding. To that end, this symposium will address the use, utility, and limitations of weather and climate models toward a goal of providing data-driven evidence of the links between weather, climate, specific pathogens and ultimately, human health. To this end, a leading climate scientist will discuss available weather and climate models followed by evidence-based presentations on the established effects of climate variability/change on specific climate sensitive diseases: meningitis, malaria, plague and other vector-borne bacterial pathogens.

CHAIR

Mary H. Hayden
National Center for Atmospheric Research, Boulder, CO, United States

Emily Zielinski-Gutierrez
Centers for Disease Control and Prevention, Fort Collins, CO, United States

1:30 p.m.

BEYOND CLIMATE SCIENCE: THE POTENTIAL FOR HEALTH FORECASTING

Eric Barron
National Center for Atmospheric Research, Boulder, CO, United States

1:55 p.m.

CLIMATE AND VECTOR-BORNE BACTERIAL ZOONOSES: PERSPECTIVES FROM NORTH AMERICA AND EAST AFRICA

Rebecca Eisen
Centers for Disease Control and Prevention, Fort Collins, CO, United States

2:20 p.m.

CLIMATE INFORMATION FOR THE CONTROL OF MENINGITIS: THE EVIDENCE TO DATE

Madeleine Thomson
The International Research Institute for Climate and Society, Palisades, NY, United States

2:45 p.m.

CLIMATE INFORMED EARLY WARNING FOR MALARIA

Stephen J. Connor
International Research Institute for Climate and Society, Palisades, NY, United States

Symposium 32

SAFE Strategy for Trachoma Control: Updates from Partnership for Rapid Elimination of Trachoma (PRET)

Delaware A
Thursday, November 19, 1:30 p.m. - 3:15 p.m.

Surgery, antibiotics, facial hygiene and environmental change form the WHO-endorsed SAFE strategy for trachoma control. This symposium will present data in support of new approaches to delivery of surgery and antibiotics for trachoma-endemic countries at varying stages of endemicity.

CHAIR

Sheila K. West
Johns Hopkins University, Baltimore, MD, United States

1:30 p.m.

MAKING SURGERY MORE STRAIGHTFORWARD MAY IMPROVE TRICHIASIS SURGERY OUTCOMES: A NEW TOOL

Emily W. Gower
Johns Hopkins University, Baltimore, MD, United States

1:55 p.m.

TRACHOMA IN A LOW PREVALENCE SETTING: IS ONE ROUND OF TREATMENT ENOUGH IN THE GAMBIA?

Robin Bailey
London School of Hygiene and Tropical Medicine, London, United Kingdom

2:20 p.m.

TRACHOMA MESOENDEMIC COMMUNITIES: MASS TREATMENT WITH A SINGLE ROUND OF AZITHROMYCIN AND HIGH COVERAGE IS NOT SUFFICIENT TO ELIMINATE INFECTION WITH *C. TRACHOMATIS*

Sheila K. West
Johns Hopkins University, Baltimore, MD, United States

2:45 p.m.

TREATMENT ISSUES IN THE MOST HYPER-ENDEMIC AREAS

Thomas Lietman
University of California San Francisco, San Francisco, CA, United States

Symposium 33

Health Care Worker/Researchers in Overseas Care Settings with Potential Disease Transmission: What's the Risk and What Should You Do?

Delaware B
Thursday, November 19, 1:30 p.m. - 3:15 p.m.

Large numbers of U.S. scientists and health care providers are working in care settings in lesser developed countries and have some unique and nosocomial risks higher than the usual traveler. We will discuss some of these risks, potential management, controversies and risk reduction strategies.

CHAIR

Naomi E. Aronson
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Rodney Coldren
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

1:30 p.m.

MANAGEMENT OF NEEDLESTICK INJURIES

Sybil Tasker
PPD, Inc., Cairo, Egypt

1:55 p.m.

SEVERE RESPIRATORY PATHOGENS

Timothy H. Burgess
Naval Medical Research Center, Silver Spring, MD, United States

2:20 p.m.

VIRAL HEMORRHAGIC FEVERS IN THE HEALTH CARE SETTING

Mark Kortepeter
United States Army Medical Research Institute for Infectious Diseases, Ft Detrick, MD, United States

2:45 p.m.

MDR/XDR TUBERCULOSIS EXPOSURE

Naomi E. Aronson
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Scientific Session 34

Malaria - Drug Development

Virginia AB

Thursday, November 19, 1:30 p.m. - 3:15 p.m.

CHAIR

Stephan Duparc
Medicines for Malaria Venture, Geneva, Switzerland

Tina S. Skinner-Adams
Queensland Institute of Medical Research, Brisbane, Australia

1:30 p.m.

295

A NOVEL ANTIMALARIAL CHEMOTYPE WITH EFFICACY AGAINST BOTH EXOERYTHROCYTIC AND ERYTHROCYTIC STAGES

Jane X. Kelly[1], Michael O'Neil[2], Victor Melendez[2], Erin Harris[2], Arba Ager[3], Martin Smilkstein[4], Isaac Forquer[1], Rosie Dodean[1], Rolf Winter[1], Dave Hinrichs[1], Mike Riscoe[1]
[1]Portland VA Medical Center, Portland, OR, United States, [2]Walter Reed Army Institute of Research, Division of Experimental Therapeutics, Silver Spring, MD, United States, [3]University of Miami, School of Medicine, Miami, FL, United States, [4]Oregon Translational Research and Drug Development Institute, Portland, OR, United States

1:45 p.m.

296

NEW INSIGHTS INTO MECHANISM OF HEMOLYTIC TOXICITY AND ANTIMALARIAL EFFICACY OF 8-AMINOQUINOLINES: EVALUATION OF STEREOSELECTIVE PROFILES

Babu L. Tekwani[1], Rajnish Sahu[2], N. P. Dhammika Nanayakkara[2], Larry A. Walker[1]
[1]National Center for Natural Products Research and Department of Pharmacology, School of Pharmacy, University of Mississippi, University, MS, United States, [2]National Center for Natural Products Research, School of Pharmacy, University of Mississippi, University, MS, United States

2 p.m.

297

AN *IN VIVO* GLUCOSE-6-PHOSPHATE DEHYDROGENASE (G6PD)-DEFICIENT MOUSE MODEL TO PREDICT THE HEMOLYTIC TOXICITY OF PRIMAQUINE

Prabhati Ray[1], Peng Zhang[1], Xiugong Gao[1], Hiroshi Ishida[1], Aileen Chua[1], Jack Amnuaysirikul[1], Peter J. Weina[1], Max Grogl[1], Colin Ohrt[1], Aruna Sampath[2], Alan J. Magill[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]University of Mississippi, University, MS, United States

2:15 p.m.

298

MIRINCAMYCIN: REASSESSMENT OF A PROMISING ANTI-MALARIAL AGENT WITH POTENTIAL IN A *PLASMODIUM CYNOMOLGI* RELAPSING MALARIA MONKEY MODEL

Susan D. Fracisco[1], Montip Gettayacamin[2], Victor Melendez[1], Qigui Li[1], Pisit Khemawoot[2], Bryan L. Smith[1], David Saunders[2], Kent Bennett[1], William McCalmont[1], Charlotte Lanteri[1], Geoffrey Dow[1], Yarrow Rothstein[1], Carl Craft[3], Paktiya Teja-isavadharm[2], Imerbsin Rawiwan[2], Alan Magill[1], A.J. Lin[1], Ian Bathurst[3], Richard Westerman[4], Colin Ohrt[1]
[1]WRAIR Experimental Therapeutics, Silver Spring, MD, United States, [2]Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand, [3]Medicines for Malaria Venture, Geneva, Switzerland, [4]MALDEVCO, Kalamazoo, MI, United States

2:30 p.m.

299

UNDERSTANDING THE ANTIMALARIAL ACTION OF THE HIV PROTEASE INHIBITORS

Tina S. Skinner-Adams[1], Katherine T. Andrews[2], Donald L. Gardiner[1], James S. McCarthy[1]
[1]Queensland Institute of Medical Research, Brisbane, Australia, [2]Eskitis Institute for Cell and Molecular Therapies, Griffith University, Brisbane, Australia

2:45 p.m.

300

EFFICACY OF PYRONARIDINE/ARTESUNATE IN CLINICAL TRIALS IN PATIENTS WITH UNCOMPLICATED ACUTE *PLASMODIUM FALCIPARUM* OR *PLASMODIUM VIVAX* MALARIA: RESULTS OF AN INTEGRATED ANALYSIS

Stephan Duparc[1], Isabelle Borghini-Fuhrer[1], J. Carl Craft[2], Sarah Arbe-Barnes[3], Robert M. Miller[3], Chang-Sik Shin[4], Lawrence Flenckenstein[5]
[1]Medicines for Malaria Venture, Geneva, Switzerland, [2]Former Medicines for Malaria Venture, Geneva, Switzerland, [3]Fulcrum Pharma Developments Ltd, Hemel Hempstead, United Kingdom, [4]Shin Poong Pharmaceuticals, Seoul, Republic of Korea, [5]University of Iowa, Iowa City, IA, United States

3 p.m.

301

SAFETY, EFFICACY AND PHARMACOKINETIC COMPARISON OF FIXED-DOSE ARTESUNATE-AMODIAQUINE "ASAQ" WITH NON-FIXED COMBINATION OF AS AND AQ AMONG KENYAN ADULTS

Bernhards Ogutu[1], Elizabeth Juma[1], Vincent Jullien[2], Gwenaelle Carn[3], Jean-René Kiechel[3]
[1]Kenya Medical Research Institute (KEMRI), Nairobi, Kenya, [2]Cardinal Health Systems, Paris, France, [3]Drugs for Neglected Diseases initiative (DNDi), Geneva, Switzerland

Symposium 35

Determining Etiology and Burden of Pneumonia Around the Globe

Virginia C

Thursday, November 19, 1:30 p.m. - 3:15 p.m.

This symposium will summarize new efforts to determine pneumonia burden and etiology globally and highlight work of the International Emerging Infections Programs, a U.S. CDC network of sites around the world with a standardized approach to pneumonia surveillance and diagnostics. This multi-country approach to conducting population-based pneumonia surveillance and etiology studies will be explored by discussing standard approaches to surveillance, including case definitions and diagnostics, comparative incidence and pathogen discovery for novel agents that may be associated with pneumonia.

CHAIR

Sonja J. Olsen
Centers for Disease Control and Prevention, Atlanta, GA, United States

Orin S. Levine
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

1:30 p.m.

PNEUMONIA ETIOLOGY RESEARCH FOR CHILD HEALTH: PREPARING FOR A WORLD AFTER HIB AND PNEUMOCOCCAL VACCINATION

Orin S. Levine
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

1:55 p.m.

STANDARDIZED APPROACHES TO PNEUMONIA SURVEILLANCE AND COMPARATIVE ETIOLOGIC DATA IN THE IEIPS

Kip Baggett
Centers for Disease Control and Prevention, Bangkok, Thailand

2:20 p.m.

SUPPORTING DIAGNOSTIC LABORATORIES IN REMOTE LOCATIONS: THE IEIP EXPERIENCE

Barry S. Fields
Centers for Disease Control and Prevention, Atlanta, GA, United States

2:45 p.m.

CHARACTERIZATION OF NOVEL AND UNRECOGNIZED PATHOGENS: PATHOGEN DISCOVERY APPROACHES IN PNEUMONIA ETIOLOGY STUDIES

David Wang
Washington University School of Medicine, St. Louis, MO, United States

Scientific Session 36

Clinical Tropical Medicine I

Washington 1

Thursday, November 19, 1:30 p.m. - 3:15 p.m.

CHAIR

Ella T. Nkhoma
University of North Carolina-Chapel Hill, Chapel Hill, NC, United States

Priscilleyne O. Reis
Ministry of Health, Brasilia, Brazil

1:30 p.m.

302

RELATIONSHIP BETWEEN BITE-TO-HOSPITAL TIME AND MORBIDITY IN VICTIMS OF CARPET VIPER BITE IN NIGERIA

Oluwagbenga P. Ogunfowokan[1], Jacob A. Dawam[2], Livinus L. Odor[2]
[1]National Hospital Abuja, Abuja, Nigeria, [2]Jos University Teaching Hospital, Jos, Nigeria

1:45 p.m.

303

EFFECT OF THE A-FORM OF G6PD DEFICIENCY ON MATERNAL *PLASMODIUM FALCIPARUM* PARASITEMIA AND PREGNANCY OUTCOMES

Ella T. Nkhoma[1], Jianbing Mu[2], Michael A. Krause[2], Seidina A. Diakite[3], Linda Kalilani[4], Stephen J. Rogerson[5], Rick M. Fairhurst[2], Steven R. Meshnick[1]
[1]University of North Carolina-Chapel Hill, Chapel Hill, NC, United States, [2]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, [3]Department of Immunogenetics, University of Bamako, Bamako, Mali, [4]College of Medicine, University of Malawi, Blantyre, Malawi, [5]Department of Medicine, University of Melbourne, Parkville, Australia

2 p.m.

304

A COMPARISON OF IRON AND FOLATE WITH FOLATE ALONE IN HEMATOLOGIC RECOVERY OF CHILDREN TREATED FOR ACUTE MALARIA

Samuel N. Gara[1], Aboi J. Madaki[1], **Tom D. Thacher**[2]
[1]Jos University Teaching Hospital, Jos, Nigeria, [2]Mayo Clinic, Rochester, MN, United States

2:15 p.m.

305

IMPROVED MALARIA CASE MANAGEMENT FOLLOWING DISTRICT BASED INTEGRATED TEAM TRAINING AND SUPPORT SUPERVISION OF HEALTH CARE WORKERS IN UGANDA

Umaru B. Ssekabira[1], Dan Senjovu Kaggwa[1], Alex Ojaku[1], Patrick Eyul[1], Adoke Yeka[2], Priscilla Aquilla Omwangangye[3], Allen Namagembe[1], Samuel Ocan[1], John Bosco Rwakimari[4], Lydia Mpanga Sebuyira[3], Marcia R. Weaver[5]
[1]Joint Uganda Malaria Training Programme, Kampala, Uganda, [2]Infectious Diseases Research Collaboration, Kampala, Uganda, [3]Infectious Diseases Institute of Makerere University, Kampala, Uganda, [4]Uganda Ministry of Health, Malaria Control Programme, Kampala, Uganda, [5]University of Washington, Seattle, WA, United States

2:30 p.m.

306

DISPARITIES EXIST IN THE AVAILABILITY OF MALARIA TREATMENT IN THE U.S.

Kelly A. Bear, Amanda Higginson, Patrick Hickey
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

2:45 p.m.

307

PROSPECTIVE STUDY ON CO-INFECTION OF COMMON VIRAL RESPIRATORY PATHOGENS AND MALARIA IN YOUNG CHILDREN IN PAPUA NEW GUINEA

Patricia Rarau, Mary Salib, Doris Manong, Brenda Wingi, Jennifer Igu, Ivo Mueller, Nicolas Senn
Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea

3 p.m.

308

INVESTIGATION OF CONTACTS OF A SOUTH AFRICAN TRAVELER WITH INITIALLY SUSPECTED ARENAVIRUS INFECTION, RIO DE JANEIRO, BRAZIL, 2008

Priscilleyne O. Reis[1], Dalva M. Assis[1], Alessandra V. Cardoso[2], Cecília C. Nicolai[3], Guida Silva[4], Ligia M. Costa[5], Elba R. Lemos[6], Márcio H. Garcia[7], Wildo N. Araújo[1], Eduardo H. Carmo[8]
[1]Brazilian Field Epidemiology Training Program (EPISUS), Secretariat of Health Surveillance, Ministry of Health, Brasília, Brazil, [2]Respiratory an Vaccine Preventable Disease Branch, Ministry of Health, Brasília, Brazil, [3]Municipal Secretariat of Health, Rio de Janeiro, Brazil, [4]State Secretariat of Health and Civil Defense, Rio de Janeiro, Brazil, [5]Directorate of Public Health Laboratories, Ministry of Health, Brasília, Brazil, [6]Department of Virology, Oswaldo Cruz Institute, Ministry of Health, Brasília, Brazil, [7]Center for Strategic Information in Health Surveillance, Ministry of Health, Brasília, Brazil, [8]Department of Epidemiological Surveillance, Secretariat of Health Surveillance, Ministry of Health, Brasília, Brazil

Symposium 37

Health Research Capacity Strengthening: Wellcome Trust Experiences

Washington 2
Thursday, November 19, 1:30 p.m. - 3:15 p.m.

The need for increased health research capacity strengthening in developing countries is increasingly accepted. The Wellcome Trust, a major UK-based independent research-funding charity, has recently launched three innovative, yet contrasting, schemes aimed at addressing some of these needs, in response to county-led demand, in India and Africa. The Indian Alliance (IA) scheme was launched in 2008 to support research capacity strengthening through a new within-country body to award fellowships nationally. The Health Research Capacity Strengthening (HRCS) scheme and the African Institutions Initiative were both launched in 2009. The HRCS is supporting health research funding bodies in Malawi and Kenya to implement national programs of training and grant support. The African Institutions Initiative is supporting networks of universities and research institutions across Africa, and with northern partners, to increase African research capacity through a variety of research management, training, and mentoring schemes.

CHAIR

Jimmy Whitworth
Wellcome Trust, London, United Kingdom

Barbara Sina
Fogarty International Center, Bethesda, United States

1:30 p.m.

THE VISION FOR CAPACITY BUILDING IN INDIA

Anuradha Lohia
Wellcome/DBT India Alliance, Hydrobad, India

1:55 p.m.

RESEARCH CAPACITY STRENGTHENING IN ACTION AT MAKERERE UNIVERSITY

Eli Katunguka
Makerere University, Kampala, Uganda

2:20 p.m.

CREATION OF AN NEW NON-GOVERNMENTAL NATIONAL HEALTH RESEARCH BODY IN KENYA

Gilbert Kokwaro
Consortium for National Health Research, Nairobi, Kenya

2:45 p.m.

HEALTH RESEARCH CAPACITY BUILDING IN AFRICA - CHALLENGES AND MODELS

Marcel Tanner
Swiss Tropical Institute, Basel, Switzerland

Scientific Session 38

Cestodes and Intestinal Nematodes

Washington 3
Thursday, November 19, 1:30 p.m. - 3:15 p.m.

CHAIR

Siddhartha Mahanty
National Institutes of Health, Rockville, MD, United States

Patricia Wilkins
Centers for Disease Control and Prevention, Atlanta, GA, United States

1:30 p.m.

309

A RAT MODEL OF INTRACEREBRAL INFECTION WITH *TAENIA CRASSICEPS* FOR THE STUDY OF INFLAMMATION ASSOCIATED WITH ANTHELMINTIC THERAPY IN NEUROCYSTICERCOSIS

Siddhartha Mahanty, Abby L. Berns, Erick Scott, Martin Lizak, Theodore Nash
National Institutes of Health, Rockville, MD, United States

1:45 p.m.

310

A MULTI-ANTIGEN PRINT IMMUNOASSAY (MAPIA) FOR DETECTION OF *TAENIA SOLIUM* CYSTICERCOSIS AND TAENIASIS ANTIBODIES

Sukwan Handali[1], Molly Klarman[2], Amanda N. Gaspard[3], John Noh[1], Yeuk-mui Lee[1], Silvia Rodriguez[4], Armando E. Gonzalez[5], Hector H. Garcia[6], Robert Gilman[7], Victor C. Tsang[8], Patricia P. Wilkins[1]
[1]Centers for Disease Control and Prevention, Chamblee, GA, United States, [2]Rollins School of Public Health, Emory University, Atlanta, GA, United States, [3]Rollins School of Public Health, Emory University, Atlanta, GA, United States, [4]Cysticercosis Unit, Instituto de Ciencias Neurologicas, Lima, Peru, [5]School of Veterinarian Medicine, Universidad de San Marcos, Lima, Peru, [6]Department of Microbiology, Universidad Peruana Cayetano, Lima, Peru, [7]Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, United States, [8]Department of Biology, Georgia State University, Atlanta, GA, United States

2 p.m.

311

EPILEPTIC SEIZURES IN POPULATION FROM ENDEMIC AND NON-ENDEMIC AREAS FOR CYSTICERCOSIS

Isidro Gonzalez[1], Jaime Miranda[2], Silvia Rodriguez[2], Candice Romero[2], Juan F Chiroque[2], Victor Vargas[1], Alfredo Cjuno[1], Javier A. Bustos[2], **Hector H. Garcia**[2]
[1]Instituto de Ciencias Neurologicas, Lima, Peru, [2]Universidad Peruana Cayetano Heredia, Lima, Peru

2:15 p.m.

312

EVALUATION OF NEW SEROLOGIC TECHNIQUES FOR THE DIAGNOSIS OF *STRONGYLOIDES STERCORALIS* INFECTIONS

Alejandro J. Krolewiecki[1], Roshan Ramanathan[2], Valeria Fink[3], Kimberly Won[4], Silvana Cajal[1], Marisa Juarez[1], Norma Acosta[1], Rogan Lee[5], Patrick Lammie[4], David Abraham[6], Thomas Nutman[2]
[1]Instituto de Investigaciones en Enfermedades Tropicales, Oran, Argentina, [2]Laboratory of Parasitic Diseases, National Institutes of Health, Bethesda, MD, United States, [3]Fundacion Huesped, Buenos Aires, Argentina, [4]Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [5]Institute of Clinical Pathology and Medical Research, Westmead Hospital, Westmead, Australia, [6]Department of Microbiology and Immunology, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA, United States

2:30 p.m.

313

QUANTITATIVE PCR-BASED ASSESSMENT OF *ANGIOSTRONGYLUS CANTONENSIS* LARVAE BURDEN IN U.S. ENVIRONMENTAL SAMPLES

Yvonne Qvarnstrom[1], Henry Bishop[2], John Teem[3], Robert Hollingsworth[4], Sarah Y. Park[5], Arlene Buchholz[5], Alexandre J. da Silva[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention-NCZVED-Division of Parasitic Diseases, Atlanta, GA, United States, [3]Division of Aquaculture, Florida Department of Agriculture and Consumer Services, FL, United States, [4]United States Pacific Basin Agricultural Research Center, United States Department of Agriculture, Hilo, HI, United States, [5]Hawaii State Department of Health, Honolulu, HI, United States
(ACMCIP Abstract)

2:45 p.m.

314

EPIDEMIOLOGY OF HOOKWORM INFECTION IN KINTAMPO NORTH DISTRICT, CENTRAL GHANA

Debbie Humphries[1], Emily Mosites[1], Joseph Otchere[2], Amoani Twum[2], Lauren Woo[1], Hinckley Jones-Sanpei[3], Lisa Harrison[1], Richard D. Bungiro[4], Michael Wilson[2], Kwabena Bosompem[2], Michael Cappello[1]
[1]Yale University, New Haven, CT, United States, [2]Noguchi Memorial Institute for Medical Research, Accra, Ghana, [3]University of North Carolina, Chapel Hill, NC, United States, [4]Brown University, Providence, RI, United States

3 p.m.

315

RELATIVE EFFECTIVENESS OF TWO ANTIHELMINTIC REGIMENS TO CONTROL SOIL-TRANSMITTED HELMINTH INFECTIONS AMONG PRE-SCHOOL AGED CHILDREN IN BANGLADESH

Cynthia Snider[1], Masud Alam[2], Dinesh Mondal[2], William A. Petri, Jr.[1], Rashidul Haque[2]
[1]University of Virginia, Charlottesville, VA, United States, [2]International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

Scientific Session 39

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Cellular Parasitology I

Supported with funding from the Burroughs Wellcome Fund

Washington 4
Thursday, November 19 1:30 p.m. - 3:15 p.m.

CHAIR

James G. Beeson
Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

Charles Cunningham
University of New Mexico, Albuquerque, NM, United States

1:30 p.m.

KEYNOTE ADDRESS: CELLULAR PARASITOLOGY

1:45 p.m.

1147

REVERSE GENETIC ANALYSIS OF ERYTHROCYTE DETERMINANTS OF *PLASMODIUM FALCIPARUM* INVASION

Amy K. Bei[1], Carlo Brugnara[2], Manoj T. Duraisingh[1]
[1]Harvard School of Public Health, Boston, MA, United States, [2]Children's Hospital Boston, Boston, MA, United States

2 p.m.

316

PERINUCLEAR PROTEIN, *P. FALCIPARUM* GAMETOCYTOGENESIS INDUCER 1, PFGYI1, PLAYS AN IMPORTANT ROLE IN GAMETOCYTOGENESIS

Saliha Eksi[1], Yoseph Haile1, **Belinda J. Morahan**[1], Tetsuya Furuya[2], Amreena Suri[1], Hongying Jiang[2], Xinzhuan Su[2], Kim C. Williamson[1]
[1]Loyola University Chicago, Chicago, IL, United States, [2]National Institutes of Health, Bethesda, MD, United States

2:15 p.m.

317

A METHOD FOR *IN VITRO* PRODUCTION OF *P. FALCIPARUM* OOKINETES REVEALS NOVEL INSIGHTS INTO OOKINETE BIOLOGY

Viengngeun Bounkeua, Fengwu Li, Joseph M. Vinetz

University of California, San Diego, La Jolla, CA, United States

2:30 p.m.

318

CELLULAR AND MOLECULAR INTERACTIONS WITH HEPARIN-LIKE MOLECULES DURING INVASION OF ERYTHROCYTES BY *PLASMODIUM FALCIPARUM* MEROZOITES

Michelle Boyle[1], Jack S. Richards[1], Paul R. Gilson[2], Wengang Chai[3], **James G. Beeson**[1]

[1]Walter and Eliza Hall Institute of Medical Research, Parkville, Australia, 2Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne, Australia, [3]Glycosciences Laboratory, Imperial College London, Northwick Park and St. Mark's Campus, Harrow, United Kingdom

2:45 p.m.

319

THE INFLUENCE OF PAIRING ON GENE EXPRESSION OF *SCHISTOSOMA MANSONI* ADULT FEMALES

Giulliana T. Almeida[1]**,** Thiago M. Venancio1, Ricardo DeMarco[2], Sergio Verjovski-Almeida[1]

[1]Departamento de Bioquímica, Instituto de Química, Universidade de São Paulo, Sao Paulo, Brazil, [2]Departamento de Física e Informática, Instituto de Física de São Carlos-Universidade de São Paulo, São Carlos, Brazil

3 p.m.

320

UNDERSTANDING THE BIOLOGY OF SCHISTOSOMES IN RESPONSE TO PRAZIQUANTEL

Pauline M. Cupit[1], Anthony D. Aragon[1], Tinopiwa Goronga[2], Thomas R. Webb[2], **Charles Cunningham**[1]

[1]University of New Mexico, Albuquerque, NM, United States, [2]St. Jude Children's Research Hospital, Memphis, TN, United States

Symposium 40

American Committee of Medical Entomology (ACME) I-Space Repellents: Potential for Role in Reducing Vector-Borne Disease

Washington 5

Thursday, November 19, 1:30 p.m. - 3:15 p.m.

Quantifying and accurately describing behavioral responses of mosquitoes to insecticides is of paramount importance for understanding the impact specific behaviors will have on the risk of disease transmission. As early as 1953, Muirhead-Thomson concluded that contact between humans and disease-transmitting mosquitoes could be disrupted in such a way as to stop disease transmission without killing the mosquitoes. One behavioral action that has been documented and is of great importance is spatial repellency. The use of space repellents to prevent vectors from entering structures or areas inhabited by human hosts using levels of chemicals that do not elicit a selection pressure for resistance (toxicity) has broad implications for disease control programs worldwide. The emphasis on toxicity has dominated the search and development of new chemistries for insect control; however, with the increasing pressure of insecticide resistance, a refocus to other chemical actions will be necessary to drive the development of innovative vector control strategies.

CHAIR

John Grieco
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Richard Andre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

1:30 p.m.

DDT: ROLE OF REPELLENT ACTIONS TO CONTROL MALARIA

Donald Roberts
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

1:55 p.m.

A LOCOMOTORY STIMULATION MODEL FOR EXCITO-REPELLENCY PHENOMENA

Edward D. Walker
Michigan State University, East Lansing, MI, United States

2:20 p.m.

THE ROLE OF MODELING IN THE EVALUATION OF SPATIAL REPELLENTS

Fredros Okumu
Ifakara Health Institute, Dar es Salaam, Tanzania

2:45 p.m.

COMPOUNDS THAT INHIBIT THE INSECT HOST-SEEKING ABILITY TO HUMAN

Ulirich R. Bernier
USDA-ARS-CMAVE, Gainsville, FL, United States

Symposium 40A

Urbanization and Typhoid Fever in Asia and Africa: A Time for Prevention

Wilson AB

Thursday, November 19, 1:30 p.m. – 3:15 p.m.

The incidence of bacteremic typhoid fever has been shown to be exceedingly high in children in Asia, especially within urban informal settlements, and in one urban informal settlement in Africa. Rising antimicrobial resistance of circulating *S. Typhi* strains and high rates of invasive disease in young children suggest that strategies for prevention, like immunization, may be worth pursuing, especially for children in densely populated urban environments where water sanitation and hygiene are suboptimal. Progress in improving diagnostics and an array of existing and new vaccine formulations make control and prevention of typhoid increasingly feasible, but would require prioritization among governments in the developing world, international health agencies and donors. This symposium presents recent data on disease burden and reviews the potential for prevention with existing and future-candidate vaccines.

CHAIR

Robert F. Breiman
Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya

CHAIR

W. Abdullah Brooks
International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

1:30 p.m.

TYPHOID FEVER--AN URBAN PROBLEM

W. Abdullah Brooks
International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

1:55 p.m.

URBANIZATION AND THE BURDEN OF TYPHOID FEVER IN AFRICA

Robert F. Breiman
Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya

2:20 p.m.

EFFECTIVENESS OF TYPHOID IMMUNIZATION IN AN URBAN INFORMAL SETTLEMENT IN KOLKATA

Dipika Sur
National Institute of Cholera and Enteric Diseases, Kolkata, India

2:45 p.m.

ON THE CUTTING-EDGE OF TYPHOID VACCINE DEVELOPMENT

Audino Podda
Novartis Vaccines Institute for Global Health (NVGH), Siena, Italy

Exhibit Hall Open

Exhibit Hall A

Thursday, November 19, 3 p.m. - 4 p.m.

Coffee Break

Exhibit Hall A

Thursday, November 19, 3:15 p.m. - 3:45 p.m.

Symposium 41

Immune Evasion in Malaria: A Challenge for Vaccine Development

Salon 1

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

Malaria is a deadly infectious disease that affects one-to-two billion people and kills up to one million children yearly. Despite decades of intensive research, we are still lacking an effective vaccine against malaria. Our efforts are being challenged not only by the complexity of *Plasmodium's* life cycle, but also by the parasite's masterful ability to avoid clearance by the host innate and adaptive immune responses. This symposium will review the main mechanisms of immune evasion used by malaria parasites, namely antigenic variation and the use of alternative erythrocyte invasion pathways, as well as subversion of host dendritic cells and regulatory T cell function. The implications that the parasite's immune evasion mechanisms have for vaccine development will be discussed.

CHAIR

Sofia Casares
Naval Medical Research Center/Walter Reed Army Institute of Research, Silver Spring, MD, United States

Thomas L. Richie
Naval Medical Research Center/Walter Reed Army Institute of Research, Silver Spring, MD, United States

3:45 p.m.

VARIANT EXPRESSION IN *PLASMODIUM FALCIPARUM*: BEYOND VAR GENES

Alfred Cortes
ICREA , Institut de Recerca Biomedica, Barcelona, Spain

4:10 p.m.

MOLECULAR AND CELLULAR MECHANISM OF T CELL MEDIATED IMMUNE EVASION IN MALARIA

Magdalena Plebanski
Monash University, Victoria, Melbourne, Australia

4:35 p.m.

REGULATORY T CELLS IN *P. FALCIPARUM* MALARIA: ARE THEY RELEVANT FOR DISEASE OUTCOME AND VACCINE DESIGN?

Michael Walther
Malaria Programme Medical Research Council Laboratories, Fajara, Banjul, Gambia

5 p.m.

URIC ACID-INDUCED INFLAMMATION AND IMMUNE REGULATION IN MALARIA

Ana Rodriguez
New York University, New York, NY, United States

Symposium 41A

Surprising Insights on Diarrheal Disease, One of the Top Two Causes of Young Child Mortality in Developing Countries

Salon 2

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

Diarrheal diseases constitute the second most common cause of death among children less than five years of age in the developing world. To achieve UN Millennium Development goal #4 (to decrease "under-fives" mortality by 67% by 2015 compared to the 1990 baseline), progress will have to be made in controlling diarrheal disease mortality. To accomplish this goal, some critical activities will have to ensue, including: estimating more precisely the diarrheal mortality burden; identifying the most important etiologic agents associated with diarrheal mortality; investigating the risk and protective factors for transmission of important diarrheal agents; and, assessment of the impact of programmatic use of existing vaccines (e.g., rotavirus vaccines). This symposium will: 1) review application of state-of-the-art diagnostic methods, as well as more classical methods, to identify a wide array of known diarrheal pathogens and to incriminate possible new pathogens; 2) summarize the latest results of a multi-center population-based case/control study of the etiology of severe diarrhea among children less than five years of age and population-based estimates of pathogen-specific incidence in four sites in sub-Saharan Africa and three in South Asia; 3) review epidemiologic data on water and sanitation conditions and human behaviors that constitute risk and protective factors (and that emphasize the surprising site-specificity of many of these factors); 4) reviewed data from 60-day visits to the households of pediatric diarrhea cases and controls that detect a notable mortality burden evident among children who suffered an episode of diarrhea, even many days and weeks after resolution of the acute diarrheal episode. Collectively, these new microbiologic and epidemiologic findings are providing heretofore unappreciated insights into the public health problem of severe diarrhea among infants and children in developing countries.

CHAIR

Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

Jan Agosti
Bill and Melinda Gates Foundation, Seattle, WA, United States

3:45 p.m.

DIAGNOSTICS FOR ENTERIC PATHOGENS: DILEMMAS AND DELIGHTS

James P. Nataro
University of Maryland School of Medicine, Baltimore, MD, United States

4:10 p.m.

ETIOLOGY AND BURDEN OF MODERATE AND SEVERE PEDIATRIC DIARRHEAL DISEASE IN AFRICA AND ASIA

Karen L. Kotloff
University of Maryland School of Medicine, Baltimore, MD, United States

4:35 p.m.

LIMITATIONS OF "ONE-SIZE INTERVENTIONS": RISKS AND PROTECTIVE FACTORS FOR TRANSMISSION OF DIARRHEAL PATHOGENS VARY MARKEDLY AMONG SITES

Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

5 p.m.

MORTALITY BURDEN AND NUTRITIONAL CONSEQUENCES EXTEND BEYOND THE ACUTE DIARRHEAL EPISODE

Dilruba Nasrin
University of Maryland School of Medicine, Baltimore, MD, United States

Symposium 42

Geospatial Patterns of Disease in a Changing Climate

Salon 3

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

Climate change projections indicate major alterations will occur in the distribution patterns and abundance of tropical diseases by 2030. Changing climate scenarios will be discussed for mosquito-borne diseases (malaria, Rift Valley Fever), Chagas disease in the U.S. and schistosomiasis and other tropical diseases in China.

CHAIR

John B. Malone
Louisiana State University, Baton Rouge, LA, United States

Robert Bergquist
Geospatial Health, Brastad, Sweden

3:45 p.m.

RIFT VALLEY FEVER EPIDEMICS: DYNAMICS AND RISK MAPPING

Yves M. Tourre
MEDIAS-France and LDEO of Columbia University, Ramonville Saint-Agne, France

4:10 p.m.

CLIMATE CHANGE AND TROPICAL DISEASES IN CHINA

Xiaonong Zhou
Institute of Parasitic Diseases - China Centers for Disease Control and Prevention, Shanghai, China

4:35 p.m.

THE ROLE OF CLIMATE IN THE POTENTIAL EMERGENCE OF CHAGAS DISEASE IN THE UNITED STATES

Korine N. Kolivras
Virginia Polytechnic Institute and State University, Blacksburg, VA, United States

5 p.m.

CLIMATE CHANGE AND MOSQUITOES: SHRINKING THE MALARIA MAP AND BOOSTING ARBOVIRUSES

Archie Clements
University of Queensland, Townsville, Australia

Symposium 43

Ancillary Benefits of Azithromycin Mass Treatment for Trachoma on Malaria, Diarrhea, Respiratory Infection and Sexually Transmitted Infections in Tanzania

Delaware A

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

Azithromycin mass treatment of entire villages with more than 10% prevalence of trachoma in children is standard for trachoma national control programs. Not only is azithromycin effective for *C. trachomatis,* but also azithromycin is active against organisms responsible for malaria, acute respiratory illness, diarrhea and sexually transmitted infections. This symposium will present findings on the extent and persistence of the ancillary benefits of single dose azithromycin in a six-month community prevalence study of more than 2,000 people in eight villages of malaria and trachoma endemic Tanzania. A GPS-based spatial-temporal analysis was performed after serial molecular and culture detection of agents causing malaria, relapsing fever, diarrhea, respiratory infection and sexually transmitted infections. In addition, changes were assessed to antimicrobial susceptibility pattern to *S. pneumoniae* and fecal *E. coli,* as well as antimalarial drug-resistant genotypes in the six months following mass treatment.

CHAIR

David J. Sullivan
Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States

Sheila K. West
Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD, United States

3:45 p.m.

ANCILLARY BENEFITS OF AZITHROMYCIN ON MALARIA AND *PLASMODIUM* DRUG RESISTANCE IN TANZANIA

David J. Sullivan
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

4:10 p.m.

MALARIA RAPID DIAGNOSTIC TEST IMPLEMENTATION DURING MASS TREATMENT OF AZITHROMYCIN

George Mtove
National Institute for Medical Research, Muheza, United Republic of Tanzania

4:30 p.m.

ANCILLARY BENEFITS OF AZITHROMYCIN ON NASOPHARYNGEAL CARRIAGE, RISK OF ACUTE LOWER RESPIRATORY INFECTION AND DIARRHEA

Christian L. Coles
Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, United States

4:50 p.m.

DRUG RESISTANCE OF RESPIRATORY PATHOGENS FOLLOWING MASS TREATMENT WITH AZITHROMYCIN

Mabula Kasubi
Muhimbili National Hospital, Dar es Salaam, United Republic of Tanzania

5:10 p.m.

ANCILLARY BENEFITS OF AZITHROMYCIN ON SEXUALLY TRANSMITTED DISEASES IN TANZANIA

Charlotte Gaydos
Johns Hopkins University School of Medicine, Baltimore, MD, United States

Symposium 44

Rapid Diagnostics For Low-Resource Settings

Delaware B

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

This symposium will present the current status and potential development of affordable rapid diagnostics for the evaluation of TB, malaria, leishmaniasis, trypanosomiasis and STDs in resource poor environments.

CHAIR

Mark Paris
Palm Beach County Department of Health, Delray Beach, FL, United States

Robert Gilman
Johns Hopkins University, Baltimore, MD, United States

3:45 p.m.

DEVELOPING TB DIAGNOSTICS: THE HOPKINS EXPERIENCE

David Moore
Universidad Peruano Cayetano Heredia, Lima, Peru

4:10 p.m.

DIAGNOSTICS FOR MALARIA IN PREGNANCY

Michal Fried
Seattle Biomedical Research Institute, Seattle, WA, United States

4:35 p.m.

CURRENT STATUS OF LEISHMANIASIS/TRYPANOMIASIS DIAGNOSTICS

Steve Reed
Infectious Disease Research Institute, Seattle, WA, United States

5 p.m.

EVALUATING EMERGING TECHNOLOGIES FOR RAPID DIAGNOSIS: ALIGNMENT OF PRODUCT PROFILES AND IMPLEMENTATION STRATEGIES

Wilbur Milhous
University of South Florida, Tampa, FL, United States

5:10 p.m.

STD UPDATE: CAN WE MOVE BEYOND SYNDOMIC TREATMENT?

Rosanna Peeling
World Health Organization, Geneva, Switzerland

Symposium 45

Tracking Resistance to Antimalarial Drugs: Progress Toward a Network

Virginia AB

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

The WorldWide Antimalarial Resistance Network, WWARN, will have been in operation for about one year at the time of the 2009 ASTMH meeting. This symposium will focus on the tools being developed and collaborations that are being established between scientists and public health experts in malaria endemic regions.

CHAIR

Carol H. Sibley
WorldWide Antimalarial Resistance Network, Seattle, WA, United States

Kumar V. Udhayakumar
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

TOOLS FOR MANAGEMENT OF CLINICAL DRUG EFFICACY

Grant Dorsey
Makerere University/University of California at San Francisco, Kampala/San Francisco, United States

4:10 p.m.

PHARMACOLOGY: A KEY COMPONENT OF ASSESSMENT OF DRUG EFFICACY

Karen I. Barnes
University of Capetown, Capetown, South Africa

4:35 p.m.

MONITORING MALARIA DRUG RESISTANCE IN SOUTH AND CENTRAL AMERICA AS PART OF THE AMAZON MALARIA INITIATIVE

Alexandre Macedo De Oliveira
Centers for Disease Control and Prevention, Atlanta, GA, United States

5 p.m.

INTEGRATED INFORMATION ON ANTIMALARIAL RESISTANCE- TOOLS FOR PRESENTATION TO POLICYMAKERS

Philippe Guerin
WWARN, Oxford, United Kingdom

Symposium 46

Mechanisms of Hantaviral Disease and Persistence

Virginia C

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

Hantaviruses, similar to several emerging zoonotic viruses, persistently infect their natural reservoir hosts without causing overt signs of disease. Spillover to incidental human hosts results in morbidity and mortality mediated by excessive proinflammatory and cellular immune responses. The mechanisms mediating differential viral pathogenesis in human and rodents are only starting to be uncovered and involve both viral and host-mediated mechanisms. Although advances are being made in the development of a hantavirus vaccine, there currently is no FDA-approved vaccine or drug for prevention or treatment of hantaviral disease. Understanding the mechanisms mediating viral pathogenesis in both humans and rodent reservoirs may contribute to advances in the treatment of hantaviral disease in humans.

CHAIR

Sabra L. Klein
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

CHAIR

Brian Hjelle
University of New Mexico Health Science Center, Albuquerque, NM, United States

3:45 p.m.

HANTAVIRUS N: REGULATOR OF VIRAL AND HOST RNA FUNCTION

Antonito T. Panganiban
University of New Mexico, Albuquerque, NM, United States

4:10 p.m.

IMMUNE RESPONSES TO NEW WORLD HANTAVIRUSES IN HUMANS

Brian Hjelle
University of New Mexico, Albuquerque, NM, United States

4:35 p.m.

IMMUNOLOGICAL EVENTS DURING SIN NOMBRE VIRUS INFECTION OF DEER MICE

Tony Schountz
University of Northern Colorado, Greeley, CO, United States

5 p.m.

INDUCTION OF REGULATORY RESPONSES MEDIATES SEOUL VIRUS PERSISTENCE IN RATS

Sabra L. Klein
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

Scientific Session 47

Clinical Tropical Medicine II

Washington 1

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

CHAIR

Ana A. Weil
International Center for Diarrheal Disease Research, Bangladesh, Dhaka, Bangladesh

Richard Ssekitoleko
Mbarara University, Mbarara, Uganda

3:45 p.m.

321

INVESTIGATION OF AN OUTBREAK OF SUPPOSED LEPTOSPIROSIS IN PEDRO CANÁRIO, ESPÍRITO SANTO STATE, BRAZIL, JANUARY, 2009

Verena M. Souza[1], Juliano L. Hoffmann[1], Maxwell Marchito[2], Wildo N. Araújo[1]
[1]Ministry of Health, Brasilia, Brazil, [2]Secretariat of Health of Espírito Santo State, Vitória, Brazil

4 p.m.

322

HYPOGLYCEMIA IS ASSOCIATED WITH MORTALITY IN UGANDAN PATIENTS WITH SEVERE SEPSIS

Richard Ssekitoleko[1], Christopher C. Moore[2], Shevin T. Jacob[3], Relana Pinkerton[2], Patrick Banura[4], David Meya[5], Steven J. Reynolds[6], Nathan Kenya-Mugisha[7], Harriet Mayanja-Kizza[5], W. Michael Scheld[2]
[1]Mbarara University, Mbarara, Uganda, [2]University of Virginia, Charlottesville, VA, United States, [3]University of Washington, Seattle, WA, United States, [4]Masaka Regional Referral Hospital, Masaka, Uganda, [5]Makerere University, Kampala, Uganda, [6]National Institutes of Health, Bethesda, MD, United States, [7]Ministry of Health, Kampala, Uganda

4:15 p.m.

323

CLINICAL OUTCOMES IN HOUSEHOLD CONTACTS OF PATIENTS WITH CHOLERA IN BANGLADESH

Ana A. Weil[1], Ashraful I. Khan[1], Fahima Chowdhury[1], Regina C. LaRocque[2], A. S. Faruque[1], Edward T. Ryan[2], Stephen B. Calderwood[2], Firdausi Qadri[1], Jason B. Harris[2]
[1]International Center for Diarrheal Disease and Research, Bangladesh, Dhaka, Bangladesh, [2]Massachusetts General Hospital, Boston, MA, United States

4:30 p.m.

324

OUTBREAK OF MASS SOCIOGENIC ILLNESS IN SECONDARY SCHOOLS IN BANGLADESH ASSOCIATED WITH MEDIA COVERAGE AND PERSON-TO-PERSON TRANSMISSION

Emily S. Gurley[1], Mahmudur Rahman[2], Nazmun Nahar[1], M. Jahangir Hossain[1], Rebeca Sultana[1], Nadia Ali Rimi[1], M. Saiful Islam[1], Main Uddin[1], Dawlat Khan[1], Mushtuq Husain[2], Musleh Uddin[2], Shamsi A. Chowdhury[2], Nuzhat N. Banu[2], Stephen P. Luby[1]
[1]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]Institute for Epidemiology, Disease Control and Research, Dhaka, Bangladesh

4:45 p.m.

325

SPATIAL PATTERNS OF MENINGITIS IN NIGER

Nita Bharti[1], Helene Broutin[2], Rebecca Grais[3], Ali Djibo[4], Bryan Grenfell[1]
[1]Penn State University, University Park, PA, United States, [2]Fogarty International Center, National Institutes of Health, Bethesda, MD, United States, [3]Epicentre, Paris, France, [4]Direction Generale de la Sante Publique, Ministere de la Sante, Niamey, Niger

5 p.m.

326

RE-EMERGENCE OF CHIKUNGUNYA FEVER IN NARATHIWAT PROVINCE: A STUDY ON CLINICAL MANIFESTATIONS

Thongchai Lertwilairatanapong, Jariya Narathipput, Suvimon Heng
Narathiwat Provincial Health Office, Narathiwat, Thailand

5:15 p.m.

327

DIABETIC RETINOPATHY IN AN URBAN DIABETIC CLINIC IN MALAWI

Simon J. Glover, Theresa J. Allain, Danielle B. Cohen
College of Medicine, Blantyre, Malawi

Symposium 48

Keys to Success in Global Health Partnership

Washington 2

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

A partnership between Indiana University School of Medicine and Moi University School of Medicine in western Kenya has grown over 20 years from a program of limited size into one of the largest and most comprehensive HIV/AIDS control systems in sub-Saharan Africa. With the involvement of several other North American academic institutions, the partnership is now expanding beyond HIV/AIDS and tackling a wide range of health issues, including electronic medical records, income and food security, primary care and public health. The partnership's emphasis on fostering the tri-partite academic mission, its focus on health systems and institutional development, and its long-term commitment to empowering individual Kenyans through counterpart relationships distinguish the twinning model. This symposium will discuss the key elements of this successful partnership, paying particular attention to those elements that make this partnership highly relevant to the field of global health and highly replicable among other academic medical centers in the United States and sub-Saharan Africa.

CHAIR

James W. Smith
Indiana University, Indianapolis, IN, United States

DeVon C. Hale
University of Utah School of Medicine, Salt Lake City, UT, United States

3:45 p.m.

LEADING WITH CARE: BALANCING THE TRIPARTITE MISSION OF ACADEMIC MEDICINE

Robert Einterz
Indiana University, Indianapolis, IN, United States

4:10 p.m.

A KENYAN PERSPECTIVE ON WHAT MAKES AN AMERICAN PARTNER COMPATIBLE AND SUCCESSFUL

Sylvester Kimaiyo
Moi University School of Medicine, Eldoret, Kenya

4:35 p.m.

THE ASANTE CONSORTIUM: HOW NORTH AMERICAN HEALTH CENTERS CAN COOPERATE TO ACHIEVE COMMON GOALS IN GLOBAL HEALTH

DeVon Hale
University of Utah School of Medicine, Salt Lake City, UT, United States

5 p.m.

THE AMPATH MEDICAL RECORD SYSTEM—A FUNDAMENTAL TOOL FOR RESEARCH AND CARE AND A TIE THAT BINDS INSTITUTIONS

Martin Were
Indiana University School of Medicine, Indianapolis, IN, United States

Scientific Session 49

Filariasis - Pathology/Treatment

Washington 3

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

CHAIR

Kelly L. Johnston
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Moses N. Katabarwa
Carter Center, Emory University, Atlanta, GA, United States

3:45 p.m.

328

CORRELATION OF DERMATOLOGICAL AND OPHTHALMOLOGICAL MORBIDITY IN ONCHOCERCIASIS (FOREST TYPE)

Luc E. Coffeng[1], Wilma A. Stolk[1], Sake J. de Vlas[1], Michel Boussinesq[2], Grace N.A. Fobi[2], Gladys A. Ozoh[2], Peter A. Enyong[2], Anne-Cécile Z.K. Bissek[2], Dik J.D.F. Habbema[1]
[1]Erasmus Medical Center, Rotterdam, The Netherlands, [2]African Programme for Onchocerciasis Control, Ouagadougou, Burkina Faso

4 p.m.

329

PATIENT TREATMENT COSTS FOR MANAGEMENT OF LYMPHEDEMA AND ACUTE ATTACKS IN TOGO

Paul T. Cantey[1], Stephanie Richard[2], Stephanie Richard[3], Ameyo Dorkenoo[4], Yao Sodahlon[5], Els Mathieu[1]
[1]Division of Parasitic Diseases, NCZVED, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Fogarty International Center, Bethesda, MD, United States, [3]John Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [4]Togo National Program for the Elimination of Lymphatic Filariasis, Lome, Togo, [5]Mectizan Donation Program, Decatur, GA, United States

4:15 p.m.

330

THE WEST AFRICAN LF MORBIDITY PROJECT: TRAINING IN LF SURGERY AS AN AVENUE TO LYMPHATIC FILARIASIS ELIMINATION

Anders R. Seim[1], Sunny D. Mante[2], Serigne M. Gueye[3]
[1]HDI (Health and Development International), Fjellstrand, Norway, [2]Ghana Army Medical Corps, Accra, Ghana, [3]University Cheikh Anta Diop, Dakar, Senegal

4:30 p.m.

331

A RODENT MODEL OF LYMPHATIC PATHOLOGY DUE TO ADULT FILARIAL WORMS

Charles D. Mackenzie[1], Allison Eavey[1], Tiffany Weinkopff[2], Pat Lammie[2], Timothy Geary[3]
[1]Michigan State University, East Lansing, MI, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]McGill University, Montreal, QC, Canada
(ACMCIP Abstract)

4:45 p.m.

332

HIGH DOSE BIANNUAL ALBENDAZOLE AND IVERMECTIN SUPPRESS *WUCHERERIA BANCROFTI* MICROFILARIAL LEVELS MORE EFFECTIVELY THAN STANDARD DOSE ANNUAL TREATMENT

Yaya I. Coulibaly[1], Benoit Dembele[1], Siaka Konate[1], Housseini Dolo[1], Siaka Y. Coulibaly[1], Dramane Sanogo[1], Lamine Soumaoro[1], Michel E. Coulibaly[1], Salif S. Doumbia[1], Abdallah A. Diallo[1], Sekou F. Traore[1], Adama D. Keita[2], Thomas B. Nutman[3], Amy D. Klion[3]
[1]University of Bamako, Bamako, Mali, [2]Hospital of Point G, Bamako, Mali, [3]National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

5 p.m.

333

SCREENING OF APPROVED DRUGS FOR EFFICACY AGAINST THE *WOLBACHIA* ENDOSYMBIONT OF FILARIAL NEMATODES

Kelly L. Johnston[1], Indira Umareddy[2], Florence Feby Cahya[2], Ralf Altmeyer[2], Mark J. Taylor[1]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]CombinatoRx Singapore, Helios, Singapore

Scientific Session 50

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Molecular Parasitology I

Supported with funding from the Burroughs Wellcome Fund
Washington 4

Thursday, November 19 3:45 p.m. - 5:30 p.m.

CHAIR

May Ho
University of Calgary, Calgary, AB, Canada

Ajay D. Pillai
National Institutes of Health, Rockville, MD, United States

3:45 p.m.

KEYNOTE ADDRESS: MOLECULAR PARASITOLOGY

4 p.m.

1148

AN UNEXPECTED ROLE OF SIR2A IN THE LIFE CYCLE OF MALARIA PARASITES

Agnieszka A. Religa[1], C. Carret[2,3], T. Feltwell[3], G. Hu[4], A. Amaladoss[4], M. Brochet[5], A. Pain[3], Z. Bozdech[4], P.R. Preiser[4], O. Billker[5], C.J. Janse[1], A. Scherf[6], A.P. Waters7

[1]Malaria Group, Leiden University Medical Centre, Leiden, The Netherlands, [2]Unidade de Malária, Instituto de Medicina Molecular, Universidade de Lisboa, Lisboa, Portugal, [3]Pathogen Microarrays Group, The Wellcome Trust Sanger Institute, Cambridge, United Kingdom, [4]School of Biological Sciences, Nanyang Technological University, Singapore, [5]Sanger Malaria Programme, The Wellcome Trust Sanger Institute, Cambridge, United Kingdom, [6]Biology of Host-Parasite Interactions Unit, Institut Pasteur, Paris, France, [7]Division of Infection and Immunity, Faculty of Biological Life Sciences, University of Glasgow, Glasgow, United Kingdom

4:15 p.m.

334

EXPRESSION OF *PLASMODIUM FALCIPARUM* ERYTHROCYTE MEMBRANE PROTEIN 1 (PFEMP1) IS IRON-DEPENDENT

May Ho, Steven D. Beaudry, Aaron White, Kristine Lee, Takayuki Arie, Kirk Deitsch, Rick M. Fairhurst

Department of Microbiology and Infectious Diseases, University of Calgary, Calgary, Alberta, Canada, Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, Department of Microbiology and Immunology, Weill Medical College of Cornell University, New York, NY, United States

4:30 p.m.

335

HIGH POLYMORPHISM OF THE PF-SERCA IN *PLASMODIUM FALCIPARUM* FIELD ISOLATES

Ronan Jambou[1], Axel Martinelli[2], João Pinto[2], Simonetta Gribaldo[1], Eric Legrand[3], Makhtar Niang[4], Nimol Kim[5], Béatrice Volnay[3], Marie Thérèse Ekala1, Christiane Bouchier[1], Thierry Fandeur[5], Pedro Berzosa[6], Isabel Dinis Ferreira[2], Cynthia Ferreira[7], Pedro Paulo Vieira[7], Maria das Graças Alecrim[7], Odile Mercereau-Puijalon[1], Pedro Cravo[2]

[1]Institut Pasteur, Paris, France, [2]Centro de Malária e Outras Doenças Tropicais/IHMT/UEI Biologia Molecular, Lisbon, Portugal, [3]Institut Pasteur de Guyane Française, Cayenne, France, [4]Institut Pasteur de Dakar, Dakar, Senegal, [5]Institut Pasteur du Cambodge, Phnom Penh, Cambodia, [6]Centro Nacional de Medicina Tropical, Madrid, Spain, [7]Fundação de Medicina Tropical do Amazonas, Manaus, Brazil

4:45 p.m.

336

FYA/FYB ANTIGENIC POLYMORPHISM SIGNIFICANTLY ALTERS BINDING OF *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN TO HUMAN ERYTHROCYTES

Jia Xianli[1], Brian Grimberg[1], Asim A. Siddiqui[1], Amy McHenry[2], Lior Greenberg[3], John H. Adams[4], Peter A. Zimmerman[1], **Christopher L. King[1]**

[1]Case Western Reserve University, Cleveland, OH, United States, [2]University of Notre Dame, Notre Dame, IN, United States, [3]University Hospitals, Cleveland, OH, United States, [4]University of South Florida, Tampa, FL, United States

5 p.m.

337

GENETIC VALIDATION OF THE PLASMODIAL SURFACE ANION CHANNEL AS AN ANTIMALARIAL DRUG TARGET

Ajay D. Pillai, Sanjay A. Desai

National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

5:15 p.m.

338

A UNIVERSAL APPROACH TO EXPRESS DIVERSE *P. FALCIPARUM* ENZYMES IN FUNCTIONAL FORM

Devaraja G. Mudeppa, Pradipsinh K. Rathod

University of Washington, Seattle, WA, United States

Symposium 51

American Committee of Medical Entomology (ACME) II-Space Repellents: Field Evaluations of Current Products and Strategies

Washington 5

Thursday, November 19, 3:45 p.m. - 5:30 p.m.

Quantifying and accurately describing behavioral responses of mosquitoes to chemicals is of paramount importance for understanding the impact specific behaviors will have on the risk of disease transmission. Many of our current vector control insecticides elicit behavioral actions from disease vectors. In addition, a number of products are currently available that are marketed for repelling vectors from inside homes. This symposium will examine the field based methodologies used for evaluating vector behavior and how these compounds and products alter this behavior. This symposium will also evaluate the role of these materials in reducing disease transmission.

CHAIR

John Grieco
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Richard Andre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

3:45 p.m.

TARGETED REPELLENCY: EVALUATION OF FOCAL TREATMENTS IN EXPERIMENTAL HUTS

Nicole Achee
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

4:10 p.m.

LONG-LASTING REPELLENT TREATED MATERIALS FOR MALARIA PREVENTION IN DISASTERS AND EMERGENCIES

Mark Rowland
London School of Hygiene and Tropical Medicine, London, United Kingdom

4:35 p.m.

A RIGOROUS ASSAY TO MEASURE SPATIAL REPELLENCY FOR AFROTROPICAL MOSQUITO CONTROL USING EXPERIMENTAL HUTS AND TENT-TRAPS

Sarah Moore
London School of Hygiene and Tropical Medicine, London, United Kingdom

5 p.m.

DO MOSQUITO REPELLENTS AND COILS PROVIDE PROTECTION AGAINST VECTOR-BORNE DISEASE? A SUMMARY OF CLINICAL EVALUATIONS AGAINST MALARIA, DENGUE AND JE

Nigel Hill
London School of Hygiene and Tropical Medicine, London, United Kingdom

Plenary Session 52

Plenary Session II: Fred L. Soper Lecture

Salon 2
Thursday, November 19, 6 p.m. - 6:45 p.m.

The Fred L. Soper Lecture is an honor bestowed on a distinguished scientist involved in studies related to environmental control and preventive medicine in the tropics.

CHAIR

Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

INTRODUCTION

Peter J. Hotez
The George Washington University, Washington, DC, United States

WHEN NATURE TURNS COOK: AN EPIDEMIOLOGICAL FEAST

David Heymann
Health Protection Agency, London, United Kingdom

Poster Session A Dismantle

Exhibit Hall B South
Thursday, November 19, 7 p.m. - 8 p.m.

Satellite Symposium

A Glimpse into the Future of Anti-Malarial Drug Development

Sponsored by Pfizer Inc.
Virginia AB
Thursday, November 19, 7:15 p.m. – 9 p.m.

Artimisinin based therapies (ACTs) are currently the mainstay of treatment of acute symptomatic *falciparum* malaria. As the emergence of drug resistant *Plasmodium vivax* strains becomes widespread and as malaria programs move from control to eradication and elimination phases, there will be a need for antimalarial agents with very different target product profiles. This symposium will address these future needs, the novel target product profiles, current pipeline of compounds in discovery, research and early development and how they fit in with the desired product profiles, and finally how to prioritize their development in the current resource constraint environment.

CHAIR

Joel G. Breman
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

INTRODUCTORY REMARKS

Joel G. Breman
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

DO WE NEED TO LOOK BEYOND ACTS?

Nicholas White
Mahidol Oxford Research Unit, Mahidol University, Bangkok, Thailand

NOVEL ANTI-MALARIAL DRUGS IN THE PIPELINE

Ian Bathurst
Medicines for Malaria Venture, Geneva, Switzerland

PRIORITIES FOR ANTI-MALARIA DRUG DEVELOPMENT

Ramanan Laxminarayan
Resources for the Future, Washington, DC, United States

PANEL DISCUSSION

CONCLUDING REMARKS

Joel G. Breman
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

Friday, November 20

Registration

Salon Foyer
Friday, November 20, 7 a.m. - 5 p.m.

Cyber Cafe

Marriott Foyer
Friday, November 20, 7 a.m. - 5 p.m.

Speaker Ready Room

Maryland A
Friday, November 20, 7 a.m. - 6 p.m.

ASTMH Journal Editorial Board Meeting

Wilson C
Friday, November 20, 7 a.m. - 8 a.m.

Clinical Group Past Presidents Meeting

Room 8212
Friday, November 20, 7 a.m. - 8 a.m.

Education Committee Meeting

Room 8211
Friday, November 20, 7 a.m. - 8 a.m.

Media Room

Rooms 8228/8229
Friday, November 20, 7:30 a.m. - 6:30 p.m.

Session 52A

Enteric and Diarrheal Diseases (EDD), a Priority of the Bill & Melinda Gates Foundation

Salon 3

Friday, November 20, 7 a.m. - 7:45 a.m.

The Bill & Melinda Gates Foundation will briefly discuss their investments in enteric and diarrheal diseases and the foundation's long-term goal(s) in this area. A small number of grants will be highlighted and representatives from those institutions will be asked to provide a brief overview of their programs. A question and answer session will follow. A light breakfast will be served.

CHAIR

Thomas Brewer
Bill & Melinda Gates Foundation, Seattle, WA, United States

INTRODUCTION TO THE EDD PROGRAM

Thomas Brewer
Bill & Melinda Gates Foundation, Seattle, WA, United States

ROTAVIRUS, SHIGELLA, ETEC VACCINES

John Boslego
PATH, Washington, DC, United States

TYPHOID, CHOLERA VACCINES

John Clemens
International Vaccines Institute, Seoul, Republic of Korea

GEMS NETWORK

Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

MAL-ED NETWORK

Mark Miller
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

Michael Gottlieb
Foundation for tha National Institutes of Health, Bethesda, MD, United States

DEVELOPING AN ANTI-SECRETORY DRUG

Richard Chin
Institute for OneWorld Health, San Francisco, CA, United States

Symposium 53

Malaria Eradication R&D Agenda: Update and Input

Salon 1

Friday, November 20, 8 a.m. - 9:45 a.m.

Research and development (R&D) forms a crucial part of the global strategy to control, eliminate and ultimately eradicate malaria. The malaria eradication research agenda (malERA) process is engaging the scientific community in a series of consultations to define the key knowledge gaps and tools needed in order to achieve this long-term, ultimate goal. This process is a natural extension of the Global Malaria Action Plan that was presented in September 2008. The overall aim is to develop a multi-disciplinary global R&D agenda (white paper) that can be actionable by research and public health agencies and sponsors. Consensus building and strengthening collaboration and linkages within the research community are other important components. Over the past year, experts from different technical areas have come together in consultations and have produced a series of documents that will form the consolidated white paper. This symposium will build on this work by offering researchers and implementers an opportunity to review the technical outputs thus far and provide their input. The symposium will begin with an overview of the malERA context and process and be followed by presentations highlighting the key points from the previous consultations. Discussion and feedback will follow the presentations.

CHAIR

Lawrence Slutsker
Centers for Disease Control and Prevention, Atlanta, GA, United States

Pedro L. Alonso
Barcelona Centre for International Health Research, University of Barcelona, Barcelona, Spain

8 a.m.

HISTORICAL BACKGROUND AND LESSONS LEARNED

Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Partnership in Africa (MACEPA), Seattle, WA, United States

8:10 a.m.

MALERA OVERVIEW AND CONTEXT

Pedro L. Alonso
Barcelona Centre for International Health Research, University of Barcelona, Barcelona, Spain

8:20 a.m.

DEFINING THE KNOWLEDGE GAPS - BASIC SCIENCE

Bob Sinden
Imperial College Science Technology and Medicine, London, United Kingdom

8:30 a.m.

DEFINING THE KNOWLEDGE GAPS - TOOLS - VACCINES AND DRUGS

Christopher V. Plowe
University of Maryland School of Medicine, Baltimore, MD, United States

8:45 a.m.

DEFINING THE KNOWLEDGE GAPS - TOOLS - VECTOR CONTROL

Frank Collins
University of Notre Dame, Notre Dame, IN, United States

8:55 a.m.

CROSS-CUTTING THEMES AND INTEGRATION

Lawrence Slutsker
Centers for Disease Control and Prevention, Atlanta, GA, United States

9:10 a.m.

CROSS-CUTTING THEMES AND INTEGRATION

Marcel Tanner
Swiss Tropical Institute, Basel, Switzerland

9:30 a.m.

GUIDED FEEDBACK/DISCUSSION

Brian Greenwood
London School of Hygiene and Tropical Medicine, London, United Kingdom

Pedro Alonso
Barcelona Centre for International Health Research, University of Barcelona, Barcelona, Spain

Scientific Session 54

Malaria - Biology and Pathogenesis I

Salon 2

Friday, November 20, 8 a.m. - 9:45 a.m.

CHAIR

Abdullah Bokhari
National Institutes of Health, Rockville, MD, United States

Mark Wacker
University of Notre Dame, South Bend, IN, United States

8 a.m.

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COMPARATIVE ANALYSIS OF SECRETED PROTEINS IN APICOMPLEXAN PARASITES

Rays H. Jiang, Daniel E. Neafsey
The Broad Institute of MIT and Harvard, Cambridge, MA, United States
(ACMCIP Abstract)

8:15 a.m.

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GENETIC MAPPING IN TWO *P. FALCIPARUM* CROSSES IDENTIFIES A LOCUS ENCODING THE PLASMODIAL SURFACE ANION CHANNEL

Abdullah A. Bokhari, Sanjay A. Desai
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

8:30 a.m.

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MAPPING THE GENETIC CONTROL OF THE GLOBAL METABOLITE PROFILE IN *PLASMODIUM FALCIPARUM*

Mark A. Wacker[1], Kellen A. Olszewski[2], Asako Tan[1], Geoffrey H. Siwo[1], Joshua D. Rabinowitz[3], Maneul Llinas[2], Michael T. Ferdig[1]
[1]Eck Institute for Global Health, University of Notre Dame, Notre Dame, IN, United States, [2]Department of Molecular Biology and Lewis-Singler Institute for Integrative Genomics, Princeton University, Princeton, NJ, United States, [3]Department of Chemistry and Lewis-Sigler Institute for Integrative Genomics, Princeton University, Princeton, NJ, United States

8:45 a.m.

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IMMUNE CONSTRAINTS ON PARASITEMIA AND GAMETOCYTEMIA IN MALARIA: INSIGHT FROM NUMERICAL STUDIES

Philip G. McQueen, F. Ellis McKenzie
National Institutes of Health, Bethesda, MD, United States

9 a.m.

343

ABO POLYMORPHISM AND *PLASMODIUM FALCIPARUM* MALARIA: ENHANCED PHAGOCYTOSIS OF INFECTED O ERYTHROCYTES

Kayla T. Wolofsky[1], Kodjo Ayi[1], W. Conrad Liles[1], Christine M. Cserti-Gazdewich[2], Kevin C. Kain[1]
[1]McLaughlin-Rotman Centre for Global Health, University Health Network, University of Toronto, Toronto, ON, Canada, [2]Blood Transfusion Laboratory, Toronto General Hospital, Department of Laboratory Hematology, University of Toronto, Toronto, ON, Canada

9:15 a.m.

344

STRUCTURAL AND BIOCHEMICAL CHARACTERIZATION OF THE BINDING REGION OF *PLASMODIUM FALCIPARUM* VAR2CSA DBL3X WITH CHONDROITIN SULFATE A

Kavita Singh[1], Rossitza K. Gitti[2], Apostolos G. Gittis[1], Phuc G. Nguyen[1], Michael J. Mohan[1], D. Channe Gowda[1], D. Channe Gowda[3], Gregory Tullo[1], Hong Zhou[1], Rick Fairhurst[1], Carole Long[1], David N. Garboczi[1]
[1]National Institute of Allergy and Infectious Diseases/National Institutes of Health, Rockville, MD, United States, [2]ECB Forensic Analytical Branch, Aberdeen, MD, United States, [3]Pennsylvania State University College of Medicine, Hershey, PA, United States

9:30 a.m.

345

IMMEDIATE NEUROPSYCHOLOGICAL AND BEHAVIORAL BENEFITS OF COMPUTERIZED COGNITIVE REHABILITATION IN UGANDAN PEDIATRIC CEREBRAL MALARIA SURVIVORS

Paul Bangirana[1], Bruno Giordani[2], Chandy C. John[3], Connie Page[4], Robert O. Opika[1], Michael J. Boivin[4]
[1]Makerere University, Kampala, Uganda, [2]University of Michigan, Ann Arbor, MI, United States, [3]University of Minnesota, Minneapolis, MN, United States, [4]Michigan State University, East Lansing, MI, United States

Symposium 55

Launching Careers in Tropical Disease Research: Progress Reports from Burroughs Wellcome Fund/ASTMH and Fellows

Supported with funding from the Burroughs Wellcome Fund
Salon 3

Friday, November 20, 8 a.m. - 9:45 a.m.

This session will highlight the work of the Burroughs Wellcome Fund/ASTMH fellows who are focusing their work on global health problems *in situ* -- doing excellent research on tropical diseases where they occur. Both of these highly competitive fellowship programs focus on training excellent U.S.-based researchers who are launching research careers that are expected to involve long-term research presence both abroad and at their home institutions in the United States. There will also be a discussion of career issues faced by those who take on working in two countries (home and abroad).

CHAIR

Jean Kramarik
Burroughs Wellcome Fund, Research Triangle Park, NC, United States

Victoria P. McGovern
Burroughs Wellcome Fund, Research Triangle Park, United States

8 a.m.

DIAGNOSING TB AMIDST CONVERGING DRUG-RESISTANT TB AND HIV EPIDEMICS IN RURAL SOUTH AFRICA

Scott Heysell
Yale University School of Medicine, New Haven, CT, United States

8:25 a.m.

THE INTERACTION BETWEEN HIV AND MALARIA: WHAT WE STILL DON'T KNOW

Matthew B. Laurens
University of Maryland School of Medicine, Baltimore, MD, United States

8:50 a.m.

FROM TYPHOID TO *RICKETTSIAE*: EXPLORING ETIOLOGIES OF ACUTE FEBRILE ILLNESS IN SOUTH ASIA

Megan E. Reller
Johns Hopkins Medical Institutions, Baltimore, MD, United States

9:15 a.m.

QUESTIONS AND ANSWERS

Terrie Taylor
Michigan State University, East Lansing, MI, United States

Symposium 56

Invasive Non-Typhoidal Salmonella Disease in Africa

Delaware A
Friday, November 20, 8 a.m. - 9:45 a.m.

During the past decade, population-based systematic blood culture surveillance has been ongoing in several centers in sub-Saharan Africa to detect invasive bacterial pathogens among infants and young children seen in health care facilities. Whereas such surveillance was mainly intended to quantify the burden of invasive *Haemophilus influenzae* type b and *Streptococcus pneumoniae* infections, a high frequency of isolation of non-typhoidal Salmonella (NTS) was revealed. In Kenya, Malawi, Gambia and Mali, the incidence of invasive NTS disease rivaled that of pneumococcal disease and case fatality rates of 8-25% were recorded. Serovars Salmonella Typhimurium and Enteritidis account for 80-95% of isolates and antibiotic resistance is common. Where comparable systematic population-based surveillance of febrile pediatric patients has been carried out in Asia, *S. Typhi* was commonly isolated among toddlers and young children in some sites, but NTS was conspicuously absent. What accounts for the high burden of pediatric invasive NTS disease in Africa? Are unusual NTS circulating? Are there genetic or environmental host factors specific to children in Africa? What measures, including vaccines, can control this public health problem in Africa? This symposium will provide an overview of invasive NTS disease in Africa, including epidemiology, clinical features, serovar distribution, pathogenesis and host factors. Results of active surveillance in both urban and rural sites in Kenya will be presented. Molecular epidemiologic and genomic investigations of NTS isolates from East and South Africa will demonstrate unique features of some African isolates (including insights from the complete genome sequence of an invasive *S. Typhimurium* isolate).

CHAIR

Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

Eric D. Mintz
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

PEDIATRIC INVASIVE NON-TYPHOIDAL SALMONELLA INFECTIONS IN SUB-SAHARAN AFRICA - A MAJOR KILLER

Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

8:25 a.m.

ENDEMIC INVASIVE NON-TYPHOIDAL SALMONELLA DISEASE IN URBAN AND RURAL SETTINGS IN KENYA DETECTED BY ACTIVE COMMUNITY SURVEILLANCE

Robert F. Breiman
Centers for Disease Control and Prevention - KEMRI, Nairobi, Kenya

8:50 a.m.

GENOMICS PROVIDES INSIGHTS ON INVASIVE NTS IN SUB-SAHARAN AFRICA

Gordon Dougan
The Wellcome Trust Genome Campus, Hinxton, Cambridge, United Kingdom

9:15 a.m.

VACCINES TO PREVENT INVASIVE NON-TYPHOIDAL SALMONELLA INFECTIONS IN INFANTS AND YOUNG CHILDREN

Allan Saul
Novartis Vaccine Institute for Global Health S.r.l., Siena, Italy

Symposium 57

Pre-Referral Rectal Artesunate in Rural African Communities - Experience in Use

Delaware B
Friday, November 20, 8 a.m. - 9:45 a.m.

A single dose of rectal artesunate cannot cure severe malaria, but it can rapidly reduce parasite count and gives enough pause to disease progression in patients heading towards death or permanent brain damage for them to reach proper treatment in time. The intervention, however, requires information on how it can be made available in remote communities to achieve benefit. What are the practical challenges in making the drug available in remote malaria endemic communities? Can mothers, community healthworkers or traditional healers treat, refer and follow up patients? Will patients or their parents and guardians feel that hospitalization can be deferred after a patient has received a suppository? What is the cost-effectiveness of this intervention? The symposium will provide answers to these questions from experience from several countries in Africa.

CHAIR

Melba Gomes
World Health Organization, Geneva, Switzerland

Malcolm Molyneux
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

8 a.m.

WHAT IS THE EFFECTIVENESS AND SAFETY OF NEAR-HOME MANAGEMENT OF SEVERE MALARIA IN THE REAL-LIFE SETTING?

Amabelia Rodrigues
Bandim Health Project, Bissau, Guinea-Bissau

8:30 a.m.

HOW CAN ARTESUNATE SUPPOSITORIES BE DISTRIBUTED TO ACHIEVE MAXIMUM BENEFIT? EXPERIENCE FROM FIVE COUNTRIES IN SUB-SAHARAN AFRICA

Joseph Rujumba
Makerere University, Kampala, Ghana

8:50 a.m.

DO PATIENTS OR THEIR PARENTS AND GUARDIANS FEEL THAT HOSPITALIZATION CAN BE DEFERRED AFTER A PATIENT HAS RECEIVED A SUPPOSITORY?

Rita Baiden
InDepth, Accra, Ghana

9:10 a.m.

WHAT IS THE COST-EFFECTIVENESS OF RECTAL ARTESUNATE?

Borislava Mihaylova
University of Oxford, Oxford, United Kingdom

Symposium 58

Challenges to Tuberculosis Control in the 21st Century: Urgency and Innovation

Virginia AB
Friday, November 20, 8 a.m. - 9:45 a.m.

The WHO global report of 2009 shows more cases of tuberculosis than in any previous year (9.3 million) and a rising rate of MDR-TB, with over one-half million estimated cases per year. Additionally, nearly 50% of tuberculosis cases are not detected or reported. However, 2009 is also a year in which there is global momentum to address the epidemic and an increasingly aligned global architecture to face it. This symposium will address some of the bottlenecks to TB control in the 21st century and the specific challenges posed by HIV co-infection, drug resistance and the use of century-old technologies for diagnosis. It will also highlight global efforts and strategies for turning a sense of urgency into actions for innovation.

CHAIR

Michael E. Kimerling
Bill & Melinda Gates Foundation, Seattle, WA, United States

Peter Godfrey-Faussett
London School of Hygiene and Tropical Medicine, London, United Kingdom

8 a.m.

CURRENT GLOBAL ESTIMATES AND THE CHALLENGES TO FINANCE THE GLOBAL PLAN

Katherine Floyd
World Health Organization, Geneva, Switzerland

8:25 a.m.

CONSORTIUM TO RESPOND EFFECTIVELY TO THE AIDS/TB EPIDEMIC: APPLYING EXISTING TOOLS AND COMMUNITY ENGAGEMENT TO CHANGE POLICY

Peter Godfrey-Faussett
London School of Hygiene and Tropical Medicine, London, United Kingdom

8:50 a.m.

NEW TOOLS DEVELOPMENT AND CHALLENGES TO THEIR UPTAKE IN THE FIELD: MAPPING A WAY FORWARD

Giorgio Roscigno
Foundation for Innovative New Diagnostics, Geneva, Switzerland

9:15 a.m.

SETTING PRIORITIES FOR PREVENTION AND CONTROL OF DRUG RESISTANT TUBERCULOSIS

Michael E. Kimerling
Bill & Melinda Gates Foundation, Seattle, WA, United States

Symposium 59

Yellow Fever Risk Mapping – Old Disease, New Approaches

Virginia C
Friday, November 20, 8 a.m. - 9:45 a.m.

Recent events, such as continued reports of rare but severe and fatal adverse events associated with yellow fever (YF) vaccine (YF vaccine-associated viscerotropic disease), and the reemergence of urban transmission of YF disease in Paraguay in early 2008, have highlighted the importance of finding new approaches for mapping countries at risk for YF, to aid in guiding YF vaccine recommendations for local populations and for international travelers. To accomplish this goal, a systematic review of every country with either a previous or current assessment of being at risk for yellow fever is being conducted by an international working group (WG) of YF experts, including those from WHO and CDC. This symposium will describe the use of historical approaches to mapping, as well as sophisticated computerized mapping programs, and the inclusion of human, animal and ecological data and findings from recent field investigations will be presented.

CHAIR

Nina Marano
Centers for Disease Control and Prevention, Atlanta, GA, United States

Gilles Poumerol
World Health Organization, Geneva, Switzerland

8 a.m.

CURRENT ISSUES REGARDING RISK OF YELLOW FEVER

Thomas P. Monath
Kleiner Perkins Caufield & Byers, Harvard, MA, United States

8:25 a.m.

HISTORICAL MAPPING FOR YELLOW FEVER

Mark Gershman
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:50 a.m.

FIELD ASSESSMENT OF YELLOW FEVER ACTIVITY IN SOUTH AMERICA

Erin Staples
Centers for Disease Control and Prevention, Fort Collins, CO, United States

9:15 a.m.

MODELLING APPROACH TO MAPPING YELLOW FEVER RISK

David Rogers
Oxford University, Oxford, United Kingdom

Scientific Session 60

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Immunoparasitology I

Supported with funding from the Burroughs Wellcome Fund

Washington 1

Friday, November 20, 8 a.m. - 9:45 a.m.

CHAIR

Lisa Ganley-Leal
Boston University School of Medicine, Boston, MA, United States

Qyana Griffith
Boston University School of Medicine, Boston, MA, United States

8 a.m.

KEYNOTE ADDRESS: IMMUNOPARASITOLOGY

8:15 a.m.

1149

MHC CLASS II-DEPENDENT BASOPHIL-CD4+ T CELL INTERACTIONS PROMOTE TH2 CELL-DEPENDENT IMMUNITY AND INFLAMMATION

Jacqueline G. Perrigoue[1], Steven A. Saenz[1], Mark Siracusa[1], Eric J. Allenspach[1], Betsy C. Taylor[1], Paul R. Giacomin[1], Meera G. Nair[1], Yurong Du[1], Colby Zaph[2], Michael R. Comeau[3], Terri M. Laufer[1], David Artis[1]

[1]University of Pennsylvania, Philadelphia, PA, United States, [2]University of British Columbia, Vancouver, BC, Canada, [2]Amgen Inc., Seattle, WA, United States

8:30 a.m.

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ANTIGEN SPECIFICITY OF CD23 (FCEPSILONRII)-BOUND IGE MODULATES B CELL RESPONSES: IMPLICATIONS FOR IMMUNITY TO SCHISTOSOMIASIS

Qyana Kelly Griffith[1], YanMei Liang1, Taslima Shaikh[2], Helmut Haas[3], Daniel Onguru[4], Pauline Mwinzi[4], Lisa Ganley-Leal[1]

[1]Boston University School of Medicine, Boston, MA, United States, [2]Boston University, Boston, MA, United States, [3]Research Center Borstel, Borstel, Germany, [4]Kenya Medical Research Institute, Kisumu, Kenya

8:45 a.m.

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***IN UTERO* EXPOSURE TO MATERNAL SCHISTOSOMIASIS MODULATES ACUTE AND MEMORY CELLULAR AND HUMORAL IMMUNE RESPONSES OF OFFSPRING**

Allison C. Brown, William J. Moss

The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

9 a.m.

348

SCHISTOSOMES TARGET HUMAN CD23-MEDIATED IMMUNITY IN IMMUNO-EVASIVE TACTICS

Qyana Griffith[1], YanMei Liang[1], Ashley Cruz1, Helmut Haas[2], **Lisa Ganley-Leal**[1]

[1]Boston University School of Medicine, Boston, MA, United States, [2]Research Centre Borstel, Borstel, Germany

9:15 a.m.

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SUBVERSION OF INNATE IMMUNE SIGNALS BY *SCHISTOSOMA MANSONI* PERMITS WORM DEVELOPMENT

Diana K. Riner, Sean K. Maynard, Stephen J. Davies

Uniformed Services University of the Health Sciences, Bethesda, MD, United States

9:30 a.m.

350

REGULATION OF INNATE IMMUNITY TO LEISHMANIA INFECTION BY TYPE I IFN SIGNALING

Lijun Xin, Diego A. Vargas-Inchaustegui, Jiaren Sun, Lynn Soong

The University of Texas Medical Branch, Galveston, TX, United States

Symposium 61

Panel Discussion on the Involvement of Human Subjects in Vector Biology Research

Washington 2

Friday, November 20, 8 a.m. - 9:45 a.m.

Research on the biology and ecology of vectors of human pathogens sometimes involves interactions with human subjects. However, there is disagreement as to when these interactions should be classified as "human subjects research" and its oversight implications, and when they should be classified as "biohazard" or "occupational hazard". This panel discussion is a first step to provide some clarity on this topic and to the development of guidelines that will help investigators and others involved in vector research with this topic.

CHAIR

Adriana Costero
National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

8 a.m.

THE INVESTIGATOR PERSPECTIVE: VALUE AND NEED FOR THE INVOLVEMENT OF HUMAN SUBJECTS IN VECTOR RESEARCH

Dawn M. Wesson
Tulane University, New Orleans, LA, United States

8:25 a.m.

THE SPONSOR PERSPECTIVE: SAFETY AND DATA INTEGRITY IN CLINICAL RESEARCH

Mirjana Nesin
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

8:50 a.m.

THE ETHICIST PERSPECTIVE: ENSURING THE HIGHEST STANDARDS FOR CLINICAL RESEARCH

James Lavery
University of Toronto, Toronto, ON, Canada

9:15 a.m.

BALANCING THE TENSIONS BETWEEN RESEARCH AND HUMAN SAFETY IN VECTOR BIOLOGY RESEARCH

Adriana Costero
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

Scientific Session 62

Flavivirus - Dengue II

Washington 3
Friday, November 20, 8 a.m. - 9:45 a.m.

CHAIR

David F. Arguello
Centers for Disease Control and Prevention, San Juan, PR, United States

Rebeca Rico-Hesse
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

8 a.m.

351

VIRAL DETERMINANTS OF DENGUE VIRUS FITNESS AND VIRULENCE REVEALED IN THE EVOLUTION OF DENGUE VIRUS SEROTYPE 2 IN NICARAGUA

Molly OhAinle[1], Matthew R. Henn[2], Aubree Gordon[1], Tangni Gomez[3], Yolanda Tellez[3], Saira Saborío[3], Bruce Birren[2], Angel Balmaseda[3], Eva Harris[1]
[1]Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, [2]Broad Institute, Cambridge, MA, United States, [3]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

8:15 a.m.

352

ASSESSING THE ROLE OF HUMAN MOVEMENT IN THE TRANSMISSION DYNAMICS OF DENGUE VIRUS IN IQUITOS, PERU

Steven T. Stoddard[1], Amy C. Morrison[1], Brett M. Forshey[1], Valerie Paz Soldan[2], Helvio Astete[1], John P. Elder[3], Gonzalo Vasquez-Prokopec[4], Uriel Kitron[4], Tadeusz J. Kochel[5], Thomas W. Scott[1]
[1]University Of California, Davis, Davis, CA, United States, [2]Tulane University, New Orleans, LA, United States, [3]San Diego State University, San Diego, CA, United States, [4]Emory University, Atlanta, GA, United States, [5]Naval Medical Research Center Detachment, Lima, Peru

8:30 a.m.

353

AGE SHIFTS OF DHF IN BRAZIL: INSIGHT FROM A SEROLOGICAL SURVEY IN RECIFE

Isabel Rodriguez-Barraquer[1], Ernesto Marques[2], Derek A. Cummings[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Johns Hopkins School of Medicine, Baltimore, MD, United States

8:45 a.m.

354

WHAT IS ENHANCED SURVEILLANCE?: DESCRIPTION OF AN ENHANCE DENGUE SURVEILLANCE SYSTEM MODEL - THE PATILLAS ENHANCED DENGUE SURVEILLANCE SYSTEM (PEDSS), PATILLAS PUERTO RICO

D. Fermín Argüello[1], Gladys González-Zeno[1], E. Brian Irizarry-Pérez[1], Mary Ramos[2], Luz Quiñones[1], Aidsa Rivera[1], Christine Luxemburger[3], Viviane Jusot[3], Jorge Muñoz[1], Elizabeth Hunsperger[1], Wellington Sun[4], Kay M. Tomashek[1]
[1]Centers for Disease Control and Prevention, San Juan, PR, United States, [2]Department of Pediatrics, University of New Mexico, Albuquerque, NM, United States, [3]Sanofi Pasteur, Lyon, France, [4]United States Food and Drug Administration, Rockville, MD, United States

9 a.m.

355

TUMOR NECROSIS FACTOR (TNF) AND LYMPHOTOXIN-ALPHA (LTA) GENE ASSOCIATIONS WITH DENGUE VIRUS INFECTION IN ETHNIC THAIS

Henry A. Stephens[1], Sasijit Vejbaesya[2], Panpimon Luangtrakool[2], Komon Luangtrakool[2], Siripen Kalayanarooj[3], David W. Vaughn[4], Timothy P. Endy[4], Mammen P. Mammen[4], Sharone Green[5], Daniel H. Libraty[5], Francis A. Ennis[5], Alan L. Rothman[5]
[1]University College London, London, United Kingdom, [2]Department of Transfusion Medicine, Siriraj Hospital and Medical School, Mahidol University, Bangkok, Thailand, [3]Queen Sirikit National Institute of Child Health, Bangkok, Thailand, [4]Department of Virology, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [5]Center for Infectious Diseases and Vaccine Research, University of Massachusetts Medical School, Worcester, MA, United States

9:15 a.m.

356

ROLE OF B CELL MEMORY IMMUNITY IN SECONDARY DENGUE VIRUS INFECTIONS IN MICE

Simona Zompi, Katherine Williams, P. Robert Beatty, Eva Harris
Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

9:30 a.m.

357

HUMANIZED MICE SHOW DIFFERENCES IN DISEASE PRESENTATION ACCORDING TO INFECTING DENGUE VIRUS GENOTYPE

Javier Mota, Rebeca Rico-Hesse
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

Symposium 63

Update on Chagas Disease in the United States: Blood Bank Screening and Diagnostic Options

Washington 4
Friday, November 20, 8 a.m. - 9:45 a.m.

Most blood banks in the United States have screened donations for *Trypanosoma cruzi* since January 2007, and to date, 782 previously undiagnosed infections have been detected. Because of blood screening and immigration from endemic regions, U.S. clinicians are increasingly called upon to evaluate patients with suspected Chagas disease, but few have experience in the diagnostic complexities of the disease. In the acute phase of Chagas disease, parasitemia is often detectable by microscopy, culture and PCR. By contrast, diagnosis in the chronic phase relies on application of at least two serological tests based on different antigens and/or principles. Discordances may be difficult to resolve because there is no true gold standard assay for chronic *T. cruzi* infection. This symposium will review clinical and biological aspects of the disease, decisions regarding the best diagnostic tests in the acute and chronic phases, discuss the performance characteristics and limitations of available assays, give an overview of blood bank screening and explore future directions in Chagas disease diagnosis.

CHAIR

Caryn Bern
Centers for Disease Control and Prevention, Atlanta, GA, United States

Susan Montgomery
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

EVALUATION OF PATIENTS WITH SUSPECTED CHAGAS DISEASE AND DECISIONS REGARDING TESTING

Caryn Bern
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:25 a.m.

ASSAYS FOR THE DIAGNOSIS OF CHRONIC *TRYPANOSOMA CRUZI* INFECTION IN THE UNITED STATES

Charles W. Todd
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:50 a.m.

SCREENING OF THE UNITED STATES BLOOD SUPPLY: ASSAYS IN CURRENT USE, FUTURE PROSPECTS AND THE RESULTS OF SCREENING SINCE 2007

David Leiby
American Red Cross, Rockville, MD, United States

9:15 a.m.

NEW DIAGNOSTIC TESTS AND PROSPECTS FOR FUTURE IMPLEMENTATION

Rick L. Tarleton
University of Georgia, Athens, GA, United States

Scientific Session 64

Mosquitoes - Biochemistry, Molecular Biology and Molecular Genetics I

Washington 5
Friday, November 20, 8 a.m. - 9:45 a.m.

CHAIR

Luke Alphey
Oxitec Limited, Abingdon, United Kingdom

Megan R. Wise de Valdez
Colorado State University, Fort Collins, CO, United States

8 a.m.

358

A LARGE SCALE LABORATORY INVESTIGATION OF THE RELEASE OF INSECTS CARRYING A DOMINANT LETHAL GENE (RIDL®) AS AN EFFECTIVE CONTROL STRATEGY FOR *AEDES AEGYPTI* MOSQUITOES

Megan R. Wise de Valdez[1], Derric Nimmo[2], Hong-Fei Gong[2], Luke Alphey[2], William C. Black, IV[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Oxitec Ltd., Abingdon, United Kingdom

8:15 a.m.

359

GENETIC CONTROL OF *AEDES* MOSQUITOES TO PREVENT DENGUE AND CHIKUNGUNYA

Luke Alphey
Oxitec Limited, Oxford, United Kingdom

8:30 a.m.

360

THE EFFECT OF GENE DRIVE ON CONTAINMENT OF TRANSGENIC MOSQUITOES

John M. Marshall
University of California at Los Angeles, Los Angeles, CA, United States

8:45 a.m.

361

GENE EXPRESSION PROFILE ANALYSIS OF *ANOPHELES GAMBIAE* AGING AND BLOOD FEEDING: IDENTIFICATION OF CANDIDATE GENES FOR AGE GRADING

Mei-Hui Wang[1], Osvaldo Marinotti[2], Anthony A. James[2], Edward Walker[3], Guiyun Yan[1]
[1]Public Health, University of California, Irvine, Irvine, CA, United States, [2]Molecular Biology and Biochemistry, University of California, Irvine, Irvine, CA, United States, [3]Microbiology and Molecular Genetics, Michigan State University, East Lansing, MI, United States

9 a.m.

362

POLYMORPHISMS IN *ANOPHELES GAMBIAE* IMMUNE GENES ARE ASSOCIATED TO MALARIA RESISTANCE

Caroline A. Harris[1], Isabelle Morlais[2], François Rousset[3], Luc Abate[1], Didier Fontenille[1], Anna Cohuet[4]
[1]Institut de recherche pour le developpement, Montpellier, France, [2]OCEAC, Youndé, Cameroon, [3]University of Montpellier, Montpellier, France, [4]IRSS, Bobo Dioulasso, Burkina Faso

9:15 a.m.

363

DUPLICATION AND CONCERTED EVOLUTION OF VITELLOGENIN GENES IN MOSQUITOES

Song Chen, Jason L. Rasgon
Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, United States

9:30 a.m.

364

RESPONSE OF MOSQUITO PROTEIN INTERACTION NETWORK TO THE DENGUE INFECTION

Zhiyong Xi, Xiang Guo, Yao Xu, Guowu Bian, Andrew David Pike, Yan Xie
Michigan State University, East Lansing, MI, United States

Scientific Session 65

HIV in the Tropics

Wilson AB

Friday, November 20, 8 a.m. - 9:45 a.m.

CHAIR

Davidson H. Hamer
Boston University School of Public Health, Boston, MA, United States

Jean B. Nachega
Johns Hopkins University, Baltimore, MD, United States

8 a.m.

365

ETIOLOGY OF FEBRILE ILLNESS AMONG HOSPITALIZED HIV-INFECTED AND HIV-UNINFECTED ADULTS AND ADOLESCENTS IN NORTHERN TANZANIA

John A. Crump[1], Habib O. Ramadhani[2], Anne B. Morrissey[1], Venance P. Maro[2], Wilbrod Saganda[3], Mtumwa S. Mwako[3], Andrea V. Shaw[1], John A. Bartlett[1], Hugh Reyburn[4]
[1]Duke University Medical Center, Durham, NC, United States, [2]Kilimanjaro Christian Medical Centre, Moshi, United Republic of Tanzania, [3]Mawenzi Regional Hospital, Moshi, United Republic of Tanzania, [4]London School of Hygiene and Tropical Medicine, London, United Kingdom

8:15 a.m.

366

PROPHYLACTIC EFFECT OF TRIMETHOPRIM-SULFAMETHOXAZOLE ON MALARIA IN HIV-INFECTED CHILDREN LIVING IN KAMPALA, UGANDA

Anne F. Gasasira[1], Moses Kamya[2], Neil Vora[3], Jane Achan[2], Fredrick Katera[2], Edwin Charlebois[3], Theodore Ruel[3], Diane Havlir[3], Philip Rosenthal[3], Grant Dorsey[3]
[1]Makerere University/University of California Berkeley, Berkeley, CA, United States, [2]Makerere University, Kampala, Uganda, [3]University of California, San Francisco, CA, United States

8:30 a.m.

367

THE EFFECT OF UNTREATED HIV INFECTION ON MALARIA: DOWN-REGULATING INNATE INFLAMMATORY RESPONSES

Lena Serghides[1], Constance A. Finney[1], Prameet Seth[2], Colin Kovacs[3], Mona Loutfy[3], Rupert Kaul[2], Kevin C. Kain[1]
[1]McLaughlin-Rotman Centre for Global Health, UHN and University of Toronto, Toronto, ON, Canada, [2]Institute of Medical Science, University of Toronto, Toronto, ON, Canada, [3]Canadian Immunodeficiency Research Collaborative, Toronto, ON, Canada

8:45 a.m.

368

FETAL IMMUNE PRIMING TO PARASITIC ANTIGENS, IMMUNE ACTIVATION AND SUSCEPTIBILITY TO *IN VITRO* HIV INFECTION

Kevin Steiner[1], Latoya Myrie[1], Indu Malhotra[1], Peter Mungai[1], Eric Muchiri[2], Arlene Dent[1], Christopher King[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Division of Vector Borne Diseases, Nairobi, Kenya

9 a.m.

369

SPECIES-SPECIFIC EFFECTS OF DEWORMING AMONG HIV AND HELMINTH CO-INFECTED INDIVIDUALS

Bradley R. Herrin, Grace John-Stewart, Judd L. Walson
University of Washington, Seattle, WA, United States

9:15 a.m.

370

REASONS FOR SWITCHING TO SECONDLINE ANTIRETROVIRAL THERAPY AMONG PATIENTS ATTENDING KABALE HOSPITAL/JCRC KABALE HIV CLINIC

Peterson S. Kyebambe
Kabale Regional Hospital, Kabale, Uganda

9:30 a.m.

371

PREVALENCE AND CORRELATES OF HELMINTH INFECTION IN HIV SERO-POSITIVE KENYAN ADULTS

Barclay T. Stewart[1], Laura Sangare[2], Loice Mbogo[3], Grace John-Stewart[2], Judd L. Walson[2]
[1]Medical University of South Carolina, Beaufort, SC, United States, [2]University of Washington, Seattle, WA, United States, [3]Kenya Medical Research Institute - University of Washington Collaboration, Kilifi, Kenya

Exhibit Hall Open

Exhibit Hall A
Friday, November 20, 9:30 a.m. - 10:30 a.m.

Coffee Break

Exhibit Hall A
Friday, November 20, 9:45 a.m. - 10:15 a.m.

Supported with funding from SCYNEXIS, Inc.

Poster Session B Set-Up

Exhibit Hall B South
Friday, November 20, 9:45 a.m. - 10:15 a.m.

Poster Session B Viewing

Exhibit Hall B South
Friday, November 20, 10:15 a.m. - Noon

Symposium 67

Global Health Cornerstone Symposium II

Salon 2
Friday, November 20, 10:15 a.m. - Noon

This year marks the first ASTMH conference that features a formal series of symposia centered around globalization's impact on health, health disparities and global health partnerships. This session features Dr. Harold Varmus, who has spoken extensively on the need for science to inform public policy and on the U.S. commitment to global health. Dr. Varmus co-chairs The Institute of Medicine's Committee on the U.S. Commitment to Global Health, which recently released the report, "The U.S. Commitment to Global Health: Recommendations for the Public and Private Sectors." A question and answer period is anticipated following the presenter's remarks.

CHAIR

Michele Barry
Stanford University, Stanford, CA, United States

Thomas E. Wellems
ASTMH President, Rockville, MD, United States

10:15 a.m.

INTRODUCTION

Michele Barry
Stanford University, Stanford, CA, United States

10:30 a.m.

Harold Varmus
Memorial Sloan-Kettering Cancer Center, New York, NY, United States

11:10 a.m.

QUESTION AND ANSWER PERIOD

Symposium 68

Academic Platforms for the Integration of Tropical Medicine Research and the Promotion of Human Rights

Salon 3
Friday, November 20, 10:15 a.m. - Noon

Despite their common goal of improved global health, there is often a significant divide in the field of tropical medicine between academicians, who pursue knowledge through research and education, and human rights workers, who generally strive to provide more direct services through humanitarian organizations. This divide often poses an impediment to the maximum success of both groups and the populations they serve. Academicians conducting field studies could benefit from partnerships with people and organizations with direct contact in the endemic areas of a health problem of interest, helping to focus their research and facilitate implementation. In turn, humanitarian organizations could benefit from a more direct stream of data and information to implement best practices in the field. Although there are frequently individuals active in both academia and humanitarian aid, few programs attempt to formally integrate science and human rights promotion. This symposium will present a few examples of programs that specifically seek to incorporate these two important components of the health sciences.

CHAIR

Daniel G. Bausch
Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Frederique A. Jacquerioz
Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

10:15 a.m.

UNIVERSITY OF CALIFORNIA, BERKELEY AND THE SUSTAINABLE SCIENCES INSTITUTE

Eva Harris
University of California at Berkeley, Berkeley, CA, United States

10:40 a.m.

TULANE UNIVERSITY AND DOCTORS FOR GLOBAL HEALTH

Daniel Bausch
Tulane University, New Orleans, LA, United States

11:05 a.m.

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE AND INNOVATION FOR HEALTH AND DEVELOPMENT

Carlton A. Evans
London School of Hygiene and Tropical Medicine, London, United Kingdom

11:30 a.m.

HARVARD UNIVERSITY AND PARTNERS IN HEALTH

Joia Mukherjee
Harvard University and Partners in Health, Boston, MA, United States

Symposium 70

Brain Disorders in the Developing World

Delaware B

Friday, November 20, 10:15 a.m. - Noon

Non-communicable diseases and disorders are rapidly becoming the predominant cause of poor health in all low-to-middle income regions except sub-Saharan Africa (where they are second only to HIV/AIDS). The World Health Organization estimates the burden of neurologic diseases – as measured in disability-adjusted life-years – is 30% greater in low-income countries than in high-income countries. This symposium will showcase research in four regions of the world funded by the National Institutes of Health Fogarty International Center's "Brain Disorders in the Developing World" program: 1) retroviral infections of the nervous system (Peru); 2) pathogenesis of cognitive and neurologic deficits in central nervous system malaria (Uganda) 3) food toxins and neurodegeneration in sub-Saharan Africa; and 4) childhood diarrhea, nutrition and gene-environment interactions in cognitive function (Brazil).

CHAIR

Joseph R. Zunt
University of Washington, Seattle, WA, United States

Desire Tshala-Katumbay
Oregon Health Sciences University, Portland, OR, United States

10:15 a.m.

RETROVIRAL INFECTIONS OF THE NERVOUS SYSTEM IN PERU

Joseph R. Zunt
University of Washington, Seattle, WA, United States

10:40 a.m.

PATHOGENESIS OF COGNITIVE AND NEUROLOGIC DEFICITS IN CENTRAL NERVOUS SYSTEM MALARIA

Chandy C. John
University of Minnesota, Minneapolis, MN, United States

11:05 a.m.

FOOD TOXINS AND NEURODEGENERATION IN SUB-SAHARAN AFRICA

Desire Tshala-Katumbay
Oregon Health and Science University, Portland, OR, United States

11:30 a.m.

CHILDHOOD DIARRHEA, NUTRITION AND GENE-ENVIRONMENT INTERACTIONS IN COGNITIVE FUNCTION

Richard Guerrant
University of Virginia, Charlottesville, VA, United States

Symposium 70A

Improving the Health of Travelers and New Immigrants and Refugees: Evidence-Based Approaches

Virginia AB

Friday, November 20, 10:15 a.m. - Noon

As global travel and migration increase, more efforts are needed to reduce the spread of infectious diseases and to prepare travelers for health risks. This symposium will address current approaches to assessing and reducing health risks to travelers and improving the health of migrants. Specific topics will include a review of TravEpiNet, a surveillance network to identify characteristics of traveling populations, description of ways in which information from travelers can be used to assess emerging infectious diseases and develop methods to reduce health risks to travelers and methods of reducing illness in immigrant and refugee populations.

CHAIR

Elizabeth D. Barnett
Boston Medical Center, Boston, MA, United States

Yanni Emad
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:15 a.m.

IMPROVING THE HEALTH OF TRAVELERS: TRAVEPINET

Edward T. Ryan
Massachusetts General Hospital, Boston, MA, United States

10:40 a.m.

IMPROVING THE HEALTH OF TRAVELERS: ASSESSING HEALTH RISKS AND BEHAVIOURS BEFORE, DURING AND AFTER TRAVEL

Davidson H. Hamer
Boston University, Boston, MA, United States

11:05 a.m.

IMPROVING THE HEALTH OF TRAVELERS: USING SEROSURVEYS TO ASSESS TRAVEL RELATED HEALTH RISKS

Elizabeth D. Barnett
Boston Medical Center, Boston, MA, United States

11:30 a.m.

IMPROVING THE HEALTH OF IMMIGRANTS AND REFUGEES: EVIDENCE-BASED APPROACHES

William M. Stauffer
University of Minnesota, Minneapolis, MN, United States

Symposium 71

30 Years of Building a Research Platform: The KEMRI/ Centers for Disease Control and Prevention Collaboration

Virginia C

Friday, November 20, 10:15 a.m. - Noon

This symposium will trace the roots of the present KEMRI/CDC Collaboration in Kisumu, Kenya from 1979, the early malaria research days, to the present, where the KEMRI/CDC Collaboration has grown into a major research platform investigating multiple infectious diseases

CHAIR

Kayla Laserson
KEMRI/Centers for Disease Control and Prevention, Kisumu, Kenya

John Vulule
KEMRI Center for Global Health Research, Kisumu, Kenya

Larry Slutsker
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:15 a.m.

DEMOGRAPHIC SURVEILLANCE: PAST, PRESENT AND FUTURE

Allen Hightower
Centers for Disease Control and Prevention-Kenya, Kisumu, Kenya

10:40 a.m.

KEMRI/CENTERS FOR DISEASE CONTROL AND PREVENTION MALARIA RESEARCH: LOCAL, NATIONAL AND GLOBAL IMPACT

Mary J. Hamel
KEMRI/Centers for Disease Control and Prevention, Kisumu, Kenya

11:05 a.m.

THE CUTTING EDGE: RESEARCH AND CONTROL AT THE EPICENTER OF THE KENYA HIV/AIDS EPIDEMIC

Kevin DeCock
Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya

11:30 a.m.

THE RISE OF CDC'S GLOBAL DISEASE DETECTION ACTIVITIES IN KENYA

Daniel Feikin
KEMRI/Centers for Disease Control and Prevention, Kisumu, Kenya

Scientific Session 72

Schistosomiasis and Other Trematodes - Immunology/ Pathology

Washington 1

Friday, November 20, 10:15 a.m. - Noon

CHAIR

Stephen Davies
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Jonathan D. Kurtis
Brown University, Providence, RI, United States

10:15 a.m.

379

TIMP-1 IN RESPONSE TO EGG ANTIGENS PREDICTS HEPATIC FIBROSIS IN HUMAN *S. JAPONICUM* INFECTION

Valeria Fabre[1], Haiwei Wu[1], Sunthorn Pond-Tor[1], Hannah M. Coutinho[1], Luz P. Acosta[2], Mario A. Jiz[1], Remigio M. Olvedo[2], Blanca Jarilla[2], Stephen T. McGarvey[3], Subburaman Mohan[4], David Baylink[4], Keith Alvares[5], Arthur Veis[5], Jennifer F. Friedman[1], Jonathan D. Kurtis[1]
[1]Center for International Health Research, Providence, RI, United States, [2]Research Institute of Tropical Medicine, Manila, Philippines, [3]Brown University, Providence, RI, United States, [4]Loma Linda University, Loma Linda, CA, United States, [5]Northwestern University, Chicago, IL, United States

10:30 a.m.

380

BASOPHILS PLAY A POSSIBLE IMMUNO-REGULATORY ROLE DURING *S. MANSONI* INFECTION IN MICE

William K. Anyan[1], Takashi Kumagai[1], Kazushige Obata[1], Reiko Shimogawara[1], Bethel Kwansa-Bentum[1], Kwabena M. Bosompem[2], Hajime Karasuyama[1], Nobuo Ohta[1]
[1]Tokyo Medical and Dental University, Tokyo, Japan, [2]Noguchi Memorial Institute for Medical Research, Accra, Ghana
(ACMCIP Abstract)

10:45 a.m.

381

INCREASES IN SCHISTOSOME-SPECIFIC IGE AND CD19+/CD23+ B CELLS IN A COHORT OF KENYAN CHILDREN UNDERGOING REPEATED TREATMENT AND REINFECTION WITH *SCHISTOSOMA MANSONI*

Carla L. Black[1], Erick M. Muok[2], Jennifer M. Carter[1], Pauline N. Mwinzi[2], Diana M. Karanja[2], W. Evan Secor[3], Daniel G. Colley[1]
[1]University of Georgia, Athens, GA, United States, [2]Kenya Medical Research Institute, Kisumu, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States
(ACMCIP Abstract)

11 a.m.

382

FACTORS ASSOCIATED TO TOTAL AND SPECIFIC IGE LEVELS IN RESIDENTS OF AN ENDEMIC AREA FOR SCHISTOSOMIASIS IN MINAS GERAIS, BRAZIL

Andrea Gazzinelli[1], Leonardo F. Matoso[1], Ricardo Fujiwara[1], João Paulo A. Haddad[1], Helmut Kloos[2], Rodrigo Correa-Oliveira[3]
[1]Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, [2]University California San Francisco, San Francisco, CA, United States, [3]Fundação Oswaldo Cruz, Belo Horizonte, Brazil
(ACMCIP Abstract)

11:15 a.m.

383

SCHISTOSOME SOLUBLE EGG ANTIGENS INDUCE ERYTHROCYTE CELL DEATH

Ravi S. Kasinathan, Robert M. Greenberg
University of Pennsylvania, Philadelphia, PA, United States

11:30 a.m.

384

ENHANCEMENT OF PROTECTIVE IMMUNITY AND IMMUNO-MODULATION OF LIVER GRANULOMA FORMATION WITH THE COMBINATION OF HUMAN AND MICE ANTI-IDIOTYPIC VACCINE MODEL IN *SCHISTOSOMA MANSONI* INFECTED MICE

Mohamed A. Ali, Mohamed Emad Abd El-Fattah
Faculty of Medicine, Minia, Egypt
(ACMCIP Abstract)

11:45 a.m.

385

A NOVEL RECOMBINANT *FASCIOLA HEPATICA* PROTEIN BELONGING TO THE METHYL TRANSFERASE PROTEIN-LIKE FAMILY IS AN USEFUL ANTIGEN FOR IMMUNODIAGNOSIS AND A POTENTIAL TARGET FOR IMMUNOPROPHYLAXIS

Jose F. Gaudier, Ana M. Espino
University of Puerto Rico, Medical Sciences Campus, San Juan, PR, United States
(ACMCIP Abstract)

Scientific Session 73

Mosquitoes - Vector Biology - Epidemiology II

Washington 2
Friday, November 20, 10:15 a.m. - Noon

CHAIR

Sheri L. Anderson
University of Florida, Vero Beach, FL, United States

Michael J. Turell
United States Army Medical Research Institute for Infectious Diseases, Fort Detrick, MD, United States

10:15 a.m.

386

EVALUATION OF NOVEL DIPSTICK ASSAYS FOR THE DETECTION OF RIFT VALLEY FEVER VIRUS IN MOSQUITOES

Michael J. Turell[1], Kirti Dave[2], Sonia Dave[2], Maria Mayda[3], Zahra Parker[3], Russell E. Coleman[4], Daniel Strickman[5]
[1]United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States, [2]VecTOR Test Systems, Inc., Thousand Oaks, CA, United States, [3]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [4]United States Army Medical Materiel Development Activity, Fort Detrick, MD, United States, [5]United States Department of Agriculture, Beltsville, MD, United States

10:30 a.m.

387

USING LUMINEX TO IDENTIFY CULEX BLOODMEALS AND EVALUATE TRAP BIAS

Tara C. Thiemann, William K. Reisen
University of California, Davis, Davis, CA, United States

10:45 a.m.

388

EPIDEMIOLOGY OF WEST NILE VIRUS IN SOUTHERN CALIFORNIA: THE ROLE OF *CULEX QUINQUEFASCIATUS* AND HOUSE FINCHES

Goudarz Molaei[1], Robert F. Cummings[2], Philip M. Armstrong[1], Tianyun Su[3], Greg A. Williams[4], Min-Lee Cheng[3], James P. Webb[2], Theodore G. Andreadis[1]
[1]The Connecticut Agricultural Experiment Station, New Haven, CT, United States, [2]Orange County Vector Control District, Garden Grove, CA, United States, [3]West Valley Mosquito and Vector Control District, Ontario, CA, United States, [4]Northwest Mosquito and Vector Control District, Corona, CA, United States

11 a.m.

389

COMMUNAL AVIAN ROOSTS AS AMPLIFICATION FOCI FOR WEST NILE VIRUS IN URBAN AREAS IN NORTHEASTERN USA

Maria A. Diuk-Wasser[1], Goudarz Molaei[2], Jennifer E. Simpson[1], Corrine M. Folsom[1], Philip M. Armstrong[2], Theodore G. Andreadis[2]
[1]Yale University, New Haven, CT, United States, [2]The Connecticut Agricultural Experiment Station, New Haven, CT, United States

11:15 a.m.

390

WEST NILE VIRUS AFFECTS THE RATE OF BLOOD DIGESTION IN *CULEX PIPIENS QUINQUEFASCIATUS* SAY (DIPTERA: CULICIDAE)

Sheri L. Anderson, Stephanie L. Richards, Chelsea T. Smartt, Jonathan F. Day
University of Florida, Vero Beach, FL, United States

11:30 a.m.

391

RELATIONSHIPS BETWEEN MEASURES OF VECTOR COMPETENCE FOR *CULEX PIPIENS QUINQUEFASCIATUS* (DIPTERA: CULICIDAE) INFECTED WITH WEST NILE VIRUS

Stephanie L. Richards, Sheri L. Anderson, Cynthia C. Lord, Chelsea T. Smartt, Walter J. Tabachnick
University of Florida, Vero Beach, FL, United States

11:45 a.m.

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EVALUATION OF KENYAN MOSQUITO SPECIES AS VECTORS OF WEST NILE VIRUS

Hellen S. Koka[1], Micheal Turell[2], Joel Lutomiah[3], Albina Makio[1], Milka Muthoni[3], James Mutisya[1], Santos Yalwala[1], Samson K. Limbaso[3], David Schnabel[1], Rosemary Sang[3]
[1]United States Army Medical Research Unit-Kenya, Nairobi, Kenya, [2]United States Army Medical Research Institute of Infectious Diseases, Frederick, MD, United States, [3]Kenya Medical Research Institute, Nairobi, Kenya

Scientific Session 74

Flavivirus - Dengue III

Washington 3
Friday, November 20, 10:15 a.m. - Noon

CHAIR

Donna Reynolds
Sanofi Pasteur, Toronto, ON, Canada

Stephen Whitehead
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

393

CLINICAL AND PRECLINICAL EVALUATION OF DENVAX, A TETRAVALENT DEN-2 PDK-53-BASED CHIMERIC DENGUE VACCINE

Richard M. Kinney[1], Joseph N. Brewoo[2], John J. Arguello[1], Shawn J. Shilengo[1], Tim D. Powell[1], Charalambos D. Partidos[2], Richard A. Bowen[3], Betty Luy[4], Siritorn Butrapet[4], Claire Y.-H. Huang[4], Dan T. Stinchcomb[1], **Jorge E. Osorio**[5]
[1]Inviragen, Inc., Fort Collins, CO, United States, [2]Inviragen, Inc., Madison, WI, United States, [3]Colorado State University, Fort Collins, CO, United States, [4]Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention, Fort Collins, CO, United States, [5]University of Wisconsin, Madison, WI, United States

10:30 a.m.

394

EVALUATION OF NEUTRALIZING ANTIBODY RESPONSES AGAINST A LARGE RANGE OF WILD-TYPE ISOLATES IN SERA OF PRIMATES VACCINATED WITH A TETRAVALENT DENGUE VACCINE

Veronique Barban[1], Yves Girerd[1], Nadège Arnaud-Barbe[1], Nathalie Mantel[1], Sandrine Gulia[1], Jorge L. Munoz-Jordan[2], Rafaele Dumas[1]
[1]Sanofi Pasteur, Marcy L'etoile, France, [2]Centers for Disease Control and Prevention, San Juan, PR, United States

10:45 a.m.

395

SAFETY AND IMMUNOGENICITY OF A TETRAVALENT DENGUE VACCINE IN FLAVIVIRUS-NAIVE AND -IMMUNE PEDIATRIC POPULATIONS WITH TWO VACCINATION REGIMENS

Denis Crevat[1], **Donna Reynolds**[2], Edith Langevin[1], Maria R. Capeding[3]
[1]Sanofi Pasteur, Marcy L'etoile, France, [2]Sanofi Pasteur, Toronto, ON, Canada, [3]Research Institute for Tropical Medicine, Muntinlupa City, Philippines

11 a.m.

396

CLINICAL EVALUATION OF LIVE ATTENUATED DEN3 VACCINE CANDIDATES

Stephen S. Whitehead[1], Alexander C. Schmidt[1], Julie H. McArthur[2], Jennifer A. Marron[2], Daniel Elwood[2], Bhavin Thumar[2], Kimberli A. Wanionek[2], Dennis Pierro[1], Joseph E. Blaney[1], Brian R. Murphy[1], Anna P. Durbin[2]
[1]Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

11:15 a.m.

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SAFETY AND IMMUNOGENICITY OF A 2-DOSE REGIMEN OF RDEN1Δ30 DENGUE SEROTYPE 1 VACCINE WITH BOOSTING AT FOUR VERSUS SIX MONTHS

Anna P. Durbin[1], Stephen S. Whitehead[2], Daniel Elwood[1], Wangeci Kagucia[1], Bhavin Thumar[1], Kimberli A. Wanionek[1], Dennis Pierro[2], Brian R. Murphy[2], Alexander C. Schmidt[2]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

11:30 a.m.

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POTENTIAL IMPACT OF VACCINATION ON THE TRANSMISSION DYNAMICS OF DENGUE: A FOUR SEROTYPE MODEL

Laurent Coudeville, Laurence Pollissard
Sanofi Pasteur, Lyon, France

11:45 a.m.

399

A SYSTEMATIC LITERATURE REVIEW AND EXPERT PANEL'S ASSESSMENT HEALTH ECONOMICS OF DENGUE

Mark E. Beatty[1], Philippe Beutels[2], Martin I. Meltzer[3], Ole Wichmann[1], Joachim Hombach[4], Raymond Hutubessy[4], Damien Dessis[5], Laurent Coudeville[6], Benoit Dervaux[7], Donald S. Shepard[8], Harold S. Margolis[1], Joel Kuritsky[1]
[1]International Vaccine Institute, Seoul, Republic of Korea, [2]Centre for Health Economics Research and Modeling Infectious Diseases, Centre for the Evaluation of Vaccination, Vaccine and Infectious Disease Institute, University of Antwerp, Antwerp, Belgium, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]World Health Organization, Geneva, Switzerland, [5]GlaxoSmithKline Biologicals, Wavre, Belgium, [6]Sanofi Pasteur, Lyon, France, [7]Universite Catholique de Lille, Lille, France, [8]Brandeis University, Waltham, MA, United States

Symposium 75

Making an Impact on Chagas Disease

Washington 4
Friday, November 20, 10:15 a.m. - Noon

This symposium will include a collection of forward-looking presentations targeted at approaches that will impact the detection, treatment and prevention of *Trypanosoma cruzi* infection and Chagas disease. The emphasis will be on new tools and how they may be applied. The goal is to raise awareness of recent developments in the field and how these might be applied to control and prevention.

CHAIR

Rick L. Tarleton
University of Georgia, Athens, GA, United States

Ricardo Gurtler
University of Buenos Aires, Buenos Aires, Argentina

10:15 a.m.

THE FUTURE OF VECTOR CONTROL EFFORTS IN CHAGAS DISEASE

Ricardo Gurtler
University of Buenos Aires, Buenos Aires, Argentina

10:40 a.m.

PROSPECTS FOR NEW DRUGS FOR CHAGAS DISEASE

Julio Urbina
Instituto Venezolano de Investigaciones Cientificas, Caracas, Venezuela

11:05 a.m.

NEW METHODS FOR ASSESSING TREATMENT EFFICACY IN CHRONIC CHAGAS DISEASE

Susana Laucella
Instituto de Parasitology "Fatala Chaben", Buenos Aires, Argentina

11:30 a.m.

PROSPECTS AND POTENTIAL FOR VACCINES FOR PREVENTION OF CHAGAS DISEASE

Rick L. Tarleton
University of Georgia, Athens, GA, United States

Symposium 76

Implementation and Evaluation of Neglected Tropical Disease Control in Sub-Saharan Africa

Washington 5
Friday, November 20, 10:15 a.m. - Noon

The Schistosomiasis Control Initiative (SCI) has assisted countries in sub-Saharan Africa since 2003. Initially the support was for schistosomiasis and soil-transmitted control (STH), but has progressed to assisting countries to implement integrated preventive chemotherapy programs for neglected tropical diseases (NTDs). The first speaker will open with a summary of SCI activities to date on schistosomiasis and STD control and discuss involvement in integrated NTD control, why it evolved, how it is being implemented and where. This presentation will cover basic principles that are needed to be considered prior to implementation. The next speakers will illustrate these general principles in more detail with specific country examples and experiences of what the main challenges and successes have been after the first two years of implementation in Niger and Uganda, respectively. These presentations will also highlight innovative program management methods and research that have been carried out. The final speaker will demonstrate the financial and economic costs of implementing an integrated NTD control program, focusing on the cost per person treated and the spatial variation in NTDs present, and hence control packages utilized, across Uganda. Comparisons to vertical programs will be illustrated and potential cost-savings highlighted.

CHAIR

Alan Fenwick
Schistosomiasis Control Initiative, Imperial College London, London, United Kingdom

Peter J. Hotez
The George Washington University, Washington, DC, United States

10:15 a.m.

SCI: SETTING THE FRAMEWORK FOR INTEGRATED NTD CONTROL

Joanne P. Webster
Imperial College London, London, United Kingdom

10:35 a.m.

LESSONS FROM THE FIELD: TWO YEARS OF IMPLEMENTING AN INTEGRATED PROGRAM FOR NEGLECTED TROPICAL DISEASES (NTDS) IN NIGER

Amadou Garba
RISEAL Niger, Niamey, Niger

10:55 a.m.

LESSONS FROM THE FIELD: TWO YEARS OF IMPLEMENTING AN INTEGRATED PROGRAM FOR NEGLECTED TROPICAL DISEASES (NTDS) IN UGANDA

Narcis B. Kabatereine
Ministry of Health, Kampala, Uganda

11:15 a.m.

DOES INTEGRATION OF PREVENTATIVE CHEMOTHERAPY REDUCE COST? EXPERIENCE FROM A PROGRAM FOR NEGLECTED TROPICAL DISEASES (NTDS) IN UGANDA

Fiona M. Fleming
Schistosomiasis Control Initiative, Imperial College London, London, United Kingdom

11:35 a.m.

VISCERAL LEISHMANIASIS IN EASTERN AFRICA: PAST AND PRESENT CONTROL EFFORTS, AND LESSONS FOR THE FUTURE

Jan Kolaczinski
Malaria Consortium, Kampala, Uganda

Scientific Session 76A

Malaria - Molecular Biology

Wilson AB
Friday, November 20, 10:15 a.m. - Noon

CHAIR

Moses Y. Otiende
Walter Reed Project/United States Army Medical Research Unit-Kenya, Kisumu, Kenya

Joanne Thompson
University of Edinburgh, Edinburgh, United Kingdom

10:15 a.m.

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***PLASMODIUM VIVAX* RHOPTRY NECK PROTEIN (PVRON2) EXPRESSED AT BOTH ERYTHROCYTIC AND PRE-ERYTHROCYTIC INVASIVE PARASITES**

Jun Cao[1], Osamu Kaneko[2], Amporn Thongkukiatkul[3], Mayumi Tachibana[4], Hitoshi Otsuki[4], Jetsumon Sattabongkot[5], Qi Gao[1], Takafumi Tsuboi[6], Motomi Torii[4]
[1]Jiangsu Institute of Parasitic Diseases, Wuxi, China, [2]Department of Protozoology, Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan, [3]Department of Biology, Faculty of Science, Burapha University, Chonburi, Thailand, [4]Department of Molecular Parasitology, Ehime University School of Medicine, Toon, Japan, [5]Department of Entomology, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [6]Cell-Free Science and Technology Research Center, Ehime University, Matsuyama, Japan
(ACMCIP Abstract)

10:30 a.m.

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INDIRECT AMINOACYLATION IN THE *PLASMODIUM APICOPLAST*

Malcolm J. Gardner[1], Gowthaman Ramasamy[1], Devaraja G. Mudeppa[2], Ling Li[1], Pradipsinh K. Rathod[2]
[1]Seattle Biomedical Research Institute, Seattle, WA, United States, [2]University of Washington, Seattle, WA, United States

10:45 a.m.

374

FUNCTIONAL ANALYSIS OF G-PROTEIN COUPLED RECEPTOR HOMOLOGUES IN *PLASMODIUM*

Joanne Thompson, L. Gabriella Lindergard
Immunology and Infection Research, Edinburgh, United Kingdom
(ACMCIP Abstract)

11 a.m.

375

A NEW ASSAY FOR SIMULTANEOUS DETECTION OF MUTATIONS ASSOCIATED WITH *PLASMODIUM VIVAX* DRUG RESISTANCE

Celine Barnadas[1], Lincoln Timinao[1], Ivo Mueller[1], Peter A. Zimmerman[2]
[1]PNG Institute for Medical Research, Goroka, Papua New Guinea, [2]Center for Global Health and Diseases, Case Western Reserve University, Cleveland, OH, United States
(ACMCIP Abstract)

11:15 a.m.

376

PRESENCE OF MULTIDRUG RESISTANCE GENE 1 (PFMDR1) ALLELES IN *P. FALCIPARUM* SAMPLES FROM A CLINICAL TRIAL TO TEST TWO ANTIMALARIAL DRUGS IN THE PERUVIAN AMAZON

Jorge Bendezu[1], Katherine Soto-Cornejo[2], Katherine Torres[1], Umberto D'Alessandro[3], Dionicia Gamboa[1]
[1]Instituto de Medicina Tropical "Alexander Von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Instituto de Medicina Tropical, Lima, Peru, [3]Institute of Tropical Medicine "Prince Leopold", Antwerp, Belgium

11:30 a.m.

377

SELECTION OF KNOWN RESISTANCE-MEDIATING POLYMORPHISMS BY ARTEMETHER-LUMEFANTRINE AND AMODIAQUINE/SULFADOXINE-PYRIMETHAMINE, BUT NOT BY DIHYDROARTEMISININ-PIPERAQUINE IN BURKINA FASO

Anyirekun Fabrice Some[1], Yves Sere[1], Issaka Zongo[1], Noel Rouamba[1], Chris Dokomajilar[2], Bryan Greenhouse[2], Jenny Legac[2], Shoba Subramanian[2], Jean-Bosco Ouedraogo[1], Philip J. Rosenthal[2]
[1]Institut de Recherche en Sciences de la Sante, Bobo-Dioulasso, Burkina Faso, [2]Department of Medicine, University of California, San Francisco, CA, United States

11:45 a.m.

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GENOME-WIDE ASSOCIATION AND SELECTION SCANS IN THE *PLASMODIUM FALCIPARUM* GENOME

Sarah Volkman[1], Daniel Neafsey[2], Elaine Angelino[3], Steve Schaffner[2], Danny Park[2], Joseph Cortese[2], Kayla Barnes[1], Rachel Daniels[2], David Rosen[1], Michele LaRoux[1], Daria Van Tyne[1], Charles Johnson[2], Ousmane Sarr[4], Souleymane Mboup[4], Danny Milner, Jr.[1], James Galagan[2], Roger Wiegand[2], Daniel Hartl[3], Bruce Birren[2], Eric Lander[2], Dyann Wirth[1], Pardis Sabeti[3]
[1]Harvard School of Public Health, Boston, MA, United States, [2]The Broad Institute, Cambridge, MA, United States, [3]Harvard University, Cambridge, MA, United States, [4]Cheikh Anta Diop University, Dakar, Senegal

Exhibit Hall Open/Light Lunch

Exhibit Hall A
Friday, November 20, Noon - 1:30 p.m.

Poster Session 77/Light Lunch

Poster Session B (#400 – 658 and Late Breakers)

Exhibit Hall B South
Friday, November 20, Noon - 1:30 p.m.

CLINICAL TROPICAL MEDICINE

400

EHRLICHIOSIS: A CASE REPORT FROM LYNCHBURG VIRGINIA

James R. Palmieri, Shaadi F. Elswaifi, John Schwartz
Virginia College of Osteopathic Medicine, Blacksburg, VA, United States

401

KNOWLEDGE AND PRACTICES AMONG YELLOW FEVER VACCINE PROVIDERS AND CLINICS - PENNSYLVANIA, USA, 2008

Mark Gershman[1], Betsy Schroeder[1], Steve Ostroff[2], Perrianne Lurie[2], Mark Lamias[1], Pauline Han[1], Aimee Ferraro[2], Phyllis Kozarsky[1], Nina Marano[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Pennsylvania Department of Health, Harrisburg, PA, United States

402

14-3-3β PROTEIN LEVEL IN THE CEREBROSPINAL FLUID AND SERUM AS AN INDICATOR OF DISEASE ACTIVITIES IN PATIENTS WITH PARASITE-INDUCED EOSINOPHILIC MENINGITIS

Hung-Chin Tsai, Min-Hon Shi, Pi-Yao Lee, I-Tzu Chen, Po-Shu Lin
Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan

403

MICROBIOLOGICAL ASPECTS OF EROSIVE-ULCEROUS LESIONS IN UPPER PART OF THE DIGESTIVE TRACT IN PATIENTS WITH LIVER CIRRHOSIS AND PORTAL HYPERTENSION

Ravshan A. Ibadov, **Leonid G. Bajenov**, N. R. Gizatulina, A. Kh. Babadjanov, G. A. Ibadova
Republican Specialized Center of Surgery, Tashkent, Uzbekistan

404

ORIGINAL ANTIBACTERIAL TECHNOLOGY IN THE PROPHYLAXIS AND COMPLEX TREATMENT OF PURULENT-INFLAMMATORY DISEASES OF THE LUNGS AT PATIENTS WITH LONG-TERM OF ARTIFICIAL VENTILATION OF LUNG

Ravshan A. Ibadov, L. G. Bajenov, Z. N. Mansurov, Z. A. Shanieva, A. Kh. Babadjanov, E. V. Rizaeva
Republican Specialized Center of Surgery, Tashkent, Uzbekistan

405

EFFECTIVITY OF DIGESTIVE ORGANS CANDIDIASIS THERAPY BY INDIVIDUAL TESTING DOSES OF NYSTATINE

N. E. Djumaeva, G. A. Ibadova
Scientific Research Institute of Epidemiology, Microbiology and Infectious Diseases, Tashkent, Uzbekistan

406

AN ON-SITE SURVEY OF YELLOW FEVER VACCINATION CLINIC PRACTICES - PENNSYLVANIA, USA, 2008

Betsy Schroeder[1], Mark Gershman[1], Stephen Ostroff[2], Perianne Lurie[2], Mark Lamias[1], Pauline Han[1], Aimee Ferraro[2], Phyllis Kozarsky[1], Nina Marano[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Pennsylvania Department of Health, Harrisburg, PA, United States

407

KETAMINE METABOLISM AND TEST ON EXIT PERSONS SUITABILITY DISCUSSION

Huarong Zhang
Chongqing International Travel Healthcare Center, Chongqing, China

408

PREVALENCE OF CHAGAS DISEASE IN U.S. LATIN AMERICAN IMMIGRANT POPULATION WITH CARDIOMYOPATHY

Mahmoud I. Traina, Salvador Hernandez, Aiman M. Smer, Wesam M. Frandah, Haneen Khamag, Eva Padilla Garcia, Sheba K. Meymandi
Olive View-University of California at Los Angeles Medical Center, Sylmar, CA, United States

409

CLINICAL FACTORS PREDICTIVE OF ENCEPHALITIS CAUSED BY *ANGIOSTRONGYLUS CANTONENSIS*

Kittisak Sawanyawisuth[1], Ken Takahashi[2], Tsutomu Hoshuyama[2], Kanlayanee Sawanyawisuth[1], Vichai Senthong[1], Panita Limpawattana[1], Donald Wilson[2], Somsak Tiamkao[1], Suthipun Jitpimolmard[1], Verajit Chotmongkol[1]
[1]Khon Kaen University, Khon Kaen, Thailand, [2]University of Occupational and Environmental Health, Kitakyushu, Japan

410

PREVALENCE OF CHAGAS DISEASE IN U.S. LATIN IMMIGRANT POPULATION WITH CONDUCTION ABNORMALITIES ON ELECTROCARDIOGRAM

Sheba K. Meymandi, Salvador Hernandez, Wesam M. Frandah, Haneen Khamag, Aiman M. Smer, Eva Padilla Garcia, **Mahmoud I. Traina**
Olive View-University of California at Los Angeles Medical Center, Sylmar, CA, United States

411

COST-EFFECTIVENESS OF INFLUENZA IMMUNIZATION IN ADULT CANCER PATIENTS IN TAIWAN

Kow-Tong Chen[1], Hsiao-Han Lin[1], Kan-Lin Hsu[1], Winston Wen-Chien Ko[2], Yi-Ching Yang[3], Yu-Wei Chang[1], Mei-Ching Yu[4]
[1]Department of Public Health, College of Medicine, National Cheng Kung University, Tainan, Taiwan, [2] Division of Infectious Diseases, Department of Internal Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, [3] Department of Family Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, [4]Department of Chemical Engineering, Tatung University, Taipei, Taiwan

ECTOPARASITE-BORNE DISEASE

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DEVELOPMENT OF A QUANTITATITVE REAL-TIME PCR (QPCR) ASSAY FOR *RICKETTSIA PARKERI*

Ju Jiang, Allen L. Richards
Naval Medical Research Center, Silver Spring, MD, United States

413

INABILITY OF *AMBLYOMMA AMERICANUM* LARVAE TO ACQUIRE *EHRLICHIA CHAFFEENSIS* FROM AN INFECTED DOG

Michael L. Levin, Aubree J. Roche, Lindsay F. Killmaster, Galina E. Zemtsova, William L. Nicholson
Centers for Disease Control and Prevention, Atlanta, GA, United States

414

GENETIC RELATIONSHIPS OF 364D AND HLP#2 SEROTYPES TO *RICKETTSIA RICKETTSII*

Gregory A. Dasch[1], Marina E. Eremeeva[1], Lauren K. Robinson[1], Kathryn Dirks[1], Frankie H. White[1], Maria L. Zambrano[1], Cecilia Kato[1], Kevin Tang[1], David C. Bruce[2], A. Chris Munk[2], J. Chris Detter[2], Thomas S. Brettin[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Joint Genome Institute, Los Alamos National Laboratory, Los Alamos, NM, United States

415

TEMPORAL PATTERNS OF EARLY CYTOKINE IMMUNE RESPONSE TO INFECTION WITH *B. BURGDORFERI*

John Aucott[1], Alison Schwarzwalder[2], Alexi Miagkov[3], Mark Soloski[1]
[1]Johns Hopkins School of Medicine, Baltimore, MD, United States, [2]Lyme Disease Research Foundation of Maryland, Lutherville, MD, United States, [3]Caliper Life Sciences, Hanover, MD, United States

416

MOLECULAR EPIDEMIOLOGY OF POWASSAN VIRUS IN NORTH AMERICA: BAYESIAN ANALYSES REVEAL STABLE POPULATION SIZES THROUGH TIME

Kendra Pesko, Fernando Torres-Perez, Gregory Ebel
University of New Mexico, Albuquerque, NM, United States

417

DISTRIBUTION OF SPOTTED FEVER-GROUP *RICKETTSIAE* IN CANINES FROM TENNESSEE

Meghan E. Rowland[1], Jenny G. Maloney[2], Junjun Huang[1], John R. Dunn[1], Rand Carpenter[1], Timothy F. Jones[1], Abelardo C. Moncayo[1]
[1]Tennessee Department of Health, Nashville, TN, United States, [2]Middle Tennessee State University, Murfreesboro, TN, United States

418

EFFECTS OF FLEA FEEDING ON EARLY INNATE IMMUNE EVENTS IN THE SKIN AND TRANSMISSION OF *YERSINIA PESTIS*

Christopher F. Bosio, Clayton O. Jarrett, B. Joseph Hinnebusch
Rocky Mountain Laboratories, Hamilton, MT, United States

419

INFECTION RATES OF THE TRIATOMINE BUG *TRIATOMA RUBIDA* WITH *TRYPANOSOMA CRUZI,* THE CAUSATIVE AGENT OF CHAGAS DISEASE, IN THE TUCSON AREA OF ARIZONA

Carolina E. Reisenman[1], Gena G. Lawrence[2], Pablo G. Guerenstein[1], Teresa Gregory[1], **Ellen M. Dotson**[2], John G. Hildebrand[1]
[1]Arizona Research Laboratories, University of Arizona, Tucson, AZ, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

420

GEOGRAPHICAL ASSESSMENT OF RICKETTSIAL INFECTIONS IN RODENTS IN INDONESIA

Susana Widjaja[1], Maya Williams[1], Ima N. Ibrahim[2], Imelda L. Winoto[1], Arik Farzeli[1], Andre Yunianto[2], Dian Perwitasari[2], Ungke A. Jaya[1], Deni Pepi[1], Allen L. Richards[3], Katie A. Barbara[1], Craig A. Stoops[1], Patrick J. Blair[1]
[1]United States Naval Medical Research Unit 2, Jakarta, Indonesia, [2]National Health Research and Development, Ministry of Health, Jakarta, Indonesia, [3]Naval Medical Research Center, Silver Spring, MD, United States

421

AFRICAN TICK-BITE FEVER IN A TAIWANESE TRAVELER RETURNING FROM SOUTH AFRICA: MOLECULAR AND SEROLOGICAL STUDIES

Kun-Hsien Tsai
Institute of Epidemiology, College of Public Health, National Taiwan University, Taipei, Taiwan

FLAVIVIRIDAE - DENGUE

422

ANTIBODY DETERMINANTS OF PROTECTION AND ENHANCEMENT OF SECONDARY DENGUE VIRUS INFECTION *IN VITRO* AND *IN VIVO*

Katherine L. Williams[1], Ruben Lachica[1], Diana Flores[1], Wahala Wahala[2], Aravinda M. de Silva[2], Martina Beltramello[3], Federica Sallusto[3], Antonio Lanzavecchia[3], P. Robert Beatty[1], Eva Harris[1]
[1]Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, [2]Department of Microbiology and Immunology, University of North Carolina, Chapel Hill, NC, United States, [3]Institute for Research in Biomedicine, Bellinzona, Switzerland

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DIFFERENCES IN CLINICAL PRESENTATION AND RELATION TO IMMUNE STATUS AMONG DENGUE VIRUS SEROTYPES IN A HOSPITAL-BASED STUDY IN NICARAGUA

Sheyla Silva[1], Crisanta Rocha[1], Gamaliel Gutierrez[2], Federico Narvaez[1], Andrea Nuñez[3], Douglas Elizondo[2], Katherine Standish[2], Angel Balmaseda[3], **Eva Harris**[4]
[1]Hospital Infantil Manuel Jesús de Rivera, Managua, Nicaragua, [2]Sustainable Sciences Institute, Managua, Nicaragua, [3]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, [4]Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

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PHYLOGEOGRAPHY AND MOLECULAR EVOLUTION OF DENGUE VIRUS TYPE 1 IN PUERTO RICO, 1981-1998

Brandi A. Mueller[1], Maya Paidi[1], Orchid Allicock[2], Christine V. Carrington[2], Duane J. Gubler[1], Shannon N. Bennett[1]
[1]University of Hawaii at Manoa, Honolulu, HI, United States, [2]University of the West Indies, St. Augustine, Trinidad and Tobago

425

TRANSFORMING MODELS INTO USER-FRIENDLY PROGRAMS FOR EVALUATING DISEASE CONTROL STRATEGIES AT THE LOCAL SCALE

Alicia Ellis[1], Dana Focks[2], Andy Garcia[1], Thomas Scott[1]
[1]University of California - Davis, Davis, CA, United States, [2]Infectious Disease Analysis, Gainesville, FL, United States

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DENGUE VIRUS SEROPREVALENCE AND SEROINCIDENCE AMONG KENYAN CHILDREN

Jason M. Blaylock[1], Ashley M. Maranich[1], Kristen Bauer[2], Mark Polhemus[3], Luis J. Martinez[2], Jitvimal Seriwatana[2], John Waitumbi[3], Douglas Walsh[3], Julia Lynch[2]
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MOLECULAR EPIDEMIOLOGY OF DENV-1 ISOLATED IN MARACAY, VENEZUELA, DURING 1997 - 2007: A PROBABLE CLADE REPLACEMENT EVENT

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DENGUE VIRUS PROTEASE NS2B/NS3 WITH A POTENTIAL INHIBITION OF THE TOLL-LIKE RECEPTOR 3 SIGNALING PATHWAY

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EFFECT OF FcγRII ISOFORMS ON ANTIBODY DEPENDENT ENHANCEMENT OF DENGUE VIRUS INFECTION

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MODELING DENGUE CASES IN HEALTH REGIONS OF COSTA RICA USING EL NIÑO SOUTHERN OSCILLATION AND LOCAL VEGETATION DYNAMICS

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MUNICIPALITIES IN PUERTO RICO WITH HISTORY OF HIGH INCIDENCE RATES OF DENGUE

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THE EFFECT OF WILDLIFE TRANSMISSION ON RABIES VACCINATION THRESHOLDS IN TANZANIA

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INTENSITY AND PREVALENCE OF SOIL TRANSMITTED HELMINTHS IN HAITIAN COMMUNITIES

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HUMAN CHRONIC INFECTIONS WITH *ASCARIS LUMBRICOIDES* AFFECT CYTOKINE PRODUCTION AND GENE EXPRESSION

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A NOVEL AND POWERFUL CLASS OF NEMATICIDES FOR SOIL-TRANSMITTED NEMATODE INFECTIONS

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CHARACTERIZATION OF THE IMMUNE RESPONSE TO THE LARVAL PHASE OF *ASCARIS SUUM* INFECTION AND IDENTIFICATION OF ASCARIS ANTIGENS EXPRESSED DURING THAT PHASE

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EFFICACY OF SECOND-LINE THERAPY (PROTEASE INHIBITOR BASE-REGIME) AFTER NON NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITOR (NNRTI) BASED HIV TREATMENT FAILURE

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THE EFFECT OF AIDS BEHAVIORAL INTERVENTION ON CHINESE OVERSEAS WORKERS

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MOLECULAR CHARACTERIZATION OF HIV-1 IN NICARAGUA

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DECREASED ANTIVIRAL ANTIBODY RESPONSES IN SHIV1157IP-INFECTED RHESUS MACAQUES COINFECTED WITH *SCHISTOSOMA MANSONI*

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PREVIOUS EXPOSURE WITH CEPHALOSPORINS AND MACROLIDES BUT NOT COTRIMOXAZOLE AS A RISK FACTOR FOR COLONIZATION WITH MRSA IN HIV-INFECTED CHILDREN

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EPIDEMIOLOGICAL INVESTIGATION OF ACUTE CHAGAS DISEASE IN THE PERUVIAN AMAZON

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TRYPANOSOMA EVANSI ANTIBODY LEVELS IN SOME EDIBLE FISHES IN KOLKATA, INDIA

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SPATIO-TEMPORAL PERSPECTIVES ON PREVALENCE OF *TRYPANOSOMA CRUZI* INFECTION IN PERI-URBAN AREQUIPA, PERU

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PREDICTIVE FACTORS FOR UNFAVORABLE OUTCOMES IN THE TREATMENT OF HUMAN AFRICAN TRYPANOSOMIASIS

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EXPANDING BELT OF HUMAN AFRICAN TRYPANOSOMIASIS (SLEEPING SICKNESS) IN PALLISA DISTRICT, UGANDA

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KINETOPLASTIDA – MOLECULAR BIOLOGY AND IMMUNOLOGY

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CHARACTERIZATION OF UNKNOWN GPI ANCHORED PROTEINS IN *TRYPANOSOMA BRUCEI BRUCEI*

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(ACMCIP Abstract)

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MOLECULAR CHARACTERIZATION OF KINESIN^{CAAX} IN *TRYPANOSOMA BRUCEI*

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(ACMCIP Abstract)

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***LEISHMANIA INFANTUM* ALDOSE REDUCTASE: EXPRESSION WITH MOLECULAR CHAPERONES, PURIFICATION AND KINETIC STUDIES**

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EXPRESSION PROFILING USING *LEISHMANIA DONOVANI* GENOMIC MICROARRAY FOR THE IDENTIFICATION OF NOVEL VACCINE TARGETS FOR VISCERAL LEISHMANIASIS

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AN UNUSUAL HSP70 PRESENT IN RARE *LEISHMANIA VIANNIA* ISOLATES FROM PERU

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(ACMCIP Abstract)

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IDENTIFYING MICRORNAS THAT ALTER MACROPHAGE SUSCEPTIBILITY TO INFECTION BY LEISHMANIA

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(ACMCIP Abstract)

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THE ANTIMICROBIAL PEPTIDES AARP-1 AND RP-1 DEMONSTRATE MICROBICIDAL ACTIVITY AGAINST BOTH *LEISHMANIA MAJOR* AND *LEISHMANIA CHAGASI INFANTUM*

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(ACMCIP Abstract)

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COMPARATIVE PROTEOMIC ANALYSIS OF IMMUNODOMINANT 30-34 KDA PROTEINS OF *TRYPANOSOMA CRUZI* BY DIFFERENT MASS SPECTROMETRY METHODS

Giovani C. da Costa[1], Leticia S. Lery[1], Hercules Moura[2], Vanda M. von Kruger[1], Regina H. Peralta[3], John R. Barr[2], Jose M. Peralta[1]
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(ACMCIP Abstract)

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***TRYPANOSOMA CRUZI* -INDUCED INFLAMMATION IN ADIPOSE TISSUE**

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(ACMCIP Abstract)

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EVALUATION OF INHIBITORY EFFECT OF A *TRYPANOSOMA BRUCEI* CALCIUM CHANNEL ANTIBODY (ANTI-TBCC1) *IN VITRO*

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(ACMCIP Abstract)

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DETECTION OF *TRYPANOSOMA CRUZI* ANTIGEN IN SKELETAL MUSCLE OF FETUSES WITH MORPHOLOGICAL STRUCTURAL ANOMALIES FROM MICE WITH ACUTE CHAGASIC INFECTION

Maritza E. Alarcon, Mary C. Perez, Loredana Goncalves, Ana Lugo-Yarbuh, Elio A. Moreno
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(ACMCIP Abstract)

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CHARACTERIZATION AND EXPRESSION OF A NOVEL SECRETORY NUCLEASE, LMEXNUC^S, IN THE HUMAN PATHOGEN *LEISHMANIA MEXICANA*

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IMPACT OF COMBINED TREATMENT OF ALLOPURINOL AND BENZNIDAZOLE ON TOTAL AND *TRYPANOSOMA CRUZI*-SPECIFIC T CELLS IN HUMAN CHRONIC CHAGAS DISEASE

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MALARIA - CHEMOTHERAPY

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ANTIMALARIAL DRUG DISPENSING AMONG COMMUNITY DRUG PROVIDERS IN IBADAN NIGERIA: A CROSS-SECTIONAL SURVEY

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FTY720 TREATMENT DURING EXPERIMENTAL MALARIA: POTENTIAL ADJUNCTIVE THERAPY FOR CEREBRAL MALARIA?

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(ACMCIP Abstract)

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MALARIA DISCIPLINE: A COMPARATIVE STUDY OF AMERICAN AND AUSTRALIAN TROOPS IN SOUTHEAST ASIA, 1967-1968

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RANDOMIZED, PROSPECTIVE, THREE-ARM STUDY OF THE AUDITORY FUNCTION FOLLOWING ANTIMALARIAL TREATMENT IN PATIENTS WITH UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA

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COHORT STUDY IN ZAMBIA EVALUATING THE SAFETY OF ARTEMETHER-LUMEFANTRINE (AL; COARTEM®) AND SULFADOXINE-PYRIMETHAMINE (SP) IN PREGNANT WOMEN WITH SYMPTOMATIC MALARIA

Christine Manyando[1], Rhoda Mkandawire[2], Lwipa Puma[3], Moses Sinkala[4], Evans Mpabalwani[5], Eric Njunju[1], Melba Gomes[6], Verena Walter[7], Raymond Schlienger[7], Mailis Virtanen[7], Frank Sullivan[8]
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PHARMACOVIGILANCE OF INTERMITTENT PREVENTIVE TREATMENT IN INFANTS WITH SULFADOXINE-PYRIMETHAMINE

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GENERATION AND CHARACTERIZATION OF A 5K ANTIMALARIAL COMPOUND COLLECTION

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PHARMACOKINETICS OF CHLOROQUINE IN A MURINE MALARIA MODEL

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A STUDY OF INTERMITTENT PREVENTIVE TREATMENT AND HOME BASED MANAGEMENT OF MALARIA IN A RURAL AREA OF THE GAMBIA

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A TWO-GENERATION STUDY OF THE REPRODUCTIVE TOXICITY OF PIPERAQUINE IN MICE

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PHYSIOLOGICAL HIGH THROUGHPUT β-HEMATIN GROWTH ASSAY

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ABSOLUTE BIOAVAILABILITY OF CIS-MIRINCAMYCIN AND TRANS-MIRINCAMYCIN IN HEALTHY RHESUS MONKEYS, AND *EX-VIVO* ANTIMALARIAL ACTIVITY AGAINST *PLASMODIUM FALCIPARUM*

David Saunders[1], Phisit Khemawoot[1], Maneerat Rasameesoraj[1], Victor Melendez[2], Rawiwan Imerbsin[1], Colin Ohrt[2], Susan Fracisco[2], Paktiya Tejaisavadharm[1]
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INDUSTRIAL CHICORY AS PRODUCTION PLATFORM FOR ARTEMISININ

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TETRAZOLIUM VIOLET INHIBITS MEROZOITE INVASION

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MONOQUINOLINE ANALOGUES HIGHLY ACTIVE AGAINST THE BLOOD STAGES OF *PLASMODIUM IN VIVO* AND *IN VITRO*

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ANTI-*PLASMODIUM* ACTIVITY OF IMIDAZOLIUM AND TRIAZOLIUM SALTS

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SAFETY OF PYRONARIDINE/ARTESUNATE IN CLINICAL TRIALS IN PATIENTS WITH UNCOMPLICATED ACUTE *PLASMODIUM FALCIPARUM* OR *PLASMODIUM VIVAX* MALARIA: RESULTS OF AN INTEGRATED ANALYSIS

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SYNTHESIS AND STRUCTURE-ACTIVITY RELATIONSHIPS OF GENZ-644442 ANALOGS: A NOVEL CHEMOTYPE WITH POTENT ACTIVITY *PLASMODIUM FALCIPARUM* AND *P. BERGHEI*

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A DUAL-SPECIFICITY PHOSPHOTYROSINE PHOSPHATASE OF *PLASMODIUM FALCIPARUM* AND ITS POTENTIAL AS A NOVEL ANTIMALARIAL DRUG TARGET

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THE USE OF TRANSGENIC *PLASMODIUM FALCIPARUM* IN THE EVALUATION OF *IN VITRO* ANTIPLASMODIAL ACTIVITY OF ANTIMALARIAL DRUGS AND METHOTREXATE

Olugbenga Akinola[1], Olusola G. Gbotosho[1], Christian T. Happi[1], Akin Sowunmi[1], Mofolusho Falade[1], Chairat Uthaipibull[2], Sumalee Kamchonwongpisan[2], A.M. Oduola[1]
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A HIGH THROUGHPUT SCREEN TO IDENTIFY APICOPLAST-TARGETING ANTIMALARIALS

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MALARIA – DRUG RESISTANCE

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Richard J. Maude[1], Wirichada Pontavornponyo[1], Debasheesh Das[1], Poravuth Yu[2], Rupam Tripura[1], Kamolrat Silamut[1], Sompob Saralamba[1], Aung Pyae Phyo[3], Nicholas P. Day[1], Arjen M. Dondorp[1], Francois Nosten[3], Duong Socheat[2], Nicholas J. White[1], Lisa J. White[1]
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ANALYSIS OF CHLOROQUINE TRANSPORT BY PURIFIED, RECONSTITUTED PFCRT

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(ACMCIP Abstract)

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RESISTANCE TO CHLOROQUINE CYTOTOXICITY IS NOT THE SAME AS RESISTANCE TO CHLOROQUINE CYTOSTASIS

Mynthia Cabrera, Paul D. Roepe
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EFFICACY OF NON-CONTROLLED INTERMITTENT PREVENTIVE TREATMENT (IPTP) VERSUS CONTROLLED IPTP IN PREGNANT (IPTP) WOMEN IN CÔTE D'IVOIRE

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INVESTIGATION OF GENETIC MUTATIONS IN *PLASMODIUM VIVAX* DIHYDROFOLATE REDUCTASE AND SUSCEPTIBILITY TO CONVENTIONAL AND NEW ANTIFOLATE ANTIMALARIALS USING A *PLASMODIUM FALCIPARUM* EXPRESSION SYSTEM

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CHLOROQUINE-RESISTANT *PLASMODIUM FALCIPARUM* HAPLOTYPES FROM THE BRAZILIAN AMAZON

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A PROBABLE CASE OF CHLOROQUINE-RESISTANT *PLASMODIUM VIVAX* IN THE PERUVIAN AMAZON

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"YEAST OPTIMIZED" *P. FALCIPARUM* CRT (PFCRT) AND MDR1 PROTEINS (PFMDR1): PURIFICATION, RECONSTITUTION AND PUTATIVE DRUG BINDING

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ASSOCIATION BETWEEN SNPS IN TRANSPORTER GENES AND *IN VITRO* REDUCED SUSCEPTIBILITY TO ARTEMISININ DERIVATIVES IN PATIENTS ISOLATES OF *PLASMODIUM FALCIPARUM*

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(ACMCIP Abstract)

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LONG TERM PERSISTENCE OF *PLASMODIUM FALCIPARUM* CLONES AND POTENTIAL BIAS IN MEASUREMENT OF DRUG EFFICACY IN LOW TRANSMISSION AREAS

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CANDIDATE GENE STUDIES IN LOW TRANSMISSION AREAS: DO SNPS (N326D AND S334N) IN THE *PLASMODIUM FALCIPARUM* CHLOROQUINE TRANSPORTER (PFCRT) UNDERLIE RESISTANCE TO AMODIAQUINE/DESETHYLAMODIAQUINE?

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CHARACTERIZING ARTEMISININ INDUCED DORMANCY IN *PLASMODIUM FALCIPARUM* AND ITS POTENTIAL IMPACT ON TREATMENT EFFICACY

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ASSOCIATION BETWEEN *P. FALCIPARUM* ABC TRANSPORTERS SNPS AND *IN VIVO* PARASITE CLEARANCE AFTER CHLOROQUINE TREATMENT IN MALI

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RESISTANCE SELECTION APPROACH TO IDENTIFY AND VALIDATE NOVEL DRUG TARGETS FOR ANTIMALARIAL DRUG DISCOVERY

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MALARIA - EPIDEMIOLOGY

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PLACENTAL MALARIA AS A PREDICTOR OF LOW BIRTH WEIGHT AMONG HIV-INFECTED AND UNINFECTED WOMEN IN TORORO, UGANDA

Patrick Michael Newman[1], Humphrey Wanzira[2], Jane Achan[3], Moses Kamya[3], Diane Havlir[1], Philip J. Rosenthal[1], Sarah Waldman[1], Grant Dorsey[1], Deborah Cohan[1], Tamara D. Clark[1]
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MOTHER'S KNOWLEDGE OF MALARIA PREDICTS ITN USE AND FEVER TREATMENT IN CHILDREN UNDER FIVE YEARS-MALARIA INDICATOR SURVEY, ETHIOPIA, 2007

Jimee Hwang[1], Patricia M. Graves[2], Richard Reithinger[3], Asefaw Getachew[4], Hana Bilak[4], Estifanos Biru Shargie[5], Jeremiah Ngondi[6], Chris Lungu[4], Aryc Mosher[2], Teshome Gebre[5], Adam Wolkon[1], Eskindir Tenaw[7], S. Patrick Kachur[1], Daddi Jima[8]
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COMPARATIVE ANALYSIS OF SEQUENCES OF THE RECEPTOR BINDING DOMAIN (F2 REGION) OF *P. FALCIPARUM* EBA 175 DERIVED FROM CHILDREN WITH SEVERE, UNCOMPLICATED AND ASYMPTOMATIC MALARIA IN THE KASSENA NANKANA DISTRICT OF GHANA

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HOLDING THE LINE: LESSONS FROM MAURITIUS FOR PREVENTING REINTRODUCTION OF MALARIA TRANSMISSION

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MALARIA INCIDENCE IN INFANTS IN BANCOUMANA, MALI

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THE RELATIONSHIP BETWEEN ANTI-MEROZOITE ANTIBODIES AND PROTECTION FROM *PLASMODIUM FALCIPARUM* MALARIA: A SYSTEMATIC REVIEW AND META-ANALYSIS

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USING DRIED BLOOD SPOTS TO MONITOR CHANGES IN ANTIBODY LEVELS TO *PLASMODIUM FALCIPARUM* IN A REGION OF DECLINING MALARIA TRANSMISSION

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ANTIBODY LEVELS TO AMA1 AND MSP142 IN MALIAN INFANTS

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DUFFY ANTIGEN RECEPTOR FOR CHEMOKINES INFLUENCES LEUKOCYTE POPULATIONS AND CIRCULATING INFLAMMATORY MEDIATORS IN KENYAN CHILDREN WITH MALARIA AND HIV-1

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EVALUATION OF CYTOKINE LEVELS AND DISEASE SEVERITY IN *PLASMODIUM FALCIPARUM* MALARIA PATIENTS FROM THE PERUVIAN AMAZON BASIN

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A VARIANT WITHIN THE STEM CELL GROWTH FACTOR (SCGF) PROMOTER (-539C/T) IS ASSOCIATED WITH PROTECTION AGAINST PEDIATRIC SEVERE MALARIAL ANEMIA AND FUNCTIONAL CHANGES IN CIRCULATING SCGF

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ASSOCIATION BETWEEN MIP-1ALPHA (MIP-1α) PROMOTER HAPLOTYPES AND HIGH-DENSITY PARASITEMIA IN CHILDREN FROM WESTERN KENYA

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A NOVEL APPROACH TO DESIGN MULTICOMPONENT BLOOD STAGE MALARIA VACCINES

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HOW WILL MALARIA EVOLVE IN RESPONSE TO A VACCINE?

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HOW TO MAKE EVOLUTION-PROOF INSECTICIDES FOR MALARIA CONTROL

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GENETIC CONTROL OF *AEDES ALBOPICTUS* USING THE RIDL® SYSTEM

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BEHAVIORAL RESPONSE OF *CULEX QUINQUEFASCIATUS* TO DUET™ INSECTICIDE

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DETERMINANTS OF FOCAL INSECTICIDE RESISTANCE OF *AEDES AEGYPTI* IN THE PHILIPPINES

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LONGEVITY OF *ANOPHELES GAMBIAE* S.L. UNDER NATURAL CONDITIONS USING A MODIFIED MARK RELEASE RECAPTURE APPROACH

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BIOACOUSTICS AND COURTSHIP IN *AEDES AEGYPTI* AND *ANOPHELES GAMBIAE*

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INNATE HOST SELECTION BY *CULEX PIPIENS* SAY (DIPTERA: CULICIDAE)

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ASSESSING RISK IN FOCAL ARBOVIRAL INFECTIONS: ARE WE MISSING THE BIG OR LITTLE PICTURE?

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COMBINING ENVIRONMENTAL MANAGEMENT WITH INSECTICIDE-TREATED NETS FOR MALARIA CONTROL

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IMMUNOLOGICAL PRIMING IN *AN. GAMBIAE:* CAN MOSQUITOES 'LEARN' FROM A CHALLENGE WITH *PLASMODIUM*?

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MOSQUITOES AND DENGUE VIRUSES IN SCHOOLS IN MÉRIDA, MEXICO

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MONITOR AND OPTIMIZE DURABLY THE USAGE OF INSECTICIDE TREATED NETS WITHIN HOUSEHOLDS WITH DETECTOR FOR REDUCING MALARIA TRANSMISSION, IN CENTRAL IVORY COAST: RESULTS OF PRELIMINARY TRIALS

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SPATIAL VARIATION OF HOST SELECTION IN *CULEX PIPIENS* MOSQUITOES

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BEHAVIORAL CHANGES OF FEMALE *AEDES AEGYPTI* IN RESPONSE TO VARIOUS COMBINATIONS OF MATERIAL TEXTURES, COVERAGE, AND DOSES OF INSECTICIDES USING A NOVEL LABORATORY ASSAY

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IMMUNOGENICITY OF *ANOPHELES ALBIMANUS* SALIVA IN MALARIA ENDEMIC AND NON-ENDEMIC AREAS

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ALGINATE-ENCAPSULATED FORMULATION OF BACTERIA THAT ATTRACT GRAVID *AEDES AEGYPTI* AND *AEDES ALBOPICTUS*

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TUBERCULOSIS RELATED STIGMA EPIDEMIOLOGY AND RISK FACTORS

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THE IMPLICATIONS OF 17,000 FIRST-LINE AND 11,800 SECOND-LINE DRUG SUSCEPTIBILITY TESTS FOR SELECTING OPTIMAL TB TREATMENT

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THE EPIDEMIOLOGY OF HUMAN LEPTOSPIROSIS IN TRINIDAD AND TOBAGO BETWEEN 1996-2007: A RETROSPECTIVE STUDY

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COMPARISON OF THE KINETICS AND MAGNITUDE OF ANTIBODY RESPONSES AGAINST THE CONSERVED 47 KDA ANTIGEN VERSUS THE VARIABLE 56 KDA ANTIGEN IN SCRUB TYPHUS PATIENTS

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A COMPARATIVE HIGH-THROUGHPUT SCREEN OF 300,000 COMPOUNDS FOR REGULATORS OF THE *SALMONELLA ENTERICA* PHOP REGULON BY THE MOLECULAR LIBRARIES PROBE CENTERS NETWORK

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ACTIVITY OF SELECTED ANTIMICROBIAL AGENTS, INCLUDING TWO EXPERIMENTAL KETOLIDES, AGAINST *LEPTOSPIRA SEROVARS IN VITRO*

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EFFICACY OF FIRST GENERATION CEPHALOSPORINS IN A HAMSTER MODEL OF LEPTOSPIROSIS

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EFFICACY OF MINOCYCLINE AND TIGECYCLINE IN A HAMSTER MODEL OF LEPTOSPIROSIS

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METALLO BETA LACTAMASE POSITIVE NOSOCOMIAL MDR GRAM NEGATIVE BACTERIA IN A CITY OF A TROPICAL COUNTRY

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GENETIC RELATIONSHIPS AMONG THREE FAMILIES OF PLASMIDS IN *RICKETTSIA*

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GENOTYPING AND MOLECULAR CHARACTERIZATION OF *GIARDIA INTESTINALIS* ISOLATED FROM THE ORANG ASLI (ABORIGINES) IN MALAYSIA

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EXPANSION OF METRONIDAZOLE RESISTANCE GENES DURING AMOEBIASIS

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THE EFFECT OF LOW TEMPERATURE ON EXCYSTMENT OF PATHOGENIC AND NON-PATHOGENIC SPECIES *ACANTHAMOEBA* AND THEIR ABILITY TO UNDERGO FEEDING FRENZY AND CANNIBALISM

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MYELOPEROXIDASE ADHERES TO AND DESTROYS *ENTAMOEBA HISTOLYTICA* TROPHOZOITES

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EVALUATION OF STOOL FIXATIVES FOR MOLECULAR DIAGNOSTIC DETECTION OF *GIARDIA INTESTINALIS, ENTAMOEBA HISTOLYTICA* AND *ENTAMOEBA DISPAR*

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THE EFFECTS OF SALINITY AND PH ON THE SURVIVAL OF PATHOGENIC AND NON-PATHOGENIC *ACANTHAMOEBA SPP.*

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ANTI-PROTOZOAL EFFECTS IN KOREA BLACK GINSENG-TREATED MICE

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TOXOPLASMA GONDII INFECTION INDUCED AUTOPHAGIC CELL DEATH OF HOST CELLS

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CROSSTALK OF MAST CELL WITH VAGINAL EPITHELIAL CELL IN INFLAMMATION CAUSED BY *TRICHOMONAS VAGINALIS*

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ANTI-TUMORIGENIC EFFECTS OF *TOXOPLASMA GONDII* LYSATE ANTIGEN ON TUMORS PRODUCED BY SARCOMA-180 AND CT-26 CELLS

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DIAGNOSTIC PARASITOLOGY TRAINING: CDC DPDX TRAINING PROJECT 2006-2008

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ACANTHAMOEBA KERATITIS IN A PREGNANT CONTACT LENS WEARER IN TURKEY

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SENSITIVE MULTIPLEX PCR ASSAY FOR GIARDIA AND CRYPTOSPORIDIUM USING DNA CAPTURE

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A LOW-PROTEIN MALNUTRITION MODEL OF CRYPTOSPORIDIAL INFECTION IN WEANED MICE

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SIMULTANEOUS LUMINEX BASED DETECTION OF MULTIPLE ENTEROPATHOGENS - PROTOZOA AND MICROSPORIDIA

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EFFECTS OF *TOXOPLASMA GONDII* INFECTION ON THE PROGRESS OF EXPERIMENTAL ALZHEIMER'S DISEASE IN MICE

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DRUGS FOR TREATING *SCHISTOSOMA HAEMATOBIUM* AND *S. MANSONI* INFECTIONS

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COMPARISON OF TWO COMMERCIALLY AVAILABLE URINE CCA ASSAYS FOR THE DETECTION OF *S. MANSONI* INFECTION IN WESTERN KENYA

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DO ENDOGENOUS ANTI-OXIDANTS OF *SCHISTOSOMA MANSONI* PRIMARY SPOROCYSTS PROTECT AGAINST EXTERNAL OXIDATIVE STRESS?

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GENERATION AND CHARACTERIZATION OF IGM AND IGG MONOCLONAL ANTIBODIES THAT BIND FUCOSYLATED GLYCAN EPITOPES FROM *SCHISTOSOMA MANSONI* AND KEY HOLE LIMPET HEMOCYANIN

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SHORT INTERFERING RNAS, AS WELL AS LONGER DS RNAS, DELIVER GENE SILENCING OF CATHEPSIN D OF *SCHISTOSOMA MANSONI*

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INNATE IMMUNE PRIMING OF ADAPTIVE RESPONSES TO HELMINTH INFECTION

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MODELING SCHISTOSOMIASIS TRANSMISSION AND CONTROL IN A DISTRIBUTED ENVIRONMENT USING A STRATIFIED WORM BURDEN APPROACH

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PRELIMINARY FINDINGS OF COST OF DISTRIBUTION STUDY FOR THREE ANTHELMINTHIC DRUGS IN PLATEAU AND NASARAWA STATES, NIGERIA

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EXPLORING THE IMPACT OF INFECTION-INDUCED IMMUNITY ON ENDEMIC LEVELS OF *SCHISTOSOMA JAPONICUM* IN HILLY AND MOUNTAINOUS ENVIRONMENTS IN CHINA

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THE IMPACT OF MOBILITY ON *SCHISTOSOMA JAPONICUM* INFECTION: A CASE-CONTROL STUDY OF INDIVIDUAL-LEVEL INFECTION RISK

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IDENTIFICATION OF GENES AND PROTEINS DIFFERENTIALLY EXPRESSED IN *SCHISTOSOMA MANSONI* ADULT WORMS TREATED WITH PRAZIQUANTEL

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SEROLOGIC SURVEILLANCE FOR EQUINE INFLUENZA VIRUS IN MEXICO

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THE INCREASING DISEASE BURDEN OF IMPORTED CHRONIC HEPATITIS B VIRUS INFECTION-UNITED STATES, 1973-2007

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ROLE OF THE MUTATIONS IN E2 PROTEIN IN ADAPTATION OF CHIKUNGUNYA VIRUS TO *AE. ALBOPICTUS* AND *AE. AEGYPTI* MOSQUITOES

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PREVALENCE OF TICK-BORNE VIRUSES AMONG PATIENTS WITH UNDIFFERENTIATED FEVER IN BULGARIA

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FURTHER EVALUATION OF RVF MP12 LIVE-ATTENUATED VACCINE IN CATTLE AND SHEEP IN EGYPT

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ANTIBODY TO HEPATITIS E VIRUS IN TRAVELERS

Elizabeth Day Barnett[1], Jan Drobeniuc[2], Saleem Kamili[2], Davidson H. Hamer[1], Lin Chen[3], William MacLeod[4], Nina Marano[2], Laura Kogelman[5], Winnie W. Ooi[6], Emad Yanni[2], AW Karchmer[7], Christine Benoit[1], Mary E. Wilson[8]
[1]Boston Medical Center, Boston, MA, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Mt. Auburn Hospital, Cambridge, MA, United States, [4]Boston University School of Public Health, Boston, MA, United States, [5]Tufts Medical Center, Boston, MA, United States, [6]Lahey Clinic, Burlington, MA, United States, [7]Beth Israel Deaconess Hospital, Boston, MA, United States, [8]Harvard School of Public Health, Boston, MA, United States

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SUSCEPTIBILITY OF AOTUS NANCYMAAE OWL MONKEYS TO NORTH AMERICAN AND SOUTH AMERICAN STRAINS OF EASTERN EQUINE ENCEPHALITIS VIRUS

Patricia V. Aguilar, Benjamin Espinoza, Tadeusz Kochel
Naval Medical Research Center Detachment, Lima, Peru

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PREDICTION, ASSESSMENT OF THE RIFT VALLEY FEVER ACTIVITY IN EAST AND SOUTHERN AFRICA 2006 - 2008 AND POSSIBLE VECTOR CONTROL STRATEGIES

Assaf Anyamba[1], Kenneth J. Linthicum[2], Jennifer Small[1], Edwin Pak[1], Compton J. Tucker[1], Jean P. Chretien[3], Seth C. Britch[2], Robert Breiman[4], Allan Hightower[5], Stephan de La Rocque[5], Pierre Formenty[6], Karl Haagsma[7], Mark Latham[8], Henry B. Lewandowski[9], Rosemary Sang[10], David Schnabel[11], Jason Richardson[12]
[1]NASA Goddard Space Flight Center, Greenbelt, MD, United States, [2]USDA-ARS Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL, United States, [3]Department of Defense Global Emerging Infections Surveillance and Response System, Silver Spring, MD, United States, [4]Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya, [5]Food and Agriculture Organisation of the United Nations, Rome, Italy, [6]World Health Organization, Geneva, Switzerland, [7]Youngstown Air Reserve Station, Vienna, OH, United States, [8]Manatee County Mosquito Control, West Palmento, FL, United States, [9]Chatham County Mosquito Control, Savannah, GA, United States, [10]Kenya Medical Research Institute, Nairobi, Kenya, [11]USAMRU-K - GEIS, Nairobi, Kenya, [12]Armed Forces Research Institute of Medical Sciences, United States Army Medical Component, Bangkok, Thailand

653

GENETIC CHARACTERIZATION OF A NOVEL HANTAVIRUS STRAIN ASSOCIATED WITH HUMAN ILLNESS IN BOLIVIA

Cristhopher Cruz[1], Brett M. Forshey[2], Efrain Vallejo[3], Roberto Agudo[3], Roger Castillo[1], Alfredo Huaman[1], Jorge Vargas[4], Tadeusz Kochel[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Naval Medical Research Center Detachment, Lima and Iquitos, Peru, [3]Servicio Departamental de Salud, Cochabamba, Bolivia, [4]Centro Nacional de Enfermedades Tropicales, Santa Cruz, Bolivia

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POPULATION-BASED STUDIES TO INVESTIGATE THE EXPANSION OF A NEWLY-INTRODUCED DENGUE VIRUS SEROTYPE IN IQUITOS, PERU

Brett M. Forshey[1], Amy C. Morrison[2], Claudio Rocha[2], Steve Stoddard[3], Rebeca Carrion[2], Isabel Bazan[2], Stalin Vilcarromero[2], Thomas W. Scott[3], Tadeusz Kochel[4]
[1]Naval Medical Research Center Detachment, Lima and Iquitos, Peru, [2]Naval Medical Research Center Detachment, Iquitos, Peru, [3]University of California, Davis, Davis, CA, United States, [4]Naval Medical Research Center Detachment, Lima, Peru

WATER, SANITATION AND HYGIENE

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THE USE OF INTRAVAGINAL PRODUCTS AND VAGINAL HYGIENE PRACTICES AMONGST NIGERIAN WOMEN

Ngozi M. Otuonhye
Nigerian Institute of Medical Research, Yaba, Lagos, Nigeria

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NEIGHBORHOOD WATER AND SANITATION AND DIARRHEAL DISEASE IN AN URBAN AND DEVELOPING REGION OF COASTAL ECUADOR

Darlene Bhavnani[1], William Cevallos[2], Joseph N. Eisenberg[1]
[1]University of Michigan, Ann Arbor, MI, United States, [2]Universidad San Francisco de Quito, Quito, Ecuador

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OUTBREAK OF A *CYCLOSPORA CAYETANENSIS* WITHIN A PERUVIAN MILITARY FACILITY IN LIMA, PERU

Mariana Ramos[1], Victor Gonzaga[1], Carmen Lucas[1], Maria Bernal[1], Christian Loret-de-Mola[1], Marianela Ore[2], Rina Meza[1], Ryan C. Maves[1], Paul Graf[1], Joel M. Montgomery[1]
[1]Naval Medical Research Center Detachment Peru, Lima, Peru, [2]Health Intelligence Section-Peruvian Army, Lima, Peru

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RELATIONSHIP BETWEEN SOCIO-ECONOMIC FACTORS AND TIME-TO-INFECTION WITH *GIARDIA INTESTINALIS* AMONG CHILDREN IN PERU

Geoffrey Kahn[1], Lilia Cabrera[2], Manuela Verastegui[3], Ynes R. Ortega[4], Robert H. Gilman[5], Lihua Xiao[1], **Vitaliano A. Cama**[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Asociacion Benefica Prisma, Lima, Peru, [3]Universidad Peruana Cayetano Heredia, Lima, Peru, [4]University of Georgia, Griffin, GA, United States, [5]Johns Hopkins University, Baltimore, MD, United States

Poster Session B ACMCIP Abstracts – Molecular, Cellular and Immunoparasitology

438, 466, 475, 477, 488, 489, 491, 492, 493, 494, 495, 496, 497, 498, 500, 502, 511, 523, 524, 525, 529, 530, 531, 535, 543, 551, 553, 554, 555, 556, 557, 558, 559, 560, 563, 566, 568, 571, 595

CME/Courses Committee Meeting

Room 8211
Friday, November 20, 12:15 p.m. - 1:15 p.m.

Public Relations Committee Meeting

Room 8212
Friday, November 20, 12:15 p.m. - 1:15 p.m.

Late Breaker Abstract Session 78

Late Breakers in Clinical Tropical Medicine

Delaware A
Friday, November 20, 12:15 p.m. - 1:15 p.m.

This session is specifically designed for presentations of new data obtained after the closing date for abstract submission. Presentations feature reports of clinical trials, preliminary data on new outbreaks of disease or individual case reports of interest. See the Late Breaker handout in your registration packet for the presentation schedule.

CHAIR
Barbara L. Herwaldt
Centers for Disease Control and Prevention, Atlanta, GA, United States

Jason D. Maguire
Naval Medical Center Portsmouth, Portsmouth, VA, United States

Mid-Day Session 79

Preparation and Review of Scientific Manuscripts for the *American Journal of Tropical Medicine & Hygiene*

Delaware B
Friday, November 20, 12:15 p.m. - 1:15 p.m.

This symposium is aimed at trainees and others interested in understanding better how manuscripts are reviewed, edited and processed by the society's journal. Pointers on preparation and review of manuscripts will be stressed. The following topics will be covered: 1) Why publish your work in our society's journal; 2) Why and where to publish, i.e. selection of the "right" journal for your work; 3) Examples of a paper in progress; how to prepare and how to write a good paper; 4) The submission and review processes and how they work; 5) How to properly review a paper; 6) How to respond to reviewer comments; and 6) The publication process: what happens after your paper is accepted.

CHAIR
Cathi Siegel
American Journal of Tropical Medicine and Hygiene, *Cleveland, OH, United States*

James Kazura
Case Western Reserve University, Cleveland, OH, United States

12:15 p.m.

WHY SELECT THE *AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE (AJTMH)* FOR YOUR PAPER: SELECTING THE RIGHT JOURNAL FOR YOUR WORK

James Kazura
Case Western Reserve University, Cleveland, OH, United States

12:25 p.m.

MANUSCRIPT PROCESSING AT AJTMH

Cathi Siegel
American Journal of Tropical Medicine and Hygiene, *Cleveland, OH, United States*

12:35 p.m.

WHAT CONSTITUTES A WELL- VERSUS POORLY-WRITTEN MANUSCRIPT: RESPONDING TO REVIEWERS' COMMENTS

James Kazura
Case Western Reserve University, Cleveland, OH, United States

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

12:45 p.m.

THE REVIEW: EDITORIAL, CORRESPONDING AUTHOR AND REVIEWER PERSPECTIVES

James Kazura
Case Western Reserve University, Cleveland, OH, United States

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

12:55 p.m.

OPEN ACCESS MOVEMENT AND AJTMH POLICY ON OPEN ACCESS

Cathi Siegel
American Journal of Tropical Medicine and Hygiene, *Cleveland, OH, United States*

1:05 p.m.

OPEN FORUM WITH AUDIENCE

Late Breaker Abstract Session 80

Late Breakers in Basic Science/Molecular Biology

Virginia AB
Friday, November 20, 12:15 p.m. - 1:15 p.m.

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. See the Late Breaker handout in your registration packet for the presentation schedule.

CHAIR

Gregory D. Ebel
University of New Mexico School of Medicine, Albuquerque, NM, United States

Stefan Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

Meet the Professors 81

Meet the Professors B: Enigmatic and Teaching Cases

Virginia C
Friday, November 20, 12:15 p.m. - 1:15 p.m.

A panel of professors will present one clinical case each of a tropical disease specific to a particular region that they have found a challenge to manage or diagnose. If there is time, participants may be able to present enigmatic cases for the audience and panel to consider.

CHAIR

Davidson H. Hamer
Boston University School of Public Health, Boston, MA, United States

PANELISTS

Susan McLellan
Tulane University School of Medicine, New Orleans, LA, United States

Hans D. Nothdurft
University of Munich, München, Germany

Mid-Day Session 81A

Case Studies for Global Health: Building Relationships, Sharing Knowledge

Wilson AB

Friday, November 20, 12:15 p.m. - 1:15 p.m.

The Alliance for Case Studies for Global Health -- (a collaboration of the Association of University Technology Managers, the Bill & Melinda Gates Foundation, Global Health Progress, International AIDS Vaccine Institute (IAVI), and TDR: For research on diseases of poverty) – set out almost two years ago to prepare a set of multi-sector "case studies" focusing on global health research, development, delivery and financing. The demand for widely available case studies regarding the way various stakeholders (e.g. private funders, the WHO, academia, the pharmaceutical and biotech sectors, public-private-partnerships and governments) address global health concerns is well known. This demand has been voiced by both 1) stakeholders currently involved with global health projects who continually evaluate how to most efficiently build and manage technologies and relationships, and 2) organizations and companies that are not yet involved in global health efforts but are interested in learning how others have participated. This workshop will unveil the publication for the first time and highlight some of the case study participants' experiences. Selected case study participants will discuss the topics of global health access, discovery/development, intervention/prevention, and systems strengthening and capacity building from a variety of perspectives.

CHAIR

Erik Iverson
Bill & Melinda Gates Foundation, Seattle, WA, United States

Labeeb Abboud
International AIDS Vaccine Institute, New York, NY, United States

Poster Session B Viewing

Exhibit Hall B South
Friday, November 20, 1:30 p.m. - 7 p.m.

Symposium 82

Targets and Mechanisms of Acquired Immunity to Malaria

Salon 1

Friday, November 20, 1:30 p.m. - 3:15 p.m.

Individuals living in malaria-endemic areas eventually develop effective immunity that protects against severe and symptomatic malaria. Presently there is only a limited understanding of the key targets of protective immune responses and specific mechanisms involved in mediating immunity in humans. This symposium will review our current understanding and recent insights into the targets and mechanisms of immunity.

CHAIR

James G. Beeson
Walter and Eliza Hall Institute, Parkville, Australia

Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

1:30 p.m.

APPROACHES TO DEFINING THE TARGETS OF IMMUNITY TO MALARIA

Kevin Marsh
Kenya Medical Research Institute, Kilifi, Kenya

1:50 p.m.

BIOLOGICALLY RELEVANT CORRELATES OF NATURALLY ACQUIRED IMMUNITY TO *PLASMODIUM FALCIPARUM* IN HUMANS

James W. Kazura
Case Western Reserve University, Cleveland, OH, United States

2:10 p.m.

GROWTH INHIBITORY ANTIBODIES AGAINST BLOOD-STAGE *P. FALCIPARUM*

Carole A. Long
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

2:30 p.m.

MEROZOITE INVASION LIGANDS AS TARGETS OF PROTECTIVE IMMUNITY AGAINST *P. FALCIPARUM*

James G. Beeson
Walter and Eliza Hall Institute, Parkville, Australia

2:50 p.m.

CORRELATES OF PROTECTIVE IMMUNITY TO *PLASMODIUM VIVAX*

Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

Symposium 83

Clinical Group I

Supported with funding from the International Association for Medical Assistance to Travelers

Salon 2

Friday, November 20, 1:30 p.m. - 3:15 p.m.

This session features the Marcolongo Lecture, named for Vincenzo Marcolongo, who founded the International Association for Medical Assistance to Travelers (IAMAT) and organized physicians from all over the world into a network assisting travelers. The session also features an update from the GeoSentinel Surveillance group and Global TravEpiNet group.

CHAIR

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

1:30 p.m.

VINCENZO MARCOLONGO MEMORIAL LECTURE: PARADIGM SHIFTS IN TUBERCULOSIS DRUG SUSCEPTIBILITY TESTING: NEW DOS AND DON'TS

David A.J. Moore
Imperial College London and Universidad Peruana, Lima, Peru

2:15 p.m.

GEOSENTINEL SURVEILLANCE REPORT

David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States

3 p.m.

TRAVEPINET UPDATE

Edward T. Ryan
Massachusetts General Hospital, Boston, MA, United States

Symposium 84

American Committee on Arthropod-Borne Viruses (ACAV) I: Business Meeting, Awards and Shope Fellowship Presentations

Salon 3

Friday, November 20, 1:30 p.m. - 3:15 p.m.

The American Committee on Arthropod-Borne Viruses provides a forum for exchange of information among people interested in arbovirus research. This session will include the business meeting/award presentations and presentations by previous winners of the Robert E. Shope International Fellowship in Infectious Diseases to describe their research on arbovirology and emerging diseases. These awardees have developed and executed international work in the field of arbovirology and strive to reinvigorate international research in tropical infectious diseases. The session will end with an informal social designed to encourage new and young members of our community to interact with fellow arbovirologists and become involved in the ACAV system.

CHAIR

Ann Powers
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Laura D. Kramer
Wadsworth Center, Slingerlands, New York, United States

1:30 p.m.

AWARDS PRESENTATION AND BUSINESS MEETING

Ann Powers
Centers for Disease Control and Prevention, Fort Collins, CO, United States

2:05 p.m.

BLOOD FEEDING BEHAVIOR OF POTENTIAL WEST NILE VIRUS VECTORS IN GUATEMALA

Rebekah J. Kent
Centers for Disease Control and Prevention, Fort Collins, CO, United States

2:25 p.m.

NEW UNDERSTANDING OF THE EPIDEMIOLOGY OF RIFT VALLEY FEVER

Angelle D. LaBeaud
Children's Hospital Oakland Research Institute, Oakland, United States

2:45 p.m.

SOCIAL NETWORKING

Symposium 85

Pharmacovigilance of New Antimalarials in the Field: Challenges and Opportunities

Delaware A
Friday, November 20, 1:30 p.m. - 3:15 p.m.

Pharmacovigilance in most sub-Saharan African countries is insufficiently operative. This situation poses acute problems for assessing the "real life" safety profile of new drugs, such as antimalarials, that will not be used in developed countries with pharmacovigilance systems. The symposium will first review the status of pharmacovigilance systems in Africa. It will also provide the first results of a large-scale proactive pharmacovigilance plan launched in 2008 on a fixed-dose ACT that uses innovative ways to gather good quality safety and effectiveness data in the field. It will finally discuss how this first experience can pave the way for monitoring plans for newer antimalarial drugs that will be launched in the coming years, and how these initiatives contribute to build capacity on pharmacovigilance in Africa.

CHAIR

Wilfred Mbacham
University of Yaoundé, Yaoundé, Cameroon

Ambrose Talisuna
Medicines for Malaria Venture, Kampala, Uganda

1:30 p.m.

LESSONS DRAWN FROM A COMPARISON OF THE STATUS OF PHARMACOVIGILANCE SYSTEMS IN NORTH AFRICA AND IN SUB-SAHARAN AFRICA

Rachida Soulaymani
National Pharmacovigilance Center, Rabat, Morocco

1:55 p.m.

ANTIMALARIALS PHARMACOVIGILANCE IN SUB-SAHARAN AFRICA: CHALLENGES AND ONGOING INITIATIVES

Shanti Pal
World Health Organization, Geneva, Switzerland

2:20 p.m.

THE ARTESUNATE-AMODIAQUINE FIXED-DOSE COMBINATION FIELD MONITORING PROGRAM: OBJECTIVES, METHODS AND FIRST RESULTS FROM LIBERIA AND SENEGAL

Francois Bompart
sanofi-aventis, Paris, France

2:50 p.m.

BEYOND ANTIMALARIALS: PERSPECTIVES FOR IMPROVING PHARMACOVIGILANCE IN SUB-SAHARAN AFRICA

Fred Binka
INDEPTH Network, Accra, Ghana

Symposium 86

The Global Burden of Anemia: Bridging Pathogenesis and Pathology

Supported with funding from the Burroughs Wellcome Fund
Delaware B
Friday, November 20, 1:30 p.m. – 3:15 p.m.

Anemia is a major disease pathology associated with a variety of infections, malnutrition and poverty. Assessing the global burden of anemia is critical to revealing the major causes and assessing mechanisms of intervention. Parasitic infections are significant contributors to anemia and linking parasite genomics and biology to pathologies of anemia, is urgently needed for effective vaccine development in many parasitic diseases. This requires understanding the complexities of pathogenic mechanisms, acute and chronic anemia and treatment strategies. This symposium will bring together strategies in measuring anemia due to distinct infectious agents, underlying mechanisms of anemia with implications for vaccine development, as well as the utilization of model systems to understand human disease.

CHAIR

Kasturi Haldar
University of Notre Dame, Notre Dame, IN, United States

Peter Hotez
George Washington University, Washington, DC, United States

1:30 p.m.

ASSESSING THE GLOBAL BURDEN OF ANEMIA

Michael Boele van Hensbroek
Emma Children's Hospital AMC, Amsterdam, The Netherlands

1:55 p.m.

THE ANEMIA OF HOOKWORM: MECHANISMS OF BLOOD LOSS

Peter J. Hotez
The George Washington University, Washington, DC, United States

2:20 p.m.

MALARIAL IMMUNITY, INFLAMMATION AND ANEMIA

Kasturi Haldar
University of Notre Dame, Notre Dame, IN, United States

2:45 p.m.

ANEMIA ASSOCIATED WITH MALARIA AND SCHISTOSOMIASIS AND HOW TO MORE EFFECTIVELY ADDRESS BEST TREATMENT OPTIONS.

Jennifer F. Friedman
Brown University, Providence, United States

Symposium 87

Research Agenda of the Schistosomiasis Consortium for Operational Research and Elimination (SCORE)

Virginia AB
Friday, November 20, 1:30 p.m. - 3:15 p.m.

This symposium will review the objectives and research agenda of the newly-created Schistosomiasis Consortium for Operational Research and Elimination. The aim of the session will be to review the present state-of the-art in the areas of operational research toward schistosomiasis control, including highlights of current approaches to measurement of drug impact on parasite diversity, the monitoring of snail populations and transmission parameters during control and the assessment of infection-associated morbidities.

CHAIR

Charles H. King
Case Western Reserve University, Cleveland, OH, United States

Daniel G. Colley
University of Georgia, Athens, GA, United States

1:30 p.m.

IMPACT OF LARGE-SCALE CONTROL PROGRAMS ON PARASITE POPULATION STRUCTURE AND GENETIC DIVERSITY

Ronald E. Blanton
Case Western Reserve University, Cleveland, OH, United States

1:55 p.m.

MOLECULAR DETECTION OF SNAIL INFECTION BY *SCHISTOSOMA* SPECIES — STATE-OF-THE-ART FOR XENOMONITORING OF TRANSMISSION

David Rollinson
The Natural History Museum, London, United Kingdom

2:20 p.m.

CURRENT APPROACHES TO MEASURING THE DISABLING 'SUBTLE' MORBIDITIES OF CHRONIC SCHISTOSOMIASIS

Charles H. King
Case Western Reserve University, Cleveland, OH, United States

2:45 p.m.

WHO'S PERSPECTIVE ON OPERATIONAL RESEARCH GOALS FOR SCHISTOSOMIASIS

Dirk A. Engels
World Health Organization, Geneva, Switzerland

Symposium 88

Molecular Pathogenesis of Leishmaniasis

Virginia C
Friday, November 20, 1:30 p.m. - 3:15 p.m.

This symposium is designed for leishmania researchers, as well as physicians, interested in leishmaniasis. The research areas covered by this symposium include promastigote virulence factors, complement resistance mechanisms and amastigote survival in macrophage phagolysosomes.

CHAIR

Chaoqun Yao
University of Wyoming, Laramie, WY, United States

Jeffrey Beetham
Iowa State University, Ames, IA, United States

1:30 p.m.

COMPLEMENT RESISTANCE MECHANISMS IN *LEISHMANIA CHAGASI*

Jeffrey Beetham
Iowa State University, Ames, IA, United States

1:55 p.m.

THE ROLE OF *LEISHMANIA GLYCOLIPIDS* IN THE INFECTIOUS CYCLE

Stephen Beverley
Washington University, St. Louis, MO, United States

2:20 p.m.

VIRULENCE DETERMINANTS IN THE PLASMA MEMBRANE OF *LEISHMANIA PROMASTIGOTES*

Chaoqun Yao
University of Wyoming, Laramie, WY, United States

2:45 p.m.

AMASTIGOTE SURVIVAL IN MACROPHAGE PHAGOLYSOSOMES

Peter Kima
University of Florida, Gainesville, FL, United States

Scientific Session 89

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Cellular Parasitology II

Supported with funding from the Burroughs Wellcome Fund
Washington 1
Friday, November 20, 1:30 p.m. - 3:15 p.m.

CHAIR

Nilda E. Rodriguez
Veterans Affairs Medical Center Iowa City, Iowa City, IA, United States

Peter Melby
University of Texas Health Science Center, San Antonio, TX, United States

1:30 p.m.

1150

NEUTROPHIL-DERIVED CCL3 IS ESSENTIAL FOR THE RAPID RECRUITMENT OF DENDRITIC CELLS TO THE SITE OF *LEISHMANIA* INOCULATION IN RESISTANT MICE

Mélanie Charmoy[1], Saskia Brunner-Agten[1], David Aebisher[1], Floriane Auderse[1], Pascal Launois[1], Geneviève Milon[2], Amanda E. I. Proudfoot[3] and Fabienne Tacchini-Cottier[1]

[1]Department of Biochemistry, WHO Immunology Research and Training Center, University of Lausannne, Epalinges, Switzerland, [2]Institut Pasteur, Département de Parasitologie et Mycologie, Unité d'Immunophysiologie et Parasitisme Intracellulaire, Paris, France, [3]Merck-Serono Geneva Research Center, Geneva, Switzerland

1:45 p.m.

1151

RELEASE OF TRAP FROM THE SPOROZOITE SURFACE IS REQUIRED FOR GLIDING MOTILITY AND INVASION OF TARGET ORGANS

Ijeoma Ejigiri, Kwadwo Kwakye, Alida Coppi, Brandy Bennett, Photini Sinnis

Department of Medical Parasitology, New York University School of Medicine, New York, NY, United States

2 p.m.

659

STIMULATION OF MONOCYTES BY FILARIAL EXCRETORY-SECRETORY PRODUCTS: A POTENTIAL ROLE IN MODULATION OF THE LYMPHATIC ENDOTHELIUM?

Tiffany S. Weinkopff[1]**,** Patrick Lammie[2]

[1]University of Georgia, Athens, GA, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

2:15 p.m.

660

MACROPHAGE CHOLESTEROL MEDIATES THE ENTRY, PHAGOSOME MATURATION, AND INTRACELLULAR SURVIVAL OF *LEISHMANIA CHAGASI* PARASITES IN A STAGE-SPECIFIC AND VIRULENCE-DEPENDENT MANNER

Nilda E. Rodriguez, Upasna Gaur, Lee-Ann H. Allen, Mary E. Wilson

Veterans Affairs Medical Center and The University of Iowa, Iowa City, IA, United States

2:30 p.m.

661

DOMINANT ALTERNATIVE MACROPHAGE ACTIVATION IN PROGRESSIVE VISCERAL LEISHMANIASIS IS MEDIATED BY PARASITE-INDUCED STAT6 ACTIVATION AND ARGINASE EXPRESSION

Elvia Y. Osorio[1], Weiguo Zhao[1], Claudia M. Espitia1, Omar A. Saldarriaga[1], Leo Hawel[2], Craig V. Byus[2], Bruno L. Travi1, Peter C. Melby[1]

[1]South Texas Veterans Health Care System/University of Texas Health Science Center, San Antonio, TX, United States, [2]University of California-Riverside, Riverside, CA, United States

2:45 p.m.

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PHOSPHATIDYLSERINE EXPOSURE BY AMASTIGOTES OF *LEISHMANIA AMAZONENSIS* IS INDUCED BY HOST IMMUNE RESPONSES

Joao L. Wanderley[1]**,** Poliana Deolindo[2], Marcello Barcinski[3], Lynn Soong[4]

[1]Federal University of Rio de Janeiro, Morphological Sciences Program, Rio de Janeiro, Brazil, [2]Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, [3]University of Sao Paulo, Sao Paulo, Brazil, [4]University of Texas Medical Branch, Galveston, TX, United States

3 p.m.

ACMCIP ANNUAL BUSINESS MEETING

Rick Fairhurst
National Institutes of Health, Rockville, MD, United States

Symposium 90

Johns Hopkins Malaria Research Institute Symposium on *Plasmodium*-Mosquito Interactions

Washington 2

Friday, November 20, 1:30 p.m. - 3:15 p.m.

Transmission of *Plasmodium*, the causative agent of malaria, is entirely dependent on its successful development in its mosquito vector. Thus, this part of the life cycle is a potential weak link in the transmission chain. Traditional control measures are either only partially effective (drugs, insecticides) or extremely hard to develop (vaccines). These considerations emphasize the importance of understanding parasite-insect vector interactions because such knowledge could lead to the development of novel control strategies. Exciting new discoveries are being made in this area of knowledge and the symposium will highlight some of these advances. Speakers will be asked to relate their discoveries to potential new strategies for disease control.

CHAIR

Marcelo Jacobs-Lorena
Johns Hopkins School of Public Health, Baltimore, MD, United States

1:30 p.m.

MOSQUITO MICROBIOTA AND *PLASMODIUM* INFECTION

George Dimopoulos
Johns Hopkins School of Public Health, Baltimore, MD, United States

1:55 p.m.

GENETICS OF *PLASMODIUM FALCIPARUM-ANOPHELES GAMBIAE* INTERACTIONS

Ken Vernick
Institut Pasteur, Paris, France

2:20 p.m.

IDENTIFICATION OF TRANSCRIPTION FACTORS IN MALARIA SPOROZOITES

Masao Yuda
Mie University, Mie, Japan

2:45 p.m.

GLYCOMIC AND GLYCO-PROTEOMIC INSIGHTS INTO *PLASMODIUM* TRANSMISSION BIOLOGY

Rhoel Dinglasan
Johns Hopkins School of Public Health, Baltimore, MD, United States

Scientific Session 91

Malaria - Epidemiology I

Washington 3
Friday, November 20, 1:30 p.m. - 3:15 p.m.

CHAIR

Frank Atuguba
Navrongo Health Research Centre, Navrongo, Ghana

Louis Penali
Institute Pasteur, Abidjan, Cote d'Ivoire

1:30 p.m.

663

A RANDOMIZED CLINICAL TRIAL OF THE PROTECTIVE EFFICACY OF TRIMETHOPRIM-SULFAMETHOXAZOLE PROPHYLAXIS AGAINST MALARIA IN HIV-EXPOSED CHILDREN

Taylor Sandison[1], Jaco Homsy[2], Emmanuel Arinaitwe[3], Neil Vora[4], Abel Kakuru[3], Humphrey Wanzira[3], Victor Bigira[3], Julius Kalamya[2], Moses Kamya[5], Grant Dorsey[4], Jordan Tappero[6]
[1]University of Washington, Seattle, WA, United States, [2]PMTCT Program, Centers for Disease Control-Uganda, Entebbe, Uganda, [3]Infectious Disease Research Collaboration, Kampala, Uganda, [4]University of California, San Francisco, San Francisco, CA, United States, [5]Makerere University, Kampala, Uganda, [6]Centers for Disease Control, Atlanta, GA, United States

1:45 p.m.

664

SEVERE DISEASE IN CHILDREN PACKAGE: IMPROVING CARE FOR CHILDREN WITH VERY SEVERE FEBRILE DISEASE PRESENTING TO FIRST-LEVEL HEALTH FACILITIES IN TANZANIA

Jacek Skarbinski[1], Thomas Lyimo[2], Faustin Rwebogora[2], Peter McElroy[1], Salim Abdulla[2], S. Patrick Kachur[1], Elizeus Kahigwa[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ifakara Health Institute, Dar es Salaam, United Republic of Tanzania

2 p.m.

665

PREVALENCE OF PFDHFR AND PFDHPS HAPLOTYPES OF GENES ASSOCIATED WITH *PLASMODIUM FALCIPARUM* RESISTANCE TO SULFADOXINE-PYRIMETHAMINE FROM ASYMPTOMATIC ISOLATES IN ANONKOUA-KOUTE (ABIDJAN, IVORY COAST)

Louis K. Penali[1], Berenger A. Ako[1], Offianan A. Toure[1], Marnie Briceno[2], Rokia Traore[1], Carol H. Sibley[2]
[1]Institut Pasteur de Cote d'Ivoire, Abidjan, Cote d'Ivoire, [2]Genome Sciences Department, Seattle, WA, United States
(ACMCIP Abstract)

2:15 p.m.

666

BURDEN OF MALARIA IN PREGNANCY IN WOMEN PRESENTING TO DELIVERY UNITS IN AREAS WITH STABLE AND UNSTABLE MALARIA TRANSMISSION IN CHHATTISGARH, INDIA

Neeru Singh[1], Mrigendra P. Singh[2], Blair J. Wylie[3], Manmohan M. Shukla[2], Mobassir Hussain[2], Aditya P. Dash[4], Kojo Yeboah-Antwi[5], Lora Sabin[5], Venkatachalam Udhayakumar[6], Meghna Desai[6], Davidson H. Hamer[7]
[1]Regional Medical Research Centre (ICMR), Jabalpur, India, [2]National Institute for Malaria Research Field Station, Jabalpur, India, [3]Massachusetts General Hospital, Boston, MA, United States, [4]National Institute for Malaria Research, Delhi, India, [5]Center for International Health and Development, Boston University, Boston, MA, United States, [6]Malaria Branch, Centers for Disease Control and Prevention, Atlanta, GA, United States, [7]Center for International Health and Development, Boston, MA, United States

2:30 p.m.

667

ROUTINE IRON SUPPLEMENTATION IN HIV-INFECTED PREGNANT WOMEN: IS IT ASSOCIATED WITH THE RISK OF MALARIA PARASITEMIA?

Atupele P. Kapito-Tembo[1], Steven R. Meshnick[1], Michaël B. van Hensbroek[2], Kamija S. Phiri[2], Margaret Fitzgerald[3], Terrie Taylor[4], Victor Mwapasa[5]
[1]University of North Carolina-Chapel Hill, Chapel Hill, NC, United States, [2]Malawi-Liverpool-Wellcome Trust Clinical Research Programme, College of Medicine, Blantyre, Malawi, [3]Medecins San Frontieres (MSF) - Luxembourg, Thyolo, Malawi, [4]Blantyre Malaria Project, Blantyre, Malawi, [5]Department of Community Health, College of Medicine, Blantyre, Malawi

2:45 p.m.

668

USING DEMOGRAPHIC SURVEILLANCE SYSTEM TO RECORD EARLY INADVERTENT EXPOSURE OF ANTIMALARIAL DURING PREGNANCY

Abdunoor M. Kabanywanyi[1], Aggrey Malila,[2], Mathew Alexander[2], Honesta Mzyangizyangi[2], Honorati Masanja[1], Salim Abdulla[1]
[1]Ifakara Health Institute, Dar es Salaam, United Republic of Tanzania, [2]Ifakara Health Institute, Ifakara, United Republic of Tanzania

3 p.m.

669

LOW BIRTH WEIGHT, ILLNESS, AND DEATH AMONG YOUNG CHILDREN OF THE KASSENA-NANAKANA DISTRICT OF NORTHERN GHANA: WHO, WHERE, WHEN, AND SOMETIMES, WHY?

Frank Atuguba[1], David J. Fryauff[2], Kwadwo A. Koram[3], Thomas Anyorigiya[1], Martin Adjuik[1], Patrick Ansah[1], Victor Asoala[1], Abraham R. Oduro[1], Abraham Hodgson[1], Lucas Amenga Etego[1], Francis Nkrumah[4]
[1]Navrongo Health Research Center, Navrongo, Ghana, [2]Naval Medical Research Center, Silver Spring, MD, United States, [3]Noguchi Memorial Institute of Medical Research, Accra, Ghana, [4]Navrongo Health Research Center, Accra, Ghana

Scientific Session 93

Filariasis - Molecular Biology

Washington 5
Friday, November 20, 1:30 p.m. - 3:15 p.m.

CHAIR

Sara Lustigman
New York Blood Center, New York, NY, United States

Helton C. Santiago
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

1:30 p.m.

670

STAGE-SPECIFIC MOLECULAR DETECTION OF *WUCHERERIA BANCROFTI* L3 LARVAE IN MOSQUITOES

Sandra J. Laney[1], Reda M. Ramzy[2], Hanan H. Helmy[3], Hoda A. Farid[3], Ameen Ashour[3], Gary J. Weil[4], Steven A. Williams[5]
[1]Smith College/Ain Shams University, Northampton, MA, United States, [2]Egyptian Ministry of Health and Population, Cairo, Egypt, [3]Ain Shams University, Cairo, Egypt, [4]Washington University, St. Louis, MO, United States, [5]Smith College/University of Massachusetts, Northampton, MA, United States
(ACMCIP Abstract)

1:45 p.m.

671

THE TRANSCRIPTOME OF LOA LOA L3 INFECTIVE LARVAE IN COMPARISON TO THE L3 TRANSCRIPTOMES OF THE OTHER MAJOR HUMAN PATHOGENIC FILARIAE

Doran L. Fink, Amy Klion, Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

2 p.m.

672

DECODING THE INVASION AND MOLTING PROCESSES OF *BRUGIA MALAYI* L3 LARVAE

Sasisekhar Bennuru, Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

2:15 p.m.

673

***BRUGIA MALAYI* GENE EXPRESSION IN RESPONSE TO TARGETED ELIMINATION OF THE WOLBACHIA ENDOSYMBIONT**

Sara Lustigman[1], Tiruneh Hailemariam[1], Jay DePasse[2], Xu Zhang[2], Yelena Oksov[1], Thomas R. Unnasch[3], Elodie Ghedin[2]
[1]New York Blood Center, New York, NY, United States, [2]University of Pittsburgh School of Medicine, Pittsburgh, PA, United States, [3]University of South Florida, Tampa, FL, United States
(ACMCIP Abstract)

2:30 p.m.

674

LATERAL GENE TRANSFER IN THE FILARIAL NEMATODES *ONCHOCERCA FLEXUOSA* AND *ACANTHOCHEILONEMA VITEAE* CREATES NOVEL TRANSCRIPTS

Samantha N. McNulty[1], Jeremy M. Foster[2], Makedonka Mitreva[1], John Martin[1], Julie C. Dunning-Hotopp[3], Norbert W. Brattig[4], Barton E. Slatko[5], Gary J. Weil[1], Peter U. Fischer[1], Bo Wu[2]
[1]Washington University School of Medicine, St. Louis, MO, United States, [2]New England Biolabs, Inc., Ipswich, MA, United States, [3]University of Maryland School of Medicine, Baltimore, MD, United States, [4]Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, [5]New England Biolabs, Inc., Ipswich, MD, United States

2:45 p.m.

675

EXPERIMENTAL CONFIRMATION OF FUNCTIONAL OPERONS IN *BRUGIA MALAYI*

Canhui Liu[1], Ana deOliveira[2], Elodie Ghedin[3], Mutende Sikuyayenga[2], **Thomas R. Unnasch**[1]
[1]GHIDR Program, University of South Florida, Tampa, FL, United States, [2]Division of Infectious Diseases, University of Alabama at Birmingham, Birmingham, AL, United States, [3]Division of Infectious Diseases, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States

Exhibit Hall Open

Exhibit Hall A
Friday, November 20, 3 p.m. - 4 p.m.

Coffee Break

Exhibit Hall A
Friday, November 20, 3:15 p.m. - 3:45 p.m.

Symposium 94

Attenuated Whole Organism Sporozoite Vaccines for Malaria

Salon 1

Friday, November 20, 3:45 p.m. - 5:30 p.m.

Immunization with live attenuated sporozoites results in immune responses which generate protection against virulent sporozoites in rodent models of malaria and human volunteers. The symposium will present the current status on the development and optimization of live attenuated sporozoite vaccines and the host responses that generate protective immunity to liver stage infection.

CHAIR

Robert Sauerwein
UMC Nijmegen, Nijmegen, The Netherlands

Ashley Birkett
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

3:45 p.m.

THE ROLE OF IMMUNOMICS

Denise Doolan
Queensland Institute of Medical Research, Brisbane, Australia

4:10 p.m.

PROGRESS TOWARDS A GENETICALLY ATTENUATED *PLASMODIUM* SPOROZOITE VACCINE

Shahid Khan
UMC Leiden, Leiden, The Netherlands

4:35 p.m.

PROGRESS IN DEVELOPING A GENETICALLY ATTENUATED PARASITE (GAP) MALARIA VACCINE

Stefan Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

5 p.m.

THE PFSPZ VACCINE: CHALLENGES IN MOVING FROM PHASE 1 CLINICAL TRIALS TO LICENSURE

Steve Hoffman
Sanaria Inc., Rockville, MD, United States

Symposium 95

Clinical Group II

Salon 2

Friday, November 20, 3:45 p.m. - 5:30 p.m.

This session features a malaria drug update and travel vaccine update.

CHAIR

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

3:45 p.m.

UPDATE ON MALARIA PROPHYLAXIS AND TREATMENT FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION

Paul Arguin
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:10 p.m.

TRAVELERS' VACCINE UPDATE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION

Gary Brunette
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:35 p.m.

TRIBUTE TO JOHN DICK FLEMING MACLEAN, MD, FRCPC, MRCP (UK), DCMT (LOND.)

Brian J. Ward
Infectious Diseases, McGill University, Montreal, QC, Canada

Michael Libman
McGill University, Toronto, ON, Canada

5 p.m.

CLINICAL GROUP ANNUAL BUSINESS MEETING

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

Symposium 96

American Committee on Arthropod-Borne Viruses (ACAV) II: ACAV 50th Anniversary Symposium: The Historical Role of ACAV in Virus Discovery, Epidemiology and Prevention

Salon 3

Friday, November 20, 3:45 p.m. - 5:30 p.m.

The American Committee on Arthropod-Borne Viruses was founded 50 years ago to provide a forum for exchange of information among people interested in arbovirus research. Because of the activities of ACAV, numerous outstanding scientific contributions to arbovirology and tropical medicine were accomplished. The symposium will describe the formation and history of ACAV and demonstrate how this network of dedicated scientists advanced research and our knowledge in areas including the invertebrate-transmitted hemorrhagic fevers and California serogroup viruses.

CHAIR

Charles Calisher
Colorado State University, Fort Collins, CO, United States

3:45 p.m.

THE FOUNDING AND ORGANIZATION OF ACAV: FORMATION OF A COMMUNITY

Charles Calisher
Colorado State University, Fort Collins, CO, United States

4:05 p.m.

COEVOLUTION OF ARBOVIROLOGY AND ACAV: SYNERGY AND WORLDWIDE GROWTH

Thomas Yuill
University of Wisconsin, Madison, United States

4:25 p.m.

YELLOW FEVER: THE ACAV NEXUS

Thomas P. Monath
Kleiner Perkins Caufield & Byers, Harvard, MA, United States

4:45 p.m.

CALIFORNIA SEROGROUP VIRUSES: ACAV AS MENTOR

Don McLean
University of British Columbia, Vancouver, Canada

5:05 p.m.

HEMORRHAGIC FEVERS, HIGH HAZARD PATHOGEN RESEARCH AND ACAV: A BRIEF HISTORY

Tom Ksiazek
University of Texas Medical Branch, Galveston, United States

Symposium 97

Out of the Shadows: Integrated Efforts to Target the Neglected Tropical Diseases (NTDs)

Delaware A
Friday, November 20, 3:45 p.m. - 5:30 p.m.

Causing an unrelieved drain on the lives, health and economies of the world's poorest populations, the 13 diseases identified by WHO as Neglected Tropical Diseases (NTDs) have finally, during the past five years, received deserved public attention and a legitimacy in discussions of global health policy. Essential to this attitudinal shift have been, first, the recognition that seven of these diseases can be effectively controlled or eliminated with agreed strategies and with tools often available at minimal or no cost because of generous donations by the pharmaceutical industry. Second, a focusing by WHO on opportunities for significant resource optimization and health gains through integrated NTD control; and, finally, major funding commitments, first by the U.S. Congress (through USAID) and then by the U.K. government (through DFID), the Bill and Melinda Gates Foundation and others to support integrated efforts to control or eliminate these NTDs. Not all countries have taken the same approach to integrating NTD control activities. Each country has built its program on an appropriate, existing healthcare platform, aimed at achieving sustainable, cost-effective disease elimination or control. Quantifiable successes have been rapidly achieved. In 2008 the U.S. government announced an initiative to expand its commitment to integrated NTD control, aiming to provide one billion treatments in 30 countries by 2013. U.S. President Obama has included NTDs among his global health priorities. The purpose of this symposium is to provide country-specific experience with integrated approaches to NTD control and to identify opportunities that must be pursued to promote the continued success of NTD control programs everywhere and to expand the health improvements and poverty reduction resulting from the investments already made by the partnership of governments, international agencies and the private sector.

CHAIR

Eric A. Ottesen
Task Force for Global Health, Decatur, GA, United States

Mary E. Linehan
RTI International, Washington, DC, United States

3:45 p.m.

NEGLECTED TROPICAL DISEASES (NTDS): YESTERDAY'S DRAIN, TOMORROW'S GAIN FOR GLOBAL HEALTH

Lorenzo Savioli
World Health Organization, Geneva, Switzerland

4:05 p.m.

PARTNERING TO ACHIEVE A COMPREHENSIVE, COST-EFFECTIVE APPROACH TO THE NTDS

Eric A. Ottesen
Task Force for Global Health, Decatur, GA, United States

4:25 p.m.

UGANDA: BUILDING NTD PROGRAMS ON A CHILD HEALTH DAYS PLATFORM

Ambrose Onapa
RTI International, Kampala, Uganda

4:45 p.m.

SIERRA LEONE: BUILDING NTD PROGRAMS ON AN APOC PLATFORM

Joseph B. Koroma
National Programme for the Control of Neglected Tropical Diseases, Ministry of Health and Sanitation (MOHS), Freetown, Sierra Leone

5:10 p.m.

CLIMATE CHANGE IN NTD FUNDING: THE ROLE OF THE U.S. GOVERNMENT IN EXPANDING ACCESS TO NTD CONTROL IN PARTNERSHIP WITH DISEASE-ENDEMIC COUNTRIES, THE PRIVATE SECTOR AND INTERNATIONAL COMMUNITY

Christy Hanson
United States Agency for International Development, Washington, DC, United States

Symposium 98

A Winning Team: The Success of the Walter Reed Army Institute of Research and Its International Partnerships in Advancing Vaccines for Malaria, HIV, Diarrheal Diseases and Dengue Fever

Delaware B
Friday, November 20, 3:45 p.m. - 5:30 p.m.

Walter Reed Army Institute of Research (WRAIR) investigators and their international partners will present practical examples of advances in vaccine development to counter the significant endemic diseases of malaria, HIV, diarrheal diseases and dengue fever. The presentations will emphasize tangible solutions to the challenges of executing successful clinical trials in international settings to include: investment in infrastructure and research capabilities, cross-training and technology transfer, community and cultural perspectives, ethical and regulatory challenges and the efficient leveraging of funding during a period of declining research funding, using current clinical trials as examples. Presentations will address the integration of research with prevention, care and treatment programs, such as the President's Emergency Program for AIDS Relief. The symposium will link advances in the research laboratories, both at the WRAIR and at its overseas laboratories, and will address the challenges and rewards of translating these vaccine research efforts to the field.

CHAIR

Mark E. Polhemus
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Douglas N. Shaffer
United States Army Research Unit-Kenya, Kericho, Kenya

3:45 p.m.

CRITERIA FOR ADVANCING MALARIA VACCINE CANDIDATES FROM THE U.S. TO THE FIELD

Chris F. Ockenhouse
Walter Reed Army Institute of Research, Silver Spring, MD, United States

4:10 p.m.

CREATING A PREMIER INTERNATIONAL HIV VACCINE RESEARCH EFFORT BY LEVERAGED HORIZONTAL AND VERTICAL INTEGRATION

Nelson F. Michael
Walter Reed Army Institute of Research, Rockville, MD, United States

4:35 p.m.

ESTABLISHING INTEGRATED PARTNERSHIPS IN EGYPT, PERU AND KENYA TO DESIGN, DEVELOP AND TEST VACCINES AGAINST THE COMMON BACTERIAL CAUSES OF DIARRHEA AND DYSENTERY

Robert Bowden
Walter Reed Army Institute of Research, Silver Spring, MD, United States

5 p.m.

KAMPHAENG-PHET, THAILAND: A MULTI-FACETED, LONG-TERM COLLABORATION TO DEVELOP A PREMIER FIELD SITE FOR SCIENTIFIC ADVANCEMENT AND CLINICAL TRIALS

In-Kyu Yoon
Armed Forces Research Institute of Medical Sciences/Walter Reed Army Institute of Research, Bangkok, Thailand

Symposium 99

Getting the Most out of Bioinformatics Resources - Introduction to Resources That Can Facilitate Your Research

Virginia AB
Friday, November 20, 3:45 p.m. - 5:30 p.m.

Bioinformatics, in particular organism-specific and comparative genomic databases, are becoming increasingly available for a large number of organisms of interest to tropical disease researchers. The databases contain data ranging from genome sequences and the geographic locations of isolates, to tools designed to help identify drug and vaccine targets. This session is designed as an introduction to several key resources, the data they contain and examples of how the tools they provide can facilitate both wet bench and field research.

CHAIR

Jessica C. Kissinger
University of Georgia, Athens, GA, United States

3:45 p.m.

SCHISTODB: *SCHISTOSOMA MANSONI* GENOME EXPLORATION

Guilherme C. Oliveira
Centro de Pesquisas René Rachou - FIOCRUZ, Belo Horizonte, Brazil

4:20 p.m.

TARGET-BASED DRUG DEVELOPMENT: FROM DATABASE PRIORITIZATION TO VALIDATION TO STRUCTURE BASED DRUG DEVELOPMENT

Wesley C. Van Voorhis
University of Washington, Seattle, WA, United States

4:55 p.m.

EUPATHDB: A PROTIST PATHOGEN DATABASE FOR APICOMPLEXANS, KINETOPLASTIDS, GIARDIA AND TRICHOMONAS

Jessica C. Kissinger
University of Georgia, Athens, GA, United States

Symposium 100

Understanding More about the Antimalarials Market in Africa: Progress in a New Field of Research

Washington 1
Friday, November 20, 3:45 p.m. - 5:30 p.m.

In 2008, the ASTMH meeting examined for the first time the link between understanding the antimalarials market and implications of such information to guide public health initiatives focused on the uptake of ACTs. Participants learned of early attempts to measure the antimalarials market in several African countries, and the way in which policymakers could use such data. Since then, the field of market intelligence has expanded, with the early initiatives of 2008 now bearing fruit. The need for market data to guide public health initiatives is more pressing than ever. The Affordable Medicines Facility, malaria (AMFm) has been approved for a pilot in 11 countries. GFATM funding to scale up access to ACTs has reached new highs. And yet we still have little information about the size and structure of the market. Who still turns to the private sector to purchase an antimalarial medicine, what do they receive, at what cost? This symposium will present the results of 12 months of research, leading to a significant improvement in our understanding of the market size, structure and the ways in which such information can guide ACT access and public health investments. This symposium will describe new data on the process and delays in public sector procurement of ACTs; groundbreaking ways to measure the size and change in the market structure; and country-specific work concerning the affordability and availability of antimalarial medicines. This range of initiatives starts to build a picture of the market, which can improve demand forecasting for needs, to target additional ACT distribution opportunities in the public and private sectors, to measure the change in the market structure as the AMFm replaces older classes of drugs with ACTs. Such information is relevant to policymakers at the global level, as well as those working at national and sub-national level, making sure each caregiver has access to the most effective possible treatment available, at all points of delivery.

CHAIR

Renia Coghlan
Medicines for Malaria Venture, Geneva, Switzerland

Eusebio Macete
CISM, Manhica, Mozambique

3:45 p.m.

AMFM: WHAT DO WE NEED TO KNOW ABOUT THE MARKET, AND WHY?

Serge Xueref
Global Fund for HIV/AIDS, TB and Malaria, Geneva, Switzerland

4:10 p.m.

THE ANTIMALARIALS MARKET REALITY: PRICE AND AFFORDABILITY OF ANTIMALARIALS IN MALAWI

Storn Kabuluzi
Ministry of Health, Malawi, Lilongwe, Malawi

4:35 p.m.

MINING DATABASES: WHAT DO WE KNOW ABOUT PROCUREMENT DATA?

Brenda Waning
Boston University, Boston, MA, United States

5 p.m.

GATHERING MARKET DATA FROM THE TOP: IMS HEALTH WORK ON MEASURING MARKET SIZE

Peter Stephens
IMS Health, London, United Kingdom

Symposium 101

Anopheles Immunity to *Plasmodium*

Washington 2
Friday, November 20, 3:45 p.m. - 5:30 p.m.

The past decade has experienced a dramatic proliferation of our knowledge on the molecular biology of the malaria vector *Anopheles* gambiae. This symposium will address the latest breakthroughs and discoveries on genes and mechanisms that are implicated in defending the *Anopheles* mosquito against *Plasmodium* infection.

CHAIR

George Dimopoulos
Johns Hopkins School of Public Health, Baltimore, MD, United States

3:45 p.m.

CAN THE MOSQUITO IMMUNE SYSTEM LEARN FROM EXPERIENCE?

Carolina Barillas-Mury
National Institutes of Health, Bethesda, MD, United States

4:10 p.m.

GENETIC VARIATION OF *PLASMODIUM* RESISTANCE LOCI IN *ANOPHELES GAMBIAE*

Ken Vernick
Institut Pasteur, Paris, France

4:35 p.m.

MOSQUITO MECHANISMS OF DEFENSE AGAINST MALARIA PARASITES

George Christophides
Imperial College London, London, United Kingdom

5 p.m.

IMMUNE PATHWAY REGULATED REFRACTORINESS TO *PLASMODIUM*

George Dimopoulos
Johns Hopkins School of Public Health, Baltimore, MD, United States

Symposium 102

Strategies for Water and Sanitation: A Multidisciplinary Approach for Sustainable Communities

Washington 3
Friday, November 20, 3:45 p.m. - 5:30 p.m.

The symposium is intended for health professionals, social scientists, engineers and other planners, or anyone with an interest in addressing critical shortages and health problems associated with inadequate and unsanitary water throughout the world. The symposium is designed to discus new strategies to overcome the barriers to provide water and sanitation in low-resource countries. Adequate technologies for water treatment, waste water recycling and sanitation will be evaluated within the broader context of the earth's environment, particularly from a sustainability perspective; the role of water as a crucial component to global health; and the cultural dimensions of local and global health. As a result, the symposium will be highly interdisciplinary and aims to share the information necessary to address complex problems associated with water, sanitation, sustainability and health impacts to form teams that bring together many specialties.

CHAIR

Wilbur K. Milhous
University of South Florida, Tampa, FL, United States

Christine L. Moe
Emory University, Atlanta, GA, United States

3:45 p.m.

A MULTIDISCIPLINARY APPROACH IN WATER AND SANITATION INTERVENTIONS

Linda Whiteford
University of South Florida, Tampa, FL, United States

4:10 p.m.

DRY SANITATION AS WATER SAVING STRATEGY

Ricardo Izurieta
University of South Florida, Tampa, FL, United States

4:35 p.m.

WASTE WATER REUSE IN DEVELOPING COUNTRIES: THE DEVELOPMENT OF THE RECYCLED-TIRE SMALL BIOREACTOR AS STRATEGY FOR WASTE WATER REUSE IN DEVELOPING COUNTRIES

Daniel Yeh
University of South Florida, Tampa, FL, United States

5 p.m.

THE USE OF CACTUS MUCILAGE AS STRATEGY TO SCOUR ARSENIC AND BACTERIA IN WATER

Norma Alcantar
University of South Florida, Tampa, FL, United States

Symposium 103

Drug Discovery for Human Helminthiases: From Genes to Screens and Lessons from the Animal Health Sector

Washington 4
Friday, November 20, 3:45 p.m. - 5:30 p.m.

Schistosomiasis treatment and community-based morbidity control relies on just one drug, praziquantel. The dependency on a single drug is not sustainable with concern about the evolution and spread of drug resistance. Hence, alternative drugs are urgently needed. This symposium reviews some of the key advances in drug discovery approaches for neglected diseases, with a focus on helminth infections, not least the lessons learned from the animal health industry on what makes a good drug.

CHAIR

David Williams
Rush University Medical Center, Chicago, IL, United States

Conor Caffrey
University of California San Francisco, San Francisco, CA, United States

3:45 p.m.

CURRENT AND PROSPECTIVE NEEDS FOR PRAZIQUANTEL FOR THE CONTROL OF NEGLECTED TROPICAL DISEASES

Lester Chitsulo
World Health Organization, Geneva, Switzerland

4:10 p.m.

IDENTIFICATION AND VALIDATION OF TARGETS FOR ANTHELMINTIC DISCOVERY

Tim Geary
McGill University, Montreal, Canada

4:35 p.m.

THE USE OF SMALL MOLECULE TOOLS AND SCREENING TECHNOLOGIES FOR NEGLECTED TROPICAL DISEASES

Christopher Austin
National Institutes of Health Chemical Genomics Center, Bethesda, MD, United States

5 p.m.

DISCOVERY OF NEW ANTHELMINTICS FOR HUMANS: LESSONS FROM THE VETERINARY SIDE

Debra Woods
Pfizer Animal Health, Kalamazoo, MI, United States

Scientific Session 104

Malaria - Diagnosis

Washington 5
Friday, November 20, 3:45 p.m. - 5:30 p.m.

CHAIR

Neal Alexander
London School of Hygiene and Tropical Medicine, London, United Kingdom

Meredith McMorrow
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

676

HIGH SENSITIVITY OF RAPID DIAGNOSTIC TESTS FOR MALARIA IN ROUTINE PATIENT CARE IN RURAL TANZANIA

Meredith McMorrow[1], Irene Masanja[2], Elizeus Kahigwa[2], Salim M. Abdulla[2], S. Patrick Kachur[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ifakara Health Institute, Dar es Salaam, United Republic of Tanzania

4 p.m.

677

A SYSTEMATIC REVIEW OF THE ACCURACY OF RAPID DIAGNOSTIC TESTS FOR MALARIA IN ENDEMIC AREAS

Piero Olliaro
World Health Organization, Geneva, Switzerland

4:15 p.m.

678

ASSESSMENT OF TWO MALARIA RAPID DIAGNOSTIC TESTS, WITH FOLLOW-UP OF POSITIVE PLDH TEST RESULTS, IN A HYPERENDEMIC *FALCIPARUM* MALARIA AREA

Sibylle Gerstl[1], Sophie Dunkley[2], Ahmed Mukhtar[2], Martin De Smet[3], Samuel Baker[4], Jacob Maikere[3]
[1]Médecins Sans Frontières UK, London, United Kingdom, [2]Médecins Sans Frontières Brussels, Bo, Sierra Leone, [3]Médecins Sans Frontières Brussels, Brussels, Belgium, [4]Ministry of Health and Sanitation, Freetown, Sierra Leone

4:30 p.m.

679

MISDIAGNOSIS AND OVERTREATMENT OF CLINICAL MALARIA CASES AND THEIR IMPLICATIONS IN WESTERN KENYA HIGHLANDS

Yaw A. Afrane[1], Andrew Githeko[1], Guiyun Yan[2]
[1]Kenya Medical Research Institute, Kisumu, Kenya, [2]Program in Public Health, University of California, Irvine, Irvine, CA, United States

4:45 p.m.

680

QUALITY CONTROL OF MALARIA SLIDE DENSITIES

Neal Alexander[1], David Schellenberg[1], Billy Ngasala[2], Max Petzold[3], Chris Drakeley[1], Colin Sutherland[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Karolinska Institute, Stockholm, Sweden, [3]Nordic School of Public Health, Gothenburg, Sweden

5 p.m.

681

A HIGH-THROUGHPUT POOLING AND TESTING STRATEGY FOR PCR DETECTION AND SPECIATION OF MALARIA DURING PREGNANCY IN KINSHASA

Steve M. Taylor[1], Jonathan J. Juliano[2], Paul A. Trottman[1], Travis A. Thompson[1], Jennifer B. Griffin[1], Sarah H. Landis[1], Paluku Kitsa[3], Antoinette Tshefu[3], Steven R. Meshnick[1]
[1]Gillings School of Global Public Health, University of North Carolina, Chapel Hill, NC, United States, [2]Division of Infectious Diseases, University of North Carolina, Chapel Hill, NC, United States, [3]Kinshasa School of Public Health, Kinshasa, The Democratic Republic of the Congo

5:15 p.m.

682

HIGH THROUGHPUT QUANTITATIVE MULTIPLEX 5' NUCLEASE PCR ASSAY FOR DIAGNOSIS AND CLINICAL INVESTIGATION OF MALARIA

Emily G. Clemens, Megan E. Reller, Karen C. Carroll, J. Stephen Dumler
The Johns Hopkins University School of Medicine, Baltimore, MD, United States

Plenary Session 105

Plenary Session III: Commemorative Fund Lecture

Salon 2
Friday, November 20, 6 p.m. - 6:45 p.m.

The ASTMH Commemorative Fund Lecture is presented annually by an invited senior researcher in the tropics.

CHAIR

Thomas E. Wellems
ASTMH President, Rockville, MD, United States

PAST VALUE AND NEW POTENTIAL OF DEMOGRAPHIC SURVEILLANCE SYSTEMS IN DEVELOPING COUNTRIES

Fred Binka
University of Ghana, Accra, Ghana

Poster Session B Dismantle

Exhibit Hall B South
Friday, November 20, 7 p.m. - 8 p.m.

Symposium 106

Malaria Genomics and Postgenomics Update

Supported with funding from the Burroughs Wellcome Fund
Salon 3
Friday, November 20, 7:15 p.m. - 9 p.m.

New findings and project directions from the ongoing malaria sequencing, array and analysis projects.

CHAIR

Victoria P. McGovern
Burroughs Wellcome Fund, Research Triangle Park, NC, United States

7:15 p.m.

UPDATE FROM SCRIPPS

Elizabeth Winzeler
Scripps, San Diego, CA, United States

7:40 p.m.

UPDATE FROM SEATTLE

Patrick Duffy
SBRI, Seattle, WA, United States

8:05 p.m.

UPDATE FROM NATIONAL INSTITUTES OF HEALTH

Xinzhuan Su
National Institutes of Health, Bethesda, MD, United States

8:30 p.m.

UPDATE FROM SANGER

Dominic Kwiatkowski
Sanger Centre, Cambridge, United Kingdom

Saturday, November 21

Registration

Salon Foyer
Saturday, November 21, 7 a.m. - 5 p.m.

Cyber Cafe

Marriott Foyer
Saturday, November 21, 7 a.m. - 5 p.m.

Speaker Ready Room

Maryland A
Saturday, November 21, 7 a.m. - 6 p.m.

Scientific Program Committee Meeting

Balcony B
Saturday, November 21, 7 a.m. - 8 a.m.

Web Site Committee Meeting

Room 8217
Saturday, November 21, 7 a.m. - 8 a.m.

ASTMH Past Presidents Meeting

Balcony C
Saturday, November 21, 7 a.m. - 8 a.m.

Media Room

Rooms 8228/8229
Saturday, November 21, 7:30 a.m. - 6 p.m.

Symposium 107

Central Role of Macrophages in Parasite Immunity

Salon 1
Saturday, November 21, 8 a.m. - 9:45 a.m.

Macrophages display amazing flexibility and can change their function in response to a wide variety of environmental stimuli. These changes can give rise to different subpopulations of macrophages with distinct functional activities. Recent studies suggest that activated macrophages, conventionally associated with IFN-Γ-dominant Th1 responses to many bacteria and viruses, also play a central role in the Th2-type inflammatory response. These macrophages are referred to as alternatively activated macrophages (AAMs) as they express a characteristic pattern of cell surface and secreted molecules distinct from that of classically activated macrophages (CAMs). The conservation of underlying common mechanisms of macrophage activation and subsequent control forms the overall thematic organization of this mini-symposium. The speakers will discuss recent findings regarding the role of macrophage sub-populations in the development of disease and host protection following infection with both protozoan and helminthic parasites.

CHAIR

Thomas A. Wynn
National Institutes of Health, Bethesda, MD, United States

8 a.m.

HELMINTH-ELICITED MACROPHAGES IN TH2-MEDIATED INFLAMMATION

Judi Allen
University of Edinburgh, Edinburgh, United Kingdom

8:25 a.m.

ROLE OF ALTERNATIVELY-ACTIVATED MACROPHAGES IN IMMUNITY TO INTESTINAL NEMATODES

William C. Gause
University of Medicine and Dentistry of New Jersey, Newark, NJ, United States

8:50 a.m.

EXPLORING THE FULL SPECTRUM OF MACROPHAGE ACTIVATION DURING INFECTION

David M. Mosser
University of Maryland, College Park, MD, United States

9:15 a.m.

ROLE OF ALTERNATIVELY-ACTIVATED MACROPHAGES IN CHRONIC HELMINTH INFECTION

Thomas A. Wynn
National Institutes of Health, Bethesda, MD, United States

Symposium 108

The Global Distribution of *Plasmodium falciparum* Malaria in 2007

Salon 2

Saturday, November 21, 8 a.m. - 9:45 a.m.

A global evidence-based distribution map describing *Plasmodium falciparum* endemicity in 2007 has been published by the Malaria Atlas Project (http://www.map.ox.ac.uk). In addition, an open access database of the contributing parasite rate surveys has also recently been released under a creative commons license. This symposium will give an overview of the 2007 *P. falciparum* map and include brief navigation of the database. The scientific advances and statistical techniques that were required to create this map will also be detailed. Data continues to be accumulated by the Malaria Atlas Project so that more than 14,000 surveys will contribute to the 2008 iteration of the *P. falciparum* map. The methodological underpinnings also continue to be developed at the national level and this is explored with the country example of endemicity mapping in Kenya. Finally, these techniques are also being extended to *P. vivax* and preliminary results of a global spatial limits and intensity of its transmission is presented.

CHAIR

David L. Smith
University of Florida, Gainesville, FL, United States

Simon I. Hay
Kenya Medical Research Institute and Department of Zoology, University of Oxford, Nairobi, Kenya

8 a.m.

THE GLOBAL DISTRIBUTION OF *P. FALCIPARUM* MALARIA IN 2007 AND 2008

Simon I. Hay
Kenya Medical Research Institute and Department of Zoology, University of Oxford, Nairobi, Kenya

8:25 a.m.

BAYESIAN MODEL-BASED GEOSTATISTICS

Peter W. Gething
Oxford University, Oxford, United Kingdom

8:50 a.m.

HIGH SPATIAL RESOLUTION ENDEMICITY MAPPING IN KENYA

Abdisalan M. Noor
Kenya Medical Research Institute (KEMRI), Nairobi, Kenya

9:15 a.m.

THE GLOBAL SPATIAL LIMIT AND INTENSITY OF *P. VIVAX* TRANSMISSION

Carlos A. Guerra
Oxford University, Oxford, United Kingdom

Symposium 109

Call 4 Action: Use of Mobile Phone Technologies for the Improvement of Human Health

Salon 3

Saturday, November 21, 8 a.m. - 9:45 a.m.

Mobile phones are widely used and are means for new communication technologies applied to human health issues. They could be used as ways to link people for civil actions, help public health officials to implement programs, be incorporated into programs to educate the public, etc. Especially useful in prevention of death rates, containment of epidemics and prevention of communicable diseases, mobile technologies may represent potential benefits to users. This symposium will present specific examples by which the use of cell phones has shown to be an effective tool, and data will be presented on ongoing specific projects. This symposium aims to show how interdisciplinary solutions could make significant differences in the future of global health. Experts in the fields of global health, civil action and medical epidemiology will each present an example of the use of mobile technology in the developing world.

CHAIR

Irene Bosch
University of Massachusetts Medical School, Worcester, MA, United States

Martin Lajous
Harvard School of Public Health, Boston, MA, United States

8 a.m.

CELL PHONES AS A TOOL FOR COMMUNITY ACTIONS

Christopher Csikszentmihályi
Massachusetts Institute of Technology, Cambridge, MA, United States

8:25 a.m.

OPEN MOBILE CONSORTIUM: WHO WE ARE AND WHAT WE DO

Kirkpatrick Robert
Open Mobile Consortium, Cambridge, MA, United States

8:50 a.m.

MOBILE PHONE APPLICATIONS IN THE HEALTH PROJECTS

Daniel Carucci
United Nations Foundation, Washington DC, United States

9:15 a.m.

INFORMATION TECHNOLOGY TO PROMOTE GLOBAL HEALTH

Anup Akkihal
Logistics for Global Good, Inc., Washington DC, United States

Scientific Session 110

Viruses I

Delaware A

Saturday, November 21, 8 a.m. - 9:45 a.m.

CHAIR

Charles Calisher
Colorado State University, Fort Collins, CO, United States

Sarah A. Ziegler
University of Texas Medical Branch, Galveston, TX, United States

8 a.m.

683

SARS CORONAVIRUS ADAPTATION TO HUMAN IS PARTIALLY CONSTRAINED BY HOST ALTERATION

Xianchun Tang[1], Nikos Vasilakis[2], Zhenli Shi[3], Yang Zhong[4], Lin-fa Wang[5], Shuyi Zhang[1]
[1]School of Life Science, East China Normal University, Shanghai, China, [2]Center for Vaccine Research, University of Pittsburgh, Pittsburgh, PA, United States, [3]Institute of Virology, Chinese Academy of Sciences, Wuhan, China, [4]School of Life Sciences, Fudan University, Shanghai, China, [5]Australian Animal Health Laboratory and Australian Biosecurity Cooperative Research Centre, Geelong, Australia

8:15 a.m.

684

A COMPARISON OF THE PATHOGENESIS OF CHIKUNGUNYA VIRUS IN MICE AFTER INFECTION BY MOSQUITO BITE OR NEEDLE INOCULATION

Sarah A. Ziegler[1], Dana Vanlandingham[1], Amelia P. Travassos da Rosa[1], Shu-Yuan Xiao[2], Stephen Higgs[1], Robert B. Tesh[1]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]Weill Cornell Medical College, New York, NY, United States

8:30 a.m.

685

IMMUNOGENICITY AND EFFICACY OF A NOVEL RECOMBINANT VACCINE AGAINST ARGENTINE HEMORRHAGIC FEVER

Alexey Seregin, Nadezhda E. Yun, **Milagros Salazar**, Allison L. Poussard, Jennifer K. Smith, Jeanon N. Smith, Michele A. Zacks, Slobodan Paessler
University of Texas Medical Branch, Galveston, TX, United States

8:45 a.m.

686

MOLECULAR PHYLOGENY OF A NEWFOUND HANTAVIRUS HARBORED BY THE EASTERN MOLE *(SCALOPUS AQUATICUS)*

Hae Ji Kang[1], Shannon N. Bennett[1], Laarni Sumibcay[1], Andrew G. Hope[2], Jin-Won Song[3], Joseph A. Cook[2], Richard Yanagihara[1]
[1]University of Hawaii, Honolulu, HI, United States, [2]University of New Mexico, Albuquerque, NM, United States, [3]Korea University, Seoul, Republic of Korea

9 a.m.

687

PREVENTING NIPAH VIRUS TRANSMISSION: UNDERSTANDING EFFICACY OF BAMBOO SKIRT TO IMPEDE DATE PALM SAP CONTAMINATION BY BATS

M. S. Khan[1], Emily S. Gurley[1], Md. Jahangir Hossain[1], Nazmun Nahar[1], Stephen P. Luby[2]
[1]International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

9:15 a.m.

688

CHIKUNGUNYA VIRUS POPULATION DYNAMICS IN CELLS AND *AEDES ALBOPICTUS*

Lark L. Coffey, Marco Vignuzzi
Institut Pasteur, Paris, France

9:30 a.m.

689

ISOLATION AND PHYLOGENETIC ANALYSIS OF MUCAMBO VIRUS (VENEZUELAN EQUINE ENCEPHALITIS COMPLEX SUBTYPE IIIA) IN TRINIDAD

Auguste J. Auguste[1], Sara Volk[2], Nicole Arrigo[2], Raymond Martinez[1], Vernie Ramkissoon[1], A. Paige Adams[2], Abiodun Adesiyun[1], Dave Chadee[1], Jerome Foster[1], Amelia Travassos Da Rosa[2], Robert Tesh[2], Scott Weaver[2], Christine V. Carrington[1]
[1]The University of the West Indies, St. Augustine, Trinidad and Tobago, [2]University of Texas Medical Branch, Galveston, TX, United States

Symposium 111

Rapid Diagnostic Tools in Theory and Practice

Delaware B

Saturday, November 21, 8 a.m. - 9:45 a.m.

There is an urgent need for simple, reliable and accurate diagnostics for infectious diseases of public health importance in the developing world. Improving existing tests and approaches and adopting new methods are integral to improving disease control and patient outcomes and curtailing drug resistance. However, even rapid diagnostic tests (RDTs), despite their apparent simplicity, are not widely accessible, and due to the weak regulatory approval standards in most developing countries, the quality of diagnostics is not assured. Furthermore, even after independent, comprehensive evaluation of performance, the adoption of these approaches and/or methods and acceptance into everyday practice poses a specific set of challenges. This symposium aims to give an overview of the technical and operational performance of selected diagnostic methods, with special emphasis on rapid diagnostic tests (RDTs) for high burden diseases (TB, malaria and visceral leishmaniasis) and address the challenges and solutions to their adoption into daily practice in endemic settings.

CHAIR

Jane Cunningham
World Health Organization, Geneva, Switzerland

Rosanna Peeling
London School of Hygiene and Tropical Medicine, London, United Kingdom

8 a.m.

GETTING A RAPID TB DIAGNOSIS: WHAT CAN WE DO WITH WHAT'S AVAILABLE?

Luis Cuevas
World Health Organization, Geneva, Switzerland

8:25 a.m.

PERFORMANCE AND QUALITY ASSURANCE OF MALARIA RDTS: LESSONS FROM THE LAB AND THE FIELD

David Bell
Foundation for Innovative New Diagnostics, Geneva, Switzerland

8:50 a.m.

EXPERIENCES ROLLING OUT RAPID DIAGNOSTICS FOR VL ELIMINATION CAMPAIGN

Suman Rijal
B.P Koirala Institute of Health Sciences, Dharan, Nepal

9:15 a.m.

INTEGRATING NEW DIAGNOSTIC TOOLS AND APPROACHES AS PART OF A COMMUNITY-BASED CASE MANAGEMENT PACKAGE

Caroline Asiimwe
Foundation for Innovative New Diagnostics, Kampala, Uganda

Scientific Session 112

Protozoa

Virginia AB
Saturday, November 21, 8 a.m. - 9:45 a.m.

CHAIR

Thaddeus Graczyk
Johns Hopkins University, Baltimore, MD, United States

Barbara Mann
University of Virginia, Charlottesville, VA, United States

8 a.m.

690

TRACKING *TOXOPLASMA GONDII* FROM LAND TO SEA

Patricia A. Conrad[1], Elizabeth VanWormer[1], Karen Shapiro[1], Melissa Miller[2], Chris Kreuder-Johnson[1], Tim Tinker[3], Michael Grigg[4], John Largier[1], Tim Carpenter[1], Jonna K. Mazet[1]
[1]University of California, Davis, Davis, CA, United States, [2]California Department of Fish and Game, Santa Cruz, CA, United States, [3]USGS-WERC, Santa Cruz, CA, United States, [4]National Institutes of Allergy and Infectious Disease, Bethesda, MD, United States

8:15 a.m.

691

PUBLIC HEALTH SAFETY OF RECREATIONAL BEACH WATERS

Thaddeus Graczyk[1], Deirdre Sunderland[1], Yessika Mashinski[1], Frances Lucy[2], Patrick Breysse[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Institute of Technology, Sligo, Ireland

8:30 a.m.

692

EFFECT OF CHALLENGE INFECTIONS ON THE IMMUNE RESPONSE OF MICE PREVIOUSLY INFECTED WITH *TOXOCARA CANIS, TOXOPLASMA GONDII* OR BOTH PARASITES

Dwight D. Bowman[1], Benjamin R. Bralove[1], Tian Z. Liang[1], Janice L. Liotta[1], Woraporn Sukhumavasi[2], J. P. Dubey[3]
[1]Cornell College of Veterinary Medicine, Ithaca, NY, United States, [2]Chulalongkorn University, Bangkok, Thailand, [3]USDA, Beltsville, MD, United States
(ACMCIP Abstract)

8:45 a.m.

693

APPLICATION OF A TRNA REPEAT UNIT GENOTYPING METHOD TO CLINICAL ISOLATES OF *ENTAMOEBA HISTOLYTICA*

Krishna Khairnar[1], Irving Salit[2], Dylan R. Pillai[1]
[1]Ontario Agency for Health Protection and Promotion, Toronto, ON, Canada, [2]University Health Network, Toronto, ON, Canada

9 a.m.

694

ROLE OF NF-KB RESPONSES AND APOPTOSIS IN MAINTAINING EPITHELIAL HOMEOSTASIS DURING *ENTAMOEBA HISTOLYTICA* INFECTION

Stephen Becker, Kyou-Nam Cho, **Eric R. Houpt**
University of Virginia, Charlottesville, VA, United States
(ACMCIP Abstract)

9:15 a.m.

695

HIGH DOSE OF VITAMIN A SUPPLEMENTATION PROTECTS ABORIGINAL SCHOOLCHILDREN IN RURAL MALAYSIA FROM *GIARDIA DUODENALIS* REINFECTION: A RANDOMIZED CONTROLLED TRIAL

Hesham M. Al-Mekhlafi[1], Johari Surin[1], Atiya A. Sallam[1], Wan Ariffin Abdullah[1], Mohammed A. Mahdy[1], Che Abdullah Hassan[2]
[1]University of Malaya, Kuala Lumpur, Malaysia, [2]Ministry of Health, Putrajaya, Malaysia

9:30 a.m.

696

LOW TEMPERATURE INDUCES TROPHOZOITES OF *ACANTHAMOEBA SPP.* TO PHAGOCYTOSE *FRANCISELLA TULARENSIS*, EXPLAINING A POSSIBLE MECHANISM OF SURVIVAL DURING WINTER

James R. Palmieri, Shaadi F. Elswaifi
Virginia College of Osteopathic Medicine, Blacksburg, VA, United States

Scientific Session 113

Schistosomiasis and Other Trematodes - Vectors and Vector Biology

Virginia C
Saturday, November 21, 8 a.m. - 9:45 a.m.

CHAIR

Matty Knight
Biomedical Research Institute, Rockville, MD, United States

Sam Loker
University of New Mexico, Albuquerque, NM, United States

8 a.m.

697

MOLECULAR SIGNALING DURING THE MIRACIDIUM TO SPOROCYST TRANSFORMATION IN *SCHISTOSOMA MANSONI*

Andrew S. Taft, Francesca Norante, Timothy P. Yoshino
University of Wisconsin, Madison, Madison, WI, United States

8:15 a.m.

698

DIFFERENTIAL GENE EXPRESSION IN *BIOMPHALARIA GLABRATA* NEONATE SNAILS IN RESPONSE TO *SCHISTOSOMA MANSONI* INFECTION

Nithya Raghavan, Andre Miller, Fred Lewis, Matty Knight
Biomedical Research Institute, Rockville, MD, United States

8:30 a.m.

699

CHARACTERIZATION OF THE TRANSCRIPTIONAL PROFILE OF *BIOMPHALARIA GLABRATA* AFTER BACTERIAL AND PARASITE CHALLENGE

Patrick C. Hanington, C. M. Adema, C. M. Lun, E. S. Loker
Center for Evolutionary and Theoretical Immunology, University of New Mexico, Albuquerque, NM, United States
(ACMCIP Abstract)

8:45 a.m.

700

DEVELOPMENT AND CHARACTERIZATION OF VARIABLE EST-SSR MARKERS DELINEATING RESISTANCE/SUSCEPTIBILITY TO *SCHISTOSOMA MANSONI* IN THE INTERMEDIATE SNAIL HOST, *BIOMPHALARIA GLABRATA*

Wannaporn Ittiprasert, Andre' Miller, Jocelyn Myers, Matty Knight
Biomedical Research Institute, Rockville, MD, United States

9 a.m.

701

VARIATIONS WITHIN LOCI CORRESPONDING TO HYDROLYTIC ENZYMES BETWEEN RESISTANT AND SUSCEPTIBLE *BIOMPHALARIA GLABRATA* SNAILS: EFFECTS OF *SCHISTOSOMA MANSONI* EXPOSURE AND AGE OF SNAIL

Jocelyn C. Myers[1], Wannaporn Ittiprasert[1], Andre Miller[1], Matty Knight[1], Clarence M. Lee[2]
[1]Biomedical Research Institute, Rockville, MD, United States, [2]Howard University, Washington, DC, United States

9:15 a.m.

702

HUMAN FASCIOLIASIS IN LATIN AMERICA: THE ENDEMIC FOCI IN ANDEAN COUNTRIES AND CARIBBEAN-CENTRAL AMERICA

Santiago Mas-Coma[1], Rene Angles[2], Jose R. Espinoza[3], Valeria Gayo[4], Carolina Gonzalez[5], Roberto Mera y Sierra[6], Lazara Rojas[7], Jose Lino Zumaquero-Rios[8], Maria Dolores Bargues[1]
[1]Departamento de Parasitologia, Universidad de Valencia, Burjassot - Valencia, Spain, [2]Catedra de Parasitologia, Facultad de Medicina, Universidad Mayor de San Andres, La Paz, Bolivia, [3]Unidad de Biotecnologia Molecular, Facultad de Ciencias, Universidad Peruana Cayetano Heredia, Lima, Peru, [4]Departamento de Parasitologia, Dilave, Ministerio de Ganaderia, Agricultura y Pesca, Montevideo, Uruguay, [5]Catedra de Parasitologia, Facultad de Farmacia y Bioanalisis, Universidad de Los Andes, Merida, Venezuela, [6]Area de Infectologia, Faultad de Ciencias Medicas, Universidad Nacional de Cuyo y Catedra de Parasitologia, Facultad de Ciencias Veterinarias, Universidad J.A. Mazza, Mendoza, Argentina, [7]Instituto de Medicina Tropical Pedro Kouri, La Havana, Cuba, [8]Laboratorio de Parasitologia, Facultad de Biologia, Benemerita Universidad Autonoma de Puebla, Puebla, Mexico

9:30 a.m.

703

ETIOLOGY AND EPIDEMIOLOGY OF CERCARIAL DERMATITIS IN NORTH AMERICA

Sara V. Brant, Eric S. Loker
University of New Mexico, Albuquerque, NM, United States

Scientific Session 114

Neglected Tropical Diseases

Washington 1
Saturday, November 21, 8 a.m. - 9:45 a.m.

CHAIR

Peter Fischer
Washington University School of Medicine, St. Louis, MO, United States

Artemis Koukounari
Imperial College, London, United Kingdom

8 a.m.

704

RESULTS FROM SENTINEL SITE SURVEILLANCE FOR TRACHOMA AND SCHISTOSOMIASIS BEFORE PREVENTIVE CHEMOTHERAPY IN BURKINA FASO

Artemis Koukounari[1], Seydou Toure[2], Amadou Ouedraogo[2], Bernadette B. Yoda[3], Martin Kabore[3], Elisa Bosque-Oliva[1], Joanne P. Webster[1], Alan Fenwick[1]
[1]Schistosomiasis Control Initiative, London, United Kingdom, [2]Réseau International Schistosomiases Environnement Aménagements et Lutte, Ouagadougou, Burkina Faso, [3]Programme National de Prevention de la Cecité, Ouagadougou, Burkina Faso

8:15 a.m.

705

PARASITOLOGICAL IMPACT OF ONE YEAR PREVENTIVE MASS CHEMOTHERAPY ON SOIL-TRANSMITTED HELMINTHIASIS AND SCHISTOSOMIASIS IN NORTHERN RWANDA

Karibushi Blaise[1], Mupfasoni Denise[1], Ruberanziza Eugene[1], Sebeza Jackson[2], Mukabayire Odette[3], Kabera Michee[1], Kramer Michael[2], Ruxin Josh[4], Fenwick Alan[5]
[1]The Access Project, Kigali, Rwanda, [2]Ministry of Health/Treatment Research Aids Center Plus, Kigali, Rwanda, [3]National Reference Laboratory, Kigali, Rwanda, [4]The Earth Institute, Columbia University, New York, NY, United States, [5]Schistosomiasis Control Initiative, Department of Infectious Disease Epidemiology, Imperial College, London, United Kingdom

8:30 a.m.

706

RANDOMISED CONTROLLED TRIALS (RCTS) OF PRAZIQUANTEL 40 VS. 60 MG/KG FOR TREATING INTESTINAL SCHISTOSOMIASIS

Piero L. Olliaro
World Health Organization, Geneva, Switzerland

8:45 a.m.

707

INTEGRATED CONTROL STRATEGIES OF SCHISTOSOMIASIS TRANSMISSION INFORMED BY A BAYESIAN MULTILEVEL MODEL AT A LOCAL SCALE

Kun Yang
College of Public Health, The Ohio State University, Columbus, OH, United States

9 a.m.

708

EVALUATION OF INTEGRATED MASS DRUG ADMINISTRATIONS FOR NEGLECTED TROPICAL DISEASES IN HAITI

Erin D. Kennedy[1], Gabrielle Philius[2], Abdel N. Direny[3], Luccene Desir[4], Jean-Francois Vely[2], Thomas G. Streit[4], Els Mathieu[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ministry of Health, Port-au-Prince, Haiti, [3]IMA World Health, Port-au-Prince, Haiti, [4]University of Notre Dame, Notre Dame, IN, United States

9:15 a.m.

709

DIFFERENTIAL DECLINE OF HELMINTH INFECTIONS ON ALOR ISLAND, INDONESIA FOLLOWING SIX ROUNDS OF MASS DRUG ADMINISTRATION USING DIETHYLCARBAMAZINE IN COMBINATION WITH ALBENDAZOLE

Peter U. Fischer[1], Yenny Djuardi[2], Heri Wibowo[2], Mark Bradley[3], Asmus Hammerich[4], Rahmah Noordin[5], Taniawati Supali[2]
[1]Washington University School of Medicine, St. Louis, MO, United States, [2]Department Parasitology, University of Indonesia, Jakarta, Indonesia, [3]Global Community Partnerships, GlaxoSmithKline, Brentfort, United Kingdom, [4]GTZ/SISKES, Kupang, Indonesia, [5]Universiti Sains Malaysia, Penang, Malaysia

9:30 a.m.

710

PERCEPTIONS OF INTEGRATED NEGLECTED TROPICAL DISEASE PROGRAMS AMONG MINISTRY OF HEALTH STAFF IN MALI

Sonia Pelletreau[1], Jennifer Lasley[1], Sory I. Bamba[2], Massitan D. Soumare[2], Sanoussi Bamani[2], Antandou Telly[3], Els Mathieu[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ministry of Health, Bamako, Mali, [3]International Trachoma Initiative, Bamako, Mali

Symposium 115

Fetal Responses to Placental Malaria: The Forgotten Half

Washington 2

Saturday, November 21, 8 a.m. - 9:45 a.m.

The problem of malaria during pregnancy has received increasing attention in recent years, resulting in major advances in our understanding of the pathogenesis of malaria in both the expectant woman and her unborn baby. However, many questions remain. It is important to determine mechanisms by which placental malaria results in placental damage, fetal compromise and poor neonatal outcomes. Some information on maternal and parasitic contributions to the problem is available, but little is known about the contributions of the fetoplacental unit itself to placental malaria. This symposium will summarize current efforts to assess the biochemical and immunological functions of the villous placenta in the context of malaria infection, and how malaria-associated perturbations influence the fetoplacental unit, birth outcome and infant responses to malaria.

CHAIR

Julie M. Moore
University of Georgia, Athens, GA, United States

Diane W. Taylor
University of Hawaii, Honolulu, HI, United States

8 a.m.

THE CONTRIBUTION OF THE TROPHOBLAST TO THE MATERNAL IMMUNE RESPONSE TO PLACENTAL MALARIA

Julie M. Moore
University of Georgia, Athens, GA, United States

8:30 a.m.

PLACENTAL MALARIA AND TROPHOBLAST FUNCTION

Stephen Rogerson
University of Melbourne, Melbourne, Australia

8:55 a.m.

MECHANISMS OF TRANSPLACENTAL TRANSFER OF MALARIAL ANTIGENS TO THE FETUS

Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

9:20 a.m.

THE FETAL RESPONSE TO PLACENTAL MALARIA AND IMPLICATIONS FOR THE INFANT

Diane W. Taylor
University of Hawaii, Honolulu, HI, United States

Scientific Session 116

Bacteriology - Diarrhea, *E. coli* and Cholera

Washington 3
Saturday, November 21, 8 a.m. - 9:45 a.m.

CHAIR

Jean-Paul Chretien
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Gregory M. Glenn
Iomai Corporation, Gaithersburg, MD, United States

8 a.m.

711

IMPORTANCE OF VIRAL PATHOGENS IN EARLY CHILDHOOD DIARRHEA IN RURAL AND URBAN NEPAL

Ladaporn Bodhidatta[1], Sanjaya K. Shrestha[2], Jyoti R. Dhakhwa[3], Bhola Ram Shrestha[4], Apichai Srijan[1], Carl J. Mason[1]
[1]Department of Enteric Diseases, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [2]Walter Reed/AFRIMS Research Unit - Nepal (WARUN), Kathmandu, Nepal, [3]Kanti Childrens' Hospital, Kathmandu, Nepal, [4]Bharatpur Hospital, Bharatpur, Nepal

8:15 a.m.

712

BURDEN OF ENTEROTOXIGENIC *ESCHERICHIA COLI* (ETEC) DIARRHEA AMONG CHILDREN LESS THAN TWO YEARS IN A RURAL EGYPTIAN COMMUNITY

Adel M. Mansour[1], A. Hafez[2], Hind I. Shaheen[1], S. El Alkamy[2], Khaled Hassan[1], Mark Riddle[3], John Sanders[4], Adam Armstrong[3], A. Kandeel[2], Nasr El Sayed[2]
[1]United States Naval Medical Research Unit#3, Cairo, Egypt, [2]Ministry of Health, Cairo, Egypt, [3]United States Naval Medical Research Center, Bethesda, MD, United States, [4]United States Naval Medical Research Center Detachment, Lima, Peru

8:30 a.m.

713

IDENTIFICATION OF COLONIZATION FACTOR ANTIGEN IN NON-ENTEROTOXIGENIC *E. COLI* STRAINS

Fulton P. Rivera[1], Maria Bernal[2], Theresa J. Ochoa[1], Rina Meza[2], Francesca Barletta[1], Erik Mercado[1], Maribel Riveros[1], David Cepeda[2], Ryan C. Maves[2], Eric R. Hall[3], Ann-Mari Svennerholm[4], Claudio F. Lanata[5]
[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]United States Naval Medical Research Center Detachment, Lima, Peru, [3]United States Naval Medical Research Center, Silver Spring, MD, United States, [4]Göteburg University, Göteburg, Sweden, [5]Instituto de Investigacion Nutricional, Lima, Peru

8:45 a.m.

714

ANTI-TOXIN IMMUNITY IN ENTERIC DISEASE: MAINTAINING THE INTEGRITY OF THE INNATE MUCOSAL BARRIER

Gregory M. Glenn, David Flyer, Diane Epperson, Jianmei Yu
Intercell US, Gaithersburg, MD, United States

9 a.m.

715

CONCOMITANT INFECTION WITH *VIBRIO CHOLERAE* O1 AND ENTEROTOXIGENIC *ESCHERICHIA COLI* INDUCES A MORE ROBUST IMMUNE RESPONSE TO CHOLERA ANTIGENS

Fahima Chowdhury[1], Yasmin Ara Begum[1], Murshid Alam[1], Ashraful Islam Khan[1], Tanvir Ahmed[1], Regina C. LaRocque[2], Jason B. Harris[2], ASG Faruque[1], Stephen B. Calderwood[2], Edward T. Ryan[2], Ann-Mari Svennerholm[3], **Firdausi Qadri**[1]
[1]International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]Massachusetts General Hospital, Boston, MA, United States, [3]University of Gothenburg, Gothenburg, Sweden

9:15 a.m.

716

A VARIANT IN LONG PALATE, LUNG AND NASAL EPITHELIUM CLONE 1 IS ASSOCIATED WITH CHOLERA IN A BANGLADESHI POPULATION

Regina C. LaRocque[1], Pardis Sabeti[2], Priya Duggal[3], Fahima Chowdhury[4], Ashraful I. Khan[4], Lauren M. Lebrun[1], Jason B. Harris[1], Edward T. Ryan[1], Firdausi Qadri[4], Stephen B. Calderwood[1]
[1]Massachusetts General Hospital, Boston, MA, United States, [2]Broad Institute, Cambridge, MA, United States, [3]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [4]International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

9:30 a.m.

717

FORECASTING CHOLERA EPIDEMICS IN AFRICA

Jean-Paul Chretien[1], Anna L. Buczak[2], Assaf Anyamba[3], Jennifer Small[3], Trudy L. Philip[2], Christine Jessup[4], John Nuckols[4], Stefan Leyk[4], Mark Miller[4], Sheri H. Lewis[2]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Johns Hopkins University/Applied Physics Laboratory, Laurel, MD, United States, [3]NASA-Goddard Space Flight Center, Greenbelt, MD, United States, [4]Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

Symposium 117

Global Health and Mass Travel Events

Washington 4

Saturday, November 21, 8 a.m. - 9:45 a.m.

In a globalized and exceedingly mobile world, the potential for spread of infectious diseases associated with large mass gatherings that can attract millions of travelers is increasingly being recognized as a critical public health challenge. Mass travel events not only bring together a diversity of cultures from around the world, but also a variety of medical and immunization histories and health risk behaviors. While all travelers are at some risk for infectious and noninfectious hazards, mass travel events present some of the world's most important public health and infection control problems. Extended stays at gathering sites and crowded accommodations with other travelers, many of whom may be from developing nations, provide an environment where emerging infectious diseases can quickly turn into epidemics, leading to the risk of potential importation or international spread of infectious disease. Effective disease and behavioral surveillance, as well as timely data analysis, are necessary to better understand health risks and strengthen evidence base for health policy and prevention related to mass travel events. This symposium will describe some of the many challenges of detecting developing outbreaks and carrying out effective responses at mass travel events.

CHAIR

Victor Balaban
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

INTERNATIONAL MASS GATHERINGS FOR SPORTS EVENTS: LESSONS FROM THE 2008 BEIJING OLYMPICS

Emily Jentes
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:25 a.m.

PUBLIC HEALTH PREPARATION FOR MASS MIGRATIONS: CURRENT EFFORTS IN TRACKING DISEASES AND CONTAINING OUTBREAKS AT MASS TRAVEL EVENTS

Aaron T. Fleischauer
North Carolina Department of Health and Human Services, Raleigh, NC, United States

8:55 a.m.

THE HAJJ: HEALTH PUBLIC HEALTH LESSONS FOR MASS GATHERINGS

Ziad A. Memish
King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

9:20 a.m.

THE HAJJ: HEALTH LESSONS FOR MASS GATHERINGS

Qanta Ahmed
Winthrop University Hospital, Mineola, NY, United States

Symposium 118

Scaling-Up Indoor Residual Spraying for Malaria Control in Africa through the President's Malaria Initiative

Washington 5

Saturday, November 21, 8 a.m. - 9:45 a.m.

Indoor Residual Spraying (IRS) is rapidly expanding through support from the President's Malaria Initiative (PMI). By the end of 2008, nearly 20 million persons across 14 countries are being protected by PMI-supported IRS programs. While the epidemiological impact can be swift and dramatic, large-scale IRS implementation is an exacting activity, often requiring new systems and strategies for Ministries of Health to implement safely and effectively. Presentations in this symposium will include the experience, lessons and results from the recent rapid scale-up; improving capacity for the safe and judicious use of pesticides; impact of IRS in combination with treated mosquito nets; and finally, the role of IRS in the context of Integrated Vector Management, both in the immediate and long-term control strategy.

CHAIR

Michael B. Macdonald
United States Agency for International Development, Washington, DC, United States

Robert A. Wirtz
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

SCALING UP INDOOR RESIDUAL SPRAYING IN AFRICA

John Chimumbwa
RTI International, Nairobi, Kenya

8:25 a.m.

IMPROVING PESTICIDE MANAGEMENT PRACTICES: ENVIRONMENTAL AND WORKER SAFETY IN RELATION TO IRS IN AFRICA

Elissa Beerbohm
United States Agency for International Development, Washington, DC, United States

8:55 a.m.

IMPACT OF IRS IN A COMMUNITY WITH PRE-EXISTING HIGH TREATED MOSQUITO NET USAGE IN MALAWI

Themba Mzilahowa
Liverpool School of Tropical Medicine, Blantyre, Malawi

9:25 a.m.

IRS IN AN INTEGRATED VECTOR MANAGEMENT STRATEGY: RATIONALIZATION AND OPTIMIZATION FOR SUSTAINED CONTROL

Jacob Williams
RTI International, Washington, DC, United States

Symposium 119

Transitioning to Senior Investigator: Experiences from Developing Countries

Wilson A
Saturday, November 21, 8 a.m. - 9:45 a.m.

Junior scientists worldwide face many challenges to initiate international research careers, and these obstacles often are harder to overcome in resource-limited settings. Lack of funding opportunities, infrastructure and institutional support, in addition to inadequate legal frameworks, are only some of the many factors young researchers have to deal with in developing countries. The experiences of senior, more experienced colleagues are critical to understand successful and potentially replicable pathways and strategies. Four successful investigators from developing country institutions, all currently directing Research Training Grants from the Fogarty International Center, will share their experiences and views about the transition to the senior researcher role.

CHAIR

Andres G. Lescano
Naval Medical Research Center Detachment, Lima, Peru

Barbara Sina
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

8 a.m.

CLIMBING UP THE RESEARCH LADDER IN AFRICA

Halima A. Mwenesi
Academy for Educational Development, Washington, DC, United States

8:25 a.m.

BECOMING A SENIOR INVESTIGATOR IN BRAZIL

Edgar M. Carvalho
Federal University of Bahia, Salvador, Brazil

8:55 a.m.

PATHWAYS TO SENIOR RESEARCHER: AN EXPERIENCE FROM PAKISTAN

Anita K. Zaidi
Aga Khan University, Karachi, Pakistan

9:25 a.m.

TRANSITIONING TO SENIOR INVESTIGATOR IN PERU: SOME THOUGHTS

Hector H. Garcia
Universidad Peruana Cayetano Heredia, Lima, Peru

Exhibit Hall Open

Exhibit Hall A
Saturday, November 21, 9:30 a.m. - 10:30 a.m.

Coffee Break

Exhibit Hall A
Saturday, November 21, 9:45 a.m. - 10:15 a.m.

Supported with funding from SCYNEXIS, Inc.

Poster Session C Set-Up

Exhibit Hall B South
Saturday, November 21, 9:45 a.m. - 10:15 a.m.

Poster Session C Viewing

Exhibit Hall B South
Saturday, November 21, 10:15 a.m. - Noon

Scientific Session 120

Mosquitoes - Biochemistry, Molecular Biology and Molecular Genetics II

Salon 1
Saturday, November 21, 10:15 a.m. - Noon

CHAIR

William Black
Colorado State University, Fort Collins, CO, United States

Gregory C. Lanzaro
University of California, Davis, CA, United States

10:15 a.m.

718

PLEISTOCENE GEOGRAPHIC SEPARATION IN EASTERN PANAMÁ AND NORTHERN COLOMBIA LEADS TO POPULATION STRUCTURE IN *ANOPHELES* (NYSSORHYNCHUS) *ALBIMANUS* (DIPTERA: CULICIDAE)

Jose Loaiza[1], Lina Gutierrez[2], Margarita Correa[2], Eldredge Bermingham[3], Marilyn Scott[1], Richard Wilkerson[4], Lotty Birnberg[5], Mario Grijalva[6], Jose Rovira[7], Sara Bickersmith[8], Jan E. Conn[8]
[1]Macdonald Campus, McGill University, Montreal, QC, Canada, [2]Escuela de Microbiologia, Universidad de Antioquia, Medellin, Colombia, [3]Smithsonian Tropical Research Institute, Balboa Ancon, Panama, [4]Walter Reed Army Institute for Research, Smithsonian Institution, Washington, DC, United States, [5]Center for Infectious Disease Research, Pontifical Catholic University of Ecuador, Quito, Ecuador, [6]Tropical Disease Institute, Ohio University, Athens, OH, United States, [7]Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama, [8]The Wadsworth Center, New York State Department of Health, Albany, NY, United States

10:30 a.m.

719

GENETIC STRUCTURE OF *AEDES ALBOPICTUS* IN CAMEROON (CENTRAL AFRICA)

Kamgang Basile[1], Brengues Cecile[2], Hervé Jean Pierre[2], Simard Frédéric[3], **Christophe Paupy**[1]
[1]IRD/OCEAC, Yaoundé, Cameroon, [2]IRD, Montpellier, France, [3]IRD, Bobo Dioulasso, Burkina Faso

10:45 a.m.

720

EPIDEMIOLOGICAL IMPORTANCE AND POPULATION GENETICS OF THE HUMAN MALARIA MOSQUITO *ANOPHELES NILI SL* IN AFRICA

Cyrille Ndo[1], Christophe Antonio-Nkondjio[1], Anna Cohuet[2], Pierre Kengne[2], Diego Ayala[2], Pierre Ngassam[3], Isabelle Morlais[2], Didier Fontenille[2], Frédéric Simard[2]
[1]Organisation de Coordination pour la lutte contre les Endémies en Afrique Centrale, Yaoundé, Cameroon, [2]Institut de Recherche pour le Développement, Unité de Recherche 016, Montpellier, France, [3]University of Yaoundé I, Yaoundé, Cameroon

11 a.m.

721

SPECIES DELIMITATION IN SOUTH EAST ASIAN VECTORS OF MALARIA

Magdalena Zarowiecki
Natural History Museum, London, United Kingdom
(ACMCIP Abstract)

11:15 a.m.

722

NEOTROPICAL *ANOPHELES TRIANNULATUS* COMPLEX: PHYLOGEOGRAPHY AND DEMOGRAPHIC HISTORY BASED ON MITOCHONDRIAL AND NUCLEAR MARKERS

Marta Moreno Leirana[1], Wesley Harlow[1], Jessica Hildebrandt[1], Teresa Fernandes Silva-do-Nascimento[2], Ricardo Lourenço-de-Oliveira[2], Maria Anice Mureb Sallum[3], Gary N Fritz[4], Freddy Ruiz[5], Richard Wilkerson[6], Jose R Loaiza[6], Maria Julia Dantur[7], Marinete AM Póvoa[8], Lina Andrea Gutiérrez-Builes[9], Margarita O. Correa[9], Jan E Conn[1]
[1]Wadsworth Center, New York Department of Health, Albany, NY, United States, [2]Departamento de Entomología, Instituto Oswaldo Cruz-Fiocruz, Rio de Janeiro, Brazil, [3]Departamento de Epidemiologia, Faculdade de Saúde Pública, Universidade de São Paulo, São Paulo, Brazil, [4]Department of Biological Sciences, Eastern Illinois University, Charleston, IL, United States, [5]Division of Entomology, Walter Reed Army Institute of Research, Silver Spring, MD, United States, [6]Smithsonian Tropical Research Institute, Balboa, Panama, [7]Instituto Superior de Entomología "Dr. Abraham Willink", Facultad de Ciencias, Naturales e Instituto Miguel Lillo, Universidad Nacional de Tucumán, Tucuman, Argentina, [8]Instituto Evandro Chagas, Secção de Parasitologia, Belém, Brazil, [9]Grupo de Microbiología Molecular, Escuela de Microbiología, Universidad de Antioquia, Medellín, Colombia

11:30 a.m.

723

LOW LINKAGE DISEQUILIBRIUM IN *ANOPHELES GAMBIAE* S.L. POPULATIONS

Anna Cohuet
Institut de Recherche pour le Développement, Bobo Dioulasso, Burkina Faso

11:45 a.m.

724

POPULATION GENETICS OF *LUTZOMYIA LONGIFLOCOSA* (DIPTERA: PSYCHODIDAE) POPULATIONS FROM COLOMBIA USING THE CYTOCHROME OXIDASE 1 GENE

Sahar Usmani-Brown, Leonard E. Munstermann
Yale University, New Haven, CT, United States

Scientific Session 121

Viruses II

Salon 2

Saturday, November 21, 10:15 a.m. - Noon

CHAIR

James J. Bangura
Ministry of Health and Sanitation, Kenema, Sierra Leone

Eileen C. Farnon
Centers for Disease Control and Prevention, Fort Collins, CO, United States

10:15 a.m.

725

HEPATITIS E OUTBREAK IN A LOW INCOME URBAN COMMUNITY IN BANGLADESH

M. Jahangir Hossain[1], Hossain M S Sazzad[1], Shahana Parveen[1], Saiful Islam[1], Labib Imran Faruque[1], Shaila Arman[1], Dawlat Khan[1], M. Mushtuq Husain[1], Yasmin Jahan[1], Mahmudur Rahman[1], Stephen P. Luby[2], Emily S. Gurley[1]
[1]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

10:30 a.m.

726

FILOVIRUS SEROURVEY FOLLOWING AN OUTBREAK OF MARBURG HEMORRHAGIC FEVER --- IBANDA AND KAMWENGE DISTRICTS, UGANDA, 2007

Eileen C. Farnon[1], Jennifer A. Adjemian[1], Edgar Kansiime[2], Johanna E. Rahman[1], Godfrey S. Bwire[2], Samuel Kahirita[3], Atek Kagirita[2], Joseph F. Wamala[2], Pierre E. Rollin[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Field Epidemiology and Laboratory Training Program, Ministry of Health, Kampala, Uganda, [3]Kamwenge District Health Office, Ministry of Health, Kamwenge, Uganda

10:45 a.m.

727

EPIDEMIOLOGY OF LASSA FEVER IN THE MANO RIVER UNION COUNTRIES OF WEST AFRICA, 2004-2008

James J. Bangura[1], Joseph Fair[2], Augustine Goba[2], Sheik H. Khan[1], Richard Fonnie[1], Robert F. Garry[2], Lina M. Moses[2], Francis Nylander[3], Jerry Daboi[4], Louise Kpoto[5], Peter C. Lugala[6], Lamine Koivogui[7], Mamadi Coulibaly[8], Margaret Lamunu[9], Cathy Roth[9], Daniel G. Bausch[2]
[1]Ministry of Health and Sanitation, Lassa Fever Program, Kenema Government Hospital, Sierra Leone, [2]Tulane University Health Sciences Center, New Orleans, LA, United States, [3]World Health Organization, Freetown, Sierra Leone, [4]Ministry of Health, Monrovia, Liberia, [5]Ministry of Health and Social Welfare, Monrovia, Liberia, [6]World Health Organization, Monrovia, Liberia, [7]Ministry of Health, Conakry, Guinea, [8]Ministry of Higher Education and Scientific Research, N'Zerekore, Guinea, [9]World Health Organization, Geneva, Switzerland

11 a.m.

728

SEROPREVALENCE OF IGG ANTIBODIES AGAINST PHLEBOVIRUSES IN HUMANS IN NORTHERN AFGHANISTAN

Gerhard Dobler[1], Michael Faulde[2], Sabine Schaper[1], Sandra Essbauer[1]
[1]Bundeswehr Institute of Microbiology, Munich, Germany, [2]Central Institute of the German Armed Forces, Koblenz, Germany

11:15 a.m.

729

A PROFILE OF INFLUENZA VIRUS INFECTION IN ACUTE RESPIRATORY ILLNESS IN GHANA

William K. Ampofo[1], Karl C. Kronmann[2]
[1]Noguchi Memorial Institute for Medical Research, Accra, Ghana, [2]NAMRU-3 Ghana Detachment, Noguchi Memorial Institute for Medical Research, Accra, Ghana

11:30 a.m.

730

INFLUENZA SENTINEL SURVEILLANCE - RWANDA, JULY 2008-MARCH 2009

Jackson Sebeza[1], Alice Kabanda[2], Joseph Rukelibuga[3], Marie-Aime Muhimpundu[1], **Rakhee Palekar**[4], John Rusine[2], Odette Mukabayire[2], Michael Kramer[1]
[1]Trac Plus-MOH, Kigali, Rwanda, [2]National Reference Laboratory, Kigali, Rwanda, [3]Centers for Disease Control and Prevention, Kigali, Rwanda, [4]Centers for Disease Control and Prevention, Baltimore, MD, United States

11:45 a.m.

731

SPATIAL ANALYSIS OF HEMORRHAGIC FEVER WITH RENAL SYNDROME IN SHANDONG PROVINCE, EASTERN CHINA, 1968-2005

Li-Qun Fang[1], Song Liang[2], Xian-Jun Wang[3], Sake J. de Vlas[4], Zhi-Qiang Wang[3], Shao-Xia Song[3], Wen-Yi Zhang[1], You-Fu Xu[1], Hong Yang[1], Wu-Chun Cao[1]
[1]Beijing Institute of Microbiology and Epidemiology, Beijing, China, [2]The Ohio State University, Columbus, OH, United States, [3]Shandong Center for Disease Control and Prevention, Jinan, China, [4]Department of Public Health, University of Medical Center Rotterdam, Rotterdam, The Netherlands

Symposium 122

Reports of High Impact in Malaria Control Programs: Too Good to Be True?

Supported with funding from the Bill & Melinda Gates Foundation

Salon 3

Saturday, November 21, 10:15 a.m. - Noon

This symposium will discuss the recent reports of impact that have been extremely encouraging - almost too good to be true. The session will address the issue of malaria control program effectiveness, and discuss the elements of the impact assessment. This symposium hopes to stimulate a discussion about general and specific aspects of malaria control interventions, including LLINS/IRS, whose effectiveness is often greater than their reported efficacy.

CHAIR

Kathryn S. Aultman
Bill & Melinda Gates Foundation, Seattle, WA, United States

10:15 a.m.

MAPS OF MALARIA TRANSMISSION AS AN ALTERNATIVE APPROACH TO ESTABLISHING BASELINES AND AUDITING CHANGE

Simon Hay
University of Oxford, Oxford, United Kingdom

10:40 a.m.

CONTROL OF MALARIA VECTORS: DOES EFFECTIVENESS EXCEED EFFICACY?

Marc Coosemans
Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium

11:05 a.m.

RECENT MALARIA CONTROL PROGRAM ACHIEVEMENTS IN SUB-SAHARAN AFRICA: COVERAGE AND INTERVENTION EFFECTIVENESS

Richard W. Steketee
Malaria Control Evaluation Partnership in Africa, PATH, Ferney-Voltaire, France

11:30 a.m.

COMPARING IMPACT OF MALARIA CONTROL IN SELECTED HIGH-BURDEN AFRICAN COUNTRIES USING ROUTINE AND OTHER SOURCES OF DATA

Robert D. Newman
World Health Organization Global Malaria Program, Geneva, Switzerland

Symposium 123

The Role of Vaccines in Integrated Control of Helminth Infections

Delaware A

Saturday, November 21, 10:15 a.m. - Noon

Recombinant vaccines against human helminths are in pre-clinical studies and in some cases already in clinical trials. These include:1) three different *Necator americanus* hookworm vaccine antigens using alum as the adjuvant; 2) vaccines against schistosomiasis caused by *Schistosoma mansoni* or *S. haematobium*. Transmission blocking veterinary vaccines for zoonotic *S. japonicum* are also showing promise; and 3) a vaccine against the infective larvae of *Onchocerca volvulus*. This symposium will discuss highlights and early product development and experiences with these helminth vaccines.

CHAIR

Peter J. Hotez
The George Washington University, Washington, DC, United States

Don McManus
Queensland Institute of Medical Research, Queensland, Australia

10:15 a.m.

THE DEVELOPMENT OF A RECOMBINANT VACCINE AGAINST HUMAN ONCHOCERCIASIS

Sara Lustigman
New York Blood Center, New York, NY, United States

10:40 a.m.

DEVELOPMENT OF A HUMAN *SCHISTOSOMA MANSONI* VACCINE

Alex Loukas
Queensland Institute of Medical Research, Brisbane, Queensland, Australia

11:05 a.m.

PROSPECTS FOR *SCHISTOSOMA JAPONICUM* VACCINES

Donald P. McManus
The Queensland Institute of Medical Research, Brisbane, Queensland, Australia

11:30 a.m.

HOOKWORM VACCINE DEVELOPMENT

Jeff Bethony
The George Washington University, Washington, DC, United States

Symposium 124

Diagnostics at the End-Game: Assessing Disease Elimination

Delaware B

Saturday, November 21, 10:15 a.m. - Noon

A number of parasitic diseases such as onchocerciasis, lymphatic filariasis and schistosomiasis now can look to elimination as a goal in light of the massive collaborative effort between government bodies, for-profit entities, NGOs and academia. However, while this paradigm has led to tremendous progress in the context of disease control, diagnostic tools with the requisite specificity and sensitivity needed to assess elimination status simply do not exist. This symposium will discuss the theory, design and implementation of diagnostic tools that can operate in low prevalence scenarios, such as those found in areas nearing elimination. Topics to be presented include critical aspects of disease diagnostics, such as statistical treatment of data to maximize sensitivity and/or specificity, powerful emerging technologies for the profiling of biological samples and progress achieved by current global programs towards parasite elimination using existing diagnostics.

CHAIR

Tobin J. Dickerson
The Scripps Research Institute, La Jolla, CA, United States

Frank Richards
The Carter Center, Atlanta, GA, United States

10:15 a.m.

BILL AND MELINDA GATES FOUNDATION: TARGETING FILARIASIS ELIMINATION

Julie Jacobson
Bill and Melinda Gates Foundation, Seattle, WA, United States

10:40 a.m.

MAXIMIZING SENSITIVITY AND SPECIFICITY IN FIELD DIAGNOSTICS

Thomas Unnasch
University of South Florida, Tampa, FL, United States

11:05 a.m.

VALIDATING THE ELIMINATION OF INFECTION - DIAGNOSTIC CHALLENGES AT THE END GAME

Patrick Lammie
Centers for Disease Control and Prevention, Atlanta, GA, United States

11:30 a.m.

METABOLOMICS AS A SENSITIVE ONCHOCERCIASIS DIAGNOSTIC

Judith Denery
The Scripps Research Institute, La Jolla, CA, United States

Scientific Session 125

Pneumonia, Respiratory Infections and Tuberculosis

Virginia AB

Saturday, November 21, 10:15 a.m. - Noon

CHAIR

Robert Breiman
Centers for Disease Control and Prevention - Kenya, Nairobi, Kenya

W. Abdullah Brooks
International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

10:15 a.m.

732

MANAGEMENT OF PNEUMONIA AND MALARIA AT THE COMMUNITY LEVEL IN ZAMBIA

Kojo Yeboah-Antwi[1], Portipher Pilingana[2], William B. MacLeod[1], Katherine Semrau[1], Kazungu Siazeele[2], Penelope Kalesha[3], Busiku Hamainza[4], Euphrasia Mtonga[3], Pascalina Chanda[5], Lora Sabin[1], Karen Kamholz[6], Erin Twohig[1], Donald M. Thea[1], Davidson H. Hamer[1]
[1]Center for International Health and Development, Boston, MA, United States, [2]Chikankata Mission Hospital, Chikankata, Zambia, [3]Child Health Unit, Ministry of Health, Lusaka, Zambia, [4]National Malaria Control Center, Ministry of Health, Lusaka, Zambia, [5]Ministry of Health, Lusaka, Zambia, [6]Boston University School of Medicine, Department of Pediatrics, Boston, MA, United States

10:30 a.m.

733

ANTIGENIC AND PHYLOGENETIC ANALYSIS OF INFLUENZA VIRUSES IN KENYA FROM 2006-08 WITHIN THE CONTEXT OF REGIONAL AND GLOBAL INFLUENZA DRIFT

David Schnabel[1], Wallace Bulimo[2], Rachel Achilla[2], Tom Gibbons[3], Scott Gordon[1]
[1]United States Army Medical Research Unit - Kenya, Nairobi, Kenya, [2]Kenya Medical Research Institute, Nairobi, Kenya, [3]United States Air Force School of Aerospace Medicine, Brooks City-Base, TX, United States

10:45 a.m.

734

VALIDATION OF THE MICROSCOPIC-OBSERVATION DRUG-SUSCEPTIBILITY (MODS) TECHNIQUE FOR DRUG-SUSCEPTIBILITY TESTING DURING TUBERCULOSIS THERAPY

Marco Tovar[1], Teresa Valencia[1], Robert Gilman[2], Lucy Caviedes[1], Eric Ramos[3], Jessica Alvarado[3], Willi Quino[1], Beatriz Herrera[1], Carlton Evans[1]
[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [3]Asociacion Benefica Prisma, Lima, Peru

11 a.m.

735

GAPS IN THE GLOBAL USE OF *HAEMOPHILUS INFLUENZAE* TYPE B CONJUGATE VACCINE

Adam L. Cohen[1], Linda R. Ojo[1], Rosalyn E. O'Loughlin[2], Karen M. Edmond[2], Sharmila S. Shetty[3], Allyson P. Bear[3], Jennifer D. Loo[1], Lois Privor-Dumm[3], Ulla K. Griffiths[2], Patrick L. Zuber[4], Gillian F. Mayers[4], Rana Hajjeh[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Department of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, London, United Kingdom, [3]Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [4]Department of Immunizations, Vaccines and Biologicals, Family and Child Health, World Health Organization, Geneva, Switzerland

11:15 a.m.

736

TREATING ISONIAZID MONORESISTANT TB WITH STANDARD FIRST-LINE REGIMENS RESULTS IN HIGH RATES OF TREATMENT FAILURE, TB RECURRENCE AND TB-RELATED DEATH

Jonathan M. Sherman[1], Marco Tovar[2], Robert H. Gilman[3], Luz Caviedes[2], Giselle Soto[4], Antonio Bernabe[2], Mirko Zimic[2], Lilia Cabrera[4], Jaime Ortiz[5], Nilda Victoria Trejo Maguina[6], Richard Rodriguez[5], Carlton A. Evans[7]
[1]Mayo Medical School, Rochester, MN, United States, [2]Faculty of Sciences, Universidad Peruana Cayetano Heredia, Perú, Lima, Peru, [3]Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States, [4]Asociacion Benefica PRISMA, Lima, Peru, [5]Hospital Maria Auxiliadora, Lima, Peru, [6]National Tuberculosis Control Program, Lima, Peru, [7]IFHAD: Innovation For Health And Development, London, United Kingdom

11:30 a.m.

737

INVESTIGATIONS OF CLOSE CONTACTS OF PATIENTS WITH LABORATORY-CONFIRMED H5N1 INFECTION IN INDONESIA, IN 2007

Vivi Setiawaty, Siti Isfandari, Ni Ketut Susilarini, Krisnanur A. Pangesti, Endang R. Sedyaningsih
National Institute of Health Research and Development, Jakarta, Indonesia

11:45 a.m.

738

BLOOD CULTURES FOR THE DIAGNOSIS OF DRUG-RESISTANT TUBERCULOSIS IN RURAL SOUTH AFRICA

Scott K. Heysell[1], Tania A. Thomas[1], Francois J. Eksteen[2], Anthony P. Moll[2], Neel R. Gandhi[3], Palav Babaria[1], Umesh G. Lalloo[4], Gerald Friedland[1], N. Sarita Shah[3]
[1]Yale University, New Haven, CT, United States, [2]Church of Scotland Hospital, Tugela Ferry, South Africa, [3]Albert Einstein College of Medicine, New York City, NY, United States, [4]University of KwaZulu-Natal, Durban, South Africa

Symposium 126

Crossing Boundaries: Models of North-South and Interprofessional Education

Virginia C

Saturday, November 21, 10:15 a.m. - Noon

Global health educators are charged with training health professionals and others to become leaders to improve health and eliminate disease. The goal is to guide scientists, clinicians, activists and others to create knowledge, apply best practices and recent discoveries and to understand the determinants of health. These complex challenges require a multidisciplinary and multinational response. All global health education programs should seek to break silos, use interdisciplinary teams, create global partnerships, emphasize roles of communities, universities, governments and NGOs in improving the health of populations. This symposium will showcase several educational programs at UCSF and The Medical College of Wisconsin which highlight interdisciplinary and North-South partnerships: 1) Global Health Clinical Scholars Program: Graduate level health professional students from different disciplines formally incorporate global health into their clinical and research training; 2) Masters in Global Health: The program prepares graduates for leadership careers in international health policy, health care, research, or development by stressing hands-on global health practice through lectures, seminars, and fieldwork; 3) International Traineeships in AIDS Prevention Studies and Sandwich Certificate Training Program: Different programs with different goals but both are designed to assist developing nations in capacity building in science and technology; and 4) International Health in the Philippines: A program focusing on rural and urban global health issues including the epidemiology of infectious, non-infectious and acute or chronic diseases prevalent in the Philippines.

CHAIR

Madhavi Dandu
University of California, San Francisco, San Francisco, CA, United States

Michael Kron
Medical College of Wisconsin, Milwaukee, WI, United States

10:15 a.m.

GLOBAL HEALTH CLINICAL SCHOLARS PROGRAM

Chris Stewart
University of California San Francisco, San Francisco, CA, United States

10:40 a.m.

MASTERS IN GLOBAL HEALTH

John Ziegler
University of California San Francisco, San Francisco, CA, United States

11:05 a.m.

INTERNATIONAL TRAINEESHIPS IN AIDS PREVENTION STUDIES

Jeffrey Mandel
University of California San Francisco, San Francisco, CA, United States

11:30 a.m.

DEVELOPING A NEW GLOBAL HEALTH PATHWAY EDUCATIONAL SYSTEM IN MILWAUKEE

Richard Olds
Medical College of Wisconsin, Milwaukee, WI, United States

Symposium 127

Malaria: Impact of Natural Selection on Transmission and Disease

Washington 1

Saturday, November 21, 10:15 a.m. - Noon

This symposium will discuss the concept of natural selection in malaria—how has the parasite selected variants in the human genome; how does the host immune system or drug pressure select parasite variants; and how do insecticides select for mosquito variants? In addition, this symposium will explore strategies to identify genes under natural selection and the implications for understanding malaria biology and development of diagnostic tools and intervention strategies.

CHAIR

Dyann F. Wirth
Harvard School of Public Health, Boston, MA, United States

Marc A. Muskavitch
Boston College, Boston, MA, United States

10:15 a.m.

NATURAL SELECTION AND TRANSMISSION OF *PLASMODIUM FALCIPARUM* MALARIA

Sarah K. Volkman
Harvard School of Public Health, Cambridge, MA, United States

10:40 a.m.

PARASITE SELECTION ON THE HUMAN HOST: THE HEMOGLOBIN STORY

Rick Fairhurst
National Institutes of Health, Bethesda, MD, United States

11:05 a.m.

ANTIGENIC POLYMORPHISM AND VARIATION OF PARASITES UNDER IMMUNE SELECTION

David Conway
Medical Research Council—The Gambia, Fajara, Gambia

11:30 a.m.

SELECTION ACTING ON THE VECTOR: IMPACTS OF INSECTICIDES

Martin Donnelly
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Symposium 128

Net Results: Scaling up LLIN Use for Malaria Control

Washington 2
Saturday, November 21, 10:15 a.m. - Noon

With massive scale up of LLIN distribution in recent years, more African households own nets. However, field programs are now faced with the challenge of closing the gap between ownership of nets and their use, which is critical for achieving impact. This symposium focuses on making the link between distribution and impact by increasing the use of Long Lasting Insecticidal Nets (LLINs). Speakers will discuss recent evidence in behavior change communication to achieve high rates of use for LLINs, including results from behavioral determinant tracking methods in Madagascar, patterns of net use within households over the course of a rainy season in Tanzania; household visits by community volunteers and issues for promoting net use in humanitarian crises.

CHAIR

Matthew Lynch
Johns Hopkins University Center for Communication Programs, Baltimore, MD, United States

CHAIR

Chris White
Population Services International, Washington, DC, United States

10:15 a.m.

TRACKING THE DETERMINANTS OF NET USE TO INFORM PROGRAMS IN MADAGASCAR

Iarimalanto Rabary
Population Services International, Antananarivo, Madagascar

10:45 a.m.

PATTERNS OF NET USE DURING RAINY SEASON IN KONGWA, TANZANIA: WEEKLY HOUSEHOLD VISITS

Hannah Koenker
Johns Hopkins University Center for Communication Programs, Baltimore, MD, United States

11:10 a.m.

PROMOTING NET USE USING VOLUNTEER HOME VISITS: RESULTS FROM RED CROSS HANG UP/KEEP UP ACTIVITIES

Salim Sohani
Canadian Red Cross, Ottawa, ON, Canada

11:35 a.m.

THE PROBLEM WITH NET USE IN HUMANITARIAN CRISES: CASE STUDY EASTERN CHAD

Richard Allan
The Mentor Initiative, Toulouse, France

Symposium 129

Towards the Control of Globally Important Vector-Borne Diseases: Prevention of Transmission in the Home and Indoor Environment

Washington 3
Saturday, November 21, 10:15 a.m. - Noon

In the developing world, the home is not always a safe place; annually it is the site of hundreds of millions of infections and more than one million deaths caused by vector-borne pathogens. For many globally important vector-borne diseases, including malaria in sub-Saharan Africa, dengue, Chagas disease, lymphatic filariasis and leishmaniasis, the most significant epidemiological point of contact between vectors and humans is the home or other indoor environments. Thus, in the developing world the home is often not a safe place; rather, it can be a dangerous place. This symposium will describe how targeting vectors in homes has helped to combat four globally important VBDs (malaria, dengue, Chagas disease and lymphatic filariasis). Special emphasis will be placed on non-stovepiped interventions to broadly prevent endophilic transmission of vector-borne pathogens in the home to reduce the public health burdens of globally important VBDs in the developing world.

CHAIR

Barry J. Beaty
Colorado State University, Fort Collins, CO, United States

Jo Lines
London School of Hygiene and Tropical Medicine, London, United Kingdom

10:15 a.m.

INTRODUCTION - THE CRITICAL IMPORTANCE OF THE HOME IN VECTOR-BORNE DISEASE TRANSMISSION AND CONTROL

Barry Beaty
Colorado State University, Fort Collins, CO, United States

10:35 a.m.

MALARIA - MALARIA CONTROL - THE EFFICACY OF TARGETING THE VECTOR IN THE HOME ENVIRONMENT

Jo Lines
London School of Hygiene and Tropical Medicine, London, United Kingdom

10:55 a.m.

DENGUE - INNOVATIVE APPROACHES TO CONTROL *AE. AEGYPTI* IN THE HOME ENVIRONMENT

Lars Eisen
Colorado State University, Fort Collins, CO, United States

11:15 a.m.

CHAGAS DISEASE: THE POTENTIAL AND LIMITATIONS OF CONTROLLING *T. INFESTANS* IN THE HOME

Uriel Kitron
Emory University, Atlanta, GA, United States

11:40 a.m.

VECTOR CONTROL: THE FORGOTTEN COMPONENT FOR EFFECTIVE CONTROL OF FILARIASIS

Graham White
USDA-ARS, Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL, United States

Symposium 130

Communicable Diseases in Post-Conflict Settings

Washington 4
Saturday, November 21, 10:15 a.m. - Noon

Persons surviving conflicts are especially vulnerable to communicable diseases because of mass migration leading to overcrowding, environmental degradation, poor housing, water, sanitation and food, or lack of preventive and curative healthcare. The populations of greatest concern are internally displaced persons or refugees and people living under fragile governments. This session will present three public health areas involved in assessing the health status of these populations: surveillance conducted in healthcare facilities, environmental responses to communicable disease outbreaks and specific healthcare program evaluations. This session presents some of the current communicable diseases affecting these vulnerable persons, including traditional, emerging and re-emerging diseases.

CHAIR

Susan Temporado Cookson
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:15 a.m.

UNHCR HEALTH INFORMATION SYSTEM (HIS) FINDINGS AMONG REFUGEE CHILDREN UNDER FIVE YEARS OF AGE

Basia Tomczyk
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:45 a.m.

MALARIA BURDEN AMONG REFUGEES, HIS FINDINGS FOR CHILDREN UNDER FIVE YEARS OF AGE

Holly A. Williams
Centers for Disease Control and Prevention, Atlanta, GA, United States

11:10 a.m.

ENVIRONMENTAL RESPONSES TO CHOLERA AND HEPATITIS E OUTBREAKS AMONG VULNERABLE AFRICAN POPULATIONS, 2008

Thomas Handzel
Centers for Disease Control and Prevention, Atlanta, GA, United States

11:35 a.m.

HEALTHCARE PROGRAM EVALUATION TOOLKITS—DEVELOPMENT AND INITIAL FINDINGS

Susan Temporado Cookson
Centers for Disease Control and Prevention, Atlanta, GA, United States

Scientific Session 131

Malaria - Regulation of Cellular Immunity in Malaria

Washington 5
Saturday, November 21, 10:15 a.m. - Noon

CHAIR

Kirsten E. Lyke
University of Maryland, Baltimore, MD, United States

Martha Sedegah
Naval Medical Research Center, Silver Spring, MD, United States

10:15 a.m.

739

IL-15 MAINTAINS A RESERVOIR OF CENTRAL MEMORY CD8 T CELLS THAT ARE REQUIRED FOR PROTRACTED PROTECTION AGAINST *PLASMODIUM BERGHEI* INFECTION

Urszula Krzych, Nick Steers, Joanne Lumsden, Dmitri Berenzon, Dmitry Liepinsh, Robert J. Schwenk
Walter Reed Army Institute of Research, Silver Spring, MD, United States
(ACMCIP Abstract)

10:30 a.m.

740

LIVER CCD8α⁺DC FROM MICE IMMUNIZED WITH RADIATION-ATTENUATED *PLASMODIUM BERGHEI* SPOROZOITES MEDIATE THE INDUCTION OF LIVER EFFECTOR CD8⁺ T CELLS AGAINST PRE-ERYTHROCYTIC STAGE INFECTION

Ousman Jobe, Robert J. Schwenk, Urszula Krzych
Walter Reed Army Institute of Research, Silver Spring, MD, United States
(ACMCIP Abstract)

10:45 a.m.

741

EXPRESSION OF FOXP3, IL-10 AND TGF-β1 IN IP-10 DEFICIENT C57BL/6 MICE WITH EXPERIMENTAL CEREBRAL MALARIA

Bismark Y. Sarfo[1], Nana Wilson[1], Danielle Whittaker[2], Vincent Bond[1], Byron Ford[1], Jonathan Stiles[1]
[1]Morehouse School of Medicine, Atlanta, GA, United States, [2]Vanderbilt University, Nashville, TN, United States
(ACMCIP Abstract)

11 a.m.

742

INTERFERON-ALPHA PROMOTER HAPLOTYPES AND SUSCEPTIBILITY TO SEVERE MALARIAL ANEMIA

Prakasha Kempaiah[1], Collins Ouma[2], Gregory C. Davenport[3], Samuel B. Anyona[2], Tom Were[2], John M. Ong'echa[2], James B. Hittner[4], Douglas J. Perkins[1]
[1]University of New Mexico, Albuquerque, NM, United States, [2]University of New Mexico/KEMRI, Kisumu, Kenya, [3]University of Pittsburgh, Pittsburgh, PA, United States, [4]College of Charleston, Charleston, SC, United States

11:15 a.m.

743

IDENTIFICATION OF HLA RESTRICTED CD8+ T-CELL EPITOPES ON THE *PLASMODIUM FALCIPARUM* AMA1 PROTEIN

Martha Sedegah[1], Yohan Kim[2], Shannon McGrath[1], Harini Ganeshan[1], Jennylynn Lejano[1], Stephen Abot[1], Glena Banania[1], Maria Belmonte[1], Renato Sayo[1], Fouzia Farooq[1], Denise L. Doolan[3], Bjoern Peters[2], Joseph Bruder[4], Christopher R. King[4], Lorraine Soisson[5], Carter Diggs[5], Christian F. Ockenhouse[1], Michael Hollingdale[1], Alessandro Sette[2], Thomas L. Richie[1]
[1]United States Military Malaria Vaccine Program, Silver Spring, MD, United States, [2]La Jolla Institute for Allergy and Immunology, La Jolla, CA, United States, [3]Queensland Institute of Medical Research, Brisbane, Australia, [4]GenVec, Gaithersburg, MD, United States, [5]United States Agency for International Development, Washington, DC, United States

11:30 a.m.

744

EFFECTS OF CONCOMITANT *SCHISTOSOMA HAEMATOBIUM* INFECTION ON THE T REGULATORY CELL RESPONSE ELICITED BY ACUTE *PLASMODIUM FALCIPARUM* MALARIA INFECTION IN MALIAN CHILDREN

Kirsten E. Lyke[1], Abdoulaye Dabo[2], Charles Arama[3], Modibo Daou[2], Issa Diarra[2], Christopher V. Plowe[4], Ogobara K. Doumbo[2], Marcelo B. Sztein[1]
[1]University of Maryland, Baltimore, MD, United States, [2]Malaria Research and Training Center, University of Bamako, Bamako, Mali, [3]Department of Immunology, University of Stockholm, Stockholm, Mali, [4]Howard Hughes Medical Institute, Baltimore, MD, United States

11:45 a.m.

745

ANTENATAL INFECTION WITH SCHISTOSOMIASIS INCREASES SUSCEPTIBILITY TO MALARIA IN KENYAN CHILDREN

Indu Malhotra[1], Peter Mungai[1], Alex Wamachi[2], John H. Ouma[3], Davy Koech[2], Eric Muchiri[4], Christopher L. King[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Kenya Medical Research Institute, Nairobi, Kenya, [3]Kenyatta University, Nairobi, Kenya, [4]Division of Vector Borne Diseases, Nairobi, Kenya
(ACMCIP Abstract)

Scientific Session 132

Kinetoplastida: Epidemiology, Diagnosis and Treatment

Wilson A

Saturday, November 21, 10:15 a.m. - Noon

CHAIR

Nisha Garg
University of Texas Medical Branch, Galveston, TX, United States

10:15 a.m.

746

COMBINATION OF BENZNIDAZOLE AND NIFURTIMOX PLUS POSACONAZOLE ENHANCES ACTIVITY AGAINST *TRYPANOSOMA CRUZI* IN EXPERIMENTAL CHAGAS DISEASE

Maria Terezinha Bahia[1], A. Talvani[1], Shing Chang[2], Isabela Ribeiro[3]
[1]Laboratório de Doença de Chagas, Núcleo de Pesquisa em Ciências Biológicas, Universidade Federal de Ouro Preto (UFOP), Ouro Preto, Brazil, [2]Drugs for Neglected Diseases initiative (DNDi), Geneva, Switzerland, [3]Drugs for Neglected Diseases initiative (DNDi) - Latin America, Rio de Janeiro, Brazil

10:30 a.m.

747

CALCULATING DRUG NEEDS AND COSTS FOR TREATING VISCERAL LEISHMANIASIS IN THE INDIAN SUBCONTINENT AND AFRICA USING LOCAL PATIENT ANTHROPOMETRIC DATA

Michael O. Harhay[1], François Chappuis[2], Suman Rijal[3], Shyam Sundar[4], Piero L. Olliaro[5]
[1]University of Pennsylvania, Philadelphia, PA, United States, [2]Geneva University Hospitals, Travel and Migration Medicine Unit, Geneva, Switzerland, [3]B.P. Koirala Institute of Health Sciences, Dharan, Nepal, [4]Institute of Medical Sciences, Banaras Hindu University, Varanasi, India, [5]UNICEF/UNDP/World Bank/WHO Special Programme on Research and Training in Tropical Diseases (TDR), World Health Organization, Geneva, Switzerland

10:45 a.m.

748

SCYX-6759, AN ORALLY BIOAVAILABLE OXABOROLE 6-CARBOXAMIDE, ACHIEVES THERAPEUTICALLY RELEVANT EXPOSURE IN BRAIN AND CSF LEADING TO 100% CURES IN A MOUSE MODEL OF CNS-STAGE HUMAN AFRICAN TRYPANOSOMIASIS

Stephen Wring[1], Cyrus Bacchi[2], Beth Beaudet[1], Tana Bowling[1], Daitao Chen[1], Robert Don[3], Yvonne Freund[4], Eric Gaukel[1], Kurt Jarnagin[4], Matthew Jenks[1], Luke Mercer[1], Bakela Nare[1], Andy Noe[1], Matthew Orr[1], Robin Parham[1], Jacob Plattner[4], Cindy Rewerts[1], Jessica Sligar[1], Nigel Yarlett[2], Robert Jacobs[1]
[1]SCYNEXIS Inc., Research Triangle Park, NC, United States, [2]Pace University, New York, NY, United States, [3]Drugs for Neglected Diseases initiative, Geneva, Switzerland, [4]Anacor Pharmaceuticals Inc., Palo Alto, CA, United States

11 a.m.

749

IDENTIFICATION OF NEW AMINOQUINOLINE COMPOUNDS ACTIVE AGAINST VISCERAL LEISHMANIASIS USING AN *EX VIVO* MODEL SYSTEM

Alex G. Peniche[1], Bruno L. Travi[1], Elvia Y. Osorio[1], Adam R. Renslo[2], Peter C. Melby[1]
[1]South Texas Veterans Health Care System/University of Texas Health Science Center, San Antonio, TX, United States, [2]University of California-San Francisco, San Francisco, CA, United States

11:15 a.m.

750

ANTILEISHMANIAL ACTIVITY OF SELECTED FDA-APPROVED DRUGS IN A MURINE CUTANEOUS LEISHMANIASIS MODEL

David Saunders[1], Qiqui Li[2], Misty Carlson[2], Lisa Xie[2], Qiang Zheng[2], Jing Zhang[2], Juan Mendez[2], John Tally[2], Suping Jiang[2], Peter Weina[2], Alan Magill[2], Max Grogl[2]
[1]Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States

11:30 a.m.

751

NOVEL COMPOUNDS FOR THE TREATMENT OF CHAGAS DISEASE

Martine Keenan[1], Wayne M. Best[1], Tanya Armstrong[2], Andrew Thompson[2], Susan Charman[3], Karen White[3], Robert Don[4], Thomas W. von Geldern[5]
[1]Epichem Pty Ltd., Murdoch, Australia, [2]Murdoch University, Murdoch, Australia, [3]Monash University, Parkville, Australia, [4]Drugs for Neglected Diseases initiative, Geneva, Switzerland, [5]Embedded Consulting, Richmond, IL, United States

11:45 a.m.

752

TRANSPORT OF PENTAMIDINE AND FURAMIDINE IN RAT AND HUMAN HEPATOCYTES

Xin Ming, Qiang Liu, Richard R. Tidwell, James E. Hall, **Michael Z. Wang**
University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
(ACMCIP Abstract)

Exhibit Hall Open/Light Lunch

Exhibit Hall A
Saturday, November 21, Noon - 1:30 p.m.

Poster Session 133/Light Lunch

Poster Session C (#753 – 1005 and Late Breakers)

Exhibit Hall B South
Saturday, November 21, Noon - 1:30 p.m.

ARTHROPODS/ENTOMOLOGY - OTHER

753

RESPONSE OF HUMAN SKIN EQUIVALENTS TO *SARCOPTES SCABIEI* MITES AND EXTRACT

Marjorie S. Morgan, Larry G. Arlian
Wright State University, Dayton, OH, United States
(ACMCIP Abstract)

754

SURVEILLANCE OF RICKETTSIAL PATHOGENS ISOLATED FROM TICKS IN THE REPUBLIC OF GEORGIA

Tamasin R. Yarina[1], Todd E. Myers[1], John S. Lee[2], Monica L. O'Guinn[3], Nicolas Tsertsvadze[4], Nino Vephkhvadze[5], Giorgi Babuadze[4], Ketevan Sidamonidze[4], Maka Kokhreidze[5], Marina Donduashvili[5], Allen L. Richards[1]
[1]Naval Medical Research Center, Silver Spring, MD, United States, [2]United States Army Medical Research Institute of Infectious Diseases, Ft. Detrick, MD, United States, [3]Armed Forces Institute of Pathology, Washington, DC, United States, [4]National Centers for Disease Control, Tbilisi, Georgia, [5]Laboratory of the Ministry of Agriculture, Tbilisi, Georgia

755

ULTRASTRUCTURAL STUDY OF *AEDES ALBOPICTUS SKUSE,* 1895 (DIPTERA: CULICIDAE) HEMOCYTES

Fabio A. Brayner-Santos[1], Helena R. Araujo[2], Luiz C. Alves[1], Paulo F. Pimenta[3]
[1]National Institutes of Health, Rockville, MD, United States, [2]Intitute Rene Rachou-IRR, Belo Horizonte-Minas Gerais, Brazil, [3]Institute Rene Rachou-IRR, Belo Horizonte-Minas Gerais, Brazil
(ACMCIP Abstract)

756

MICROGEOGRAPHICAL ANALYSIS OF GENETIC STRUCTURE AND REINFESTATION DYNAMICS OF *TRIATOMA INFESTANS* POPULATIONS IN NORTHERN ARGENTINA

Paula L. Marcet[1], Matias S. Mora[2], Ana P. Cutrera[2], Ricardo E. Gürtler[3], Uriel Kitron[4], Ellen Dotson[1]
[1]Centers for Disease Control and Prevention- DPD- Entomology, Chamblee, GA, United States, [2]Lab Ecofisiología-FCEN-Univ Mar del Plata, Mar del Plata, Argentina, [3]Lab. Eco-epidemiología - FCEN-UBA, Buenos Aires, Argentina, [4]Department of Environmental Studies, Emory University, Atlanta, GA, United States

757

A RAPID ASSAY FOR THE DETECTION OF ALL FOUR DENV SEROTYPES IN MOSQUITOES

Maria E. Mayda[1], Zahra Parker[1], Kirti Dave[2], Michael J. Turell[3], Tobin Rowland[1], Russell Coleman[4], Daniel Strickman[5]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]VecTOR Test Systems, Inc, Thousand Oaks, CA, United States, [3]Virology Division, United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States, [4]United States Army Medical Materiel Development Activity, Fort Detrick, MD, United States, [5]Veterinary, Medical, and Urban Entomology, USDA, ARS, Beltsville, MD, United States

758

CHARACTERIZATION OF HEMOCYTES FROM *AEDES AEGYPTI* AND *AEDES ALBOPICTUS*

Luiz C. Alves[1], Helena R. Araújo[2], Fabio A. Baryner-Santos[1], Paulo F. Pimenta[3]
[1]National Institutes of Health, Rockville, MD, United States, [2]Institute Rene Rachou, Belo Horizonte-Minas Gerais, Brazil, [3]Intitute Rene Rachou, Belo Horizonte-Minas Gerais, Brazil
(ACMCIP Abstract)

759

EVALUATION RESTING BEHAVIOR OF *AEDES AEGYPTI* USING MARK-RELEASE-RECAPTURE DESIGN AND EXPERIMENTAL HUTS, PERU

Fanny Castro-Llanos[1], Hortance Manda[2], Amy Morrison[1], Victor Lopez[1], Nichole L. Achee[2], John P. Grieco[2], Kirk Mundal[1]
[1]*Naval Medical Research Center, Iquitos, Peru,* [2]*Uniformed Services University of the Health Sciences, Bethesda, MD, United States*

760

ORAL-MEDIATED GENE SILENCING OF A FAT BODY GENE OF *RHODNIUS PROLIXUS*

Pamela Pennington, Mabel Taracena, Claudia Umaña, Ana L. de Montenegro, Celia Cordón-Rosales
Universidad del Valle de Guatemala, Guatemala, Guatemala

761

EHRLICHIAE AND SPOTTED-FEVER GROUP *RICKETTSIAE* IN TICKS FROM TENNESSEE

Sara Cohen[1], Michael Yabsley[2], James Freye[3], Brett Dunlap[3], Junjun Huang[1], Meghan Rowland[1], Daniel Mead[2], John Dunn[1], Timothy Jones[1], **Abelardo C. Moncayo**[1]
[1]*Tennessee Department of Health, Nashville, TN, United States,* [2]*University of Georgia, Athens, GA, United States,* [3]*United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Madison, TN, United States*

762

DEMONSTRATION OF PARATRANSGENIC *PHLEBOTOMUS ARGENTIPES*

Heidi Hillesland[1], Ivy Hurwitz[1], Rajesh Kumar[2], Ravi Durvasula[1], Vijay Kumar[2], Pradeep Das[2], Annabeth Fieck[1]
[1]*University of New Mexico, Albuquerque, NM, United States,* [2]*Rajendra Memorial Research Institute of Medical Sciences, Patna, India*

763

PROMISING STRATEGY FOR VISCERAL LEISHMANIASIS CONTROL UTILIZING NANOPARTICLE DELIVERY OF EFFECTOR MOLECULES

Heidi Hillesland[1], Scott Matthews[1], Rajesh Kumar[2], Ivy Hurwitz[1], Annabeth Fieck[1], Ravi Durvasula[1], Gabriel Lopez[1], Pradeep Das[2], Vijay Kumar[2]
[1]*University of New Mexico, Albuquerque, NM, United States,* [2]*Rajendra Memorial Research Institute of Medical Sciences, Patna, India*

CLINICAL TROPICAL MEDICINE

764

CLINICAL FACTORS CORRELATED TO POSITIVE SEROLOGIC TEST IN MENINGITIC ANGIOSTRONGYLIASIS

Kanlayanee Sawanyawisuth, Kittisak Sawanyawisuth
Khon Kaen University, Khon Kaen, Thailand

765

A RETROSPECTIVE ANALYSIS OF HEALTH AND SCHOOL OUTCOMES OF A SCHOOL BASED MALARIA PROGRAMME IN MANGOCHI DISTRICT, MALAWI

Bertha Nhlema Simwaka
Malaria Control and Evaluation Partnership for Africa Learning Community, Lusaka, Zambia

766

DETECTION OF *ENTAMOEBA HISTOLYTICA, GIARDIA INTESTINALIS* AND *CRYPTOSPORIDIUM SPP.* ANTIGEN BY USE OF LUMINEX XMAP TECHNOLOGY

Rashidul Haque[1], Zannatun Noor[1], Mamun Kabir[1], Dinesh Mondal[1], Li Chen[2], Joel Herbein[2], William A. Petri, Jr.[3]
[1]*International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh,* [2]*TechLab, Inc., Blacksburg, VA, United States,* [3]*University of Virginia, Charlottesville, VA, United States*

767

LABORATORY CONFIRMED DIAGNOSES OF ACUTE FEBRILE ILLNESS IN GHANA

Karl C. Kronmann[1], Guillermo Pimentel[2], Naiki Puplampu[3], Shirley Odoom[3], Janice Tagoe[3], Edward Nyarko[4], Prince Agbenohevi[4], Gregory Raczniak[1], Jamal Dejli[2], Michael Wilson[5], Kwadwo Koram[3]
[1]*Naval Medical Research Unit No. 3, Ghana Detachment, Accra, Ghana,* [2]*Naval Medical Research Unit No. 3, Cairo, Egypt,* [3]*Noguchi Memorial Institute for Medical Research, Legon, Ghana,* [4]*37th Military Hospital, Accra, Ghana*

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ETIOLOGY OF FEBRILE DIARRHEA IN PERÚ AND PARAGUAY, 2001-2009

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CHILDHOOD KWASHIORKOR IN MADAGASCAR: A CASE REPORT

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IMMIGRANT SCREENING IN THE INPATIENT SETTING IN A MUNICIPAL HOSPITAL

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VARICELLA STATUS IN TRAVELERS SEEN IN THE BOSTON AREA TRAVEL MEDICINE NETWORK (BATMN)

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PREVALENCE OF *PLASMODIUM FALCIPARUM* INFECTION AMONG PATIENTS WITH CHRONIC RENAL FAILURE (CRF) IN MALI

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LEPTOSPIROSIS IN THE REPUBLIC OF GEORGIA

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CANDIDAEMIA IN A TERTIARY CARE HOSPITAL IN KOLKATA, INDIA

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FLAVIVIRIDAE - DENGUE

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DENGUE AMONG PATIENTS WITH UNDIFFERENTIATED FEVER IN SOUTHERN SRI LANKA

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COST OF DENGUE VECTOR CONTROL ACTIVITIES IN PUERTO RICO

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AGGREGATE ECONOMIC COST OF DENGUE IN PUERTO RICO

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EFFECT OF METYLPREDNISOLONE IN PREVENTING DENGUE COMPLICATIONS: A SINGLE-CENTER RANDOMIZED PLACEBO-CONTROLLED TRIAL

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NATURAL STRAIN VARIATION AND THE NEUTRALIZATION OF DENGUE SEROTYPE 3 VIRUSES

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PAEDIATRIC DENGUE SURVEILLANCE IN COLOMBO, SRI LANKA

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DETECTION OF ASYMPTOMATIC INFECTION AMONG RELATIVES OF DENGUE PATIENTS

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INVESTIGATING NOVEL DENGUE VIRUS INFECTION BIOMARKERS USING PROTEOMIC METHODS: VITRONECTIN PRECURSOR PROTEIN AS A NEW LEAD

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BABOON MODEL FOR DENGUE VIRUS INFECTION AND VACCINE EVALUATION

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SEROPREVALENCE OF DENGUE IN UNITED STATES ARMY SPECIAL OPERATIONS COMMAND PERSONNEL

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MOLECULAR DETERMINANTS OF DENGUE VIRUS ENVELOPE PROTEIN IN VIRUS INFECTION

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PHENOTYPIC ANALYSIS OF DENGUE VIRUS ISOLATES ASSOCIATED WITH DENGUE FEVER AND DENGUE HEMORRHAGIC FEVER FOR CELLULAR ATTACHMENT, REPLICATION AND INTERFERON SIGNALING ABILITY

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NEEDLE-FREE DELIVERY OF A TETRAVALENT DENGUE VACCINE (DENVAX): SAFETY AND EFFICACY IN NON-HUMAN PRIMATES

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INHIBITION OF THE TYPE I IFN PRODUCTION IN DENDRITIC CELLS BY DENGUE VIRUS

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DENGUE TRENDS BY AGE AND SEX IN PUERTO RICO A HISTORICAL ANALYSIS FROM 1990 TO 2008

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CHARACTERIZATION OF A PANEL OF DENV-3 INFECTIOUS CLONES

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TOWARDS DEVELOPING AN ANIMAL MODEL TO EVALUATE THE PROTECTIVE EFFICACY OF ANTIBODIES RAISED AGAINST CANDIDATE DENGUE VACCINES

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IMMUNE-SUPPRESSIVE ABILITY OF DENGUE VIRUS IN AN *AEDES AEGYPTI* CELL LINE

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KINETIC ASSESSMENT OF DENGUE VIRUS CELLULAR TROPISM

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FREQUENCY OF DENGUE FEVER AMONG FEBRILE PATIENTS PRESENTING TO AN URBAN HOSPITAL IN MEDELLIN, COLOMBIA: STUDY RESULTS

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USE OF AG129 MICE TO ASSESS THE SAFETY OF LIVE, ATTENUATED DENGUE VACCINES

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SUSCEPTIBLE RECONSTRUCTION AND SEROTYPE SPECIFIC ESTIMATES OF THE TRANSMISSIBILITY AND SEASONALITY OF TRANSMISSION OF DENGUE VIRUSES IN THAILAND

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DENGUE INFECTION IN HOSPITALIZED PATIENTS WITH FEBRILE SYNDROME, MEDELLIN, COLOMBIA

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USEFULNESS OF COMMERCIALLY AVAILABLE GPS DATA-LOGGERS FOR TRACKING HUMAN MOVEMENT AND RISK OF DENGUE VIRUS INFECTION

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DENGUE SURVEILLANCE IN A TERTIARY HOSPITAL IN CEBU CITY, PHILIPPINES

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ESTIMATING THE GLOBAL BURDEN OF DENGUE

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USE OF HAND HELD COMPUTERS FOR PRIMARY DATA COLLECTION IN A DENGUE FEVER SURVEILLANCE STUDY, MEDELLIN, COLOMBIA

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EPIDEMIOLOGIC CONDITIONS ASSOCIATED WITH CASES OF DENGUE HEMORRHAGIC FEVER AND CONTROL EFFORTS: APPLYING TAIWAN'S EXPERIENCES TO GLOBAL CONTROL

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DENGUE IN CEBU PROVINCE FOR OVER A DECADE AND PUPAL PRODUCTIVITY OF DENGUE MOSQUITO VECTORS (DIPTERA: CULICIDAE) IN A RURAL AREA IN CEBU, PHILIPPINES

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FLAVIVIRIDAE - OTHER

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ACUTE ENCEPHALITIS SYNDROME SURVEILLANCE FOR JAPANESE ENCEPHALITIS --- INDIA, MAY 2007-APRIL 2008

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IN SITU REVERSE-TRANSCRIPTION LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (*IN SITU* RT-LAMP) FOR DETECTION OF JAPANESE ENCEPHALITIS VIRAL RNA IN HOST CELLS

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DEVELOPMENT OF A CONSENSUS MICROARRAY METHOD FOR IDENTIFICATION OF SOME SEVERE INFECTIVE VIRUSES

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THE CHANGE OF THE HSP70-RELATED GENES AND ITS POTENTIAL ROLE IN C6/36 CELL INFECTED BY JAPANESE ENCEPHALITIS VIRUS

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DIFFERENTIAL INTERACTION OF DENDRITIC CELLS AND MACROPHAGES TO RUSSIAN SPRING-SUMMER ENCEPHALITIS AND OMSK HEMORRHAGIC FEVER VIRUSES

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DETECTION AND CHARACTERIZATION OF TICK-BORNE ENCEPHALITIS VIRUS AND ITS RESERVOIR IN THE KYRGYZ REPUBLIC

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JAPANESE ENCEPHALITIS IN THE PHILIPPINES: CHART REVIEW AND LABORATORY CONFIRMED HOSPITALIZED CASES

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FLAVIVIRIDAE – WEST NILE

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DEVELOPMENT OF A BROAD SPECTRUM FLAVIVIRUS QUANTITATIVE DETECTION ASSAY USING RT-PCR/ELECTROSPRAY IONIZATION MASS SPECTROMETRY ON THE IBIS T5000 PLATFORM

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DETECTION OF WEST NILE VIRUS RNA BY ONE-STEP REAL TIME RT-PCR

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A CPE BASED HIGH THROUGHPUT SCREEN FOR ANTI-WEST NILE VIRUS: MLPCN CAMPAIGN

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HELMINTHS – NEMATODES – FILARIASIS (OTHER)

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A MULTICENTER EVALUATION OF A NEW ANTIBODY TEST KIT FOR LYMPHATIC FILARIASIS EMPLOYING RECOMBINANT BRUGIA MALAYI ANTIGEN BM-14

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SOCIO-ECONOMIC ANALYSIS OF NTD AT INDIVIDUAL AND HOUSEHOLD LEVEL: SELECTED EVIDENCES, KNOWLEDGE GAPS AND ALTERNATIVE PATTERNS OF IMPACT ASSESSMENT

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NOVEL BORON-CONTAINING SMALL MOLECULES AS POTENTIAL THERAPEUTICS AGAINST HUMAN LYMPHATIC FILARIASIS

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OPTIMISING ANTIBIOTIC TREATMENT OF *BRUGIA MALAYI WOLBACHIA* IN INFECTED JIRDS

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PROSPECTS FOR THE INTERRUPTION OF ONCHOCERCIASIS TRANSMISSION IN MOUNT ELGON FOCUS, EASTERN UGANDA

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COST-EFFECTIVENESS ANALYSIS OF MICROSCOPY, OG4C3 ELISA AND PCR FOR THE MONITORING OF LYMPHATIC FILARIASIS MASS DRUG ADMINISTRATION INTERVENTION

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STRUCTURAL AND IMMUNOLOGIC CROSS REACTIVITY AMONG ALLERGENS AND HOMOLOGOUS HELMINTH ANTIGENS: LESSONS LEARNED FROM TROPOMYOSIN AND THEIR IMPLICATION FOR THE HYGIENE HYPOTHESIS

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NATURAL PROGRESSION OF LYMPHEDEMA IN TOGO BETWEEN 2004 AND 2007

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EVALUATION OF THE LARVAL MIGRATION INHIBITION ASSAY FOR DETECTING IVERMECTIN RESISTANCE IN *BRUGIA PAHANGI*

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STATUS OF NEGLECTED TROPICAL DISEASES IN MOROGORO REGION, TANZANIA MAINLAND

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THE NEMATODE PARASITE *ONCHOCERCA VOLVULUS* AND OTHER FILARIAE GENERATE THE TRANSFORMING GROWTH FACTOR-BETA (TGF-BETA)

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DEVELOPMENT OF GMP PROTOCOL FOR THE PRODUCTION OF R-BM14 BASED IGG4 ELISA KIT

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KINETOPLASTIDA – DIAGNOSIS AND TREATMENT

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CONGENITAL TRANSMISSION OF *TRYPANOSOMA CRUZI* IN SECOND GENERATION WISTAR RATS

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IMPORTANCE OF URINARY KINETIC TO VALUE THE DISPOSITION OF EXPERIMENTAL PENTAVALENT ANTIMONY ULAMINA®

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LEAD OPTIMIZATION OF NOVEL BORON-CONTAINING DRUG CANDIDATES FOR THE TREATMENT OF HUMAN AFRICAN TRYPANOSOMIASIS

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COST-EFFECTIVENESS ANALYSIS OF COMBINATION THERAPIES FOR VISCERAL LEISHMANIASIS ON THE INDIAN SUBCONTINENT

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LOOK TO THE LESION: SYSTEMIC ANTIMONIAL THERAPY DOES NOT CURE EARLY PREULCERATIVE AMERICAN CUTANEOUS LEISHMANIASIS IN NORTHEASTERN BRAZIL

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EVALUATION OF COMPOUNDS FOR CUTANEOUS LEISHMANIAL ACTIVITY IN BALB/C MICE INFECTED WITH *LEISHMANIA MAJOR*

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EVALUATION OF NEW TESTS FOR EARLY DIAGNOSIS OF VISCERAL LEISHMANIASIS AND ITS COMPLICATIONS AT THE 'POINT-OF-CARE'

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REVERSED AMIDINES AS ANTI LEISHMANIAL AGENTS: *IN VIVO* EVALUATION OF CANDIDATE COMPOUNDS AGAINST VISCERAL LEISHMANIASIS IN HAMSTER MODEL

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Gideon K. Helegbe, Tetsuo Yanagi, Masachika Senba, Nguyen T. Huy, Mohammed N. Shuaibu, Akiko Yamazaki, Mihoko Kikuchi, Michio Yasunami, Kenji Hirayama
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EUROPEAN CONCERTED RESEARCH ACTION ON LIFE OR DEATH OF PROTOZOAN PARASITES

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(ACMCIP Abstract)

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METABOLOMIC ANALYSIS OF THE MALARIA PARASITE *PLASMODIUM FALCIPARUM*

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DISRUPTION OF LIPOYLATION IN THE *P. FALCIPARUM* MITOCHONDRION AND APICOPLAST IS LETHAL

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ELEVATED TNF RECEPTOR 2 IS AN INDICATOR OF PLACENTAL MALARIA BUT LEVELS DID NOT CORRELATE WITH MALARIA-ASSOCIATED LOW BIRTH WEIGHT BABIES

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MEROZOITE SURFACE PROTEIN 2 HAS A POTENTIAL ROLE IN THE ATTACHMENT OF *PLASMODIUM FALCIPARUM* MEROZOITES TO ERYTHROCYTES DURING INVASION

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MODIFICATION OF CD47 LEVELS ON *PLASMODIUM FALCIPARUM*-INFECTED ERYTHROCYTES

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SERUM BUT NOT CEREBROSPINAL FLUID ENDOTHELIN-1 LEVELS IN CHILDREN WITH CEREBRAL MALARIA ARE ASSOCIATED WITH NEUROLOGIC DEFICITS

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MALARIA - CHEMOTHERAPY

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COMPARATIVE EFFICACY AND SAFETY OF DIHYDROARTEMISININ PLUS AMODIAQUINE OR SULFADOXINE -PYRIMETHAMINE IN THE TREATMENT OF ACUTE UNCOMPLICATED *FALCIPARUM* MALARIA IN NIGERIAN CHILDREN

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AN OPEN RANDOMIZED CLINICAL TRIAL IN COMPARING TWO ARTESUNATE-BASED COMBINATION TREATMENTS [ARTESUNATE/ SULFAMETHOXYPYRAZINE/PYRIMETHAMINE (FIXED DOSE OVER 24 HOURS) AND ARTESUNATE/ AMODIAQUINE (FIXED DOSE OVER 48 HOURS)] ON *PLASMODIUM FALCIPARUM* MALARIA IN NIGERIAN CHILDREN

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A BAYESIAN APPROACH TO REDUCING MISCLASSIFICATION IN ANTIMALARIAL EFFICACY STUDIES

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SAFETY AND EFFICACY OF ARTEMETHER-LUMEFANTRINE (AL; COARTEM®) IN THE TREATMENT OF ACUTE, UNCOMPLICATED *FALCIPARUM* MALARIA IN ADULTS (>16 YEARS OLD): A POOLED ANALYSIS OF INDIVIDUAL PATIENT DATA

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SAFETY AND EFFICACY OF ARTEMETHER-LUMEFANTRINE (AL, COARTEM®) IN THE TREATMENT OF ACUTE, UNCOMPLICATED *FALCIPARUM* MALARIA IN CHILDREN (BELOW 16 YEARS OLD): A POOLED ANALYSIS OF INDIVIDUAL PATIENT DATA

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THERAPEUTIC EFFICACY AND EFFECTS OF ARTESUNATE-MEFLOQUINE AND MEFLOQUINE ON GAMETOCYTE CARRIAGE IN CHILDREN WITH UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN SOUTHWEST NIGERIA

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DIRECT SYNTHESIS OF CYCLOGUANIL AND MISLOCALIZATION OF MITOCHONDRIAL DIHYDROFOLATE REDUCTASE-THYMIDILATE SYNTHASE (DHFR-TS) IN ATOVAQUONE-PROGUANIL TREATED *P. FALCIPARUM*

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DOSE-DEPENDENT RISK OF NEUTROPENIA FOLLOWING SEVEN-DAY COURSES OF ARTESUNATE MONOTHERAPY IN ADULT CAMBODIAN PATIENTS WITH ACUTE *FALCIPARUM* MALARIA

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THE EFFECTS OF CHRONIC ADMINISTRATION OF LOPINAVIR/RITONAVIR ON THE PHARMACOKINETICS OF QUININE IN HEALTHY VOLUNTEERS

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MALARIA - DIAGNOSIS

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GLOBAL SEQUENCE VARIATION IN THE HISTIDINE-RICH PROTEIN 2 OF *PLASMODIUM FALCIPARUM*: IMPLICATIONS FOR PERFORMANCE OF RAPID DIAGNOSTIC TESTS FOR MALARIA

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MALARIA DIAGNOSIS BY POLYMERASE CHAIN REACTION BASED ASSAY USING A POOLING STRATEGY

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A COMPARISON OF THE SENSITIVITIES OF DETECTION OF *PLASMODIUM FALCIPARUM* GAMETOCYTES BY MAGNETIC FRACTIONATION, THICK BLOOD FILM, AND RT-PCR TECHNIQUES

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MALARIA-RELATED MORTALITY IN HOSPITALIZED UGANDAN CHILDREN IN AN AREA OF HIGH MALARIA TRANSMISSION

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HEALTH WORKERS' USE OF MALARIA RAPID DIAGNOSTIC TESTS (RDTS) TO GUIDE CLINICAL DECISION-MAKING IN RURAL DISPENSARIES, TANZANIA

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COMPARISON OF REAL-TIME PCR AND MICROSCOPY FOR DIAGNOSIS OF MALARIA IN MALAWIAN PREGNANT WOMEN

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USE OF ICT MAL PF RAPID DIAGNOSTIC TEST CASSETTES FOR POLYMERASE CHAIN REACTION (PCR) ANALYSIS OF *PLASMODIUM FALCIPARUM* RNA ANALYSIS IN ZAMBIA

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MOLECULAR TEST FOR *VIVAX* MALARIA WITH LOOP-MEDIATED ISOTHERMAL AMPLIFICATION METHOD IN CENTRAL CHINA

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DETECTION OF *P. FALCIPARUM* IN SALIVA USING RAPID DIAGNOSTIC TEST AND POLYMARASE CHAIN REACTION (PCR) IN PATIENTS WITH ACUTE UNCOMPLICATED MALARIA IN SOUTHWEST NIGERIA

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HIGH-THROUGHPUT QUANTITATIVE MULTIPLEX REVERSE TRANSCRIPTASE 5' NUCLEASE PCR ASSAY FOR QUANTITATION OF *PLASMODIUM FALCIPARUM* GAMETOCYTEMIA

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FIELD PERFORMANCE OF THE RAPID DIAGNOSTIC TESTS PARACHECK AND FALCIVAX IN TSUNAMI-AFFECTED DISTRICTS OF ACEH AND NIAS, INDONESIA

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USE OF THE INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS CRITERIA AND SYNDROMIC DIAGNOSIS OF MALARIA IN RURAL SIERRA LEONE

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IDENTIFICATION AND DEVELOPMENT OF A NOVEL CHEMICAL SERIES WITH ACTIVITY AGAINST BOTH BLOOD- AND LIVER-STAGES OF *PLASMODIUM FALCIPARUM*

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RANDOMIZED CLINICAL TRIAL (RCT) WITH A CROSSOVER STUDY DESIGN TO EXAMINE THE SAFETY AND PHARMACOKINETICS OF A 2100 MG DOSE OF AQ-13 AND THE EFFECTS OF A STANDARD FATTY MEAL ON ITS BIOAVAILABILITY

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INITIATING PRECLINICAL EVALUATIONS OF REVERSED CHLOROQUINES

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LOW DOSE CYSTEAMINE POTENTIATES THE ANTI-MALARIAL ACTIVITY OF ARTEMISININ DERIVATIVES *IN VIVO*

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TETRACYCLIC BENZOTHIAZEPINES: A NOVEL CLASS OF *PLASMODIUM FALCIPARUM* CYTOCHROME BC1 INHIBITORS

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PLASMODIUM FALCIPARUM GAMETOCYTOCIDAL ACTIVITY OF PROTEASOME INHIBITOR EPOXOMICIN

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(ACMCIP Abstract)

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METABOLIC PROFILING OF PRIMAQUINE USING *IN VITRO* AND *IN VIVO* APPROACHES

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IN VITRO AND *IN VIVO* METABOLISM AND DISPOSITION STUDIES OF IMIDAZOLIDINEDIONE ANALOGS

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IN VITRO AND *IN VIVO* METABOLIC PROFILE OF TWO DEOXO-IMIDAZOLIDINEDIONE ANALOGS

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IN VITRO METABOLISM AND DISPOSITION EVALUATIONS OF QUINOLINE METHANOL ANALOGS OF MEFLOQUINE MODIFIED AT THE 4-POSITION

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DEVELOPMENT OF A NETWORK OF INVESTIGATORS TO STUDY ANTIMALARIAL PROPHYLAXIS IN THE ASIA-PACIFIC REGION

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MALARIA – DRUG RESISTANCE

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RAPID INCREASES IN THE PREVALENCE OF PFDHFR AND PFDHPS MUTANT HAPLOTYPES DURING THE PERIOD OF SP USE AS THE FIRST-LINE ANTIMALARIAL IN KISUMU, KENYA

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COLOMBIAN NETWORK FOR SURVEILLANCE OF *PLASMODIUM FALCIPARUM IN VITRO* SUSCEPTIBILITY TO ANTIMALARIAL DRUGS: PARASITE'S PHENOTYPE AFTER THE ARTEMISININ-BASED COMBINATION THERAPIES (ACT) IMPLEMENTATION

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A RAPID PYROSEQUENCING METHOD FOR DETECTION OF SINGLE NUCLEOTIDE POLYMORPHISM (SNPS) ASSOCIATED WITH ANTIMALARIAL RESISTANCE

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SCREENING AND GENETIC MAPPING TARGETS OF DIFFERENTIAL CHEMICAL-RESPONSE PHENOTYPES IN *PLASMODIUM FALCIPARUM*

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(ACMCIP Abstract)

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ACCUMULATION OF CHLOROQUINE (CQ) AND AN INVESTIGATIONAL AMINOQUINOLINE (AQ-13) BY CQ-SUSCEPTIBLE AND CQ-RESISTANT *PLASMODIUM FALCIPARUM*

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(ACMCIP Abstract)

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THE GENETIC BACKGROUND OF *PLASMODIUM FALCIPARUM* DETERMINES THE EXTENT TO WHICH MUTANT PFCRT CONFERS RESISTANCE TO CHLOROQUINE

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BALANCING FITNESS COSTS WITH CHLOROQUINE RESISTANCE: A "RAISON D'ÊTRE" FOR NOVEL PFCRT ALLELES IN SOUTHEAST ASIA?

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MOLECULAR CHARACTERIZATION OF RESISTANCE TO ARTEMISININ DRUGS IN *PLASMODIUM FALCIPARUM*

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ANTI-MALARIAL TREATMENT REGIMES FROM AN EVOLUTIONARY PERSPECTIVE

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VALIDATION OF PLATE COATING AND STORAGE TECHNIQUES FOR *IN VITRO* DRUG SENSITIVITY TESTING OF PIPERAQUINE, PYRONARIDINE, AND LUMIFANTRINE

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COMPARISON OF GENOTYPING USING CAPILLARY VS. GEL ELECTROPHORESIS FOR TWO ANTIMALARIAL DRUG EFFICACY TRIALS IN UGANDA

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***IN VITRO* DRUG SENSITIVITY-PHARMACODYNAMIC CORRELATES IN A CLINICAL TRIAL OF VARYING DOSES OF ARTESUNATE IN CAMBODIAN ADULT PATIENTS WITH UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA**

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MALARIA - EPIDEMIOLOGY

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A NEW MALARIA EXPERIMENTAL CHALLENGE SYSTEM; INFECTION OF VOLUNTEERS BY THE BITE OF ASEPTIC *ANOPHELES STEPHENSI* MOSQUITOES INFECTED WITH *PLASMODIUM FALCIPARUM* (NF54) SPOROZOITES

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ESTIMATING THE RATE OF ACQUIRING IMMUNITY TO SEVERE DISEASE DUE TO *PLASMODIUM FALCIPARUM* WITH AGE AND EXPOSURE

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ASYMPTOMATIC CARRIAGE OF *P. FALCIPARUM* PARASITES PROTECT AGAINST MALARIA ATTACKS DURING THE MALARIA HIGH TRANSMISSION SEASON IN CHILDREN UNDER FIVE YEARS LIVING IN A RURAL AREA OF BURKINA FASO

Tiono B. Alfred, Ouedraogo Alphonse, Diarra Amidou, Sanon Souleymane, Yaro Jean Baptist, Ouedraogo Espérance, Ouedarogo Amathe, Soulama Issiaka, Bougouma Edith, Konaté T. Amadou, Nébié Issa, Sirima B. Sodiomon
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BURDEN OF MALARIA IN PREGNANCY IN AREAS OF STABLE AND UNSTABLE MALARIA TRANSMISSION IN CHHATTISGARH, INDIA

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DISTRIBUTION OF HAPLOTYPES CARRIED BY PFCRT, PFDHFR AND PFDHPS IN TWO NEIGHBOURING GEOGRAPHICAL SITES FROM SOUTHERN COTE D'IVOIRE

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(ACMCIP Abstract)

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GENETIC DIVERSITY IN THE *P. FALCIPARUM* AND *P. VIVAX* MALARIA CELTOS GENE FROM SOUTHEAST ASIA, AFRICA AND SOUTH AMERICA REVEALS A HIGHLY CONSERVED GENE WITH FOCAL REGIONS OF NON-SYNONOMOUS MUTATIONS UNDER IMMUNE SELECTIVE PRESSURE CONFIRMED BY GENE SEQUENCING, 3D STRUCTURE PREDICTION AND PEPTIDE MAPPING

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ASSESSMENT OF MALARIA MORTALITY IN AFRICAN CHILDREN LIVING IN A MALARIA STABLE TRANSMISSION AREA IN BURKINA FASO: A PART OF MALARIA VACCINE TRIALS SITE CHARACTERISATION STUDY

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THE DYNAMICS OF MIXED AND ALTERNATING SPECIES INFECTIONS OF *PLASMODIUM VIVAX* AND *P. FALCIPARUM* IN LOW TRANSMISSION AREAS.

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THE LONGITUDINAL PROROGATION OF COMPLEX *P. FALCIPARUM* INFECTIONS CULTIVATES GENETICALLY DISTINCT CLONAL POPULATIONS

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GENETIC DIVERSITY OF *PLASMODIUM FALCIPARUM* FROM WESTERN KENYA HIGHLAND AREAS PRONE MALARIA EPIDEMICS

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SEVERE MALARIA IN BATTAMBANG REFERRAL HOSPITAL, CAMBODIA FROM 2006 TO 2008

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VALIDATING SEVERE ANEMIA AS A PROXY FOR MALARIA: EVIDENCE FROM A NATIONAL SURVEY

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MALARIA - IMMUNOLOGY

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LIMITED GLOBAL DIVERSITY OF ANTIBODY EPITOPES EXPRESSED BY PLACENTAL BINDING *PLASMODIUM FALCIPARUM* VARIANTS

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(ACMCIP Abstract)

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ANTIBODIES AGAINST THE ERYTHROCYTE BINDING ANTIGENS OF *PLASMODIUM FALCIPARUM* ARE STRONGLY ASSOCIATED WITH PROTECTION AGAINST CLINICAL MALARIA AND HIGH PARASITEMIA

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ACQUISITION OF ANTIBODIES TO MEROZOITE SURFACE PROTEIN 3 AMONG RESIDENTS OF KOROGWE, NORTHEASTERN TANZANIA

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(ACMCIP Abstract)

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BIOMARKERS OF IMMUNO-HEMATOLOGICAL RELEVANCE ASSOCIATED WITH SEVERE MALARIA ANAEMIA IN GHANAIAN CHILDREN

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ANTIBODY RESPONSES TO EBA-175 REGION II IN ADULTS AND CHILDREN IN A MALARIA ENDEMIC AREA OF GHANA

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RELATIONSHIP BETWEEN CLINICAL MALARIA AND IGG RESPONSES TO A PANEL OF MALARIA SPECIFIC VACCINE CANDIDATES IN CHILDREN LIVING IN SEASONAL MALARIA TRANSMISSION AREA OF BURKINA FASO

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CYTOKINE BIOMARKERS OF ASYMPTOMATIC MALARIA

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GENE CONTENT POLYMORPHISMS OF KILLER CELL IMMUNOGLOBULIN-LIKE RECEPTORS (KIRS) IN THE SUSCEPTIBILITY TO AND PROTECTION FROM PLACENTAL MALARIA IN HIV-1 NEGATIVE AND HIV-1 POSITIVE PREGNANT WOMEN IN WESTERN KENYA

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MSP-1_{19} HAPLOTYPE SPECIFICITY OF FUNCTIONAL ANTI-MSP-1_{19} ANTIBODIES IN PEDIATRIC ACUTE MALARIA INFECTION

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ENGINEERING APICAL MEMBRANE ANTIGEN-1 TO OVERCOME ANTIGENIC DIVERSITY IN THIS MALARIA VACCINE CANDIDATE

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EXAMINATION OF HUMORAL AND CELLULAR MEMORY RESPONSES TO *PLASMODIUM FALCIPARUM* IN THE PERUVIAN AMAZON

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MALARIA – MOLECULAR BIOLOGY

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MASSIVELY PARALLEL PYROSEQUENCING TO DEFINE IN HOST DIVERSITY OF *PLASMODIUM FALCIPARUM*: BLANTYRE, MALAWI

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COMPARISON OF THREE DNA EXTRACTION METHODS FROM BLOOD SAMPLES COLLECTED IN MALARIA RAPID DIAGNOSTIC TESTS (MRDTS)

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(ACMCIP Abstract)

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ASYMPTOMATIC MALARIA DETECTION BY PCR AMONG A COLLATERAL NATIVE POPULATION IN AN ENDEMIC REGION AT THE PERUVIAN-ECUADORIAN BORDER

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TARGET PROTEINS OF THE CYTOSOLIC THIOREDOXIN IN *PLASMODIUM FALCIPARUM*

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USE OF MICROSATELLITE MARKERS TO DISTINGUISH RECRUDESCENCE FROM REINFECTION IN *PLASMODIUM VIVAX* INFECTIONS FROM THE PERUVIAN AMAZON BASIN

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GENETIC DIVERSITY ON RE-EMERGED *P. VIVAX* IN SOUTH AND NORTH KOREA

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LISP1 IS IMPORTANT FOR THE EGRESS OF *PLASMODIUM* PARASITES FROM LIVER CELLS

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A HIGHLY SENSITIVE REAL-TIME REVERSE TRANSCRIPTION-PCR ASSAY FOR DETECTION OF *PLASMODIUM FALCIPARUM* GAMETOCYTES USING A SINGLE AMPLIFICATION STEP

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PROTOXIN CRY1AC INDUCES PROTECTION AGAINST *P. BERGHEI ANKA* AND *P. CHABAUDI* AS IN CBA/CA MICE

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THE IDENTIFICATION OF MOLECULAR MARKERS FOR DORMANCY IN *PLASMODIUM FALCIPARUM*

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ROUTES OF MALARIA VACCINE AND CHALLENGE ADMINISTRATION: TRANSITION FROM MOSQUITO TO NEEDLE AND SYRINGE

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ROLE OF GLUTAMINE SYNTHETASE AND GLUTAMATE SYNTHASE (GS/GLTS) IN _AEDES AEGYPTI_ FAT BODY METABOLISM

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MOLECULAR ANALYSIS OF PROTEASE FUNCTION IN THE MIDGUT OF BLOOD FED _AEDES AEGYPTI_ MOSQUITOES

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AN RNAI-BASED FORWARD GENETIC TOOL FOR ANALYSIS OF MOSQUITO CELLULAR RESPONSES TO DENGUE VIRUS INFECTION

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MOLECULAR BASIS OF THE ESSENTIAL AMINO ACID ABSORPTION IN VECTOR MOSQUITOES

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MOSQUITO VISION: MOLECULAR EVOLUTION AND FUNCTIONAL CHARACTERIZATION OF THE OPSINS IN *ANOPHELES GAMBIAE* AND *AEDES AEGYPTI*

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GENE EXPRESSION PROFILE ASSOCIATED WITH BLOOD FEEDING AND *PLASMODIUM FALCIPARUM* INFECTION IN THE MALARIA VECTOR *ANOPHELES FUNESTUS*

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POPULATION CYTOGENETICS OF *ANOPHELES MOUCHETI* AND *ANOPHELES NILI*

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A SURVEY OF TWO SPECIES IN THE MINIMUS GROUP FROM MALARIA ENDEMIC AREAS IN WESTERN THAILAND

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ANOPHELES ARABIENSIS FEEDING BEHAVIOR AND ITS RELATIONSHIP TO THE DEMOGRAPHICS OF INSECTICIDE-TREATED BED NET USE IN MACHA, ZAMBIA

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STRUCTURE AND PUTATIVE FUNCTIONS OF THE ANTERIOR AND POSTERIOR LARVAL INTIMAL REMNANTS IN THE MOSQUITO ALIMENTARY CANAL

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EVALUATION OF *AEDES AEGYPTI* RESTING PREFERENCES IN EXPERIMENTAL HUTS IN IQUITOS, PERU

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SUSCEPTIBILITY OF *AE. AEGYPTI* TO ORAL INFECTION WITH MAYARO VIRUS

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THE RELATIONSHIP BETWEEN HOST ABUNDANCE AND PER-HOST FEEDING DENSITY OF *CULEX QUINQUEFASCIATUS SAY* (DIPTERA: CULICIDAE)

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EFFECT OF DENGUE II VIRUS INFECTION ON PROTEIN EXPRESSION IN THE HEAD AND THORAX OF *AEDES AEGYPTI* MOSQUITOES

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ENVIRONMENTAL FACTORS ASSOCIATED WITH THE MALARIA VECTORS *ANOPHELES GAMBIAE* S.L AND *ANOPHELES FUNESTUS* IN KENYA

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TEMPORAL ASSOCIATIONS BETWEEN *CULEX TARSALIS* ABUNDANCE AND WESTERN EQUINE ENCEPHALOMYELITIS VIRUS TRANSMISSION

Christopher M. Barker[1], Bruce F. Eldridge[1], Wesley O. Johnson[2], Bborie K. Park[1], William K. Reisen[1]
[1]University of California, Davis, CA, United States, [2]University of California, Irvine, CA, United States

981

UNDERSTANDING THE EFFECTS OF CLIMATE ON MALARIA TRANSMISSION

Krijn Paaijmans, Simon Blanford, Andrew Bell, Andrew Read, Matthew Thomas
Pennsylvania State University, University Park, PA, United States

982

BITING BEHAVIOR OF *ANOPHELES MINIMUS THEOBALD* (DIPTERA:CULICIDAE) IN NORTHERN PROVINCE, A SITE OF HIGH MALARIA INCIDENCE IN THAILAND

Wannapa Suwonkerd[1], Nanatawan Suwannachote[1], Theeraphap Chareonviriyaphap[2]
[1]Office of Disease Prevention and Control, Ministry of Public Health, Chiang Mai, Thailand, [2]Faculty of Entomology, Department of Agriculture, Kasetsart University, Bangkok, Thailand
(ACMCIP Abstract)

983

COMPARATIVE KINETICS OF SOUTHEAST ASIAN DENGUE VIRUSES WITHIN AND BETWEEN SEROTYPES

Rebecca C. Christofferson, Christopher N. Mores
Louisiana State University, Baton Rouge, LA, United States

984

EVALUATION OF A NEW LONG LASTING INSECTICIDAL NET (NETPROTECT®) ON INDOOR RESTING ACTIVITY AND ON HUMAN MALARIA INCIDENCE IN VILLAGES IN WESTERN KENYA

Ojera Odhiambo[1], John Vulule[2], L. Odeny[2], N. Mulaya[2], E. D. Kokwaro[2], **Ole Skovmand**[3]
[1]Kenyatta University, Nairobi, Kenya, [2]KEMRI, Kisumu, Kenya, [3]Intelligent Insect Control, Castelnau le Lez, France

PNEUMONIA, RESPIRATORY INFECTIONS AND TUBERCULOSIS

985

CD36 DEFICIENCY AND RESISTANCE TO MYCOBACTERIAL INFECTION

Michael Hawkes, Xiaoming Li, Maryanne Crockett, Angelina Diassiti, Constance Finney, Gundula Min-Oo, W. Conrad Liles, Jun Liu, Kevin Kain
University of Toronto, Toronto, ON, Canada

986

PITFALLS IN DIAGNOSING CNS TUBERCULOSIS

Deborah Asnis, Tamar Toronjadze, Robert Rilpuou, Anil Kapoor, Jordan A Kazakov, Chiminyan Sathyakumar
Flushing Hospital Medical Center, Flushing, NY, United States

987

MOLECULAR CHARACTERIZATION OF HUMAN METAPNEUMOVIRUS ISOLATES FROM PERU, HONDURAS AND COLOMBIA: 2008-2009

Maria E. Gamero[1], Merly Sovero[1], Josefina Garcia[1], Jane Rios[1], Ivette Lorenzana[2], Ana E. Arango[3], Victor Ocaña[4], Gloria Chauca[1], Jose L. Huaman[1], V. Alberto Laguna-Torres[1], Patricia V. Aguilar[1], Tadeusz Kochel[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Universidad Nacional Autonoma de Honduras, Tegucigalpa, Honduras, [3]Grupo de Inmunologia, Universidad de Antioquia, Medellin, Colombia, [4]Centro de Salud Pachitea/Ministerio de Salud, Piura, Peru

988

DF152 AS A NEW MOLECULE TO TREAT TUBERCULOSIS AND OTHER NEGLECTED MYCOBACTERIAL INFECTIONS

Anny Fortin[1], Shahid Soomro[1], Paul Stoppie[1], Sarah Cauwenbergh[1], Sabine Ruesch-Gerdes[2], Frans Herwig Jansen[1]
[1]Dafra Pharma Re3D bvba, Turnhout, Belgium, [2]National Reference Center for Mycobacteria, Research Center Borstel, Borstel, Germany

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ASSOCIATION BETWEEN HTLV-1 INFECTION AND TUBERCULOSIS: EPIDEMIOLOGICAL AND CLINICAL ASPECTS

Maria de Loudes S. Bastos[1], Beth Osterbauer[2], Daniel L. Mesquita[3], Carlos A. Carreira[3], Maria Juliana Albuquerque[3], Leandro Silva[3], Daniele N. Pereira[3], Lee Riley[2], Edgar M. Carvalho[4]
[1]Hospital Especializado Octavio Mangabeira, Salvador - BA, Brazil, [2]University of California at Berkley, Berkley, CA, United States, [3]Escola Bahiana de Medicina e Saúde Pública, Salvador - BA, Brazil, [4]Federal University of Bahia, Salvador - BA, Brazil

990

IDENTIFICATION OF ENTEROVIRUS ISOLATIONS IN CHILDREN WITH INFLUENZA-LIKE ILLNESS IN SOUTH AMERICA

Jose L. Huaman[1], Maria E. Gamero[1], Ana E. Arango[2], Washington Aleman[3], Wilson Chicaiza[4], Gloria Rey[5], Nicolas Aguayo[6], Guillermo Comach[7], Cecilia Rivera[1], Gloria Chauca[1], V. Alberto Laguna-Torres[1], Melvin Barrantes[8], Tadeusz Kochel[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Grupo de Inmunovirologia, Universidad de Antioquia, Medellin, Colombia, [3]Hospital Vernaza, Guayaquil, Ecuador, [4]Hospital Vozandes, Quito, Ecuador, [5]Instituto Nacional de Salud, Bogota, Colombia, [6]Asociacion Rayos de Sol, Asuncion, Paraguay, [7]Laboratorio Regional de Diagnostico e Investigación del Dengue y otras Enfermedades Virales, Maracay, Venezuela, [8]Hospital Materno Infantil San Francisco Solano, Buenos Aires, Argentina

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THE PITFALLS IN DIAGNOSING CENTRAL NERVOUS SYSTEM MENINGITIS

Robert Rilpuou, Deborah Asnis, Tamar Toronjadze, Jordan Kazakov
Flushing Hospital Medical Center, Flushing, NY, United States

992

DEVELOPMENT OF A SINGLE DOSE, POX-VIRUS BASED VACCINE FOR HIGHLY VIRULENT AVIAN INFLUENZA VIRUSES (H5N1)

Jeremy C. Jones[1], Tim D. Powell[2], Brock Bakke[3], Joseph N. Brewoo[1], Charalambos D. Partidos[1], Dan T. Stinchcomb[2], Jorge E. Osorio[3]
[1]Inviragen, Inc., Madison, WI, United States, [2]Inviragen, Inc., Fort Collins, CO, United States, [3]University of Wisconsin, Madison, WI, United States

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ANTIBIOTIC SUSCEPTIBILITY AND SEROTYPES OF *STREPTOCOCCUS PNEUMONIAE* FROM INVASIVE DISEASE IN RURAL THAILAND, 2005-2009

Prasert Salika[1], Leelaowadee Sangsuk[2], Possawat Jorakate[1], Anek Kaewpan[1], Duangkamon Siludjai[1], Sopida Pookit[2], Surang Dejsirilert[2], Sumalee Boonmar[1], Leonard Peruski[1]
[1]International Emerging Infections Program, Nonthaburi (Bangkok), Thailand, [2]National Institute of Health, Ministry of Public Health, Nonthaburi (Bangkok), Thailand

994

SENTINEL HUMAN SURVEILLANCE FOR INFLUENZA AT HEALTH CARE FACILITIES IN KATHMANDU

Sanjaya K. Shrestha[1], Julie A. Pavlin[2], Khin S. Myint[2], **Bishnu K. Shrestha**[1], Robert V. Gibbons[2], Binob Shrestha[1], Kittinun Hussem[2], Bishnu B. Rayamajhi[1], Richard G. Jarman[2]
[1]Walter Reed/AFRIMS Research Unit Nepal, Kathmandu, Nepal, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

VIRUSES - OTHER

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EMERGENCE OF DENGUE VIRUS SEROTYPE 4 IN NORTHERN PERU

Brett M. Forshey[1], Amy C. Morrison[2], Cristhopher Cruz[3], Claudio Rocha[2], Stalin Vilcarromero[2], Carolina Guevara[3], Daria E. Camacho[4], Araceli Alava[5], Cesar Madrid[6], Luis Beingolea[7], Victor Suarez[8], Guillermo Comach[4], Tadeusz Kochel[3]
[1]Naval Medical Research Center Detachment, Lima and Iquitos, Peru, [2]Naval Medical Research Center Detachment, Iquitos, Peru, [3]Naval Medical Research Center Detachment, Lima, Peru, [4]Laboratorio Regional de Diagnóstico e Investigación del Dengue y otras Enfermedades Virales, Maracay, Venezuela, [5]Instituto Nacional de Higiene y Medicina Tropical "Leopoldo Izquieta Perez", Guayaquil, Ecuador, [6]Hospital Naval de Guayaquil, Guayaquil, Ecuador, [7]Direccion General de Epidemiologia/ Ministerio de Salud, Lima, Peru, [8]Instituto Nacional de Salud, Lima, Peru

996

LAGUNA NEGRA VIRUS ASSOCIATED WITH HUMAN ILLNESS IN PARAGUAY

Vidal Felices[1], Nicolas Aguayo[2], V. Alberto Laguna-Torres[1], Patricia V. Aguilar[1], Cristhopher Cruz[2], Ivan Allende[3], Alma Barboza[2], Tadeusz Kochel[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Asociacion Rayos de Sol, Asuncion, Paraguay, [3]Ministry of Health, Asuncion, Paraguay

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CHIKUNGUNYA VIRUS ANTIBODY IN TRAVELERS

Natasha K. Soodoo[1], Elizabeth D. Barnett[1], Abbie Stevenson[1], Stephen I. Pelton[1], Emad Yanni[2], Nina Marano[2], Lin H. Chen[3], Mary E. Wilson[4], Winnie W. Ooi[5], Laura Kogelman[6], Adolf W. Karchmer[7], Davidson H. Hamer[8]
[1]Boston Medical Center, Boston, MA, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Mount Auburn Hospital, Cambridge, MA, United States, [4]Harvard School of Public Health, Boston, MA, United States, [5]Lahey Clinic, Burlington, MA, United States, [6]Tufts Medical Center, Boston, MA, United States, [7]Beth Israel Deaconess, Boston, MA, United States, [8]Boston University School of Public Health, Boston, MA, United States

998

ARBOVIRUSES CIRCULATING IN BOLIVIA 2008 - 2009

E. Roxana Caceda[1], Juan Sulca[1], Patricia V. Aguilar[1], Jorge Vargas[2], Yelin Roca[2], Carolina Guevara[1], Tadeusz Kochel[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Centro Nacional de Enfermedades Tropicales, Santa Cruz, Bolivia

999

CELLULAR RESPONSE TO RIFT VALLEY FEVER VIRUS INFECTION

Kimberly K. Gray, Michael R. Holbrook
University of Texas Medical Branch, Galveston, TX, United States

1000

MATERNAL AND NEONATAL DEATHS ASSOCIATED WITH ACUTE JAUNDICE DURING PREGNANCY IN BANGLADESH: USING VERBAL AUTOPSY DATA TO ESTIMATE OF THE BURDEN OF HEPATITIS E INFECTION

Emily Gurley, Amal K. Halder, Peter K. Streatfield, H. M. Shahed Sazzad, M. Tarique Huda, M. Jahangir Hossain, Stephen P. Luby
International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

1001

EMERGING VIRAL ZOONOSES IN AZERBAIJAN: A CROSS-SECTIONAL STUDY

Danielle V. Clark[1], Afrail Ismayilov[2], Esmiralda Seyidova[2], Ayten Hajiyeva[3], Sevinj Bakhishova[2], Huseyn Hajiyev[2], Tahir Nuriyev[4], Saleh Piraliyev[4], Sadigulla Bagirov[4], Afag Aslanova[5], Amanda Lane[6], Maqsud Qasimov[2], Matthew J. Hepburn[6]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Anti-Plague Station, Baku, Azerbaijan, [3]Republican Veterinary Laboratory, Baku, Azerbaijan, [4]Center for Hygiene and Epidemiology, Quba, Qusar, Xachmaz, Azerbaijan, [5]Raytheon Technical Services Company, Baku, Azerbaijan, [6]United States Army Research Institute for Infectious Diseases, Fort Detrick, MD, United States

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PHYLOGENY OF EASTERN EQUINE ENCEPHALITIS VIRUS IN FLORIDA

Gregory S. White[1], Lillian M. Stark[2], Christy L. Ottendorfer[3], Thomas R. Unnasch[3]
[1]University of Alabama at Birmingham, Birmingham, AL, United States, [2]Florida Department of Health, Bureau of Laboratories-Tampa, Tampa, FL, United States, [3]GHIDR Program, University of South Florida, Tampa, FL, United States

1003

BASELINE KAP SURVEY: AVIAN INFLUENZA IN THE INCIDENCE AREAS OF TANGERANG, BANTEN PROVINCE, INDONESIA

Lisa Safira, Alyya S. Siregar
Faculty of Medicine, Pembangunan Nasional Veteran Jakarta University, Jakarta Selatan, Indonesia

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A COMPARISON OF THE INFECTION DYNAMICS OF HOUSE SPARROW AND COTTON RATS WITH NORTH AND SOUTH AMERICAN EASTERN EQUINE ENCEPHALITIS VIRUS

Nicole Arrigo[1], Douglas M. Watts[2], Patrick C. Newman[1], Scott C. Weaver[1]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]University of Texas El Paso, El Paso, TX, United States

1005

DENGUE SMS SURVEILLANCE PROJECT IN THE PHILIPPINES

Jacqueline Coberly[1], Richard Wojcik[1], Agnes D. Tomayao[2], IIya A. Tac-an[3], John Mark S. Velasco[4], Sheri Lewis[1]
[1]JHU Applied Physics Laboratory, Laurel, MD, United States, [2]USAMC-AFRIMS/ Philippines-AFRIMS Virology Research Unit, Cebu City, Philippines, [3]Cebu City Health Department/City Epidemiology Surveillance Statistics Unit, Cebu City, Philippines, [4]PAVRU, Manila, Philippines

Poster Session C ACMCIP Abstracts – Molecular, Cellular and Immunoparasitology
617, 621, 623, 626, 630, 632, 637, 638, 643, 646, 753, 755, 758, 782, 819, 820, 824, 840, 842, 846, 857, 861, 866, 868, 879, 888, 889, 892, 901, 910, 912, 913, 914, 915, 916, 918, 920, 925, 930, 950, 956, 959, 982

Membership Committee Meeting

Room 8217
Saturday, November 21, 12:15 p.m. - 1:15 p.m.

Certificate Exam Committee Meeting

Room 8212
Saturday, November 21, 12:15 p.m. - 1:15 p.m.

Mid-Day Session 133A

Workshop on Manuscript Preparation: How to Get Your Work Published

Delaware A
Saturday, November 21, 12:15 p.m. - 1:15 p.m.

This workshop is intended for students and junior scientists who are not extensively familiar with manuscript publication processes. The workshop will be interactive and discuss the manuscript submission process and provide tips on how to avoid the most common mistakes.

CHAIR

Serap Aksoy
Yale University, New Haven, CT, United States

Barbara Sina
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

SCIENTIFIC MANUSCRIPT WRITING

Serap Aksoy
Yale University School of Public Health, New Haven, CT, United States

Mid-Day Session 134

Video on Cuba's Role in the Global Health Crisis

Delaware B
Saturday, November 21, 12:15 p.m. - 1:15 p.m.

From the shores of Africa to the Americas, the documentary film, !Salud!, hits the road with some of the 28,000 Cuban health professionals serving in 68 countries, and explores the hearts and minds of international medical students in Cuba—now numbering 30,000, including nearly 100 from the USA. Their stories plus testimony from experts around the world bring home the competing agendas that mark the battle for global health, and the complex realities confronting the movement to make healthcare everyone's birth right.

CHAIR

Peter Bourne
MEDICC, Washington, DC, United States

12:15 p.m.

VIDEO PRESENTATION

12:45 p.m.

DISCUSSION

Meet the Professors 135

Meet the Professors C: Enigmatic and Teaching Cases

Virginia C
Saturday, November 21, 12:15 p.m. - 1:15 p.m.

A panel of professors will present one clinical case each of a tropical disease specific to a particular region that they have found a challenge to manage or diagnose. If there is time, participants may be able to present enigmatic cases for the audience and panel to consider.

CHAIR

Davidson H. Hamer
Boston University School of Public Health, Boston, MA, United States

PANELISTS

David Shlim
Jackson Hole Travel and Tropical Medicine, Jackson Hole, WY, United States

Eli Schwartz
Tel-Aviv University, Tel-Aviv, Israel

Poster Session C Viewing

Exhibit Hall B South
Saturday, November 21, 1:30 p.m. - 7 p.m.

Symposium 136

Progress Towards Predicting and Preventing Outbreaks of Vector-Borne Disease Utilizing Satellite Remote Sensing Technology and Models

Salon 1

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

The symposium is designed to update the progress in the using Remote Sensing to predict and mitigate vector-borne disease. The speakers will discuss models developed by NASA and their partners for application of the research results for improved prevention and prediction of outbreaks. We will discuss new finding from the projects that were introduced last year and also present new projects that are using NASA data.

CHAIR

Sue M. Estes
NASA/USRA, Huntsville, AL, United States

1:30 p.m.

AN UPDATE OF NASA PUBLIC HEALTH APPLICATIONS PROJECTS USING REMOTE SENSING DATA

Sue M. Estes
NASA/USRA, Huntsville, AL, United States

1:55 p.m.

ROLES OF REMOTE SENSING AND GIS IN AVIAN AND PANDEMIC INFLUENZA SURVEILLANCE AND RISK PREDICTION

Richard Kiang
NASA, Greenbelt, MD, United States

2:20 p.m.

ENHANCING MALARIA EARLY WARNING SYSTEMS (MEWS) WITH EARTH OBSERVATION AND MODELING RESULTS

Stephen Connor
International Research Institute for Climate and Society (IRI), New York, NY, United States

2:45 p.m.

MOSQUITO-BORNE ENCEPHALITIS VIRUS INTEGRATION USING REMOTE SENSING FOR INTERVENTION DECISION SUPPORT SYSTEMS

William K. Reisen
University of California - Davis, Davis, CA, United States

Symposium 137

Malaria Control in Africa for Sustained Impact: Mapping the Transition from Program Scale-up to Elimination

Salon 2

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

Scale-up for Impact (SUFI) has served as a framework for national program implementation, with an emphasis on rapid national-scope attainment of high prevention coverage with documentation of programming impact on the burden of malaria. The programming approaches required to implement SUFI are based on the public health planning, resourcing, implementation and evaluation cycle (the PRIME) and a core set of essential methodologies for malaria program scale-up. Zambia, Swaziland and Ethiopia have documented attaining program coverage of a consensus package of malaria interventions in the 60-80 % range. Inputs (i.e., resources invested, commodities procured), actions (i.e., teams organized, people trained, districts engaged) and outputs (i.e., prevention interventions [ITNs, and IRS] and diagnostics and drugs distributed) have grown steadily, especially in the past three years. Outcomes (i.e., increasing nationwide coverage of interventions) have similarly improved dramatically in successive years. The declaration of expanded ambitions for malaria control, including elimination and eradication, poses a new set of programming. SUFI has proven to be a coherent framework for launching national malaria control programming, but does not constitute a sustainable approach longer-term to maintain malaria burden at low levels or elimination. The transition from a campaign approach to programming for sustained impact creates new criteria of program success. National program competency to maintain low malaria transmission and burden, the capacity to define highly cost-efficient program strategies and to assure financing loom as major challenges. National experiences in planning for sustained impact on malaria will build our collective knowledge on how countries in the Africa region can not only realize, but also sustain, low malaria burden.

CHAIR

Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Partnership in Africa (MACEPA), Seattle, WA, United States

1:30 p.m.

OPENING REMARKS

David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

1:40 p.m.

ZAMBIA: STRATEGIES TO SUSTAIN THE PROGRAM IMPACT ACHIEVED THROUGH SUFI

Elizabeth Chizema
Ministry of Health, Lusaka, Zambia

2 p.m.

ETHIOPIA: DEVELOPMENT OF A RISK STRATIFIED APPROACH TO FOCUS PROGRAM AND PREVENTING RESURGENCE

Kesetebirhan Admasu
Federal Ministry of Health, Addis Ababa, Ethiopia

2:25 p.m.

SWAZILAND: PROGRAMMING WITH NEIGHBORING COUNTRIES TO SUSTAIN MALARIA CONTROL AND ELIMINATION

Simon Kunene
Ministry of Health, Manzini, Swaziland

2:50 p.m.

DONORS AND TECHNICAL AGENCIES – SUPPORTING PLANNING, IMPLEMENTATION, AND FINANCING FOR SUSTAINED IMPACT

Duncan Earle
PATH, Ferney, France

Scientific Session 138

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Immunoparasitology II

Supported with funding from the Burroughs Wellcome Fund
Salon 3

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

CHAIR

Joao Carlos Aguiar
Naval Medical Research Center, Silver Spring, MD, United States

Ian A. Cockburn
Johns Hopkins University, Baltimore, MD, United States

1:30 p.m.

1152

DOMINANT CD8+ T CELL RESPONSES ARE ESSENTIAL FOR OPTIMAL CONTROL OF *TRYPANOSOMA CRUZI* INFECTION

Charles S. Rosenberg[1,2], Diana L. Martin[1], Rick L. Tarleton1[3]

[1]The Center for Tropical and Emerging Global Diseases and the Departments of [2]Microbiology and [3]Cellular Biology, University of Georgia, Athens, GA, United States

1:45 p.m.

1006

PRESENTATION OF CD8+ EPITOPES IN THE CIRCUMSPOROZOITE PROTEIN OF *P. BERGHEI* IS STRICTLY TAP DEPENDENT

Ian A. Cockburn[1], Sze-Wah Tse[1], Andrea J. Radtke[1], Yun-Chi Chen[1], Photini Sinnis[2], Fidel Zavala[1]

[1]Johns Hopkins Malaria Research Institute, Bloomberg School of Public Health, Baltimore, MD, United States, [2]Department of Medical Parasitology, New York University, New York, NY, United States

2 p.m.

1007

PROFILING ANTIBODY RESPONSES TO *P. FALCIPARUM* INFECTION BY PROTEIN MICROARRAY-A STRATEGY FOR IDENTIFYING NOVEL MALARIA VACCINE TARGETS

Peter D. Crompton[1], Matthew A. Kayala[2], Boubacar Traore[3], Kassoum Kayentao[3], Aissata Ongoiba[3], Greta E. Weiss[1], Douglas M. Molina[4], Chad R. Burk[5], Michael Waisberg[1], Algis Jasinskas[5], Safiatou Doumbo[3], Didier Doumtabe[3], Younoussou Kone[3], David L. Narum[6], Xiaowu Liang[4], Ogobara K. Doumbo[3], Louis H. Miller[6], Denise L. Doolan[7], Pierre Baldi[2], Philip L. Felgner[5], Susan K. Pierce[1]

[1]Laboratory of Immunogenetics, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [2]School of Information and Computer Sciences, Institute for Genomics and Bioinformatics, University of California, Irvine, CA, United States, [3]Malaria Research and Training Center, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [4]Antigen Discovery, Inc., Irvine, CA, United States, [5]Department of Medicine, Division of Infectious Diseases, University of California, Irvine, CA, United States, [6]Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [7]Molecular Vaccinology Laboratory, Queensland Institute of Medical Research, Brisbane, Australia

2:15 p.m.

1008

***VIVAX* MALARIA VACCINE DEVELOPMENT: TAKING CUES FROM NATURE**

Sope Olugbile[1], Akihide Takagi Takagi[1], Pu Liu[1], Malcolm Gardner[1], Ivan Dario Velez[2], Ruobing Wang[1]

[1]Seattle Biomedical Research Institute, Seattle, WA, United States, [2]Programa de Estudio y Control de Enfermedades Tropicales PECET. Universidad de Antioquia, Medellín, Colombia

2:30 p.m.

1009

DISCOVERING NOVEL PRE-ERYTHROCYTIC ANTIGENS FOR MALARIA VACCINES

Joao Carlos Aguiar[1], Jessica Bolton1, Joyce Wanga1, AnneMarie Urquhart[2], John B. Sacci[3], Keith Limbach[1], Takafumi Tsuboi[4], Chris Ockenhouse[2], Thomas L. Richie[1]

1Naval Medical Research Center, Silver Spring, MD, United States, 2Walter Reed Army Institute of Research, Silver Spring, MD, United States, 3The University of Maryland School of Medicine, Baltimore, MD, United States, 4Cell-Free Science and Technology Research Center, Ehime University, Matsuyama, Japan

2:45 p.m.

1010

IL-2-PRODUCING EFFECTOR MEMORY AND CENTRAL MEMORY CD4$^+$ T CELL SUBSETS ARE ASSOCIATED WITH PROTECTIVE IMMUNITY IN RTS,S-IMMUNIZED SUBJECTS

Joanne Lumsden[1], Robert J. Schwenk[1], Lisa Egner[1], Joe Cohen[2], Ripley Ballou[2], Opokua Ofori-Anyinam[2], Philippe Moris[2], Kent E. Kester[1], D. Gray Heppner[1], Urszula Krzych[1]

[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]GSK Biologicals, Rixensart, Belgium

3 p.m.

1011

GENETICALLY ATTENUATED VACCINES INDUCE CONTACT-DEPENDENT CD8$^+$ T CELL KILLING OF *PLASMODIUM YOELII* LIVER STAGE-INFECTED HEPATOCYTES

Megha Gupta[1], Adama Trimnell[1], Akihide Takagi1, Thomas L. Richie[2], Stefan H. Kappe[1], Ruobing Wang[1]

[1]Seattle Biomedical Research Institute, Seattle, WA, United States, [2]Naval Medical Research Center, Silver Spring, MD, United States

CHAIR

Ian A. Cockburn
Molecular Microbiology and Immunology, Johns Hopkins University, Baltimore, MD, United States

Scientific Session 139

Arthropods/Entomology

Delaware A

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

CHAIR

Laura C. Harrington
Cornell University, Ithaca, NY, United States

Michelle Helinski
Cornell University, Ithaca, NY, United States

1:30 p.m.

1012

INTERACTIONS BETWEEN MUTUALIST WIGGLESWORTHIA AND TSETSE PEPTIDOGLYCAN RECOGNITION PROTEIN (PGRP-LB) INFLUENCE TRYPANOSOME TRANSMISSION

Jingwen Wang, Yineng Wu, Guangxiao Yang, Serap Aksoy
Yale University, New Haven, CT, United States

1:45 p.m.

1013

THE MOSQUITO HEART: FUNCTIONAL MECHANICS AND ROLE IN MALARIA SPOROZOITE MIGRATION

Julian F. Hillyer, Jonas G. King, Justin D. Glenn
Vanderbilt University, Nashville, TN, United States
(ACMCIP Abstract)

2 p.m.

1014

GENE DUPLICATION AND GENOME EVOLUTION IN THE IXODIDAE

Janice Van Zee[1], Jason Meyer[1], Shannon Schlueter[1], Jessica Schlueter[1], Phil Dixon[2], Catherine Hill[1]
[1]Purdue University, West Lafayette, IN, United States, [2]Iowa State University, Ames, IA, United States

2:15 p.m.

1015

EFFICIENCY AND RELIABILITY OF RBCL AND CRCL[3] IN MARKING *TRIATOMA BRASILIENSIS* NYMPHS: PERSISTENCE AND INFLUENCE OF TRACE ELEMENTS ON INSECT BIOLOGY

Rafael M. Freitas, Otilia Sarquis, Livia S. Oliveira, Jailey M. Gonçalves, Reginalo L. Rego, Marli M. Lima
Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

2:30 p.m.

1016

FEED-THROUGH CONTROL FOR LARVAL SAND FLIES USING HOST-TARGETED INSECTICIDE

Gideon Wasserberg[1], Richard Poche[2], Larisa A. Polyakova[2], Michelle V. Chenault[1], Gabriela Zollner[1], Edgar D. Rowton[1], David Miller[2]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Genesis Laboratories, Inc., Wellington, CO, United States

2:45 p.m.

1017

ASSORTATIVE MATING IN THE DENGUE VECTOR MOSQUITO, *AEDES AEGYPTI*

Laura C. Harrington, Katherine J. Connors, Lauren J. Cator, Michelle E. Helinski
Cornell University, Ithaca, NY, United States

3 p.m.

1018

THE EFFECT OF MALE MATING HISTORY AND BODY SIZE ON FEMALE FECUNDITY AND LONGEVITY IN THE DENGUE VECTOR *AEDES AEGYPTI*

Michelle E. Helinski, Laura Sirot, Mariana F. Wolfner, Laura C. Harrington
Cornell, Ithaca, NY, United States

Symposium 140

Emerging Arboviral Infections among International Travelers

Delaware B

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

The geographic expansion of arboviral infections has also affected international travelers. International travelers have the potential both to acquire and to spread these infections. The most rapidly emerging arboviral diseases in travelers are dengue and chikungunya. It is paramount that health care providers have an understanding of the epidemiology and risk, clinical spectrum, diagnosis, management and prevention of these emerging diseases in travelers.

CHAIR

Annelies Wilder-Smith
National University of Singapore, Singapore, Singapore

Duane Gubler
Asia-Pacific Institute of Tropical Medicine and Infectious Disease, Honolulu, HI, United States

1:30 p.m.

THE EVOLUTION OF THE GEOGRAPHIC EXPANSION OF ARBOVIRAL INFECTIONS

Duane Gubler
Asia-Pacific Institute of Tropical Medicine and Infectious Disease, Honolulu, HI, United States

1:55 p.m.

DENGUE IN TRAVELERS

Eli Schwartz
Sheba Medical Center, Tel Hashomer, Israel

2:20 p.m.

EPIDEMIOLOGY AND CLINICAL MANIFESTATIONS OF CHIKUNGUNYA IN TRAVELERS

Philippe Parola
WHO Collaborating Centre for Rickettsioses and Arboviral Diseases, Marseille, France

2:45 p.m.

PREVENTION OF DENGUE AND CHIKUNGUNYA IN TRAVELERS

Annelies Wilder-Smith
National University of Singapore, Singapore, Singapore

Symposium 141

Rummaging Through Pharma's Attic: Taking Advantage of Industry's Unused Assets to Generate New Products for Infectious Diseases of the Developing World

Virginia AB
Saturday, November 21, 1:30 p.m. - 3:15 p.m.

Among members of the global health community, there is a keen interest in leveraging existing pharmaceutical assets to generate new medicines for infectious diseases of poverty, such as malaria, tuberculosis and kinetoplastid diseases. Access to the pharmaceutical and biotechnology industries' compound libraries, technology platforms and shelved products could expedite product discovery and development, while simultaneously reducing the overall costs of innovation. But gaining access to industry's assets requires more than goodwill alone. In this session, leaders from industry, academia and non-profit product development partnerships (PDPs) will discuss strategies for harnessing industry resources for new product innovation.

CHAIR

Christopher D. Earl
BIO Ventures for Global Health, Washington, DC, United States

1:30 p.m.

FINDING A DIAMOND IN THE ROUGH: SCREENING INDUSTRY'S LIBRARIES AGAINST TROPICAL PARASITES

James H. McKerrow
University of California, San Francisco, San Francisco, CA, United States

1:55 p.m.

RAIDING THE DEEP FREEZE: THE FEXINIDAZOLE STORY

Els Torreele
Drugs for Neglected Diseases Initiative, Geneva, Switzerland

2:20 p.m.

WILL THEY RESPECT YOU IN THE MORNING: FORGING PARTNERSHIPS WITH BIOTECH AND BIG PHARMA

Jörg J. Möhrle
Medicines for Malaria Venture, Geneva, Switzerland

2:50 p.m.

EXTENDING A HAND: ELI LILLY'S TB DRUG DISCOVERY PARTNERSHIP

Gail H. Cassell
Eli Lilly & Co., Indianapolis, IN, United States

Symposium 142

Managing Childhood Illness at Community Level: Good News from Africa

Virginia C
Saturday, November 21, 1:30 p.m. - 3:15 p.m.

Community Case Management (CCM) is recognized today as a critical public health strategy to reach the fourth Millennium Development Goal, especially in low- and middle-income countries. Malaria, pneumonia, diarrhea and neonatal infections contribute towards 76% of current mortality in children under five. Though there are effective interventions to prevent most of the deaths related to these conditions, they have failed to reach the children who need them most. CCM is a strategy that delivers anti-malarials, antibiotics and a combination of oral rehydration therapy and zinc at the community level by trained community health workers to the most vulnerable. The purpose of this symposium is to present recent evidence on CCM as part of a strategy to inform implementers, donors and policymakers and advocate for CCM scale-up.

CHAIR

Alexandra O. de Sousa
UNICEF, New York, NY, United States

Jennifer Bryce
Johns Hopkins University, Baltimore, MD, United States

1:30 p.m.

ZAMBIA INTEGRATED MANAGEMENT OF MALARIA AND PNEUMONIA

Kojo Yeboah-Antwi
Boston University, Boston, MA, United States

1:55 p.m.

LET'S TALK ABOUT SCALE: INTEGRATED COMMUNITY CASE MANAGEMENT IN SIX COUNTRIES

Emmanuel d'Harcourt
International Rescue Committee, New York, NY, United States

2:20 p.m.

QUALITY OF CASE MANAGEMENT SERVICES FOR PNEUMONIA, MALARIA AND DIARRHEA PROVIDED BY HEALTH SURVEILLANCE ASSISTANTS IN MALAWI

Cristina Cardemil
Johns Hopkins School of Public Health, Baltimore, MD, United States

2:45 p.m.

AN INTEGRATED APPROACH FOR THE CASE MANAGEMENT OF MALARIA AND PNEUMONIA AT COMMUNITY LEVEL IN UGANDA

James Tibenderana
Malaria Consortium, Kampala, Uganda

Symposium 143

The Spatial Scale of Dengue Virus Transmission: Implications for Disease Prevention

Washington 1

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

Network models of infectious disease transmission predict that insight into heterogeneity in the distribution and movement of infectious and susceptible individuals is fundamental to understanding and reducing pathogen transmission. Results from regional space-time studies have revealed dengue transmission networks that are highly synchronized over hundreds of kilometers. In this symposium, we will examine the spatial scale of dengue transmission dynamics and the implications for improving disease prevention. Participants, who are all engaged in spatially explicit dengue research, will discuss observed spatial scales of virus transmission patterns, core dynamics that define the scale of transmission, scale-dependent indicators of risk and how improved understanding of the spatial dimension of transmission will improve disease prevention. Virus transmission patterns will be examined across scales ranging from clustering around households to citywide transmission networks to broad-scale dynamics across large endemic regions. Mechanisms for assessing and responding to risk at each scale will be reviewed. Emphasis will be on understanding the relationships between transmission dynamics at each scale and patterns of epidemic disease, and the role of spatial scale in developing resource-efficient and cost-effective disease prevention strategies.

CHAIR

Karen M. Campbell
San Diego State University, San Diego, CA, United States

Thomas W. Scott
University of California, Davis, CA, United States

1:30 p.m.

LOCAL CLUSTERING OF DENGUE TRANSMISSION IN KAMPHAENG PHET, THAILAND

In-Kyu Yoon
Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

1:55 p.m.

COMMUNITY-LEVEL DENGUE TRANSMISSION AND HUMAN MOVEMENT PATTERNS IN IQUITOS, PERU

Amy C. Morrison
University of California, Davis, Davis, CA, United States

2:20 p.m.

FROM HOUSEHOLD TO COMMUNITY: INDICATORS OF RISK AND THE IMPLICATIONS FOR PREVENTION STRATEGIES

Thomas W. Scott
University of California, Davis, CA, United States

2:45 p.m.

FROM COMMUNITY TO PROVINCE TO REGION: SPACE-TIME VARIATION IN DENGUE TRANSMISSION NETWORKS AND INDICATORS OF RISK IN THAILAND

Karen M. Campbell
San Diego State University, San Diego, CA, United States

Scientific Session 144

Filariasis - Control

Washington 2

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

CHAIR

Paul T. Cantey
Centers for Disease Control and Prevention, Atlanta, GA, United States

Daniel J. Tisch
Case Western Reserve University, Cleveland, OH, United States

1:30 p.m.

1019

DIAGNOSTIC TOOLS FOR LYMPHATIC FILARIASIS ELIMINATION PROGRAM: RESULTS OF A COMMUNITY AND SCHOOLCHILDREN SURVEY IN AN ISLAND OF FRENCH POLYNESIA

Catherine Plichart[1], Lam Ngoc Nguyen[1], Sylviane Teururai[1], Clemence Gatti[1], Herve Bossin[1], Jerome Marie[1], Marc Faaruia[1], Albert Tetuanui[1], Tuterarii Paoaafaite[1], Ralph Pawlowiez[1], Sandra J. Laney[2], Makoto Itoh[3], Anne-Marie Legrand[1]
[1]Institut Louis Malarde, Papeete-Tahiti, French Polynesia, [2]Smith College, Northampon, MA, United States, [3]Aichi Medical University, Aichi-ken, Japan

1:45 p.m.

1020

INCREASED ADHERENCE TO MASS DRUG ADMINISTRATION FOR LYMPHATIC FILARIASIS - ORISSA STATE, INDIA, 2009

Paul T. Cantey[1], Grace Rao[2], Jonathan Rout[2], Anna Jolly[1], John Williamson[1], LeAnne Fox[1]
[1]Division of Parasitic Diseases, NCZVED, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Church's Auxiliary for Social Action, Bhubaneswar, India

2 p.m.

1021

LONG LASTING INSECTICIDAL NETS ALONE CAN REDUCE TRANSMISSION OF LYMPHATIC FILARIASIS IN SOUTHEAST NIGERIA

Emmanuel Emukah[1], **Patricia M. Graves**[2], Aryc W. Mosher[2], Lindsay Rakers[2], Emmanuel Miri[3], Njoku Chidiebere[1], Nwodu Kenrick[1], Obiezu Josephine[1], Okpala T. Njideka[1], Frank O. Richards[2]
[1]The Carter Center, Owerri, Nigeria, [2]The Carter Center, Atlanta, GA, United States, [3]The Carter Center, Jos, Nigeria

2:15 p.m.

1022

TRANSMISSION INTENSITY AND BIOMARKERS OF *WUCHERERIA BANCROFTI* INFECTION 10 YEARS AFTER CESSATION OF MASS DRUG ADMINISTRATION TO ELIMINATE LYMPHATIC FILARIASIS IN PAPUA NEW GUINEA

Daniel J. Tisch[1], Will Kastens[1], Bockarie J. Moses[1], Moses Baisor[2], Melinda Susapa[2], Daphne Sepe[2], Kay Baia[2], Manasseh Baia[2], John Reeder[3], Edwin Michael[4], Peter Siba[5], James W. Kazura[1]

[1]Case Western Reserve University, Cleveland, OH, United States, [2]Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, [3]Burnet Institute, Melbourne, Australia, [4]Imperial College, London, United Kingdom, [5]Papua New Guinea Institute of Medical Research, Goroka, Papua New Guinea

2:30 p.m.

1023

DOES TRANSMISSION TAKE PLACE IN HYPOENDEMIC AREAS FOR ONCHOCERCIASIS? A STUDY IN NORTH REGION OF CAMEROON

Moses N. Katabarwa[1], Albert Eyamba[2], Mouhamadou Souaibou[2], Peter Enyong[3], Thomas Kuete[4], Yaya Souleymanou[5], Abudoulaye Yougoude[5], Gervais O. Andze[6], Marceline Ntep[6], Lindsay Rakers[1], Donald Hopkins[1], Frank Richards[1]

[1]Emory University/The Carter Center, Atlanta, GA, United States, [2]The Carter Center, Yaounde, Cameroon, [3]Research Foundation for Tropical Disease and Environment, Buea, Cameroon, [4]University of Doula, Doula, Cameroon, [5]Ministry of Health, Garoua, Cameroon, [6]Ministry of Health, Yaounde, Cameroon

2:45 p.m.

1024

PROGRESS ON THE ELIMINATION OF ONCHOCERCIASIS (RIVER BLINDNESS) FROM THE AMERICAS

Frank O. Richards[1], Mauricio Sauerbrey[2], Guillermo Zea Flores[2], Alfredo Dominguez Vazquez[2], Alba Lucia Morales[2], Ed Cupp[3]

[1]Carter Center, Atlanta, GA, United States, [2]Onchocerciasis Elimination Program for the Americas, Guatemala City, Guatemala, [3]Auburn University, Auburn, AL, United States

Scientific Session 145

Malaria - Epidemiology II

Washington 3

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

CHAIR

Chandy C. John
University of Minnesota, Minneapolis, MN, United States

Giovanna Raso
Environment et Santé, Centre Suisse de Recherches Scientifiques, Abidjan, Cote d'Ivoire

1:30 p.m.

1025

POSSIBLE INTERRUPTION OF MALARIA TRANSMISSION IN TWO HIGHLAND AREAS OF KENYA

Chandy C. John[1], Melissa A. Riedesel[1], Ng'wena G. Magak[2], David M. Menge[1], Kim A. Lindblade[3], John M. Vulule[4], James A. Hodges[1], Willis Akhwale[5]

[1]University of Minnesota, Minneapolis, MN, United States, [2]Moi University, Eldoret, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Kenya Medical Research Institute, Kisumu, Kenya, [5]Ministry of Health, Nairobi, Kenya

1:45 p.m.

1026

PREVALENCE OF PCR-DETECTABLE *PLASMODIUM PARASITEMIA* IN PARTICIPANTS IN THE DEMOCRATIC REPUBLIC OF THE CONGO, 2007 DEMOGRAPHIC HEALTH SURVEY

Steve M. Taylor[1], Jonathan J. Juliano[2], Jeremie Muwonga[3], Augustin Okenge[3], Antoinette Tshefu[4], Janey Messina[5], Ann A. Way[6], Mohamed Ayad[6], Michael Emch[5], Steven R. Meshnick[1]

[1]Gillings School of Global Public Health, University of North Carolina, Chapel Hill, NC, United States, [2]Division of Infectious Diseases, University of North Carolina, Chapel Hill, NC, United States, [3]Programme National de Lutte Contre le Sida, Kinshasa, The Democratic Republic of the Congo, [4]Kinshasa School of Public Health, Kinshasa, The Democratic Republic of the Congo, [5]Department of Geography, University of North Carolina, Chapel Hill, NC, United States, [6]Measure DHS, Calverton, MD, United States

2 p.m.

1027

DOES INDOOR RESIDUAL SPRAYING PROVIDE ADDED PROTECTION TO INSECTICIDE TREATED NETS IN PREVENTING MALARIA - PRELIMINARY RESULTS OF AN INCIDENCE COHORT

Mary J. Hamel[1], Peter Otieno[1], Nabie Bayoh[1], Simon Kariuki[1], Kayla Laserson[1], Willis Akhwale[2], John Williamson[3], Laurence Slutsker[3], John Gimnig[3]

[1]Centers for Disease Control and Prevention/Kenya Medical Research Institute Research Station, Kisumu, Kenya, [2]Kenya Ministry of Health, Nairobi, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

2:15 p.m.

1028

THIRTY YEARS OF *PLASMODIUM FALCIPARUM* TRANSMISSION IN KENYA: TIME-SPACE MODELING OF PARASITE PREVALENCE

Abdisalan M. Noor[1], Peter W. Gething[2], Victor A. Alegana[1], Eric Muchiri[3], Robert W. Snow[1]

[1]Kenya Medical Research Institute/Wellcome Trust/University of Oxford Collaborative Research Programme, Nairobi, Kenya, [2]Spatial Ecology and Epidemiology Group, Tinbergen Building, Department of Zoology, University of Oxford, Oxford, United Kingdom, [3]Division of Vector Borne and Neglected Disease, Ministry of Health, Nairobi, Kenya

2:30 p.m.

1029

SPATIAL RISK PROFILING OF *PLASMODIUM FALCIPARUM* PARASITEMIA IN WESTERN CÔTE D'IVOIRE

Giovanna Raso[1], Kigbafori D. Silué[1], Penelope Vounatsou[2], Burton H. Singer[3], Marcel Tanner[2], Juerg Utzinger[2], Eliézer K. N'Goran[4]
[1]Centre Suisse de Recherches Scientifiques, Abidjan, Cote d'Ivoire, [2]Swiss Tropical Institute, Basel, Switzerland, [3]Princeton University, Princeton, NJ, United States, [4]University of Cocody-Abidjan, Abidjan, Cote d'Ivoire

2:45 p.m.

1030

SUBMICROSCOPIC *PLASMODIUM FALCIPARUM* INFECTION IN ENDEMIC POPULATION SURVEYS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Lucy C. Okell[1], Azra C. Ghani[2], Emily Lyons[2], Chris Drakeley[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Imperial College London, London, United Kingdom

3 p.m.

1031

BIOLOGICAL AND CLINICAL IMMUNITY TO MALARIA INCREASE WITH AGE IN KENYAN HIGHLAND AREAS WITH UNSTABLE TRANSMISSION

Melissa A. Riedesel[1], Matthew McCarra[1], Ng'wena G. Magak[2], Kacey C. Ernst[3], Chandy C. John[1]
[1]University of Minnesota, Minneapolis, MN, United States, [2]Moi University, Eldoret, Kenya, [3]University of Arizona, Tucson, AZ, United States

Scientific Session 146

Malaria - Vaccines I

Washington 4

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

CHAIR

Sheetij Dutta
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Vidadi M. Yusibov
Fraunhofer USA, Newark, DE, United States

1:30 p.m.

1032

INDUCTION OF VACCINE-SPECIFIC T CELL AND ANTIBODY RESPONSES IN RHESUS MACAQUES IMMUNIZED WITH TWO *P. VIVAX* CIRCUMSPOROZOITE-BASED VACCINE ANTIGEN CANDIDATES FORMULATED IN $AS01_B$

Yannick Vanloubbeeck[1], Sathit Pichyangkul[2], Babak Bayat[1], Kosol Yongvanitchit[2], Utaiwan Srichairatanakul[2], Amporn Chluaydumrong[2], Marie-Noelle Donner[1], Virginie Garze[1], Aram Afsar[1], Lisa Ware[3], Marie-Claude Dubois[1], Pascal Mettens[1], Laurence Lemiale[4], Mark Polhemus[3], Brent House[3], Jetsumon Sattabongkot[2], Kurt Schaecher[3], Christian Ockenhouse[3], Joe Cohen[1], Anjali Yadava[3]
[1]GlaxoSmithKline Biologicals, Rixensart, Belgium, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [3]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [4]The PATH Malaria Vaccine Initiative, Bethesda, MD, United States

1:45 p.m.

1033

EVALUATION OF A HETEROLOGOUS PRIME-BOOST VACCINE SCHEDULE BASED ON LOW SEROPREVALENT ADENOVIRUS VECTORS FOR MALARIA

Ariane Rodríguez Rodríguez, Gert Gillissen, Dennis Tax, Ratna Mintardjo, **Harmjan Kuipers**, Jerome Custers, Maria Grazia Pau, Stefan Kostense, Jenny Hendriks, Mariska ter Haak, Jaap Goudsmit, Katarina Radošević
Crucell, Leiden, The Netherlands

2 p.m.

1034

A NON-ADJUVANTED POLYPEPTIDE NANOPARTICLE VACCINE TARGETING *PLASMODIUM FALCIPARUM* CSP INDUCES 100% STERILE PROTECTION AGAINST LETHAL CHALLENGE WITH LIVE SPOROZOITES

Stephen A. Kaba[1], Clara Brando[1], Christian Mittelholzer[2], Qin Guo[1], Ian McWilliams[1], Andrea Crisanti[3], Roberta Spaccapelo[4], Peter Burkhard[5], David E. Lanar[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]M.E. Muller Institute, Basel, Switzerland, [3]Imperial College, London, United Kingdom, [4]Universita degli Studi di Perugia, Perugia, Italy, [5]University of Connecticut, Storrs, CT, United States

2:15 p.m.

1035

IMAGING MURINE NALT FOLLOWING PROTECTIVE INTRANASAL IMMUNIZATION WITH *P. FALCIPARUM* CS PROTEIN CONJUGATED TO FLAGELLIN, A POTENT TLR5 AGONIST

Adéla Nacer[1], Daniel Carapau[1], Robert Mitchell[1], Alan Shaw[2], Ute Frevert[1], Elizabeth Nardin[1]
[1]New York University School of Medicine, New York, NY, United States, [2]VaxInnate Corporation, Cranbury, NJ, United States
(ACMCIP Abstract)

2:30 p.m.

1036

FROM RODENTS TO HUMANS: DEVELOPMENT OF A P52KO BASED WHOLE ORGANISM MALARIA VACCINE

Ben C. Van Schaijk[1], Martijn Vos[1], Geert-Jan van Gemert[1], Marga van de Vegte-Bolmer[1], Audrey Gego[2], Samir Yalaoui[2], Jean-Francois Franetich[2], Ivo Ploemen[1], Dominique Mazier[2], Chris J. Janse[3], Shahid M. Khan[3], Robert W. Sauerwein[1]
[1]Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands, [2]INSERM, Université Pierre et Marie Curie-Paris6, Paris, France, [3]Leiden University Medical Centre, Leiden, The Netherlands

3 p.m.

1037

DESIGNING A PAN-REACTIVE MALARIA VACCINE BASED ON THE CROSS-REACTIVE EPITOPES OF APICAL MEMBRANE ANTIGEN-1 OF *PLASMODIUM FALCIPARUM*

Sheetij Dutta[1], Lisa Dlugosz[1], Margaret Schwarz[1], Joshua Clayton[1], Michael Foley[2], Robin Anders[2], Adrian Batchelor[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Department of Biochemistry, La Trobe University, Australia

3:15 p.m.

1038

ANTIBODIES TO PLANT-PRODUCED *PLASMODIUM FALCIPARUM* SEXUAL STAGE PROTEIN PFS25 EXHIBIT TRANSMISSION BLOCKING ACTIVITY

Vidadi Yusibov[1], Jessica A. Chichester[1], Christine E. Farrance[1], Vadim Mett[1], Konstantin Musiychuk[1], Moneim Shamloul[1], Satish Sharma[1], Stephen Streatfield[1], Natalia Ugulava[1], Robert W. Sauerwein[2], Will Roeffen[2], Yimin Wu[3], Olga Muratova[3], Louis H. Miller[3], Douglas A. Holtzman[4]
[1]Fraunhofer USA, Center for Molecular Biotechnology, Newark, DE, United States, [2]Radboud University Medical Centre, Nijmegen, The Netherlands, [3]Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [4]The Bill and Melinda Gates Foundation, Seattle, WA, United States
(ACMCIP Abstract)

Scientific Session 147

Malaria - Biology and Pathogenesis II

Washington 5

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

CHAIR

Mahamadou Diakite
University of Bamako, Bamako, Mali

Whitney E. Harrington
SBRI, Seattle, WA, United States

1:30 p.m.

1039

HEMOGLOBIN AND RED BLOOD CELL POLYMORPHISMS THAT CONFER PROTECTION AGAINST SEVERE *PLASMODIUM FALCIPARUM* MALARIA ARE EXCEEDINGLY COMMON IN MALI

Seidina A. S. Diakité[1], Michael A. Krause[2], Karim Traoré[1], Tatiana M. Lopera-Mesa[2], Saibou Doumbia[1], Drissa Konaté[1], Maria Cecilia Huaman[2], Mory Doumbia[1], Ababacar Diouf[2], Jennifer M. Anderson[2], Seydou Doumbia[1], Carole A. Long[2], Rick M. Fairhurst[2], **Mahamadou Diakité**[1]
[1]Malaria Research and Training Center, Bamako, Mali, [2]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

1:45 p.m.

1040

PRESUMPTIVE TREATMENT INCREASES RISK OF INFLAMMATION AND POOR FETAL OUTCOMES IN WOMEN WITH PLACENTAL MALARIA AT DELIVERY

Whitney E. Harrington[1], Edward Kabyemela[1], Atis Muehlenbachs[1], Kathryn Williamson[1], Theonest K. Mutabingwa[2], Michal Fried[1], Patrick E. Duffy[1]
[1]Seattle Biomedical Research Institute, Seattle, WA, United States, [2]National Institute of Medical Research, Dar es Salaam, United Republic of Tanzania

2 p.m.

1041

RETINAL ANGIOGRAPHIC CHANGES IN PAEDIATRIC CEREBRAL MALARIA

Simon J. Glover[1], Simon P. Harding[2], Malcolm E. Molyneux[3], Terrie E. Taylor[4], Nicholas A. Beare[5]
[1]College of Medicine, Blantyre, Malawi, [2]University of Liverpool, Liverpool, United Kingdom, [3]Malawi-Liverpool-Wellcome Trust/College of Medicine, Blantyre, Malawi, [4]Blantyre Malaria Project, Blantyre, Malawi, [5]Royal Liverpool University Hospitals Trust, Liverpool, United Kingdom

2:15 p.m.

1042

TRANSCRIPTIONAL PROFILE COMPARISON OF HOST IMMUNE RESPONSE TO SEVERE VERSUS UNCOMPLICATED *FALCIPARUM* MALARIA: A CASE-CONTROL STUDY IN MALIAN CHILDREN

Jessica E. Manning[1], Amadou Niangaly[1], Antoine Dara[1], Abdoulaye K. Kone[1], Mahamadou A. Thera[1], Abdoulaye A. Djimde[1], Guy Vernet[2], Philippe Leissner[3], Christopher Plowe[4], Ogobara Doumbo[1]
[1]Malaria Research and Training Center, University of Bamako, Bamako, Mali, [2]Fondation Merieux, Lyon, France, [3]BioMerieux, Grenoble, France, [4]Howard Hughes Medical Institute/Center for Vaccine Development, University of Maryland, Baltimore, MD, United States

2:30 p.m.

1043

DOWN-REGULATION OF ANTI-INFLAMMATORY AND ANTI-APOPTOTIC GENE EXPRESSION DURING UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA

Ousmane A. Koita[1], Joni H. Ylostalo[2], James M. Colborn[3], Ousmane H. Cisse[1], Donald J. Krogstad[4]
[1]University of Bamako, Bamako, Mali, [2]University of Texas, Temple, Temple, TX, United States, [3]Centers for Disease Control and Prevention, San Juan, PR, United States, [4]Tulane University Health Sciences Center, New Orleans, LA, United States
(ACMCIP Abstract)

2:45 p.m.

1044

DETECTION AND VALIDATION OF COMPLEMENT COMPONENT C3A AS A NOVEL BIOMARKER FOR CEREBRAL MALARIA

Sarah J. Higgins, Karlee Silver, Shehzad Iqbal, Samir Patel, Kathleen Zhong, Andrea Conroy, Kevin C. Kain
McLaughlin-Rotman Centre for Global Health University of Toronto, Toronto, ON, Canada
(ACMCIP Abstract)

3 p.m.

1045

WHOLE BLOOD ANGIOPOIETIN-1 AND -2 LEVELS DISCRIMINATE CEREBRAL AND SEVERE MALARIA FROM UNCOMPLICATED MALARIA

Andrea L. Conroy[1], Erin I. Lafferty[1], Fiona E. Lovegrove[1], Srivicha Krudsood[2], Noppadon Tangpukdee[2], Sornchai Looareesuwan[2], W. Conrad Liles[3], Kevin C. Kain[3]
[1]McLaughlin-Rotman Centre for Global Health, University of Toronto, Toronto, ON, Canada, [2]Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, [3]Tropical Disease Unit, Division of Infectious Diseases, Department of Medicine, University of Toronto, Toronto, ON, Canada

Symposium 148

Global Health Workforce Crises: Impact of International Migration

Wilson A

Saturday, November 21, 1:30 p.m. - 3:15 p.m.

The international migration of health personnel poses a major challenge for improving and maintaining health systems in developing countries. This symposium will examine the migratory flow patterns, causes and impact of global south health care provider migration to the global north or more prosperous areas of the global south over the past 10-15 years. The scope of the problem from the perspective of the receiving and source countries, including ethics and justice issues, will be examined. The World Health Organization's recommendations for reversing these trends and proposed interventions to curb migration will be discussed.

CHAIR

Noreen A. Hynes
Johns Hopkins University School of Medicine, Baltimore, MD, United States

Fitzhugh Mullan
George Washington University, Washington, DC, United States

1:30 p.m.

PATTERNS OF AND FACTORS IN HEALTHCARE PROVIDER MIGRATION

Noreen A. Hynes
Johns Hopkins University School of Medicine, Baltimore, MD, United States

1:50 p.m.

STEMMING THE TIDE: IMPROVING HEALTH CARE PROVIDER TRAINING

Robert Bollinger
Johns Hopkins University School of Medicine, Baltimore, MD, United States

2:20 p.m.

STEMMING THE TIDE: INNOVATION AND EMPOWERMENT IN THE PUBLIC HEALTH-MEDICAL CARE INTERFACE

Joel Selanikio
Datadyne, Washington, DC, United States

2:50 p.m.

CAN WE STEM THE TIDE OF THE "BRAIN DRAIN"?

Fitzhugh Mullan
George Washington University, Washington, DC, United States

Scientific Session 149

Schistosomiasis and Other Trematodes - Epidemiology/ Control

Salon 1

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

CHAIR

Andrea Gazzinelli
Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Donald P. McManus
The Queensland Institute of Medical Research, Brisbane, Australia

3:45 p.m.

1046

THE ROLE OF BOVINES IN HUMAN *SCHISTOSOMA JAPONICUM* INFECTION IN THE PEOPLES' REPUBLIC OF CHINA

Darren J. Gray[1], Gail M. Williams[2], Yuesheng Li[1], Honggen Chen[3], Simon Forsyth[2], Robert Li[2], Adrian Barnett[4], Jiagang Guo[5], Allen Ross[6], Zheng Feng[5], Donald P. McManus[1]
[1]Queensland Institute of Medical Research, Brisbane, Australia, [2]University of Queensland, Brisbane, Australia, [3]Jiangxi Provincial Institute of Parasitic Diseases, Nanchang, China, [4]Queensland University of Technology, Brisbane, Australia, [5]Institute of Parasitic Diseases, Chinese Centre for Disease Control and Prevention, Shanghai, China, [6]Griffith University, Brisbane, Australia

4 p.m.

1047

EVIDENCE OF SYNERGISTIC EFFECTS BETWEEN *PLASMODIUM SPP.* AND *SCHISTOSOMA HAEMATOBIUM* INFECTIONS ON ANEMIA AND STUNTING IN KENYAN CHILDREN

Lia S. Florey[1], Charles H. King[2], Melissa K. Van Dyke[1], Eric M. Muchiri[3], Peter L. Mungai[4], Peter A. Zimmerman[2], Mark L. Wilson[1]
[1]University of Michigan, Ann Arbor, MI, United States, [2]Case Western Reserve University, Cleveland, OH, United States, [3]Division of Vector Borne and Neglected Diseases, Ministry of Public Health and Sanitation, Nairobi, Kenya, [4]Msambweni Field Station, Msambweni, Kenya

4:15 p.m.

1048

THE IMPACT OF COMMUNITY CHARACTERISTICS ON INDIVIDUAL INFECTION RISK: NIGHT SOIL USE AND SCHISTOSOMIASIS TRANSMISSION IN SOUTHWEST CHINA

Elizabeth J. Carlton[1], Edmund Y. Seto[1], Bo Zhong[2], Robert C. Spear[1]
[1]Department of Environmental Health Sciences, University of California, Berkeley, Berkeley, CA, United States, [2]Institute for Parasitic Diseases, Sichuan Center for Disease Control and Prevention, Chengdu, China

4:30 p.m.

1049

A SURVEY OF RODENTS FOR SCHISTOSOMES FROM THE LAKE VICTORIA BASIN, KENYA, THE DISCOVERY OF A NEW SCHISTOSOME SPECIES, AND THE IMPLICATIONS FOR SCHISTOSOMIASIS CONTROL STRATEGIES

Ben Hanelt[1], Sara V. Brant[1], Michelle L. Steinauer[1], Geoffrey M. Maina[2], Joseph M. Kinuthia[2], Eric L. Agola[2], Ibrahim N. Mwangi[2], Ben N. Mungai[2], Martin W. Mutuku[2], Eric S. Loker[1], Gerald M. Mkoji[2]
[1]University of New Mexico, Albuquerque, NM, United States, [2]Centre for Biotechnology Research and Development, KEMRI, Nairobi, Kenya

4:45 p.m.

1050

KHAT, SNAILS AND FLUKES: CLINICAL AND EPIDEMIOLOGICAL FEATURES OF FASCIOLIASIS, AN EMERGING DISEASE IN THE UK

Joanna S. Herman, Meera A. Chand, Peter L. Chiodini
Hospital for Tropical Diseases, London, United Kingdom

5 p.m.

1051

ACCESSIBILITY AND UTILIZATION OF SCHISTOSOMIASIS-RELATED HEALTH SERVICES IN A RURAL AREA IN NORTHERN MINAS GERAIS STATE, BRAZIL

Dener C. Reis[1], Helmut Kloos[2], Charles King[3], Humberto F. Quites[1], Leonardo F. Matoso[1], Andrea Gazzinelli[1]
[1]Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, [2]University California San Francisco, San Francisco, CA, United States, [3]Case Western University, Cleveland, OH, United States

5:15 p.m.

1052

RAPID ASSESSMENT OF *SCHISTOSOMA HAEMATOBIUM* INFECTION IN NIGER USING SCHOOL-BASED QUESTIONNAIRES

Anna E. Phillips[1], Amadou Garba[2], Aichatou Dijbo[3], Joanne Webster[1], Alfari Aichatou[2], Ali Djibou[2], Alan Fenwick[1]
[1]Imperial College, London, United Kingdom, [2]Schistosomiasis Control Initiative, Niamey, Niger, [3]Universite Abdou MouMouni, Niamey, Niger

Scientific Session 150

Malaria - Implementation of Malaria Control and Treatment Strategies

Salon 2

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

CHAIR

Justin M. Cohen
Clinton Foundation HIV/AIDS Initiative, Brookline, MA, United States

Lisa Hare
John Snow Inc., Arlington, VA, United States

3:45 p.m.

1053

GEOGRAPHIC VARIATION IN STOCKING AND SALES OF SUBSIDIZED ARTEMISININ-BASED COMBINATION THERAPIES BY PRIVATE DRUG SHOPS IN TWO RURAL DISTRICTS OF TANZANIA

Justin M. Cohen[1], Kate Bowler[1], Oliver Sabot[1], Megumi Gordon[1], Isaac Gross[1], David Bishop[2], Moses Odhiambo[3], Lorrayne Ward[1], Yahya Ipuge[1], Catherine Goodman[4]
[1]Clinton HIV/AIDS Initiative, Boston, MA, United States, [2]Mott MacDonald Ltd, Birmingham, United Kingdom, [3]The Steadman Group, Nairobi, Kenya, [4]Kenyan Medical Research Institute/Wellcome Trust Research Programme, Nairobi, Kenya

4 p.m.

1054

RAPID UPTAKE OF ARTEMISININ-BASED COMBINATION THERAPY IN RUFIJI DISTRICT, TANZANIA

Julie I. Thwing[1], Joseph D. Njau[2], Catherine A. Goodman[3], S. Patrick Kachur[1], Elizeus Kahigwa[2], Salim Abdullah[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ifakara Health Institute, Dar es Salaam, United Republic of Tanzania, [3]KEMRI/Wellcome Trust, Nairobi, Kenya

4:15 p.m.

1055

SAVING LIVES THROUGH INCREASED ACCESS TO ARTEMESIN-BASED COMBINATION THERAPY (ACT): THE EXPERIENCE IN MALAWI

Lisa Hare, Jayne Waweru, Elias Mwalabu, Evance Moyo, Ralph H. Rack
John Snow Inc., Arlington, VA, United States

4:30 p.m.

1056

THE COST OF SCALING UP INTERMITTENT PREVENTIVE TREATMENT IN INFANTS IN AFRICA

Alexandra De Sousa
UNICEF, New York, NY, United States

4:45 p.m.

1057

PRE-REFERRAL RECTAL ARTESUNATE IS COST-EFFECTIVE FOR TREATING SEVERE CHILDHOOD MALARIA

Yesim Tozan[1], Rajashree Panicker[2], Sarah R. Darley[2], Ramanan Laxminarayan[2], Joel G. Breman[3]
[1]Boston University School of Public Health, Boston, MA, United States, [2]Resources for the Future, Washington, DC, United States, [3]Fogarty International Center, National Institutes of Health, Washington, DC, United States

5 p.m.

1058

IDENTIFYING THE OPTIMAL ANTI-MALARIA PROGRAM FOR A COMMUNITY: THE NEED TO FOCUS ON SOCIAL WELFARE AS THE TARGET OUTCOME

Derek W. Willis, Jeffrey S. Hammer
Princeton University, Princeton, NJ, United States

5:15 p.m.

1059

HOW TO ENSURE *PLASMODIUM FALCIPARUM* CHEMOSENSITIVITY RESULTS IN THE FIELD?

Daniel Parzy[1], Le Hong Quang[2], Nguyen Xuan Thanh[3], Marc Desbordes[1], Véronique Sinou[4]
[1]IMTSSA - UMR-MD5, Marseille, France, [2]Military Center of Preventive Medicine, Ho Chi Minh City, Vietnam, [3]Military Institute of Hygiene and Epidemiology, Hanoi, Vietnam, [4]Université de la Méditerranée - UMR-MD5, Marseille, France

Symposium 151

One World One Health and Intercontinental Invaders

Salon 3

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

This symposium will promote the concepts of the One Health Initiative (OHI). The OHI a movement to forge co-equal, all-inclusive collaborations between physicians, veterinarians and other scientific-health related disciplines to improve human and animal health. Topics include water-borne infections of humans and animals, use of marine animals for surveillance of emerging infections, Rift Valley fever ecology/epidemiology, West Nile ecology and West Nile vaccine development for humans and equids.

Co-Organized by the Society of Tropical Veterinary Medicine

CHAIR

Bob H. Bokma
United States Department of Agriculture, Riverdale, MD, United States

E. Paul Gibbs
University of Florida, Gainesville, FL, United States

Thomas P. Monath
Kleiner Perkins Caufield & Byers, Harvard, MA, United States

3:45 p.m.

"ONE HEALTH" APPROACH TO INVESTIGATE ZOONOTIC WATERBORNE PROTOZOAL PARASITES IN CALIFORNIA AND TANZANIA

Patricia A. Conrad
University of California at Davis, Davis, CA, United States

4:05 p.m.

RIFT VALLEY FEVER VIRUS, A ZOONOTIC DISEASE OF HIGH CONSEQUENCE IN BOTH THE VETERINARY AND HUMAN HEALTH ARENAS

Thomas G. Ksiazek
University of Texas Medical Branch, Galveston, TX, United States

4:25 p.m.

MARINE VERTEBRATES AS SENTINELS OF EMERGING INFECTIOUS DISEASES: ECOLOGICAL HEALTH LINKING LAND TO SEA

Alonso Aguirre
Wildlife Trust, New York, NY, United States

4:45 p.m.

HOW WEST NILE AND AVIAN INFLUENZA VIRUSES ILLUSTRATE THE CHALLENGES IN APPLYING ONE HEALTH

Samantha E. Gibbs
United States Fish and Wildlife Service, Arlington, VA, United States

5:05 p.m.

CONCURRENT DEVELOPMENT OF NOVEL WEST NILE VACCINES FOR HUMANS AND EQUIDS: APPLICATION OF ONE HEALTH PRINCIPLES

Thomas P. Monath
Kleiner Perkins Caufield & Byers, Menlo Park, CA, United States

Symposium 152

New Trends in *Anopheles darlingi*: Divergence, Genetics, Malaria Transmission and Ecology

Delaware A

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

This session will review new evidence for lineage divergence in the *Anopheles darlingi* (Diptera: Culicidae), the most important and anthropophilic malaria vector in the Americas. Evolutionary forces shaping the genetic structure of *An. darlingi* across its extensive distribution from southern Mexico to northern Argentina will be examined, as well as the putative impact of distinctive lineages on vectorial capacity and malaria transmission. The session will compare the complete mitochondrial genome of the putative *An. darlingi* lineages with *An. gambiae, Aedes aegypti*, *Ae. albopictus* and *Drosophila yakuba*, focusing on protein coding genes, initial codons, stop codons and codon usage for amino acids, to better understand the evolution of *An. darlingi* and its phylogenetic relationship to other genera of mosquitoes and to Diptera. In the Peruvian Amazon, a region of low intensity malaria transmission, asymptomatic humans appear to be reservoirs for *Plasmodium vivax*. This session will provide information on the clinical characteristics of symptomatic versus asymptomatic patients, methods to determine transmission patterns in experimental infection of natural (outbred) *An. darlingi* and other malaria vectors and implications of such studies for transmission-blocking vaccines. The symposium will review a series of ecological investigations of *An. darlingi* in Belize that have evaluated flight behavior using mark-release-recapture methods, detected bimodal biting patterns, assessed seasonal densities, discovered that the preferred breeding habitat of this species is floating detritus patches in rivers, used GIS and remote sensing to attempt to predict positive breeding sites and used reciprocal placement experiments to discover that *An. darlingi* survives best in its own habitat, compared with other local vectors. The session will focus on ways to use such information for novel control strategies.

CHAIR

Jan E. Conn
New York State Department of Health, Albany, NY, United States

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

3:45 p.m.

EVIDENCE FOR LINEAGE DIVERGENCE IN *ANOPHELES DARLINGI*

Jan E. Conn
New York State Department of Health, Albany, NY, United States

4:15 p.m.

THE MITOCHONDRIAL DNA OF *ANOPHELES DARLINGI:* AN INSIGHT INTO EVOLUTION OF ANOPHELINE MOSQUITOES

Osvaldo Marinotti
University of California Irvine, Irvine, CA, United States

4:40 p.m.

HUMAN RESERVOIRS OF *PLASMODIUM VIVAX* TRANSMISSION IN THE PERUVIAN AMAZON

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

5:05 p.m.

THE ECOLOGY OF *ANOPHELES DARLINGI* IN BELIZE AND THE ASSOCIATION WITH NOVEL VECTOR CONTROL STRATEGIES

Nicole Achee
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Symposium 153

A Current Summary of Selected Zoonotic Diseases of People and Their Pets

Delaware B

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

A series of presentations on diseases of human and veterinary health importance will examine the zoonotic aspects of the parasitic or vector-borne agents, with an emphasis on new or noteworthy findings. The focus of the symposium will be humans and their companion animals, dog and cats, within the United States. Relevant details of clinical signs and symptoms, diagnosis and treatment will be reviewed for both human and veterinary patients, and opportunities and challenges for future research will be discussed. Talks will discuss soil, water, and vector-borne diseases. The soil and water-borne presentations will cover giardiasis, cryptosporidiosis, toxoplasmosis, toxocariasis, baylisascariasis and cutaneous larva migrans. The vector-borne presentations will cover tick transmitted Lyme borreliosis, anaplasmosis, ehrlichiosis, and Rocky Mountain spotted fever, flea-associated bartonellosis, typhus, and plague and mosquito-transmitted dirofilariasis.

CHAIR

Dwight D. Bowman
Cornell University, Ithaca, NY, United States

Mark Eberhard
Centers for Disease Control and Prevention, Atlanta, GA, United States

Ellen Carlin
Companion Animal Parasite Council, Washington, DC, United States

Susan Montgomery
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

PUBLIC HEALTH SIGNIFICANCE OF GIARDIASIS AND CRYPTOSPORIDIOSIS IN COMPANION ANIMALS

Vitaliano A. Cama
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:55 p.m.

TOXOPLASMA GONDII: SUMMARIZING PREVALENCE AND RISK FACTORS

Sharon Patton
University of Tennessee, Knoxville, TN, United States

4:10 p.m.

CURRENT STATE OF *TOXOCARA SPP.* IN DOGS AND CATS: NEW INFORMATION ON TRANSMISSION, INFECTION AND ZOONOSIS

Anne M. Zajac
Virginia Tech, Blacksburg, VA, United States

4:20 p.m.

HOOKWORMS AS AGENTS OF CUTANEOUS LARVA MIGRANS

Dwight D. Bowman
Cornell University, Ithaca, NY, United States

4:35 p.m.

AN UPDATE ON COMMON TICK-BORNE DISEASES SHARED BY DOGS AND PEOPLE, PART I: LYME BORRELIOSIS

Susan E. Little
Oklahoma State University, Stillwater, OK, United States

4:45 p.m.

AN UPDATE ON COMMON TICK-BORNE DISEASES SHARED BY DOGS AND PEOPLE, PART II: RICKETTSIAL PATHOGENS

William L. Nicholson
Centers for Disease Control and Prevention, Atlanta, GA, United States

5 p.m.

CURRENT UNDERSTANDING OF FLEA-ASSOCIATED ZOONOTIC DISEASES OF CATS: BARTONELLOSIS, TYPHUS, AND PLAGUE

Jennifer H. McQuiston
Centers for Disease Control and Prevention, Atlanta, GA, United States

5:15 p.m.

CURRENT STATE OF *DIROFILARIA IMMITIS* IN THE U.S.: NATIONAL SURVEY ON PREVALENCE OF HEARTWORM INFECTION IN DOGS

Mark L. Eberhard
Centers for Disease Control and Prevention, Atlanta, GA, United States

Scientific Session 154

Water, Sanitation and Hygiene

Virginia AB
Saturday, November 21, 3:45 p.m. - 5:30 p.m.

CHAIR

Tarique M. Huda
International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

Clair Null
Emory University, Atlanta, GA, United States

3:45 p.m.

1060

HOW TO GET SAFE WATER: PERSUASION, PEERS, PRICE, PROMOTERS OR PRODUCT?

Clair Null[1], Michael Kremer[2], Edward Miguel[3], Sendhil Mullainathan[2], Alix Zwane[4]
[1]Rollins School of Public Health, Emory University, Atlanta, GA, United States, [2]Harvard University, Cambridge, MA, United States, [3]University of California, Berkeley, CA, United States, [4]The Bill and Melinda Gates Foundation, Seattle, WA, United States

4 p.m.

1061

INTERIM ASSESSMENT OF A SANITATION, HYGIENE EDUCATION AND WATER SUPPLY INTERVENTION IN RURAL BANGLADESH, 2008

Tarique M. Huda[1], Leanne Unicomb[1], Richard B. Johnston[2], Carole Tronchet[2], Amal K. Halder[1], Stephen P. Luby[1]
[1]International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]United Nations Children's Fund (UNICEF), Dhaka, Bangladesh

4:15 p.m.

1062

A COMPARISON OF WATER TREATMENT PRACTICES AMONG PEOPLE LIVING WITH HIV/AIDS AND COMMUNITY MEMBERS IN ETHIOPIA, DECEMBER, 2008

Achuyt Bhattarai[1], Ciara E. O'Reilly[1], Sisay Alemayehu Abayneh[2], Ribka Fantu[2], Alemayehu Mekonnen[2], Jelaludin Ahmed[2], Beniam Feleke[2], Rob Quick[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Addis Ababa, Ethiopia

4:30 p.m.

1063

RANDOMIZED CONTROLLED TRIALS OF A PLASTIC HOUSING BIOSAND FILTER IN CAMBODIA, GHANA AND HONDURAS

Christine E. Stauber[1], Anna M. Fabiszewski[2], Erin L. Printy[2], Byron C. Kominek[2], Adam R. Walters[2], Kaida-may R. Liang[2], Mark D. Sobsey[2]
[1]Georgia State University, Atlanta, GA, United States, [2]University of North Carolina, Chapel Hill, NC, United States

4:45 p.m.

1064

A RETROFIT TO UPGRADE LOW-COST CERAMIC WATER FILTER DEVICES TO PURIFIER STATUS

Jeffrey F. Williams, Michael A. Bridges, Duane D. Dunk, Lori Trimpe, Nevada Reuhlen, Jose I. Santiago
HaloSource Incorporated, Bothell, WA, United States

5 p.m.

1065

HOUSEHOLD PREDICTORS OF ABUNDANCE OF THE LASSA VIRUS RESERVOIR, MASTOMYS NATALENSIS, IN THE EASTERN PROVINCE OF SIERRA LEONE

Lina M. Moses[1], Kandeh Kargbo[2], James Koninga[2], Willie Robert[2], Victor K. Lungay[2], Richard Fonnie[2], Lansana D. Kanneh[2], James J. Bangura[3], Robert F. Garry[1], Daniel G. Bausch[1]
[1]Tulane University, New Orleans, LA, United States, [2]Kenema Government Hospital, Kenema, Sierra Leone, [3]Ministry of Health and Sanitation, Kenema Government Hospital, Kenema, Sierra Leone

Symposium 155

International Programmatic Experience in Lymphedema Management for Lymphatic Filariasis

Virginia C

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

Lymphatic Filariasis (LF) affects more than 120 million people in 81 countries worldwide; over 40 million of whom suffer from LF-related disability, including lymphedema, elephantiasis and hydrocele. The WHO Global Program to Eliminate Lymphatic Filariasis (GPELF), which began in 1998, has two objectives: interruption of LF transmission and management of LF-related disability. As LF is ranked the second leading cause of disability worldwide and the social, physical, economic and psychological consequences of LF-related disability are significant, effective LF morbidity management programs are critically needed. Effective morbidity management/disability prevention programs reinforce community acceptance of mass drug administration (MDA), and as such are important components of national LF elimination programs. This symposium will review programmatic experience with lymphedema management programs for lymphatic filariasis from several different countries, including East and West Africa and South Asia. It will also explore the role of non-governmental development organizations (NGDOs) engaged in disability-prevention efforts, discuss the integration of LF-related disability prevention efforts with other chronic disease prevention efforts, and explore the challenges and future directions for LF morbidity management programs worldwide.

CHAIR

LeAnne M. Fox
Centers for Disease Control and Prevention, Atlanta, GA, United States

Els Mathieu
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

THE GLOBAL CHALLENGE OF LYMPHEDEMA IN THE DEVELOPING WORLD

Pierre Brantus
Handicap International, Prevessin-Moens, France

4:10 p.m.

THE TOGO LYMPHEDEMA MANAGEMENT MODEL

Ameyo Dorkenoo
Ministry of Health, Lome, Togo

4:35 p.m.

COMMUNITY-BASED LYMPHEDEMA MANAGEMENT IN ORISSA STATE, INDIA: A ROLE FOR COMMUNITY-BASED NGDOS

Jonathan Rout
Church's Auxiliary for Social Action (CASA), New Delhi, India

5 p.m.

LYMPHEDEMA MANAGEMENT AND THE ROLE OF MASS DRUG ADMINISTRATION: PATIENT PERSPECTIVES FROM TANZANIA

Charles D. Mackenzie
Michigan State University, East Lansing, MI, United States

Symposium 156

Lessons from 15 Years of Prospective Studies of Acute Dengue Illness

Washington 1

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

With over 40 years of experience in the management of children with dengue, the Dengue Unit of the Queen Sirikit National Institute of Child Health (QSNICH) in Bangkok, Thailand, has been designated as a World Health Organization Collaborating Centre for Case Management of Dengue Hemorrhagic Fever/Dengue Shock Syndrome. Since 1994, QSNICH physicians have been collaborating with investigators at the U.S. Armed Forces Research Institute of Medical Sciences (AFRIMS) and the University of Massachusetts Medical School (UMMS) to conduct prospective studies of children presenting within the first 72 hours of suspected acute dengue illness. Concurrent field studies have been implemented by Armed Forces Research Institute of the Medical Sciences, UMMS and Thai Ministry of Public Health investigators to identify host, vector and environmental factors that impact dengue disease severity. These pivotal studies, supported by National Institute of Allergy and Infectious Diseases and USAMRMC, have yielded a detailed and integrated picture of the clinical, virological, and immunological aspects of human dengue virus infection. Participating investigators will review both published and unpublished findings from 15 years of study and discuss questions still to be addressed in dengue clinical research.

CHAIR

Stephen J. Thomas
Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

Timothy P. Endy
State University of New York, Upstate Medical University, Syracuse, NY, United States

3:45 p.m.

CLINICAL DIAGNOSIS AND MANAGEMENT OF SEVERE DENGUE

Siripen Kalayanarooj
Queen Sirikit National Institute of Child Health, Bangkok, Thailand

4:10 p.m.

CLINICAL AND MOLECULAR EPIDEMIOLOGY OF DENGUE IN A RURAL THAI COMMUNITY

In-Kyu Yoon
Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

4:25 p.m.

IMMUNOLOGIC AND VIROLOGIC MARKERS OF DENGUE DISEASE SEVERITY

Anon Srikiatkhachorn
University of Massachusetts Medical School, Worcester, MA, United States

4:45 p.m.

INTEGRATING CLINICAL AND LABORATORY DATA TO PREDICT THE OUTCOME OF ACUTE DENGUE ILLNESS

Sharone Green
University of Massachusetts Medical School, Worcester, MA, United States

Symposium 157

New Techniques for Monitoring and Evaluating the Impact of Insecticide Resistance in Mosquitoes

Washington 2
Saturday, November 21, 3:45 p.m. - 5:30 p.m.

Insecticide resistance is increasing at a dramatic rate in malaria and dengue vectors. New tools are being developed to detect this resistance, but there is an urgent need for measures to assess the impact of different resistance mechanisms on the efficacy of disease control.

CHAIR

Janet Hemingway
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

3:45 p.m.

DEVELOPMENT OF MOLECULAR METHODS FOR VECTOR POPULATION MONITORING

Martin Donnelly
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

4:10 p.m.

FIELD USE OF MOLECULAR ASSAYS FOR RESISTANCE MONITORING IN *AEDES*

Bill Black
Colorado State University, Fort Collins, CO, United States

4:35 p.m.

MONITORING OF INSECTICIDE RESISTANCE DATA IN A DENGUE DECISION SUPPORT SYSTEM

Saul Lozano-Fuentes
Colorado State University, Fort Collins, CO, United States

5 p.m.

NEW DEVELOPMENTS IN MALARIA DECISION SUPPORT SYSTEMS

Michael Coleman
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Symposium 158

Malaria RDTs: Bench Performance Comparisons and Some Specific Issues

Washington 3
Saturday, November 21, 3:45 p.m. - 5:30 p.m.

Malaria control and elimination is back to the global health agenda. Malaria RDTs play an important role in diagnosis and case management, and their use is rapidly expanding globally. Many RDTs are now commercially available and their performance is being compared head-to-head by the WHO-FIND malaria diagnostics evaluation program. Round one testing of 41 products from 21 manufacturers is complete. The procedures and results will be presented. Besides quality, the selection of RDTs should also include geographical considerations.

CHAIR

Qin Cheng
Australian Army Malaria Institute, Brisbane, Australia

David Bell
Foundation for Innovative New Diagnostics, Geneva, Switzerland

3:45 p.m.

OPENING REMARKS

David Bell
WHO/FIND, Geneva, Switzerland

3:55 p.m.

CHARACTERIZATION AND SELECTION OF MALARIA SAMPLES FOR EVALUATION OF RDTS

Peter L. Chiodini
Hospital for Tropical Diseases, London, United Kingdom

4:15 p.m.

METHODS FOR AND OBSERVATIONS FROM THE BENCH EVALUATION OF MALARIA RDTS

John W. Barnwell
Centers for Disease Control and Prevention, Atlanta, United States

4:35 p.m.

ANALYSING THE BENCH PERFORMANCE OF RDTS

Michelle L. Gatton
Queensland Institute of Medical Research, Brisbane, Australia

4:55 p.m.

SELECTION OF MALARIA RDTS IN SOUTH AMERICA

Dionicia Gamboa
Institute of Tropical Medicine "Alexander Von Humboldt", Lima, Peru

4:55 p.m.

SELECTION OF MALARIA RDTS IN SOUTH AMERICA

Qin Cheng
Australian Army Malaria Institute, Brisbane, Australia

5:20 p.m.

DISCUSSION

Scientific Session 159

Malaria - Development and Functional Assessment of Antibodies to Malaria Antigens

Washington 4

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

CHAIR

Bryan Greenhouse
University of California, San Francisco, San Francisco, CA, United States

Linda Reiling
The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

3:45 p.m.

1066

ANTIMALARIAL ANTIBODIES ARE GOOD MARKERS OF PRIOR EXPOSURE BUT NOT PROTECTION AGAINST SUBSEQUENT MALARIA IN CHILDREN IN KAMPALA, UGANDA

Bryan Greenhouse[1], Benjamin Ho[2], Moses R. Kamya[3], Tamara D. Clark[1], Denise Njama-Meya[3], Bridget Nzarubara[3], Catherine Maiteki-Sebuguzi[3], Sarah G. Staedke[4], Philip J. Rosenthal[1], Grant Dorsey[1], Chandy C. John[2]
[1]University of California, San Francisco, San Francisco, CA, United States, [2]University of Minnesota, Minneapolis, MN, United States, [3]Makerere University, Kampala, Uganda, [4]London School of Hygiene and Tropical Medicine, London, United Kingdom

4 p.m.

1067

ANALYSIS OF THE BIOLOGICAL FUNCTION OF ANTIBODIES ELICITED FOLLOWING IMMUNIZATION OF MALARIA- NAÏVE SUBJECTS WITH A *PLASMODIUM FALCIPARUM* ERYTHROCYTE-BINDING ANTIGEN 175 (EBA175) VACCINE

Samuel E. Moretz[1], Ababacar Diouf[1], Hong Zhou[1], Gregory Tullo[1], Hanaa El Sahli[2], Wendy Keitel[2], Carole A. Long[1]
[1]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [2]Baylor College of Medicine, Houston, TX, United States

4:15 p.m.

1068

DIFFERENT T EPITOPE REGIONS OF THE *P. FALCIPARUM* MSP1-33 CRITICALLY INFLUENCED THE RESPONSIVENESS, MAGNITUDE, AND QUALITY OF ANTI-MSP1-19 ANTIBODIES

Kae Pusic[1], Charmaine Aniya[2], Susannah Lee[1], Mazie Tsang[1], James Senda[2], David Clements[2], George Hui[1]
[1]University of Hawaii, Honolulu, HI, United States, [2]Hawaii Biotech Inc, Aiea, HI, United States

4:30 p.m.

1069

PFEMP1 IS THE MAJOR TARGET OF ANTIBODIES TO THE SURFACE OF *P. FALCIPARUM*-INFECTED ERYTHROCYTES THAT ARE ASSOCIATED WITH PROTECTION FROM MALARIA

Katherine Howell[1], Joanne M. Chesson[1], Linda Reiling[1], Peter C. Bull[2], George Warimwe[2], Alan F. Cowman[1], Kevin Marsh[2], **James G. Beeson**[1]
[1]Walter and Eliza Hall Institute of Medical Research, Parkville, Australia, [2]Centre for Geographic Medicine Research, Kenya Medical Research Institute, Kilifi, Kenya
(ACMCIP Abstract)

4:45 p.m.

1070

IMPACT OF INTERMITTENT PREVENTIVE TREATMENT WITH SULFADOXINE-PYRIMETHAMINE ON IMMUNE RESPONSES TO ERYTHROCYTIC STAGE ANTIGENS IN MOZAMBICAN CHILDREN

Diana Quelhas[1], Laura Puyol[2], Llorenc Quinto[2], Tacilta Nhampossa[1], Eusebio Macete[1], Pedro Aide[1], Elisa Serra-Casas[2], Alfons Jimenez[2], Pau Cistero[2], Alfredo Mayor[2], Inacio Mandomando[1], Sergi Sanz[2], John Aponte[2], Virander Chauhan[3], Chetan Chitnis[3], Pedro Alonso[2], Clara Menendez[2], Carlota Dobano[2]
[1]Manhica Health Research Centre, Manhica, Mozambique, [2]Centre de Recerca en Salut Internacional de Barcelona, Barcelona, Spain, [3]International Centre for Genetic Engineering and Biotechnology, New Delhi, India

5 p.m.

1071

ACQUISITION OF ANTIBODIES TO THE PFRH2 INVASION LIGANDS OF *P. FALCIPARUM* AND THEIR ASSOCIATION WITH PROTECTION FROM MALARIA

Linda Reiling[1], Jack S. Richards[1], Tony Triglia[1], Watcharee Chokejindachai[2], John E. Donelson[3], Elijah Dabod[4], Pascal Michon[4], Livingstone Tavul[4], Alan F. Cowman[1], Ivo Mueller[4], James G. Beeson[1]
[1]The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia, [2]Mahidol University, Bangkok, Thailand, [3]University of Iowa, City of Iowa, IA, United States, [4]Papua New Guinea Institute of Medical Research, Goroka, Papua New Guinea

5:15 p.m.

1072

IDENTIFYING B-CELL EPITOPES WITHIN THE LIGAND DOMAIN OF *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN

Francis B. Ntumngia
University of South Florida, Tampa, FL, United States
(ACMCIP Abstract)

Symposium 160

Vivax Malaria Research

Washington 5

Saturday, November 21, 3:45 p.m. - 5:30 p.m.

Presentations will highlight important aspects of *vivax* malaria epidemiology, pathogenesis, drug resistance and host interactions.

CHAIR

John Adams
University of South Florida, Tampa, FL, United States

Deirdre A. Joy
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

3:45 p.m.

MICROSATELLITE DIVERSITY IN *PLASMODIUM VIVAX* FIELD PARASITE ISOLATES

Nadira D. Karunaweera
University of Colombo, Colombo, Sri Lanka

4:05 p.m.

MOLECULAR ANALYSES OF *PLASMODIUM VIVAX* PARASITES INVOLVED IN SEVERE MANIFESTATIONS

Ashis Das
Birla Institute of Technology and Science, Pilani, Rajasthan, India

4:25 p.m.

SPECTRUM AND MORBIDITY PATTERN OF SEVERE *VIVAX* MALARIA AND ITS COMPARISON WITH SEVERE MANIFESTATION ASSOCIATED WITH *FALCIPARUM* AND MIXED MALARIA (A STUDY FROM BIKANER, NORTHWEST INDIA)

Sanjay Kumar Kochar
S.P. Medical College, Bikaner, India

4:45 p.m.

A RANDOMISED, OPEN COMPARATIVE STUDY OF DIHYDROARTEMISININ-PIPERAQUINE VERSUS CHLOROQUINE FOR THE TREATMENT OF *VIVAX* MALARIA

Phyo Aung
Shoklo Malaria Research Unit, Mae Sot Tak, Thailand

5:05 p.m.

IDENTIFICATION OF HOST FACTORS AND LEAD COMPOUNDS FOR DEVELOPMENT OF NOVEL AGENTS TARGETING *PLASMODIUM*-INFECT HEPATOCYTES - CAN THEY BE USED TO TARGET HYPNOZOITE STAGES?

Maria Mota
Instituto de Medicina Molecular, Lisboa, Portugal

Symposium 160A

Late-Breaking Findings from a Recently Completed Trial of a Rotavirus Vaccine in Five Countries in Africa and Asia: Public Health Implications

Wilson A

Saturday, November 21, 3:45 p.m. – 5:30 p.m.

Rotavirus is a major cause of severe diarrhea and mortality in infants and toddlers in the developing world. While rotavirus vaccines are used routinely in infants in the United States and a variety of other countries, they are not yet utilized for children at highest risk for severe disease and mortality in Asia and Africa. This session will summarize findings of a recently completed randomized, double-blind, placebo controlled investigation of efficacy, immunogenicity and safety of an oral pentavalent rotavirus vaccine in two countries in Asia (Vietnam and Bangladesh) and three countries in Africa (Ghana, Kenya and Mali). The trial which began in 2007, concluded in March 2009. In addition to the key findings of this trial, the session will review information on rotavirus burden of disease, impact of introduction of rotavirus vaccines in other parts of the world, and will put these findings in context with other trials and post-marketing assessments to consider the way forward for reducing the disease burden from diarrheal disease due to rotavirus.

CHAIR

Robert Breiman
Centers for Disease Control and Prevention - Kenya, Nairobi, Kenya

Roger Glass
Fogarty International Center, Bethesda, MD, United States

3:45 p.m.

ROTAVIRUS: GLOBAL BURDEN OF DIARRHEAL DISEASE AND EARLY IMPACT OF VACCINE INTRODUCTION

Roger Glass
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

4 p.m.

FINDINGS OF RANDOMIZED, DOUBLE-BLIND CONTROLLED TRIAL OF AN ORAL PENTAVALENT ROTAVIRUS VACCINE IN ASIA (VIETNAM AND BANGLADESH)

K. Zaman
ICDDR,B, Dhaka, Bangladesh

4:15 p.m.

FINDINGS OF RANDOMIZED, DOUBLE-BLIND CONTROLLED TRIAL OF AN ORAL PENTAVALENT ROTAVIRUS VACCINE IN AFRICA (GHANA, KENYA, AND MALI)

Samba O. Sow
Center for Vaccine Development-Mali, Bamako, Mali

4:40 p.m.

SYNTHESIZING DATA FROM THE FIVE SITES: EVALUATING PUBLIC HEALTH IMPACT

Robert Breiman
Centers for Disease Control and Prevention - Kenya, Nairobi, Kenya

4:55 p.m.

DISCUSSION OF RESULTS FROM THE TRIALS

Robert Breiman
Centers for Disease Control and Prevention - Kenya, Nairobi, Kenya

5:10 p.m.

ROTAVIRUS VACCINES FOR CHILDREN IN DEVELOPING COUNTRIES: NEXT STEPS FOR DISEASE REDUCTION

Duncan Steele
PATH, Seattle, WA, United States

Plenary Session 161

Plenary Session IV: Presidential Address and Business Meeting

Salon 2
Saturday, November 21, 6 p.m. - 7:30 p.m.

ASTMH presidential address and annual business meeting.

CHAIR

Jonathan (Josh) Berman
Fast-Track Drugs and Biologics LLC, North Potomac, MD, United States

Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

6 p.m.

INTRODUCTION

Christopher V. Plowe
University of Maryland School of Medicine, Baltimore, MD, United States

6:15 p.m.

OPTIMISM, PERSISTENCE AND OUR COLLECTIVE CRYSTAL BALL

Thomas E. Wellems
ASTMH President, Rockville, MD, United States

6:45 p.m.

ASTMH ANNUAL BUSINESS MEETING

Jonathan (Josh) Berman
Fast-Track Drugs and Biologics LLC, North Potomac, MD, United States

Poster Session C Dismantle

Exhibit Hall B South
Saturday, November 21, 7 p.m. - 8 p.m.

Sunday, November 22

Registration

Salon Foyer
Sunday, November 22, 7 a.m. - 10:30 a.m.

Cyber Cafe

Marriott Foyer
Sunday, November 22, 7 a.m. - 10:30 a.m.

Speaker Ready Room

Maryland A
Sunday, November 22, 7 a.m. - Noon

Media Room

Rooms 8228/8229
Sunday, November 22, 7:30 a.m. - 1 p.m.

ASTMH Council Meeting

Balcony B
Sunday, November 22, 7:30 a.m. - 9:30 a.m.

Symposium 163

Clinical Update: What's New in Literature

Salon 2
Sunday, November 22, 8 a.m. - 9:45 a.m.

Clinicians in tropical medicine and travelers' health base their decisions on the knowledge of disease epidemiology, diagnostic tools, drug resistance patterns and vaccine safety data. This symposium will review the evolving epidemiology, diagnosis, treatment, and prevention of malaria, tuberculosis, influenza and yellow fever, with highlights on recently published studies.

CHAIR

Lin H. Chen
Mount Auburn Hospital, Cambridge, MA, United States

8 a.m.

MALARIA: CLINICAL UPDATE WITH LITERATURE HIGHLIGHTS

Christoph Hatz
Swiss Tropical Institute, Basel, Switzerland

8:25 a.m.

YELLOW FEVER: CLINICAL UPDATE WITH LITERATURE HIGHLIGHTS

Thomas P. Monath
Kleiner Perkins Caulfield & Byers Pandemic & Biodefense Fund, Cambridge, MA, United States

8:50 a.m.

TUBERCULOSIS: CLINICAL UPDATE WITH LITERATURE HIGHLIGHTS

Robert Gilman
Johns Hopkins University School of Public Health, Baltimore, MD, United States

9:15 a.m.

INFLUENZA: CLINICAL UPDATE WITH LITERATURE HIGHLIGHTS

Frederick Hayden
University of Virginia, Charlottesville, VA, United States

Symposium 164

Pathophysiology, Pathology and Management of Severe Malaria

Salon 3
Sunday, November 22, 8 a.m. - 9:45 a.m.

This symposium is presented by the two research groups (working in Malawi and Southeast Asia) conducting studies of the pathology of severe malaria. Reflecting on over twenty years of research on the clinical features, pathophysiology and management of severe malaria, the similarities and differences in clinical and pathological features of severe malaria in African children and Asian adults will be presented and discussed and current management reviewed.

CHAIR

Nicholas White
Mahidol University, Bangkok, Thailand

Malcolm Molyneux
Blantyre Malaria Project, Blantyre, Malawi

8 a.m.

THE PATHOLOGY OF SEVERE MALARIA

Gareth D. H. Turner
Oxford University, Oxford, United Kingdom

Dan A. Milner
Blantyre Malaria Project and Harvard School of Public Health, Boston, MA, United States

8:20 a.m.

PATHOPHYSIOLOGY AND CLINICAL FEATURES OF SEVERE MALARIA IN MALAWIAN CHILDREN

Terrie Taylor
Michigan State University, East Lansing, MI, United States

8:45 a.m.

PATHOPHYSIOLOGICAL AND CLINICAL FEATURES OF SEVERE MALARIA IN ADULTS

Nicholas P. Day
Mahidol University, Bangkok, Thailand

9:05 a.m.

MANAGEMENT OF SEVERE MALARIA

Arjen Dondorp
Mahidol University, Bangkok, Thailand

9:25 a.m.

GENERAL DISCUSSION AND QUESTIONS

Symposium 165

The Affordable Medicines Facility-malaria (AMFm)

Delaware A
Sunday, November 22, 8 a.m. - 9:45 a.m.

The Affordable Medicines Facility-malaria (AMFm) is a global financing mechanism designed to make good quality ACTs (and other coformulated drugs, as they are developed) widely available at low "chloroquine" prices through both the public and private sectors in malaria-endemic countries. These subsidized ACTs should, through market forces, displace more expensive artemisinin monotherapies (which would hasten resistance to artemisinins) and cheaper antimalarials, which now lack effectiveness because of resistance. What distinguishes AMFm from other subsidies is its reliance on existing supply chains to carry subsidized drugs from the highest to the lowest links in distribution: from country-level wholesalers to village drug-sellers. AMFm is available in 13 countries in 2009 and will be in the rest of the malaria-endemic world within a few years. From its conception in a 2004 Institute of Medicine report through to implementation, AMFm has attracted controversy and intense debate. Speakers in this symposium will discuss the origins of AMFm and the early stages of its implementation, as well as the current status of ACTs in the private sector.

CHAIR

Hellen Gelband
Resources for the Future, Washington, DC, United States

Ramanan Laxminarayan
Resources for the Future, Washington, DC, United States

8 a.m.

SAVING LIVES, BUYING TIME—THE IOM REPORT AND EARLY STEPS TOWARD A GLOBAL ACT SUBSIDY

Ramanan Laxminarayan
Resources for the Future, Washington, DC, United States

8:20 a.m.

PUTTING THE SUBSIDY IDEA INTO PRACTICE: THE BIRTH OF AMFm

Olusoji Adeyi
World Bank, Washington, DC, United States

8:45 a.m.

TESTING THE GLOBAL SUBSIDY IDEA: THE CHAI EXPERIENCE

Oliver Sabot
Clinton Foundation, Dar es Salaam, United Republic of Tanzania

9:10 a.m.

ACTWATCH: PRIVATE SECTOR ACT SUPPLY AND QUALITY IN SEVEN COUNTRIES BEFORE AMFm

Kathryn O'Connell
PSI, Nairobi, Kenya

Symposium 166

Building Bridges toward Improved IRB Processes through Capacity Building in Research Ethics in the Developing World

Delaware B

Sunday, November 22, 8 a.m. - 9:45 a.m.

Strengthening research ethics review capacity in an era of significant exporting of clinical trials to the developing world is an essential need. Recent data showed that 13,521 of 24,206 clinical trial sites being used in November 2007 for studies sponsored by the 20 largest U.S. drugmakers were international, and that the number of countries involved in clinical trials has doubled over the past ten years. Concerns about the inadequacy of proper ethics review systems to effectively protect human subjects and vulnerable populations, the need to strengthen the local ethical committees or IRBs and the absence of funding allocated to research ethics capacity building through most of the research budget calls for innovations and international liaisons to address the need for highly-advanced ethics knowledge, while at the same time applying the procedures and principles to local practices and traditions. The implementation of local regulations may also help address issues of compliance from both the ethics committees and the investigators. Disregarding this concern and abandoning research ethics committees to fend for themselves will only contribute to the rise of ethical disparities in the conduction of human subject research.

CHAIR

A. Roxana Lescano
Naval Medical Research Center Detachment Peru, Lima, Peru

Barbara Sina
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

8 a.m.

RESEARCH ETHICS TRAINING AND THE NATIONAL INSTITUTES OF HEALTH

Reidar Lie
National Institutes of Health, Bethesda, MD, United States

8:25 a.m.

RESEARCH ETHICS CAPACITY BUILDING EFFORTS IN INDIA

Nandini Kumar
Indian Council of Medical Research, New Delhi, India

8:50 a.m.

RESEARCH ETHICS TRAINING, THE PERUVIAN IRB NETWORK EXPERIENCE

A. Roxana Lescano
Naval Medical Research Center Detachment Peru, Lima, Peru

9:15 a.m.

THE BRAZILIAN SYSTEM OF RESEARCH ETHICS REVIEW

Dirce Guilhem
Universidade de Brasilia, Brasilia, Brazil

Scientific Session 167

Filariasis - Immunology

Virginia AB

Sunday, November 22, 8 a.m. - 9:45 a.m.

CHAIR

Marc Hübner
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

8 a.m.

1080

BASOPHILS AUGMENT PARASITE ANTIGEN-SPECIFIC CD4+ T CELL PROLIFERATION AND EOSINOPHILIA IN A MOUSE MODEL OF FILARIASIS

Marina N. Torrero, Marc P. Hübner, David Larson, Ellen Mueller, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8:15 a.m.

1081

INCREASED POPULATIONS OF CIRCULATING MYELOID AND PLASMACYTOID DENDRITIC CELLS IN PATENT FILARIAL INFECTIONS

Lily Mahapatra[1], Benoit Dembele[2], Simon Metenou[1], Siaka Konate[2], Housseini Dolo[2], Michel E. Coulibaly[2], Lamine Soumaoro[2], Rungnapa Panka[3], Damien Chaussabel[3], Siaka Y. Coulibaly[2], Dramane Sanogo[2], Salif Seriba Doumbia[2], Abdallah A. Diallo[2], Thomas B. Nutman[1], Siddhartha Mahanty[1], Roshanak Tolouei Semnani[1]
[1]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States, [2]Filariasis Unit, FMPOS, University of Bamako, Bamako, Mali, [3]Baylor Institute for Immunology Research, Baylor University, Dallas, TX, United States

8:30 a.m.

1082

BASOPHILS AND MAST CELLS BECOME HYPORESPONSIVE IN CHRONIC HELMINTH INFECTIONS

David Larson, Marc P. Hübner, Marina N. Torrero, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8:45 a.m.

1083

PRE-EXISTING FILARIAL INFECTION INFLUENCES CYTOKINE PRODUCTION DURING ACUTE MALARIA IN CHILDREN AND YOUNG ADULTS IN A COENDEMIC REGION OF MALI

Benoit Dembele[1], Simon Metenou[2], Housseini Dolo[1], Siaka Konate[1], Siaka Y. Coulibaly[1], Dramane Sanogo[1], Siddhartha Mahanty[2], Michel E. Coulibaly[1], Lamine Soumaoro[1], Salif S. Doumbia[1], Abdallah A. Diallo[1], Merepin A. Guindo[1], Dapa A. Diallo[1], Sekou F. Traore[1], Yaya I. Coulibaly[1], Thomas B. Nutman[2], Amy D. Klion[2]
[1]University of Bamako, Bamako, Mali, [2]National Institute of Allergy and Infectious Diseases/National Institutes of Health, Bethesda, MD, United States

9 a.m.

1084

PATENT FILARIAL INFECTION MODULATES THE QUALITY OF T CELL RESPONSES TO MALARIAL ANTIGENS IN MALARIA/FILARIAL CO-ENDEMIC VILLAGE OF MALI

Simon Metenou[1], Benoit Dembele[2], Siaka Konate[2], Housseini Dolo[2], Lamine Soumaoro[2], Abdallah A. Diallo[2], Michel E. Coulibaly[2], Siaka Y. Coulibaly[2], Dramane Sanogo[2], Yaya I. Coulibaly[2], Sekou F. Traore[2], Siddhartha Mahanty[1], Amy D. Klion[1], Thomas B. Nutman[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Filaria Unit, FMPOS, University of Bamako, Mali, Bamako, Mali
(ACMCIP Abstract)

9:15 a.m.

1085

ATTENUATION OF TLR EXPRESSION AND FUNCTION IN LATENT TUBERCULOSIS BY COEXISTENT FILARIAL INFECTION WITH RESTORATION FOLLOWING ANTIFILARIAL CHEMOTHERAPY

Subash Babu[1], Sajid Q. Bhat[1], Pavan Kumar[1], R. Anuradha[1], Paul Kumaran[2], P. G. Gopi[2], C. Kolappan[2], V. Kumaraswami[2], Thomas B. Nutman[3]
[1]National Institutes of Health-TRC-ICER, Chennai, India, [2]Tuberculosis Research Center, Chennai, India, [3]National Institutes of Health, Bethesda, MD, United States

9:30 a.m.

1086

HELMINTH-MEDIATED PROTECTION AGAINST AUTOIMMUNE DIABETES IN NOD MICE IS NOT DEPENDENT ON A TH2 IMMUNE SHIFT

Marc P. Hübner, Marina N. Torrero, Ellen Mueller, David Larson, J. Thomas Stocker, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Symposium 168

MAL-ED: A Study of the Effects of Enteric Diseases and Malnutrition on Child Growth and Development in Eight Resource-Poor Countries

Virginia C
Sunday, November 22, 8 a.m. - 9:45 a.m.

One in every five children in the developing world is malnourished and poor nutrition is linked to more than half of all child deaths worldwide. Early childhood malnutrition is considered one of the most prevalent risk factors for morbidity and mortality in children under five and may lead to cognitive and physical deficits later in life. This vicious cycle of malnutrition is compounded by the tremendous enteric infectious disease burden of children in the developing world. These infections alter gut integrity, impair absorption of nutrients and the resulting malnutrition increases susceptibility to and incidence of further infection and diminished immune response to vaccines. Moreover, high rates of disease, malnutrition and impaired child development place an enormous and disproportionate burden on poor families and on the social and economic stability of the countries where they occur. Understanding the complex and synergistic relationship between enteric infections and malnutrition is fundamental to the design of better intervention strategies. This symposium will present the goals and organization of a study being conducted in eight poorly-resourced countries by researchers in a new project known as MAL-ED. The MAL-ED Consortium has established and will coordinate a network of sites focusing on populations with a high prevalence of malnutrition and enteric infections. The sites, including those in Peru, Brazil, Bangladesh, India, Pakistan, Tanzania, South Africa and Nepal, will conduct comprehensive studies using shared protocols to determine the factors that impact early childhood growth and cognitive development. These studies will allow us to elucidate some of the complex relationships between enteric infection and malnutrition, leading to more targeted, cost-effective interventions that will further reduce the burden of disease for those living in poverty.

CHAIR

Mark A. Miller
National Institutes of Health, Bethesda, MD, United States

Michael Gottlieb
Foundation for the National Institutes of Health, Bethesda, MD, United States

8 a.m.

GLOBAL EPIDEMIOLOGY OF DIARRHEAL DISEASE

Mark A. Miller
National Institutes of Health, Bethesda, MD, United States

8:25 a.m.

DETERMINING DIARRHEAL ETIOLOGY IN THE MAL-ED STUDY

Eric Houpt
University of Virginia, Charlottesville, VA, United States

8:50 a.m.

EFFECTS OF ENTERIC DISEASES ON COGNITIVE DEVELOPMENT

Richard Guerrant
University of Virginia, Charlottesville, VA, United States

9:15 a.m.

THE LINK BETWEEN ENTERIC INFECTIONS AND MALNUTRITION

Laura Caulfield
The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

Scientific Session 169

Mosquitoes - Insecticide Resistance and Control

Washington 1
Sunday, November 22, 8 a.m. - 9:45 a.m.

CHAIR

William Black
Colorado State University, Fort Collins, CO, United States

Karla L. Saavedra-Rodriguez
Colorado State University, Fort Collins, CO, United States

8 a.m.

1087

INDOOR USE OF CARBAMATE TREATED PLASTIC SHEETING IN COMBINATION WITH LONG LASTING INSECTICIDAL NETS TO CONTROL PYRETHROID RESISTANT MALARIA VECTORS IN WEST AFRICA

Djenontin Armel
CREC/IRD, Cotonou, Benin

8:15 a.m.

1088

MULTIPLE INSECTICIDE RESISTANCE AMONG *ANOPHELES GAMBIAE* IN URBAN AGRICULTURAL AREAS OF COTONOU, BENIN (WEST AFRICA)

Moussa B. Cisse[1], Thierry Baldet[1], Fabrice Chandre[2], Joseph Chabbi[1], Jean M. Hugard[2], Martin Akogbeto[1], Ousmane A. Koita[3], Donald J. Krogstad[4]
[1]Centre de Recherche Entomologique de Cotonou (CREC), Cotonou, Benin, [2]Institut de Recherche pour le Developpement (IRD), Cotonou, Benin, [3]Laboratoire de Biologie Moleculaire Appliquee, Facultes des Sciences et Techniques (FAST), Bamako, Mali, [4]Tulane University Health Sciences Center, New Orleans, LA, United States

8:30 a.m.

1089

THE POTENTIAL FOR MALARIA CONTROL USING FUNGAL BIOPESTICIDES

Matt Thomas, Simon Blanford, Andrew Read
Pennsylvania State University, University Park, PA, United States

8:45 a.m.

1090

INSENSITIVE ACETYLCHOLINESTERASE (ACE.1^R): EVENTS OF INTROGRESSION AND DUPLICATION BETWEEN THE MOLECULAR M AND S FORMS OF *ANOPHELES GAMBIAE* S.S.

Luc S. Djogbénou[1], Mylène Weill[2], Jean-Marc Hougard[3], Fabrice Chandre[3], Roch Dabire[4]
[1]Institut Régional de Santé Publique/IRD, Cotonou, Benin, [2]Equipe Génétique de l'Adaptation/Université Montpellier, Montpellier, France, [3]Institut de Recherche pour le Developpement, Montpellier, France, [4]Institut Régional des Sciences de Santé, Bobo-Dioulasso, Burkina Faso

9 a.m.

1091

CHANGES IN THE TRANSCRIPTION OF DETOXIFICATION GENES IN RESPONSE TO SELECTION WITH TEMEPHOS AND PERMETHRIN IN *AEDES AEGYPTI*

Karla Saavedra-Rodriguez[1], Clare Strode[2], Guadalupe Reyes-Solis[1], Adriana Flores-Suarez[3], Hilary Ranson[2], Janet Hemingway[2], William Black IV[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [3]Universidad Autonoma de Nuevo Leon, San Nicolas de los Garza, Mexico

9:15 a.m.

1092

OPTIMIZATION OF A HOST-SEEKING MOSQUITO TRAP FOR INTEGRATION INTO AN *AEDES AEGYPTI* PUSH-PULL CONTROL STRATEGY

Ferdinand V. Salazar[1], Theeraphap Chareonviriyaphap[1], Nicole Achee[2]
[1]Kasetsart University, Bangkok, Thailand, [2]Uniformed Services University of the Health Sciences, Bethesda, MD, United States

9:30 a.m.

1093

WILLINGNESS TO PAY FOR VECTOR CONTROL FOR THE ASIAN TIGER MOSQUITO IN NEW JERSEY

Yara A. Halasa[1], Donald S. Shepard[1], Dina Fonseca[2], Ary Farajollahi[3], Sean Healy[4], Randy Gaugler[2], Gary G. Clark[5]
[1]Brandeis University, Waltham, MA, United States, [2]Rutgers University, New Brunswick, NJ, United States, [3]Mercer County Mosquito Control, West Trenton, NJ, United States, [4]Monmouth County Mosquito Control Commission, Tinton Falls, NJ, United States, [5]United States Department of Agriculture, Gainesville, FL, United States

Scientific Session 170

Flavivirus - West Virus

Washington 2

Sunday, November 22, 8 a.m. - 9:45 a.m.

CHAIR

Doug E. Brackney
University of New Mexico, Albuquerque, NM, United States

Heidi Smith
University of Massachusetts Medical Center, Worcester, MA, United States

8 a.m.

1094

WEST NILE VIRUS GENETIC DIVERSITY AND RNA INTERFERENCE IN THE MOSQUITO *CULEX PIPIENS QUINQUEFASCIATUS*

Doug E. Brackney[1], Jennifer E. Beane[2], Gregory D. Ebel[1]
[1]University of New Mexico, Albuquerque, NM, United States, [2]Boston University Medical Center, Boston, MA, United States

8:15 a.m.

1095

THE EFFECT OF MOSQUITO SALIVA ON THE INTERACTION OF WEST NILE VIRUS AND ITS VERTEBRATE HOST

Pei-Yin Lim, Linda M. Styer, Laura D. Kramer, Kristen A. Bernard
Wadsworth Center, Slingerlands, NY, United States

8:30 a.m.

1096

AVIAN HOSTS OF WEST NILE VIRUS IN PUERTO RICO

Nicholas Komar[1], Elizabeth Hunsperger[2], Kovi Bessoff[2], Annette Diaz[2], Manuel Amador[2], Ginger Young[1], Rafael Seda[3], Taonex Perez[3], Roberto Barrera[2]
[1]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]Centers for Disease Control and Prevention, San Juan, PR, United States, [3]Puerto Rico Department of Health, San Juan, PR, United States

8:45 a.m.

1097

THE IMPACT OF WEST NILE VIRUS ON THE ABUNDANCE OF NORTH AMERICAN BIRDS

Ivo M. Foppa[1], Raphaelle H. Beard[1], Md Monir Hossain[2]
[1]Tulane University, New Orleans, LA, United States, [2]University of Texas, Houston, TX, United States

9 a.m.

1098

WEST NILE VIRUS INDUCES MULTIPLE MATRIX METALLOPROTEINASES (MMP) IN HUMAN ASTROCYTES: ROLE IN TIGHT JUNCTION PROTEIN (TJP) DEGRADATION AND BLOOD-BRAIN BARRIER (BBB) DISRUPTION

Saguna Verma, Mukesh Kumar, Ulziijargal Gurjav, Stephanie Lum, Vivek R. Nerurkar
University of Hawaii, Honolulu, HI, United States

9:15 a.m.

1099

CHARACTERIZATION OF ANTIGEN-SPECIFIC MEMORY CD8+ T CELLS FOLLOWING LIVE-ATTENUATED CHIMERIC WEST NILE VIRUS VACCINATION

Heidi Smith[1], Thomas P. Monath[2], Pamela Pazoles[1], Alan L. Rothman[1], Francis A. Ennis[1], Farshad Guirakhoo[3], Sharone Green[1]
[1]University of Massachusetts Medical School, Worcester, MA, United States, [2]Kleiner Perkins Caufield & Byers, Menlo Park, CA, United States, [3]Sanofi Pasteur, Marcy l'Etoile, France

9:30 a.m.

1100

VACCINATION OF WILDLIFE TO CONTROL ZOONOTIC DISEASE: WEST NILE VIRUS AS A CASE STUDY

A. Marm Kilpatrick[1], Ryan J. Peters[2], Matthew J. Jones[3], Peter P. Marra[4], Peter Daszak[5], Laura D. Kramer[3]
[1]University of California, Santa Cruz, Santa Cruz, CA, United States, [2]George Mason University, Fairfax, VA, United States, [3]New York State Department of Health, Albany, NY, United States, [4]Smithsonian Migratory Bird Center, Washington, DC, United States, [5]Wildlife Trust, New York, NY, United States

Symposium 171

The Fever from the Forest: Fifty Years of Research on Sylvatic Dengue Virus

Washington 5
Sunday, November 22, 8 a.m. - 9:45 a.m.

The goal of this symposium is to inform the scientific community about the history, current status and future directions of research on sylvatic dengue virus, an important yet underappreciated component of the dengue virus (DENV) transmission cycle. DENV are members of the genus Flavivirus in the family Flaviviridae and include four antigenically distinct serotypes (DENV-1-4). In the last half-century, DENV have emerged as the most important arboviral pathogens in tropical and subtropical regions throughout the world, putting one-third of the human population at risk of infection. The transmission of DENV includes a sylvatic, enzootic cycle, most likely between non-human primates and arboreal *Aedes* mosquitoes, and an urban, endemic/epidemic cycle between peridomestic *Aedes* mosquitoes and human reservoir hosts. Phylogenetic analyses suggest that the four currently circulating urban DENV serotypes emerged independently from ancestral sylvatic progenitors in the forests of southeast Asia after the establishment of urban populations large enough to support continuous interhuman transmission. In this symposium we will examine the sylvatic origins of DENV, including ecology, adaptation for urban transmission and molecular epidemiology, as well as the forces that have shaped the molecular evolution of extant sylvatic DENV strains. The potential for sylvatic DENV to re-emerge into the human transmission cycle in the face of immunity to current urban strains or vaccine candidates currently under development will also be discussed. The topics addressed in this symposium will provide an overview of how sylvatic DENV population dynamics and transmission influence emergence and why, therefore, the study of sylvatic DENV is critical to the prediction of future DENV emergence.

CHAIR

Nikos Vasilakis
University of Texas Medical Branch, Galveston, TX, United States

Kathryn A. Hanley
New Mexico State University, Las Cruces, NM, United States

8 a.m.

ECOLOGY AND EPIDEMIOLOGY OF SYLVATIC DENGUE IN WEST AFRICA

Amadou A. Sall
Institut Pasteur de Dakar, Dakar, Senegal

8:25 a.m.

EVOLUTIONARY PATTERNS IN SYLVATIC DENGUE VIRUS

Eddie Holmes
The Pennsylvania State University, University Park, PA, United States

8:50 a.m.

AND IN A SURPRISE MOVE…A RECENT CASE OF DENGUE HEMORRHAGIC FEVER DUE TO SYLVATIC DENGUE VIRUS INFECTION IN MALAYSIA

Jane M. Cardosa
Universiti Malaysia Sarawak, Sarawak, Malaysia

9:15 a.m.

INSIGHTS FROM THE BENCH: EXPERIMENTAL STUDIES OF SYLVATIC DENGUE VIRUS

Nikos Vasilakis
University of Texas Medical Branch, Galveston, TX, United States

Symposium 172

Influenza in the Developing World: Advances in Defining Burden and Considerations for Prevention and Preparedness

Washington 4

Sunday, November 22, 8 a.m. - 9:45 a.m.

In recent years, there have been new data from tropical countries in the developing world where there was essentially no information on influenza, confirming that influenza is an important threat. At the 2008 ASTMH annual meeting, a symposium was presented with early data from comprehensive surveillance established recently in five countries in Africa, Asia and Latin America: Kenya, Egypt, Thailand, Bangladesh and Guatemala. The symposium was widely acclaimed as providing new and exciting information, and set the stage for a follow-up symposium, during which an anticipated wealth of new data from these settings would be available. New data that defines burden of disease and risk factors for transmission in these countries will be presented. The cross-cutting theme of the presentations and discussion will be to focus on applying these new data to formulate and evaluate optimal cost-effective strategies for immunization and infection control to decrease burden of disease associated with influenza, along with adapting surveillance approaches in the developing world to detect and respond to emerging respiratory pathogen threats, including pandemic influenza.

CHAIR

Robert Breiman
Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya

Tim Uyeki
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

USING A VARIETY OF SURVEILLANCE TOOLS TO ASSESS BURDEN AND TO FORMULATE PREVENTION STRATEGIES FOR KENYA

Emma Lebo
Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya

8:20 a.m.

A TALE OF TWO CLIMATES: THE EPIDEMIOLOGY OF INFLUENZA IN THE HIGHLANDS AND LOWLANDS OF GUATEMALA

Kim Lindblade
Centers for Disease Control and Prevention-Guatemala, Guatemala City, Guatemala

8:40 a.m.

MODELING THE NATIONAL BURDEN OF INFLUENZA IN BANGLADESH

Eduardo Azziz-Baumgartner
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

SURVEILLANCE FOR INFLUENZA IN THE MIDDLE EAST: EMERGING PERSPECTIVES

Maha Talaat
NAMRU-3, Cairo, Egypt

9:20 a.m.

TRANSITIONING FROM SURVEILLANCE TO POLICY: THE EVOLVING STORY IN THAILAND

Mark Simmerman
Thailand - United States Collaboration, Bangkok, Thailand

Symposium 173

Complexities of Measuring Hygiene Behavior and Health Outcomes: How Do We Best Evaluate Low-Technology Solutions to Reducing Global Diarrhea Burden?

Washington 5

Sunday, November 22, 8 a.m. - 9:45 a.m.

Low-technology solutions such as handwashing with soap and point-of-use water treatment are increasingly being implemented to alleviate the high burden of diarrheal disease morbidity and mortality in resource-poor settings. Evaluating these programs using efficacy and effectiveness studies is challenging because of the complexities of measuring hygiene behavior and health outcomes. This symposium will provide a wealth of evidence regarding these complexities and provide recommendations for measuring hygiene behavior and health outcomes in a variety of research and program settings.

CHAIR

Pavani K. Ram
University at Buffalo, Buffalo, NY, United States

Stephen P. Luby
International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

8 a.m.

RAPID SPOT CHECK FOR SOAP AND WATER: A USEFUL PROXY TO ASSESS HANDWASHING BEHAVIOR?

Stephen P. Luby
International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

8:20 a.m.

CAN PROXY MEASURES OF HANDWASHING BEHAVIOR PREDICT DIARRHEA OUTCOMES? COMPARING MULTIPLE HANDWASHING INDICATORS AND HOUSEHOLD DISEASE OUTCOMES

Robert Dreibelbis
Johns Hopkins University, Baltimore, MD, United States

8:40 a.m.

RECALL ERRORS IN A WEEKLY DIARRHEAL SURVEY IN GUATEMALA: DETERMINING THE OPTIMAL LENGTH OF RECALL

Syed Nabeel Zafar
Aga Khan University, Karachi, Pakistan

9:05 a.m.

MEASURING DIARRHEA: QUANTIFYING HAWTHORNE EFFECTS IN FREQUENTLY COLLECTED DATA

Clair C. Null
Emory University, Atlanta, GA, United States

9:25 a.m.

RECONTAMINATION OF HANDS FOLLOWING THOROUGH HANDWASHING WITH SOAP: LESSONS FOR HAND CONTAMINATION MEASUREMENT AND HANDWASHING PROMOTION IN RESOURCE-POOR SETTINGS

Pavani Kalluri Ram
University at Buffalo, Buffalo, NY, United States

Scientific Session 173A

Malaria - Vaccines II

Washington 6

Sunday, November 22, 8 a.m. - 9:45 a.m.

CHAIR

Kazutoyo Miura
National Institute of Allergy and Infectious Diseases/National Institutes of Health, Rockville, MD, United States

Mahamadou Thera
MRTC/DEAP/FMPOS, Bamako, Mali

8 a.m.

1073

ASSESSMENT OF FIELD SITES FOR CLINICAL TRIALS OF A NEW MALARIA VACCINE IN AFRICA

Matthew B. Laurens[1], Bernhards R. Ogutu[2], Laurence Lemiale[3], Karl C. Kronmann[4], Linda Rosendorf[5], Christopher V. Plowe[1]
[1]Howard Hughes Medical Institute/Center for Vaccine Development, University of Maryland School of Medicine, Baltimore, MD, United States, [2]INDEPTH-Malaria Clinical Trials Alliance, Kisumu, Kenya, [3]PATH Malaria Vaccine Initiative, Bethesda, MD, United States, [4]United States Navy Medical Research Unit No. 3, Ghana Detachment, Accra, Ghana, [5]Independent Consultant, Bethesda, MD, United States

8:15 a.m.

1074

RANDOMIZED, CONTROLLED, PHASE 2B CLINICAL TRIAL TO EVALUATE THE SAFETY, IMMUNOGENICITY AND EFFICACY OF WRAIR'S AMA-1 MALARIA VACCINE (FMP2.1) ADJUVANTED IN GSK BIOLOGICALS' AS02A VS. RABIES VACCINE IN 1-6 YEAR OLD CHILDREN IN BANDIAGARA, MALI

Mahamadou A. Thera[1], Ogobara K. Doumbo[1], Drissa Coulibaly[1], Matthew B. Laurens[2], Abdoulaye Kone[1], Ando Guindo[1], Dapa A. Diallo[1], Karim Traore[1], Bourema Kouriba[1], Issa Diarra[1], Amagana Dolo[1], Amadou Niangaly[1], Modibo Daou[1], Mady Sissoko[1], Drissa Traore[1], Kirsten E. Lyke[3], Shannon Takala[3], Olivier Godeaux[4], Joelle Thonnard[4], Joe Cohen[4], David Lanar[5], Carter Diggs[6], Lorraine Soisson[6], Donald G. Heppner[5], Christopher V. Plowe[2]
[1]MRTC/DEAP/FMPOS - University of Bamako, Bamako, Mali, [2]CVD-University of Maryland, Baltimore, MD, United States, [3]CVD - University of Maryland, Baltimore, MD, United States, [4]GlaxoSmithKline Biologicals, Rixensart, Belgium, [5]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [6]United States Agency for International Development, Washington, DC, United States

8:30 a.m.

1075

IMPACT OF *PLASMODIUM FALCIPARUM* APICAL MEMBRANE ANTIGEN 1-COMBINATION 1/ALHYDROGEL VACCINE ON GROWTH-INHIBITORY ACTIVITY OF ANTIBODIES IN CHILDREN IN MALI

Kazutoyo Miura[1], Hong Zhou[2], Ababacar Diouf[2], Gregory Tullo[2], Joan A. Aebig[1], Louis H. Miller[1], Allan Saul[1], Ogobara K. Doumbo[3], Issaka Sagara[3], Alassane Dicko[3], Carole A. Long[2], Ruth D. Ellis[1]
[1]Malaria Vaccine Development Branch/National Institute of Allergy and Infectious Diseases/National Institutes of Health, Rockville, MD, United States, [2]Laboratory of Malaria and Vector Research/National Institute of Allergy and Infectious Diseases/ National Institutes of Health, Rockville, MD, United States, [3]Malaria Research and Training Center/ Faculty of Medicine Pharmacy and Dentistry/University of Bamako, Bamako, Mali

8:45 a.m.

1076

A PHASE 1 TRIAL OF A BIVALENT MSP2 BLOOD-STAGE MALARIA VACCINE FORMULATED WITH MONTANIDE ISA 720

James S. McCarthy[1], Joanne Marjason[2], Suzanne Elliott[2], Paul Fahey[3], Elissa Malkin[3], Eveline Tierney[3], Nadia Cross[4], Jack S. Richards[4], Michelle Boyle[4], Gilles Bang[5], Carole Long[6], Pierre Druilhe[5], James Beeson[4], Robin F. Anders[7]
[1]QIMR, University of Queensland, Brisbane, Australia, [2]Q-Pharm Pty Ltd, Brisbane, Australia, [3]PATH Malaria Vaccine Initiative, Bethesda, MD, United States, [4]Walter and Eliza Hall Institute, Melbourne, Australia, [5]Paster Institute, Paris, France, [6]National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, [7]Department of Biochemistry, La Trobe University, Melbourne, Australia

9 a.m.

1077

NEUTRALIZING ANTIBODY TITERS TO SIMIAN ADENOVIRAL VECTORS FOLLOWING ADCH63 ME-TRAP IMMUNIZATION IN HUMANS

Anna L. Goodman[1], Geraldine O'Hara[1], Katie Ewer[1], Katharine Collins[1], Nick Edwards[1], Arturo Reyes-Sandoval[1], Alison Lawrie[1], Alfredo Nicosia[2], Stefano Colloca[2], Sarah C. Gilbert[1], Adrian V. Hill[1]
[1]The Jenner Institute, University of Oxford, United Kingdom, [2]Okairos, Rome, Italy

9:15 a.m.

1078

SAFETY, TOLERABILITY, IMMUNOGENICITY AND PROTECTIVE EFFICACY OF AN ADENOVIRUS-VECTORED *P. FALCIPARUM* MALARIA VACCINE IN HEALTHY, MALARIA-NAÏVE ADULTS

C. Tamminga[1], M. Sedegah[1], I. Chuang[1], D. Regis[1], J.E. Epstein[1], M. Spring[1], J. Mendoza-Silveiras[1], V. Steinbeiss[1], C. Fedders[1], S. Reyes[1], F. Parekh[1], F. Williams[2], K. Smith[1], S. Maiolatesi[1], D.L. Doolan[1], K. Limbach[1], N. B. Patterson[1], J. Bruder[3], C.R. King[3], L. Soisson[4], C. Diggs[4], C. Ockenhouse[1], T.L. Richie[1]
[1]United States Military Malaria Vaccine Program, Naval Medical Research Center/ Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]National Naval Medical Center, Bethesda, MD, United States, [3]GenVec Inc., Gaithersburg, MD, United States, [4]United States Agency for International Development, Washington, DC, United States

9:30 a.m.

1079

DEVELOPMENT OF A SAFE AND REPRODUCIBLE HUMAN SPOROZOITE CHALLENGE MODEL FOR *PLASMODIUM VIVAX* IN HEALTHY ADULTS IN THE UNITED STATES

Ilin Chuang[1], Jetsumon Prachumsri[2], David Fryauff[1], Jitta Murphy[3], David Saunders[2], Jason Richardson[2], Donna Tosh[3], Jack Williams[3], Delia Bethell[2], Thomas L. Richie[1], Lisa Ware[3], Michele Spring[3], Mark Fukuda[2], Cindy Tamminga[1], James Cummings[3], April Kathcart[3], Anjali Yadava[3], Jack Komisar[3], Mike O'Neil[3], Mark Polhemus[3], Christian F. Ockenhouse[3]
[1]Naval Medical Research Center, Silver Spring, MD, United States, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [3]Walter Reed Army Institute of Research, Silver Spring, MD, United States

Coffee Break

Marriott Foyer

Sunday, November 22, 9:45 a.m. - 10:15 a.m.

Symposium 174

Cross Border Travel Bugs: Global Migration and Health Right in our Backyard

Salon 1

Sunday, November 22, 10:15 a.m. - Noon

On May 23, 2005, the World Health Assembly of the International Health Regulations (IHR) was adopted by member countries. One aim of the IHR is to "better respond to the increasing interaction between countries of the world, and to the changing nature of public health threats". IHR Article 44 affirmed that "State Parties shall undertake to collaborate with each other" to identify, investigate and respond to events and provide technical and logistic support. The United States shares northern and southern borders with Canada and Mexico respectively. Each year, more than 300 million persons travel across these borders. Some are potentially infectious or are carrying infected animals and/or cargo. For communities on these borders, the borders themselves are indistinct, thus local public health officials must share epidemiologic information between the respective countries regarding all epidemiologic events of mutual interest. This session will explore efforts by governments on the borders to improve information-sharing during public health events and develop sharing agreements and outline the binational procedures currently in place to ensure effective surveillance and reporting of pubic health events of mutual interest. Specific examples will include a Public Health Agency of Canada's Office of Public Health Policy study looking at the status of information-sharing arrangements and related issues along the Canada-United States border, and a model cross border case management and referral program for tuberculosis and the current status of binational collaborative efforts between Mexico and the U.S. The session will use TB case examples to highlight challenges for local public health response on both sides posed by infectious border crossers to evaluate the risks to other travelers and to coordinate binational contact investigations and will discuss issues and complex dynamics of tuberculosis control among migrating and mobile populations across both borders.

CHAIR

Clive M. Brown
Centers for Disease Control and Prevention, Atlanta, GA, United States

Steve Waterman
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:15 a.m.

CHALLENGES AND OBSTACLES FOR IMPLEMENTING EFFECTIVE CROSS-BORDER INFECTIOUS DISEASE SURVEILLANCE AND CONTROL ALONG THE U.S.-MEXICO BORDER

Miguel Escobedo
Centers for Disease Control and Prevention, El Paso, TX, United States

10:40 a.m.

THE EXISTING FRAMEWORK FOR EFFECTIVE BINATIONAL TUBERCULOSIS CONTROL ACTIVITIES CURRENTLY IN PLACE ALONG THE U.S.-MEXICO BORDER

Martin Castellanos
Mexico Secretariat of Health, Mexico City, Mexico

11:05 a.m.

THE RISKS ASSOCIATED WITH TB TRANSMISSION ON INTERNATIONAL BUS TRAVEL AND PRACTICAL ISSUES IN PURSUING CROSS-BORDER CONTACT INVESTIGATIONS

Paul Edelson
Centers for Disease Control and Prevention, New York, NY, United States

11:30 a.m.

PUBLIC HEALTH INFORMATION SHARING ALONG THE CANADA-U.S. BORDER: OPPORTUNITIES FOR IMPROVEMENT

André La Prairie
Public Health Agency of Canada, Ottawa, ON, Canada

Scientific Session 175

Clinical Tropical Medicine III

Salon 2

Sunday, November 22, 10:15 a.m. - Noon

CHAIR

Enrico Brunetti
University of Pavia, Pavia, Italy

Sabine Mand
University of Bonn, Bonn, Germany

10:15 a.m.

1101

COMPARISON OF P29, B2T AND EGHF DIAGNOSTIC PERFORMANCE (ELISA) IN PATIENTS WITH RESIDUAL CAVITIES AFTER SURGERY FOR CYSTIC ECHINOCOCCOSIS

Enrico Brunetti[1], Mar Siles-Lucas[2], Norbert Mueller[3], Maria Chiara Cerutti[4], Valeria D'Amico[4], Chiara Bazzocchi[4], Carlo Filice[1], Bruno Gottstein[3]
[1]University of Pavia - IRCCS S.Matteo Hospital Foundation, Pavia, Italy, [2]Consejo Superior de Investigaciones Científicas, Salamanca, Spain, [3]Institute of Parasitology - University of Bern, Bern, Switzerland, [4]University of Milan, Milan, Italy

10:30 a.m.

1102

DOXYCYCLINE IMPROVES FILARIAL LYMPHOEDEMA INDEPENDENT FROM ITS ACTION ON *WOLBACHIA*

Sabine Mand[1], Alexander Y. Debrah[2], Sabine Specht[1], Alexander Kwarteng[3], Rolf Fimmers[4], Ute Klarmann[1], Linda Batsa[3], Yeboah Marfo-Debrekyei[3], Ohene Adjei[3], Achim Hoerauf[1]
[1]Institute for Medical Microbiology, Immunology and Parasitology, University of Bonn, Bonn, Germany, [2]School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, [3]Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR), Kumasi, Ghana, [4]Institute for Medical Biometry, Informatics and Epidemiology, University of Bonn, Bonn, Germany

10:45 a.m.

1103

EFFECT OF HIGH DOSE INTRAVENOUS DEXAMETHASONE IN THE TREATMENT OF TYPHOID ENCEPHALOPATHY AMONG BANGLADESHI PATIENTS

Pradip K. Bardhan, Mohammad J. Chisti, Sayeeda Huq, Wasif A. Khan, Mohammad A. Salam
International Center for Diarrheal Disease Research, Dhaka, Bangladesh

11 a.m.

1104

THE ETIOLOGIES OF ACUTE UNDIFFERENTIATED FEBRILE ILLNESS IN AN ADULT COHORT IN BANDUNG, INDONESIA (2000-2008)

Panji I. Rudiman[1], Bachti Alisjahbana[1], Herman Kosasih[2], Primal Sudjana[1], Hadi Jusuf[1], Timothy H. Burgess[2], Maya Williams[2]
[1]Medical Faculty, Padjadjaran University, Bandung, Indonesia, [2]United States Naval Medical Research Unit 2, Jakarta, Indonesia

11:15 a.m.

1105

THE ASSOCIATION BETWEEN KHAT CHEWING AND TOBACCO SMOKING AMONG STUDENTS OF THE COLLEGE OF HEALTH SCIENCES FOR MALES IN JAZAN, SAUDI ARABIA

Yasser A. Hassan
College of Health Sciences, Jazan, Saudi Arabia

11:30 a.m.

1106

OUTBREAKS OF PUFFER FISH INTOXICATION FOLLOWING CONSUMPTION OF MARINE PUFFER FISH IN BANGLADESH, 2008

Nusrat Homaira[1], Mahmudur Rahman[2], Stephen P. Luby[1], Mustafizur Rahman[2], Mohammad Sabbir Haider[2], Labib Imran[1], Dawlat Khan[1], Shahana Parveen[1], Emily S. Gurley[1]
[1]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]IEDCR, Dhaka, Bangladesh

11:45 a.m.

1107

ETHICAL IMPLICATIONS OF INFORMED CONSENT IN EMERGENT CLINICAL SITUATIONS IN A "BUSH HOSPITAL" IN MALI

Jessica E. Manning[1], Christopher V. Plowe[2], Ogobara Doumbo[1]
[1]Malaria Research and Training Center, University of Bamako, Bamako, Mali, [2]Howard Hughes Medical Institute/Center for Vaccine Development, University of Maryland, Baltimore, MD, United States

Scientific Session 176

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Molecular Parasitology II

Supported with funding from the Burroughs Wellcome Fund
Salon 3

Sunday, November 22, 10:15 a.m. - Noon

CHAIR

Joanna Bridger
Brunel University, Middlesex, United Kingdom

Godfrey O. Lisk
National Institutes of Health, Rockville, MD, United States

10:15 a.m.

1153

PROFILING THE TRANSCRIPTIONAL LANDSCAPE IN *TRYPANOSOMA BRUCEI* BY MRNA NEXT-GENERATION SEQUENCING

Nikolay G. Kolev[1], Joseph B. Franklin[2], Shai Carmi[3], Huafang Shi[4], Shulamit Michaeli[3], Elisabetta Ullu[2,4], Christian Tschudi[1]
[1]School of Public Health, Yale University, New Haven, CT, United States, [2]Department of Cell Biology, Yale University Medical School, New Haven, CT, United States, [3]The Mina and Everard Goodman Faculty of Life Sciences, Bar Ilan University, Ramat-Gan, Israel, [4]Department of Internal Medicine, Yale University School of Medicine, New Haven, CT, United States

10:30 a.m.

1154

EXPORT OF MALARIAL VIRULENCE PROTEINS THAT REMODEL INFECTED HUMAN ERYTHROCYTES

Justin A. Boddey[1], Anthony N. Hodder[1], Svenja Gunther1, Paul R. Gilson[2], Heather Patsiouras[3], Eugene A. Kapp[3], J. Andrew Pearce[1], Richard J. Simpson[3], Brendan S. Crabb[2] and Alan F. Cowman[1]
[1]The Walter and Eliza Hall Institute for Medical Research, Melbourne, Victoria, Australia, [2]Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne, Victoria, Australia, [3]Ludwig Institute for Cancer Research and The Walter and Eliza Hall Institute for Medical Research, Melbourne, Victoria, Australia

10:45 a.m.

1108

A GENE LINKED TO A NEW ANTIMALARIAL DRUG RESISTANCE MECHANISM: REDUCED UPTAKE BY INFECTED ERYTHROCYTES

Godfrey Lisk, Sanjay A. Desai
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

11:00 a.m.

1109

CYTOKINE GENE SNPS ARE ASSOCIATED WITH SEVERE MALARIA IN VIETNAM

N.T.N. Quyen[1], N.H. Phu[2], C.Q. Thai[2], T.T. Hien[2], J.J. Farrar[1], S.J. Dunstan[1], The MalariaGEN Consortium[3]

[1]Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Ho Chi Minh City, Viet Nam, [2]Hospital for Tropical Diseases, Ho Chi Minh City, Viet Nam, [3]www.malariagen.net, Oxford, United Kingdom

11:15 a.m.

1110

MEK/ERK SIGNALING AND REACTIVE OXYGEN SPECIES REGULATE THE MOSQUITO ANTI-MALARIAL IMMUNE RESPONSE

Win Surachetpong, Shirley Luckhart

University of California Davis, Davis, CA, United States

11:30 a.m.

1111

SPATIAL REPOSITIONING OF GENE LOCI IN THE INTERPHASE NUCLEI OF BGE CELLS CO-CULTURED WITH *SCHISTOSOMA MANSONI* PARASITES

Joanna M. Bridger[1], Edwin C. Odoemelan[1], Halime Arican[1], Ishita S. Mehta[1], Nithya Raghavan[1], Wannaporn Ittiprasert[2], Andre Miller[2], Matty Knight[2]

[1]Brunel University, Middlesex, United Kingdom, [2]Biomedical Research Institute, Rockville, MD, United States

11:45 a.m.

1112

A LATERALLY TRANSFERRED BACTERIAL FERROCHELATASE GENE IS FUNCTIONAL IN FILARIAL PARASITES

Bo Wu[1], Jacopo Novelli[1], Daojun Jiang[2], Jeremy Foster[1], Peter U. Fischer[2], Barton Slatko[1]

[1]New England Biolabs, Inc, Ipswich, MA, United States, [2]Infectious Diseases Division, Department of Internal Medicine, Washington University School of Medicine, St. Louis, MO, United States

Symposium 177

Striking The Balance: Enhancing the Livelihoods and Health of Persons Living in the Developing World While Minimizing the Impact of Habitat Loss and Disease Transmission

Delaware A

Sunday, November 22, 10:15 a.m. - Noon

Globally, loss of habitat and biodiversity and environmental change is occurring at an ever increasing pace. Numerous factors such as logging, crop development, road construction, mining, livestock production and advancement of human settlements are largely to blame for the demise of the environment. While at the same time, the world's population continues to grow without an increase in these renewable resources. In addition, there is mounting evidence suggesting that this loss of biodiversity is contributing to the spread of infectious diseases in most major continents, including South America, Asia and Africa. We are currently at the crossroads of how to reduce disease transmission due to environment perturbation, while at the same time enhancing the health, well-being and livelihoods of persons living in the developing world. This symposium will highlight some of the most recent data demonstrating the link between environmental change and infectious disease transmission. Furthermore, we will explore and discuss the social impacts of this controversial issue as it relates to our changing global community.

CHAIR

Joel M. Montgomery
Naval Medical Research Center Detachment/Centers for Disease Control and Prevention, Lima, Peru

James N. Mills
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:15 a.m.

HABITAT LOSS AND PERTURBATION: THE POTENTIAL IMPACT ON INFECTIOUS DISEASE TRANSMISSION IN SOUTHEASTERN PERU

Hugo Razuri
Naval Medical Research Center Detachment, Lima, Peru, United States

10:40 a.m.

ECONOMIC STRESS, HABITAT PERTURBATION, AND LASSA VIRUS TRANSMISSION IN SIERRA LEONE, WEST AFRICA

Daniel G. Bausch
Tulane University, New Orleans, LA, United States

11:05 a.m.

HABITAT LOSS AND DISEASE TRANSMISSION IN THE AMERICAS: THE HUMAN HEALTH IMPLICATIONS

Valerie Paz Soldan
Tulane University, New Orleans, LA, United States

11:30 a.m.

EFFECT OF LAND USE CHANGES ON MALARIA VECTOR DISTRIBUTION IN CAMBODIA

Steven Tobias
Naval Medical Research Unit - 2, Jakarta, Indonesia, United States

Symposium 178

Modulation of Dendritic Cell Function by Pathogens

Delaware B
Sunday, November 22, 10:15 a.m. - Noon

Dendritic cells (DC) are centrally positioned in the mammalian immune system to orchestrate defense against infection. These cells are specialized for antigen presentation and, when combined with their ability to secrete immunoregulatory cytokines, they play a prominent role in T cell subset differentiation and effector generation. These combined properties allow DC to bridge innate and adaptive immune responses. Given the importance of DC in immunity, it is interesting that many microbial pathogens actively target these cells for infection. Furthermore, it is becoming increasingly clear that many virulent microorganisms have developed mechanisms to specifically disable DC function. A growing body of literature suggests that there are both common and unique methods employed by pathogens to interfere with DC function. This symposium will review recent advances in our understanding of the specific mechanisms used by bacteria, protozoan parasites and viruses to modulate DC function, resulting in establishment of persistent infection and in some cases development of disease.

CHAIR

Catharine M. Bosio
National Institute of Allergy and Infectious Diseases/National Institutes of Health, Hamilton, MT, United States

Eric Y. Denkers
Cornell University, Ithaca, NY, United States

10:15 a.m.

MODULATION OF HUMAN DENDRITIC CELLS BY VIRULENT *FRANCISELLA TULARENSIS*

Catharine M. Bosio
National Institute of Allergy and Infectious Diseases/National Institutes of Health, Hamilton, MT, United States

10:40 a.m.

DISRUPTION OF DENDRITIC CELL AND MACROPHAGE FUNCTION DURING INTRACELLULAR *TOXOPLASMA GONDII* INFECTION

Eric Y. Denkers
Cornell University, Ithaca, NY, United States

11:05 a.m.

RESPONSES OF DIFFERENT DENDRITIC CELL SUBPOPULATIONS DURING MALARIA INFECTION

Ana Rodriguez
New York University School of Medicine, New York, NY, United States

11:30 a.m.

REGULATION OF INFLUENZA VIRUS-SPECIFIC ADAPTIVE IMMUNITY BY PULMONARY DENDRITIC CELLS

Kevin Legge
University of Iowa, Iowa City, IA, United States

Scientific Session 179

Malaria/Mosquitoes: Prevention of Transmission

Virginia AB
Sunday, November 22, 10:15 a.m. - Noon

CHAIR

Peter S. Larson
University of Michigan, Adrian, MI, United States

Fengwu Li
University of California San Diego, La Jolla, CA, United States

10:15 a.m.

1113

***ANOPHELES CRACENS* - THE VECTOR OF THE 5TH HUMAN MALARIA PARASITE, *PLASMODIUM KNOWLESI,* IN PENINSULAR MALAYSIA**

Adela Ida Jiram[1], Indra Vythilingam[2], Fong Mun Yik[3]
[1]Parasitology Unit, Institute for Medical Research, Kuala Lumpur, Malaysia, [2]National Environment Agency (NEA), Singapore, [3]Department of Parasitology, Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

10:30 a.m.

1114

REGULATION OF MALARIA POPULATION DYNAMICS IN SANTO, VANUATU

Luis F. Chaves[1], Akira Kaneko[2]
[1]Emory University, Atlanta, GA, United States, [2]Karolinska Institutet, Stockholm, Sweden

10:45 a.m.

1115

DEVELOPMENT OF A MALARIA-REFRACTORY TRANSGENIC MOSQUITO USING AN ANTI-CHITINASE SINGLE-CHAIN ANTIBODY GENE

Fengwu Li[1], Alison Isaacs[2], Nijole Jasinskiene[2], Joseph Vinetz[1], Anthony A. James[2]
[1]University of California San Diego, La Jolla, CA, United States, [2]University of California Irvine, Irvine, CA, United States
(ACMCIP Abstract)

11 a.m.

1116

PERSPECTIVES OF PEOPLE IN MALI, WEST AFRICA TO GENETICALLY MODIFIED MOSQUITOES FOR MALARIA CONTROL

John M. Marshall[1], Mahamadou B. Toure[2], Mohamed M. Traore[2], Shannon Famenini[1], Charles E. Taylor[1]
[1]University of California at Los Angeles, Los Angeles, CA, United States, [2]Malaria Research and Training Center, Bamako, Mali

11:15 a.m.

1117

SPATIAL PATTERNS AND DETERMINANTS OF INSECTICIDE-TREATED NET USE, MALARIA AND ANEMIA IN THREE REGIONS OF MALAWI, 2005-2008

Peter S. Larson[1], Don P. Mathanga[2], Mark L. Wilson[1]
[1]University of Michigan, Ann Arbor, MI, United States, [2]University of Malawi College of Medicine, Blantyre, Malawi

11:30 a.m.

1118

INSECTICIDE TREATED NETS IN MALARIA PREVENTION: DOES DISTRIBUTION MODEL MATTER?

Hannah Chiu, Michael Hawkes, Kevin Kain
University of Toronto, Toronto, ON, Canada

11:45 a.m.

1119

EFFECTIVENESS OF INTERMITTENT PREVENTIVE TREATMENT FOR CHILDREN (IPTC) COMBINED WITH TIMELY TREATMENT AT HOME FOR MALARIA CONTROL

Collins S. Ahorlu[1], Kwadwo A. Koram[1], Atsu Seake-Kwawu[2]
[1]Noguchi Memorial Institute for Medical Research, Accra, Ghana, [2]Keta District Health Administration, Keta, Ghana

Symposium 180

Tackling the Number One Killer of Children in the Developing World: Approaches to Prevention and Treatment of Pneumonia

Virginia C

Sunday, November 22, 10:15 a.m. - Noon

In spite of the availability of cost-effective strategies to both prevent and treat pneumonia, over 2 million children continue to die each year, which is more than AIDS, malaria, and measles combined. Appropriate case management has been shown to be highly efficacious in treating children with pneumonia. However, many children in the developing world either do not seek care or do not receive appropriate antibiotics by health care workers. *Pneumococcus* and *Haemophilus influenzae* type b (Hib) together are thought to cause approximately half of childhood pneumonias. Although vaccines against both of these organisms have been extensively used in developed countries and have had a major impact on reducing pneumonia, the majority of the poorest children in the world currently have limited access to Hib vaccine and almost none have access to pneumococcal vaccines. Environmental and nutritional factors are known to greatly increase the risk and severity of pneumonia. In this symposium, world-renowned panelists will discuss the barriers to effective implementation of preventive and therapeutic strategies for pneumonia and provide their opinions on ways to overcome these barriers.

CHAIR

Adam L. Cohen
Centers for Disease Control and Prevention, Atlanta, GA, United States

Mathuram Santosham
Johns Hopkins School of Public Health, Baltimore, MD, United States

10:15 a.m.

VACCINES TO PREVENT PNEUMONIA AND IMPROVE CHILD SURVIVAL

Richard Adegbola
Medical Research Council Laboratories, Banjul, Gambia

10:40 a.m.

ZINC AND NUTRITIONAL INTERVENTIONS TO TREAT AND PREVENT PNEUMONIA

W. Abdullah Brooks
International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

11:05 a.m.

HANDWASHING IN THE DEVELOPING WORLD: A SIMPLE INTERVENTION TO PREVENT PNEUMONIA

Stephen Luby
Centers for Disease Control and International Center for Diarrheal Disease Research, Bangladesh, Dhaka, Bangladesh

11:30 a.m.

ENVIRONMENTAL INTERVENTIONS: REDUCTION OF INDOOR AIR POLLUTION TO PREVENT PNEUMONIA

Nigel Bruce
University of Liverpool, Liverpool, United Kingdom

Symposium 181

Advances in *Anopheles gambiae* Population Genomics

Washington 1

Sunday, November 22, 10:15 a.m. - Noon

Population genomics may be defined as the study of genome-wide patterns of sequence variation within and between closely related species. This approach can provide valuable insights into the determination of the relative importance of such evolutionary forces as mutation, recombination, natural selection and genetic drift in explaining observed variation. The application of population genomics to human biology is shedding new light on our evolutionary history and is providing the means of identifying genes that cause complex diseases. The release of the whole genome sequence for the malaria vector, *Anopheles* gambiae, in 2002 has provided vector biologists with the means of conducting population genomics studies on this species. New tools have been developed and studies are underway that will shed new light on the relationships among divergent populations of this species and on the genetic basis of important phenotypes that influence malaria transmission in Africa. In this symposium we provide a description of these new methods and of the results of their application.

CHAIR

Gregory C. Lanzaro
University of California at Davis, Davis, CA, United States

Nora Besansky
University of Notre Dame, South Bend, IN, United States

10:15 a.m.

LINKAGE DISEQUILIBRIUM IN THE *AN. GAMBIA* EGENOME

Martin J. Donnelly
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:40 a.m.

THE *AN. GAMBIAE* WHOLE GENOME TILING ARRAY

Yoosook Lee
University of California, Davis, CA, United States

11:05 a.m.

THE *AN. GAMBIAE* M AND S GENOME ANALYSIS WITH A VIEW TOWARD POPULATION GENOMICS OF SPECIATION

Nora Besansky
University of Notre Dame, Notre Dame, IN, United States

11:30 a.m.

DEVELOPMENT OF A GENOME-WIDE SNP ARRAY FOR *AN. GAMBIAE*

Mark A. Muskavitch
Boston College, Harvard School of Public Health, Boston, MA, United States

Scientific Session 182

Flavivirus

Washington 2
Sunday, November 22, 10:15 a.m. - Noon

CHAIR

Aaron C. Brault
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Nicole Nemeth
National Wildlife Research Center, Fort Collins, CO, United States

10:15 a.m.

1120

WEST NILE AND ST. LOUIS ENCEPHALITIS VIRUSES: IDENTIFICATION OF GENETIC DETERMINANTS OF ALTERED AVIAN AND VECTOR INFECTION PHENOTYPES

Payal D. Maharaj[1], Michael Anishchenko[2], Stanley A. Langevin[2], **Aaron C. Brault**[1]
[1]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]University of California, Davis, CA, United States

10:30 a.m.

1121

NORTH AMERICAN BIRDS AS POTENTIAL AMPLIFYING HOSTS OF JAPANESE ENCEPHALITIS VIRUS

Nicole Nemeth[1], Angela Bosco-Lauth[2], Richard Bowen[2]
[1]National Wildlife Research Center, Fort Collins, CO, United States, [2]Colorado State University, Fort Collins, CO, United States

10:45 a.m.

1122

ENTOMOLOGICAL SURVEILLANCE FOR VIRUSES IN THE YUCATAN PENINSULA OF MEXICO, JANUARY TO DECEMBER 2008

Bradley J. Blitvich[1], Maria A. Loroño-Pino[2], Julian E. Garcia-Rejon[2], Victor Soto[1], Ming Lin[1], Lyric C. Bartholomay[1], Molly Staley[1], Jose A. Farfan-Ale[2]
[1]Iowa State University, Ames, IA, United States, [2]Universidad Autonoma de Yucatan, Merida, Mexico

11 a.m.

1123

YFV-INDUCED CYTOKINE EXPRESSION IN PRIMARY HUMAN MACROPHAGES

Sara E. Woodson, Michael R. Holbrook
University of Texas Medical Branch, Galveston, TX, United States

11:15 a.m.

1124

HUMANIZED ANTI-YELLOW FEVER VIRUS MURINE MONOCLONAL ANTIBODY PROTECTS AG129 MICE FROM PERIPHERAL VIRUS CHALLENGE

Brett A. Thibodeaux[1], John T. Roehrig[2], Jacob J. Schlesinger[3], Carol D. Blair[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [3]University of Rochester Medical Center, Rochester, NY, United States

11:30 a.m.

1125

PRE-EXISTING IMMUNITY TO RELATED FLAVIVIRUSES PROTECTS AGAINST INFECTION WITH JAPANESE ENCEPHALITIS VIRUS IN HAMSTERS

Angela M. Bosco-Lauth, Richard Bowen
Colorado State University, Fort Collins, CO, United States

11:45 a.m.

1126

LONG-TERM IMMUNITY FOLLOWING VACCINATION WITH THE INACTIVATED JAPANESE ENCEPHALITIS VACCINE IXIARO®, IC51, AND IMMUNE RESPONSE TO A BOOSTER DOSE

Katrin L. Dubischar-Kastner, Susanne Eder, Astrid Kaltenboeck, Christoph Klade, Gabriele Woelfl
Intercell AG, Vienna, Austria

Scientific Session 183

Schistosomiasis and Other Trematodes - Molecular Biology/ Biochemistry

Washington 3

Sunday, November 22, 10:15 a.m. - Noon

CHAIR

Paul J. Brindley
George Washington University Medical Center, Washington, DC, United States

Patrick Skelly
Tufts University, North Grafton, MA, United States

10:15 a.m.

1127

TRANSFORMATION OF SCHISTOSOME EGGS WITH REPORTER TRANSGENES AND MURINE LEUKEMIA VIRUS

Kristine J. Kines[1], Gabriel Rinaldi[1], Tunika I. Okatcha[1], Maria E. Morales[2], Victoria H. Mann[1], Paul J. Brindley[1]
[1]The George Washington University, Washington, DC, United States, [2]Tulane University, New Orleans, LA, United States

10:30 a.m.

1128

CHARACTERIZATION OF A MAJOR HOST-INTERACTIVE SCHISTOSOME TEGUMENT PROTEIN, SM29, USING PHAGE-DISPLAYED ANTIBODIES

Jacque Tremblay, Jorge Sepulveda, Patrick J. Skelly, **Charles B. Shoemaker**
Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States
(ACMCIP Abstract)

10:45 a.m.

1129

PURINERGIC SIGNALING AND IMMUNE MODULATION AT THE SCHISTOSOME SURFACE

Rita Bhardwaj, Patrick J. Skelly
Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States
(ACMCIP Abstract)

11 a.m.

1130

RECOMBINANT EXPRESSION AND PURIFICATION OF CASPASE 9 OF *OPISTHORCHIS VIVERRINI*

Sandi K. Parriott[1], Sutas Suttiprapa[1], Thewarach Laha[2], Banchob Sripa[2], Alex Loukas[3], Paul J. Brindley[1]
[1]The George Washington University, Washington, DC, United States, [2]Khon Kaen University, Khon Kaen, Thailand, [3]Queensland Institute of Medical Research, Brisbane, Queensland, Australia
(ACMCIP Abstract)

11:15 a.m.

1131

PRAZIQUANTEL IS A SUBSTRATE OF A MULTIDRUG RESISTANCE PROTEIN (SMDR2) FROM *SCHISTOSOMA MANSONI*

Ravi S. Kasinathan[1], Tino Garonga[2], Thomas R. Webb[2], **Robert M. Greenberg**[1]
[1]University of Pennsylvania, Philadelphia, PA, United States, [2]St. Jude Children's Research Hospital, Memphis, TN, United States

11:30 a.m.

1132

MOLECULAR CHARACTERIZATION OF WATER MOVEMENT IN SCHISTOSOMES

Patrick J. Skelly, Zahra Faghiri
Tufts University, North Grafton, MA, United States
(ACMCIP Abstract)

11:45 a.m.

1133

PROTEOMIC ANALYSES OF SCHISTOSOME EGGS IN HATCHING AND DEVELOPMENT

Malcolm K. Jones[1], Meera Perumalpillai-McGarry[1], Sujeevi Nawaratna[1], Jason Mulvenna[2]
[1]University of Queensland, Brisbane, Queensland, Australia, [2]Queensland Institute of Medical Research, Herston Queensland, Australia

Scientific Session 184

Global Health

Washington 4

Sunday, November 22, 10:15 a.m. - Noon

CHAIR

Ruth D. Ellis
National Institutes of Health, Rockville, MD, United States

Antonio Quispe
United States Naval Medical Research Center Detachment, Lima, Peru

10:15 a.m.

1134

THE INTEGRATION OF NEGLECTED DISEASES: THREE YEARS OF EXPERIENCE IN TOGO

Gabriel Anthony[1], Michael Deming[2], Améyo M. Dorkenoo[3], Kodjo Morgah[3], Jennifer Verani[2], Anders Seim[4], Komi Dogbe[3], Yao Sodahlon[5], Els Mathieu[2]
[1]Health and Development International, Lome, Togo, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Ministry of Health, Lome, Togo, [4]Health and Development International, Norway, [5]Mectizan Donation Program, Atlanta, GA, United States

10:30 a.m.

1135

THE ROLE OF PRODUCT DEVELOPMENT PARTNERSHIPS IN R&D FOR NEGLECTED DISEASES

Mary Moran
The George Institute for International Health, Sydney, Australia

10:45 a.m.

1136

HYPERTENSION IN AN URBAN SLUM POPULATION: POTENTIAL IMPACT OF SLUM HEALTH ON THE FORMAL HEALTH SECTOR

Alon Unger[1], Ridalva D. Felzemburgh[2], Vinicius B. Costa[2], Astrid X. Melendez[2], Renato B. Reis[2], Francisco S. Santana[2], Sharif Mohr[2], Mitermayer G. Reis[2], Lee W. Riley[3], Albert I. Ko[4]
[1]Departments of Medicine and Pediatrics, University of California, Los Angeles, Los Angeles, CA, United States, [2]Fundação Oswaldo Cruz, Centro de Pesquisas Gonçalo Moniz, Salvador, Brazil, [3]School of Public Health, University of California-Berkeley, Berkeley, CA, United States, [4]Division of Infectious Diseases, Weill Medical College of Cornell University, New York, NY, United States

11 a.m.

1137

COMPARING THE QUALITY OF INFORMED CONSENT IN THE UNITED STATES AND MALI

Ruth D. Ellis[1], Issaka Sagara[2], Anna Durbin[3], Alassane Dicko[2], Donna Shaffer[3], Mark Pierce[1], Louis Miller[1], Mahamadoun H. Assadou[2], Mamady Kone[2], Beh Kamate[2], Ousmane Guindo[2], Michael P. Fay[4], Dapa Diallo[2], Ogobara K. Doumbo[2], Ezekiel Emmanuel[5], Joseph Millum[6]
[1]Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Disease, National Institutes of Health, Rockville, MD, United States, [2]Malaria Research and Training Center, Faculty of Medicine Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [3]Johns Hopkins Center for Immunization Research, Washington, DC, United States, [4]Biostatistics Research Branch, National Institute of Allergy and Infectious Disease, National Institutes of Health, Rockville, MD, United States, [5]Clinical Center Department of Bioethics, National Institutes of Health, Bethesda, MD, United States, [6]Clinical Center Department of Bioethics/Fogarty International Center, National Institutes of Health, Rockville, MD, United States

11:15 a.m.

1138

SELF-REPORTED HEALTH STATUS AND WELL-BEING AMONG SMALL RIVERINE POPULATIONS IN THE PERUVIAN RAINFOREST

Antonio M. Quispe[1], Juan F. Sanchez[1], Angela M. Bayer[1], Martin Beltran[2], Eric S. Halsey[3], Victor E. Gonzaga[1], Hugo R. Razuri[1], Carol Zavaleta[4], Ryan C. Maves[1], Joel M. Montgomery[1], John W. Sanders[1], Andres G. Lescano[1]
[1]United States Naval Medical Research Center Detachment, Lima, Peru, [2]Sub-Regional Epidemiology Office, Peruvian Ministry of Health, Yurimaguas, Peru, [3]United States Air Force Wright-Patterson Medical Center, Dayton, OH, United States, [4]National Center of Intercultural Health, Peruvian Ministry of Health, Lima, Peru

11:30 a.m.

1139

IS THERE AN ASSOCIATION BETWEEN INFRASTRUCTURE AND DISEASE REPORTING TIMELINESS? ASSESSMENT OF AN ELECTRONIC SURVEILLANCE SYSTEM OPERATING IN A RESOURCE-LIMITED SETTING

Ricardo A. Hora
United States Naval Medical Research Center Detachment, Lima, Peru

Scientific Session 185

Bacteriology - Diarrhea, Enteric Fever and Leptospirosis

Washington 5
Sunday, November 22, 10:15 a.m. - Noon

CHAIR

Richelle C. Charles
Massachusetts General Hospital, Boston, MA, United States

Eric Mintz
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:15 a.m.

1140

PROLONGED DIARRHEA IN A BRAZILIAN COMMUNITY BIRTH COHORT: EPIDEMIOLOGY, ETIOLOGIES, NUTRITIONAL IMPACT AND LINKS TO PERSISTENT DIARRHEA

Sean R. Moore[1], Noélia L. Lima[2], Reinaldo B. Oriá[2], Relana C. Pinkerton[3], Alberto M. Soares[2], Richard L. Guerrant[3], Aldo A. Lima[2]
[1]Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States, [2]Federal University of Ceará, Fortaleza, Brazil, [3]University of Virginia, Charlottesville, VA, United States

10:30 a.m.

1141

MORTALITY AMONG CHILDREN WITH MODERATE-TO-SEVERE DIARRHEA IN RURAL WESTERN KENYA, 2008

Richard Omore[1], Ciara E. O`Reilly[2], Benjamin Ochieng[1], Elizabeth Blanton[2], John Crump[2], Tamer H. Farag[3], Lynette Berkeley[3], Sandra Panchalingam[3], James P. Nataro[3], Karen Kotloff[3], Myron Levine[3], Fenny Moke[1], Alex Ondeng[1], Peter Jaron[1], Alfred Abir[1], Caleb Okonji[1], Michele Parsons[2], Cheryl Bopp[2], Joseph Oundo[1], John Vulule[4], Kubaje Adazu[1], Daniel Feikin[1], Kayla Laserson[1], Eric Mintz[2], Robert F. Breiman[5]
[1]Kenya Medical Research Institute/United States Centers for Disease Control and Prevention, Kisumu, Kenya, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]University of Maryland, School of Medicine, Center for Vaccine Development, Baltimore, MD, United States, [4]Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, [5]Kenya Medical Research Institute/ United States Centers for Disease Control and Prevention, Nairobi, Kenya

10:45 a.m.

1142

OUTBREAK OF TYPHOID FEVER WITH HIGH RATE OF INTESTINAL PERFORATION, KASESE DISTRICT, UGANDA - 2008-2009

Karen Neil[1], Samir Sodha[1], Luswa Luswago[2], Shikanga O-tipo[3], Matthew Mikoleit[1], Sherricka Simington[1], Sam Majalija[4], Atek Kagirita[5], Stephen Balinandi[3], Peter Mukobi[6], Vianney Kweyamba[7], Brigid Batten[1], Patricia Adem[1], Deborah Talkington[1], Sharif Zaki[1], Eric Mintz[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ministry of Health, Kampala, Uganda, [3]Field Epidemiology and Laboratory Training Program, Nairobi, Kenya, [4]Makerere University, Kampala, Uganda, [5]Central Public Health Laboratory, Kampala, Uganda, [6]District Health Office, Kasese District, Uganda, [7]Bwera Hospital, Bwera, Uganda

11 a.m.

1143

TYPHOID FEVER OUTBREAK IN KASESE DISTRICT, UGANDA: 103 CASES WITH INTESTINAL PERFORATION

Shikanga O-tipo[1], Karen Neil[2], Samir Sodha[2], Luswa Luswago[3], Peter Mukobi[4], Stephen Balinandi[1], Sam Majalija[5], Atek Kagirita[6], Eric Mintz[2]
[1]Field Epidemiology and Laboratory Training Program, Nairobi, Kenya, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Ministry of Health, Kampala, Uganda, [4]District Health Office, Kasese District, Uganda, [5]Makerere University, Kampala, Uganda, [6]Central Public Health Laboratory, Kampala, Uganda

11:15 a.m.

1144

EVALUATION OF INTERFERON-γ RESPONSES IN PATIENTS WITH *SALMONELLA ENTERICA SEROVAR TYPHI* BACTEREMIA IN DHAKA, BANGLADESH

Alaullah Sheikh[1], Farhana Khanam[1], Taibur Rahman[1], Martin Pacek[2], Yanhui Hu[2], Andrea Baresch[3], Md. Saruar Bhuiyan[1], Sean Rollins[3], Robert Citorik[3], Anuj Kalsy[3], Richelle Charles[3], Regina C. LaRocque[3], Joshua LaBaer[2], Stephen B. Calderwood[3], Jason B. Harris[3], Firdausi Qadri[1], **Edward T. Ryan**[3]
[1]International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]Harvard Institute of Proteomics, Boston, MA, United States, [3]Massachusetts General Hospital, Boston, MA, United States

11:30 a.m.

1145

HIGH THROUGHPUT GENE EXPRESSION PROFILING OF *SALMONELLA ENTERICA SEROVAR PARATYPHI A* IN THE BLOOD OF BACTEREMIC PATIENTS IN BANGLADESH

Richelle C. Charles[1], Alaullah Sheikh[2], Sean Rollins[1], Jason B. Harris[1], Md. Saruar Bhuiyan[2], Farhana Khanam[2], Archana Bukka[3], Anuj Kalsy[1], Steffen Porwollik[4], W. Abdullah Brooks[2], Regina LaRocque[1], Michael McClelland[4], Tanya Logvinenko[5], Alejandro Cravioto[2], Stephen B. Calderwood[1], James E. Graham[3], Firdausi Qadri[2], Edward T. Ryan[1]
[1]Massachusetts General Hospital, Boston, MA, United States, [2]International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [3]University of Louisville, Louisville, KY, United States, [4]Sidney Kimmel Cancer Center, San Diego, CA, United States, [5]Tufts University Medical Center, Boston, MA, United States

11:45 a.m.

1146

GENOMIC INSIGHTS INTO LEPTOSPIRAL PATHOGENESIS

Jessica Ricaldi, Michael A. Matthias, Joseph Vinetz
University of California San Diego, San Diego, CA, United States

Symposium 186

Human *Babesia* Species: Intraerythrocytic Protozoa of Global Public Health Concern

Washington 6

Sunday, November 22, 10:15 p.m. - Noon

Babesiosis is a tick-borne disease caused by intraerythrocytic protozoan species of the genus *Babesia*. Human babesiosis is found throughout the world, with the highest prevalence of both tick and transfusion-transmitted infection occurring in the United States. *Babesia microti* is the most common *Babesia* species, causing human infection worldwide and is endemic in the northeastern and northern midwestern United States. Other *Babesia* species that cause human disease include *B. duncani* and MO1 in the United States, *B. divergens* and EU1 in Europe and TW1 and KO1 in Asia. Clinical manifestations of babesiosis range from asymptomatic infection to fulminant disease resulting in death. Immunocompromised individuals, including those with malignancy, HIV, no spleen, receiving immunosuppressive drugs and people over the age of 50 years are at the highest risk of severe disease. In the majority of healthy adults, *Babesia* infection results in mild to moderate symptoms that are difficult to distinguish from flu-like illness. Available laboratory tests are labor-intensive and require highly specialized training and may not be well-suited for the type of mass screening necessary to identify blood donors who are silently infected and pose a serious blood safety risk in endemic areas. Despite the significant emerging global public health burden of human babesiosis, inadequate attention has been paid to this disease that is prevalent in both industrialized and developing countries. Accordingly, the primary objective of this symposium is to highlight the public health importance of this neglected infection by raising awareness among researchers, heath care professionals and funding agencies. Scientific presentations will focus on Babesia biology, ecology, epidemiology, molecular immunology, pathogenesis, laboratory diagnosis and blood safety concerns.

CHAIR

Sanjai Kumar
Food and Drug Administration, Rockville, MD, United States

Peter Krause
Yale University, New Haven, CT, United States

10:15 a.m.

THE BIOLOGY AND ECOLOGY OF *BABESIA*

Sam R. Telford
Tufts University, North Grafton, MA, United States

10:40 a.m.

THE EPIDEMIOLOGY OF HUMAN BABESIOSIS

Barbara L. Herwaldt
Centers for Disease Control and Prevention, Atlanta, GA, United States

11:05 a.m.

THE CLINICAL PRESENTATION, COMPLICATIONS, DIAGNOSIS AND TREATMENT OF HUMAN BABESIOSIS

Peter J. Krause
Yale University, New Haven, CT, United States

11:30 a.m.

THE EMERGING RISK OF BABESIOSIS FROM TRANSFUSION IN THE UNITED STATES

Jay S. Epstein
Food and Drug Administration, Rockville, MD, United States

Sunday, November 22, Noon

ASTMH 58th Annual Meeting Adjourns
See you next year in Atlanta, Georgia!

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Author Index

The number(s) following author name refers to abstract number.

M

Author Index

The number(s) following author name refers to abstract number.

Author Index

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U

V

Author Index

The number(s) following author name refers to abstract number.

W

X

Y

Author Index

The number(s) following author name refers to abstract number.

Z

Speaker and Session Chair Index for Plenary, Symposium, Meet the Professors and Mid-Day Sessions

The number(s) following individual's name refers to session number.

Speaker and Session Chair Index for Plenary, Symposium, Meet the Professors and Mid-Day Sessions

The number(s) following individual's name refers to session number.

Speaker and Session Chair Index for Plenary, Symposium, Meet the Professors and Mid-Day Sessions

The number(s) following individual's name refers to session number.

ASTMH Membership Application

Send to: American Society of Tropical Medicine and Hygiene, P.O. Box 71482,
Chicago, IL 60694-1482, USA, +1-847-480-9592 Fax: +1-847-480-9282 info@astmh.org

FIRST NAME (GIVEN NAME) LAST NAME (FAMILY NAME) DEGREES

COMPANY / ORGANIZATION

DEPARTMENT

ADDRESS

CITY STATE POSTAL CODE COUNTRY

TELEPHONE FAX E-MAIL

NAME OF REFERRING MEMBER

ASTMH may provide mailing addresses to third parties approved by the ASTMH secretary-treasurer for one-time use. E-mail addresses are never provided. To remove your address from our list, log in to the Members Only section of www.astmh.org and click "Manage Mail Preferences" in the left margin.

Dues

Dues are billed on a calendar year basis. The dues year is January through December.

☐ Regular Member ($195)		$_____
☐ Pre-Doctoral Student ($65)		$_____
☐ Post-Doctoral Student ($95)		$_____
☐ Life Membership ($3,900)		$_____
☐ Affiliate Membership *check 1*	■ Patron ($5,000 or more)	$_____
	■ Donor ($1,000 - $4,999)	$_____
	■ Contributor ($500 - $999)	$_____
☐ American Committee on Arthropod-Borne Viruses (ACAV)	■ Voluntary Dues ($10)	$_____
☐ American Committee of Medical Entomology (ACME)	■ Voluntary Dues ($10)	$_____
☐ Clinical Group (ACCTMTH) *check 1*	■ Dues ($30)	$_____
	■ Life Membership ($600)	$_____
☐ American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)	■ Dues ($10)	$_____
☐ Journal Subscription in Print ($20 US; $30 Canada; $40 All others) *Membership includes an electronic journal subscription*		$_____
TOTAL ENCLOSED		$_____

Payment

☐ Autodraft

I wish to renew my dues AUTOMATICALLY until such time as I choose to stop. (Not applicable to lifetime memberships. Written notice required.)

To authorize automatic renewal of your ASTMH Membership, simply check the autodraft box above. You will be charged for subsequent years' dues according to the payment information you provide. ASTMH will send you a reminder notice of the impending automatic debit at least one month before the charge to your account is to be made.

You can cancel your participation in this program at any time. Simply inform ASTMH in writing before January 1st of the year for which you wish to cancel your participation in the auto-renewal program. Thereafter, you can renew "manually" or cancel your membership altogether.

☐ AmEx ☐ VISA ☐ MasterCard ☐ Check enclosed

CARD# EXP. DATE

SIGNATURE OF CARDHOLDER NAME OF CARDHOLDER

Full payment must accompany this application. All checks must be made in U.S. dollars, drawn on U.S. banks. U.S. postal money orders, U.S. travelers checks, VISA, MasterCard and American Express will also be accepted.

Contributions and gifts to ASTMH may be deductible as charitable contributions for federal income tax purposes. Dues payments may be deductible by members as an ordinary and necessary business expense. Consult your tax advisor for further information.

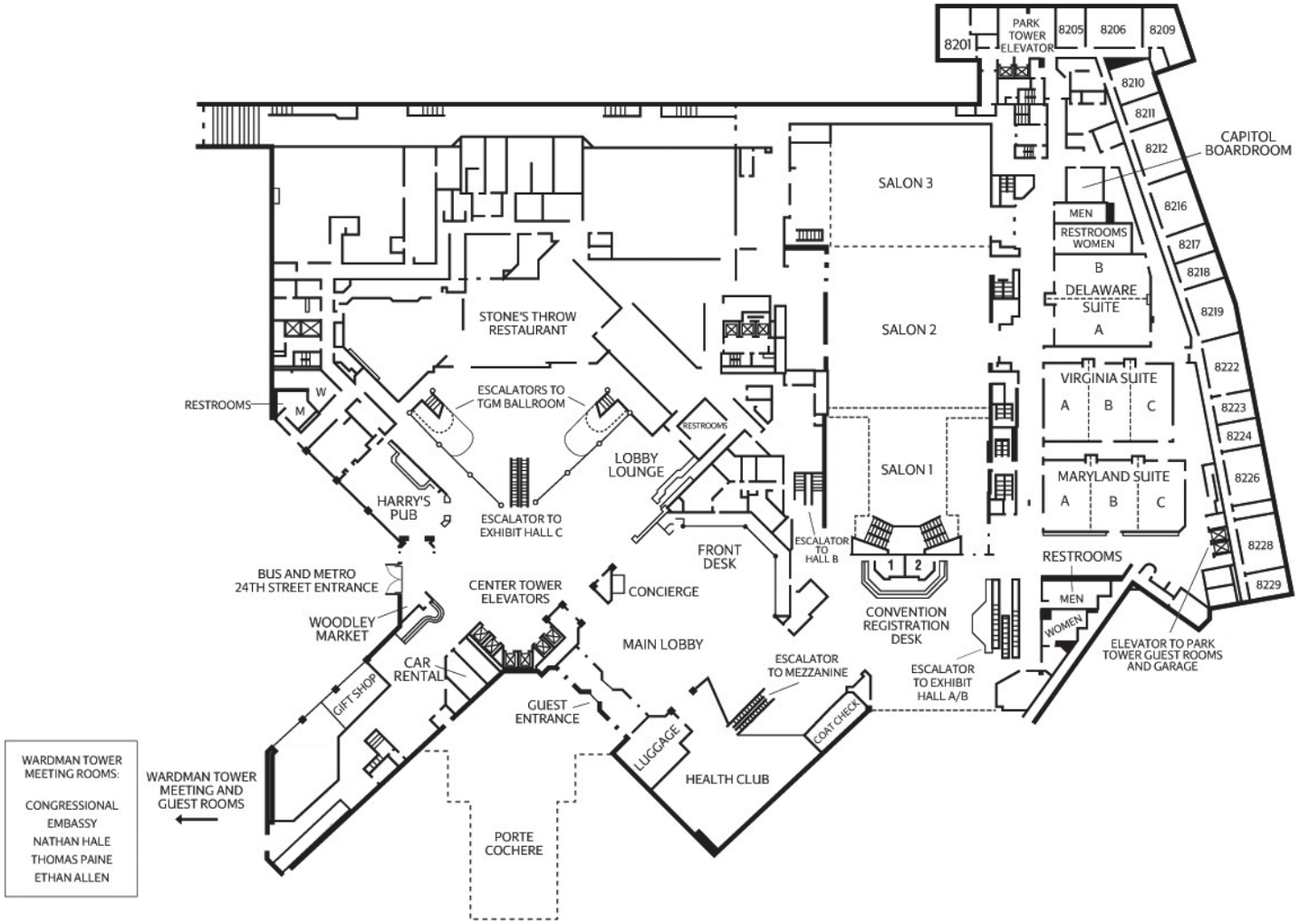
Student Members

Complete the following or attach a registrar's letter as proof of full-time student status.

This is to certify that the above-named applicant is a full-time student at:

NAME OF INSTITUTION SIGNATURE OF DEAN OR DEPARTMENT CHAIR DATE

LOBBY LEVEL



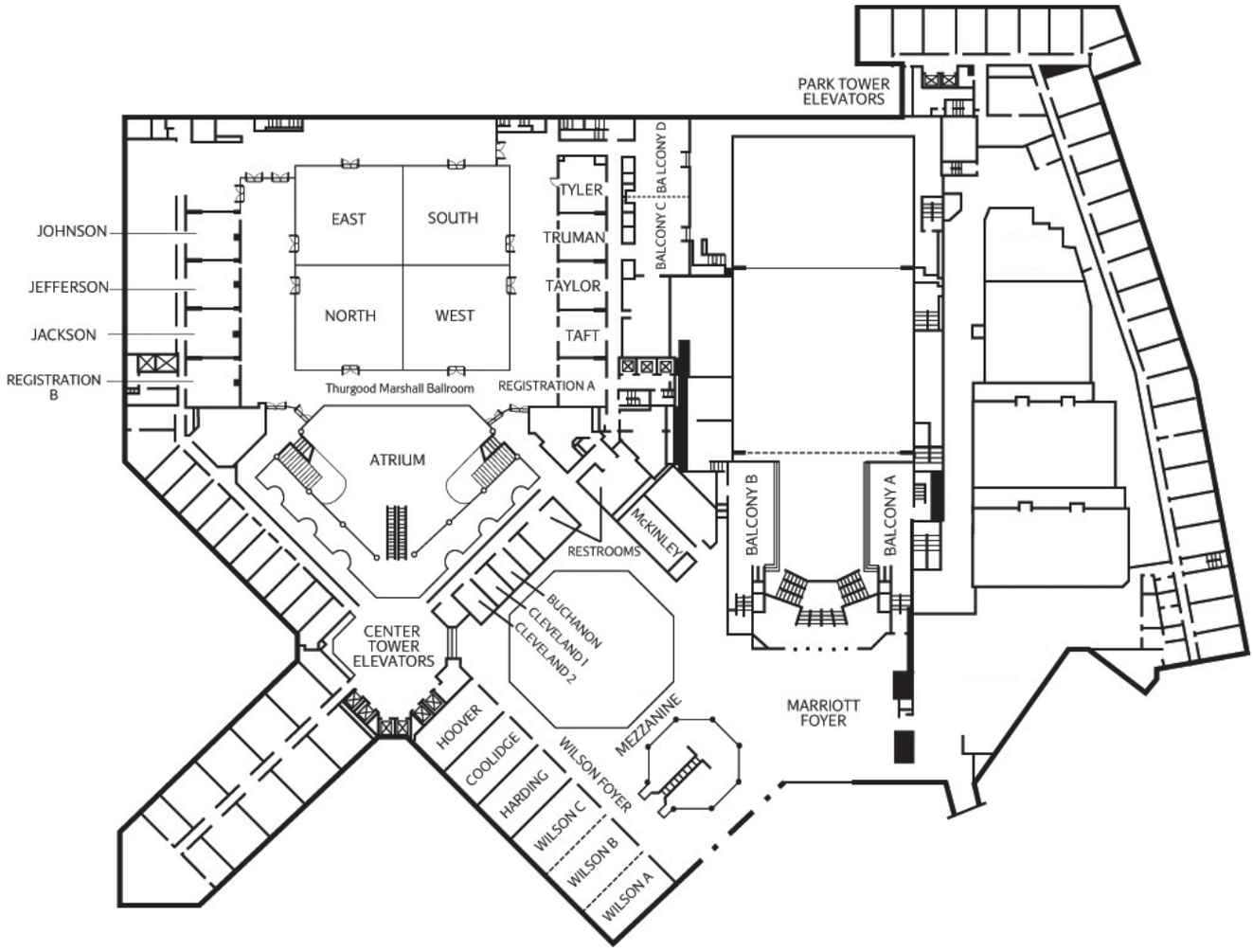
LOBBY LEVEL (FIRST FLOOR) MEETING ROOMS

Capitol Boardroom
Delaware A
Delaware B
Maryland A (Speaker Ready Room)
Salon 1
Salon 2
Salon 3
Salon Foyer (Registration)
Virginia AB
Virginia C
Room 8210
Room 8211
Room 8212
Room 8216
Room 8217
Room 8218 (Meeting Room Sign-Up)
Room 8219 (Meeting Room Sign-Up)
Room 8222
Room 8223
Room 8228 (Press Room)
Room 8229 (Press Room)

WARDMAN TOWER BUILDING

Embassy
Ethan Allen
Nathan Hale
Thomas Paine

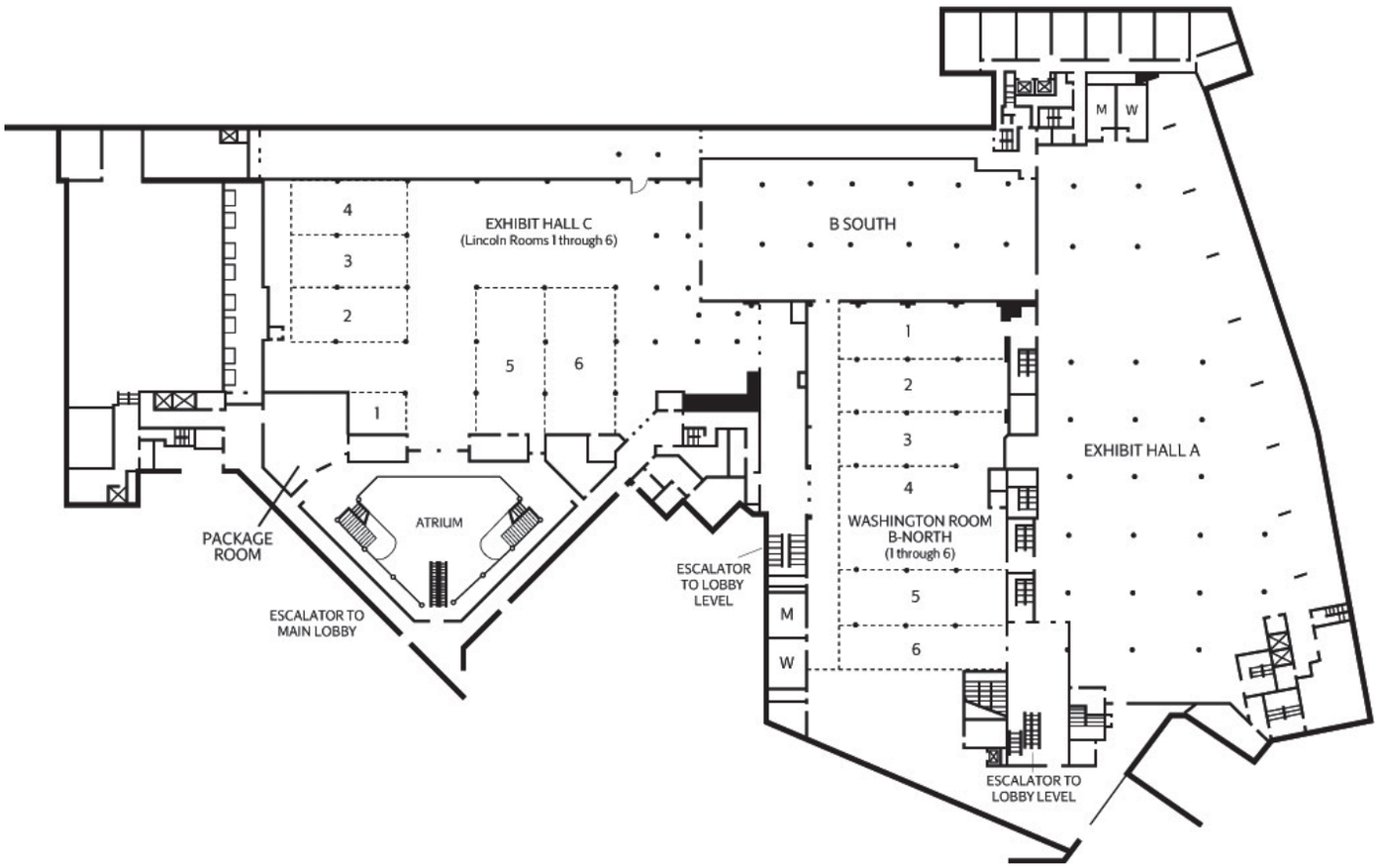
MEZZANINE LEVEL



MEZZANINE LEVEL (SECOND FLOOR) MEETING ROOMS

Balcony A
Balcony B
Balcony C
Balcony D
Buchanan
Cleveland 1
Cleveland 2
Coolidge
Hoover
Jackson
Jefferson
Johnson
Marriott Foyer (Cyber Café)
Taft
Taylor
Truman
Tyler
Wilson A
Wilson B
Wilson C

EXHIBITION LEVEL



EXHIBITION LEVEL (LOWER LEVEL) MEETING ROOMS

Exhibit Hall A	(Exhibit Hall)
Exhibit Hall B South	(Poster Hall)
Washington 1	
Washington 2	
Washington 3	
Washington 4	
Washington 5	
Washington 6	