Final Program
American Society of Tropical Medicine and Hygiene
57th Annual Meeting

57TH
ASTMH
ANNUAL MEETING

December 7–11, 2008
Sheraton New Orleans
New Orleans, Louisiana, USA

Supplement to
The American Journal of Tropical Medicine and Hygiene
ASTMH Thanks the 57th Annual Meeting Supporters

Bill & Melinda Gates Foundation

Burroughs Wellcome Fund

International Association for Medical Assistance to Travelers

Medicines for Malaria Venture

National Institutes of Health/
National Institute of Allergy and Infectious Diseases

Novartis Pharma AG.

Novartis Vaccines

Pfizer Inc.

sanofi-aventis

Sigma-Tau Phamaceuticals, Inc.

sigma-tau SpA

SCYNEXIS, Inc.

TechLab, Inc.

www.astmh.org
See the ASTMH 57th Annual Meeting Abstract Book, included with your registration packet, to view the full text of abstracts presented at the annual meeting.

December 7-11, 2008
Sheraton New Orleans
New Orleans, Louisiana, USA

www.astmh.org
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About the American Society of Tropical Medicine and Hygiene (ASTMH)

ASTMH is the principal organization in the United States representing scientists, clinicians and others with interests in the prevention and control of tropical diseases and diseases of global health import. The interests of the society are in tropical medicine, including the varied parasitic and viral diseases of the tropics, as well as other infectious diseases, such as enteric and mycobacterial infections. ASTMH members include those with clinical, epidemiological, programmatic and basic biochemical, immunologic and molecular approaches to both diseases and pathogens. Within the society are various active subgroups with specific interests, such as medical entomology, arbovirology, molecular parasitology and clinical tropical diseases.

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 277.

Program Changes

The time and/or location of any activity or session is subject to change. Notices of program changes will be posted in the ASTMH registration area. A Program Update is included in your registration packet.

Questions

If you have any questions regarding the program or registration, visit the ASTMH registration desk in the Napoleon Ballroom on the fourth floor.
## Schedule-at-a-Glance

**Sunday, December 7, 2008**

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1 Opening Plenary Awards Ceremony p. 54

*Pre-Meeting Course: Malaria Eradication*

*Young Investigator Award Session A*

*Young Investigator Award Session B*

*Student Reception*
### Sunday, December 7, 2008 (continued)

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### Schedule-at-a-Glance

**Monday, December 8, 2008**

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<td>3 Symposium GIS Systems and Infectious Dis. p. 56</td>
<td>4 Symposium Clinical Updates p. 57</td>
<td>5 Symposium Natural Disasters p. 57</td>
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<td>43 Scientific Session Malaria Immunology II p. 105</td>
<td>44 Symposium Malnutrition and Infection p. 106</td>
<td>45 Symposium Malaria Rx in Pregnancy p. 107</td>
<td>46 Scientific Session Malaria Markers Drug Resistance p. 107</td>
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## Schedule-at-a-Glance

**Tuesday, December 9, 2008**

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<td>Genomics p. 171</td>
<td>Analysis p. 172</td>
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Exhibits: Open

Light Lunch

Poster Sessions:
- Session A
- Session B
- Session C

Symposia:
- Severe Malaria
- Plasmodium Operations Research
- Schisto: Africa Interactions
- Mosquito Foraging and Vector Mgmt.
- Private Sector Metabolic and Metagenomic Profiling
- G6 Symposium

Additional Sessions:
- ACT
- Dengue: Synergy
- Dengue: Beyond Genomics
- Malaria and School Children
- Malaria Chemotherapy

Other Highlights:
- R.E. Shope Lecture
- Enigmatic Cases
- Plenary III
- Global Health

Conferences:
- Schistosomiasis
- Filariasis I
- Flavivirus III
- Flavivirus IV
- Clinical Tropical Medicine II
- Bacteriology II: Prokaryotes and Eukaryotes
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<td>62 Symposium Liver Fluke Cholangiocarcinoma p. 119</td>
<td>63 Scientific Session Clinical Tropical Medicine I p. 119</td>
<td>64 Symposium Vector and Disease Modeling p. 120</td>
<td>65 Scientific Session Filariasis I Immunology p. 121</td>
<td>66 Scientific Session Flavivirus III Dengue III p. 122</td>
<td>67 Symposium Global Health p. 123</td>
<td>68 Scientific Session Malaria Dx p. 123</td>
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### Schedule-at-a-Glance

**Wednesday, December 10, 2008**

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<td>134 Session C Light Lunch p. 194</td>
<td>134 Session C Light Lunch p. 194</td>
<td>121 Symposium Loiasis p. 187</td>
<td>122 Symposium Nervous Disease Burden p. 188</td>
<td>123 Symposium Malaria Epidemiology II p. 188</td>
<td>124 Symposium Update: Vector-borne Brazil p. 189</td>
<td>125 Symposium Diagnostic Tools p. 190</td>
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<td>140 Symposium Severe Pneumonia p. 223</td>
<td>141 Symposium Global Enteric GEMS Study p. 224</td>
<td>142 Symposium IT in Research and Training p. 224</td>
<td>143 Symposium Yersinia pestis p. 233</td>
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<td>12:30 - 12:45 p.m.</td>
<td>136A Malaria Film p. 221</td>
<td></td>
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<td>137 Meet the Professors C Enigmatic Cases p. 221</td>
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<td>138 Welcome Trust Res. Fellowships p. 222</td>
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<td>12:45 - 1:15 p.m.</td>
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<td>165 Plenary IV Presidential Address Business Meeting p. 239</td>
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<tr>
<td>6:45 - 7:00 p.m.</td>
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<td>8:30 - 9:00 p.m.</td>
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## Schedule-at-a-Glance

### Thursday, December 11, 2008

<table>
<thead>
<tr>
<th>Time</th>
<th>Napoleon Ballroom 3rd floor</th>
<th>Gallery 1st floor</th>
<th>Waterbury 2nd floor</th>
<th>Napoleon 3rd floor</th>
<th>Bayside A 4th floor</th>
<th>Bayside BC 4th floor</th>
<th>Grand Ballroom C 5th floor</th>
<th>Grand Ballroom D 5th floor</th>
<th>Grand Ballroom E 5th floor</th>
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<tbody>
<tr>
<td>7:00 - 7:30 a.m.</td>
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<tr>
<td>9:45 - 10:15 a.m.</td>
<td>Coffee Break</td>
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</table>
### Affiliate Group Meeting Schedule

**Saturday, December 6**  
**DoD-GEIS Malaria Drug Resistance Surveillance II**  
Salon 816/820  
8 a.m. – 5 p.m.

**Blantyre Malaria Project Think Tank for the Blantyre Autopsy Study**  
Crescent  
8:30 a.m. – 5 p.m.

**Fogarty International Center Grants Writing Workshop**  
Estherwood  
9 a.m. – 5 p.m.

**WARN Board Meeting**  
Off-site Meeting  
9 a.m. – 8 p.m.

**Liverpool School of Tropical Medicine AWOL Consortium**  
Cornet  
9 a.m. – 5 p.m.

**Sunday, December 7**  
**Medicines for Malaria Venture Conference Room**  
Estherwood and Rampart  
7 a.m. – 7 p.m.

**Novartis Pharma Conference Room**  
Gallier AB  
7 a.m. – 7 p.m.

**Novartis Vaccines Conference Room**  
Oakley  
7 a.m. – 7 p.m.

**Pfizer Conference Room**  
Poydras  
7 a.m. – 7 p.m.

**sanofi-aventis Conference Room**  
Grand Chenier  
7 a.m. – 7 p.m.

**PATH Malaria Vaccine Initiative RTS,S Vaccine CTPC**  
Off-site Meeting  
8 a.m. – 6 p.m.

**Bill & Melinda Gates Foundation Meeting**  
Crescent  
9 a.m. – 5 p.m.

**Fogarty International Center Grants Writing Workshop**  
Grand Couteau  
9 a.m. – Noon

**UMass Medical School Dengue Hemorrhagic Fever Project Annual Investigators Meeting**  
Off-site Meeting  
9 a.m. – 5 p.m.

**WARN Board Meeting**  
Off-site Meeting  
9 a.m. – 5 p.m.

**Liverpool School of Tropical Medicine AWOL Management Committee and ESAC**  
Off-site Meeting  
9 a.m. – 5 p.m.

**MR4 Science Advisory Committee Meeting**  
Off-site Meeting  
10 a.m. – 3 p.m.

**International Society of Travel Medicine GeoSentinel Site Directors Meeting**  
Westin New Orleans Canal Place  
1 p.m. – 5 p.m.

**CDC Emerging Infections Meeting**  
Salon 828  
3:30 p.m. – 5:30 p.m.

**Monday, December 8**  
**Medicines for Malaria Venture Conference Room**  
Estherwood and Rampart  
7 a.m. – 7 p.m.

**Novartis Pharma Conference Room**  
Gallier AB  
7 a.m. – 7 p.m.

**Novartis Vaccines Conference Room**  
Oakley  
7 a.m. – 7 p.m.

**Pfizer Conference Room**  
Poydras  
7 a.m. – 7 p.m.

**sanofi-aventis Conference Room**  
Grand Chenier  
7 a.m. – 7 p.m.

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Gallier AB  
7 a.m. – 7 p.m.

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Oakley  
7 a.m. – 7 p.m.

**Pfizer Conference Room**  
Poydras  
7 a.m. – 7 p.m.

**sanofi-aventis Conference Room**  
Gallier AB  
7 a.m. – 7 p.m.

**Novartis Vaccines Conference Room**  
Oakley  
7 a.m. – 7 p.m.

**PATH Malaria Vaccine Initiative MALVA Funders Group Meeting**  
Grand Couteau  
8 a.m. – 6 p.m.

**Bill & Melinda Gates Foundation Meeting**  
Crescent  
9 a.m. – 5 p.m.

**Tulane SPHTM Chagas Disease: Trypanosoma cruzi Infection: Women and Children, a Vulnerable Population**  
Maurepas  
8 a.m. – 5 p.m.

---

**Note:**  
Affiliate group meetings are by invitation only.
ASTMH Council, Committee and Subgroup Meetings

Sunday, December 7

**ASTMH Council Meeting**
Waterbury
8 a.m. – 3:30 p.m.

**ACAV SIE Subcommittee Meeting**
Salon 817/821
11 a.m. – Noon

**ACAV SIRACA Subcommittee Meeting**
Salon 817/821
Noon – 2 p.m.

**ACAV SALS Subcommittee Meeting**
Salon 817/821
2 p.m. – 3:30 p.m.

**ACAV Council Meeting**
Salon 817/821
3:30 p.m. – 5:30 p.m.

**ACMCIP Council Meeting**
Grand Couteau
3:30 p.m. – 5:30 p.m.

**ACME Council Meeting**
Salon 824
3:30 p.m. – 5:30 p.m.

**Clinical Group Council Meeting**
Salon 816
3:30 p.m. – 5:30 p.m.

**Young Investigator Award Committee Meeting**
Oak Alley
3:30 p.m. – 5 p.m.

Monday, December 8

**ASTMH Diploma Course Directors Meeting**
Salon 829
7 a.m. – 8 a.m.

**Public Policy and Advocacy Leadership Committee Meeting**
Salon 816
7 a.m. – 8 a.m.

**Burroughs Wellcome Fund/ASTMH Fellowship Committee Meeting**
Salon 828
Noon – 2 p.m.

**Certificate Exam Executive Committee Meeting**
Salon 829
12:15 p.m. – 1:15 p.m.

**Clinical Group Education Curriculum Meeting**
Salon 816
12:15 p.m. – 1:15 p.m.

Tuesday, December 9

**Clinical Group Past Presidents Meeting**
Salon 824
Tuesday, December 9, 7 a.m. – 8 a.m.

**Education Committee Meeting**
Salon 816
7 a.m. – 8 a.m.

**Journal Editorial Board Meeting**
Salon 817/821
7 a.m. – 8 a.m.

**CME/Courses Committee Meeting**
Salon 816
12:15 p.m. – 1:15 p.m.

Wednesday, December 10

**Scientific Program Committee**
Oak Alley
7 a.m. – 8 a.m.

**ASTMH Past Presidents Meeting**
Grand Couteau
7 a.m. – 8 a.m.

**Web Site Committee Meeting**
Salon 816
7 a.m. – 8 a.m.

**Membership Committee Meeting**
Salon 816
12:15 p.m. – 1:15 p.m.

**Certificate Exam Committee Meeting**
Salon 829
12:15 p.m. – 1:15 p.m.

Thursday, December 11

**ASTMH Council Meeting**
Grand Couteau
7:30 a.m. – 9:30 a.m.

**Meeting Room Sign-Up**
Rooms 816 and 824 on the eighth 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.
ASTMH 57th Annual Meeting

Officers
President
Claire Panosian

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Thomas Wellems

Immediate Past President
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George Hillyer

Executive Director
Sally Finney

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John Donelson
James Hughes
Regina Rabinovich
Frank Richards
Carol Hopkins Sibley
Scott Weaver
Mary Wilson

Chair, Scientific Program Committee
Edward Ryan

Editor, American Journal of Tropical Medicine and Hygiene
James Kazura

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

Web Site Editor
Jack Woodall

Advisor
Peter Weller

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
ASTMH Scientific Program Committee

Edward T. Ryan, Chair

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

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

Diarrhea and Bacterial Illness
Chair: Ed Ryan
Davidson Hamer
James Hughes
Regina LaRocque
Pavani Ram

Entomology
Chair: William Black
Kate Aultman
Hilary Ranson
David Severson

Filariasis
Chair: Amy Klon
Edward Mitre
Frank Richards
Steven Williams

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

Kinetoplastida
Chair: Rick Tarleton
Barbara Burleigh
Diane McMahon-Pratt

Late Breakers in Clinical Tropical Medicine
Barbara Herwaldt
David McNeeley

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

Meet the Professors
Anne McCarthy

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

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

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
Tom Wynn

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

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

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

ASTMH Committees and Subgroups

Archives
Donald Burke, Chair

Audit
George Hillyer, Chair
Sally Finney; Tom Wellens; Peter Weller

Awards
Thomas Monath, Chair
Myron Levine; Kent Campbell

Benjamin H. Kean Traveling Fellowship in Tropical Medicine
Christopher Plowe, Chair
Alberto Acosta; Frank Bia; Stephen Hoffman; Colette Kean; Myaing Nyunt; Martin Wolfe

Bioterrorism
Daniel Carucci, Chair
Carter Diggs; James Hughes; George Korch

Burroughs Wellcome Fund ASTMH Fellowship
Terrie Taylor, Chair
Stephen Calderwood; Ravi Durvasula; Richard Guerrant; Regina LaRocque; Victoria McGovern; Peter Weller

Certificate Examination
Susan McLellan, Chair
Lin Chen; Jovita Fernandez; David Freedman; Gregory Lucket; Lisa Keep; Ali Khan; Victor Kovner; Walter Kuhn; James Maguire; Bonnie Smoak; William Stauffer; Clinton White

Certificate Exam Executive Committee
James Maguire, Chair
Claire Panosian; George Hillyer; Patricia Joyce; Larry Laughlin; Alan Magill; Susan McLellan

Commemorative Fund Lectureship
Claire Panosian, Chair

Communications Award
Claire Panosian, Chair
John Donnelly; Michael Leahy; James Maguire; Frank Richards

Continuing Medical Education
Jonathan Berman, Chair
Daniel Carucci; David Hill; Alan Magill; Edward Ryan

Corporate Liaison
Thomas Monath, Chair
Bradley Connor; Jaco Smit

Courses Committee
Alan Magill, Chair
Jonathan Berman; Daniel Carucci; David Hill; Edward Ryan

Credentialing Committee
Larry Laughlin, Chair
David Freedman; David Hill; Christopher Karp; Jay Keystone; Christopher King; Herbert Tanowitz

Current Affairs
Richard Guerrant, Chair
Joseph Cook; Jacob Frenkel; Scott Halstead

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; Scott Weaver; Clinical Group Editor: James Maguire

Education
Stephen Higgs, Chair
Noah Craft; Hector Gorbea; Laura Harrington; Risa Hoffman; Charles McGee; Victoria McGovern; Claire Panosian; Sarah Volkman; Steve Wikel; Jack Woodall; Peter Zimmerman

Fundraising
Peter Weller, Chair
Michele Barry; Stephen Hoffman; Peter Hotez; James Kazura; Tom Monath; William Petri; Dyann Wirth

Gorgas Memorial Institute Research Award
Kathryn Aultman, Chair
Rodney Adam; Patricia Dorn; Ynes Ortega; Jorge Osorio; Rebeca Rico-Hesse; Tom Yuill

Honorary Membership
Thomas Monath, Chair
John David; Richard Guerrant; Frank Neva

International Federation of Tropical Medicine Representative
Don Krogstad

Lecture (Fred L. Soper and Charles F. Craig)
Robert Tesh, Chair
Donald Burke; David Freedman (Gorgas representative); Peter Hotez; William Petri

Membership
George Hillyer, Chair

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

Nominations
Kent Campbell, Chair
Dan Bausch; Nora Besansky; Mark Eberhard; Mary Hamel; Alan Magill; Julie Moore; Thomas Nutman; Gary Weil; Clinton White; Dyann Wirth

Pfizer Centennial Travel Award
Joe Vinetz, Chair
Michael Cappello; David Fidock; Diane McMahon-Pratt; Thomas Moore; Sarah Volkman

Public Policy and Advocacy Leadership
Kent Campbell, Chair
Michele Barry, Frank Collins, Stephen Hoffman, Peter Hotez, Alan Magill; Tom Monath; Claire Panosian, Frank Richards, Larry Slutsker, Terrie Taylor

Program Certification
James Maguire, Chair
Michele Barry; David Freedman; Richard Guerrant; Rocio Hurtado; James Kazura; Donald Krogstad; Larry Laughlin; Anne McCarthy; Alan Spira; Peter Weller

Robert E. Shope International Fellowship
Charles Calisher, Chair
Barry Beaty; Donald Burke; George Ludwig; Barry Miller; Philip Russell; Richard Shope; Peter Weller

Scientific Program
Edward T. Ryan, Chair
ASTMH 57th Annual Meeting

Travel Awards
James LeDuc, Chair
Mark Eberhard; James Maguire; Dan Milner; Terrie Taylor; Eileen Villasante; Joe Vinetz; Sarah Volkman

Update Course in Clinical Tropical Medicine and Travelers’ Health
Alan Magill, Co-Chair; Richard Pearson, Co-Chair

Web Site Committee
Ken Dardick, Chair
Kathryn Aultman; Stephen Cunnion; Akhil Vaidya; Dawn Wesson; Jack Woodall

Young Investigator Award
Peter Zimmerman, Chair
Kate Aultman; Subash Babu; Brenda Beerntsen; Roland Cooper; Stephen Davies; Christopher King; Sanjai Kumar; Nick Komar; Miriam Laufer; Julian Rayner; Daniel Tisch; Joe Vinetz; David Williams; Yimin Wu

American Committee of Medical Entomology (ACME)
Kenneth Linthicum, Chair

American Committee on Arthropod-Borne Viruses (ACAV)
Douglas Watts, Chair

Clinical Group (American Committee on Clinical Tropical Medicine and Travelers’ Health – ACCTMTH)
Alan Magill, President

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

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Buffy Finn
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Conference Director

Kim Santos
Conference Administrator

Matthew Lesh
Communications Manager

Jill Hronek
Communications Director

Bill Chandler
Accountant
**ASTMH 57th Annual Meeting**

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- Recognition in ASTMH publications and at the annual meeting, and
- 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.

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**2008 Travel Awards**
Supported with funding from the Bill & Melinda Gates Foundation and the National Institutes of Health/National Institute of Allergy and Infectious Diseases

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<th>Award Recipient</th>
<th>Institution/Organization</th>
<th>Location</th>
<th>Abstract Number</th>
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<tr>
<td>Papi Drame</td>
<td>Institut de Recherche pour le Développement</td>
<td>Dakar, Senegal</td>
<td>1219</td>
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<tr>
<td>Cynthia Khoo</td>
<td>Colorado State University</td>
<td>Fort Collins, Colorado, USA</td>
<td>1085</td>
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<td>Joseph Koroma</td>
<td>Ministry of Health and Sanitation</td>
<td>Freetown, Sierra Leone</td>
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<td>Fiona Lovegrove</td>
<td>University of Toronto</td>
<td>Toronto, Ontario, Canada</td>
<td>1184</td>
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<tr>
<td>Robin Moudy</td>
<td>Wadsworth Center/New York State Department of Health</td>
<td>Albany, New York, USA</td>
<td>806</td>
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<tr>
<td>Erick Muck</td>
<td>Kenya Medical Research Institute</td>
<td>Kisumu, Kenya</td>
<td>788</td>
</tr>
<tr>
<td>James Mutunga</td>
<td>Virginia Tech University</td>
<td>Blacksburg, Virginia, USA</td>
<td>1216</td>
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<tr>
<td>Agnes Mwakingwe</td>
<td>Albert Einstein College of Medicine</td>
<td>Bronx, New York, USA</td>
<td>928</td>
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<tr>
<td>Norah Mwebaza</td>
<td>Makerere University</td>
<td>Kampala, Uganda</td>
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<tr>
<td>Kathryn Griffiths</td>
<td>University of Wisconsin-Oshkosh</td>
<td>Oshkosh, Wisconsin, USA</td>
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<tr>
<td>Joaimit Nankabirwa</td>
<td>Makerere University</td>
<td>Kampala, Uganda</td>
<td>725</td>
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<tr>
<td>Samuel Nsobya</td>
<td>Makerere University</td>
<td>Kampala, Uganda</td>
<td>591</td>
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<tr>
<td>Charles Obonyo</td>
<td>Kenya Medical Research Institute</td>
<td>Kisumu, Kenya</td>
<td>953</td>
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<tr>
<td>Nicole L. Gottdenker</td>
<td>University of Georgia</td>
<td>Athens, Georgia, USA</td>
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<tr>
<td>December 8</td>
<td>University Hospitals Case Medical Center</td>
<td>Cleveland, Ohio, USA</td>
<td>224</td>
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<tr>
<td>Mert Ozturk</td>
<td>University of New Mexico/KEMRI</td>
<td>Kisumu, Kenya</td>
<td>1230</td>
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<tr>
<td>Surendra Kumar Prajapati</td>
<td>National Institute of Malariology Research</td>
<td>Delhi, India</td>
<td>224</td>
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<tr>
<td>Edsel Salvana</td>
<td>University of New Mexico/KEMRI</td>
<td>Kisumu, Kenya</td>
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<td>Maria de Jesus Trovoada</td>
<td>Instituto Gulbenkian de Ciencia</td>
<td>Oeiras, Portugal</td>
<td>227</td>
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<tr>
<td>Matt Tucker</td>
<td>University of New Mexico/KEMRI</td>
<td>Kisumu, Kenya</td>
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<tr>
<td>Bhagyashree Manivannan Uradey</td>
<td>Victoria University of Wellington</td>
<td>Wellington, New Zealand</td>
<td>742</td>
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<tr>
<td>Tom Were</td>
<td>University of New Mexico/KEMRI</td>
<td>Kisumu, Kenya</td>
<td>339</td>
</tr>
<tr>
<td>Meera Venkatesan</td>
<td>Johns Hopkins Bloomberg School</td>
<td>Baltimore, Maryland, USA</td>
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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.

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The American Society of Tropical Medicine and Hygiene designates this educational activity for a maximum of 31.75 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 $100. CME certificates will be mailed six-to-eight weeks after the annual meeting. 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/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
Napoleon Ballroom Registration Desk (Fourth Floor)
Friday, December 5        4 p.m. – 6 p.m.
Saturday, December 6      7 a.m. – 1:30 p.m.

Annual Meeting Registration Hours
Napoleon Ballroom (Fourth Floor)
Sunday, December 7        9:30 a.m. – 6 p.m.
Monday, December 8         7 a.m. – 5 p.m.
Tuesday, December 9        7 a.m. – 5 p.m.
Wednesday, December 10    7 a.m. – 5 p.m.
Thursday, December 11     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 +1-504-525-2500, the main switchboard of the Sheraton New Orleans. Callers should ask to be connected to the ASTMH registration desk. Faxes can be sent to the hotel at +1-504-595-5552.

Badges/Access Control
Participation in the ASTMH Annual Meeting is limited to registered attendees. The official badge is required for admission to all sessions, social activities and the exhibit area. Do not place a business card into the badgeholder as identification. If there is an error on a badge, please have it corrected at the 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 Sunday, 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 (Sunday)
• Late Breakers in Clinical Tropical Medicine and Basic Science/Molecular Biology light dinner (Monday afternoon)
• Poster session lunches (Monday, Tuesday and Wednesday)
• Coffee breaks

Hotel Information
The Sheraton New Orleans is the site of all annual meeting activities.
Sheraton New Orleans
500 Canal Street
New Orleans, Louisiana 70131
Phone +1-504-525-2500
Fax: +1-504-595-5552

Hotel Parking
Parking at the Sheraton New Orleans is currently $30.18 for overnight valet parking with in/out privileges. If you choose to self-park, a garage is located directly across the street from the hotel. The rate is $28 for 24 hours with no in/out privileges.

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

Exhibits
Napoleon Ballroom, Fourth Floor

Exhibit Hall
The ASTMH 57th Annual Meeting features an exposition of displays by leading suppliers and vendors. A complete exhibitor and supporter directory is included on page 32.

Exhibit Hours
Sunday, December 7 7:30 p.m. – 9:30 p.m.
Monday, December 8 9:30 a.m. – 10:30 a.m.
Noon – 1:30 p.m.
3 p.m. – 4 p.m.
Tuesday, December 9 9:30 a.m. – 10:30 a.m.
Noon – 1:30 p.m.
3 p.m. – 4 p.m.
Wednesday, December 10 9:30 a.m. – 10:30 a.m.
Noon – 2:30 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 Lagniappe on the second floor. As a courtesy to other attendees, we ask that you limit your computer use to ten minutes per visit.

Press Room
The press room is located in the Ellendale and Evergreen rooms on the fourth floor. ASTMH press kits are available. Media announcements and other details can be found in the press room. Press room hours of operation are:
Sunday, December 7 10 a.m. – 4 p.m.
Monday, December 8 7:30 a.m. – 6:30 p.m.
Tuesday, December 9 7:30 a.m. – 6:30 p.m.
Wednesday, December 10 8 a.m. – 6:30 p.m.
Thursday, December 11 8 a.m. – Noon

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 now 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, buy classified ad space in the American Journal of Tropical Medicine and Hygiene and search the ASTMH resume bank for qualified applicants.

Camera/Recording Restrictions
Only registered members of the press and attendees who receive 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

First Floor
Gallery Ballroom

Second Floor
Lagniappe (Cyber Café)
Waterbury Ballroom
Rhythms I
Rhythms II
Rhythms III

Third Floor
Maurepas
Napoleon Ballroom (Registration, Exhibit Hall)
Napoleon A123
Napoleon C123

Fourth Floor
Bayside A
Bayside BC
Crescent
Edgewood
Ellendale (Press Room)
Estherwood
Evergreen (Press Room)
Galier

Fourth Floor (continued)
Nottoway (Speaker Ready Room)
Oak Alley
Oakley

Fifth Floor
Grand Ballroom A
Grand Ballroom B
Grand Ballroom C
Grand Ballroom D
Grand Ballroom E
Grand Chenier
Grand Couteau
Rampart

Eighth Floor
Armstrong Ballroom (Poster Hall)
Cornet (Poster Hall)
Salon 801
Salon 816 (Meeting Room Sign-Up)
Salon 817/821
Salon 824 (Meeting Room Sign-Up)
Salon 828
Salon 829
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.

ASTMH Journal Symposium
Preparation and Review of Scientific Manuscripts for the American Journal of Tropical Medicine & Hygiene
Mid-Day Session Session 86
Tuesday, December 9
12:15 p.m. – 1:15 p.m.
Grand Ballroom D

This session is designed to educate attendees about the Journal and the publishing process as a whole. Discussion will focus on how manuscripts are reviewed, edited and processed by the Journal, and will include pointers on preparation and review of manuscripts. We encourage you to ask questions at this session and would like to hear your feedback on the Journal.

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 now 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 on-site orders. Contact IntelliQuest Media at 866-651-2586 or visit www.intelliquestmedia.com.

Late Breaker Abstracts

Late Breaker Abstract Session 49
Late Breakers in Clinical Tropical Medicine
Monday, December 8
3:45 p.m. – 5:30 p.m.
Bayside BC

Late Breaker Abstract Session 50
Late Breakers in Basic Science/Molecular Biology
Monday, December 8
3:45 p.m. – 5:30 p.m.
Grand Ballroom A

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 Monday afternoon. Poster late breaker presentations will take place during the poster sessions on Monday, Tuesday and Wednesday. 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 Monday, Tuesday and Wednesday at lunchtime. 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. AMCIP refers to the American Committee of Molecular, Cellular and Immunoparasitology, an ASTMH subgroup. For more information, go to http://www.astmh.org/sic/acmcip.cfm.

Explore the NEW www.astmh.org

The ASTMH Web site has a fresh look and new user-friendly design. Visit the site today for:
• The latest news on Society activities and advocacy efforts
• Funding and fellowship opportunities
• The famed Herman Zaiman parasitology slide collection...and much more.
Special Events for Trainees, Students, Fellows, Residents and Junior Faculty

*Events featuring light meals denoted with an asterisk.

Young Investigator Award Presentations
Sunday, December 7, 11 a.m. – 3:30 p.m.
Oak Alley, Rhythms I, Bayside A, Bayside B, Bayside C

Student Reception*
Sunday, December 7, 4 p.m. – 5 p.m.
Rhythms III

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 Session 12: Careers in Tropical Medicine – The Paths to Success Part I
Monday, December 8, 8 a.m. – 9:45 a.m.
Grand Ballroom D

Symposium Session 24: Careers in Tropical Medicine – The Paths to Success Part II
Monday, December 8, 10:15 a.m. – Noon
Grand Ballroom D

Mid-Day Session Session 27: Grad School or Peace Corps...Why Not Do Both?
Monday, December 8, 12:15 p.m. – 1:15 p.m.
Waterbury

Meet the Professors Session 28: Meet the Professors A: Enigmatic and Teaching Cases*
Monday, December 8, 12:15 p.m. – 1:15 p.m.
Grand Ballroom A

Symposium Session 80: Global Health Programs in University Settings: What's Out There
Tuesday, December 9, 10:15 a.m. – Noon
Grand Ballroom D

Meet the Professors Session 85: Meet the Professors B: Enigmatic and Teaching Cases*
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.
Grand Ballroom A

Mid-Day Session Session 86: Preparation and Review of Scientific Manuscripts for the American Journal of Tropical Medicine & Hygiene
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.
Grand Ballroom D

Symposium Session 129: Launching Careers in Tropical Disease Research: Progress Reports from The Burroughs Wellcome Fund/ASTMH Fellows
Wednesday, December 10, 10:15 a.m. – Noon
Grand Ballroom A

Meet the Professors Session 137: Meet the Professors C: Enigmatic and Teaching Cases*
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.
Grand Ballroom A

Mid-Day Session Session 138: Welcome Trust Public Health and Tropical Medicine Fellowships Masterclass
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.
Grand Ballroom D

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.

Abstract 61
Evaluation of Multi-Drug Therapy for Hansen’s Disease in the U.S.A. Using Daily Rifampin
Mara Dacso

Abstract 97
Management of Childhood Diarrheal Disease in Gondar, Ethiopia
Rishi Mediratta

Abstract 322
Malaria Potentiates Experimental Mycobacterial Infection in vitro and in vivo
Michael Hawkes

Abstract 476
An Assessment of Blood Volumes in Relation to Symptom Resolution in Severely Anemic Malawian Children
Michael Esan

Abstract 506
Analysis of the Transcriptomic Response to West Nile Virus Infection in the Equine Host
Melissa Bourgeois

Abstract 653
The Status of the PfMSP3 N-Terminus as a Vaccine Candidate: Cross- Reactive Antibodies in Hypoendemic Transmission
Stephen Jordan

Abstract 765
Insensitive Acetylcholinesterase (ace-1R) of Anopheles gambiae s.s.: Events of Introgression and Duplication Between the M and S Molecular Forms
Luc Djogbenou

Abstract 827
Caring for the Mother and Child in an Integrated Health System: The Utility of a Postnatal Bridging Card
Eugene Richardson

Abstract 828
Biology is Destiny or Social Status Meets Sero-Status? Determinants of HIV Infection in Africa
Ashley Fox

Abstract 955
Detection of Plasmodium knowlesi by Real-Time PCR
Ngolela Babady

Abstract 1122
Examination of the Molecular Basis of Resistance to Artemisinin Drugs in Plasmodium falciparum
Matt Tucker

Abstract 2497
In vivo Assessment of Serum Th1 and Th2 Cytokines in Patients with Hydatid Cysts of the Liver
Francesca Tamarozzi
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td><strong>Clinical Pre-Meeting Course:</strong></td>
<td>Saturday, Dec 6</td>
<td>1 p.m. - 7:15 p.m.</td>
<td>Napoleon C123</td>
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<tr>
<td><strong>Malaria Eradication:</strong></td>
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<tr>
<td><strong>Calibrating Aspirations, Technology and Commitment</strong></td>
<td>Sunday, Dec 7</td>
<td>7:30 a.m. - 3 p.m.</td>
<td>Grand Ballroom AB</td>
</tr>
<tr>
<td><strong>Plenary Session I:</strong></td>
<td>Sunday, Dec 7</td>
<td>5:30 p.m. - 7:30 p.m.</td>
<td>Grand Ballroom</td>
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<tr>
<td><strong>Opening Plenary Session and Awards Ceremony</strong></td>
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<tr>
<td><strong>Symposium Session 4:</strong></td>
<td>Monday, Dec 8</td>
<td>8 a.m. - 9:45 a.m.</td>
<td>Rhythms II/III</td>
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<tr>
<td><strong>Clinical Updates in Leishmaniasis, Chagas Disease, Leptospirosis</strong></td>
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<td>and Tuberculosis**</td>
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<tr>
<td><strong>Symposium Session 16:</strong></td>
<td>Monday, Dec 8</td>
<td>10:15 a.m. - Noon</td>
<td>Rhythms II/III</td>
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<tr>
<td><strong>Tropical Medicine in a Temperate Climate</strong></td>
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<tr>
<td><strong>Meet the Professors 28</strong></td>
<td>Monday, Dec 8</td>
<td>12:15 p.m. - 1:15 p.m.</td>
<td>Grand Ballroom A</td>
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<tr>
<td><strong>Meet the Professors A:</strong></td>
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<tr>
<td><strong>Enigmatic and Teaching Cases</strong></td>
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<tr>
<td><strong>Symposium Session 32:</strong></td>
<td>Monday, Dec 8</td>
<td>1:30 p.m. - 3:15 p.m.</td>
<td>Rhythms I</td>
</tr>
<tr>
<td><strong>The Traveling Child:</strong></td>
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<tr>
<td><strong>Medical Advice and Advances</strong></td>
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<tr>
<td><strong>Late Breaker Session 49:</strong></td>
<td>Monday, Dec 8</td>
<td>3:45 p.m. - 5:30 p.m.</td>
<td>Bayside BC</td>
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<tr>
<td><strong>Late Breakers in Clinical Tropical Medicine</strong></td>
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<tr>
<td><strong>Plenary Session II:</strong></td>
<td>Monday, Dec 8</td>
<td>6 p.m. - 6:45 p.m.</td>
<td>Grand Ballroom C</td>
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<tr>
<td><strong>Charles Franklin Craig Lecture</strong></td>
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<tr>
<td><strong>Scientific Session 63:</strong></td>
<td>Tuesday, Dec 9</td>
<td>8 a.m. - 9:45 a.m.</td>
<td>Bayside BC</td>
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<tr>
<td><strong>Clinical Tropical Medicine I</strong></td>
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<tr>
<td><strong>Scientific Session 76:</strong></td>
<td>Tuesday, Dec 9</td>
<td>10:15 a.m. - Noon</td>
<td>Bayside BC</td>
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<tr>
<td><strong>Clinical Tropical Medicine II</strong></td>
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<tr>
<td><strong>Meet the Professors 85</strong></td>
<td>Tuesday, Dec 9</td>
<td>12:15 p.m. - 1:15 p.m.</td>
<td>Grand Ballroom A</td>
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<tr>
<td><strong>Meet the Professors B:</strong></td>
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<tr>
<td><strong>Enigmatic and Teaching Cases</strong></td>
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<tr>
<td><strong>Symposium Session 94:</strong></td>
<td>Tuesday, Dec 9</td>
<td>1:30 p.m. - 3:15 p.m.</td>
<td>Grand Ballroom C</td>
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<tr>
<td><strong>Clinical Group I</strong></td>
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<tr>
<td><strong>Symposium Session 104</strong></td>
<td>Tuesday, Dec 9</td>
<td>3:45 p.m. - 5:30 p.m.</td>
<td>Grand Ballroom C</td>
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<tr>
<td><strong>Clinical Group II</strong></td>
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<tr>
<td><strong>Plenary Session III:</strong></td>
<td>Tuesday, Dec 9</td>
<td>6 p.m. - 6:45 p.m.</td>
<td>Grand Ballroom C</td>
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<tr>
<td><strong>Commemorative Fund Lecture</strong></td>
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<tr>
<td><strong>Symposium Session 117</strong></td>
<td>Wednesday, Dec 10</td>
<td>8 a.m. - 9:45 a.m.</td>
<td>Grand Ballroom B</td>
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<tr>
<td><strong>Presumptive Therapy and Medical Screening of Migrating Refugees</strong></td>
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<td>and Immigrants**</td>
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<tr>
<td><strong>Symposium Session 121</strong></td>
<td>Wednesday, Dec 10</td>
<td>10:15 a.m. - Noon</td>
<td>Gallery</td>
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<tr>
<td><strong>Post-Treatment Reactions in Loiasis:</strong></td>
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<tr>
<td><strong>Clinical and Programmatic Implications</strong></td>
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<tr>
<td><strong>Meet the Professors 137</strong></td>
<td>Wednesday, Dec 10</td>
<td>12:15 p.m. - 1:15 p.m.</td>
<td>Grand Ballroom A</td>
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<tr>
<td><strong>Meet the Professors C:</strong></td>
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<tr>
<td><strong>Enigmatic and Teaching Cases</strong></td>
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<tr>
<td><strong>Symposium Session 141</strong></td>
<td>Wednesday, Dec 10</td>
<td>1:30 p.m. - 3:15 p.m.</td>
<td>Rhythms II/III</td>
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<tr>
<td><strong>Benign Tertian Malaria? Examining Severe Disease Caused by</strong></td>
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<td><strong>Plasmodium Vivax</strong></td>
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<tr>
<td><strong>Symposium Session 154</strong></td>
<td>Wednesday, Dec 10</td>
<td>3:45 p.m. - 5:30 p.m.</td>
<td>Rhythms II/III</td>
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<tr>
<td><strong>Dengue in International Travelers</strong></td>
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<tr>
<td><strong>Plenary IV:</strong></td>
<td>Wednesday, Dec 10</td>
<td>6 p.m. - 7:30 p.m.</td>
<td>Grand Ballroom C</td>
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<td><strong>Presidential Address and ASTMH Annual Business Meeting</strong></td>
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<tr>
<td><strong>Scientific Session 171</strong></td>
<td>Thursday, Dec 11</td>
<td>8 a.m. - 9:45 a.m.</td>
<td>Grand Ballroom C</td>
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<tr>
<td><strong>Clinical Tropical Medicine III</strong></td>
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<tr>
<td><strong>Scientific Session 179</strong></td>
<td>Thursday, Dec 11</td>
<td>10:15 a.m. - Noon</td>
<td>Grand Ballroom C</td>
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<tr>
<td><strong>Clinical Tropical Medicine IV</strong></td>
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</table>
Poster Sessions
Armstrong Ballroom, Eighth Floor

Three poster sessions will be held at the ASTMH 57th Annual Meeting in The Armstrong Ballroom on the eighth floor. 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
Monday, December 8

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
Tuesday, December 9

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
Wednesday, December 10

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 Facilities
Nottoway Room, Fourth Floor

Audio-visual preview and submission facilities are provided beginning Sunday, December 7 at noon in the Nottoway Room on the fourth floor. All oral presentations must use PowerPoint. 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 on the morning of your talk as early as possible.

Your presentation should be saved on a floppy disk, CD-R or memory stick. The CD-R should be in a version that can be read on any PC CD-ROM. If you use a Mac, make sure that your presentation is readable via PC PowerPoint. If your presentation includes a video and/or audio segment, it is very important that you visit the Speaker Ready Room and advise the AV techs of the video and/or audio piece.

A computer and LCD projector will be set up in each presentation room. You cannot present your talk from your own laptop. Your presentation will be run from the AV technician’s PC-based computer.

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

Speaker Ready Room Hours
Sunday, December 7 Noon – 6 p.m.
Monday, December 8 7 a.m. – 6 p.m.
Tuesday, December 9 7 a.m. – 6 p.m.
Wednesday, December 10 7 a.m. – 6 p.m.
Thursday, December 11 7 a.m. – Noon
MARK YOUR CALENDAR!

ASTMH 58th Annual Meeting
November 18-22, 2009
Marriott Wardman Park
Washington, DC, USA

ASTMH 59th Annual Meeting
November 3-7, 2010
Atlanta Marriott Marquis
Atlanta, Georgia, USA

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
Workers in Tropical Medicine Video Presentation
Napoleon Ballroom

Workers in Tropical Medicine:
Oral History Project Re-Initiated

Selected biographical videos of ASTMH members who have made important contributions to the field of tropical medicine will be shown at the annual meeting. A viewing station in the Napoleon Ballroom has been reserved where interested visitors can view DVDs of their choice. DVD histories available include:

- Jordi Casals
- K.F. Meyer
- William Reeves
- Albert Sabin
- Thomas Weller
- Telford Work
- Karl Johnson

And others......
Africa Health Placements (South Africa)
Contact: Therese Hansen
1820 9th Ave W.
Seattle, WA 98119
Suite 265
Dunkeld West Centre
Johannesburg, South Africa
Phone: 206-465-8824 USA +27 011 3281300 (South Africa)
Fax: +27 011 3281301
E-mail: theresemhansen@gmail.com
www.ahp.org.za
Booth 111
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: Jaclynn Martin
1752 N St., NW
Washington, DC 20036-2904
Phone: 202-737-3600
Fax: 202-942-9342
E-mail: books@asmusa.org
Booth 103
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 percent discount on all purchases made at the meeting.

Bill & Melinda Gates Foundation
P.O. Box 23350
Seattle, WA 98102
Phone: 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
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**Burroughs Wellcome Fund/The Wellcome Trust**
Contact: Jean Kramarik
21 TW Alexander Drive
Research Triangle Park, NC 27709-3901
Phone: 919-991-5122
Fax: 919-991-5182
E-mail: jkramarik@bwfund.org
Booth 202
The Burroughs Wellcome Fund is an independent private foundation dedicated to advancing the biomedical science by supporting research and other scientific and educational activities. The Wellcome Trust is an independent charity funding research to improve human and animal health.

**Carramore International Ltd**
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Miry Lane
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Phone: +44 1484 690 444
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**Clinical Research Management**
Contact: Caylee Ortega
411 Aviation Way
Suite 220
Frederick, MD 21701
Phone: 301-620-1987
Fax: 301-662-2236
E-mail: cortega@clinicalrm.com
Booth 402
Clinical Research Management, Inc. is a full service clinical research organization (CRO) providing a full range of clinical research services to support pre-clinical testing, product manufacturing, regulatory compliance and managing clinical trials.

**Drugs for Neglected Diseases initiative (DNDi)**
Contact: Michelle French
7 World Trade Center, 250 Greenwich St., 40th Fl.
New York, NY 10007-2157
Phone: 212-298-3743
Fax: 212-300-3673
E-mail: mfrench@dndi.org
Booth 209
DNDi is a needs-driven, not-for-profit product development partnership working to research and develop new treatments for neglected diseases such as sleeping sickness (HAT), visceral leishmaniasis (VL), Chagas disease, and malaria. Founded in 2003 by four publicly-funded research institutes from India, Malaysia, Kenya, and Brazil along with Institut Pasteur and MSF, DNDi has developed the largest ever R&D portfolio for the kinetoplastid diseases and has already released two new anti-malarial drugs. For further information, visit www.dndi.org.

**Elsevier Saunders Mosby Churchill Publishers**
Contact: Steven Lowry
PO Box 360446
Birmingham, AL 35236
Phone: 205-542-7755
Fax: 205-988-3352
E-mail: s.lowry@elsevier.com
Booth 200
The latest in Medical Publications for health professionals. New Cook and Zumia Manson's Tropical Medicine text with on line version. New Jong Travel and Tropical Medicine Manual. Also the 2008 CDC Health Information and Travel Guide.

**European Malaria Vaccine Initiative**
Contact: Roland Ventura
c/o Statens Serum Institut
Building 202/323
AR TilleriveJ5
Copenhagen-S, DK-2300
Denmark
Phone: +45 32 68 3798
Fax: +45 32 68 3144
E-mail: oly@ssi.dk
Booth 411
The European Malaria Vaccine Initiative (EMVI) contributes financially and technically to nationally and internationally funded malaria vaccine research and development. EMVI provides a funding mechanism to further experimental vaccine candidates through to limited industrial production and early phase clinical trials, in close collaboration with the African Malaria Network Trust. In addition, EMVI provides a forum for academics, industry, regulatory agencies and vaccine producers interested in developing an efficacious and affordable malaria vaccine.
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Insect Shield Repellent Technology
Contact: Jason Griffin
814 West Market Street
Greensboro, NC 27401
Phone: 336-272-4157
Fax: 336-275-7604
E-mail: publicrelations@buzzoff.com
Booth 206
Insect Shield® Repellent Technology provides long-lasting, effective and odorless insect protection. The durable protection provided by Insect Shield apparel, gear and global health products is the result of years of research and testing. Insect Shield products combine the patent-pending Insect Shield process with a proprietary formulation of the insect repellent permethrin. Insect Shield® has been proven and registered by the United States Environmental Protection Agency (EPA) to repel many species of insects including those that can carry dangerous diseases. For more information please visit www.insectshield.com.

International Association for Medical Assistance to Travelers (IAMAT)
40 Regal Road
Guelph, ON N1K 1B5 Canada
Phone: 519-836-0102
Fax: 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.

International Society of Travel Medicine
Contact: Brenda Bagwell
2386 Clower St., Suite A102
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Phone: 770-736-7060
Fax: 770-736-0313
E-mail: admindir@istm.org
Booth 303
The International Society of Travel Medicine (ISTM) is committed to the promotion of healthy and safe travel. In cooperation with national and International health care providers, academic centers, the travel industry and the media. ISTM advocates and facilitates education, service and research activities in the field of travel medicine.

London School of Hygiene & Tropical Medicine
Contact: Paul Shanley
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E-mail: registry@Ishtm.ac.uk
Booth 307
The School offers 18 London-based taught Masters degrees (1 year FT/ 2 years PT) and four via distance learning. Research students can undertake either the MPhil/PhD programme or DrPH (Doctor of Public Health). Masters courses are comprised of a broad range of modules taught by expert academic staff. These modules are also offered as part of our Short Study Programme, which includes Diploma, Certificate and shorter courses covering all aspects of the School’s work.

Macro International Inc.
Contact: Erin Eckert
11785 Beltsville Dr.
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Beltsville, MD 20705
Phone: 301-572-0200
Fax: 301-572-0991
Booth 408
Macro International 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.
Exhibitor and Supporter Directory

**Malaria Research and Reference Reagent Resource Center (MR4)**
Contact: Timothy T. Stedman
10801 University Blvd
Manassas, VA 20110
Phone: 703-365-2765
Fax: 703-365-2774
E-mail: malaria@atcc.org
Booth 310
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 Institutes of Health (NIH) National Institute of Allergy and Infectious Diseases (NIAID), the MR4 repository collects and distributes parasites, mosquito vectors, and many other biological reagents, free of production charges, to registered malaria research laboratories. MR4 is managed through the American Type Culture Collection (ATCC).

**Mary Ann Liebert, Inc.**
Contact: Lisa Pierce
140 Huquenot St.
New Rochelle, NY 10801
Phone: 914-740-2100
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**Medicines for Malaria Venture**
Contact: Anna Wang
Route de Pre-Bois 20
CH-1215 Geneva 15
Switzerland
Phone: +41 22 799 4060
Fax: +41 22 799 4061
E-mail: wanga@mmv.org
Booth 207
Medicines for Malaria Venture (MMV) is a non-profit organization created to discover, develop and deliver effective and affordable antimalarial drugs through public-private partnerships. Our vision is a world in which these innovative medicines will cure and protect the millions at risk of malaria and help to ultimately eradicate this terrible disease.

**Merrick & Company-Facilities, Science and Technology Unit**
Contact: Dr. Robert (Ross) Graham
2450 South Peoria Street
Aurora, CO 80014-5475
Phone: 703-680-6086
Fax: 703-680-6086
E-mail: ross.graham@merrick.com
Booth 409
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**National Institute of Allergy and Infectious Diseases**
Contact: Julie Marquardt
6610 Rockledge Drive MSC 6612
Bethesda, MD 20892-6612
Phone: 866-284-4107
Booth 208
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National Research Council of the National Academies
Contact: Judith K. Nyquist, Ph.D.
3541 39th Street NW, Keck 568
Washington, DC 20001
Phone: 202-334-2760
Fax: 202-334-2759
E-mail: jnyquist@nas.edu
Booth 203
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Novartis Pharma AG.
Contact: Nadia elMasry
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Fax: +41 61 324 2146
E-mail: nadia.elmasry@novartis.com
Booth 215
Novartis offers a wide range of healthcare products through our Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health Divisions. Our complementary healthcare businesses address the changing needs of patients and societies worldwide. With innovative pharmaceuticals at the core, we are also a global leader in generics, vaccines and consumer health products. We believe this targeted portfolio best meets the challenges and opportunities in a dynamically changing healthcare environment.

Novartis Vaccines
Contact: Laura Wesolowski
350 Massachusetts Ave.
Cambridge, MA 02139
Phone: 862-778-6299
E-mail: laura.wesolowski@novartis.com
Booth 410
Novartis Vaccines and Diagnostics is a division of Novartis focused on the development of preventive treatments. The division has two businesses: Novartis Vaccines and Chiron. 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. Chiron, the blood testing and molecular diagnostics business, is dedicated to preventing the spread of infectious diseases through the development of novel blood-screening tools that protect the world’s blood supply.

Paladin Labs
Contact: Fernando Korembum
6111 Royalmount Ave. #102
Montreal, Quebec H4P 2T4
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Phone: 514-340-1112 x 3034
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Contact: Richa Chandra
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E-mail: richa.s.chandra@pfizer.com
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**QBC Diagnostics**  
Contact: Tom Fuller  
200 Innovation Blvd  
Suite 212  
State College, PA 16803  
Phone: 814-231-7660  
Fax: 814-231-3118  
E-mail: qbcsales@qbcdiag.com  
Booth 401

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**Royal Society of Tropical Medicine and Hygiene**  
Contact: Gerri McHugh  
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Phone: +44 207 580 2127  
Fax: +44 207 436 1389  
E-mail: gerri.mchugh@rstmh.org  
Booth 106

The objectives of the Society are to promote and advance the study, control and prevention of diseases in man and other animals in the tropics and sub-tropics, facilitate discussion and exchange of information among those who are interested in tropical diseases and international health, and generally to promote the work of those interested in these objectives.

**Salix Pharmaceuticals, Inc.**  
Contact: Mark Droke  
1700 Perimeter Park Drive  
Morrisville, NC 27560  
Phone: 919-862-1000  
Fax: 919-862-1095  
Booth 108

Salix Pharmaceuticals, Inc. follows a competitive strategy of in-licensing late-stage pharmaceutical products to treat GI diseases. The Salix portfolio includes 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.

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Contact: Frederique Bornier  
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Discovery Dr.  
Swiftwater, PA 18370  
Phone: 570-957-3473  
Fax: 800-565-5756  
E-mail: kim.quinn@sanofipasteur.com  
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**Sawyer Products**  
Contact: Amy Reed  
605 7th Ave N  
Safety Harbor, FL 34695  
Phone: 800-356-7811  
Fax: 727-725-1954  
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Scimedx Corporation is a highly flexible diagnostic manufacturer with over 30 years of experience in the autoimmune and infectious disease testing market. Scimedx’s recent acquisition of PanBio’s IFA and Latex Infectious assays makes them the number one manufacturer of IFA tests worldwide. IFA products include West Nile, RSV, VZV, R, rickettsii, E. chaffeensis and HHV 6, 7, & 8. Also included in Scimedx’s extensive viral and infectious menu of assays are rapid tests for Malaria and Dengue Fever.
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Contact: Terry Marquardt
PO Box 12878
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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.

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Sigma-Tau SpA
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Director, International Medical Marketing Affairs
Socio Unico
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Sigma-Tau Pharmaceuticals, Inc.
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Vice President, Commercial Operations
9841 Washingtonian Blvd., Ste 500
Gaithersburg, MD 20878
Phone: 301-670-1518
Fax: 301-948-1862
Email: Marc.Tewey@sigmatau.com
Sigma-Tau is a leading research-based pharmaceutical company headquartered in Pomezia, Italy with more than 2,500 employees worldwide. Sigma-Tau focuses its research and development on cardiovascular disease, metabolism, oncology, immunology, and the central and peripheral nervous systems. Sigma-Tau is also dedicated to creating novel therapies for the unmet needs of patients with rare diseases. Truly unique in its field, Sigma-Tau places its considerable scientific resources behind the discovery, development and distribution of compounds that benefit the few. Sigma-Tau has operating subsidiaries throughout Europe and the United States and maintains a presence in all of the world’s major pharmaceutical markets.

Sustainable Sciences Institute (NGO)
Contact: Josefina Coloma
870 Market St., Suite 764
San Francisco, CA 94102
Phone: 415-772-0939
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E-mail: ssi@ssilink.org
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Sustainable Sciences Institute (SSI) is an international NGO, dedicated to developing scientific capacity in areas with pressing health problems, via education, training, and support of locally relevant scientific projects. By building local health research capacity, SSI empowers developing country researchers to solve infectious disease problems in their communities. By providing training in low-cost and appropriate techniques, SSI promotes sustainability, and strengthens the local research and health infrastructure in the areas of laboratory, epidemiology, manuscript and grant writing, bioinformatics, bioethics, and information and communication technologies for health.
TechLab, Inc.
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E-mail: techlab@techlab.com
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Booth 210
Established in 1891, the University of Chicago Press is the largest American university press. The Press currently publishes nearly 50 leading journals and serials, in a wide range of disciplines including The Journal of Infectious Diseases, Clinical Infectious Diseases, and Infection Control & Hospital Epidemiology. Chicago also publishes approximately 250 books a year, and has published 11,000 books since its founding.

Tulane University Department of Tropical Medicine
Contact: Ron Cail
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New Orleans, LA 70112
Phone: 504-988-7313
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E-mail: rcail@tulane.edu
Booth 201
Department of Tropical Medicine Degree Programs:
> MSPH (Master’s of Science in Public Health)
> MPH & TM (Master’s of Science in Public Health)
> PhD (Doctorate of Philosophy in Parasitology)
> Diploma Course in Traveler’s Health

University of Pennsylvania / EuPathDB
Contact: Omar Harb, Ph.D.
1403 Blockley Hall Center for Bioinformatics
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Fax: 215-573-3111
E-mail: oharb@pcbi.upenn.edu
Booth 301
The Eukaryotic Pathogens database (www.EuPathDB.org) is an integrated database for protozoan pathogens and provides a functional resource for Cryptosporidium spp., Giardia lamblia, Plasmodium spp., Toxoplasma gondii and Trichomonas vaginalis. 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
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Walter Reed Army Institute of Research
Peter D’Arpa
503 Robert Grant Avenue
Silver Spring, MD 20910-7500
Phone: 301-319-7549
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E-mail: peter.darpa@us.army.mil
Booth 102
WRIAR is DoD’s largest biomedical research laboratory. WRAIR conducts bench-to-bedside R&D -- developing diagnostics, vaccines and drugs to detect, prevent and treat traumatic injuries and infectious diseases. With facilities in the US for human sleep studies, veterinary medicine, pilot GMP vaccine/biological manufacture, and a dedicated clinical trials center -- and overseas laboratories in Asia and Africa conducting product development where tropical diseases are endemic – WRAIR, independently and through collaboration with university and industry partners, is improving soldier and world health.

WHO/TDR
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E-mail: guthj@who.int
Booth 407
Detailed Program

Friday, December 5

Pre-Meeting Course Registration

Gallery
Friday, December 5, 4 p.m. – 6 p.m.

Saturday, December 6

Pre-Meeting Course Registration

Napoleon Ballroom Registration Desk
Saturday, December 6, 7 a.m. – 1:30 p.m.

ASTMH Certificate of Knowledge Exam

Napoleon B123
Saturday, December 6, 8 a.m. – Noon

Pre-Meeting Course

Whole Genome Association Studies: Understanding the Genetic Basis of Susceptibility to Infectious Diseases

Napoleon A123
Saturday, December 6, 8:30 a.m. – 4:30 p.m.

This course targets scientists, physicians, clinicians, graduate students and educators with interests in the rapidly evolving field of whole genome association studies and how these approaches can be used to understand the basis for susceptibility or resistance to infectious diseases. Topics will include an overview of whole genome association, a review of the state-of-the-art in technology development, an overview of computational analyses and biostatistics and a discussion of some of the bioethical considerations associated with these studies.

CHAIR
Daniel J Carucci
United Nations Foundation, Washington, DC, United States
Michael Gottlieb
Foundation for the National Institutes of Health, Bethesda, MD, United States
Dominic Kwiatkowski
Wellcome Trust Center for Human Genetics, Oxford, United Kingdom

8:30 a.m.
COFFEE AND LIGHT CONTINENTAL BREAKFAST

9 a.m.
INTRODUCTION – COURSE GOALS AND OUTLINE
Daniel J. Carucci
United Nations Foundation, Washington, DC, United States
Michael Gottlieb
Foundation for National Institutes of Health, Bethesda, MD, United States
Dominic Kwiatkowski
Wellcome Trust Center for Human Genetics, Oxford, United Kingdom

9:15 a.m.
INTRODUCTION TO WHOLE GENOME ASSOCIATION STUDIES
Dominic Kwiatkowski
Wellcome Trust Center for Human Genetics, Oxford, United Kingdom

10 a.m.
TECHNOLOGIES AND APPROACHES
Speaker to be announced

10:45 a.m.
COMPUTATIONAL ANALYSES AND BIOSTATISTICS
Paul DeBakker
Broad Institute, Cambridge, MA, United States

11:30 a.m.
LUNCH (ON YOUR OWN)

1 p.m.
BIOETHICAL ISSUES IN WHOLE GENOME ASSOCIATION STUDIES
Abdoulaye Djimde
University of Bamako, Bamako, Mali

1:30 p.m.
WHOLE GENOME ASSOCIATION STUDIES (MALARIA)
Kerrin Small
Wellcome Trust Centre for Human Genetics, Oxford, United Kingdom

2 p.m.
WHOLE GENOME ASSOCIATION STUDIES (HIV)
Dongliang Ge
Duke Institute, Durham, NC, United States

3 p.m.
BREAK

3:30 p.m.
WHOLE GENOME ASSOCIATION STUDIES (TUBERCULOSIS)
Fred Vannberg
Wellcome Trust Centre for Human Genetics, Oxford, United Kingdom
4 p.m.
PANEL DISCUSSION: IMPLICATION FOR IMPACT ON DISEASES OF THE DEVELOPING WORLD
Moderator
John Reeder
Burnet Institute for Medical Research and Public Health, Melbourne, VIC, Australia

Pre-Meeting Course

Malaria Eradication: Calibrating Aspirations, Technology and Commitment

Supported with funding from the Bill & Melinda Gates Foundation
Napoleon C123
Saturday, December 6, 1 p.m. – 5:45 p.m.

In the past five years, there has been enormous change in the financing and implementation of malaria prevention and treatment to meet agreed upon uptake goals, and this process had already been accelerated under the concept of “Scaling up for Impact,” which is based on the potential for higher impact when the control program is scaled up rapidly rather than incrementally. A number of countries, supported by major financing agencies, have made commitments to drive malaria control interventions up to optimize impact. This course is designed to provide the participant an exposure to experts in the range of relevant topics to review the historical and contemporary issues that frame global malaria control strategies and programming. The course will focus on providing participants a broad interactive opportunity to learn about the rationale, feasibility and strategic approaches to intensification of malaria control.

CHAIR
Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Partnership in Africa (MACEPA), Seattle, WA, United States
Bernard Nahlen
President’s Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States
David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

1 p.m.
INTRODUCTION — COURSE GOALS AND OUTLINE
Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Partnership in Africa (MACEPA), Seattle, WA, United States
Bernard Nahlen
President’s Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States
David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

1:15 p.m.
MALARIA CONTROL OVERVIEW 2000-2008
Bernard Nahlen
President’s Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States
Mac Otten
World Health Organization, Geneva, Switzerland

2:30 p.m.
LESSONS ON ERADICATION
Randall Packard
Johns Hopkins University, Baltimore, MD, United States
Linda Venczel
Bill & Melinda Gates Foundation, Seattle, WA, United States

3:30 p.m.
MALARIA CONTROL: CONTROL- ELIMINATION- ERADICATION- COUNTRY CASE PERSPECTIVES
Hoda Yousef Atta
World Health Organization, Cairo, Egypt.
Abdullah Ali
Zanzibar Malaria Control Program, Zanzibar, United Republic of Tanzania.
Keith Carter
Pan American Health Organization, Hyattsville, MD, United States
9:30 a.m.
THE RESEARCH AGENDA: MAPPING AND FILLING GAPS IN OUR KNOWLEDGE AND TOOLS TO ELIMINATION AND ERADICATION
Pedro Alonso
Centro de Investigacao em saude de Manhica (CISM),
Barcelona, Spain

10:30 a.m.
BREAK

11:30 a.m.
THE POLITICAL AND FINANCING REQUIREMENTS FOR MALARIA ERADICATION
Richard Feachem
University of California at San Francisco, San Francisco, CA, United States

12:30 p.m.
LUNCH (ON YOUR OWN)

1:30 p.m.
A GLOBAL MALARIA STRATEGIC AND BUSINESS PLAN
James Banda
World Health Organization, Geneva, Switzerland
Regina Rabinovich
Bill & Melinda Gates Foundation, Seattle, WA, United States

2:45 p.m.
WRAP-UP
David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

ASTMH Council Meeting
Waterbury
Sunday, December 7, 8 a.m. – 3:30 p.m.

Registration
Napoleon Ballroom
Sunday, December 7, 9:30 a.m. – 6 p.m.

Press Room
Ellendale/Evergreen
Sunday, December 7, 10 a.m. – 4 p.m.

Young Investigator Award Poster Set-Up
Sunday, December 7, 10 a.m. – 10:45 a.m.
Information about location posted at ASTMH registration desk.

Cyber Cafe
Lagniappe
Sunday, December 7, Noon – 6 p.m.

ACAV SIE Subcommittee Meeting
Salon 817/821
Sunday, December 7, 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 57th Annual Meeting. This award encourages developing young scientists to pursue careers in various aspects of tropical disease research.

Young Investigator Award Session A
Oak Alley
Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES
Subash Babu
National Institutes of Health, Bethesda, MD, United States
Stephen Davies
Uniformed Services University of the Health Sciences, Bethesda, MD, United States
Daniel J. Tisch
Case Western Reserve University, Cleveland, OH, United States

CARING FOR THE MOTHER AND CHILD IN AN INTEGRATED HEALTH SYSTEM: THE UTILITY OF A POSTNATAL BRIDGING CARD
Eugene Richardson¹, Robert Pattinson¹, Anne-Marie Bergh², Elsie Etsane³, Jenny Makín³
¹Yale University School of Medicine, New Haven, CT, United States, ²University of Pretoria, Pretoria, South Africa
LANDSCAPE GENETICS REVEALS FOCAL TRANSMISSION OF ASCARIS LUMBRICOIDES

Charles D. Criscione¹, Dan Sudimack², Joel D. Anderson³, Janardan Subedi¹, Dev R. Rai², Ram P. Upadhyay³, Bharat Jha³, Kimberly D. Williams², Sarah Williams-Blanger³, Timothy J. Anderson²
¹Department of Biology, Texas A&M University, College Station, TX, United States, ²Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio, TX, United States, ³Perry R. Bass Marine Fisheries Research Station, Coastal Fisheries Division, Texas Parks and Wildlife Department, Palacios, TX, United States, ⁴Department of Sociology and Gerontology, Miami University, Oxford, OH, United States, ⁵Tribhuvan University Institute of Medicine, Kathmandu, Nepal, ⁶Lifespan Health Research Center, Department of Community Health, Boonshoft School of Medicine, Wright State University, Dayton, OH, United States

DIAGNOSTIC ACCURACY OF LEISHMANIA OLIGOC-TEST FOR THE DIAGNOSIS OF CUTANEOUS LEISHMANNIASIS IN PERU

Diego Espinosa¹, Andrea K. Boggid³, Stijn Deborggraeve³, Thierry Laurent⁴, Cristian Valencia⁴, César Miranda-Verástegui⁴, Alejandro Llanos-Cuentas⁴, Thierry Leclipteux⁴, Jean-Claude Dujardin⁴, Philippe Büscher⁴, Jorge Arévalo⁴, ¹Instituto de Medicina Tropical “Alexander von Humboldt”, Universidad Peruana Cayetano Heredia, Lima, Peru, ²Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada, ³Department of Parasitology, Institute of Tropical Medicine, Antwerp, Belgium, ⁴Coris BioConcept, Gembloux, Belgium

ANTI-WOLBACHIA ANTIBODIES MAY DECREASE THE LIKELIHOOD OF ACUTE ADENOLYMHOSTIS IN LYMPHATIC FILARIASIS

Edsel Maurice T. Salvana¹, Katrin Daehnel², Amy G. Hise³, Eric Pearlman², Daniel J. Tisch³, James W. Kazura¹
¹Division of Infectious Diseases and HIV Medicine, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, ²Department of Ophthalmology, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, ³Department of Global Health and Diseases, Case Western Reserve University, Cleveland, OH, United States

MEMORY B CELL RESPONSES IN PATIENTS WITH DEHYDRATING DIARRHEA CAUSED BY VIBRIO CHOLERAE O1

Aaron M. Harris¹, Jason B. Harris¹, Md. Saruar Bhuiyan¹, Fahima Chowdhury¹, Ashraful I. Khan¹, Abu S. Faruque¹, Regina C. LaRocque², Edward T. Ryan², Firdausi Qadri³, Stephen B. Calderwood²
¹Tufts University School of Medicine, Boston, MA, United States, ²Massachusetts General Hospital, Boston, MA, United States, ³International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

WOLBACHIA SEQUENCES IN THE CHROMOSOMAL GENOME OF ONCHOCERCA FLEXUOSA INDICATE PAST WOLBACHIA ENDOSYMBIOSIS

Samantha N. McNulty
Washington University School of Medicine, St. Louis, MO, United States

THE EFFECT OF PRAZIQUANTEL TREATMENT ON THE GENETIC DIVERSITY OF SCHISTOSOMA MANSONI INFECTIONS IN PRIMARY SCHOOL CHILDREN WITHIN MAYUGE DISTRICT, UGANDA

Poppy H. Lamberton¹, Alice J. Norton¹, Alan Fenwick¹, Narcis Kabaterine², Joanne P. Webster¹
¹Imperial College London, London, United Kingdom, ²Vector Control Division, Ministry of Health, Kampala, Uganda

IDENTIFICATION OF RICKETTSIA FROM TICK SPECIES COLLECTED IN TENNESSEE

Sara B. Cohen¹, Michael J. Yabsley², J. D. Freye³, Brett G. Dunlap³, John R. Dunn¹, Daniel G. Mead¹, Timothy F. Jones¹, Abielardo C. Moncayo¹
¹Tennessee Department of Health, Nashville, TN, United States, ²Southeastern Cooperative Wildlife Disease Study, University of Tennessee Department of Health, Nashville, TN, United States, ³University of Tennessee Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services Program, Nashville, TN, United States

USE OF HETEROLOGOUS MICROARRAY HYBRIDIZATION TO IDENTIFY GENES INVOLVED IN MOSQUITO INFECTIVITY FOR BRUGIA PAHANGI MICROFILARiae

Kathryn Griffiths¹, George Mayhew², Rebecca Zink³, Sara Erickson², Jeremy Fuchs², Bruce Christensen², Colleen McDermott¹, Michelle Michalski³
¹University of Wisconsin Oshkosh, Oshkosh, WI, United States, ²University of Wisconsin Madison, Madison, WI, United States

CHRONIC HELMINTH INFECTION INCREASES THE THRESHOLD OF ACTIVATION FOR BASOPHILS AND MAST CELLS

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

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ALLEVIATING THE BURDEN OF LYMPHEDEMA IN TARABA STATE, NIGERIA VIA COMMUNITY-BASED REHABILITATION (CBR)
Lola E. Adigun1, Stanley O. Foster1, Henry B. Perry III2, Oladele Akogun2
1Emory University, Atlanta, GA, United States, 2Future Generations, Franklin, WV, United States

521

DEVELOPING BRUGIA MALAYI/BRUGIA PAHANGI HYBRIDS AS A TOOL FOR MOSQUITO INFECTIVITY STUDIES
Rebecca Zink1, Kathryn Griffiths1, Sara Erickson1, Jeremy Fuchs2, Bruce Christensen2, Michelle Michalski1
1University of Wisconsin Oshkosh, Oshkosh, WI, United States, 2University of Wisconsin Madison, Madison, WI, United States

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CLIMATIC FACTORS, ENTOMOLOGIC ATTRIBUTES AND EPIDEMICS OF DENGUE IN TAIWAN, 1998 – 2006
Chuin-Shee Shang1, Chi-Tai Fang1, Chung-Ming Liu2, Fu-Chang Hu2, Chwan-Chuen King1
1Institute of Epidemiology, National Taiwan University, Taipei City, Taiwan, 2Global Change Researching Center, National Taiwan University, Taipei City, Taiwan, 3National Center of Excellence for General Clinical Trial & Research, NTU Hospital, Taipei City, Taiwan

482

A PRINCIPAL COMPONENTS ANALYSIS OF IMMUNE PARAMETERS ASSOCIATED WITH RESISTANCE TO REINFECTION WITH SCHISTOSOMA MANSONI
Carla L. Black1, Pauline N. Mwinzi2, W. Evan Secor1, Diana M. Karanja3, Daniel G. Colley1
1University of Georgia, Athens, GA, United States, 2Centre for Global Health Research, Kenya Medical Research Institute, Kismu, Kenya, 3Centers for Disease Control and Prevention, Atlanta, GA, United States

1231

INHIBITION OF ANCYLOSLOMA CELYANICUM MACROPHAGE MIGRATION INHIBITORY FACTOR (ACEMIF): POTENTIAL FOR PREVENTING HOOKWORM-ASSOCIATED IMMUNOMODULATION AND DISEASE PATHOGENESIS
Jon J. Vermeire1, Yoonsang Cho2, Lin Leng2, Elias Lolis2, Richard Bucala3, Michael Cappello1
1Program in International Child Health and Department of Pediatrics, Yale University School of Medicine, New Haven, CT, United States, 2Department of Pharmacology, Yale University School of Medicine, New Haven, CT, United States, 3Department of Medicine, Yale University School of Medicine, New Haven, CT, United States

697

MODELING WEST NILE VIRUS TRANSMISSION AMONG BIRDS IN CONNECTICUT
Jennifer E. Simpson1, Alison Galvani1, Jan Medlock1, Goudarz Molaei2, Theodore Andreadis3, Maria Diuk-Wasser1
1Yale University, New Haven, CT, United States, 2The Connecticut Agricultural Experiment Station, New Haven, CT, United States

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MOLECULAR CHARACTERIZATION OF FATTY ACID BINDING PROTEINS FROM THE HOOKWORM ANCYLOSTOMA CELYANICUM
Keke C. Fairfax1, Jon J. Vermeire, Richard D. Bungiro, Lisa M. Harrison, Sohail Husain, Michael Cappello
Yale University, New Haven, CT, United States

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HISTAMINE DOES NOT PLAY A ROLE IN VACCINE-MEDIATED IMMUNITY AGAINST MURINE FILARIASIS
Ellen C. Mueller
Uniformed Services University, Bethesda, MD, United States

783

RICKETTSIA FELIS INFECTION IN A MURINE MODEL.
Kathryn E. Reif, Rhett W. Stout, Timothy W. Morgan, Kevin R. Macaluso
Louisiana State University, Baton Rouge, LA, United States

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EFFECTIVENESS OF HEALTH EDUCATION INTERVENTION TRIAL TO REDUCE PORCINE CYSTICERCOSIS IN NORTHERN TANZANIA
Helena A. Ngowi1, Hélène Carabin2, M. R. Mlozi1, Ayub A. Kassuku1, J. E. Mlangwa1, A. Lee Willingham3
1Sokoine University of Agriculture, Morogoro, United Republic of Tanzania, 2University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, 3WHO/FAO Collaborating Center for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Frederiksberg, Denmark
Young Investigator Award Session B

Rhythms /
Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES
Kathryn S. Aultman
Bill & Melinda Gates Foundation, Seattle, WA, United States
Brenda T. Beerntsen
University of Missouri-Columbia, Columbia, MO, United States
Nicholas Komar
Centers for Disease Control and Prevention, Fort Collins, CO, United States

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RABIES IN BATS IN TWO COMMUNITIES IN PERU AFTER AN OUTBREAK IN 2007
Gabriela Salmon-Mulanovich1, Christian Albújar2, Carolina Guevara3, Alicia Vasquez4, Alberto Laguna5, Milagros Salazar1, Hernán Zamalloa1, Marcia Cáceres1, Tadeusz Kochel1, Carlos Contreras1, Felix R. Jackson2, Charles E. Rupprecht1, Joel M. Montgomery1
1Naval Medical Research Center Detachment, Lima, Peru, 2Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru, 3University of Texas Medical Branch, Galveston, TX, United States, 4Dirección de Salud, Madre de Dios, Peru, 5Centers for Disease Control and Prevention, Atlanta, GA, United States

1171
LARVAL ANOPHELINE MOSQUITO RECTA EXHIBIT A DRAMATIC CHANGE IN ION TRANSPORT PROTEINS IN RESPONSE TO SHIFTING SALINITY
Kristin E. Smith1, Leslie A. VanEkeris1, William R. Harvey1, Peter J. Smith1, Paul J. Linser1
1University of Florida, Saint Augustine, FL, United States, 2BioCurrents Research Center, Program in Molecular Physiology, Marine Biological Center, Woods Hole, MA, United States

1131
UNDERSTANDING BATS ACCESS TO DATE PALM SAP: IDENTIFYING PREVENTATIVE TECHNIQUES FOR NIPAH VIRUS TRANSMISSION
M. S.U. Khan1, Nazmun Nahar, Rebeca Sultana, M. Jahangir Hossain, Emily S. Gurley, Stephen P. Luby
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

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BIOCHEMICAL AND KNOCKDOWN RESISTANCE OF ANOPHELES GAMBIAE TO PERMETHRIN AND DELTAMETHRIN (PYRETHROIDS) AT KPONE ON SEA IN THE GREATER ACCRA REGION OF GHANA
Kwadwo K. Frempong1, Isabella Quakyi2, Sulley K. Ben-Mahmoud2, Irene Offei Owusu1, Maxwell A. Appawu1, Daniel Boakye1
1Noguchi Memorial Institute for Medical Research, Accra, Ghana, 2School of Public Health, University of Ghana, Accra, Ghana, 3African Regional Postgraduate Programme in Insect Science (ARPPIS), University of Ghana, Accra, Ghana
PREVENTING NIPAH VIRUS INFECTION: INTERVENTIONS TO INTERRUPT BATS ACCESSING DATE PALM SAP

Nazmun Nahar, Rebeca Sultana, Elizabeth Oliveras, Utpal Kumar Mondal, M. Jahangir Hossain, Emily S. Gurley, M. Saiful Islam, M. S. Khan, Stephen P. Luby
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

NEWLY ISOLATED MUTANTS OF DENGUE VIRUS TYPE 1 WITH DELETIONS IN THE 3' NONCODING REGION SHOW HIGHER LEVELS OF REPLICATION IN VIVO IN MOSQUITOES

Yoko Nukui1, Shigeru Tajima1, Makiko Ikeda1, Akira Kotaki1, Tomohiko Takasaki1, Yuki Esrita1, Ichiro Kurane1
1National Institute of Infectious Diseases, Tokyo, Japan, 2Oita University Faculty of Medicine, Oita, Japan

MOSQUITOES PUT THE BRAKE ON EVOLUTION: EXPERIMENTAL EVOLUTION REVEALS SLOWER MUTATION ACCUMULATION IN MOSQUITO CELLS THAN VERTEBRATE CELLS

Nikos Vasilakis1, Eleanor Deardorf1, Joanie Kenney1, Shannan L. Rossi1, Kathryn A. Hanley1, Scott C. Weaver1
1University of Texas Medical Branch, Galveston, TX, United States, 2New Mexico State University, Las Cruces, NM, United States

RNA INTERFERENCE (RNAI) OF RIBOSOMAL PROTEIN S3A (RPS3A) SUGGESTS A LINK BETWEEN THIS GENE AND ARRESTED OVARIAN DEVELOPMENT DURING ADULT DIAPAUSE IN CULEX PIPIENS

Mijung Kim
The Ohio State University, Columbus, OH, United States

GENETIC STRUCTURE IN THE ARBOVIRAL VECTOR CX. TARSALIS: A SPATIAL ANALYSIS OF POPULATION DIFFERENTIATION ACROSS THE WESTERN UNITED STATES

Meera Venkatesan, Jason L. Rasgon
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

CYTOKINE EXPRESSION IN A HAMSTER MODEL OF HANTAVIRUS PULMONARY SYNDROME

Martin H. Richter, Mary Louise Milazzo, Eduardo J. Eyzaguirre, Charles F. Fulhorst
University of Texas Medical Branch Galveston, Galveston, TX, United States

HOME POULTRY RAISING PRACTICES IN BANGLADESH: THE SETTING FOR ANIMAL TO HUMAN INFLUENZA TRANSMISSION

International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

AVIAN INFLUENZA IN WILD BIRDS FROM THE CENTRAL COAST OF PERU

Bruno M. Ghersi1, David Blazes1, Eliana Icochea2, Rosa I. Gonzalez2, Tadeusz Kochel1, Yeny Tinocio1, Merly Sovero1, Stephen Lindstrom2, Bo Shu3, Alexander Klimov4, Armando E. Gonzalez2, Joel M. Montgomery1
1Naval Medical Research Center Detachment, Lima, Peru, 2San Marcos University, Lima, Peru, 3Johns Hopkins University, School of Public Health, MD, United States, 4Center for Disease Control and Prevention, Atlanta, GA, United States
Young Investigator Award Session C

Bayside A
Sunday, December 7, 2008 11 a.m. – 3:30 p.m.

JUDGES
Roland A. Cooper
Old Dominion University, Norfolk, VA, United States
Miriam Laufer
University of Maryland, Baltimore, MD, United States
Julian C. Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

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MODELLING THE POTENTIAL IMPACT OF ARTEMISININ COMBINATION THERAPIES AND LONG-LASTING DRUG COMBINATIONS ON MALARIA TRANSMISSION INTENSITY: A CASE STUDY IN TANZANIA
Lucy Okell¹, Chris Drakeley¹, Teun Bousema², Chris J. Whitty¹, Azra C. Ghanim³
¹London School of Hygiene and Tropical Medicine, London, United Kingdom, ²Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, ³Imperial College, London, United Kingdom

CHANGES IN MICRORNAS EXPRESSED BY HUMAN MACROPHAGES AS A RESULT OF LEISHMANIA CHAGASI INFECTION
Anne M. Dickson¹, Anton McCaffrey¹, Mary E. Wilson²
¹Department of Internal Medicine, University of Iowa, Iowa City, IA, United States, ²Departments of Internal Medicine, Microbiology and Epidemiology, University of Iowa and the VA Medical Center, Iowa City, IA, United States

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METACYCLOGENESIS ALTERS RECEPTOR-MEDIATED UPTAKE OF LEISHMANIA CHAGASI PROMASTIGOTES BY HUMAN MONOCYTE-DERIVED MACROPHAGES
Norikiyo Ueno, Nilda E. Rodriguez, Carol L. Bratt, Mary E. Wilson
University of Iowa, Iowa City, IA, United States

410

SAP1 IS A SELECTIVE MASTER REGULATOR OF MALARIA PARASITE LIVER INFECTION
Ahmed S. Aly, Stefan H. Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States
Detailed Program

559
ANALYSIS OF GENE EXPRESSION AND EVOLUTIONARY PROCESS IN LEISHMANIA (VIANNIA) BRAZILIENSIIS AND LEISHMANIA (VIANNIA) PERUVIANA MODEL
Dionicia Gamboa
Instituto de Medicina Tropical, Lima, Peru

1211
IDENTIFICATION OF A NOVEL FAMILY OF VARIANT SURFACE ANTIGENS IN PLASMODIUM FALCIPARUM
Amanda K. Lukens1, Daniel E. Neafsey2, Stephen F. Schaffner2, Daniel J. Park2, Philip Montgomery2, Sarah K. Volkman1, Pardis C. Sabeti2, Danny A. Milner, Jr.1, Johanna P. Daily1, Ousmane Sarr1, Daouda Ndiaye1, Omar Ndir1, Soulyemane Mboup1, Nicole Stange-Thoman1, Roger C. Wiegand1, Bruce W. Birren2, Daniel L. Hart1, James E. Galagan1, Eric S. Lander1, Dyan F. Wirth1
1Harvard School of Public Health, Boston, MA, United States
2National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

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YFV-INDUCED CYTOKINE EXPRESSION IN HUMAN HEPATOCYTES
Sara E. Woodson, Michael R. Holbrook
University of Texas Medical Branch, Galveston, TX, United States

838
DISTINCT ROLES OF PLASMODIUM RHOMBOID 1 IN PARASITE DEVELOPMENT AND MALARIA PATHOGENESIS
Prakash Srinivasan1, Isabelle Coppens1, Marcelo Jacobs-Lorena2
1National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States
2Johns Hopkins School of Public Health, Baltimore, MD, United States

1186
SINGLE MOLECULAR FORCE SPECTROSCOPY STUDY OF PLASMODIUM FALCIPARUM-INFECTED ERYTHROCYTE CYTODAHERENCE TO ENDOTHELIAL RECEPTORS
Ang Li1, Tong Seng Lim, Hui Shi, Jing Yin, Shyong Wei Tan, Chwee Teck Lim
National University of Singapore, Singapore, Singapore

409
P. VIVAX POPULATION GENETICS IN PERU AND VIETNAM: A COMPARATIVE STUDY USING MICROSATELLITES MARKERS
Peter Van den Eede1, Gert Van Der Auwera1, Annette Erhart1, Chantal Van Overmeir1, Jozef Anné2, Umberto D’Alessandro1
1Institute of Tropical Medicine Antwerp, Antwerp, Belgium
2Catholic University of Leuven, Leuven, Belgium

639
GENETIC VARIATION AMONG PLASMODIUM VIVAX PRIMATE ISOLATES AND THE IMPLICATION FOR VACCINE DEVELOPMENT
Francis B. Ntumngia1, Amy M. McHenry2, John W. Barnwell3, Jennifer Cole-Tobian4, Christopher L. King4, John H. Adams1
1Global Health Infectious Disease Research, University of South Florida, Tampa, FL, United States
2University of Notre Dame, Notre Dame, IN, United States
3Centers for Disease Control and Prevention, Atlanta, GA, United States
4Center for Global Health and Disease at Case Western Reserve University School of Medicine, Cleveland, OH, United States

506
ANALYSIS OF THE TRANSCRIPTOMIC RESPONSE TO WEST NILE VIRUS INFECTION IN THE EQUINE HOST
Melissa Bourgeois1, Maureen Long3, Kathy Seino2, Nancy Denslow1
1University of Florida College of Veterinary Medicine, Gainesville, FL, United States
3Washington State University College of Veterinary Medicine, Pullman, WA, United States

407
ANALYSIS OF PLASMODIUM FALCIPARUM QUANTITATIVE TRAIT LOCI DETERMINING DIFFERENTIAL INFECTIVITY TO ANOPHELES MOSQUITOES
Jonathan Mwangi, Lisa Ranford-Cartwright
University of Glasgow, Glasgow, United Kingdom

938
SPECIFIC INHIBITION OF THE PHOSPHOETHANOLAMINE METHYLTRANSFERASE OF THE HUMAN MALARIA PARASITE PLASMODIUM FALCIPARUM BY AMODIAQUINE
April M. Bobenchik, Arunima Mishra, Bing Hao, Julian N. Rujan, Jeffrey C. Hoch, Choukri Ben Mamoun
University of Connecticut Health Center, Farmington, CT, United States

917
IDENTIFICATION, CHARACTERIZATION, AND EVALUATION OF THE TryPANSOMA BRUCEI CA+ CHANNEL (TBCC1) AS A POTENTIAL DRUG AND VACCINE TARGET
Kiantra I. Ramey1, Francis O. Eko1, Nana Wilson1, Zuzana Kucerova1, Winston Thompson1, Jonathan K. Stiles1
1Morehouse School of Medicine, Atlanta, GA, United States

1029
TRANSCRIPTIONAL ANALYSIS OF PUTATIVE FOLATE TRANSPORTER GENES IN PLASMODIUM FALCIPARUM
Edwin Ochong1, Enrique Salcedo1, Pat Bray2, Steve Ward1, Andrew Owen1
1Liverpool School of Tropical Medicine, Liverpool, United Kingdom
2Department of Pharmacology, University of Liverpool, Liverpool, United Kingdom
Young Investigator Award Session D

Bayside B
Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES
Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States
David Williams
Illinois State University, Normal, IL, United States
Yimin Wu
National Institutes of Health, Rockville, MD, United States

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MANAGEMENT OF CHILDHOOD DIARRHEAL DISEASE IN GONDAR, ETHIOPIA
Rishi P. Medratta1, R. Bradley Sack2
1Johns Hopkins University, Baltimore, MD, United States, 2Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

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CSA POTENTIATES DYSREGULATED INFLAMMATORY AND ANGIOPGENIC RESPONSES IN PREGNANCY-ASSOCIATED MALARIA
Andrea L. Conroy1, Constance Finney1, Lena Serghides1, Simon O. Owino2, D. Channe Gowda1, W. Conrad Liles3, Julie M. Moore2, Kevin C. Kain2
1University of Toronto, Toronto, ON, Canada, 2Center for Tropical and Emerging Global Diseases and Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, GA, United States, 3Department of Biochemistry and Molecular Biology, Pennsylvania State University, College of Medicine, Hershey, PA, United States

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GENETIC HITCHHIKING, SELECTIVE SWEEPS, AND MULTIPLE ORIGINS OF DRUG RESISTANT PLASMODIUM FALCIPARUM IN THREE DISTINCT POPULATIONS
Andrea M. McCollum1, Venkatachalam Udhayakumar1, Ananias A. Escalante2
1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2Arizona State University, Tempe, AZ, United States

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PROTEOMIC ANALYSIS OF THE PHOP REGULON IN SALMONELLA ENTERICA SEROVARS TYPHI AND TYPHIMURIUM
Richelle C. Charles1, Jason B. Harris2, Lauren M. Lebrun3, Michael Chase1, Aulallah Sheikh1, Regina C. Larocque1, Brian Krastins1, David Saracino1, Ian Rosenberg1, Abdullah Tarique1, Stephen B. Calderwood1, Elizabeth Hohmann1, Firdiwas Qadri1, Kenneth Parker1, Edward T. Ryan1
1Massachusetts General Hospital, Boston, MA, United States, 2International Centre for Diarrheal Disease Research, Dhaka, Bangladesh, 3Harvard-Partners Center for Genetics and Genomics, Cambridge, MA, United States

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Jacqueline Janka1, Ousmane A. Koita2, Maya Josepha2, Broulaye Traoré2, Fawaz Mzayek2, Lansana Sangare2, Ousmane Cissé1, Laurel Mendelsohn1, Xunde Wang1, Henry Masur2, Mark Gladwin1, Donald J. Krogstad4
1National Institutes of Health, Bethesda, MD, United States, 2University of Bamako, Bamako, Mali, 3Hôpital Gabriel Touré, Bamako, Mali, 4 Tulane University, New Orleans, LA, United States

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Edna A. Ooko1, Dr. Peter Lomo1, Dr. Paul O. Ongugo2, Dr.Christine Bii3, Prof. Ahmed Hassanali4
1Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, 2Kenya Forestry Research institute, Nairobi, Kenya, 3Kenya Medical Research Institute, Nairobi, Kenya, 4International Center for Insect Physiology and Ecology, Nairobi, Kenya

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Raimund Helbok1, Eric Kendjo1, Saadou Issifu2, Peter Lackner1, Charles R. Newton1, Maryvonne Kombila3, Tsiri Agbenyega4, Klaus Dietz5, Kalifa Bojang5, Erich Schmutzhard6, Peter G. Kremser2
1Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon; Innsbruck Medical University, Clinical Department of Neurology, Austria, 2Medical Research Unit, Albert Schweitzer Hospital, Lambaréne, Gabon; Department of Parasitology, Institute of Tropical Medicine, University of Tübingen, Tübingen, Germany, 3Innsbruck Medical University, Clinical Department of Neurology, Innsbruck, Austria, 4Centre for Geographical Medicine, Kenya Medical Research Institute Kilifi, Kilifi, Kenya; Neuroscience Unit, Institute of Child Health, University College London, London, United Kingdom, 5Department of Parasitology, Mycology and Tropical Medicine, Faculty of Medicine, University of Health Sciences Libreville, Libreville, Gabon, 6University of Science and Technology, School of Medical Science, Kumasi, Ghana, 7Department of Medical Biometry, University of Tübingen, Tübingen, Germany, 8Medical Research Council Laboratories, Banjul, Gambia

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Juliana V. Harris1, Catherine N. Stracener1, Xiaobo Wu2, Dirk Spitzer2, John P. Atkinson3, José A. Strute3
1Uniformed Services University, Bethesda, MD, United States, 2Washington University, St. Louis, MO, United States
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Chummy S. Sikasunge1, Maria V. Johansen2, Lee A. Willingham III3, Pall S. Leifsson4, Isaac K. Phiri5
1School of Veterinary Medicine, University of Zambia, Lusaka, Zambia, 2DBL – Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Copenhagen, Denmark, 3WHO/FAO Collaborating Centre for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Copenhagen, Denmark, 4Department of Veterinary Pathobiology, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Copenhagen, Denmark

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TRANSPLACENTAL TRANSFER OF ANTIBODIES TO THE FETUS THAT COULD PROTECT INFANTS FROM MALARIA

Patrick T. Wilson1, Peter Mungai2, Indu Malhotra3, Chris King3, Arlene Dent1
1Rainbow Babies and Children’s Hospital, Cleveland, OH, United States, 2Case Western Reserve University, Cleveland, OH, United States, 3Case Western Reserve University School of Medicine, Cleveland, OH, United States

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Valeria R. Soberon1, Carola J. Salas1, Meddly L. Santolalla2, Andrea M. McColllum3, Venkatachalam Udhayakumar4, Carmen M. Lucas5, David J. Bacon2
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States

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Iskra Tuero1, Joseph Vinetz2, Gary Klimpel3
1Universidad Peruana Cayetano Heredia, Lima, Peru, 2University of California, San Diego, CA, United States, 3University of Texas Medical Branch, Galveston, TX, United States

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Bruna L. Maciel1, Iraci D. Lima1, Hênio G. Lacerda1, Paula V. Duarte1, José W. Queiroz1, Núbia N. Pontes1, Sérgio R. Araújo1, Eliana T. Nascimento1, Glória R. Monteiro1, Richard D. Pearson2, Mary E. Wilson3, Stephen E. McGowan3, Selma M. Jerônimo1
1Universidade Federal do Rio Grande do Norte, Natal – RN, Brazil, 2University of Virginia, Charlottesville, VA, United States, 3University of Texas Medical Branch, Galveston, TX, United States

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Louis-Patrick Haraoui1, Nancy Koles2, Robin S. Howard3, Glenn W. Wortmann1, Mark Polhemus1, Naomi E. Aronson1
1Internal Medicine Residency Training Program, Department of Medicine, McGill University, Montreal, QC, Canada, 2Uniformed Services University of the Health Sciences, Bethesda, MD, United States, 3Walter Reed Army Medical Center, Washington, DC, United States

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PATHOGENESIS OF HAEMORRHAGE ASSOCIATED WITH DENGUE INFECTION IN ADULTS IN VIETNAM

Dinh The Trung1, Tran Minh Dung2, Nguyen Minh Dung2, Tran Van Ngoc2, Robert Goldin3, Edward Tuddenham4, Cameron Simmons2, Jeremy Farrar2, Bridget Wills3
1University of Medicine and Pharmacy of Ho Chi Minh city, Ho Chi Minh city, Viet Nam, 2Hospital for Tropical Diseases, Ho Chi Minh city, Viet Nam, 3Department of Investigative Sciences, Imperial College, London, United Kingdom, 4Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Ho Chi Minh City, Viet Nam
ASTMH 57th Annual Meeting

PLASMODIUM FALCIPARUM HISTIDINE-RICH PROTEIN 2 ELISA FOR USE IN MALARIAN INTERVENTION TRIAL
Carolyne M. Kifude1, Ann Stewart1, Carter Diggs2, John N. Waitumbi1
1Walter Reed Project/KEMRI, Kisumu, Kenya, 2Malaria Vaccine Development Program United States Agency for International Development, Washington, DC, United States

CLASSIFICATION AND REGRESSION TREE (CART) ANALYSIS USING CLINICAL LABORATORY VARIABLES KNOWN TO BE ASSOCIATED WITH DENGUE TO ESTABLISH EARLY DISEASE CLASSIFICATION
James A. Potts1, Siripen Kalayanarooj1, Suchitra Nimmannitya2, Anon Srikiatkhachorn1, Ananda Nisalak1, David W. Vaughn1, Timothy P. Endy3, Daniel H. Libraty1, Sharone Green1, Alan L. Rothman1
1University of Massachusetts Medical School, Worcester, MA, United States, 2Queen Sirikit National Institute of Child Health, Bangkok, Thailand, 3Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, 4U.S. Army Medical Research and Material Command, Fort Detrick, MD, United States, 5University of New York, Upstate Medical University, Syracuse, NY, United States

CO-INFECTION WITH HELMINTHS AND MALARIA DURING PREGNANCY EFFECT SUSCEPTIBILITY TO FALCIPARUM MALARIA DURING CHILDHOOD
Indu Malhotra1, Peter Mungai2, Alex Wamachi2, John Ouma2, Davy Koech2, Eric Muchiri2, Christopher L. King1
1Case Western Reserve University, Cleveland, OH, United States, 2Kenya Medical Research Institute, Nairobi, Kenya, 3Kenya University, Nairobi, Kenya, 4Division Of Vector Born Diseases, Nairobi, Kenya

CLINDAMYCIN PLUS QUININE FOR TREATING UNCOMPLICATED FALCIPARUM MALARIA: A META-ANALYSIS.
Charles O. Obonyo, Elizabeth A. Juma
Kenya Medical Research Institute, Kisumu, Kenya

Young Investigator Award Session E

Bayside C
Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES
Christopher L. King
Case Western Reserve University, Cleveland, OH, United States
Sanjai Kumar
Food and Drug Administration, Rockville, MD, United States
Peter Zimmerman
Case Western Reserve University, Cleveland, OH, United States

TLR INVOLVEMENT DURING EXPERIMENTAL MALARIA: IMPLICATIONS FOR BOTH ENDS OF THE CLINICAL SPECTRUM OF HUMAN DISEASE
Constance A. Finney, Ziyue Lu, W. Conrad Liles, Kevin C. Kain
University of Toronto, Toronto, ON, Canada

IDENTIFICATION OF IMUNODOMINANT REGIONS OF LEPTOSPIRAL IMMUNOGLOBULIN-LIKE PROTEINS FOR USE IN THE DIAGNOSIS OF LEPTOSPIROSIS
Julio Croda1, Marco A. Medeiros2, Rena Greenwald3, Jenny Sun1, Alan Mcbride1, Sharon J. Peacock4, Henry A. Choy3, David A. Haake3, Akira Homma5, Mitermayer G. Reisch1, Javan Esfandiari1, Konstantin P. Lyashchenko4, Albert I. Ko5
1Oswaldo Cruz Foundation, Gonçalo Moniz Institute, Brazilian Ministry of Health, Salvador, Brazil, 2Oswaldo Cruz Foundation, Biomanguinhos, Brazilian Ministry of Health, Rio de Janeiro, Brazil, 3Chembio Diagnostic Systems, Inc., Medford, NY, United States, 4Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, 5Veterans Affairs Greater Los Angeles Healthcare System, Department of Medicine and the David Geffen School of Medicine at UCLA, Los Angeles, CA, United States

ECOLOGICAL AND GENETIC RELATIONSHIPS OF THE FOREST-M FORM AMONG CHROMOSOMAL AND MOLECULAR FORMS OF THE MALARIAN VECTOR ANOPHELES GAMBIAE S. S.
Yoonsok Lee1, Claudio R. Meneses1, Abdrahamane Fofana2, Aurélie G. Andrianarivo1, Rory D. McBee1, Etienne Fondjo1, Sekou F. Traoré1, Anthony J. Cornel1, David A. Haake3, Rena Greenwald3, Sharon J. Peacock4, Henry A. Choy3, Marco A. Medeiros2, Alain J. Lutwama1, David A. Hall1, Javan Esfandiari1, Konstantin P. Lyashchenko4, Albert I. Ko5
1University of California Davis, Davis, CA, United States, 2Malaria Research and Training Center, Faculty of Medicine, University of Mali, Bamako, Mali, 3National Malaria Program, Ministry of Health, Yaoundé, Cameroon

SUPPRESSION OF HOST MACROPHAGE TRANSCRIPTIONAL RESPONSES BY LEISHMANIA MEXICANA
Shuyi Zhang, P’ng Loke, James H. McKerrow
University of California San Francisco, San Francisco, CA, United States
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Department of Global Health; Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada.  
1Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health; Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada. |
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University of Toronto, Toronto, ON, Canada |
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2Jiangxi Institute of Parasitic Diseases, Nanchang, China |
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Walter Reed Project/KEMRI, Kisumu, Kenya.  
Department of Biochemistry and Molecular Genetics, University of Virginia School of Medicine, Charlottesville, VA, United States |
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Institute of Biomedical Sciences, University of São Paulo, São Paulo, Brazil |
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Uniformed Services University of the Health Sciences, Bethesda, MD, United States |
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1Department of Microbiology, Immunology and Tropical Medicine, The George Washington University, Washington, DC, United States.  
2Department of Parasitology, Khon Kaen University, Khon Kaen, Thailand.  
3The Department of Pathology, Khon Kaen University, Khon Kaen, Thailand.  
4Division of Infectious Diseases and Immunology, Queensland Institute of Medical Research, Brisbane, Queensland, Australia |
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1Queensland Institute of Medical Research, Brisbane, Australia.  
2Australian Army Malaria Institute, Brisbane, Australia.  
3World Health Organization, Western Pacific Region Office, Manila, Philippines |
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University of South Florida, Tampa, FL, United States |
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1Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya.  
2University of Georgia, Athens, GA, United States.  
3Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.  
4Kenyatta University, Nairobi, Kenya.  
5Centers for Disease Control and Prevention, Atlanta, GA, United States |
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1Universidad Nacional Mayor de San Marcos, Lima, Peru.  
2Instituto Nacional de Salud, Lima, Peru |
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Institute of Tropical Disease, Research and Prevention, Calabar, Nigeria

FUNCTIONAL ASSOCIATION BETWEEN RANTES -4151C/T PROMOTER POLYMORPHISM AND HIGH-DENSITY FALCIARPAM PARASITEMIA AMONG CHILDREN IN A HOLOENDEMIC MALARIA TRANSMISSION AREA
Tom Were¹, Collins Ouma¹, Greg C. Davenport², James B. Hittner³, Michael F. Otieno⁴, Alloys S. Orago⁵, John M. Vulule⁶, John M. Ong’eche⁷, Douglas J. Perkins⁷
¹University of New Mexico/KEMRI, Kisian, Kenya, ²University of Pittsburgh, Pittsburgh, PA, United States, ³Department of Psychology, College of Charleston, Charleston, SC, United States, ⁴Department of Pre-Clinical Sciences, School of Health Sciences, Kenyatta University, Nairobi, Kenya, ⁵National AIDS Control Council, Nairobi, Kenya, ⁶Centre for Global Health Research, Kenya Medical Research Institute, Kisian, Kenya, ⁷Division of Infectious Diseases, University of New Mexico School of Medicine, New Mexico, NM, United States

THE STATUS OF THE PFM3 N-TERMINUS AS A VACCINE CANDIDATE: CROSS-REACTIVE ANTIBODIES IN HYPOENDEMIC TRANSMISSION
Stephen J. Jordan, Oralee H. Branch, Julian C. Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

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Zen Hafy¹, Purnomo Soecharso¹, Irani F. Rudiman¹, Wahyuning Ramelan¹, Bachti Alisjahbana², Susanna Widjaja², Herman Kosasih³, Ervi Salwati³, Djoko Yuwono³, Maya Williams⁴, Patrick Blair⁴, Timothy Burgess⁴
¹University of Sriwijaya, Palembang, Indonesia, ²University of Indonesia, Jakarta, Indonesia, ³Hasan Sadikin Hospital, Bandung, Indonesia, ⁴Viral Disease Program, US Namru-2, Jakarta, Indonesia, ⁵National Institutes of Health Research and Development, Jakarta, Indonesia
Detailed Program

Speaker Ready Room

Nottoway
Sunday, December 7, Noon – 6 p.m.

ACAV SALS Subcommittee Meeting

Salon 817/821
Sunday, December 7, 2 p.m. – 3:30 p.m.

Young Investigator Award Committee Meeting

Oak Alley
Sunday, December 7, 3:30 p.m. – 5 p.m.

ACMCIP Council Meeting

Grand Couteau
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

ACAV Council Meeting

Salon 817/821
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

ACME Council Meeting

Salon 824
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

Clinical Group Council Meeting

Salon 816
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

Student Reception

Rhythms II/III
Sunday, December 7, 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

Grand Ballroom
Sunday, December 7, 5:30 p.m. – 7:30 p.m.

CHAIR
Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States
Edward T Ryan
Massachusetts General Hospital, Boston, MA, United States

5:30 p.m.
THE GENIUS OF BOLDNESS: THINKING BIG IN GLOBAL HEALTH
Richard Feachem
University of California at San Francisco, San Francisco, CA, United States
Formerly Executive Director, The Global Fund to Fight AIDS, TB and Malaria, and Under-Secretary General, United Nations

6:30 p.m.
AWARDS CEREMONY

COMMUNICATIONS AWARD
Charles Piller and Doug Smith
Los Angeles Times, Los Angeles, CA, United States
Presented by Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

HONORARY MEMBERS
Pierre Ambroise-Thomas
President, French National Academy of Medicine, Gentilly, France
Anastácio de Queiroz Sousa
São José Hospital for Infectious Diseases, Fortaleza, Ceará, Brazil
Presented by Thomas P. Monath
Kleiner Perkins Caufield & Byers, Harvard, MA, United States

HOOGSTRAAL MEDAL
Daniel Sonenshine
Old Dominion University, Norfolk, VA, United States
Presented by Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

BAILEY K. ASHFORD MEDAL
Kevin Kain
University of Toronto Hospital, Toronto, ON, Canada
Presented by Alan Magill
Walter Reed Army Institute of Research, Washington, DC, United States

BEN KEAN MEDAL
Jay Keystone
Toronto Hospital, Toronto, ON, Canada
Presented by Phyllis Kozarsky
Emory University, Atlanta, GA, United States

WALTER REED MEDAL
Richard L. Guerrant
University of Virginia Medical School, Charlottesville, VA, United States
Presented by James Hughes
Emory University, Atlanta, GA, United States
ASTMH 57th Annual Meeting

Opening Reception

Napoleon Ballroom
Sunday, December 7, 7:30 p.m. – 9:30 p.m.

Exhibit Hall Open

Napoleon Ballroom
Sunday, December 7, 7:30 p.m. – 9:30 p.m.

Monday, December 8

Registration

Napoleon Ballroom
Monday, December 8, 7 a.m. – 5 p.m.

Cyber Cafe

Lagniappe
Monday, December 8, 7 a.m. – 5 p.m.

Speaker Ready Room

Nottoway
Monday, December 8, 7 a.m. – 6 p.m.

ASTMH Diploma Course Directors Meeting

Salon 829
Monday, December 8, 7 a.m. – 8 a.m.

Breakfast Session 1A

THE BILL & MELINDA GATES FOUNDATION’S MALARIA STRATEGY
Grand Ballroom A
Monday, December 8, 7 a.m. – 7:50 a.m.

Staff from the Bill & Melinda Gates Foundation will share the Foundation’s malaria strategy, including a review of why the Foundation chose to fight malaria, how the Foundation approaches the issue, what types of programs the Foundation funds and what the Foundation hopes to accomplish in the long term. A small number of grantees may provide a brief overview of their programs. A question and answer period will follow. A light breakfast will be served.

Press Room

Ellendale/Evergreen
Monday, December 8, 7:30 a.m. – 6:30 p.m.
Symposium 2

Lone Star Rising Part I: Recent Efforts to Define the Role of *Amblyomma americanum* in the Transmission of Bartonella, Borrelia, Ehrlichia and Rickettsia species

**Gallery**

**Monday, December 8, 8 a.m. – 9:45 a.m.**

An understanding of the association between vectors, vertebrate hosts and pathogens is fundamental for the development of tick-borne disease prevention strategies. The lone star tick, *Amblyomma americanum*, is an aggressive anthropophilic tick often found in high densities in the southern and eastern United States, and is expanding its range northward. Until recently, this tick was regarded as a nuisance pest of humans but is now an important vector of zoonotic pathogens: *Ehrlichia chaffeensis*, the agent of human monocytic ehrlichiosis, and *E. ewingii*, the agent of granulocytic ehrlichiosis in humans and dogs. *A. americanum* also harbors organisms less clearly linked with human disease, *Bartonella spp.*, *Borrelia lonestari*, *Rick-

ettsia amblyommii* and an ehrlichial pathogen ("Panola Mountain Ehrlichia") closely related to *E. ruminantium*. On one hand, clinical presentations are seen after *A. americanum* tick bites that are not yet definitively associated with specific etiological agents; on the other hand, *A. americanum*-borne organisms have been elucidated that are not yet associated with specific syndromes. *Erythema migrans* following *A. americanum* tick bite contin-

es to be an unanswered clinical question, as is the role of *R. amblyommii* in mild or asymptomatic rickettsiosis. Furthermore, a recently discovered Coxiella-type symbiont may influence maintenance or transmissions of other pathogens within *A. americanum*, thereby impacting human disease transmission. This symposium will focus on efforts to describe these organisms, understand their interactions and sort out their roles in human disease.

**CHAIR**

Ellen Y. Stromdahl

U.S. Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, MD, United States

Rendi M. Bacon

Centers for Disease Control and Prevention, Ft. Collins, CO, United States

**8 a.m.**

**PROPOSED ETIOLOGIES FOR SOUTHERN TICK-ASSOCIATED RASH ILLNESS**

Susan E. Little

Oklahoma State University, Stillwater, OK, United States

**8:25 a.m.**

**MOLECULAR SIGNATURES DETECTED IN *AMBLYOMMA AMERICANUM* AND SKIN BIOPSY SAMPLES FROM STARI PATIENTS USING THE IBIS UNIVERSAL BIOSENSOR**

Mark A. Pilgard

Centers for Disease Control and Prevention, Ft. Collins, CO, United States

**8:50 a.m.**

**DETECTION OF *RICKETTSIA AMBLYOMMII* IN *AMBLYOMMA AMERICANUM* TICKS**

Allen L. Richards

Naval Medical Research Center, Silver Spring, MD, United States

9:15 a.m.

**GENOMICS, MOLECULAR HETEROGENEITY AND PATHOGENICITY OF *RICKETTSIA AMBLYOMMII* AND OTHER AGENTS FOUND IN THE LONE STAR TICK**

Gregory Dasch

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

Symposium 3

Remote Technology to Create a Cyberenvironment for Infectious Disease Surveillance

**Rhythms I**

**Monday, December 8, 8 a.m. – 9:45 a.m.**

Remote Sensing and GIS applications, in the realm of disease surveillance on a global level, is continuously being developed and upgraded. Its early beginnings, with satellite imagery such as Landsat data, has rapidly improved to include higher spatial resolution information such as IKONOS and QuickBird, as well as proliferation of statistical models, supercomputer applications and real-time communication. The global and rapid movement of humans, animals and goods, coupled with population growth and urbanization, provide for increased risk of infectious disease outbreaks. This warrants the continued need to exploit technology for surveillance systems that will minimize these risks. The objective of the symposium is to provide an up-to-date view of current technology and its application to infectious disease problems on a global level.

**CHAIR**

Benjamin G. Jacob

The University of Alabama at Birmingham, Birmingham, AL, United States

Robert J. Novak

University of Alabama, Birmingham, AL, United States

**8 a.m.**

**GEOSTATISTICAL ALGORITHMS**

Daniel A. Griffith

University of Texas at Dallas, Richardson, TX, United States

**8:25 a.m.**

**SATELLITE TECHNOLOGY**

James L. Regens

University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States

**8:50 a.m.**

**CYBERENVIRONMENT FOR REMOTE DISEASE SURVEILLANCE SYSTEMS AS A BASES FOR INTEGRATED MALARIA MANAGEMENT (IMM)**

Ian Brooks

National Center for Supercomputing Applications (NCSA), Champaign, IL, United States

**9:15 a.m.**

**DESIGNING AND DEVELOPING LARVAL MANAGEMENT STRATEGIES BY IDENTIFYING CRITICAL FEATURES OF LANDSCAPE FOR LOCATING PRODUCTIVE AQUATIC HABITATS BASED ON FIELD SAMPLED AND GIS/RS DATA**

Benjamin G. Jacob

University of Alabama at Birmingham, Birmingham, AL, United States
Symposium 4

Clinical Updates in Leishmaniasis, Chagas Disease, Leptospirosis and Tuberculosis

*Rhythms I/II/I
Monday, December 8, 8 a.m. – 9:45 a.m.

This symposium will provide a clinical update of recent literature and unpublished data for these diseases.

CHAIR
Eric Houpt
University of Virginia, Charlottesville, VA, United States
Anne Moore
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.
RECENT ADVANCES IN VISCERAL AND CUTANEOUS LEISHMANIASIS
Richard D. Pearson
University of Virginia, Charlottesville, VA, United States

8:25 a.m.
CHAGAS DISEASE IN THE IMMUNOCOMPROMISED HOST
Anne Moore
Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

8:50 a.m.
UPDATE IN LEPTOSPIROSIS
Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

9:15 a.m.
DIAGNOSIS AND MANAGEMENT OF DRUG RESISTANT TUBERCULOSIS
Eric R. Houpt
University of Virginia, Charlottesville, VA, United States

Symposium 5

Infectious Diseases and Other Health Risks Following Natural Disasters: Experiences from Hurricane Katrina and Beyond

Waterbury
Monday, December 8, 8 a.m. – 9:45 a.m.

This session will explore the relationship between natural disasters and risk of infectious diseases, with illustrations from local experiences following Hurricane Katrina and from other disaster situations around the world, such as the 2005 Indian Ocean tsunami. Speakers include a representative from the Louisiana Office of Public Health describing infectious diseases and surveillance following Katrina, an entomologist describing insect populations and vector-borne diseases following Katrina, a representative of Medecins Sans Frontieres describing responses to natural disasters in developing countries and a public health expert reviewing the relationship between global climate changes, natural disasters, and travel health risks.

CHAIR
Richard Oberhelman
Tulane School of Public Health, New Orleans, LA, United States
James H. Diaz
Louisiana State University School of Public Health, New Orleans, LA, United States

8 a.m.
SURVEILLANCE FOR HUMAN DISEASE IN THE WAKE OF HURRICANE KATRINA
Raoult Ratard
Louisiana Office of Public Health, New Orleans, LA, United States

8:25 a.m.
ENTOMOLOGICAL SURVEILLANCE AND VECTOR-BORNE DISEASES AFTER HURRICANE KATRINA
Dawn Wesson
Tulane University, New Orleans, LA, United States

8:50 a.m.
RESPONSE TO INFECTIOUS DISEASES AFTER NATURAL DISASTERS IN DEVELOPING COUNTRIES
Martin De Smet
Médecins Sans Frontières, Brussels, Belgium

9:15 a.m.
GLOBAL CLIMATE CHANGES, NATURAL DISASTERS AND TRAVEL HEALTH RISKS
James H. Diaz
Louisiana State University School of Public Health, New Orleans, LA, United States

Scientific Session 6

Malaria – Vaccines I

Napoleon A123
Monday, December 8, 8 a.m. – 9:45 a.m.

CHAIR
Brent House
Naval Medical Research Center, Silver Spring, MD, United States
Takafumi Tsuboi
Ehime University, Matsuyama, Ehime, Japan

1

8 a.m.

ANTIBODY RESPONSES IN RABBITS TO IMMUNIZATION BY THE SUBCUTANEOUS AND INTRADERMAL ROUTES WITH A METABOLICALLY ACTIVE, NON-REPLICATING (ATTENUATED) PLASMODIUM FALCIPARUM SPOROZOE VACCINE
Eric R. James1, Kim Lee Sim1, Mark Loyevsky1, Adam Richman1, Tao Li1, Sumana Chakravarty1, Anusha Gunesekera1, Rana Chattopadhyay1, Adriana Ahumada1, MingLin Li1, Richard Stafford1, Peter Billingsley1, Stephen L. Hoffman1

1Sanaria, Rockville, MD, United States, *Protein Potential, Rockville, MD, United States
Detailed Program

8:15 a.m.

2

IMMUNITY INDUCED BY PLASMODIUM BERGHEI CSP EXPRESSION FROM VARIOUS CELLULAR LOCALIZATIONS AND DELIVERY BY INACTIVATED ESCHERICHIA COLI

Katharine Boyle¹, Jessica Whittington², Elizabeth Deriso³, Timothy Alexantis², Elke S. Bergmann-Leitner¹, Paul Grewal², Vito DelVecchio², Evelina Angov³

¹Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²Vital Probes, Inc., Mayfield, PA, United States

8:30 a.m.

3

THE BIOCHEMICAL AND BIOPHYSICAL CHARACTERIZATION OF AN ESCHERICHIA COLI EXPRESSED PLASMODIUM FALCIPARUM CIRCUMSPOROZOITE PROTEIN (CSP), A LEADING MALARIA VACCINE CANDIDATE

Matthew Lee Plassmeyer¹, Nick MacDonald¹, Karine Reiter¹, Richard Shimp¹, Yanling Zhang¹, Brent House¹, Jack Lebowitz¹, Svetlana Kotova¹, Selina Bin¹, Merrit Hickman¹, Paul Herrera¹, Oninyechukwu Uchime¹, Vu Nguyen¹, Jacqueline Glen¹, Louis Miller¹, Yimin Wu¹, David Narum¹

¹National Institutes of Health, Bethesda, MD, United States, ²U.S. Navy, Silver Spring, MD, United States, ³National Institutes of Health, Bethesda, MD, United States

8:45 a.m.

4

CHARACTERIZATION OF ANTI-AMA1 ANTIBODIES INDUCED BY AMA1-C2, A THREE-ALLELE COMBINATION VACCINE

Sara A. Murray¹, Hong Zhou², Joan Aebig², Lynn Lambert², Laura B. Martin¹, Louis Miller¹, Carole Long², Kazutoyo Miura¹

¹Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Diseases, Rockville, MD, United States, ²Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, Rockville, MD, United States

9 a.m.

5

THE FIRST GENERATION PLASMODIUM FALCIPARUM AMA-1 BASED MONOVALENT ADENOVIRUS VACCINE AND THE SECOND GENERATION BIVALENT ADENOVIRUS VACCINE EXPRESSING P. FALCIPARUM AMA-1 AND MSP1-42 ELICITS ROBUST FUNCTIONAL ANTIBODIES IN NZW RABBIT

Noelle B. Patterson¹, Joseph T. Bruder¹, Keith Limbach¹, Samuel E. Moore², Hong Zhou², Ababacar Diouf¹, C. Richter King¹, Kalpana Gowda¹, Ping Chen¹, Svetlana Konovalova¹, Elke S. Bergmann-Leitner¹, Emily Locke¹, Lorraine Soisson¹, Carter Diggs², Evelina Angov¹, Carole A. Long³, Thomas L. Richie¹, Denise L. Doolan¹

¹U.S. Military Malaria Vaccine Program (Naval Medical Research Center & Walter Reed Army Institute of Research), Silver Spring, MD, United States, ²GenVec, Inc., Gaithersburg, MD, United States, ³Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, ⁴PATH Malaria Vaccine Initiative, Bethesda, MD, United States, ⁵United States Agency for International Development, Malaria Vaccine Development Program, Washington, DC, United States

9:15 a.m.

6

DEVELOPMENT OF A MULTI-ANTIGEN MULTI-STAGE ADENOVIRUS-BASED MALARIA VACCINE THAT INDUCES ROBUST T-CELL AND ANTIBODY RESPONSES

Joseph T. Bruder¹, Ping Chen¹, Maureen E, Stefaniak², Elena Semenova³, Keith Limbach¹, Noelle B. Patterson², Svetlana Konovalova¹, Charlie Thomas¹, Joseph J. Campo², Damodar Ettreyreddy², Duncan McVey¹, Carole A. Long³, Sheng Li³, Emily Locke¹, Thomas L. Richie¹, Denise L. Doolan¹

¹GenVec, Gaithersburg, MD, United States, ²Naval Medical Research Center, Malaria Program, Silver Spring, MD, United States, ³Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, ⁴PATH Malaria Vaccine Initiative, Bethesda, MD, United States

9:30 a.m.

7

SAFETY AND TOLERABILITY OF A MULTI-STAGE, MULTI-ANTIGEN ADENOVIRUS-VECTOR ADENOVIRUS-BASED P. FALCIPARUM MALARIA VACCINE, IN HEALTHY, MALARIA-NAÏVE ADULTS

Cindy Tamminga¹, Ilin Chuang¹, David Regis¹, Jose Mendoza-Silveiras², Judith E. Epstein³, Falgunee Parekh³, Sharina Reyes³, Victoria Steinbeiss³, Charlotte Fedders³, Santina Maiolatesi³, Kathryn Smith³, Francis Williams³, Martha Sedegah³, Denise L. Doolan³, Keith Limbach¹, Noelle B. Patterson³, Michele Spring³, Joseph T. Bruder³, CR King³, Lorraine Soisson³, Carter Diggs³, Christian F. Ockenhouse³, Thomas Richibe³

¹Naval Medical Research Center/Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²National Naval Medical Center, Bethesda, MD, United States, ³Walter Reed Army Institute of Research/Naval Medical Research Center, Silver Spring, MD, United States, ⁴GenVec, Inc., Gaithersburg, MD, United States, ⁵United States Agency for International Development, Washington, DC, United States

Symposium 7

The Importance of Field-Based Research to Inform Public Health Decisions

Maurepas

Monday, December 8, 8 a.m. – 9:45 a.m.

This symposium will bring to the forefront the importance of field-based research to developing informed and evidence-based public health decisions regarding infectious diseases. A series of four talks will focus on the effect of field-based scientific research on public health decisions in order to highlight the growing importance of funding this type of research, particularly in emerging infectious diseases. The four speakers will discuss the complicated environment of this type of research, both from the perspective of resource-limited nations, as well as issues related to bridging the multi-disciplinary needs for such research to impact public health decision-making. The plan is to provide ample opportunity for discussion at the end of the four presentations, focusing on defining areas of need and future types of funding initiatives that might facilitate expansion of this area of research. The four talks will address malaria, dengue, HIV and Japanese encephalitis.

CHAIR

Laura D. Kramer

Wadsworth Center, Albany, NY, United States

Jeffrey S. Kennedy

Wadsworth Center, New York State Department Health, Albany, NY, United States
8 a.m.
THE ROLE OF FIELD RESEARCH IN DEVELOPING PARADIGMS FOR TREATMENT AND PREVENTION OF DENGUE
Timothy P. Endy
State University of New York, Upstate Medical University, Syracuse, NY, United States

8:25 a.m.
SUPPORTING AND EMPOWERING NATIONAL DECISION-MAKING FOR JE CONTROL, THE ROLE OF RESEARCH AND TECHNICAL ASSISTANCE
Julie Jacobson
Bill & Melinda Gates Foundation, Seattle, WA, United States

8:50 a.m.
MALARIA TRANSMISSION AND CONTROL – EVIDENCE-BASED PUBLIC HEALTH POLICY DECISIONS
Karen Day
New York University School of Medicine, New York, NY, United States

9:15 a.m
DEVELOPMENT OF A MULTI-NATIONAL PUBLIC HEALTH AND VACCINE RESEARCH INITIATIVE FOR HIV IN EAST AFRICA
Patricia E. Fast
International AIDS Vaccine Initiative, New York, NY, United States

Symposium 8
The Neglected Tropical Diseases in Latin America and the Caribbean: A Review of Disease Burden, Geographic Distribution and Methods Control and Elimination

Bayside BC
Monday, December 8, 8 a.m. – 9:45 a.m.

Parasites have many different strategies for getting into and out of host cells. This symposium will provide an overview of these strategies, as well as review the most recent findings regarding pathways used by parasites for invasion and egress. This symposium is designed to review and update progress toward understanding the strategies used by parasites to get into and out of host cells, and how this information may be applied to the development of strategies to reduce the burden of disease.

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

8 a.m.
A PLANT-LIKE PATHWAY FOR CALCIUM SIGNALING CONTROLS EGRESS AND DEVELOPMENT IN TOXOPLASMA
David Sibley
Washington University School of Medicine, St. Louis, MO, United States

8:35 a.m.
WHAT A PEPTIDE TAUGHT US ABOUT PLASMODIUM-MOSQUITO INTERACTIONS
Marcelo Jacobs-Lorena
Johns Hopkins School of Public Health, Baltimore, MD, United States

8:50 a.m.
ELIMINATING LYMPHATIC FILARIASIS, ONCHOCERCIASIS AND SCHISTOSOMIASIS FROM THE AMERICAS
Patrick J. Lammie
Center for Disease Control, Atlanta, GA, United States

9:15 a.m
AN EMERGING GLOBAL INFECTIOUS DISEASE: STRONGYLOIDES AND THE LINK WITH HTLV-1
Eduardo Gotuzzo
IMT "Alexander Von Humboldt", Lima, Peru

Symposium 9
American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Getting In and Getting Out—Strategies Used by Parasites During Their Host Cell Encounters

Supported with funding from The Burroughs Wellcome Fund
Grand Ballroom A
Monday, December 8, 8 a.m. – 9:45 a.m.

Parasites have many different strategies for getting into and out of host cells. This symposium will provide an overview of these strategies, as well as review the most recent findings regarding pathways used by parasites for invasion and egress. This symposium is designed to review and update progress toward understanding the strategies used by parasites to get into and out of host cells, and how this information may be applied to the development of strategies to reduce the burden of disease.

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

8 a.m.
A PLANT-LIKE PATHWAY FOR CALCIUM SIGNALING CONTROLS EGRESS AND DEVELOPMENT IN TOXOPLASMA
David Sibley
Washington University School of Medicine, St. Louis, MO, United States

8:35 a.m.
WHAT A PEPTIDE TAUGHT US ABOUT PLASMODIUM-MOSQUITO INTERACTIONS
Marcelo Jacobs-Lorena
Johns Hopkins School of Public Health, Baltimore, MD, United States

9:10 a.m.
PLASMODIUM FALCIPARUM — PROTEOLYSIS AS A STRATEGY FOR GETTING INTO AND OUT OF THE HOST CELL
Michael J. Blackman
National Institute for Medical Research, London, United Kingdom

Symposium 8
The Neglected Tropical Diseases in Latin America and the Caribbean: A Review of Disease Burden, Geographic Distribution and Methods Control and Elimination

Bayside BC
Monday, December 8, 8 a.m. – 9:45 a.m.

The most common infections of the poorest people living in Latin American and Caribbean (LAC) are caused by the neglected tropical diseases (NTDs). Geographically, the NTDs in LAC concentrate in 11 different sub-regions, each with a distinctive human and environmental ecology. Soil-transmitted helminth infections, primarily hookworm disease and Chagas disease, are the most important NTDs in LAC based on prevalence data and healthy life years lost from disability. These are followed by high burdens of disease caused by schistosomiasis, leishmaniasis, trachoma, leprosy and lymphatic filariasis. This symposium will provide a review and an assessment of the distribution and the burden of these diseases in the region and provide a perspective for the roadmap for the control and elimination of these diseases.

CHAIR
Peter J. Hotez
The George Washington University, Washington, DC, United States
Jose Ignacio Santos
Hospital Infantil de Mexico Federico Gómez, Mexico, Mexico

8 a.m.
IMPROVING THE HEALTH OF NEGLECTED POPULATIONS IN LATIN AMERICA: APPROACHES TO ELIMINATION AND CONTROL OF CHAGAS DISEASE AND LEPROSY
Carlos Franco-Paredes
Emory University School of Medicine, Atlanta, GA, United States

8:25 a.m.
THE ANTIPOVERTY VACCINES: NEW TOOLS FOR THE CONTROL OF SOIL-TRANSMITTED HELMINTH INFECTIONS
Maria Elena Bottazzi
The George Washington University, Washington, DC, United States

8:50 a.m.
ELIMINATING LYMPHATIC FILARIASIS, ONCHOCERCIASIS AND SCHISTOSOMIASIS FROM THE AMERICAS
Patrick J. Lammie
Center for Disease Control, Atlanta, GA, United States

9:15 a.m
AN EMERGING GLOBAL INFECTIOUS DISEASE: STRONGYLOIDES AND THE LINK WITH HTLV-1
Eduardo Gotuzzo
IMT "Alexander Von Humboldt", Lima, Peru
Symposium 10

HIV/AIDS in Africa: Beyond the Antiretroviral Therapy Roll-Out

Grand Ballroom B

Monday, December 8, 8 a.m. – 9:45 a.m.

In Africa there are still many more new HIV infections than people placed on ART, and UNAIDS point to a widening funding gap for antiretroviral treatment (ART) programs. Antiretroviral scale-up clearly still faces major challenges. However, considerable experience has been gained as many African ART roll-out programs have been operating for longer than five years under initiatives such as PEPFAR and UN Global Fund, and 1.34 million people were receiving ART in 2006. Adherence rates have been high. Outcomes are generally excellent, apart from a high rate of early deaths, but a number of key issues have arisen with the maturing roll-out process. Long-running programs show that ART is being initiated with higher CD4 counts resulting in fewer deaths, but loss to follow up has increased as clinics approach capacity. Clinical and public health issues related to co-infection with tuberculosis or hepatitis B are emerging.

CHAIR
Jean B. Nachega
Johns Hopkins University, Baltimore, MD, United States
Timothy Sterling
Vanderbilt University, Nashville, TN, United States

8 a.m.

HIV/AIDS EPIDEMIOLOGY IN AFRICA: UPDATE
Jean Nachega
Johns Hopkins University, Baltimore, MD, United States

8:25 a.m.

TREATMENT REGIMES FOR HIV-INFECTED IN RESOURCE-LIMITED SETTINGS
Marco Vitoria
World Health Organization, Geneva, Switzerland

8:50 a.m.

MANAGING TB-HIV CO-INFECTION IN AFRICA
Timothy Sterling
Vanderbilt University, Nashville, TN, United States

9:15 a.m.

RETENTION AND LOSS TO FOLLOW-UP IN HIV TREATMENT PROGRAMS IN AFRICA
Chris Gill
Boston University, Boston, MD, United States

Scientific Session 11

Flavivirus I – Dengue I

Grand Ballroom C

Monday, December 8, 8 a.m. – 9:45 a.m.

CHAIR
Maria T. Arevalo
University of Rochester, Rochester, NY, United States
Nikos Vasilakis
University of Pittsburgh, Pittsburgh, PA, United States

8 a.m.

NEWLY ISOLATED MUTANTS OF DENGUE VIRUS TYPE 1 WITH DELETIONS IN THE 3' NONCODING REGION SHOW HIGHER LEVELS OF REPLICATION IN VIVO IN MOSQUITOES
Yoko Nukui1, Shigeru Tajima1, Makiko Ikeda1, Akira Kotaki1, Tomohiko Takasaki1, Yuki Eshita1, Ichiro Kurane1
1National Institute of Infectious Diseases, Tokyo, Japan, 2Oita University Faculty of Medicine, Oita, Japan

8:15 a.m.

MOSQUITOES PUT THE BRAKE ON EVOLUTION: EXPERIMENTAL EVOLUTION REVEALS SLOWER MUTATION ACCUMULATION IN MOSQUITO CELLS THAN VERTEBRATE CELLS
Nikos Vasilakis1, Eleanor Deardorf1, Joanie Kenney1, Shannan L. Rossi1, Kathryn A. Hanley1, Scott C. Weaver1
1University of Texas Medical Branch, Galveston, TX, United States, 2New Mexico State University, Las Cruces, NM, United States

8:30 a.m.

ANTIBODY DEPENDENT ENHANCEMENT OF DENGUE VIRUS INFECTION IN HUMAN DENDRITIC CELLS
Kobporn Boonnak, Bonnie M. Slike, Mary A. Marovich
The Henry M. Jackson Foundation, Rockville, MD, United States

8:45 a.m.

PRIMARY HUMAN ENDOTHELIAL CELLS SUPPORT DIRECT BUT NOT ANTIBODY-DEPENDENT ENHANCED DENGUE VIRUS INFECTION
Maria T. Arevalo, Patricia J. Simpson-Haidaris, Zhihua Kou, Jacob J. Schlesinger, Xia Jin
University of Rochester, Rochester, NY, United States

9 a.m.

CANDIDATE GENE APPROACH TO IDENTIFY HOST GENETIC FACTORS FOR SEVERE FORMS OF DENGUE VIRUS INFECTION
Nguyen T. Lan1, Michio Yasunami2, Mihoko Kikuchi2, Vu T. Huong2, Vu T. Ngu2, Hoang N. Dao2, Do Q. Ha2, Tran T. Thuy2, Tran M. Tuan2, Vo V. Tuong3, Tran V. Dat4, Naoko Okuda4, Hitomi Hori1, Toshifumi Oyama1, Kouchi Morita1, Kenji Hirayama1
1Institute of Tropical Medicine (NEKKEN), Nagasaki University, Nagasaki, Japan, 2Pasteur Institute in Ho Chi Minh City, Ho Chi Minh City, Vietnam, 3Nhi Dong Hospital No. 2, Ho Chi Minh City, Vietnam, 4Center for Preventive Medicine of Vinh Long Province, Vinh Long Province, Vietnam
9:15 a.m.

13

EVALUATION OF THE ROLES OF CD209 PROMOTER AND GENE POLYMORPHISMS IN PATHOGENESIS OF DENGUE DISEASE IN INDONESIA

Zen Hafy1, Purnomo Soeharso2, Irani F. Rudiman1, Wahyuning Ramelan1, Bachti Alisjahbana2, Susanna Widjaja1, Herman Kosasih1, Ervi Salwati1, Djoko Yuwono1, Maya Williams1, Patrick Blair1, Timothy Burgess4
1University of Sriwijaya, Palembang, Indonesia, 2University of Indonesia, Jakarta, Indonesia, 3Hasan Sadikin Hospital, Bandung, Indonesia, 4Viral Disease Program, US Namru-2, Jakarta, Indonesia, 5National Institutes of Health Research and Development, Jakarta, Indonesia

9:30 a.m.

14

CHARACTERIZATION OF THE GENE EXPRESSION PROGRAMS ASSOCIATED WITH DISEASE SEVERITY IN ACUTE PEDIATRIC DENGUE INFECTION

Stephen J. Popper1, Aubree Gordon1, Mingshun Liu1, Maria Jose Vargas3, Chelsey Perry2, Angel Balmaseda3, Crisanta Rocha1, Eva Harris1, David A. Relman5
1Stanford University School of Medicine, Stanford, CA, United States, 2Division of Infectious Diseases, School of Public Health, University of California, Berkeley, CA, United States, 3Departamento de Virologia, Centro Nacional de Diagnostico y Referencia, Ministerio de Salud, Managua, Nicaragua, 4Hospital Infantil Manuel de Jesus Rivera, Managua, Nicaragua, 5Stanford University School of Medicine and VA Palo Alto Health Care System, Stanford, CA, United States

Symposium 12

Careers in Tropical Medicine – The Paths to Success Part I

Grand Ballroom D
Monday, December 8, 8 a.m. – 9:45 a.m.

This symposium is designed for trainees in the fields of tropical medicine and global health. The presenters will explore aspects of developing a successful career in tropical medicine, explain how to integrate different skills to obtain funding and highlight the value of ASTMH membership.

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

8 a.m.

HERE TO HELP – WHAT ASTMH CAN DO FOR YOU
Edward T. Ryan
Massachusetts General Hospital, Boston, MA, United States

8:25 a.m.

GLOBAL HEALTH/TROPICAL DISEASES: OPPORTUNITIES FOR NETWORKING AND TRAINING
Michele Barry
Yale University, New Haven, CT, United States

8:50 a.m.

SO YOU WANT TO WORK OVERSEAS?
Stephen L. Hoffman
Sanaria Inc., Rockville, MD, United States

9:15 a.m.

SHOW ME THE MONEY – GRANT PREPARATION
Michael Strand
University of Georgia, Athens, GA, United States

Symposium 13

Use of Rectal Artesunate at the Community Level in Remote Malaria Settings in Asia and Africa

Grand Ballroom E
Monday, December 8, 8 a.m. – 9:45 a.m.

Death from malaria reflects delay in treatment. Artemisinin-based suppositories can help “buy time” for malaria patients who face a delay in accessing effective injectable antimalarial treatment. Malaria Treatment Guidelines advise that if there is delay in reaching hospital, the patient should be given an initial dose of an artemisinin-based suppository and proceed to the nearest hospital for complete diagnosis and treatment. The symposium describes the results of community-based research on rectal artesunate in different settings in Asia and Africa.

CHAIR
Melba Gomes
World Health Organisation, Geneva, Switzerland
Joel Breman
Fogarty International Center, Bethesda, United States

8 a.m.

RESULTS OF A RANDOMIZED, PLACEBO CONTROLLED TRIAL CARRIED OUT IN REMOTE RURAL AREAS OF AFRICA AND ASIA
John Gyapong
Ministry of Health, Accra, Ghana

8:25 a.m.

ETHICAL CONSIDERATIONS IN THE CONDUCT OF A PLACEBO-CONTROLLED TRIAL IN RURAL AREAS OF BANGLADESH
Abul Faiz
Director General of Health Services, Dhaka, Bangladesh

8:50 a.m.

THE LOGISTICS OF DEPLOYING RECTAL ARTESUNATE IN FIVE COUNTRIES IN AFRICA THROUGH MOTHER COORDINATORS OR VILLAGE HEALTH VOLUNTEERS
Amabelia Rodrigues
Bandim Health Project, Bissau, Guinea-Bissau

9:15 a.m.

ADHERENCE TO REFERRAL ADVICE TO PROCEED TO A HOSPITAL AFTER TREATMENT WITH RECTAL ARTESUNATE. WHAT HAPPENS IN PRACTICE?
Andrew Kitua
National Institute of Medical Research, Dar-es-Salaam, United Republic of Tanzania.
Lone Star Rising, Part II: Recent Efforts to Define the Role of Amblyomma americanum in the Transmission of Bartonella, Borelia, Ehrlichia and Rickettsia Species

An understanding of the association between vectors, vertebrate hosts and pathogens is fundamental for the development of tick-borne disease prevention strategies. The lone star tick, Amblyomma americanum, is an aggressive anthropophilic tick often found in high densities in the southern and eastern United States, and is expanding its range northward. Until recently, this tick was regarded as a nuisance pest of humans but is now an important vector of zoonotic pathogens: Ehrlichia chaffeensis, the agent of human monocytic ehrlichiosis, and E. ewingii, the agent of granulocytic ehrlichiosis in humans and dogs. A. americanum also harbors organisms less clearly linked with human disease, Bartonella spp., Borrelia lonestari, Rickettsia amblyommii and an ehrlichial pathogen (“Panola Mountain Ehrlichia”) closely related to E. ruminantium. On one hand, clinical presentations are seen after A. americanum tick bites that are not yet definitively associated with specific etiological agents; on the other hand, A. americanum-borne organisms have been elucidated that are not yet associated with specific syndromes. Erythema migrans following A. americanum tick bite continues to be an unanswered clinical question, as is the role of R. amblyommii in mild or asymptomatic rickettsiosis. Furthermore, a recently discovered Coxiella-type symbiont may influence maintenance or transmissions of other pathogens within A. americanum, thereby impacting human disease transmission. This symposium will focus on efforts to describe these organisms, understand their interactions, and sort out their roles in human disease.

CHAIR
Ellen Y. Stromdahl
U.S. Army Center for Health Promotion & Preventive Medicine, Aberdeen Proving Ground, MD, United States
Rendi M. Bacon
Centers for Disease Control and Prevention, Ft. Collins, CO, United States

Symposium 15

Advances in Geospatial Health

Rhythms I
Monday, December 8, 10:15 a.m. – Noon
Recent advances in health applications of geospatial science will be illustrated by review of new research results on malaria in Southeast Asia, schistosomiasis in Africa and in China, and geohelminths of ruminants in Italy. Presentations on use of satellite remote sensing and geographic information systems (GIS) for spatial analysis will provide the basis for discussion in the context of other geospatial analysis work in the health arena. It is the intent that spatial analysis concepts introduced can be adopted by participants for application to their own research area.

CHAIR
John B. Malone
Louisiana State University, Baton Rouge, LA, United States
Robert Bergquist
World Health Organization (retired), Geneva, Switzerland

MALARIA MODELING AND SURVEILLANCE FROM SPACE
Richard Kiang
NASA, Greenbelt, MD, United States

CLIMATE CHANGE AND SCHISTOSOMA JAPONICUM IN CHINA
Zhou Xiaonong
Institute of Parasitic Diseases-China Centers for Disease Control and Prevention, Shanghai, China

LANDSCAPE EPIDEMIOLOGY OF ANIMAL GEOHELMINTHS IN ITALY
Laura Rinaldi
University of Naples, Naples, Italy
11:30 a.m.
GIS AND SCHISTOSOMIASIS IN AFRICA: THE CONTRAST INITIATIVE
Thomas Kristensen
DBL-Institute for Health Research and Development, Frederiksberg, Denmark

Symposium 16
Tropical Medicine in a Temperate Climate

Rhythms III/III
Monday, December 8, 10:15 a.m. – Noon
This session will present four case series of patients attending this hospital over the last eight years, focusing specifically on: 1. the prevalence of renal impairment in adults presenting with acute P. falciparum malaria; 2. imported enteric fever – clinical and laboratory features among 78 cases of culture positive S. typhi and paratyphi; 3. the changing pattern of acute hepatitis in travellers – highlighting that hepatitis E is now the most common; 4. amoebic liver abscess in a travelling population – clinical and laboratory features of 20 cases seen in London.

CHAIR
Tom Doherty
Hospital for Tropical Diseases, London, United Kingdom
Philip Gothard
 Hospital for Tropical Diseases, London, United Kingdom

10:15 a.m.
THE PREVALENCE OF RENAL IMPAIRMENT AMONG TRAVELLERS WITH ACUTE P. FALCIPARUM MALARIA
Maggie Armstrong
Hospital for Tropical Diseases, London, United Kingdom

10:40 a.m.
IMPORTED ENTERIC FEVER – A REVIEW OF 78 CULTURE POSITIVE CASES
Trupti Patel
Hospital for Tropical Diseases, London, United Kingdom

11:05 a.m.
THE CHANGING PATTERN OF ACUTE IMPORTED HEPATITIS
Michael Brown
Hospital for Tropical Diseases, London, United Kingdom

11:30 a.m.
AMOEBCIC LIVER ABSCESS AMONG TRAVELERS
Stephen G. Wright
Hospital for Tropical Diseases, London, United Kingdom

11:30 a.m.
Gis and Schistosomiasis in Africa: The Contrast Initiative
Thomas Kristensen
DBL-Institute for Health Research and Development, Frederiksberg, Denmark

Scientific Session 17
Bacteriology I – Water and Hygiene

Waterbury
Monday, December 8, 10:15 a.m. – Noon

CHAIR
Stephen Luby
International Center for Diarrhoeal Disease Research Bangladesh, Dhaka, Bangladesh

10:15 a.m.
15
ANALYSIS OF THE EFFECTIVENESS AND SUSTAINABILITY OF METHODS FOR HOUSEHOLD WATER TREATMENT AND SAFE STORAGE
Mark Sobsey
University of North Carolina, Chapel Hill, NC, United States

10:30 a.m.
16
SUCCESSFUL PROMOTION OF WATER TREATMENT AND HAND HYGIENE THROUGH A PILOT CLINIC-BASED INTERVENTION FOR PREGNANT WOMEN SEEKING ANTENATAL CARE: MALAWI, MAY 2007-MARCH 2008
Anandi N. Sheth1, Elizabeth T. Russo1, Manoj Menon1, Amose C. Kudzala2, John D. Kelly1, Merri Weinger1, Kiwe Sebunya2, Humphreys Masuku1, Kathleen Wannemuehler1, Rob Quick1
1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2United Nations Children’s Fund, Lilongwe, Malawi, 3United States Agency for International Development, Washington, DC, United States, 4Government of Malawi Ministry of Health, Lilongwe, Malawi

10:45 a.m.
17
USE OF A NOVEL METHOD TO DETECT REACTIVITY TO STRUCTURED OBSERVATION FOR MEASUREMENT OF HANDWASHING BEHAVIOR
Pavani Kalluri Ram1, Amal K. Halder2, Stewart P. Granger3, Peter Hall4, Therese Jones1, David Hitchcock4, Benjamin Nygren3, M Sirajul Islam2, John W. Molyneaux2, Stephen P. Luby2
1University at Buffalo, Buffalo, NY, United States, 2International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, 3Unilever R&D Port Sunlight, Bebington, United Kingdom, 4-4Front Research UK Ltd Capenhurst, United Kingdom, 5Emory University, Atlanta, GA, United States, 6Water and Sanitation Program, The World Bank Group, Washington, DC, United States
10:15 a.m.  

A PHASE 1 TRIAL OF THE MALARIA TRANSMISSION BLOCKING VACCINE CANDIDATES PFS25 AND PVS25 FORMULATED WITH MONTANIDE ISA 51

Ruth D. Ellis1, Yimin Wu1, Donna Shaffer2, Erica Fontes2, Elissa Malkin1, Siddhartha Mahanty1, Michael P. Fay1, David Narum1, Kelly Rausch1, Aaron P. Miles1, Joan Aebig1, Andrew Orcutt1, Olga Muratova1, Guanhong Song1, Lynn Lambert1, Daming Zhu1, Kazutoyo Miura1, Carole Long1, Allan Saul1, Louis H. Miller1, Anna P. Durbin1
1National Institutes of Health, Rockville, MD, United States, 2Johns Hopkins Center for Immunization Research, Washington, DC, United States

11:15 a.m.  

A GRAVITY-FEED HOUSEHOLD WATER PURIFIER DEVICE FOR USE IN THE INDIAN MARKETPLACE: LABORATORY AND FIELD EXPERIENCES

Abhay Kumar1, P. A. Shankar1, Muralidhara Rao1, Michael Bridges1, Jeffrey F. Williams1
1Eureka Forbes, Mumbai, India, 2Filtrex Limited, Bangalore, India, 3Eureka Forbes, Bangalore, India, 4HaloSource Incorporated, Bothell, WA, United States

11:30 a.m.  

DIFFICULTIES IN SUSTAINING IMPROVED HANDWASHING BEHAVIOR, KARACHI, PAKISTAN

Stephen P. Luby1, Mubina Agboatwalla1, Anna Bowen1, Robert M. Hoekstra1
1International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, 2HOPE, Karachi, Pakistan, 3Centers for Disease Control and Prevention, Atlanta, GA, United States

11:45 a.m.  

INTERNALISATION OF MICROBES IN VEGETABLES: MICROBIAL LOAD OF EXOTIC VEGETABLES AND THE RELATIONSHIP WITH DIFFERENT WATER SOURCES OF IRRIGATION

Eric Sampane-Donkor
University of Ghana Medical School, Accra, Ghana

科学会議18

12:00 p.m.  

Malaria – Vaccines II

Napoleon A123
Monday, December 8, 10:15 a.m. – Noon

CHAIR
Ruth D. Ellis
National Institutes of Health, Rockville, MD, United States
Seth Owusu-Agyei
Kintampo Health Research Center, Kintampo, Ghana

10:15 a.m.  

A PHASE 1 TRIAL OF THE MALARIA TRANSMISSION BLOCKING VACCINE CANDIDATES PFS25 AND PVS25 FORMULATED WITH MONTANIDE ISA 51

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1National Institutes of Health, Rockville, MD, United States, 2Johns Hopkins Center for Immunization Research, Washington, DC, United States

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1Eureka Forbes, Mumbai, India, 2Filtrex Limited, Bangalore, India, 3Eureka Forbes, Bangalore, India, 4HaloSource Incorporated, Bothell, WA, United States

11:30 a.m.  

DIFFICULTIES IN SUSTAINING IMPROVED HANDWASHING BEHAVIOR, KARACHI, PAKISTAN

Stephen P. Luby1, Mubina Agboatwalla1, Anna Bowen1, Robert M. Hoekstra1
1International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, 2HOPE, Karachi, Pakistan, 3Centers for Disease Control and Prevention, Atlanta, GA, United States

11:45 a.m.  

INTERNALISATION OF MICROBES IN VEGETABLES: MICROBIAL LOAD OF EXOTIC VEGETABLES AND THE RELATIONSHIP WITH DIFFERENT WATER SOURCES OF IRRIGATION

Eric Sampane-Donkor
University of Ghana Medical School, Accra, Ghana

科学会議18

12:00 p.m.  

Malaria – Vaccines II

Napoleon A123
Monday, December 8, 10:15 a.m. – Noon

CHAIR
Ruth D. Ellis
National Institutes of Health, Rockville, MD, United States
Seth Owusu-Agyei
Kintampo Health Research Center, Kintampo, Ghana
11 a.m.

25

RANDOMIZED, CONTROLLED, PHASE 2B CLINICAL TRIAL TO EVALUATE THE SAFETY, IMMUNOGENICITY AND EFFICACY OF WALTER REED ARMY INSTITUTE OF RESEARCH’S AMA-1 MALARIA VACCINE (FMP2.1) ADJUVANTED IN GSK BIOLOGICALS’ AS02 VS. RABIES VACCINE IN 1-6-YEAR-OLD CHILDREN IN BANDIAGARA, MALI

Mahamadou A. Thera1, Ogobara K. Doumbo1, Drissa Coulibaly1, Matthew B. Laurens2, Abdoulaye K. Kone1, Ando B. Guindo1, Dapa A. Diallo1, Karim Traore1, Issa Diarra1, Amadou Niangaly1, Amagana Dolo1, Modibo Dao1, Mady Sissoko1, Mamadou S. Sissoko2, Bourema Kouriba3, Drissa Traore3, Kirsten E. Lyke2, Shannon L. Takala2, Olivier Godeaux1, Carter Diggs1, Sheetij Dutta2, V. Ann Stewart3, Brent House2, D. Gray Heppner2, Christopher V. Plowe3, Joe Cohen3, W. Ripley Ballou3, Joelle Thonnard, Marie-Claude Dubois5, Lorraine Soisson, Lisa A. Ware5, David E. Lanar5

1University of Bamako Faculty of Medicine, Bamako, Mali, 2University of Maryland School of Medicine, Baltimore, MD, United States, 3GlaxoSmithKline Biologicals, Rixensart, Belgium, 4PATH Malaria Vaccine Initiative, Bethesda, MD, United States, 5Walter Reed Army Institute of Research, Silver Spring, MD, United States

11:15 a.m.

26

PHASE IIIB, RANDOMIZED, DOUBLE-BLIND TRIAL TO ASSESS THE EFFICACY, SAFETY AND IMMUNOGENICITY OF THE CANDIDATE MALARIA VACCINE RTS,S/AS01 IN KENYAN AND TANZANIAN CHILDREN


1KEMRI Wellcome Collaborative Research Programme, Kilifi, Kenya, 2Joint Malaria Project, Korogwe, United Republic of Tanzania, 3GlaxoSmithKline Biologicals, Rixensart, Belgium, 4PATH Malaria Vaccine Initiative, Bethesda, MD, United States, 5London School of Hygiene and Tropical Medicine, London, United Kingdom

11:30 a.m.

27

PHASE IIIB, RANDOMIZED, DOUBLE-BLIND TRIAL TO ASSESS THE SAFETY, IMMUNOGENICITY AND EFFICACY OF THE CANDIDATE MALARIA VACCINE RTS,S/AS02 WHEN ADMINISTERED ACCORDING TO THE EXPANDED PROGRAM ON IMMUNIZATION SCHEDULE


1Bagamoyo Research and Training Center, Ifakara Health Research and Development Centre, Dar-es-Salaam, United Republic of Tanzania, 2Swiss Tropical Institute, Basel, Switzerland, 3GlaxoSmithKline Biologicals, Rixensart, Belgium, 4PATH Malaria Vaccine Initiative, Bethesda, MD, United States

11:45 a.m.

28

PHASE II, RANDOMIZED TRIAL TO ASSES THE SAFETY AND IMMUNOGENICITY OF THE CANDIDATE MALARIA VACCINES RTS,S/AS02 AND RTS,S/AS01 WHEN GIVEN ACCORDING TO DIFFERENT VACCINATION SCHEDULES IN CHILDREN IN GHANA


1Kintampo Health Research Center, Kintampo, Ghana, 2School of Medical Sciences, Kwa-me Nkrumah University of Science and Technology, Kumasi, Ghana, 3GlaxoSmithKline Biologicals, Rixensart, Belgium, 4PATH Malaria Vaccine Initiative, Bethesda, MD, United States, 5London School of Hygiene and Tropical Medicine, London, United Kingdom, 6Kumasi Centre for Collaborative Research, Kumasi, Ghana

Scientific Session 19

Malaria/Mosquitoes: Prevention of Transmission

Maurepas

Monday, December 8, 10:15 a.m. – Noon

CHAIR

Rhoel R. Dinglasan

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

Mark L. Wilson

University of Michigan School of Public Health, Ann Arbor, MI, United States

10:15 a.m.

29

REGIME SHIFTS IN MALARIA INCIDENCE PATTERNS ARE RELATED TO CLIMATIC VARIABILITY, BUT MEDIATED BY INSECTICIDE TREATED NET USE

Luis F. Chaves1, Akira Kaneko2, Mercedes Pascual1, Mark L. Wilson1

1University of Michigan, Ann Arbor, MI, United States, 2Karolinska Institutet, Stockholm, Sweden

10:30 a.m.

30

PROTEIN-GLYCAN INTERACTIONS MEDIATE MALARIA PARASITE TRANSMISSION

Rhoel R. Dinglasan1, Toin H. van Kuppevelt2, Luisella Verotta1, Paolo Ferruti1, Elisabetta Ranucci1, Anil K. Ghosh1, Aditi Alaganan1, Akio Saito2, Marcelo Jacobs-Lorena2

1Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, 2Radboud University of Nijmegen, Nijmegen, Netherlands, 3University of Milan, Milan, Italy, 4Kinki University, Osaka, Japan
Detailed Program

Symposium 20

Addressing the R&D Challenges in Making New Drugs Available for Human African Trypanosomiasis (aka Sleeping Sickness): Potential in the Pipeline and Recent Clinical Results

Bayside BC

Monday, December 8, 10:15 a.m. – Noon

Human African trypanosomiasis (HAT or sleeping sickness) is a life-threatening disease which threatens 60 million people in 36 countries in Africa. Caused by Trypanosoma brucei parasites transmitted by tsetse flies, HAT is calculated by WHO estimates to infect between 50,000 and 70,000 people in sub-Saharan Africa. Currently available treatments for HAT are few and limited due to toxicity and lost efficacy in several regions. Treatment is stage-specific, with more toxic and more difficult-to-administer treatments for stage 2 disease. There are a small number of projects for improved treatments currently in clinical development. This symposium will address the most recent results from these clinical trials and will also explore the most interesting candidates in the pipeline, including fexinidazole, a drug candidate currently in preclinical development by the Drugs for Neglected Diseases initiative (DNDi). DNDi, a new product development partnership (PDP) committed to develop new treatments for this and other fatal-yet-neglected diseases, and the HAT Platform, a regional clinical research platform, are holding this symposium in order to also present results from a pivotal Phase III study and to review the opportunities and challenges ahead in the different phases of research and development of new drugs for sleeping sickness.

CHAIR
Leon Kazumba
HAT Platform, Kinshasa, The Democratic Republic of the Congo
Pere Simarro
World Health Organization, Geneva, Switzerland

10:15 a.m.

HAT PLATFORM – SUCCESS TO DATE, AND CHALLENGES/OPPORTUNITIES AHEAD IN OVERCOMING DIFFICULTIES IN CLINICAL RESEARCH OF HAT DRUGS AND IN DEVELOPING REGIONAL RESEARCH PLATFORM

Dawson Mbulamberi
Ministry of Health, Kampala, Uganda

10:40 a.m.

PHASE III RESULTS OF MULTI-CENTRE STUDY EVALUATING NIFURTIMOX-EFLORTHINE COMBINATION FOR TREATMENT (NECT) OF STAGE 2 HAT

Gerardo Priotto
Epicentre, Paris, France

11:05 a.m.

RESEARCH RESULTS EVALUATING THE DIAMIDINE CLASS FOR THE TREATMENT OF HAT

Richard Tidwell
Consortium for Parasitic Drug Development, University of North Carolina, Chapel Hill, NC, United States

11:30 a.m.

FEXINIDAZOLE: A REDISCOVERED NITROIMIDAZOLE DRUG CANDIDATE MOVING INTO CLINICAL DEVELOPMENT FOR HAT

Els Torrelee
Drugs for Neglected Diseases initiative, Geneva, Switzerland
Symposium 21

Genomic Approaches to Host-Pathogen Interactions for *Plasmodium falciparum*

Grand Ballroom A
Monday, December 8, 10:15 a.m. – Noon

Genomic approaches, methodologies and technologies for evaluation of both *P. falciparum* and its host organisms — humans and the anopheles mosquito — will be presented and discussed. With increased genetic and genomic knowledge, this symposium will review the latest data and technologies, as well as discuss how these data can be leveraged to identify signatures of natural selection and to infer biologic meaning about these genomic signatures of selection. Participants will also discuss real world applications of these genetic and genomic data toward understanding basic biologic and immunologic mechanisms, as well for epidemiologic, clinical, vaccine or drug studies in the natural setting.

CHAIR
Dyann F. Wirth
Harvard School of Public Health, Boston, MA, United States
Marc Muskavitch
Boston College, Boston, MA, United States

10:15 a.m.

GENETIC VARIATION IN THE HUMAN HOST — LEVERAGING SIGNATURES OF NATURAL SELECTION TO UNDERSTAND HOST-PATHOGEN INTERACTIONS
Dominic Kwiatkowski
Wellcome Trust Centre for Human Genetics, Oxford, United Kingdom

10:40 a.m.

GENETIC VARIATION IN *P. FALCIPARUM* — USING GENETIC VARIATION IN THE PARASITE TO IDENTIFY GENETIC LOCI UNDER NATURAL SELECTION.
Sarah K. Volkman
Harvard School of Public Health, Boston, MA, United States

11:05 a.m.

GENETIC VARIATION IN THE ANOPHELES HOST — HOW GENETIC AND GENOMIC DIFFERENCES IN THE VECTOR CONTRIBUTE TO PARASITE DEVELOPMENT AND SURVIVAL
Fotis C. Kafatos
Imperial College London, London, United Kingdom

11:30 a.m.

APPLYING KNOWLEDGE AND TOOLS OF GENETIC VARIATION IN THE FIELD FOR DEVELOPMENT OF INTERVENTION STRATEGIES
Christian T. Happi
University of Ibadan, Ibadan, Nigeria

Scientific Session 22

Intestinal and Tissue Helminths I: *Taenia* / Cysticercosis

Grand Ballroom B
Monday, December 8, 10:15 a.m. – Noon

CHAIR
Ana Flisser
Universidad Nacional Autonoma de Mexico, Faculty of Medicine, Mexico City, Mexico
Theodore E. Nash
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

IN VITRO ASSESSMENT OF *TAENIA CRASSICEPS* MOTILITY AND ITS APPLICATION TO THE STUDY OF ANTHELMINTIC TREATMENT IN NEUROCYSTICERCOSIS
Erick Scott1, Juraj Kabat2, Owen Schwartz2, Theodore E. Nash2, Siddhartha Mahanty2
1National Institutes of Health, Rockville, MD, United States, 2National Institutes of Health, Bethesda, MD, United States

10:30 a.m.

*TAENIA SOLIUM* CYSTICERCOSIS IN NATURALLY INFECTED PIGS: VIABILITY OF CYSTICERCI AND PERSISTENCY OF SPECIFIC ISOTYPE ANTIBODIES AND CYSTICERCAL ANTIGENS AFTER TREATMENT WITH OXFENDAZOLE
Chummy S. Sikasunge1, Maria V. Johansen2, Lee A. Willingham III1, Pall S. Leifsson1, Isaac K. Phiri1
1School of Veterinary Medicine, University of Zambia, Lusaka, Zambia, 2DBL – Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen, Thorvaldsensvej, Frederiksberg C, Copenhagen, Denmark, 3WHO/FAO Collaborating Centre for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Dyrlegvejen 100, 1870 Frederiksberg C, Copenhagen, Denmark, 4Department of Veterinary Pathobiology, Faculty of Life Sciences, University of Copenhagen, Ridebanevej, Frederiksberg C, Copenhagen, Denmark

10:45 a.m.

EFFECTIVENESS OF HEALTH EDUCATION INTERVENTION TRIAL TO REDUCE PORCINE CYSTICERCOSIS IN NORTHERN TANZANIA
Helena A. Ngowi1, Hélène Carabin2, M. R. Mlozi2, Ayub A. Kassuku1, J. E. Mlangwa1, A. Lee Willingham2
1Sokoine University of Agriculture, Morogoro, United Republic of Tanzania, 2University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, 3WHO/FAO Collaborating Center for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Frederiksberg, Denmark

67
Detailed Program

11 a.m.

39
A NATIONAL MODEL FOR THE CONTROL OF A PARASITIC DISEASE: CYSTICERCOSIS IN MEXICO
Ana Flisser1, Javier Calderon-Albor1, Miguel Robles-Barcena1, Gina Martinez-Flisser2, Jose Narro-Robles1
1Universidad Nacional Autonoma de Mexico, Faculty of Medicine, Mexico City, Mexico, 2Private, Mexico City, Mexico

11:15 a.m.

40
KNOWLEDGE AND BELIEFS ASSOCIATED WITH EPILEPSY AND CYSTICERCOSIS IN BURKINA FASO
Alida Da1, Athanase Millogo2, Sennen Hounton3, Linda D. Cowan4, Rasmane Ganaba2, Pascal Nitiema4, Hélène Carabin4
1Université de Ouagadougou, Ouagadougou, Burkina Faso, 2Centre Universitaire Hospitalier Sourou Sanous, Bobo Diolasso, Burkina Faso, 3West Africa Field Epidemiology and Laboratory Training Program, Ouagadougou, Burkina Faso, 4University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States

11:30 a.m.

41
PREVALENCE OF EPILEPSY, CYSTICERCOSIS AND NEUROCYSTICERCOSIS IN BURKINA FASO
Hélène Carabin4, Athanase Millogo2, Sennen Hounton3, Nicolas Praet5, Linda D. Cowan4, Pascal Nitiema4, Pierre Dorny4, Zékiba Tarnagda5, Rasmane Ganaba2
1University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, 2Centre Universitaire Hospitalier Sourou Sanous, Bobo Diolasso, Burkina Faso, 3West Africa Field Epidemiology and Laboratory Training Program, Ouagadougou, Burkina Faso, 4Institute of Tropical Medicine, Antwerp, Belgium, 5IRSS, Bobo Diolasso, Burkina Faso

11:45 a.m.

42
COMBINED GENOTYPE AND IN SILICO COMPARISON STUDIES OF PIG TAPEWORM TAENIA SOLIUM MATCH WITH UNIQUE ETHNOGEOGRAPHY OF MADAGASCAR
Lorraine Michelet
Pitié-Salpêtrière Hospital, Paris, France
(ACMCIP Abstract)

11 a.m.

Scientific Session 23

Flavivirus II – Dengue II

Grand Ballroom C
Monday, December 8, 10:15 a.m. – Noon

CHAIR
Derek A. Cummings
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

10:15 a.m.

43
LACK OF TYPE I IFN IN DENGUE VIRUS (DENV) INFECTED HUMAN BLOOD CELLS MAY ACCOUNT FOR INEFFICIENT IMMUNE RESPONSES DURING DENV INFECTION
Ana Fernandez-Sesma1, Dabeiba Bernal-Rubio1, Dorothy Kaminski1, Kelley Boyd1, Hannah Phipps-Yonas1, Thomas M. Moran1, Adolfo Garcia-Sastre1, Jorge Munoz-Jordan2
1Mount Sinal School of Medicine, New York, NY, United States, 2Centers for Disease Control, Dengue Branch, San Juan, PR, United States

10:30 a.m.

44
INTRINSIC ANTIBODY DEPENDENT ENHANCEMENT OF DENGUE INFECTION IN PRIMARY HUMAN MONOCYTIC PHAGOCYTES AND CELL LINES
Zhihua Kou1, Matthew H. Quinn1, Huiyuan Chen1, Jacob J. Schlesinger1, Federica Sallusto2, Xia Jin1
1University of Rochester, Rochester, NY, United States, 2Institute of Research in Biomedicine, Bellinzona, Switzerland
(ACMCIP Abstract)

10:45 a.m.

45
A MOUSE MODEL FOR ANTIBODY-ENHANCED DENGUE VIRUS INFECTION AND DISEASE
Scott Balsitis, Katherine Williams, Jennifer L. Kyle, Robert Beatty, Eva Harris
Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

11 a.m.

46
PRELIMINARY DATA ON A POTENTIAL RHESUS MACAQUE MODEL FOR DHF/DSS
Guey Chuen Perng, Nattawat Onlamoon, Hui-Mien Hsiao, Margaret C. Tse, Francois Villinger, Aftab A. Ansari
Emory University School of Medicine, Atlanta, GA, United States
11:15 a.m.

INCREASED DENGUE DISEASE SEVERITY IN NICARAGUA IS ASSOCIATED WITH A CLADE REPLACEMENT IN DENGUE VIRUS 2
Angel Balmaseda1, Tangni Gomez2, Matthew Henn2, Niall Lennon2, Guillermima Kuan3, crisanta rocha4, Sheyla Silva4, Aubree Gordon5, Bruce Birren2, Eva Harris2
1Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, 2Broad Institute, Cambridge, MA, United States, 3Socrates Flores Vivas Health Center, Managua, Nicaragua, 4Hospital Infantil Manuel Jesús de Rivera, Managua, Nicaragua, 5Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

11:30 a.m.

SPATIAL HETEROGENEITY IN THE FORCE OF INFECTION OF DENGUE IN THAILAND AND THE SPATIAL STRUCTURE OF PHASE RELATIONSHIPS IN MULTIANNUAL OSCILLATIONS
Derek A. Cummings1, Ira Schwartz2, Donald S. Burke3, Robert V. Gibbons4
1Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, 2United States Naval Research Laboratory, Washington, DC, United States, 3University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States, 4Armed Forces Institute of Medical Sciences, Bangkok, Thailand

11:45 a.m.

A UNIFYING FRAMEWORK FOR THE COMPLEX REGIONAL DYNAMICS OF MULTI-SEROTYPE DENGUE VIRUS TRANSMISSION
Karen M. Campbell1, Arthur Getis1, Jared Aldstadt2, Kristopher Kuzera1, Kumnuan Ungchusak1, Richard A. Levine1, Thomas W. Scott*1
1San Diego State University, San Diego, CA, United States, 2University at Buffalo, Buffalo, NY, United States, 3Ministry of Public Health, Nonthaburi, Thailand, 4University of California, Davis, CA, United States

Symposium 24

Careers in Tropical Medicine – The Paths to Success Part II

Day 2: Monday, December 8, 10:15 a.m. – Noon

This symposium is designed for trainees in the fields of tropical medicine and global health. The presenters will explore aspects of developing a successful career in tropical medicine, explain how to integrate different skills to obtain funding and highlight the value of ASTMH membership.

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

10:15 a.m.

NAVIGATING THE NATIONAL INSTITUTES OF HEALTH SYSTEM
Adriana Costero
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

10:40 a.m.

ALL THESE DATA......MANUSCRIPT PREPARATION, SUBMISSION AND MAKING REVIEWERS HAPPY
James Kazura
Case Western Reserve University, Cleveland, OH, United States

11:05 a.m.

WHEN THE CAMERAS ARE RUNNING – INTERVIEW SKILLS
Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

11:30 a.m.

RESOURCES FROM THE BURROUGHS WELLCOME FUND – “MAKING THE RIGHT MOVES – A PRACTICAL GUIDE TO SCIENTIFIC MANAGEMENT FOR POSTDOCS AND NEW FACULTY” AND “INTERNATIONAL CAREERS”
Victoria P. McGovern
Burroughs Wellcome Fund, Research Triangle Park, NC, United States

11:45 a.m.

QUESTIONS AND ANSWERS

Symposium 25

Home Management of Malaria in 2008: Improving Access to ACTs and Diagnostics at the Community Level in Sub-Saharan Africa

Grand Ballroom E

Day 2: Monday, December 8, 10:15 a.m. – Noon

Home Management of Malaria (HMM) is becoming increasingly important as a way to increase access to treatment by underserved populations, in particular in sub-Saharan Africa (SSA). Developed in the 1990s, when chloroquine was the antimalarial drug of choice, HMM has in recent years faced the challenge to incorporate new tools like artemisinin-based combination therapy (ACT) and rapid diagnostic tests (RDT) for malaria. Furthermore, due to the dramatic increase in numbers of people living in urban areas in SSA, there is a need to develop and test the efficacy of a HMM strategy adapted to urban settings. Finally, findings will be presented on the additional benefit that community-level treatment of both malaria and pneumonia is going to provide compared to community-level treatment of malaria only, and on how to an integrated strategy for community-level management of both diseases can be designed and delivered. Results will be presented that provide the evidence to orient antimalarial policy for case management at the community level.

Chair
Franco Pagnoni
World Health Organization, Geneva, Switzerland

Joel G. Breman
National Institutes of Health, Bethesda, MD, United States
10:15 a.m.
FEASIBILITY, ACCEPTABILITY AND EFFECTIVENESS OF ACT USED WITHIN THE CONTEXT OF HMM
Ikeoluwapo O. Ajayi
University of Ibadan, Ibadan, Nigeria

10:35 a.m.
THE USE OF RDTs IN THE CONTEXT OF HMM
James Tibenderana
Uganda Malaria Research Center, Kampala, Uganda
Thomas Anyorigiya
Navrongo Research Center, Navrongo, Ghana

11 a.m.
HOME MANAGEMENT OF MALARIA IN URBAN SETTINGS IN SUB-SAHARAN AFRICA: A FEASIBLE OPTION?
Patricia Akweongo
Navrongo Health Research Centre, Navrongo, Ghana

11:25 a.m.
INTEGRATED MANAGEMENT OF MALARIA AND PNEUMONIA AT THE COMMUNITY-LEVEL: PRELIMINARY RESULTS FROM A CLUSTER-RANDOMIZED TRIAL
John O. Gyapong
Ghana Health Service, Accra, Ghana

11:45 a.m.
DISCUSSION
Joel G. Breman
Fogarty International Center, Bethesda, MD, United States

Exhibit Hall Open/Light Lunch
Napoleon Ballroom
Monday, December 8, Noon – 1:30 p.m.

Poster Session 26/Light Lunch
Poster Session A (#50-321 and Late Breakers)
Armstrong Ballroom
Monday, December 8, Noon – 1:30 p.m.
Arthropods/Entomology-Other

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ECOLOGICAL AND GENETIC RELATIONSHIPS OF THE FOREST-M FORM AMONG CHROMOSOMAL AND MOLECULAR FORMS OF THE MALARIA VECTOR ANOPHELES GAMBIAE S S.
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(ACMCIP Abstract)
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IDENTIFICATION OF POTENTIAL TARGET GENES FOR MALARIA VACCINE DEVELOPMENT BY DIFFERENTIAL EXPRESSION PROFILING OF RADIATION-ATTENUATED PLASMODIUM FALCIPARUM SPOROZOITES

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CEREBRAL MALARIA GENETICS IN ANGOLAN CHILDREN

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SEQUENCE DIVERSITY OF THE MSP2 GENE (MEROZOITE SURFACE PROTEIN 2) IN THE PLASMODIUM FALCIPARUM COLLECTION AT THE MR4/ATCC BIORESOURCE CENTER

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(ACMCIP Abstract)

Mosquitoes – Insecticide Resistance and Control

INSECTICIDE SUSCEPTIBILITY LEVEL OF Aedes Aegypti (Linn.) FROM MUNICIPALITY OF CABUYAO AND CITY OF MANILA, PHILIPPINES

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¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Kenya Medical Research Institute, Kisumu, Kenya

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POSSIBLE PRESENCE OF THREE PROMINENT IMMUNE SIGNALING PATHWAYS, IMD/RELIISH, TOLL/DORSAL AND JAK/STAT, IN THE SNAIL BIOMPHALARIA GLABRATA, THE INTERMEDIATE HOST OF SCHISTOSOMA MANSONI
Si-Ming Zhang, Vijay Ramakrishnan, Hong Nian
University of New Mexico, Albuquerque, NM, United States
(ACMCIP Abstract)

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COMMUNITY-DIRECTED INTERVENTION FOR SCHISTOSOMIASIS AND SOIL TRANSMITTED HELMINTHES IN WESTERN KENYA
Pauline N. Mwinzi¹, Mariam Mwanje², Chrispin Owaga³, Erick Muok¹, Kayla Laserson¹, Addzub Kubaje³, Susan Montgomery³, W. Evan Secor¹, Erick Muchiri², Diana MS Karanja³
¹Kenya Medical Research Institute, Center for Global Health Research, Kisumu, Kenya, ²Division of Vector Borne Diseases, Kenya Ministry of Health, Nairobi, Kenya, ³KEMRI-Centers for Disease Control and Prevention, Kenya Medical Research Institute, Center for Global Health Research, Kisumu, Kenya, ⁴Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

300

CIRCULATING CYTOKINES, THEIR SOLUBLE RECEPTORS AND HUMAN RESPONSES TO PRAZIQUANTAL TREATMENT OF SCHISTOSOMIASIS
Jenny Houghton¹, Colin M. Fitzsimmons², Narcis B. Kabatereine³, Gachuku Kimani³, Eric Muchiri³, Joseph K. Mwatha¹, Claus M. Reimert², Edridah M. Tukahebwa³, Birgitte J. Vennervald³, David W. Dunne³
¹Department of Pathology, Cambridge University, Cambridge, United Kingdom, ²Vector Control Division, Ministry of Health, Kampala, Uganda, ³Kenya Medical Research Institute, Nairobi, Kenya, ⁴Division of Vector Borne Diseases, Kenyan Ministry of Health, Nairobi, Kenya, ²DBL – Centre for Health Research and Development, Copenhagen, Denmark
(ACMCIP Abstract)

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TRANSPOSITION EXCISION ACTIVITIES OF THE PIGGYBAC AND MOS-1 MARINER TRANSPOSONS IN SCHISTOSOMA MANSONI
Yousef N. Alrefaei¹, Maria Morales², Paul J. Brindley¹
¹The George Washington University, Washington, DC, United States, ²Tulane University, New Orleans, LA, United States
(ACMCIP Abstract)

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A PRINCIPAL COMPONENTS ANALYSIS OF IMMUNE PARAMETERS ASSOCIATED WITH RESISTANCE TO REINFECTION WITH SCHISTOSOMA MANSONI
Carla L. Black¹, Pauline N. Mwinzi², W. Evan Secor², Diana M. Karanja¹, Daniel G. Colley¹
¹University of Georgia, Athens, GA, United States, ²Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, ³Centers for Disease Control and Prevention, Atlanta, GA, United States
(ACMCIP Abstract)
303
CHARACTERIZATION OF HUMORAL AND CD4+ T CELL RESPONSES TO SMCB1 IN SCHISTOSOMIASIS PATIENTS RESIDING IN ENDEMIC AREAS IN BRAZIL
Lucia A. O. Fraga1, Erika Lamb2, Elizabeth C. Moreno3, Luiz Cosme C. Malaquias4, Alda Maria S. Silveira5, Jan Dvorak6, Conor R. Caffrey7, Stephen J. Davies8
1Uniformed Services University of the Health Sciences/UNIVALE/DRS, Bethesda, MD, United States, 2Uniformed Services University of the Health Sciences, Bethesda, MD, United States, 3Funasa-Fundação Nacional de Saúde-MS-Brasil, Belo Horizonte, Brazil, 4UNIVALE-Universidade Vale do Rio Doce, Gov. Valadares, MG., Brazil, 5UNIVALE-Universidade Vale do Río Doce, Gov. Valadares, MG., Brazil, 6Sandler Center for Basic Research in Parasitic Diseases, California Institute for Quantitative Biosciences (QB3), University of California, San Francisco, CA, United States, 7Sandler Center for Basic Research in Parasitic Diseases, California Institute for Quantitative Biosciences (QB3), University of California, San Francisco, CA, United States, 8Department of Microbiology and Immunology, Uniformed Services University of the Health Sciences, Bethesda, MD, United States
(ACMCIP Abstract)

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URINARY SCHISTOSOMIASIS SCORE IN RURAL SCHOOL CHILDREN IN CHITONGO AREA, SOUTHERN ZAMBIA
Sandra Chishimba1, Aniset Kamanga1, Jay Sikalima1, Julie Clemmon2, Sungano Mharakurwa2, Clive J. Shiff1
1The Malaria Institute at Macha, Choma, Zambia, 2Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

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FEASABILITY OF SCHISTOSOMIASIS MANSONI ENDEMIC EVALUATION USING EITHER SERODIGNOSTIC OF MOLECULAR DETECTION METHODS IN BURKINA FASO
Hermann Sorgho, Ollo U. Da, Jean-Bosco Ouédraogo
Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso

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A CLOSER LOOK AT THE PROTEINS INVOLVED IN SEROTONIN SIGNALING IN SCHISTOSOMA MANSONI AND HOW THEY MODULATE BEHAVIOR
Nicholas Patocka, Paula Ribeiro
McGill University, Ste-anne-de-bellevue, QC, Canada
(ACMCIP Abstract)

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IMPLIEDS OF THE EFFECT OF SCHISTOSOMA MANSONI AND SCHISTOSOMA HAEMATOBIUM CO-INFECTIONS ON HUMAN MORBIDITY INDICATORS
Anouk N. Gourvas1, Alice J. Norton1, Curtis H. Kariuki2, Alan Fenwick1, Joanne P. Webster1
1Imperial College London, London, United Kingdom, 2National Museums Kenya, Kenya, Kenya

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VIRUSES – OTHER

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FIELD DETECTION OF EBOLA- AND MARBURG VIRUSES BY A PCR-BASED LATERAL FLOW DIPSTICK ASSAY
Roman Wölfel1, Markus Panning2, Gerhard Dobler1
1Bundeswehr Institute of Microbiology, Munich, Germany, 2Bernhard-Nocht Institute for Tropical Medicine, Hamburg, Germany

311
VIRULENCE VARIATION AMONG ISOLATES OF WESTERN EQUINE ENCEPHALITIS VIRUS IN AN OUTBRED MOUSE MODEL
Christopher H. Logue
Centres for Disease Control and Prevention & Colorado State University, Fort Collins, CO, United States

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RABIES IN BATS IN TWO COMMUNITIES IN PERU AFTER AN OUTBREAK IN 2007
Gabriela Salmon-Mulanovich1, Christian Albújar1, Carolina Guevara1, Alicia Vasquez1, Alberto Laguna1, Milagros Salazar1, Hernán Zamalloa1, Marcia Cáceres4, Tadeusz Kochel1, Carlos Contreras1, Felix R. Jackson1, Charles E. Rupprecht1, Joel M. Montgomery1
1Naval Medical Research Center Detachment, Lima, Peru, 2Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru, 3University of Texas Medical Branch, Galveston, TX, United States, 4Dirección de Salud, Madre de Dios, Peru, 5Centers for Disease Control and Prevention, Atlanta, GA, United States

313
CORTICOSTEROIDS MODULATE SEUL VIRUS INFECTION, REGULATORY T CELL RESPONSES, AND MMP-9 EXPRESSION IN MALE, BUT NOT FEMALE, NORWAY RATS
Judith D. Easterbrook, Sabra L. Klein
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States
DETECTION OF VIRAL RNA FROM PARAFFIN-EMBEDDED TISSUES AFTER PROLONGETED FORMALIN FIXATION

Randal J. Schoepp1, Michelle D. McKinney2, Steven J. Moon1, David A. Kulesh1, Thomas Larsen1
1U.S. Army Medical Research Institute for Infectious Diseases, Frederick, MD, United States, 2GEO-CENTERS, Inc., Frederick, MD, United States

FULL LENGTH SEQUENCING AND GENETIC CHARACTERIZATION OF BREU BRANCO VIRUS (BE AR 494347) AND STRAINS BE AR 494475 AND BE AR 486204 ISOLATED FROM ANOPHELES MOSQUITOES

Conceição M. Vieira1, Márcio R. Nunes2, Eliana V. da Silva2, Valéria L. Carvalho2, Joaquim P. Nunes Neto2, Helena B. Vasconcelos2, Ana C. Cruz3, Samir M. Casseb4, Pedro F. Vasconcelos2
1Universidade Federal Rural da Amazônia, Belém, Brazil, 2Instituto Evandro Chagas, Belém, Brazil

SEROPREVALENCE RATES OF MAYARO VIRUS IN URBAN AND RURAL AREAS OF MAYNAS PROVINCE, PERU

Kanya C. Long1, Amy C. Morrison1, Brett M. Forshey1, Alfredo Huaman1, Claudio Rocha2, Rebeca Carrión2, Cristian Carey1, Joel M. Montgomery2, Robert B. Tesh2, Tad Kochel1
1University of Texas Medical Branch, Galveston, TX, United States, 2University of California, Davis, Davis, CA, United States, 3Naval Medical Research Center Detachment, Lima, Peru, 4Direcção Executiva de Epidemiologia de Saúde de Loreto, Iquitos, Peru, 5US Centers for Disease Control, Atlanta, GA, United States

SINDBIS ALPHAVIRUS INFECTION: CLINICAL FEATURES, DIAGNOSIS AND EPIEMIOLOGY

Satu Kurkela1, Tapani Helve2, Osmo Rätti3, Tytti Manni1, Eeli Huhtamo1, Nathalie Yumari Uzcátegui4, Johanna Myllynen5, Juha Laakkonen1, Juha Pekka Huhtamo1, Antti Vaheri1, Olli Vapalahti1
1Haartman Institute, University of Helsinki, Helsinki, Finland, 2Helsinki University Central Hospital, Helsinki, Finland, 3Arctic Centre, University of Lapland, Rovaniemi, Finland, 4Helsinki University Central Hospital Laboratory, Helsinki, Finland, 5Faculty of Veterinary Medicine, University of Helsinki, Helsinki, Finland, 6National Public Health Institute, Helsinki, Finland

NORTH AND SOUTH AMERICAN EASTERN EQUINE ENCEPHALITIS VIRUS INFECTION OF HISPID COTTON RATS

Nicole C. Arrigo1, Patrick C. Newman1, A. Paige Adams1, Douglas M. Watts2, Scott C. Weaver1
1University of Texas Medical Branch, Galveston, TX, United States

TRANSFORMATION OF NIPAH BY DATE PALM SAP, BANGLADESH 2008

Muhammad Aziz Rahman1, M. Jahangir Hossain2, Sharmin Sultana2, Shahed Sazzad2, Nusrat Homaira2, Sayma Afroz3, Mahmudur Rahman4, Emily Gurley2, Stephen P. Luby2
1International Center for Diarrhoeal Disease Research, Bangladesh and IEDCR (Institute of Epidemiology, Disease Control and Research), Dhaka, Bangladesh, 2International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, 3IECDCR (Institute of Epidemiology, Disease Control and Research), Dhaka, Bangladesh, 4International Center for Diarrhoeal Disease Research, Bangladesh and Centers for Disease Control and Prevention, Dhaka, Bangladesh

EVALUATION OF RISK FOR AVIAN INFLUENZA INTRODUCTION USING GIS IN WETLANDS IN PERU

Hugo R. Razuri1, Bruno M. Ghersi1, Veronica Landa2, Gabriela Salmon-Mulanovich1, Jorge Pastor3, Raul Zegarra4, David L. Blazes5, Joel Montgomery2, Andres G. Lescano2
1Naval Medical Research Center Detachment, Lima, Peru, 2National Animal and Plant Health Service, Ministry of Agriculture, Lima, Peru

DICISTRONIC EXPRESSION OF MULTIPLE FLUORESCENT PROTEINS FROM A DOUBLE SUBGENOMIC ALPHAVIRUS

Michael R. Wiley1, Lisa O. Roberts2, Zach N. Adelman1, Kevin M. Myles1
1Virginia Tech, Blacksburg, VA, United States, 2School of Biomedical and Life Sciences, University of Surrey, Guildford, United Kingdom

Burroughs Wellcome Fund/ASTMH Fellowship Committee Meeting

Salon 828
Monday, December 8, Noon – 2 p.m.

Clinical Group Education Curriculum Meeting

Salon 816
Monday, December 8, 12:15 p.m. – 1:15 p.m.

Exam Executive Committee Meeting

Salon 829
Monday, December 8, 12:15 p.m. – 1:15 p.m.
Mid-Day Session 27

Grad School or Peace Corps... Why Not Do Both?

Waterbury
Monday, December 8, 12:15 p.m. – 1:15 p.m.

The Peace Corps strives to help meet the world’s demand for skilled volunteers in public health. Through its Master’s International (MI) program, graduate students serve others overseas while earning their master’s degree. Partner universities benefit as well by further internationalizing both particular schools and their campuses. A Peace Corps volunteer in public health may serve in a healthcare system either as a regional health educator for a government ministry of health, or as a community health or nutrition promoter working out of a rural dispensary or clinic. Collaborating with host country counterparts on education, awareness and other relevant projects, Master’s International Peace Corps Volunteers encourage community members to adopt behaviors that promote health, prevent illness, treat disease and facilitate rehabilitation. The Master’s International program provides an opportunity for these educators to pursue a master’s degree that includes credit for Peace Corps service. It also benefits partner colleges and universities by further internationalizing campuses, as well as attracting focused and committed graduate students. The discussion will be facilitated by the coordinator of the Master’s International program at Tulane University. Panelists include university representatives who coordinate the MI program on their campuses, as well as former MI students who have served overseas.

CHAIR
Eric Goldman
Peace Corps, Washington, DC, United States
Steve Bennett
Tulane University, New Orleans, LA, United States

SPEAKER
Steve Bennett
Tulane University, New Orleans, LA, United States

Mid-Day Session 27A

Video on Human African Trypanosomiasis: “Survival - The Deadliest Disease”

Bayside BC
Monday, December 8, 12:15 p.m. - 1:15 p.m.

Sleeping Sickness is the deadliest disease in the world. The Democratic Republic of Congo suffers more cases than almost any other country. Without treatment, parasites called trypanosomes invade the victim’s brain, ravage their sleep cycle, driving them mad before finally killing them. But dedicated doctors and medics are fighting back. They travel throughout this war-torn and poverty-stricken country, seeking out the victims of Sleeping Sickness and treating them before it’s too late. But their tools are limited. The most used drug, Melasoprol, kills one in twenty patients. Without new, safer drugs, this terrible disease may never be defeated.

CHAIR
Ann-Marie Sevcsik
Drugs for Neglected Diseases initiative, Geneva, Switzerland

Meet the Professors 28

Meet the Professors A: Enigmatic and Teaching Cases

Grand Ballroom A
Monday, December 8, 12:15 p.m. – 1:15 p.m.

A panel of professors will each present one clinical case 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. An open discussion will be encouraged, with audience participation.

CHAIR
Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada

PRESENTERS
Christina M. Coyle
Albert Einstein College of Medicine, Bronx, NY, United States
Eric R. Houpt
University of Virginia, Charlottesville, VA, United States

Mid-Day Session 29

Malaria Eradication: Calibrating Aspirations, Technology, and Commitment

Grand Ballroom C
Monday, December 8, 12:15 p.m. – 1:15 p.m.

In 2007 there was global call for a long-term course toward the eradication of malaria. The use of the term “malaria eradication” will remind many of the previous declaration of global malaria eradication in the mid-1950s and the outcomes of that – “failure” or “partial success,” depending on to whom you talk. We need to understand what we are doing now for malaria control as a base for what progress and timeframe is realistic in the future. Questions about eradication of malaria as a long-term goal have included: Should eradication be undertaken at all, or will it be too costly? Is eradication feasible with today’s tools and if not, what innovations will be needed? The symposium will provide a focused yet comprehensive overview of the critical technical, epidemiologic and programmatic issues critical to near-term control and the eventual eradication of malaria. The objective of the symposium is to increase international scholarly exchange focused on malaria control, elimination and eradication, and the importance of a coordinated strategic approach.

CHAIR
Carlos C. (Kent) Campbell
Malaria Control and Evaluation Partnership in Africa/PATH, Seattle, WA, United States

12:15 PM

OVERVIEW
Richard Feachem
The Global Health Group, San Francisco, CA, United States

12:20 PM

PERSPECTIVES ON MALARIA ERADICATION
Randall M. Packard
Institute of the History of Medicine, Baltimore, MD, United States
ASTMH 57th Annual Meeting

12:25 p.m.
MALARIA CONTROL OVERVIEW 2000-2008
Bernard Nahlen
President’s Malaria Initiative, Washington, DC, United States

12:35 p.m.
MALARIA CONTROL-ELIMINATION-ERADICATION – COUNTRY PERSPECTIVE: ZANZIBAR
Abdullah Ali
Zanzibar Malaria Control Program, Zanzibar, United Republic of Tanzania

12:45 p.m.
PROGRESS TOWARD MALARIA PROGRAM IMPACT AND ELIMINATION
Richard W. Steketee
PATH, Seattle, WA, United States

1 p.m.
A GLOBAL MALARIA ACTION PLAN
David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States
Pedro Alonso
Centro de Investigacao em saude de Manhica (CISM), Barcelona, Spain

Mid-Day Session 30

The Cochrane Infectious Diseases Group: Systematic Reviews in Tropical Diseases

Grand Ballroom D
Monday, December 8, 12:15 p.m. – 1:15 p.m.

The Cochrane Collaboration Infectious Diseases Group (CIDG) has been producing and updating systematic reviews in tropical diseases since 1992. As of 2008, more than 125 CIDG reviews are available in the Cochrane Database of Systematic Reviews. Most reviews have been done by the 228 academic or clinical specialists in disease areas from 43 countries, with technical support from the CIDG base at the Liverpool School of Tropical Medicine and seven international editors. The symposium will introduce CIDG, including the scope of reviews it undertakes, how it is supported and its influence on research and policy. The diseases covered by the CIDG include most major infectious diseases of the developing world with a strong focus on malaria and TB, as well as the neglected tropical diseases (HIV/AIDS, acute respiratory infections and trachoma are covered by other Cochrane groups). Speakers will underscore opportunities to become involved as review authors, referees or editors.

CHAIR
Paul Garner
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

12:15 p.m.
THE COCHRANE INFECTIOUS DISEASES GROUP (CIDG): WHAT IT IS, HOW IT WORKS, AND OPPORTUNITIES FOR INVOLVEMENT
Paul Garner
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

12:30 p.m.
CIDG IN AFRICA: TOPICAL REVIEWS AND AUTHORS
Martin Meremikwu
University of Calabar, Calabar, Nigeria

12:45 p.m.
CIDG REVIEWS IN MALARIA: WHAT WE KNOW FROM SYSTEMATIC REVIEWS, POLICY AND RESEARCH IMPLICATIONS
Piero Olliaro
World Health Organization, Geneva, Switzerland

1 p.m.
CIDG REVIEWS IN DIARRHEA: PAVING THE WAY FOR POLICY WITH RELIABLE SYNTHESES
Thomas Clasen
London School of Hygiene and Tropical Medicine, London, United Kingdom

Poster Session A Viewing

Armstrong Ballroom
Monday, December 8, 1:30 p.m. – 7 p.m.

Scientific Session 31

Malaria – Immunology I

Gallery
Monday, December 8, 1:30 p.m. – 3:15 p.m.

CHAIR
Peter Crompton
National Institutes of Health, Rockville, MD, United States
Franck Remoue
Institut de Recherche Pour Le Developpment, Epidem, Montpellier, France

1:30 p.m.
MALARIA POTENTIATES EXPERIMENTAL MYCOBACTERIAL INFECTION IN VITRO AND IN VIVO
Michael Hawkes, Xiaoming Li, Maryanne Crockett, Angelina Diassiti, W. Conrad Liles, Jun Liu, Kevin Kain
University of Toronto, Toronto, ON, Canada

(ACMCIP Abstract)
### Detailed Program

**1:45 p.m.**

<table>
<thead>
<tr>
<th>323</th>
<th>IMPACT OF HIV-1 ON HUMORAL IMMUNITY TO <em>PLASMODIUM FALCIPARUM</em> MALARIA IN NON-PREGNANT ADULTS WITH UNCOMPLICATED MALARIA IN ZAMBIA</th>
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<tbody>
<tr>
<td></td>
<td>Erica Van Eijk¹, Jean-Pierre Van geertruyden², Francisca Yosaatmadja³, Webster Kasongo³, Modest Mulenga⁴, Umberto D’Alessandro⁵, Stephen Rosgerson⁷</td>
</tr>
<tr>
<td></td>
<td>¹Vrije Universiteit Amsterdam, Amsterdam, Netherlands, ²Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium, ³Melbourne University, Melbourne, Australia, ⁴Tropical Disease Research Centre, Ndola, Zambia</td>
</tr>
</tbody>
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(ACMCIP Abstract)

**2 p.m.**

<table>
<thead>
<tr>
<th>324</th>
<th>CHILD MALNUTRITION AT THE ONSET OF MALARIA TRANSMISSION: IMPACT ON SUBSEQUENT MALARIA MORBIDITY AND ANTI-<em>PLASMODIUM FALCIPARUM</em> ANTIBODY RESPONSE</th>
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<tr>
<td></td>
<td>Florie Filli¹, Jean Birame Sarr², Franck Remoue³, Denis Boulanger⁴, Badara Cisse⁵, Cheikh Sokhna⁶, Geoffrey Targett⁷, Jean-François Trape⁸, François Simonond⁹, Brian Greenwood¹⁰, Kirsten Simondon¹¹</td>
</tr>
<tr>
<td></td>
<td>¹Institut de Recherche pour le Développement (IRD), Montpellier, France, ²Association Espoir Pour la Santé (EPLS), Saint-Louis, Senegal, ³Institut de Recherche pour le Développement (IRD), Dakar, Senegal, ⁴Université Cheikh Anta Diop (UCAD), Laboratory of Parasitology, Dakar, Senegal, ⁵London School of Hygiene and Tropical Medicine, London, United Kingdom</td>
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</table>

**2:15 p.m.**

<table>
<thead>
<tr>
<th>325</th>
<th>A LONGITUDINAL STUDY OF THE ACQUISITION AND MAINTENANCE OF <em>PLASMODIUM FALCIPARUM</em>-SPECIFIC MEMORY B CELLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Greta Weiss¹, Boubacar Traore², Safiatou Doumbó², Didier Doumtabe³, Younoussou Konge⁴, Marko Mircetic⁵, Aissata Ongoinba⁶, Kassoum Kayentao⁷, Ogbara K. Doumbo⁸, Susan K. Pierce⁹, Peter D. Crompton¹⁰</td>
</tr>
<tr>
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<td>¹National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunogenetics, Bethesda, MD, United States, ²Malaria Research and Training Center, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali</td>
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(ACMCIP Abstract)

**2:30 p.m.**

<table>
<thead>
<tr>
<th>326</th>
<th>IMMUNITY TO <em>PLASMODIUM FALCIPARUM</em> MEASURED BY GROWTH INHIBITION ASSAY DECREASES WITH AGE AND IS ASSOCIATED WITH DELAYED TIME TO BLOOD STAGE INFECTION IN NATURALLY EXPOSED PERSONS</th>
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<tr>
<td></td>
<td>Arlene E. Dent¹, Elke Bergmann-Leitner², Danny Wilson³, Daniel Tisch⁴, Rhonda Kimmel⁵, John Vulule⁶, Peter Sumba⁷, James Beeson⁸, Evelina Angov⁹, Ann Moormann¹⁰, James Kazura¹¹</td>
</tr>
<tr>
<td></td>
<td>¹Case Western Reserve University, Cleveland, OH, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States, ³Walter and Eliza Hall Institute, Parkville, Australia, ⁴Case Western Reserve University, Cleveland, OH, United States, ⁵Kenya Medical Research Institute, Kisumu, Kenya</td>
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(ACMCIP Abstract)

**3 p.m.**

<table>
<thead>
<tr>
<th>327</th>
<th>COMPARISON OF SEROLOGICAL PROFILES AND ANTIBODY AVIDITIES TO EIGHT MAJOR CANDIDATE VACCINE ANTIGENS IN THAI AND CAMEROON ADULTS</th>
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<tr>
<td></td>
<td>Alexander K. Kayatani¹, Mark M. Fukuda², Rose G. Leke³, Diane W. Taylor⁴</td>
</tr>
<tr>
<td></td>
<td>¹University of Hawaii, Honolulu, HI, United States, ²Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, ³University of Yaounde I, Yaounde, Cameroon</td>
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</tbody>
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**3:45 p.m.**

<table>
<thead>
<tr>
<th>328</th>
<th>DIFFERENCES IN TRANSMISSION INTENSITIES OF FALCIPARUM MALARIA AFFECT THE FREQUENCY OF HUMAN COMPLEMENT RECEPTOR 1 (CR1) POLYMORPHISMS IN NORTH-EASTERN TANZANIA</th>
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<td>Helle H. Hansson¹, Lasse S. Vestergaard², Martha M. Lemnge³, Bruno P. Mmbando³, Anders Enevold³, Mette L. Schousboe⁴, John P. Lusingu⁵, Thor G. Theander⁶, Ib C. Bygbjerg⁷, Michael Alifrangi⁸</td>
</tr>
<tr>
<td></td>
<td>¹Center for Medical Parasitology, University of Copenhagen and Rigshospitalet, Copenhagen, Denmark, ²Department of Infectious Diseases, Rigshospitalet, and Institute of International Health, Immunology and Microbiology, University of Copenhagen, Copenhagen, Denmark, ³National Institute for Medical Research, Tanga, United Republic of Tanzania, ⁴Institute for International Health, Immunology and Microbiology, University of Copenhagen and Rigshospitalet, Copenhagen, Denmark</td>
</tr>
</tbody>
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11/10/08 3:51:12 PM
Symposium 32

The Traveling Child: Medical Advice and Advances

Rhythms I
Monday, December 8, 1:30 p.m. – 3:15 p.m.

This symposium will address special considerations for the pediatric traveler in terms of pre-travel preparation and evaluation and management of post-travel illness. Content covered will include selected topics in pre-travel counseling, malaria prevention, updates in immunizations and medications and assessment of the ill child after travel to tropical areas. Illustrative case presentations will be included to emphasize key concepts.

CHAIR
Andrea P. Summer
Medical University of South Carolina, Charleston, SC, United States
Philip R. Fischer
Mayo Clinic, Rochester, MN, United States

1:30 p.m.
INFANTS, ALTITUDE AND AIR TRAVEL
Karl Neumann
Weill Cornell Medical College of Cornell University, Forest Hills, NY, United States

1:55 p.m.
PEDIATRIC VACCINE UPDATE
Sheila Mackell
Mountain View Pediatrics, Flagstaff, AZ, United States

2:20 p.m.
APPROACH TO THE ILL CHILD AFTER TRAVEL TO THE TROPICS
Andrea Summer
Medical University of South Carolina, Charleston, SC, United States

2:45 p.m.
CASE PRESENTATION IN PRE- AND POST-TRAVEL PATIENTS
William M. Stauffer
University of Minnesota, Minneapolis, MN, United States

Symposium 33

Building a Children’s Clinical Centers of Excellence Network to Treat Pediatrics HIV/AIDS in Resource-Limited Settings

Rhythms II/III
Monday, December 8, 1:30 p.m. – 3:15 p.m.

Building and supporting clinical programs in resource-limited settings can be difficult. This symposium is a primer for individuals interested in starting, funding and maintaining such programs. Using the Baylor International Pediatric AIDS Initiative experience with the care and treatment of pediatric HIV/AIDS patients in Eastern Europe and Africa as a model, we will describe challenges and opportunities for the establishment of similar programs. The first session will help the participant understand the need for a preliminary business plan for the introduction of pediatric care and treatment in a selected community and how to identify resources from the public health and the private sector for supporting this endeavor. Addressing children’s health care issues can be problematic in resource limited areas. Choosing the clinical services that will be provided, picking the appropriate clinical site and choosing community partners will be reviewed in the second session. The lack of human capacity is also a critical problem in many regions of the world and suggestions for addressing these issues will also be made from supplying expatriate physicians to training local health care providers in providing specialized care. The third session covers the importance of monitoring and evaluation of a program. This session will help the participant to understand how to develop a monitoring and evaluation plan, the implementation of this plan and how to use these data for program management and improvement in the future. Programs in resource limited areas can become isolated but by connecting multiple programs into a network their value can be increased. The final session of the symposium will demonstrate the power of such a network and how a strong working network can affect local, national and international policies.

CHAIR
Gordon E. Schutze
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States
Mark W. Kline
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

1:30 p.m.
DEVELOPING, FUNDING, AND MAINTAINING PUBLIC-PRIVATE PARTNERSHIPS
Michael B. Mizwa
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

1:55 p.m.
ADDRESSING CHILDREN’S HEALTH CARE ISSUES IN RESOURCE-LIMITED AREAS
Gordon E. Schutze
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

2:20 p.m.
THE MONITORING AND EVALUATION OF CLINICAL PROGRAMS IN RESOURCE-LIMITED SETTINGS
R. Sebastian Wanless
Baylor College of Medicine Pediatric International Pediatric AIDS Initiative, Houston, TX, United States
2:45 p.m.
THE POWER OF A NETWORK IN CHANGING HEALTH CARE FOR CHILDREN
Mark W. Kline
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

SYMPOSIUM 34
Roles of Intestinal Microbiota in Mucosal Function

Waterbury
Monday, December 8, 1:30 p.m. – 3:15 p.m.
Burgeoning information suggests that the commensal microbiota, which exceed by orders of magnitude our Homo sapiens genome, have profound influences on the development and maintenance of host immunity and resistance to infections. Our microbiota thus distinguish and help determine who we are (Gordon, Klein et al). Both innate and acquired host immune responses and mucosal growth, development and repair are substantially influenced by intestinal microbiota. Effects range from development of antigenic tolerance, immunologic counter-regulation and allergic disease to regulation of intestinal inflammation and mucosal barrier and absorptive function. Their importance in resistance to infection is clear from antibiotic associated complications. These topics will be addressed by pioneering investigators in this rapidly developing field.

CHAIR
Richard L. Guerrant
University of Virginia, Charlottesville, VA, United States
Chris Karp
Cincinnati Children's Hospital, Cincinannati, OH, United States

1:30 p.m.
IMPACT OF COMMENSAL MICROBIOTA ON MUCOSAL IMMUNITY AND INFLAMMATION
Balfour Sartor
University of North Carolina, Department of Medicine, Chapel Hill, NC, United States

2:05 p.m.
IMMUNE COUNTERREGULATION, THE HYGIENE HYPOTHESIS AND ORAL TOLERANCE
Christopher Karp
Cincinnati Children's Hospital, Cincinnati, OH, United States

2:40 p.m.
MECHANISMS TO PROTECT AGAINST INFLAMMATION AND BARRIER DISRUPTION
D. Brent Polk
Vanderbilt University Medical Center, Nashville, TN, United States

SYMPOSIUM 35
Johns Hopkins Malaria Research Institute Symposium: Pores, Channels and Transporters in Plasmodium

Napoleon A123
Monday, December 8, 1:30 p.m. – 3:15 p.m.
The Plasmodium genome encodes over a hundred membrane proteins with putative functions of pores, channels and transporters. Many of these play a range of key physiological roles in the parasite, including the uptake of essential nutrients, the release of metabolic wastes, and ion homeostasis and signaling. Some of them are also known to play a role in the resistance to a number of anti-malarial drugs. Speakers in this symposium will provide an overview of the roles and characteristics of transporters and channels in the parasite.

CHAIR
Nirbhay Kumar
Johns Hopkins University, Baltimore, MD, United States
Peter Agre
Johns Hopkins University, Baltimore, MD, United States

1:30 p.m.
TRANSPORTERS AND CHANNELS OF THE MALARIA PARASITE
Kiaran Kirk
The Australian National University, Canberra, Australia

1:55 p.m.
AQUAGLYCEROPORIN IN PLASMODIUM
Peter Agre
Johns Hopkins University, Baltimore, MD, United States

2:20 p.m.
A PURINE PERMEASE IN THE ENDOPLASMIC RETICULUM OF PLASMODIUM FALCIPARUM
Choukri Ben Mamoun
University of Connecticut Health Center, Farmington, CT, United States

2:45 p.m.
K+ CHANNELS ENCODED BY PLASMODIUM PARASITES
Peter Ellekquist
University of Copenhagen, Copenhagen, Denmark
Symposium 35A

Roll Back Malaria Monitoring and Evaluation Reference Group: Progress and New Initiatives to Improving M&E for Malaria Control Programs

Maurepas
Monday, December 8, 1:30 p.m. - 3:15 p.m.

The Roll Back Malaria Monitoring and Evaluation Reference Group (MERG) was established to standardize indicators, develop data collection tools, and provide M&E guidance for national malaria control programs. The MERG brings together experts on malaria M&E from national control programs, regional institutions, and the RBM Partner organizations. The MERG has developed standardized indicators and tools for measuring malaria program coverage such as the DHS and MICS malaria modules and the Malaria Indicator Survey (MIS). The group has also worked on approaches to estimating changes in mortality. Together, these efforts have substantially increased the availability of consistent, reliable data at the country level on progress towards malaria control. The MERG also actively supports capacity development efforts for national malaria control programs to organize and conduct M&E efforts tailored to their own activities. As the world moves towards elimination of malaria, the MERG will take a leading role in refining existing tools and filling the emerging gaps in M&E. The symposium will highlight the work of the Roll Back Malaria Monitoring and Evaluation Reference Group to standardize M&E efforts, improve the quality of the available data on malaria control, and build capacity in M&E within country programs.

CHAIR
Richard W. Steketee
Malaria Control and Evaluation Partnership in Africa (MACEPA)/PATH, Ferney, France
Erin Eckert
Macro International, Calverton, MD, United States

1:30 p.m.
OVERVIEW
Bernard Nahlen
President’s Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States

1:35 p.m.
CORE INDICATORS FOR MEASURING MALARIA COVERAGE AND IMPACT DURING PROGRAM SCALE-UP: GUIDANCE FROM THE RBM MERG
Emily White Johannson
UNICEF, New York, NY, United States

2:05 p.m.
MALARIA INDICATOR SURVEYS AND BUILDING LOCAL CAPACITY TO MEASURE PROGRESS
Erin Eckert
Macro International, Calverton, MD, United States

2:35 p.m.
M&E NEEDS IN THE MOVE TOWARDS ELIMINATION: WHAT ADAPTATIONS WILL MERG PARTNERS NEED TO DEVELOP TO MEET THE INTENSIFIED NEEDS IN M&E AS COUNTRIES MOVE TOWARDS ELIMINATION?
Larry Slutsker
Centers for Disease Control and Prevention, Atlanta, GA, United States
Richard W. Steketee
Malaria Control and Evaluation Partnership in Africa (MACEPA)/PATH, Ferney, France

3:05 p.m.
DISCUSSION/SUMMARY

Symposium 36

Chemotherapeutic Strategies for Schistosomiasis

Bayside A
Monday, December 8, 1:30 p.m. – 3:15 p.m.

Schistosomiasis is a so-called neglected tropical disease, although almost 800 million people are at risk and more than 200 million individuals are infected. Individual treatment and community-based morbidity control relies on just one drug, namely praziquantel. The dependency on a single drug is an alarming situation, fueled by concern about the development and spread of resistance. Hence, alternative drugs are urgently needed. This symposium reviews some of the key advances in antischistosomal drug discovery now being undertaken by integrated public-private partnerships.

CHAIR
Jennifer Keiser
Swiss Tropical Institute, Basel, Switzerland
Jürg Utzinger
Swiss Tropical Institute, Basel, Switzerland

1:30 p.m.
THE HELMINTH DRUG INITIATIVE
Solomon Nwaka
World Health Organisation/TDR, Geneva, Switzerland

1:50 p.m.
METALOMOME AND KINOME APPROACHES FOR THE IDENTIFICATION OF DRUG TARGETS IN SCHISTOSOMA MANSONI
Guilherme Oliveira
Centro de Pesquisas Rene Rachou, Belo Horizonte, Brazil

2:10 p.m.
IDENTIFICATION OF NEW DRUG LEADS FOR THE CONTROL OF SCHISTOSOMIASIS
David L. Williams
Illinois State University, Normal, IL, United States

2:30 p.m.
DRUG DISCOVERY FOR SCHISTOSOMES: POTENTIAL GENE TARGETS AND SMALL MOLECULE LEADS
Conor R. Caffrey
Sandler Center, San Francisco, CA, United States

2:50 p.m.
NOVEL ANTISCHISTOSOMAL DRUGS: PIGGY BACKING FROM MALARIA DRUG DEVELOPMENT
Jennifer Keiser
Swiss Tropical Institute, Basel, Switzerland
### Symposium 37

**Update on the Control of Communicable and Tropical Diseases in Conflict-Affected Populations**

*Bayside BC*

**Monday, December 8, 1:30 p.m. – 3:15 p.m.**

Conflict-affected, refugee or internally displaced populations, pose a challenge for control of communicable and tropical diseases. Population mobility, lack of adequate water and sanitation, breakdown of health care services, insufficient resources, tenuous security and inadequate shelter can result in increased levels of morbidity and mortality and threat of epidemics. Adequate disease control involves addressing basic human needs for food, water, shelter and sanitation, which requires coordination and communication among numerous humanitarian relief agencies. This symposium addresses current challenges in providing health care to populations affected by conflicts.

**CHAIR**

Holly A. Williams  
*Centers for Disease Control and Prevention, Atlanta, GA, United States*

**1:30 p.m.**

**IMPACT OF VIOLENCE ON A HEALTHCARE SYSTEM – CASE REPORT OF POST-ELECTION VIOLENCE IN KENYA, JANUARY – MARCH 2008**

Susan Cookson  
*Centers for Disease Control and Prevention, Atlanta, GA, United States*

**1:55 p.m.**

**ACCESS TO AND QUALITY OF WATER AND SANITATION SERVICES IN REFUGEE SETTINGS**

Thomas Handzel  
*Centers for Disease Control and Prevention, Atlanta, GA, United States*

**2:20 p.m.**

**OPERATIONAL DEVELOPMENT OF HIS FOR REFUGEES: SCIENCE, SURVEILLANCE AND ACTION**

Basia Tomczyk  
*Centers for Disease Control and Prevention, Atlanta, GA, United States*

**2:45 p.m.**

**UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES STRATEGIC PLAN FOR MALARIA CONTROL**

Holly A. Williams  
*Centers for Disease Control and Prevention, Atlanta, GA, United States*

### Symposium 38

**Disease Eradication with the Forgotten Diseases: The NTDs and Their Progress Towards the Finish Line**

*Grand Ballroom A*

**Monday, December 8, 1:30 p.m. – 3:15 p.m.**

The eradication of smallpox was an unparalleled public health accomplishment. Since that time, there have been many other targets set for the next disease to be eradicated. Polio has been in center stage, but still faces several hurdles before the final goal is accomplished. Outside of the main fanfare are several of the neglected tropical diseases which have made slow but steady progress toward elimination and eradication goals. This symposium will look at the progress, challenges and future facing eradication of Guinea Worm, onchocerciasis, lymphatic filariasis and Human African Trypanosomiasis.

**CHAIR**

Julie Jacobson  
*Bill & Melinda Gates Foundation, Seattle, WA, United States*

Donald R. Hopkins  
*The Carter Center, Atlanta, GA, United States*

**1:30 p.m.**

**INTRODUCTION**

Julie Jacobson  
*Bill & Melinda Gates Foundation, Seattle, WA, United States*

**1:40 p.m.**

**INTRODUCTION**

Donald R. Hopkins  
*Carter Center, Atlanta, GA, United States*

**1:55 p.m.**

**GUINEA WORM ERADICATION: THE FINAL CHALLENGE**

Donald R. Hopkins  
*The Carter Center, Atlanta, GA, United States*

**2:15 p.m.**

**ONCHOCERCIASIS: PROGRESS FROM CONTROL TO ELIMINATION/ERADICATION**

Frank O. Richards  
*The Carter Center, Atlanta, GA, United States*

**2:35 p.m.**

**LYMPHATIC FILARIASIS: PROGRESS IN ELIMINATION AND NEW CHALLENGES**

Eric Ottesen  
*The Taskforce for Child Survival and Development, Atlanta, GA, United States*

**2:55 p.m.**

**HAT: NEW SETBACKS AND OPPORTUNITIES**

Jean Jannin  
*World Health Organization, Geneva, Switzerland*
Scientific Session 39

**Schistosomiasis I – Epidemiology/Control**

**Grand Ballroom B**

**Monday, December 8, 1:30 p.m. – 3:15 p.m.**

**CHAIR**

Jennifer F. Friedman  
Brown University, Providence, RI, United States  
Joanne P. Webster  
Imperial College Faculty of Medicine, London, United Kingdom

**1:30 p.m.**

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**329**

**ZOO NOTIC TRANSMISSION OF SCHISTOSOMA JAPONICUM IN CHINA AND THE PHILIPPINES**

James W. Rudge, Da-bing Lu, Maria-Gloria Basanez, Tianping Wang, Helene Carabin, Ernesto Balolong Jr., Stephen T. McGarvey, Joanne P. Webster  
1: Imperial College London, London, United Kingdom  
2: Anhui Institute of Parasitic Diseases, Wuhu, China  
3: University of Oklahoma, Oklahoma City, OK, United States  
4: Research Institute for Tropical Medicine, Muntinlupa, Philippines  
5: Brown University, Providence, RI, United States

**1:45 p.m.**

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**330**

**IMPACT OF INTENSE, LONGITUDINAL RETREATMENT WITH PRAZIQUANTEL ON CURE RATES OF SCHISTOSOMIASIS MANSONI IN A COHORT OF OCCUPATIONALLY EXPOSED ADULTS IN WESTERN KENYA**

Carla L. Black, Michelle L. Steinauer, Pauline M. Mwinzi, W. Evan Secor, Diana M. Karanja, Daniel G. Colley  
1: University of Georgia, Athens, GA, United States  
2: University of New Mexico, Albuquerque, NM, United States  
3: University of Oklahoma, Oklahoma City, OK, United States  
4: Centers for Disease Control and Prevention, Atlanta, GA, United States

**2 p.m.**

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**331**

**RELATIONSHIP BETWEEN MATERNAL ANEMIA OF INFLAMMATION AND BIRTH OUTCOMES IN S. JAPONICUM ENDEMIC VILLAGES OF LEYTE, THE PHILIPPINES**

Jennifer F. Friedman, Luz P. Acosta, Mario A. Jiz, Blanca Jarilla, David Margolius, Courtney Olson, Mary Paz Urbina, Remigio M. Olveda, Jonathan D. Kurtis  
1: Center for International Health Research, Lifespan Hospital/Brown University, Providence, RI, United States  
2: Research Institute of Tropical Medicine, Manila, Philippines

**2:15 p.m.**

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**332**

**ESTIMATION OF ATTRIBUTABLE RISK OF ANEMIA DUE TO SCHISTOSOMIASIS IN WESTERN KENYA**

Susan P. Montgomery, Erick Muok, Pauline M. Mwinzi, John M. Williamson, W. Evan Secor, Diana M. Karanja  
1: Centers for Disease Control and Prevention, Atlanta, GA, United States  
2: Kenya Medical Research Institute, Kisumu, Kenya

**2:30 p.m.**

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**333**

**SCHISTOSOMIASIS AMONG YOUNG CHILDREN IN WESTERN KENYA**

Jennifer R. Verani, Bernard Abudho, Susan P. Montgomery, Pauline M. Mwinzi, Hillary L. Shane, Sara E. Butler, Diana M. Karanja, William E. Secor  
1: Centers for Disease Control and Prevention, Atlanta, GA, United States  
2: Kenya Medical Research Institute, Kisumu, Kenya

**2:45 p.m.**

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**334**

**MATHEMATICAL MODELS FOR SCHISTOSOMIASIS TRANSMISSION DYNAMICS AND CONTROL IN SUB-SAHARAN AFRICA: LESSONS FROM KENYA AND UGANDA**

Michael D. French, Thomas S. Churcher, Jimmy Kihara, Joanne P. Webster, Maria-Gloria Basáñez  
1: Schistosomiasis Control Initiative, Imperial College London, London, United Kingdom  
2: Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom  
3: Kenya Medical Research Institute (KEMRI), Nairobi, Kenya

**3 p.m.**

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**335**

**INTEGRATING PROTOCOLS FOR MAPPING TRACHOMA AND URINARY SCHISTOSOMIASIS. CAN SURVEYS BE DONE SIMULTANEOUSLY?**

Jonathan D. King, Frank Richards, Abel Eigege, Nimzing Jip, John Umaru, Michael Deming, Deborah McFarland, Emmanuel Miri, Paul M. Emerson  
1: The Carter Center, Atlanta, GA, United States  
2: The Carter Center, Jos, Nigeria  
3: Centers for Disease Control and Prevention, Atlanta, GA, United States  
4: Emory University, Atlanta, GA, United States
Symposium 40
American Committee of Medical Entomology (ACME) I: Release of Modified Vectors: Strategies and Technical Feasibility

Grand Ballroom C
Monday, December 8, 1:30 p.m. – 3:15 p.m.

Twenty years ago, it was postulated that it would someday be possible to suppress certain vector-borne diseases through the release of vectors that were altered in such a way as to diminish the vector competence, lifespan or abundance of native populations. Rapid advances in molecular and genetic techniques have brought us to the threshold of that reality. Three general strategies have been developed: replacement of native vector populations with populations possessing reduced vector competence, shortening of vector longevity and suppression of vector abundance. This symposium examines the technical aspects of each strategy.

CHAIR
Jefferson A. Vaughan
University of North Dakota, Grand Forks, ND, United States

1:30 p.m.
REDUCING VECTOR COMPETENCE: THE MALARIA MODEL
Marcelo Jacobs-Lorena
Johns Hopkins School of Public Health, Baltimore, MD, United States

1:55 p.m.
CREATING GENETIC ELEMENTS TO DRIVE POPULATION REPLACEMENT
Bruce A. Hay
California Institute of Technology, Pasadena, CA, United States

2:20 p.m.
REDUCING VECTOR ABUNDANCE AND/OR CAPACITY WITH BACTERIAL ENDOSYMBIOTS
Stephen L. Dobson
University of Kentucky, Lexington, KY, United States

2:45 p.m.
REDUCING VECTOR ABUNDANCE WITH IMPROVED STERILE INSECT TECHNIQUE
Luke Alphey
Oxitec Limited, Oxford, United Kingdom

Symposium 41
Global Strategies for Using Antimalarial Drugs: Making the Most of a Precious Resource

Grand Ballroom D
Monday, December 8, 1:30 p.m. – 3:15 p.m.

The idea of using only combinations of drugs — as opposed to monotherapy — to treat cases of malaria took hold only a few years ago, decades after the same concept had become ingrained in the treatment of TB and had been the norm almost since the beginning of the HIV treatment era. Making sure everyone gets a drug combination for malaria treatment (preferably a coformulation, i.e., two or more drugs in one pill) is only the first step, however. This symposium will examine malaria drug policies that could be instituted to ensure that malaria drugs remain effective for as long as possible, while curing the greatest numbers. The results of modeling will be presented showing that deliberate use of more than one drug for first-line treatment of uncomplicated malaria in a population has a proportionately greater effect than would be predicted on the basis of simple drug pressure alone (that is, the fewer the courses of a drug used, the longer it would be expected to remain effective). A policy of “multiple first-line therapy” (MFT) would present practical challenges in malaria-endemic countries, where standard practice has been to name a single first-line treatment. The developing Affordable Medicines Facility-malaria (AMFm) may play a role in facilitating a transition to MFT.

CHAIR
Hellen Gelband
Resources for the Future, Washington, DC, United States
Ramanan Laxminarayan
Resources for the Future, Washington, DC, United States

1:30 p.m.
INTRODUCTION
Ramanan Laxminarayan
Resources for the Future, Washington, DC, United States

1:45 p.m.
MULTIPLE FIRST-LINE THERAPIES (MFT) FOR MALARIA: WHAT’S IT ALL ABOUT AND WHY WILL IT HELP SAVE MALARIA DRUGS
David Smith
University of Florida, Gainsville, FL, United States

2:10 p.m.
ANTIMALARIAL RESISTANCE MONITORING: USING SURVEILLANCE TO INFORM DECISIONS
Christopher V. Plowe
University of Maryland School of Medicine, Baltimore, MD, United States

2:35 p.m.
PRACTICAL CHALLENGES IN A MALARIA DRUG POLICY CHANGE TO MFT: FROM CONCEPT TO REALITY
Ambrose O. Talisuna
Medicines for Malaria Venture, Kampala, Uganda

3 p.m.
AMFM — THE AFFORDABLE MEDICINES FACILITY — MALARIA: HOW IT CAN HELP THE IMPLEMENTATION OF MFT POLICIES
Hellen Gelband
Resources for the Future, Washington, DC, United States
Symposium 42

Advances Towards Understanding Mechanisms of Pathology and Protection in Trypanosomatid Infections

Grand Ballroom E
Monday, December 8, 1:30 p.m. – 3:15 p.m.

Recent advances in both animal models and human studies of trypanosomatid infections have helped us gain a better understanding of the factors that control generation of protective and pathogenic immune responses in these important parasitic diseases that affect hundreds of millions worldwide. In particular, infection with *T. cruzi* (causative agent for Chagas disease) leads to a complex series of interactions with the host that can lead to the development of an indeterminate clinical form (mild) or cardiac disease (the most severe clinical form). Similarly, infection with one species of *Leishmania* can lead to relatively mild clinical forms such as cutaneous disease, or to severe clinical forms like mucosal or disseminated disease. Recent data points to important factors for development of protective or pathogenic responses in these diseases, as well as for development of effective memory responses. Our symposium will address these issues in both animal models and human infection with *T. cruzi* or *Leishmania*, providing insights to these and other diseases.

CHAIR
Kenneth J. Gollob
Federal University of Minas Gerais, Belo Horizonte, Brazil

1:30 p.m.

ADIPOSE TISSUE AND CHAGAS DISEASE: IS THERE A CONNECTION?
Herbert B. Tanowitz
Albert Einstein College of Medicine, New York, NY, United States

1:55 p.m.

GENERATION OF PROTECTIVE AND PATHOGENIC IMMUNE RESPONSES IN HUMAN CHAGAS DISEASE
Walderez O. Dutra
Federal University of Minas Gerais, Belo Horizonte, MG, Brazil

2:20 p.m.

MECHANISMS IMPORTANT FOR GENERATION OF EFFECTOR AND CENTRAL MEMORY RESPONSES IN ANIMAL MODELS OF LEISHMANIA INFECTION
Phillip Scott
University of Pennsylvania, Philadelphia, PA, United States

2:45 p.m.

IMMUNOREGREULATION OF HUMAN LEISHMANIASIS AND IMPLICATIONS FOR TREATMENT
Edgar M. Carvalho
Federal University of Bahia, Salvador, BA, Brazil

Scientific Session 43

Malaria – Immunology II

Gallery
Monday, December 8, 3:45 p.m. – 5:30 p.m.

CHAIR
Chandy C. John
University of Minnesota Medical School, Minneapolis, MN, United States

John Waitumbi
Kenya Medical Research Institute, Kisumu, Kenya

3:45 p.m.

EXPERIMENTAL MALARIA INFECTION TRIGGERS RAPID EXPANSION OF NATURAL KILLER CELLS
Sunil Parikh, Charlie C. Kim, Joseph C. Sun, Alissa Myrick, Lewis L. Lanier, Philip J. Rosenthal, Joseph L. DeRisi
University of California-San Francisco, San Francisco, CA, United States

4 p.m.

SERUM VON WILLEBRAND FACTOR LEVELS EFFECTIVELY DISCRIMINATE BETWEEN CEREBRAL MALARIA AND UNCOMPPLICATED MALARIA
Gregory S. Park, Robert O. Opoka, Michael J. Boivin, Chandy C. John
1University of Minnesota, Minneapolis, MN, United States,
2 Makerere University, Kampala, Uganda, 3 Michigan State University, East Lansing, MI, United States

(ACMCIP Abstract)

4:15 p.m.

B CELL ACTIVITY IN CHILDREN WITH MALARIA
Jackson C. Korir, Ronald P. Taylor, John N. Waitumbi
1 Walter Reed Project/KEMRI, Kisumu, Kenya, 2 Department of Biochemistry and Molecular Genetics, University of Virginia School of Medicine, Charlottesville, VA, United States

(ACMCIP Abstract)
4:30 p.m.

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FUNCTIONAL ASSOCIATION BETWEEN RANTES-4151C/T PROMOTER POLYMORPHISM AND HIGH-DENSITY FALCIPARUM PARASITEMIA AMONG CHILDREN IN A HOLOENDEMIC MALARIA TRANSMISSION AREA

Tom Were¹, Collins Ouma¹, Greg C. Davenport², James B. Hittner², Michael F. Otieno¹, Alloys S. Orago¹, John M. Vulule⁶, John M. Ong’echa¹, Douglas J. Perkins⁷
¹University of New Mexico/KEMRI, Kisian, Kenya, ²University of Pittsburgh, Pittsburgh, PA, United States, ³Department of Psychology, College of Charleston, Charleston, SC, United States, ⁴Department of Pre-Clinical Sciences, School of Health Sciences, Kenyatta University, Nairobi, Kenya, ⁵National AIDS Control Council, Nairobi, Kenya, ⁶Centre for Global Health Research, Kenya Medical Research Institute, Kisian, Kenya, ⁷Division of Infectious Diseases, University of New Mexico School of Medicine, New Mexico, NM, United States

(ACMCIP Abstract)

4:45 p.m.

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LEUCOCYTES AND CYTOKINE PRODUCTION IN PATHOGENESIS OF SEVERE MALARIA IN MALAWIAN CHILDREN

Wilson L. Mandala¹, Steve A. Ward², Malcolm E. Molyneux³, Calman A. MacLennan⁴
¹College of Medicine, Blantyre, Malawi, ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom, ³Malawi Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi, ⁴MRC Centre for Immune Regulation, University of Birmingham, Birmingham, United Kingdom

5 p.m.

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CYTOKINE PROFILE IN VARIOUS SEVERE FORMS OF FALCIPARUM MALARIA IN CENTRAL INDIA

Vidhan Jain¹, Sukla Biswas¹, A. P. Dash¹, Naomi Lucchi¹, Neeru Singh⁵
¹National Institute of Malaria Research FS (ICMR), Jabalpur, India, ²National Institute of Malaria Research (ICMR), New Delhi, India, ³National Institute of Malaria Research (ICMR), New Delhi, India, ⁴Malaria Branch, Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁵Regional Medical Research Center for Tribals (ICMR), Jabalpur, India

(ACMCIP Abstract)

5:15 p.m.

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ASSOCIATION OF LOW CYTOKINE GENE POLYMORPHISMS IN RESISTANCE AND SUSCEPTIBILITY TO PLASMODIUM FALCIPARUM INFECTION IN ZIMBABWE

Takafira Mduluza¹, Davison Sangweme¹, Nicholas Midzi¹, Sekesai Zinyowera¹, Godfree Mlambo¹, Susan L. Mutambu³, Nribhay Kumar⁵
¹University of Zimbabwe, Harare, Zimbabwe, ²National Institutes of Health Research, Harare, Zimbabwe, ³Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

(ACMCIP Abstract)

Exhibit Hall Open

Napoleon Ballroom
Monday, December 8, 3 p.m. – 4 p.m.

Coffee Break

Napoleon Ballroom
Monday, December 8, 3:15 p.m. – 3:45 p.m.

Symposium 44

Malnutrition and Infection in the Tropics

Rhythms I

Monday, December 8, 3:45 p.m. – 5:30 p.m.

The synergy of malnutrition between malnutrition and infections accounts for 55 percent of the deaths among children in developing countries. The epidemiologic scope of this problem is continuing to expand with recent recognition that malnutrition may contribute to susceptibility to malaria and amebiasis. The mechanisms of the immunodeficiency of malnutrition are also poorly understood. Evolving data suggest that adipokines, such as such as leptin and adiponectin, may influence susceptibility to infection.

CHAIR
Gregory M. Anstead
University of Texas Health Science Center, San Antonio, TX, United States
Richard L. Guerrant
University of Virginia, Charlottesville, VA, United States

3:45 p.m.

MALNUTRITION AND INFECTION: A GLOBAL PROBLEM

Richard L. Guerrant
University of Virginia, Charlottesville, VA, United States

4:10 p.m.

NUTRITIONAL STATUS IN SCHISTOSOMIASIS AND MALARIA: RESOLVING THE CONTROVERSIES

Jennifer F. Friedman
Brown University, Providence, RI, United States

4:35 p.m.

MALNUTRITION AND SUSCEPTIBILITY TO AMEBIASIS

William A. Petri
University of Virginia, Charlottesville, VA, United States
5 p.m.
NUTRIKINES: MOLECULAR LINKS BETWEEN NUTRITIONAL STATUS AND THE IMMUNE SYSTEM
Gregory M. Anstead
University of Texas Health Science Center, San Antonio, TX, United States

Symposium 45
Update on the Pharmacokinetics, Safety and Efficacy of ACTs and Mefloquine for the Treatment and Prevention of Malaria in Pregnancy

Rhythms III/III
Monday, December 8, 3:45 p.m. – 5:30 p.m.
Experts in the field of malaria in pregnancy will provide updates on recent progress of their malaria in pregnancy studies: 1) the latest pharmacokinetics data on the use of antimalarials in pregnancy; 2) a review of the safety of artemisinins in pregnancy from the Thai-Burmese border; 3) a recently completed trial on mefloquine for the intermittent preventive treatment of malaria in pregnancy in Benin; and 4) a trial on artemether-lumefantrine for the treatment of malaria in the second and third trimester of pregnancy in Uganda.

CHAIR
Jenny Hill
Malaria in Pregnancy Consortium, Liverpool School of Tropical Medicine, United Kingdom
Feiko ter Kuile
Malaria in Pregnancy Consortium, Liverpool School of Tropical Medicine, Liverpool, United Kingdom

3:45 p.m.
AN UPDATE ON THE PHARMACOKINETICS OF ANTIMALARIALS IN PREGNANCY
Francois Nosten
Shoklo Malaria Research Institute, Mae Sod, Thailand

4:10 p.m.
A REVIEW OF THE SAFETY OF ARTEMISININS IN PREGNANCY: EXPERIENCE FROM THE THAI-BURMESE BORDER
Rose McGready
Shoklo Malaria Research Institute, Mae Sod, Thailand

4:35 p.m.
A TRIAL ON MEFLOQUINE FOR THE INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY IN BENIN.
Michel Cot
Institut de Recherche pour le Développment, Paris, France

5 p.m.
ARTEMETHER-LUMEFANTRINE FOR THE TREATMENT OF MALARIA IN SECOND AND THIRD TRIMESTER PREGNANCY: A TRIAL FROM UGANDA
Patrice Piola
Epicentre, Medecins sans Frontiere, Mbarara, Uganda

Scientific Session 46
Malaria – Molecular Markers of Drug Resistance

Napoleon A123
Monday, December 8, 3:45 p.m. – 5:30 p.m.

CHAIR
Andrea M. McCollum
Centers for Disease Control and Prevention, Atlanta, GA, United States
Daouda Ndiaye
Cheikh Anta Diop University, Dakar, Senegal

3:45 p.m.
GENETIC HITCHHIKING, SELECTIVE SWEEPS, AND MULTIPLE ORIGINS OF DRUG RESISTANT PLASMODIUM FALCIPARUM IN THREE DISTINCT POPULATIONS
Andrea M. McCollum¹, Venkatachalam Udhayakumar¹, Ananias A. Escalante²
¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Arizona State University, Tempe, AZ, United States

4 p.m.
DISPERsal OF DRUG RESISTANT DHPS REVEALS REGIONAL MIGRATION PATTERNS AMONG AFRICAN PLasMODIum FALCIPARUM
Richard Pearce, Cally Roper
London School of Hygiene and Tropical Medicine, London, United Kingdom

4:15 p.m.
FIVE-YEAR SURVEILLANCE OF MOLECULAR MARKERS OF PLasMODIum FALCIPARUM ANTIMALARIAL DRUG RESISTENCE IN KOROGWE DISTRICT, TANZANIA – ACCUMULATION OF THE 581G MUTATION IN THE PFdHPS GENE
Michael Alifrangis¹, John P. Lusingu¹, Bruno Mmbando¹, Michael B. Dalgaard¹, Lasse S. Vestergaard¹, Deus Ishengoma², Insaf F. Khalil¹, Thor G. Theander¹, Martha M. Lemnge¹, Ib C. Bygbjerg¹
¹Centre for Medical Parasitology, University of Copenhagen and Rigshospitalet, Denmark, ²National Institute for Medical Research, Tanga Centre, Tanga, United Republic of Tanzania
4:30 p.m.

THE INTRA-HOST DYNAMICS OF PFCRT AND PFMDR-1 ALLELES FOLLOWING ANTIMALARIAL TREATMENT IN SUDANESE PATIENTS

Nahla B. Gadalla¹, Ishag Adam², David C. Warhurst¹, Badria B. El-Sayed³, Colin J. Sutherland¹
¹London School of Hygiene and Tropical Medicine, London, United Kingdom, ²Faculty of Medicine, University of Khartoum, Khartoum, Sudan, ³Tropical Medicine Research Institute, Khartoum, Sudan

4:45 p.m.

META-ANALYSIS OF MOLECULAR SURVEILLANCE STUDIES EXAMINING SULPHADOXINE-PYRIMETHAMINE (SP) RESISTANCE MARKERS IN AFRICAN P. FALCIPARUM POPULATIONS

Sankar Sridaran, Luke M. Syphard, John W. Barnwell, Venkatachalam Udhayakumar
Centers for Disease Control and Prevention, Atlanta, GA, United States

5 p.m.

EMERGENCE OF A DHFR MUTATION CONFERRING HIGH-LEVEL DRUG RESISTANCE IN PLASMODIUM FALCIPARUM POPULATIONS FROM SOUTHWEST UGANDA

Caroline Lynch
London School of Hygiene and Tropical Medicine, London, United Kingdom

5:15 p.m.

EVALUATION OF EX VIVO DRUG SENSITIVITY FROM PLASMODIUM FALCIPARUM-INFECTED SENEGALESE PATIENTS

Daouda Ndiaye¹, Vishal Patel¹, Johanna Patricia Daily¹, Alisson Demas¹, Omar Ndir¹, Souleymane Mboup¹, Dyann F. Wirth²
¹Cheikh Anta Diop University, Dakar, Senegal, ²Immunology and Infectious Diseases, Harvard School of Public Health, Boston, MA, United States

4:30 p.m.

Science Session 47

Kinetoplastida I: Molecular Biology and Immunology

Maurepas
Monday, December 8, 3:45 p.m. – 5:30 p.m.

CHAIR
Vivian Bellofatto
New Jersey Medical School, Newark, NJ, United States

3:45 p.m.

CHANGES IN MICRORNAS EXPRESSED BY HUMAN MACROPHAGES AS A RESULT OF LEISHMANIA CHAGASI INFECTION

Anne M. Dickson¹, Anton McCaffrey¹, Mary E. Wilson²
¹Department of Internal Medicine, University of Iowa, Iowa City, IA, United States, ²Departments of Internal Medicine, Microbiology and Epidemiology, University of Iowa and the VA Medical Center, Iowa City, IA, United States

3:50 p.m.

A NOVEL HIT-DOMAIN PROTEIN HYDROLyzES M7GPPPM662‘A, WHICH IS A TRYPANOSOME-SPECIFIC HYPERMETHYLATED CAP STRUCTURE

Vivian Bellofatto
New Jersey Medical School, Newark, NJ, United States

4 p.m.

METABOLIC PROFILING OF CO-INFECTION OF TRYPANOSOMA BRUCEI BRUCEI STRAINS IN MICE

Jia Li¹, Jasmina Saric², Yulan Wang¹, Juerg Utzinger², Oliver Balmer², Elaine Holmes²
¹Imperial College London, London, United Kingdom, ²Swiss Tropical Institute, Basel, Switzerland
4:30 p.m.

APPLICATION OF A BIOLUMINESCENT LEISHMANIA MAJOR IMAGING MODEL TO THE DEVELOPMENT OF A NOVEL KILLED BUT METABOLICALLY ACTIVE WHOLE CELL VACCINE
Jacquelyn N. Haskell1, Ron A. Birnbaum1, Veena Vanchinathan1, Tamiko Konishi1, Stephen M. Beverley2, Kevin W. Bruhn1, Noah Craft1
1Los Angeles Biomedical Research Institute, Division of Dermatology, Harbor-UCLA Medical Center, UCLA School of Medicine, Torrance, CA, United States, 2Washington University School of Medicine, St. Louis, MO, United States

4:45 p.m.

PARASITOPHOROUS VACUOLES THAT HARBOR LEISHMANIA PARASITES INTERACT EXTENSIVELY WITH THE HOST ENDOPLASMIC RETICULUM.
Blaise Ndjamen, Peter Kima
University of Florida, Gainesville, FL, United States
(ACMCIP Abstract)

5 p.m.

NEW INSIGHTS IN THE PATHOGENESIS OF L. BRAZILIENSIS INFECTION: ROLE OF TNF-α, IFN-γ AND IL-17
Olivia Bacellar1, Marcia Nascimento1, Thiago M. Cardoso1, Walker Nonoato1, Shelene Poetker1, Paulo L. Machado1, Edward Pearce1, Philip Scott1, Edgar M. Carvalho1
1Federal University of Bahia, Salvador, Brazil, 2University of Pennsylvania, Philadelphia, PA, United States

5:15 p.m.

TUBULIN-BASED SUBUNIT VACCINE CANDIDATES SHOW PROMISE IN ANIMAL STUDIES
Elisabeth Knapp1, Rosemary Flores1, Kirby Steger1, George Lubega1, Ann Nantezza2, Monica Namayanja3, Roger Prichard1, Douglas Holtzman1, Vidadi Yusibov1
1Fraunhofer USA Inc., Center for Molecular Biotechnology, Newark, DE, United States, 2Department for Veterinary Parasitology and Microbiology, Makerere University, Kampala, Uganda, 3Institute of Parasitology, McGill University, Montreal, QC, Canada, 4Bill and Melinda Gates Foundation, Seattle, WA, United States

Symposium 48

Research Capacity Building in the Tropics

BAYSIDE A
Monday, December 8, 3:45 p.m. – 5:30 p.m.

For decades, international research has been an important mechanism to build research capacity in the tropics. However, new investigators, especially foreign researchers, face many difficulties establishing themselves as researchers in their home countries and are often tempted to migrate to more favorable settings in developed countries. Debate began at an international symposium in 2004, and continued during the review of long-term training programs and a revision of the peer review process at the U.S. National Institutes of Health. Important regional experiences have taken place in the tropics, and now it is crucial to disseminate available evidence of their results and impact. Mechanisms to assist recent foreign graduates to re-establish at their home countries after international training deserve special attention, such as re-entry grants and international young investigator awards.

CHAIR
Andres G. Lescano
U.S. Naval Medical Research Center Detachment, Lima, Peru
Joel M. Montgomery
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

NATIONAL INSTITUTES OF HEALTH/FOGARTY INTERNATIONAL CENTER SUPPORT TO BUILD RESEARCH CAPACITY
Barbara Sina
Fogarty International Center, National Institutes of Health, Bethesda, United States

4:10 p.m.

BUILDING RESEARCH CAPACITY IN THE TROPICS: AN AFRICAN EXPERIENCE
John M. Ong’echa
University of Pittsburgh/KEMRI Laboratories of Parasitic and Viral Diseases, Nairobi, Kenya

4:35 p.m.

BUILDING RESEARCH CAPACITY IN INDIA
Gagandeep Kang
Christian Medical College, Vellore, India

5 p.m.

CRAFTING GOLDEN PARACHUTES: THE PERU EXPERIENCE
Andres G. Lescano
U.S. Naval Medical Research Center Detachment, Lima, Peru
Late Breaker Abstract Session 49

Late Breakers in Clinical Tropical Medicine

Bayside BC

Monday, December 8, 3:45 p.m. – 5:30 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

David McNeeley
Tibotec, Teaneck, NJ, United States

Late Breaker Abstract Session 50

Late Breakers in Basic Science/Molecular Biology

Grand Ballroom A

Monday, December 8, 3:45 p.m. – 5:30 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
Stefan Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

Greg Ebel
University of New Mexico School of Medicine, Albuquerque, NM, United States

Scientific Session 51

Schistosomiasis II – Immunology/Pathology

Grand Ballroom B

Monday, December 8, 3:45 p.m. – 5:30 p.m.

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

Shona Wilson
University of Cambridge, Cambridge, United Kingdom

3:45 p.m.

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THE EFFECT OF SNP VARIANTS IN THE 3’-UTR REGION OF IL-5 ON GENE TRANSCRIPTION AND MRNA STABILITY AND THEIR ROLE IN SYMPTOMATIC INFECTION WITH SCHISTOSOMA JAPONICUM

Magda K. Ellis1, Yuesheng Li1, Honggen Chen2, Donald P. McManus3
1QIMR, Brisbane, Australia, 2Jiangxi Institute of Parasitic Diseases, Nanchang, China

4 p.m.

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ASSOCIATION OF THE GENE POLYMORPHISMS IFN-γ +874 AND IL-13 -1055 WITH PATTERNS OF REINFECTION WITH SCHISTOSOMA MANSONI

Michael R. Gatlin1, Carla L. Black1, Pauline N. Mwinzi4, W. Evan Secor2, Diana M. Kananj1, Daniel G. Colley3
1University of Georgia, Athens, GA, United States, 2Kenya Medical Research Institute, Kisumu, Kenya, 3Centers for Disease Control and Prevention, Atlanta, GA, United States

4:15 p.m.

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COMPARISON OF POTENTIALLY PROTECTIVE HUMAN TH2 RESPONSES AGAINST DIFFERENT SCHISTOSOME SPECIES

Shona Wilson1, Birgitte J. Vennervald2, Narics B. Kabatereine3, Moussa Sacko5, Gachuhi Kimani5, Eric Muchiri5, David W. Dunne1
1University of Cambridge, Cambridge, United Kingdom, 2DBL – Centre for Health Research and Development, Copenhagen, Denmark, 3Vector Control Division, Ministry of Health, Kampala, Uganda, 4Institut National de Recherche en Sante Publique, Bamako, Mali, 5Kenya Medical Research Institute, Nairobi, Kenya

4:30 p.m.

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THE ROLE OF HYGIENIC BATHING AFTER DEFECTION IN THE TRANSMISSION OF SCHISTOSOMA MANSONI

Sake J. de Vlas1, Seydou Sow2, Kim Vereecken1, Jozef Vercruysse3, Bruno Gryseels4, Katja Polman5
1Erasmus MC, Rotterdam, Netherlands, 2Region Medecale de St. Louis, St. Louis, Senegal, 3Institute of Tropical Medicine, Antwerp, Belgium, 4Faculty of Veterinary Medicine, Ghent, Belgium
The Antimalarials Market in Africa: Do We Know Enough?

**Symposium 53**

**American Committee of Medical Entomology (ACME) II: Release of Modified Vectors: Practical and Ethical Feasibility**

**Grand Ballroom C**

**Monday, December 8, 3:45 p.m. – 5:30 p.m.**

Twenty years ago, it was postulated that it would someday be possible to suppress certain vector-borne diseases through the release of vectors that were altered in such a way as to diminish the vector competence, lifespan or abundance of native populations. Rapid advances in molecular and genetic techniques have brought us to the threshold of that reality. This symposium examines the practical aspects of moving from controlled laboratory experiments to actual release of modified vectors in the field. But before that can happen, there are certain risks, ethical issues and social ramifications that need to be considered. This symposium will review the modeling efforts used to predict the likely outcomes of releasing modified vectors on disease transmission within endemic areas. It will also attempt to define how best to develop a rational approach towards risk assessment and help to crystallize our understanding of the ethical and social issues involved.

**CHAIR**

Jefferson A. Vaughan  
*University of North Dakota, Grand Forks, ND, United States*
3:45 p.m.
THE ANTIMALARIALS MARKET IN AFRICA: A CRITICAL NEED FOR KNOWLEDGE
Saul Walker
United Kingdom Department for International Development (DFID), London, United Kingdom

4 p.m.
HOW THE ABSENCE OF MARKET DATA IMPACTS ON ENDEMIC COUNTRY UPTAKE OF ACTS: AN ENDEMIC COUNTRY EXPERIENCE
Storn Kabuluzi
Ministry of Health, Lilongwe, Malawi

4:20 p.m.
STRUCTURING A FIVE-YEAR MARKET SURVEY PROGRAMME: ACT WATCH
Kate O’Connell
ACT Watch, PSI, Washington, United States

4:35 p.m.
UNDERSTANDING THE ANTIMALARIALS MARKET IN UGANDA: RESULTS OF THE MMV MARKET STUDY
Rosette Mutambi
HEPS Uganda, Kampala, Uganda

4:55 p.m.
PANEL DISCUSSION AND CONCLUDING REMARKS

Symposium 54
How PPPs Can Contribute to the Fight Against Most Neglected Diseases?

Grand Ballroom E
Monday, December 8, 3:45 p.m. – 5:30 p.m.
Aside from the three killers – malaria, TB and AIDS – some diseases are more than neglected. This symposium will explore a partnership engaged in the fight against some of the most neglected tropical diseases, including sleeping sickness, Leishmaniasis, Buruli ulcer and Chagas Disease. The synergistic method is the best with a renewed commitment to work together for the elimination of these diseases. This symposium will explain the step by step strategy, the field objectives, the logical implication of everybody, from research to community centers with one goal: to work altogether to eliminate some of the MND of the developing world.

CHAIR
Jean Jannin
World Health Organization, Geneva, Switzerland

Simon Croft
London School of Hygiene and Tropical Medicine, London, United Kingdom

3:45 p.m.
OUR COMMITMENT, IN PARTNERSHIP WITH THE WHO, TO FIGHT AGAINST MOST NEGLECTED DISEASES
Robert Sebbag
sanofi-aventis, Paris, France

4:05 p.m.
CONCEPT OF ELIMINATION OF SOME OF THE MOST NEGLECTED DISEASES
Jean Jannin
World Health Organization, Geneva, Switzerland

4:25 p.m.
CUTANEOUS LEISHMANIASIS: CHALLENGES AND OPPORTUNITIES
Alan J. Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

4:45 p.m.
SLEEPING SICKNESS: CHANGING OUR MIND FOR SUSTAINABLE CONTROL
Pere Perez-Simarro
World Health Organization, Geneva, Switzerland

5:05 p.m.
PANEL DISCUSSION
Anne Moore
Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

Plenary Session 55
Plenary Session II: Charles Franklin Craig Lecture

Grand Ballroom C
Monday, December 8, 6 p.m. – 6:45 p.m.
The Charles Franklin Craig Lecture is an honor bestowed on a distinguished worker in the field of tropical medicine.

CHAIR
Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

THE HUNT FOR THE RESERVOIR HOSTS OF MARBURG AND EBOLA VIRUSES
Robert Swanepoel
National Institute for Communicable Diseases, Sandringham, South Africa

Poster Session A Dismantle

Armstrong Ballroom
Monday, December 8, 7 p.m. – 8 p.m.
Satellite Symposium

From Field Experience to the Discovery of Antimalarials: Partnerships in Action

**Sponsored by sanofi-aventis**

**Gallery**

**Monday, December 8, 7 p.m. – 8:15 p.m.**

Sanofi-aventis and the Drugs for Neglected Diseases Initiative (DNDi) have in concert developed a fixed-dose combination of artesunate-amodiaquine ("ASAQ") that was launched in sub-Saharan Africa in 2007. This symposium aims to demonstrate how the partnership between sanofi-aventis and DNDi is evolving into a multi-pronged partnership with the objective to gather good quality data about existing antimalarials’ safety and effectiveness, and to continue the development of new antimalarials. More specifically, we will present how the partnership is proactively collecting safety and efficacy data information on ASAQ. We will also discuss how sanofi-aventis and its partners conduct a discovery and development program, including the rationale for the development of a new antimalarial candidate (bis-thiazolium, SAR97276). Currently, the partnership discovery and development programs boast several compounds, two of which have reached the clinical development stage.

**CHAIR**

Wilfred Mbacham
Biotechnologies Centre, University of Yaounde I, Yaounde, Cameroon

**REVIEW OF CLINICAL EXPERIENCE WITH THE ARTESUNATE-AMODIAQUINE FIXED-DOSE COMBINATION**

Milijana Randrianarivelojosia
Institut Pasteur, Madagascar, Madagascar

**EFFICACY AND SAFETY MONITORING IN THE FIELD: THE ARTESUNATE-AMODIAQUINE FIXED-DOSE COMBINATION MONITORING PLAN**

François Bompart
sanofi-aventis Access to Medicines, Paris, France

**NEW APPROACHES FOR THE TREATMENT OF SEVERE MALARIA: BIS-THIAZOLIUM SAR97276**

Henri Vial
University Montpellier, Montpellier, France

**THE SEARCH FOR NEW ANTIMALARIAL DRUGS: SANOFI-AVENTIS’ RESEARCH AND DEVELOPMENT PROGRAM**

Laurent Fraisse
sanofi-aventis, Toulouse, France

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Satellite Symposium

From Tourist to Expatriate: An Update on Risk and Prevention of Japanese Encephalitis

**Sponsored by Novartis Vaccines**

**Rhythms II/III**

**Monday, December 8, 7 p.m. – 8:15 p.m.**

A review of Japanese Encephalitis (JE), including epidemiology, case studies and consideration of JE vaccination; from past experience in Asia and the U.S. military, to the future outlook in travel.

**CHAIR**

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

**WELCOME AND INTRODUCTION**

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

**JE RISK ASSESSMENT IN THE TOURIST AND EXPATRIATE: A REVIEW OF EPIDEMIOLOGY, CASE STUDIES AND CONSIDERATIONS FOR PROPHYLAXIS**

Bradley A. Connor
Travel Health Services, New York, NY, United States

**JE VACCINATION: PAST SUCCESSES IN ASIA AND FUTURE OUTLOOK IN TRAVEL**

Elaine Jong
University of Washington, Edmonds, WA, United States

**JE VACCINATION IN THE U.S. MILITARY**

LTC Wayne E. Hachey
Director, Preventive Medicine, Office of the Assistant Secretary Of Defense (Health Affairs) Force Health Protection And Readiness, Falls Church, VA, United States
Satellite Symposium

Treating Malaria with Pyronaridine-Artesunate: Safety and Efficacy Results in Phase III Clinical Studies

Sponsored by Medicines for Malaria Venture and Shin Poong Pharmaceuticals

Grand Ballroom A

Monday, December 8, 7 p.m. – 8:15 p.m.

Choices of safe, effective and affordable antimalarials are limited. The co-sponsors of the symposium, Medicines for Malaria Venture and their partner, Shin Poong Pharmaceuticals Ltd, are dedicated to developing high-quality medicines appropriate for those living in disease endemic countries. The speakers will focus on presenting and discussing the clinical results of three Phase III clinical trials of this novel ACT combination which were carried out in Africa and Asia: A) The safety and efficacy of a fixed dose combination of Pyronaridine/Artesunate tablets compared to artemether/lumefantrine in children and adult patients with uncomplicated \( P. falciparum \) malaria; B) The safety and efficacy of a fixed dose combination of Pyronaridine/Artesunate granules (pediatric formulation) compared to artemether/lumefantrine crushed tablets in pediatric patients with uncomplicated \( P. falciparum \) malaria; C) The safety and efficacy of a fixed-dose combination of Pyronaridine/Artesunate tablets compared to chloroquine in children and adult patients with uncomplicated \( P. vivax \) malaria.

CHAIR
Antoinette Tshefu
University of Kinshasa, Kinshasa, Congo
Stephan Duparc
Medicines for Malaria Venture, Geneva, Switzerland

PYRONARIDINE-ARTESUNATE VS. ARTEMETHER/LUMEFANTRINE: EFFICACY IN MALARIA PATIENTS WITH UNCOMPPLICATED ACUTE \( P. FALCIPARUM \) MALARIA: RESULTS FROM A PIVOTAL PHASE III TRIAL
Kassoum Kayentao
MRTC/FMPOS, Bamako, Mali

SAFETY IN ACUTE \( P. FALCIPARUM \) MALARIA PATIENTS TREATED WITH EITHER PYRONARIDINE-ARTESUNATE OR ARTEMETHER/LUMEFANTRINE IN A PIVOTAL PHASE III TRIAL
Antoinette Tshefu
University of Kinshasa, Kinshasa, Congo

TREATMENT OF PEDIATRIC PATIENTS WITH UNCOMPPLICATED ACUTE \( P. FALCIPARUM \) MALARIA WITH PYRONARIDINE-ARTESUNATE GRANULES OR CRUSHED TABLET OF ARTEMETHER/LUMEFANTRINE IN A PHASE III CONTROLLED TRIAL
Riccardo Thompson
Instituto Nacional de Saude, Maputo, Mozambique

TREATMENT OF \( P. VIVAX \) PATIENTS WITH PYRONARIDINE-ARTESUNATE OR CHLOROQUINE IN A CONTROLLED PHASE III TRIAL
Emiliana Tjitra
National Institute of Malaria Research, Jakarta, Indonesia

Satellite Symposium

Artemether/Lumefantrine Continues to Demonstrate Excellent Efficacy and Safety

Sponsored by Novartis Pharma AG.

Grand Ballroom D

Monday, December 8, 7 p.m. – 8:15 p.m.

Clinical development of Artemether/Lumefantrine (A/L) led to registration by several stringent national drug regulatory authorities. Since the first approvals in 1999, further clinical work has been undertaken to improve the dosing regimen and to investigate the efficacy and safety of A/L in children with a body weight of >5 kg, leading to registration for treatment of this important patient group in 2005. The clinical program to profile A/L in the most vulnerable patient populations is ongoing. A prospective observational study in pregnant women was conducted, comparing the safety of sulfadoxine pyrimethamine (SP) vs. A/L in women exposed to A/L. In parallel, and with a view to ease the administration of A/L to infants and young children, a new formulation was developed in the form of a sweet-flavored dispersible tablet. This symposium will provide a comprehensive overview of the data collected from several clinical trials and observational studies investigating both the efficacy and safety of the regular and the dispersible A/L tablet.

CHAIR
Zul Premji
Muhimbili University, Department of Parasitic Infections, Dar es Salaam, United Republic of Tanzania.

POOLED EFFICACY AND SAFETY DATA IN ADULTS AND CHILDREN
Michael M. Makanga
European and Developing Countries Clinical Trials, Cape Town, South Africa

ARTEMETHER/LUMEFANTRINE DISPERSIBLE FORMULATION: PHARMACOKINETIC/PHARMACODYNAMIC AND FOOD EFFECT DATA FROM PHASE III TRIALS
Abdoulaye Djimde
University of Bamako, Bamako, Mali

ESTABLISHING A PREGNANCY REGISTRY TO ASSESS THE IMPACT OF ARTEMETHER/LUMEFANTRINE IF TAKEN DURING PREGNANCY
Christine Manyando
Tropical Diseases Research Centre, Ndola, Zambia.

DEVELOPING EFFECTIVE TRAINING MATERIALS FOR HEALTHCARE WORKERS
Ane E. Haaland
University of Oslo, Fjellstrand, Norway
**ASTMH 57th Annual Meeting**

**Tuesday, December 9**

**Registration**
Napoleon Ballroom
Tuesday, December 9, 7 a.m. – 5 p.m.

**Cyber Cafe**
Lagniappe
Tuesday, December 9, 7 a.m. – 5 p.m.

**Speaker Ready Room**
Nottoway
Tuesday, December 9, 7 a.m. – 6 p.m.

**Education Committee Meeting**
Salon 816
Tuesday, December 9, 7 a.m. – 8 a.m.

**Journal Editorial Board Meeting**
Salon 817/821
Tuesday, December 9, 7 a.m. – 8 a.m.

**Clinical Group Past Presidents Meeting**
Salon 824
Tuesday, December 9, 7 a.m. – 8 a.m.

**Breakfast Session 55A**
The Bill & Melinda Gates Foundation’s Strategy on Neglected Tropical Diseases
Grand Ballroom D
Tuesday, December 9, 2008 7 a.m. - 7:50 a.m.

Staff from the Bill & Melinda Gates Foundation will share the Foundation’s strategy on combating the following seven diseases, often referred to as Neglected Tropical Diseases (NTDs): Cysticercosis; Human African Trypanosomiasis; Guinea Worm; Lymphatic filariasis; Onchocerciasis; Schistosomiasis; Soil-transmitted helminthes (Ascariasis, Hookworm infection and Trichuriasis); Trachoma; and Visceral Leshmaniasis. The Foundation will discuss how it approaches combating NTDs, why combating these diseases is a priority, what select grantees are doing in support of the program’s objectives and what the Foundation hopes to accomplish in the long term. A question and answer period will follow. A light breakfast will be served.

**Press Room**
Ellendale/Evergreen
Tuesday, December 9, 7:30 a.m. – 6:30 p.m.

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**Symposium 56**
Pathophysiology, Pathology and Management of Severe Malaria

**Gallery**
Tuesday, December 9, 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 J. White
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand
Malcolm E. Molyneux
Blantyre Malaria Project, Blantyre, Malawi

**8 a.m.**
THE PATHOLOGY OF SEVERE MALARIA
Gareth Turner
Nuffield Department of Pathology, Oxford, United Kingdom

**8:20 a.m.**
THE PATHOLOGY OF SEVERE MALARIA
Steve Kamiza
University of Malawi, College of Medicine, Malawi, Malawi

**8:40 a.m.**
PATHOPHYSIOLOGY AND CLINICAL FEATURES OF SEVERE MALARIA IN MALAWIAN CHILDREN
Terrie Taylor
Michigan State University, Michigan, United States

**9 a.m.**
PATHOPHYSIOLOGICAL AND CLINICAL FEATURES OF SEVERE MALARIA IN ADULTS
Nicholas P. Day
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

**9:15 a.m.**
MANAGEMENT OF SEVERE MALARIA
Arjen Dondorp
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

**9:30 a.m.**
GENERAL DISCUSSION AND QUESTIONS
Malcolm Molyneux
Blantyre Malaria Project, Blantyre, Malawi
Symposium 57

Operation Research During Control of Schistosomiasis in Africa

Rhythms I
Tuesday, December 9, 8 a.m. – 9:45 a.m.

Since 2003, the Schistosomiasis Control Initiative (SCI) has assisted eight sub-Saharan African countries to develop sustainable schistosomiasis morbidity control programs. The monitoring and evaluation plan involves annual follow up of the cohorts and is therefore generating data to prove whether the control objectives have been met. Two speakers will present results which assess the health impact of control programs on a large scale in several countries, including infection status for *Schistosoma mansoni* and *Schistosoma haematobium*, haemoglobin levels, anaemia, nutritional status, ultrasound and clinical examination morbidity, before and after chemotherapeutic treatment. The integration of preventive chemotherapy programs targeting multiple neglected tropical diseases (NTDs) with similar strategic approaches offers further opportunities for estimation of health outcomes of integrated programs and some preliminary results will be presented. The next speaker will discuss how large-scale chemotherapeutic control programs exert prolonged new selection pressures on parasites with the resulting fear of the emergence of drug resistance. It will be shown that population genetic studies on schistosomes using recently developed neutral microsatellites can provide insights into the effects of such mass chemotherapeutic control programs and the transmission and clinical processes of the disease. Results will be presented for the population genetics of both *S. mansoni* and *S. haematobium* from several sub-Saharan countries. Finally, knowing that the pattern of human helminth infections, such as schistosomiasis, within a community, typically display heterogeneities in infection rates, infection intensity and development of morbidity, the final presenter will propose that capturing these heterogeneities is crucial in order to more accurately monitor control programs and predict their future course.

CHAIR
Alan Fenwick
*Imperial College London, London, United Kingdom*

Peter J. Hotez
*The George Washington University, Washington, United States*

8 a.m.

INTRODUCTION
Alan Fenwick
*Imperial College London, London, United Kingdom*

Peter J. Hotez
*The George Washington University, Washington, United States*

8:20 a.m.

MONITORING AND EVALUATION OF SCHISTOSOMIASIS AND INTEGRATED CONTROL PROGRAMS IN SUB-SAHARAN AFRICA
Artemis Koukounari
*Schistosomiasis Control Initiative, London, United Kingdom*

8:40 a.m.

PREDICTORS OF ANAEMIA IN ZAMBIA
Nadine Seward
*Schistosomiasis Control Initiative, Imperial College Faculty of Medicine, London, United Kingdom*

9 a.m.

POPULATION GENETICS OF *S. MANSONI* AND *S. HAEMATOBIUM* LINKED TO PRAZIQUANTEL DRUG PRESSURE IN AFRICA
Alice Norton
*Schistosomiasis Control Initiative, Imperial College London, London, United Kingdom*

9:20 a.m.

THE DEVELOPMENT OF SCHISTOSOMIASIS TRANSMISSION MODELS: CAPTURING INHERENT HETEROGENEITIES
Michael French
*Schistosomiasis Control Initiative, London, United Kingdom*

Symposium 58

Plasmodium-Mosquito Interactions

Rhythms III/III
Tuesday, December 9, 8 a.m. – 9:45 a.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*

8 a.m.

A MASTER TRANSCRIPTION FACTOR THAT CONTROLS GENE EXPRESSION IN THE MOSQUITO-INVASIVE STAGE OF MALARIA PARASITES
Masao Yuda
*Mie University, Mie, Japan*

8:25 a.m.

THE MOLECULAR REPERTOIRE OF MOSQUITO HEMOCYTES AND THEIR INFLUENCE OF MALARIA PARASITE TRANSMISSION
Kristin Michel
*Kansas State University, Manhattan, KS, United States*

8:50 a.m.

HOW DOES PLASMODIUM EVADE THE MOSQUITO’S IMMUNE SYSTEM?
Carolina Barillas-Mury
*National Institutes of Health, Rockville, MD, United States*

9:15 a.m.

VIRAL PARATRANSGENESIS AND MALARIA CONTROL IN ANOPHELES GAMBIAE
Jason Rasgon
*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*
Symposium 59
Integration of Mosquito Foraging in Management of Vector-Borne Diseases

Waterbury
Tuesday, December 9, 8 a.m. – 9:45 a.m.
Female mosquitoes need to find resources (hosts and oviposition sites) for completing the gonotrophic cycle. Foraging ecology of mosquitoes is important for understanding of interactions between hosts and mosquitoes. Recently, attention has been drawn to examine impacts of control interventions, such as insecticide-treated bednets and source reduction on mosquito foraging. This symposium represents both theoretic and experimental advances to highlight variability of resource-seeking patterns and implications on prevention and control of mosquito-borne diseases.

CHAIR
Weidong Gu
University of Alabama, Birmingham, Birmingham, United States

8 a.m.
LOCAL SCALE PATTERNS OF HOST SEEKING AND FEEDING AND IMPLICATIONS FOR PATHOGEN TRANSMISSION
A. Marm Kilpatrick
Consortium for Conservation Medicine, New York, United States

8:25 a.m.
AN AGENT-BASED MODEL OF MOSQUITO FORAGING FOR INTEGRATED MALARIA MANAGEMENT
Weidong Gu
University of Alabama, Birmingham, Birmingham, United States

8:50 a.m.
TESTING THE IMPORTANCE OF HABITAT SELECTION IN DETERMINING THE SPATIAL DISTRIBUTION OF MOSQUITO POPULATIONS: IMPLICATIONS FOR MANAGEMENT
Alicia Ellis
University of North Carolina, Charlotte, United States

9:15 a.m.
FOCUSING VECTOR INTERVENTIONS ON THE HOME FOR PREVENTION OF DENGUE
Thomas W. Scott
University of California, Davis, United States

Symposium 60
Expanding ACT Reach in the Private Sector

Napoleon A123
Tuesday, December 9, 8 a.m. – 9:45 a.m.
Over 40 percent of the world's inhabitants are at risk from malaria. Millions of children continue to fall prey to this dreaded disease. Among the many reasons for this unacceptable statistic is the fact that patients and caregivers have sorely limited access to high quality, effective treatment, particularly in private sector outlets where 40-60 percent of people buy their medicines. Are ACTs reaching people in Africa today? If not, why not? How can access to ACTs be facilitated? What are the challenges that must be overcome to ensure easy access of ACTs to malaria sufferers? Will a new, innovative mechanism in the form of a global subsidy ensure affordability, and thus access? What challenges still need to be overcome? Medicines for Malaria Venture (MMV) brings together international players in the field of access to antimalarials, as well as representatives from national malaria programs in Africa to share an overview of the status of access to effective antimalarials in Africa.

CHAIR
Francisco Songane
Partnership for Maternal, Newborn and Child Health, Geneva, Switzerland
George Jagoe
Medicines for Malaria Venture, Geneva, Switzerland

8 a.m.
PRIVATE SECTOR IN ACCESS: STRATEGIES FOR ENGAGEMENT AND CHALLENGES
Gladys Tetteh
MSH, Nairobi, Kenya

8:15 a.m.
DISPLACING INEFFECTIVE ANTIMALARIALS: FINDINGS FROM THE MOH-CHAI PILOT IN TANZANIA
Renata Mandike
Ministry of Health, Dar es Salaam, United Republic of Tanzania

8:30 a.m.
ENSURING RESPONSIBLE ACCESS TO ACTS: FINDINGS FROM THE MOH-MMV LED UGANDA PILOT
Ambrose Talisuna
Medicines for Malaria Venture (MMV), Geneva, Switzerland

8:45 a.m.
MAKING ANTIMALARIALS MORE USER-FRIENDLY: DESIGNING APPROPRIATE PACKAGING
Susan Mukasa
PSI Uganda, Kampala, Uganda

9 a.m.
PANEL DISCUSSION AND WRAP-UP
**Scientific Session 61**

**Bacteriology II – Diarrhea: Epidemiology and Treatment**

**Chair**
Karen Levy
Stanford University, San Francisco, CA, United States
Theresa J. Ochoa
Baylor College of Medicine, Houston, TX, United States

8 a.m.

**364**

SEASONALITY, WATER QUALITY VARIABILITY AND DIARRHEAL DISEASE IN NORTHERN COASTAL ECUADOR

Karen Levy1, Alan Hubbard2, Kara Nelson2, Joseph Eisenberg3
1Stanford University, Stanford, CA, United States, 2UC Berkeley, Berkeley, CA, United States, 3University of Michigan, Ann Arbor, MI, United States

8:15 a.m.

**365**

SHIFTING PREVALENCE OF MAJOR DIARRHEAL PATHOGENS IN PATIENTS SEEKING HOSPITAL CARE DURING FLOODS IN 1998, 2004, AND 2007 IN DHAKA, BANGLADESH

Aaron M. Harris1, Fahima Chowdhury2, Yasmin Ara Begum2, Abu S. Faruque1, Ann-Mari Svennerholm1, Jason B. Harris1, Edward T. Ryan1, Alejandro Cravioto2, Stephen B. Calderwood2, Firdausi Qadri2
1Tufts University School of Medicine, Boston, MA, United States, 2International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, 3The Sahlgrenska Academy at University of Gothenburg, Goteborg, Sweden, 4Massachusetts General Hospital, Boston, MA, United States

8:30 a.m.

**366**

SHIGA TOXIN GENE TYPES OF SHIGA TOXIN-PRODUCING ESCHERICHIA COLI (STEC) ISOLATED FROM PERUVIAN CHILDREN

Carmen A. Contreras1, Theresa J. Ochoa2, Francesca Barletta2, Nelly Zavaleta3, Claudio F. Lanata3, Thomas G. Cleary4
1Universidad Nacional Mayor de San Marcos, Lima, Peru, 2Universidad Peruana Cayetano Heredia, Lima, Peru, 3Instituto de Investigación Nutricional, Lima, Peru, 4University of Texas School of Public Health, Houston, TX, United States

8:45 a.m.

**367**

AGE-RELATED SUSCEPTIBILITY TO INFECTION WITH DIARRHEAGENIC E. COLI

Lucie Ecker1, Theresa J. Ochoa2, Francesca Barletta2, Monica Mispireta1, Ana I. Gil1, Isabel Amemiya1, Hector Verastegui1, Eric Hall1, Thomas G. Cleary4, Claudio F. Lanata1
1Instituto de Investigación Nutricional, Lima, Peru, 2Universidad Peruana Cayetano Heredia, Lima, Peru, 3Naval Medical Research Center Detachment, Lima, Peru, 4University of Texas Health Science Center, Houston, TX, United States

9 a.m.

**368**

FACTORS ASSOCIATED WITH ORAL REHYDRATION THERAPY UTILIZATION FOR CHILDHOOD DIARRHEA MANAGEMENT AMONG PRIMARY HOUSEHOLD CAREGIVERS — ASEMBO, KENYA 2007

Christine K. Olson1, Lauren S. Blum2, Kinnery Naik3, Prisca Oria2, Alice Mathingau2, Beatrice Odidi2, Daniel Feikin2, Kayla Laserson2, Anna W. Wamae2, Robert F. Breiman2, Pavan K. Ram2
1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2International Emerging Infections Program, Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, 3Centers for Disease Control and Prevention/Kenya Medical Research Institute – Centre for Global Health Research, Kisumu, Kenya, 4Republic of Kenya Ministry of Health, Nairobi, Kenya, 5University at Buffalo, Buffalo, NY, United States

9:15 a.m.

**369**

MANAGEMENT OF DIARRHEAL ILLNESS IN YOUNG CHILDREN OF RURAL WESTERN KENYA – FINDINGS FROM A HEALTH UTILIZATION AND ATTITUDES SURVEY, 2007

Kavita K. Trivedi1, Richard Omore2, Elizabeth Blanton1, Kubaje Adazu1, John Vulule1, Kayla Laserson2, John A. Crump1, Myron M. Levine1, Karen Kotloff1, Annemieke van Eijk1, Eric D. Mintz1, Clara E. O'Reilly1, Robert F. Breiman2
1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2Kenya Medical Research Institute/Centers for Disease Control and Prevention, Kisumu, Kenya, 3Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, 4University of Maryland School of Medicine, Center for Vaccine Development, Baltimore, MD, United States, 5Kenya Medical Research Institute/Centers for Disease Control and Prevention, Nairobi, Kenya
Liver Fluke Infection Induces Cholangiocarcinoma

Bayside A
Tuesday, December 9, 8 a.m. – 9:45 a.m.

Throughout East Asia, there is a strikingly high prevalence of cholangiocarcinoma (CCA) in regions where Opisthorchis viverrini liver fluke infection is endemic. CCA is extremely prevalent in Northeast Thailand, where uncooked cyprinoid fish is often a dietary staple. These fish are the intermediate hosts of the liver flukes. Despite widespread administration of praziquantel, the prevalence of O. viverrini approaches 70 percent in Northeast Thailand and Laos. Moreover, in Thailand, liver cancer is the most prevalent of the fatal tumors, and rates of CCA in regions where the parasite is endemic are unprecedented — CCA is responsible for about 19 percent of liver cancers in the U.S.A. but represents 71 percent of cancers in Thailand’s Khon Kaen region, the highest incidence in the world. O. viverrini infection induces inflammation of the bile ducts, resulting in oxidative DNA damage of the epithelium and subsequent malignant transformation to CCA. Experimental infections of hamsters with O. viverrini corroborate findings in human infections. Secreted fluke proteins stimulate biliary epithelial cells to hyper-proliferate but not undergo apoptosis, providing an additional potential mechanism by which epithelial cells become neoplastic. The symposium will address these issues and additional recent findings related to O. viverrini-associated liver cancer.

CHAIR
Paul J. Brindley
George Washington University Medical Center, Washington DC, United States
Banchob Sripa
Khon Kaen University, Khon Kaen, Thailand

8 a.m.

MOLEcular CARCINogeneSIS OF OpISTHorChIS vIVERrINI INDUCED CHOlANGIOCARCINogenesis
Banchob Sripa
Khon Kaen University, Khon Kaen, Thailand

8:25 a.m.

IMMUNOLOGICAL CORRELATES OFHEPATO-BILARY CHANGES IN HUMAN OPISTHORCHIASIS
Jeffrey M. Bethony
George Washington University, Washington DC, United States

8:50 a.m.

PROTEOMICS OF SECRETED OPISTHORCHIS VIVERRINI ANTIGENS
Alex Loukas
Queensland Institute of Medical Research, Brisbane, Australia

9:15 a.m.

DEVELOPMENTAL REGULATION OF SECRETED FASCIOLA PROTEASES REVEALED BY PROTEOMICS
Mark Robinson
University of Technology Sydney (UTS), Sydney, Australia
8:45 a.m.

A PHASE 2, OPEN LABEL, NON-COMPARATIVE TRIAL OF AZITHROMYCIN 2G PLUS CHLOROQUINE 600 MG BASE DAILY FOR THREE DAYS FOR THE TREATMENT OF UNCOMPLICATED PLASMODIUM FALCIPARUM MALARIA

Richa Chandra1, Drew Lewis2, Diego Moran3, Nagesh Dubhashi4, Shrisendu Sarkar5, Cunshan Wang1, Jenny Cai1, Michael Dunne1
1Pfizer Inc., New London, CT, United States, 2Pfizer Inc., New York, NY, United States, 3Hospital San Andres de Tumaco, Colombia, Narino, Colombia, 4Goa Medical College, Bambolim, Goa, India, 5Pfizer Inc., Mumbai, India

9 a.m.

EPIDEMIOLOGY OF IMPORTED MALARIA IN HOUSTON CHILDREN: 1994-2007

Gloria E. Oramasionwu1, Susan H. Wootton2, Morven S. Edwards1
1Baylor College of Medicine, Houston, TX, United States, 2University of Texas Health Science Center at Houston, Houston, TX, United States

9:15 a.m.

PROSPECTIVE ANALYSIS OF HOSPITAL ADMISSIONS, DIAGNOSIS, DISEASE AND OUTCOMES FOR MALARIA IN JAYAPURA, PAPUA, INDONESIA

Yohana Sorontou1, Samuel Baso2, Abdul Rohim2, Puji B. Asih2, Din Syafruddin2, Robert W. Taylor1, J. Kevin Baird1
1Cendrawasih University, Jayapura, Papua, Indonesia, 2Dok II Hospital, Internal Medicine, Jayapura, Papua, Indonesia, 3Eijkman Institute, Jakarta, Indonesia, 4Oxford University, Hanoi, Vietnam, 5Eijkman Oxford Clinical Research Unit, Jakarta, Indonesia

9:30 a.m.

A RANDOMISED TRIAL OF AN EIGHT-WEEK, ONCE WEEKLY PRIMAQUINE REGIMEN TO PREVENT RELAPSE OF PLASMODIUM VIVAX IN PAKISTAN

Toby Leslie1, Ismail Mayan2, Nasir Mohammed2, Panna Erasmus3, Jan Kolaczinski1, Christopher J. Whitty1, Mark Rowland1
1London School of Hygiene and Tropical Medicine, London, United Kingdom, 2HealthNet-TPO, Peshawar, Pakistan

Symposium 64

Combining Vector and Disease Data for Improved Assessment of Vector-Borne Disease Risk

Grand Ballroom A
Tuesday, December 9, 8 a.m. – 9:45 a.m.

The symposium will focus on cross-disciplinary approaches that incorporate data for both arthropod vectors and human disease to deliver improved assessments of vector-borne disease risk. As noted in the 2008 Institute of Medicine Workshop Summary for “Vector-Borne Diseases: Understanding the Environmental, Human Health, and Ecological Connections,” there has been a tendency in the research community to stovepipe Geographic Information System-based risk modeling approaches for vector-borne diseases to either vector data or epidemiologic data. This is highly unfortunate because vector and disease data not only have different weaknesses, but also complementary strengths. For example, although the location of sampling sites for vectors readily can be georeferenced, human behavior often impacts risk of vector and pathogen contact. On the other hand, a human disease case, which unequivocally demonstrates contact with an infected vector, often is accompanied by questionable information regarding the probable vector and pathogen exposure site. To overcome these issues, models combining independently derived estimates for vector risk and epidemiologic risk are needed. The symposium will explore the potential for developing risk models and risk maps that include both vector and disease data, and will include examples from a wide range of diseases of public health importance in the Americas and elsewhere (dengue, Lyme disease, malaria, plague, tularemia, West Nile virus disease).

CHAIR
Lars Eisen
Colorado State University, Fort Collins, CO, United States

8 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF RISK OF BACTERIAL VECTOR-BORNE DISEASES: LYME DISEASE, PLAGUE AND TULAREMIA

Rebecca J. Eisen
Centers for Disease Control and Prevention, Fort Collins, CO, United States

8:25 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF DENGUE RISK

Amy C. Morrison
University of California, Davis, Davis, CA, United States

8:50 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF MALARIA RISK

Michael Coleman
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

9:15 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF WEST NILE VIRUS DISEASE RISK

Lars Eisen
Colorado State University, Fort Collins, CO, United States
Scientific Session 65
Filariasis I – Immunology

Grand Ballroom B
Tuesday, December 9, 8 a.m. – 9:45 a.m.

CHAIR
Edward Mitre
National Institutes of Health, Bethesda, MD, United States
Sabine Specht
University Hospital Bonn, Bonn, Germany

8 a.m.

378
BASOPHILS AND IGE AMPLIFY THE IMMUNE RESPONSE TOWARDS LITOMOSOIDE SIGMONTIS
Marina N. Torrero, Marc P. Hübner, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8:15 a.m.

379
INDUCTION OF TRAIL- AND TNF-α-DEPENDENT APOPTOTIC CELL DEATH IN HUMAN MONOCYTE-DERIVED DENDRITIC CELLS BY BRUGIA MALAYI
Roshanak Tolouei Semnani, Priyanka Goel Venugopal, Lily Mahapatra, Jason Skinner, Françoise Meylan, Damien Chaussabel, Richard M. Siegel, Thomas B. Nutman
1National Institutes of Health-TRC-International Center for Excellence in Research, Chennai, India, 2Tuberculosis Research Center, Chennai, India, 3National Institutes of Health, Bethesda, MD, United States

8:30 a.m.

380
ANTI-WOLBACHIA ANTIBODIES MAY DECREASE THE LIKELIHOOD OF ACUTE ADENOLYMPHANGITIS IN LYMPHATIC FILARIASIS
1Division of Infectious Diseases and HIV Medicine, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, 2Department of Ophthalmology, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, 3Center for Global Health and Diseases, Case Western Reserve University, Cleveland, OH, United States

8:45 a.m.

381
FILARIAL LYMPHATIC PATHOLOGY IS CHARACTERIZED BY AUGMENTED PRO-INFLAMMATORY CYTOKINE PRODUCTION IN RESPONSE TO TLR2 AND TLR9 LIGANDS
Subash Babu, Sajid Bhat, Pavan Kumar, C. Kolappan, V. Kumaraswami, Thomas B. Nutman
1National Institutes of Health-TRC-International Center for Excellence in Research, Chennai, India, 2Tuberculosis Research Center, Chennai, India, 3National Institutes of Health, Bethesda, MD, United States

(ACMCIP Abstract)

9 a.m.

382
ELEVATED PLASMA ANGIogenic and LYMPHANGIOgenic FACTORS ARE ASSOCIATED WITH INFECTION PER SE RATHER THAN CLINICALLY APPARENT DISEASE IN HUMAN FILARIAL INFECTION
Sasisekhar Bennuru, Grace Maldarelli, Kumaraswami V, Thomas B. Nutman
1National Institutes of Health, Bethesda, MD, United States, 2Tuberculosis Research Centre, Chennai, India

9:15 a.m.

383
INCREASED IMMUNE STIMULATION AFTER MACROFILARICIDAL THERAPY
Sabine Specht, Sabine Mand, Alexander Y. Debrah, Yeboah M. Debreyekyi, Ohene Adjei, Frank Geisinger, Norbert W. Brattig, Achim Hoerauf
1Institute for Medical Microbiology, Immunology and Parasitology, University Hospital, Bonn, Germany, 2Kumasi Centre of Collaborative Research, Kumasi, Ghana, 3Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

(ACMCIP Abstract)
9:30 a.m.  

384  

A LOA/BABOON MODEL FOR INVESTIGATING THE MECHANISMS OF ENCEPHALOPATHY FOLLOWING IVERMECTIN ADMINISTRATION  
Samuel Wanjı¹, Nicholas Tendongfors¹, Julius Che¹, Ebangha Joan Eyong¹, Jonas Moafos¹, Elive Ngallis¹, Peter Enyons¹, Charles Mackenzie²  
¹University of Buea, Buea, Cameroon, ²Michigan State University, East Lansing, MI, United States

8:15 a.m.  

385  

DENGUE AND THE DEMOGRAPHIC TRANSITION  
Derek A. Cummings¹, Sopon Iamsirithaworn², Justin Lessler³, Rungnapa Prasanthong⁴, Richard G. Jarman⁵, Donald S. Burke⁶, Robert V. Gibbons⁷  
¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ²Ministry of Public Health, Nonthaburi, Thailand, ³Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, ⁴University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States, ⁵Armed Forces Institute of Medical Sciences, Bangkok, Thailand

9:00 a.m.  

386  

SAFETY AND IMMUNOGENICITY IN CHILDREN AND ADULTS FROM ENDEMIC COUNTRIES AND ADULTS FROM NONENDEMIC COUNTRIES OF A TETRAVALENT, LIVE ATTENUATED DENGUE VACCINE  
Alain Boukenooghe¹, Mari R. Capeding², Dennis N. Morrison³, Jorge L. Poo⁴, Jean Lang⁵, Laurent Chambonneau⁶, Remi Forrat⁷  
¹Sanofi Pasteur, Swiftwater, PA, United States, ²Research Institute for Tropical Medicine, Muntinlupa City, Philippines, ³Bio-Kinetic Clinical Applications, Springfield, MO, United States, ⁴Hospital Medica Sur, México City, Mexico, ⁵Sanofi Pasteur, Marcy l’Etoile, France

8:30 a.m.  

387  

IMMUNE RESPONSE TO TETRAVALENT DENGUE VACCINATION IN MEXICAN SUBJECTS: THE EFFECTS OF YELLOW FEVER VACCINATION  
Remi Forrat¹, Jorge L. Poo², Juan F. Galán Herrera³  
¹Sanofi Pasteur, Lyon, France, ²CIF-BIOTEC Médica Sur, Mexico City, Mexico

8:45 a.m.  

388  

INCIDENCE OF SYMPTOMATIC AND SUBCLINICAL DENGUE IN A FOUR-YEAR PEDIATRIC COHORT STUDY IN NICARAGUA  
Guillermina Kuan¹, Angel Balmaseda², Aubree Gordon³, Oscar Ortega⁴, Nicole Fitzpatrick⁵, William Avilés⁶, Crisanta Rocha⁷, Andrea Nuñez⁸, Josefnia Coloma⁹, Eva Harris¹⁰  
¹Sanofi Pasteur, Lyon, France, ²CIF-BIOTEC Médica Sur, Mexico City, Mexico

9:00 a.m.  

389  

A PROSPECTIVE STUDY OF PRIMARY DENGUE VIRUS INFECTIONS DURING INFANCY: PRELIMINARY FINDINGS  
Daniel H. Libraty¹, Rosario M. Capeding², Luz Acosta³, Veronica Tallo³, Edel Mercado³, Analisa Bautista³, Richard G. Jarman⁴, In-Kyu Yoon⁵, Robert V. Gibbons², Job D. Brion³  
¹University of Massachusetts Medical School, Worcester, MA, United States, ²Research Institute for Tropical Medicine, Manila, Philippines, ³Armed Forces Research Institute for Medical Sciences, Bangkok, Thailand, ⁴San Pablo City Health Office, San Pablo, Philippines

9:15 a.m.  

390  

SUBSTANTIAL UNDERREPORTING OF DENGUE DEATHS IN AN ASIAN DENGUE ENDEMIC COUNTRY  
Jose A. Suaya¹, Donald S. Shepard²  
¹Heller School, Brandeis University, Waltham, MA, United States

9:30 a.m.  

391  

AN ESTIMATION OF THE DISEASE AND ECONOMIC BURDEN OF DENGUE IN SOUTHERN VIETNAM  
Laurent Coudeville¹, Laurence Poillissard², Quang Luong Chan³, Trong Toan Nguyen³, Huong Vu Thi Que³, Christine Luxemburger⁴, Kim Tien Nguyen Thi⁵  
¹Sanofi Pasteur, Lyon, France, ²Pasteur Institute, Ho Chi Minh City, Vietnam
Scientific Session 67

Global Health Symposium on Tropical Medicine

Supported with funding from the Bill & Melinda Gates Foundation

Grand Ballroom D

Tuesday, December 9, 8 a.m. - 9:45 a.m.

This symposium features young investigators from Senegal, Brazil, Peru and Thailand who have received travel awards to present their work on malaria, leptospirosis, leishmaniasis and filariasis at the annual meeting.

CHAIR

Anthony A. James
University of California, Irvine, Irvine, CA, United States

James LeDuc
University of Texas Medical Branch, Galveston, TX, United States

8:15 a.m.

HUMAN ANTIBODY RESPONSE TO ANOPHELES GAMBIAE SALIVA: A NEW IMMUNO-EPIDEMIOLOGICAL MARKER TO EVALUATE THE EFFECTIVENESS OF INSECTICIDES TREATED NETS (ITNS)?

Papa Makhtar Drame1, Anne Poinsignon2, Patrick Besnard1, Sylvie Cornélie2, Vincent Fournet1, Cheikh Saya Sow1, Jacques Le Mire3, Filomena Fortes3, Denis Boulanger3, Pierre Carnevale2, Francois Simondon2, Franck Remoue1

1Institut de Recherche pour le Developpement, Dakar, Senegal, 2Institut de Recherche pour le Developpement, Montpellier, France, 3Service Médical Sonamet, Lobito, Angola, 4Organisation de Coordination pour la lutte contre les Endémies en Afrique Centrale (OCEAC), Yaoundé, Cameroon, 5Service Médical Clinique Sonamet, Lobito, Angola, 6Malaria Control Program, Luanda, Angola

8:30 a.m.

LEPTOSPIROSIS IN SAO PAULO, BRAZIL: EVEN MORE FULMINANT, EVEN MORE A PULMONARY DISEASE

Anne Spichler1, Daniel Athanazio1, Pedro Vilaca1, Erica Chapolla1, Marcia Buzza1, Bronislawa Castro1, Antonio Seguro1

1Health Municipality Secretariat of Sao Paulo, Sao Paulo, Brazil, 2Federal University of Bahia, Salvador, Brazil

8:45 a.m.

ANALYSIS OF GENE EXPRESSION AND EVOLUTIONARY PROCESS IN LEISHMANIA (VIANNIA) BRAZILIENSIS AND LEISHMANIA (VIANNIA) PERUVIANA MODEL

Dionicia Gamboa
Instituto de Medicina Tropical, Lima, Peru

(ACMCIP Abstract)
8:30 a.m.  

394  

LOW QUALITY OF ROUTINE MICROSCOPY FOR MALARIA AT DIFFERENT HEALTH SYSTEM LEVELS IN DAR ES SALAAM: RAPID DIAGNOSTIC TESTS SHOULD ALSO BE IMPLEMENTED IN HOSPITALS AND URBAN SETTINGS  

Judith Kahama-Maro1, Valérie D’Acremont1, Deo Mtasiwa2, Blaise Genton3, Christian Lengeler4  

1City Medical Office of Health, Dar es Salaam City Council, United Republic of Tanzania, 2Ministry of Health and Social Welfare, Dar es Salaam, United Republic of Tanzania, 3Ifakara Health Research and Development Center, Dar es Salaam, United Republic of Tanzania, 4Swiss Tropical Institute, Basel, Switzerland

8:45 a.m.  

395  

EFFECTIVENESS AND SAFETY OF TRAINING IN FEVER CASE MANAGEMENT AND RDT USE AT HEALTH CENTERS IN UGANDA  

Heidi Hopkins1, Alex Ojakuj, Adoke Yeka1, Patrick Angutoko2, John Ategeka2, Alex Ojakuk, Umaru Ssekabira2, Carol Asimwe3, Jane Nabakooka2, John B. Rwakimari2, Lydia Mpana Sebuyira2, Fred Wabwire Mangen2, Grant Dorsey1  

1University of California, San Francisco, San Francisco, CA, United States, 2Joint Uganda Malaria Training Program, Kampala, Uganda, 3Uganda Malaria Surveillance Project, Kampala, Uganda, 4Malaria Consortium, Kampala, Uganda, 5Uganda Ministry of Health, Malaria Control Programme, Kampala, Uganda, 6Infectious Diseases Institute, Makerere University, Kampala, Uganda, 7Makerere University School of Public Health, Kampala, Uganda

9 a.m.  

396  

DECREASING TRENDS IN COMMUNITY-REPORTED FEVER AND HEALTH FACILITY MALARIA DIAGNOSES IN THE IFAKARA DSS (TANZANIA)  

Sandra Alba1, Manuel Hetzel1, Angel Dillip1, Iddy Mayumana1, Christian Lengeler2, Mathew Alexander1, Rose Nathan1, Brigit Obrist1, Alexander Schulze1, Flora Kessy1, Hassan Mshinda1  

1Ifakara Health and Research Development Centre, Ifakara, United Republic of Tanzania, 2Swiss Tropical Institute, Basel, Switzerland, 3Novartis Foundation for Sustainable Development, Basel, Switzerland

9:15 a.m.  

397  

WITHDRAWING ANTIMALARIALS IN FEBRILE CHILDREN WITH A NEGATIVE RAPID DIAGNOSTIC TEST IS SAFE IN A MODERATELY ENDEMIC AREA OF TANZANIA  

Valérie D’Acremont1, Judith Kahama-Maro2, Deo Mtasiwa3, Christian Lengeler2, Blaise Genton4  

1City Medical Office of Health, Dar es Salaam City Council, United Republic of Tanzania, 2Ministry of Health and Social Welfare, Dar es Salaam, United Republic of Tanzania, 3Swiss Tropical Institute, Basel, Switzerland, 4Ifakara Health Research and Development Center, Dar es Salaam, United Republic of Tanzania

9:30 a.m.  

398  

MALARIA PARASITEMIA IN BLOOD BANKING IN AN ENDEMIC AREA  

Catherine O. Falade, Oyekanmi Nash, Titi S. Akingbola, Olusegun G. Ademowo  

University of Ibadan, Ibadan, Nigeria

Exhibit Hall Open  

Napoleon Ballroom  

Tuesday, December 9, 9:30 a.m. – 10:30 a.m.

Coffee Break  

Napoleon Ballroom  

Tuesday, December 9, 9:45 a.m. – 10:15 a.m.

Poster Session B Set-Up  

Armstrong Ballroom  

Tuesday, December 9, 9:45 a.m. – 10:15 a.m.

Poster Session B Viewing  

Armstrong Ballroom  

Tuesday, December 9, 10:15 a.m. – Noon

Symposium 69  

Leprosy Awareness in the U.S  

Gallery  

Tuesday, December 9, 10:15 a.m. – Noon

This symposium will raise awareness that leprosy does occur in the U.S., primarily within immigrants from countries where the disease is endemic. The epidemiology and unique clinical immunopathological features of HD will be discussed, along with the current concepts in diagnosis and treatment and the services provided by the National Hansen’s Disease Programs (NHDP) in Baton Rouge, Louisiana.

CHAIR  

James L. Krahenbuhl  

National Hansen’s Disease Programs, Baton Rouge, LA, United States

David M. Scollard  

National Hansen’s Disease Programs, Baton Rouge, LA, United States

10:15 a.m.  

OVERVIEW OF THE SERVICES PROVIDED TO PRIVATE SECTOR PHYSICIANS BY THE NATIONAL HANSEN’S DISEASE PROGRAMS (NHDP)  

James Krahenbuhl  

National Hansen’s Disease Programs, Baton Rouge, LA, United States
10:30 a.m.
LEPROSY AWARENESS IN THE UNITED STATES
Richard Truman
National Hansen’s Disease Programs, Baton Rouge, LA, United States

10:55 a.m.
CLINICAL IMMUNOHISTOPATHOLOGICAL SPECTRUM OF LEPROSY
David M. Scollard
National Hansen’s Disease Programs, Baton Rouge, LA, United States

11:20 a.m.
LEPROSY DIAGNOSIS, TREATMENT AND MANAGEMENT OF REACTIONS.
Barbara M. Stryjewska
National Hansen’s Disease Programs, Baton Rouge, LA, United States

Scientific Session 70
Intestinal and Tissue Helminths II: Echinococcosis/Hydatidiosis

Rhythms I
Tuesday, December 9, 10:15 a.m. – Noon
CHAIR
Enrico Brunetti
University of Pavia, Pavia, Italy

10:15 a.m.
399
IMMUNOLOGICAL AND GENETIC FACTORS AFFECTING HUMAN SUSCEPTIBILITY TO ECHINOCOCCOsis

Yu R. Yang1, Magda K. Ellis2, Philip S. Craig2, Dominique A. Vuitton2, Gill M. Williams3, Geoffrey N. Gabot1, Tao Sun1, Donald P. McManus2
1Ningxia Medical College, Yinchuan City, Ningxia Hui Autonomous Region, China, 2Molecular Parasitology Lab., Queensland Institute of Medical Research, Brisbane, Queensland, Australia, 3Biomedical Sciences Research Institute and School of Environment and Life Sciences, University of Salford, Salford, United Kingdom, 4Université de Franche-Comté, Besançon, France, 5School of Population Health, University of Queensland, Brisbane, Queensland, Australia

(ACMCIP Abstract)

10:30 a.m.
400
ACCELERATED LARVAL GROWTH OF ECHINOCOCCUS SPP. IN THE IMMUNODEFICIENT HOST?

Beate Gruener1, Carmen-Michaela Crețu2, Enrico Brunetti3, Collin N. Menezes3, Georg Haerter3, Martin P. Grubusch4, Peter Kern1
1University of Ulm, Ulm, Germany, 2University of Medicine and Pharmacy, Bucharest, Romania, 3University of Pavia, Pavia, Italy, 4Infectious Diseases Unit, Helen Joseph Hospital, Johannesburg, South Africa, 5University of Witwatersrand, Johannesburg, South Africa

10:45 a.m.

401
OBSERVATIONS ON THE CYTODIFFERENTIATION OF ECHINOCOCCUS MULTilocULARIS IN VITRO

Tanya Armstrong1, Andrew Thompson1, Peta Clode2
1Murdoch University, Perth, Australia, 2University of Western Australia, Perth, Australia

11 a.m.

402
CRITICAL APPRAISAL OF NITAZOXANIDE FOR THE TREATMENT OF ALVEOLAR ECHINOCOCCOSIS

Peter Kern1, Philippe Abboud2, Winfried V. Kern3, August Stich4, Solange Bresson-Hadni5, Bruno Guerin5, Klaus Butzenschoen5, Beate Gruener1, Stefan Reuter1, Andrew Hemphill6
1University of Ulm, Ulm, Germany, 2University of Rouen, Rouen, France, 3University of Freiburg, Freiburg, Germany, 4Medical Mission Hospital, Würzburg, Germany, 5University of Besançon, Besançon, France, 6Centre Hospitalier, Rodez, France, 7University of Düsseldorf, Düsseldorf, Germany, 8University of Berne, Berne, Switzerland

11:15 a.m.

403
GEO-ECOLOGICAL AND SOCIO-ECONOMIC ENVIRONMENTS AFFECTING ECHINOCOCCUS TRANSMISSION IN NINGXIA HUI AUTONOMOUS REGION OF CHINA

Yu R. Yang1, David Pleydell2, Philip S. Craig3, Donald P. McManus4, Patrick Giraudoux2, Gail M. Williams5, Jia Gang Guo6, Rui Qi Liu1
1Ningxia Medical College, Yinchuan City, Ningxia Hui Autonomous Region, China, 2Chrono-environment, Université de Franche-Comté, UMR CNRS 6249 usc INRA, Besançon, France, 3Biomedical Sciences Research Institute and School of Environment and Life Sciences, University of Salford, Salford, United Kingdom, 4Molecular Parasitology Laboratory, Queensland Institute of Medical Research, Brisbane, Australia, 5School of Population Health, University of Queensland, Brisbane, Queensland, Australia, 6National Institute of Parasitic Diseases, Chinese Centre for Disease Control and Prevention, Shanghai, China

(ACMCIP Abstract)
11:30 a.m.

**HUMAN HYDATIDOSIS IN SUDAN: IS IT A SPORADIC OR ENDEMIC DISEASE?**

Rihab A. Omer¹, Anke Dinkel², Thomas Romig², Ute Mackenstedt², Mohamed Elamin¹, Ayman Elnahas¹, Imad Aradaib¹, Ibrahim Elmahdi⁶
¹Central Veterinary Research Laboratories, Khartoum, Sudan, ²Institut Für Zoologie, Fachgebiet Parasitologie, Stuttgart, Germany, ³Elshab Teaching Hospital, Khartoum, Sudan, ⁴Department of Surgery, Faculty of Vet. Med. University of Khartoum, Khartoum, Sudan, ⁵Department of Medicine, Faculty of Veterinary Medicine, University of Khartoum, Khartoum, Sudan, ⁶Institute of Nuclear Medicine, Molecular Biology and Oncology, University of Gezira, Medani, Sudan

11:45 a.m.

**TREATMENT OF A LARGE PERITONEAL ECHINOCOCCAL CYST WITH PERCUTANEOUS DRAINAGE AND ALBENDAZOLE**

Enrico Brunetti, Giuseppe Mariani, Francesca Tamarozzi, Antonella Grisolia, Carlo Filice
University of Pavia – San Matteo Foundation Hospital, Pavia, Italy

**Symposium 71**

**Vaccine Development for Intracellular Bacteria: Biological Approaches for Stimulating Protective Immunity**

*Rhythms III/III*

Tuesday, December 9, 10:15 a.m. – Noon

This symposium is designed to review and update participants regarding the history and future of vaccines for intracellular bacterial pathogens of interest to practitioners in tropical medicine and travelers' health. Speakers will consider the strengths and failings of prior and existing vaccines, and will discuss strategic approaches toward defining the immunological basis of protection as an underpinning for rational vaccine design. The main emphasis of the program is to define the conceptual framework by which protective immunity to intracellular bacteria differs from that developed against extracellular bacteria, viruses, and eukaryotic pathogens, and the demonstration of how these principles can be applied to maximize stimulation of immune response critical for protection against bacteria that occupy an intracellular niche. Four important emerging pathogens will serve as platforms for conveying principles and specific disease/vaccine-related information: *Rickettsia* spp., including *R. prowazekii* (louse-borne typhus) and *R. rickettsii* (Rocky Mountain spotted fever), *Orientia tsutsugamushi* (scrub typhus), *Coxiella burnetii* (Q fever) and *Burkholderia* spp. (melioidosis and glanders).

**CHAIR**

J. Stephen Dumler
The Johns Hopkins University School of Medicine, Baltimore, MD, United States

David H. Walker
University of Texas Medical Branch, Galveston, TX, United States

10:15 a.m.

**RICKETTSIAL VACCINES: SUCCESSES, FAILINGS, AND THE BIOLOGICAL UNDERPINNING FOR STIMULATING PROTECTIVE IMMUNITY BY VACCINATION**

David H. Walker
University of Texas Medical Branch at Galveston, Galveston, TX, United States

10:40 a.m.

**SCRUB TYPHUS VACCINES: PAST HISTORY AND RECENT DEVELOPMENTS**

Allen L Richards
Naval Medical Research Center, Silver Spring, MD, United States

11:05 a.m.

**MECHANISMS OF VACCINE-INDUCED PROTECTIVE IMMUNITY AGAINST COXIELLA BURNETII INFECTION**

James E. Samuel
Texas A&M Health Science Center, College Station, TX, United States

11:30 a.m.

**GLANDERS AND MELIOIDOSIS: SUBUNIT VACCINES AGAINST BURKHOLDERIA SPP.**

D. Mark Estes
University of Texas Medical Branch at Galveston, Galveston, TX, United States

Scientific Session 72

**Malaria – Molecular Biology**

Waterbury
Tuesday, December 9, 10:15 a.m. – Noon

**CHAIR**

Amy M. McHenry
University of Notre Dame, Notre Dame, IN, United States

Jonathan Mwangi
University of Glasgow, Glasgow, United Kingdom

10:15 a.m.

**HIGH-THROUGHPUT GENOTYPING AND POPULATION GENOMICS OF P. FALCIPARUM MALARIA**

Sarah Volkman¹, Daniel E. Neafsey², Stephen F. Schaffner², Danny J. Park³, Philip Montgomery², Nathan Houde², Ousmane Sam³, Douda Ndiaye³, Soulyeman Mboup⁴, Danny A. Milner, Jr.¹, Roger Wiegand¹, Daniel L. Harth¹, Bruce W. Birren², Eric S. Lander², Pardis C. Sabeti², Dyann F. Wirth¹
¹Harvard School of Public Health, Boston, MA, United States, ²Broad Institute of MIT and Harvard, Cambridge, MA, United States, ³Cheikh Anta Diop University, Dakar, Senegal, ⁴Harvard University, Cambridge, MA, United States
10:30 a.m.

407

ANALYSIS OF PLASMODIUM FALCIPARUM QUANTITATIVE TRAIT LOCI DETERMINING DIFFERENTIAL INFECTIVITY TO ANOPHELES MOSQUITOES

Jonathan Mwangi, Lisa Ranford-Cartwright
University of Glasgow, Glasgow, United Kingdom

10:45 a.m.

408

FIXATION OF MUTATIONS AND A SINGLE ORIGIN OF PCFRT AND PFMDR1 HAPLOTYPES IN PLASMODIUM FALCIPARUM FROM VENEZUELA

Sean M. Griffing1, Luke Syphard2, Sankar Sridaran1, Andrea McCollum2, Leopoldo Villegas3, Ananias A. Escalante2, John Barnwell3, Venkatachalam Udhayakumar4
1Emory University, Centers for Disease Control and Prevention, Atlanta Research and Education Foundation, Atlanta, GA, United States, 2Centers for Disease Control and Prevention, Chamblee, GA, United States, 3Centers for Disease Control and Prevention, Atlanta, GA, United States, 4Arizona State University, Tempe, AZ, United States, 5Centers for Disease Control and Prevention, Atlanta Research and Education Foundation, Atlanta, GA, United States

(ACMCIP Abstract)

11 a.m.

409

P. VIVAX POPULATION GENETICS IN PERU AND VIETNAM: A COMPARATIVE STUDY USING MICROSEMITELITES MARKERS

Peter Van den Eede1, Gert Van Der Auwera1, Annette Erhart1, Chantal Van Overmeir2, Jozef Anné2, Umberto D’Alessandro1
1Institute of Tropical Medicine Antwerp, Antwerp, Belgium, 2Catholic University of Leuven, Leuven, Belgium

(ACMCIP Abstract)

11:15 a.m.

410

SAP1 IS A SELECTIVE MASTER REGULATOR OF MALARIA PARASITE LIVER INFECTION

Ahmed S. Aly, Stefan H. Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

(ACMCIP Abstract)

11:30 a.m.

411

DETERMINATION OF THE BASIS FOR A LIMITED DIMORPHISM, N417K, IN THE PLASMODIUM VIVAX DUFFY-BINDING PROTEIN

Amy M. McHenry1, John H. Adams2
1University of Notre Dame, Notre Dame, IN, United States, 2University of South Florida, Tampa, FL, United States

(ACMCIP Abstract)

11:45 a.m.

412

CHARACTERIZATION OF PLASMODIUM FALCIPARUM PROTEIN KINASE 2

Kentaro Kato, Atsushi Sudo, Kyousuke Kobayashi, Yukinobu Tohya, Hiroomi Akashi
The University of Tokyo, Tokyo, Japan

Symposium 73

Metabolic and Metagenomic Profiling of Host-Parasite Interactions

Napoleon A123
Tuesday, December 9, 10:15 a.m. – Noon

Medical research strives to serve two main paradigms. On one hand, it aims to improve life quality in the modern world trying to perfect prevention and treatment of diseases coupled with developing highly specified, personalized health care. On the other hand, developing countries require rapid, inexpensive and efficient diagnostic methods for large-scale population screening. Post-genomic sciences such as transcriptomics, proteomics and metabolomics/metabolomics can yield new insights into disease diagnosis and prognosis. This symposium aims to evaluate the application of post-genomic technologies such as metabolic and metagenomic profiling to diagnosing and promoting mechanistic understanding of parasitic diseases based on easily accessible biofluids such as urine, plasma and fecal water. Spectroscopic tools such as nuclear magnetic resonance (NMR) spectroscopy and mass spectrometry (MS) can be used to metabolically characterize host-parasite interactions in animal models and humans. Each parasitic infection induces both general and specific changes in the metabolic signatures of infection, which can also uncover clues as to the mechanistic processes of the disease and may ultimately result in the identification of targets for therapeutic intervention. We will cover the technological strategies and demonstrate their multiple applications. We will also discuss the use of metagenomic approaches for defining relationships between parasites and host microflora. Unlike genomics, proteomics and transcriptomics, monitoring the metabolic state of an individual is relatively inexpensive, and its biggest advantage over the other –omics sciences is the capacity for high throughput of samples and ease of sample preparation, which uniquely suits it for screening programs in poor countries with high burdens of disease. Finally we will explore the potential of this technology for the diagnosis of multiple infections in human populations.

CHAIR
Juerg Utzinger
Swiss Tropical, Basel, Switzerland
Jennifer Keiser
Swiss Tropical Institute, Basel, Switzerland

10:15 a.m.

GLOBAL OVERVIEW OF METABOLIC PROFILING APPLICATIONS IN TROPICAL MEDICINE

Burton Singer
Princeton University, Princeton, NJ, United States

10:40 a.m.

EPIDEMIOLOGICAL STRATEGIES FOR MOLECULAR PARASITOLOGY

Juerg Utzinger
Swiss Tropical Institute, Basel, Switzerland
Detailed Program

11:05 a.m.
MODELING SPECTROSCOPIC SIGNATURES OF INFECTION
Elaine Holmes
Imperial College, London, United Kingdom

11:30 a.m.
THE GUT MICROBIOTA: A VIRTUAL ORGAN AND ITS ROLE IN INFECTION
Julian Marchesi
Cardiff University, Cardiff, United Kingdom

Symposium 74
Innate Immunity to Protozoan Parasites
Maurepas
Tuesday, December 9, 10:15 a.m. – Noon

Much has been learned for the role of innate immunity in the control of acute infections caused by viruses and bacteria. However, it is less clear as to how protozoan parasites interact with key components in the host innate immunity system. This symposium will focus on the roles of neutrophils, dendritic cells, and NK cells in infections with protozoan parasites. This symposium will include four presentations: (1) Cell signaling mechanisms in inflammatory responses to malaria parasites; (2) Toxoplasma gondii and its close encounters with the innate immune system; and (3) Innate immune responses to Leishmania parasites. It is anticipated that participants will gain a general picture for the roles of neutrophils, dendritic cells and NK cells at early stages of infection with protozoa and gain some basic knowledge on parasites' strategies to subvert host innate immune responses.

CHAIR
Lynn Soong
The University of Texas Medical Branch, Galveston, TX, United States

10:15 a.m.
CELL SIGNALING MECHANISMS IN INFLAMMATORY RESPONSES TO MALARIA PARASITES
Channe D. Gowda
Pennsylvania State University, Hershey, PA, United States

10:50 p.m.
TOXOPLASMA GONDII: CLOSE ENCOUNTERS WITH CELLS OF THE INNATE IMMUNE SYSTEM
Eric Y. Denkers
Cornell University, Ithaca, NY, United States

11:25 p.m.
INNATE IMMUNE RESPONSES TO LEISHMANIA PARASITES
Lynn Soong
The University of Texas Medical Branch, Galveston, TX, United States

Scientific Session 75
Bacteriology III

Bayside A
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR
Richelle C. Charles
Massachusetts General Hospital, Boston, MA, United States

10:15 a.m.
HORIZONTAL GENE TRANSFER OF ANTIBIOTIC RESISTANCE GENES IN COMMENSAL ESCHERICHIA COLI FROM REMOTE COMMUNITIES
Gabriel A. Trueba1, Rosana Segovia1, William Cevallos2, Karina Ponce1, Dimitri Kakabade1, Lixin Zhang3, Carl F. Marrs3, Betsy Foxman1, Joseph Eisenberg2
1Universidad San Francisco de Quito, Quito, Ecuador,
2Department of Epidemiology, University of Michigan, Ann Arbor, MI, United States

10:30 a.m.
PROTEOMIC ANALYSIS OF THE PHOP REGULON IN SALMONELLA ENTERICA SEROVARS TYPHI AND TYPHIMURIUM
Richelle C. Charles1, Jason B. Harris2, Lauren M. Lebrun1, Michael Chase1, Alauddin Sheikh1, Regina C. Larocque1, Brian Krastins1, David Saracino1, Ian Rosenberg3, Abdullah Tariq2, Stephen B. Calderwood1, Elizabeth Hohmann1, Firdausi Qadri2, Kenneth Parker3, Edward T. Ryan1
1Massachusetts General Hospital, Boston, MA, United States,
2International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh,
3Harvard-Partners Center for Genetics and Genomics, Cambridge, MA, United States

10:45 a.m.
MEMORY B CELL RESPONSES IN PATIENTS WITH DEHYDRATING DIARRHEA CAUSED BY VIBRIO CHOLERAE O1
Aaron M. Harris1, Jason B. Harris2, Md. Saruar Bhuiyan3, Fahima Chowdhury4, Ashraful I. Khan4, Abu S. Faruque5, Regina C. Larocque2, Edward T. Ryan2, Firdausi Qadri2, Stephen B. Calderwood2
1Tufts University School of Medicine, Boston, MA, United States,
2Massachusetts General Hospital, Boston, MA, United States,
3International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh
Scientific Session 76

Clinical Tropical Medicine II

Bayside BC
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR
Arthur Mpimbaza
Uganda Malaria Surveillance Project, Kampala, Uganda
Anne Spichler
Health Municipality Secretariat of Sao Paulo, Sao Paulo, Brazil

10:15 a.m.

MOLECULAR DIAGNOSTICS AND SPECIATION GUIDE CHOICE OF ALTERNATIVE, SHORT-COURSE TREATMENT REGIMENS FOR CUTANEOUS LEISHMANIASIS

Roshan Ramanathan1, Kawsar Talaat2, Daniel Fedorko3, Siddhartha Mahanty1, Theodore Nash3
1National Institutes of Health, Bethesda, MD, United States, 2Johns Hopkins University, Baltimore, MD, United States

10:30 a.m.

THE EPIDEMIOLOGY OF LEISHMANIA CHAGASI INFECTION IN RIO GRANDE DO NORTE, NORTHEAST BRAZIL

Bruna L. Maciel1, Iraci D. Lima1, Hênio G. Lacerda1, Paula V. Duarte1, José W. Queiroz1, Núbia N. Pontes1, Sérgio R. Araújo1, Eliana T. Nascimento1, Glória R. Monteiro1, Richard D. Pearson2, Mary E. Wilson2, Stephen E. McGowan3, Selma M. Jerônimo1
1Universidade Federal do Rio Grande do Norte, Natal – RN, Brazil, 2University of Virginia, Charlottesville, VA, United States, 3University of Iowa, Wisconsin, IA, United States
Detailed Program

10:45 a.m. 422

MILTEFOSINE FOR BOLIVIAN MUCOSAL LEISHMANIASIS: EFFICACY OF SIX WEEKS OF THERAPY
J. Soto1, M. Balderrama1, I. Raa1, J. Toledo1, J. Berman2
1Fundacion FADER, Bogota, Colombia, 2Proyecto OSCAR, Palos Blancos, Bolivia

11 a.m. 423

CLINICAL CHARACTERISTICS OF THREE PATIENTS WITH ACUTE, ORALLY TRANSMITTED CHAGAS DISEASE: THE PROMINENCE OF GASTROINTESTINAL SYMPTOMS
Gisele Dias Freitas1, Aglaer Nobrega1, Alessandro Romano1, Maria Pontes2, Liliane Leite2, Elenild Costa3, Jeremy Sobel4
1Ministry of Health, Brasília, Brazil, 2State Department of Health, Pará, Brazil, 3Centers for Disease Control and Prevention, Atlanta, GA, United States

11:15 a.m. 424

MULTICENTER CLINICAL TRIAL OF NIFURTIMOX-EFLORNITHINE COMBINATION THERAPY FOR SECOND-STAGE SLEEPING SICKNESS
Gerardo Priotto1, Serena Kasparian1, Daniel Ngouama2, Sara Ghorashian1, Ute Arnold1, Salah Ghabi1, Elisabeth Baudin1, Vincent Buad1, Serge Kazadi-Kyanza2, Victor Kande3, Wilfried Mutombo5, Medard Ilunga1, Willy Mutangala1, Cae cilia Schmid8, Els Torreele1, Unni Karunakara7

11:30 a.m. 425

SIMILARITIES AND DIFFERENCES BETWEEN PEDIATRIC AND ADULT LEPTOSPIROSIS IN SAO PAULO, BRAZIL
Anne Spichler1, Daniel Athanazio1, Pedro Vilaca1, Erica Chapolla1, Marcia Bizzarri1, Bronislawa Castro1, Antonio Seguro2
1Health Municipality Secretariat of Sao Paulo, Sao Paulo, Brazil, 2Federal University of Bahia, Salvador, Brazil, 3University of Sao Paulo School of Medicine, Sao Paulo, Brazil

11:45 a.m. 426

IDENTIFICATION AND CHARACTERIZATION OF THE ETIOLOGIES OF ACUTE UNDIFFERENTIATED FEBRILE ILLNESS IN CAMBODIA IN 2007
Patrick J. Blair1, Thomas F. Wierzbajk, Sok Touch7, Buth Sokhal6, Matthew R. Kasper5, Maya Williams1, Timothy H. Burgess5, Shannon D. Putnam5
1Naval Health Research Center, San Diego, CA, United States, 2NAVIRU2-Phnom Penh, Phnom Penh, Cambodia, 3Communicable Diseases Control Department, Phnom Penh, Cambodia, 4National Institute of Public Health, Phnom Penh, Cambodia, 5Naval Medical Research Unit #2, Jakarta, Indonesia

Symposium 77

Artemisinin Resistance Confirmation, Characterization and Containment in Southeast Asia

Grand Ballroom A
Tuesday, December 9, 10:15 a.m. – Noon

Global strategies for controlling and eliminating malaria rely heavily on artemisinin-based combination therapies (ACTs). Prolonged parasite clearance times and treatment failures have been reported following treatment with ACTs and with artemisinin monotherapy in Southeast Asia. Malariologists, malaria control officials, international agencies and donors are working together to confirm, characterize and contain the possible emergence of Plasmodium falciparum tolerance and/or resistance to the artemisinins. Speakers in this symposium will provide a status report of the situation including new clinical, in vitro and molecular data on artemisinin resistance and plans for containment.

CHAIR
Christopher V. Plowe
Howard Hughes Medical Institute and University of Maryland, Baltimore, MD, United States

Nicholas J. White
Mahidol University, Bangkok, Thailand

10:15 a.m.

CLINICAL AND IN VITRO EVIDENCE OF ARTEMISININ RESISTANCE IN SOUTHEAST ASIA I
Arjen Dondorp
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand
10:35 a.m.

CLINICAL AND IN VITRO EVIDENCE OF ARTEMISININ RESISTANCE IN SOUTHEAST ASIA II
Mark M. Fukuda
Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

10:55 a.m.

POPULATION GENETICS APPROACHES TO CHARACTERIZING AND CONTAINING ARTEMISININ RESISTANCE IN SOUTHEAST ASIA
Shannon Takala
University of Maryland School of Medicine, Baltimore, MD, United States

11:15 a.m.

CONTAINING ARTEMISININ RESISTANCE IN SOUTHEAST ASIA
Shunmay Yeung
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

11:35 a.m.

SUMMARY AND DISCUSSION
Nicholas White
Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

Scientific Session 78
Filariasis II – Molecular Biology

Grand Ballroom B
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR
Sasisekhar Bennuru
National Institutes of Health, Bethesda, MD, United States
Gary J. Weil
Washington University, St. Louis, MO, United States

10:15 a.m.

EARLY CHANGES IN GENE EXPRESSION PROFILES IN BRUGIA PAHANGI L3 AFTER INFECTION IN JIRDS OR IN VITRO CULTURE
Ramakrishna U. Rao1, Thomas R. Kler1, Yuefang Huang1, Krishna P. Shakyaw2, Michael Heinz1, Ben-Wen Li1, Gary J. Weil1
1Washington University School of Medicine, St. Louis, MO, United States, 2Louisiana State University, Baton Rouge, LA, United States

10:30 a.m.

428

CHANGES IN THE Aedes aegypti TRANSCRIPTOME IN RESPONSE TO BRUGIA MALAYI DEVELOPMENT
Sara M. Erickson1, Zhiyong Xi2, Jose L. Ramirez2, Matthew T. Aliota1, George F. Mayhew1, Bruce M. Christensen1, George Dimopoulos1
1Univ of Wisconsin-Madison, Madison, WI, United States, 2Michigan State University, East Lansing, MI, United States

10:45 a.m.

429

WOLBACHIA SEQUENCES IN THE CHROMOSOMAL GENOME OF ONCHOCERCA FLEXUOSA INDICATE PAST WOLBACHIA ENDO SYMBIOSIS
Samantha N. McNulty, M. Mitreva, M. Heinz, J. Martin, N.W. Brattig, G.J. Weil, P.L. Fischer
Washington University School of Medicine, St. Louis, MO, United States

11 a.m.

430

GLOBOMYCIN: A NEW CLASS OF DRUG WITH EFFICACY AGAINST WOLBACHIA AND FILARIAL NEMATODES
Kelly L. Johnston1, Bo Wu2, Ana Guimarães1, Louise Ford1, Pauline A. Ambrose1, Barton E. Slatko2, Mark J. Taylor1
1Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 2New England Biolabs Incorporated, Ipswich, MA, United States

11:15 a.m.

431

A-WOL DRUG DISCOVERY – SCREENING OF NOVEL DERIVATIVES OF TETRACYCLINE WITH IMPROVED EFFICACY OVER DOXYCYCLINE IN AN IN VITRO WOLBACHIA CELL-LINE ASSAY
Louise Ford1, Kelly L. Johnston1, Pauline A. Ambrose1, Michael P. Draper1, Beena Bhatia2, Mark J. Taylor1
1Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 2Paratek Pharmaceuticals, Inc., Boston, MA, United States

11:30 a.m.

432

MOLECULAR ANALYSIS OF THE EFFECT OF DIETHYL CARBA MABAMINE ON BRUGIA MALAYI MICROFILARIAE
Tiffany S. Weinkopff1, Seth D. Crosby2, Mike Heinz2, Janice Mladenicky1, Patrick Lammie1, Steve Williams4
1Department of Cellular Biology, University of Georgia, Athens, GA, United States, 2Genome Sequencing Center, Department of Genetics, Washington University School of Medicine, St. Louis, MO, United States, 3Centers for Disease Control and Prevention, Atlanta, GA, United States, 4Clark Science Center, Department of Biological Sciences, Smith College, Northampton, MA, United States
11:45 a.m.  

433

MOLECULAR CHARACTERIZATION OF RE-EMERGENT BRUGIA MALAYI IN SRI LANKA
Peter U. Fischer¹, Tilaka Liyanage², Ramakrishna U. Rao¹, Gary J. Weil³
¹Washington University School of Medicine, St. Louis, MO, United States, ²Anti-Filariasis Campaign, Ministry of Health, Colombo, Sri Lanka

11 a.m.  

807

REPLIVAX WN, A SINGLE-CYCLE FLAVIVIRUS VACCINE, IS SAFE AND EFFICACIOUS IN A RHESUS MACAQUE MODEL OF WEST NILE DISEASE
Douglas G. Widman¹, Tomohiro Ishikawa¹, Ricardo Carrion², Nigel Bourne¹, Peter W. Mason¹
¹University of Texas Medical Branch, Galveston, TX, United States, ²Southwest Foundation for Biomedical Research, San Antonio, TX, United States

11:15 a.m.  

808

ECOLOGY OF WEST NILE VIRUS IN GUATEMALA
Nicholas Komar¹, Maria Eugenia Morales-Betoulle², Nicholas Panella¹, Danilo Alvarez², Celia Cordon-Rosas³
¹Centers for Disease Control and Prevention, Fort Collins, CO, United States, ²Centers for Disease Control and Prevention, Guatemala City, Guatemala

11:30 a.m.  

809

DETECTION OF RNA FROM A NOVEL WEST NILE-LIKE VIRUS AND HIGH PREVALENCE OF AN INSECT-SPECIFIC FLAVIVIRUS IN MOSQUITOES IN THE YUCATAN PENINSULA OF MEXICO
Bradley J. Blitvich¹, Maria A. Loroño-Pino², Julian E. Garcia-Rejon³, Einat Hovav⁴, Ann M. Powers⁵, Ming Lin⁶, Karin S. Dorman⁷, Kenneth B. Platt¹, Lyric C. Bartholomay¹, Jose A. Farfan-Ale³
¹Iowa State University, Ames, IA, United States, ²The Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico, ³Centers for Disease Control and Prevention, Fort Collins, CO, United States

11:45 a.m.  

810

TEMPORAL AND SPATIAL RELATIONSHIP BETWEEN FLANDERS VIRUS AND WEST NILE VIRUS IN THE SOUTHEASTERN UNITED STATES
Abelardo C. Moncayo¹, Rosmarie Kelly², Dora B. Huddleston³, Sudeshna Mukherjee⁴, William Reimels⁵, Junjun Huang⁶, Tim F. Jones³, Daniel G. Mead³
¹Tennessee Department of Health, Nashville, TN, United States, ²Georgia Department of Human Resources, Division of Public Health, Atlanta, GA, United States, ³University of Georgia, Southeastern Cooperative Wildlife Disease Study, Athens, GA, United States

10:15 a.m.  

804

THE STOICHIOMETRY OF ANTIBODY-MEDIATED NEUTRALIZATION OF WEST NILE VIRUS INFECTION: FACTORS THAT GOVERN ANTIBODY POTENCY
Steevenson Nelson¹, Erin Mehlhop², Christiane A. Jost¹, Syd Johnson³, Daved H. Fremont³, Michael S. Diamond⁴, Theodore C. Pierson¹
¹National Institutes of Health, Bethesda, MD, United States, ²Washington University School of Medicine, St. Louis, MO, United States, ³Macrogenics Inc., Rockville, MD, United States

10:30 a.m.  

805

MOLECULAR BASIS FOR THE RESISTANCE OF WEST NILE VIRUS TO ANTIVIRAL ACTIVITY OF OAS1B
Eva Mertens¹, Isabelle Iteeman², Marie-Pascale Frenkiel¹, Dominique Simon-Chazottes³, Anna Kajaste-Rudnitski¹, Philippe Després²
¹Institut Pasteur, Flavivirus Host Molecular Interactions, Paris, France, ²Institut Pasteur, Public Health Platform, Paris, France, ³Institut Pasteur, Functional Murine Genetics, Paris, France

10:45 a.m.  

806

WEST NILE VIRUS-VECTOR INTERACTIONS ARE AFFECTED BY GLYCOSYLATION OF THE VIRAL ENVELOPE PROTEIN
Robin M. Moudy, Mark A. Meola, Bo Zhang, Pei-Yong Shi, Laura D. Kramer
Wadsworth Center/NYSDOH, Albany, NY, United States
Symposium 80

Global Health Programs in University Settings: What's Out There?

Grand Ballroom D
Tuesday, December 9, 10:15 a.m. – Noon

With over 100 programs in the U.S. now developing multidisciplinary global health programs within medical schools, as well as in residency training programs, this symposium will bring together a panel of directors of different models to describe programmatic content of such programs, as well as methods of sustainability.

CHAIR
Michele Barry
Yale University School of Medicine, New Haven, CT, United States

10:15 a.m.
GLOBAL HEALTH PROGRAMS AT U.S. UNIVERSITIES: THE JOHNS HOPKINS MODEL
Thomas C. Quinn
Johns Hopkins University, Baltimore, MD, United States

10:35 a.m.
GLOBAL HEALTH PROGRAM AT UNIVERSITY OF VIRGINIA/HISTORY: BARRIERS AND SUSTAINABILITY
Richard Guerrant
University of Virginia, Charlottesville, VA, United States

10:55 a.m.
GLOBAL HEALTH PROGRAM AT DUKE/HISTORY: BARRIERS AND SUSTAINABILITY
Michael Merson
Duke University, Durham, NC, United States

11:15 a.m.
GLOBAL HEALTH PROGRAM AT MT. SINAI/HISTORY: BARRIERS AND SUSTAINABILITY
Jonathan Ripp
Mt. Sinai School of Medicine, New York, NY, United States

11:30 a.m.
SUMMARY OF UNIVERSITY CONSORTIUM FOR GLOBAL HEALTH MEETING
Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

11:50 a.m.
QUESTIONS AND ANSWERS

Symposium 81

Update on Control of Neglected Tropical Diseases in Sub-Saharan Africa

Grand Ballroom E
Tuesday, December 9, 10:15 a.m. – Noon

The Neglected Tropical Diseases affect some 500 million people in Africa, but thanks to donations of drugs from the pharmaceutical industry, many million are receiving treatment. In East and West Africa, with funding from a number of donors, several countries have now embarked on an integrated implementation program to deliver the donated drugs. In this symposium, speakers will report on the coverage achieved in their regions, while an analysis will be presented of the countries still in need of assistance to implement control. Challenges met so far and suggested solutions will be discussed.

CHAIR
Alan Fenwick
Imperial College London, London, United Kingdom
Peter J. Hotez
The George Washington University, Washington, United States

10:15 a.m.
INTRODUCTION
Alan Fenwick
Imperial College, London, United Kingdom

10:25 a.m.
CURRENT STATUS OF NEGLECTED TROPICAL DISEASE CONTROL IN EAST AFRICA
Narcis Kabatereine
Vector Control Division, Kampala, Uganda

10:50 a.m.
CURRENT STATUS OF NEGLECTED TROPICAL DISEASES IN WEST AFRICA
Amadou Garba
RISEA, Niaméy, Niger

11:15 a.m.
CURRENT STATUS OF NEGLECTED TROPICAL DISEASE CONTROL IN RWANDA AND BURUNDI
Marie-Alice Deville
Schistosomiasis Control Initiative, London, United Kingdom

11:40 a.m.
AN ESTIMATE OF THE UNMET NEEDS OF COUNTRIES IN AFRICA IN ORDER TO CONTROL NEGLECTED TROPICAL DISEASES
Yaobi Zhang
Schistosomiasis Control Initiative, London, United Kingdom
Detailed Program

**Exhibit Hall Open/Light Lunch**

Napoleon Ballroom  
Tuesday, December 9, Noon – 1:30 p.m.

**Poster Session 82/Light Lunch**

Poster Session B (#434-724 and Late Breakers)  
Armstrong Ballroom  
Tuesday, December 9, Noon – 1:30 p.m.

**Cestodes – Echinococcosis/Hytatid Disease**

**434**  
CRITICAL APPRAISAL OF NITAZOXANIDE FOR THE TREATMENT OF ALVEOLAR ECHINOCOCOSIS  
Peter Kern¹, Philippe Abboud², Winfried V. Kern³, August Stich⁴, Solange Bresson-Hadni⁵, Bruno Guerin⁶, Klaus Buttenschoen⁷, Beate Gruener⁸, Stefan Reuter⁹, Andrew Hemphill¹⁰  
¹University of Ulm, Ulm, Germany, ²University of Rouen, Rouen, France, ³University of Freiburg, Freiburg, Germany, ⁴Medical Mission Hospital, Würzburg, Germany, ⁵University of Besancon, Besancon, France, ⁶Centre Hospitalier, Rodez, France, ⁷University of Düsseldorf, Düsseldorf, Germany, ⁸University of Berne, Berne, Switzerland

**435**  
PRIMARY CEREBRAL HYDATID CYST: REPORT OF A CASE AND REVIEW OF THE LITERATURE  
Mehmet Tanyukse⁵, Zeynep Guclu Kilbas, Engin Araz, Yusuf İzci, Engin Gonul  
GMMA, Ankara, Turkey

**436**  
UPDATE ON HUMAN POLYCYSTIC ECHINOCOCCOSIS IN NORTH OF BRAZIL  
Nilton G. Siqueira¹, Fernanda B. Almeida², Adriana P. Sudrê³, Jose M. Peralta², Jose R. Machado-Silva², Rosangela Rodrigues-Silva⁴  
¹Universidade Federal do Acre, Rio Branco, Acre, Brazil, ²Instituto Oswaldo Cruz – Fiocruz, Rio de Janeiro, Brazil, ³Universidade Federal Fluminense, Niteroi, Brazil, ⁴Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, ⁵Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil, ⁶Instituto Oswaldo Cruz – Fiocruz, Rio de Janeiro, Brazil

**437**  
EVALUATION OF TAENIA SOLIUM CALRETICULIN AS AN ORAL VACCINE IN EXPERIMENTAL TAPEWORM INFECTION  
Sonia Leon-Cabrera, Fela Mendlovic, Mayra Cruz-Rivera, Guillermina Avila-Ramirez, Salvador Fonseca-Coronado, Ana Flisser  
Universidad Nacional Autonoma de Mexico, Faculty of Medicine, Mexico City, Mexico  
(ACMCIP Abstract)

**438**  
A COMPREHENSIVE APPROACH TO UNDERSTANDING TAENIA SOLIUM CYSTICERCOSIS IN EASTERN AND SOUTHERN AFRICA: THE CESA PROJECT  
¹WHO/FAQ Collaborating Center for Parasitic Zoonoses, University of Copenhagen, Frederiksberg C, Denmark, ²DBL-Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Denmark, ³Sokoine University of Agriculture, Morogoro, United Republic of Tanzania, ⁴Eduardo Mondlane University, Maputo, Mozambique, ⁵Institute of African Studies, University of Nairobi, Nairobi, Kenya, ⁶Uyole Livestock Research Institute, Mbeya, United Republic of Tanzania, ⁷Muhimbili University of Health and Allied Sciences, Dar es Salaam, United Republic of Tanzania

**439**  
CYSTICERCOSIS AND TAENIASIS IN PAPUA, INDONESIA  
Lidwina Salim, Agnes Ang, Sukwan Handali, Cysticercosis Working Group in Papua, Victor C.W. Tsang  
Centers for Disease Control and Prevention, Chamblee, GA, United States

**440**  
ASSAY DEVELOPMENT AND OPTIMIZATION FOR CYSTICERCOSIS USING RECOMBINANT AND SYNTHETIC DIAGNOSTIC PROTEINS  
John Noh¹, Isabel McAusliffe², Yeuk-Mui Lee³, Sukwan Handali⁴, Maria Silva-Ibanez⁵, Kathy Hancock⁶, Hector H. Garcia⁷, Armando E. Gonzalez⁸, Robert H. Gilman⁹, Patricia Wilkins¹⁰, Victor C.W. Tsang¹¹  
¹Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA USA, ²Atlanta Research and Education Group in Lima, Peru

**Clinical Tropical Medicine**

**441**  
POLICY IMPLICATIONS OF THE RESULTS FROM THE RANDOMIZED DOUBLE BLIND PLACEBO CONTROLLED TRIAL OF SP, LAPDAP OR MEfloquine FOR PREVENTION OF MALARIA IN INFANTS STUDY IN NORTH-EASTERN TANZANIA  
Roly D. Gosling¹, Samwel Gesase², Ilona Carneiro³, Brian M. Greenwood⁴, Daniel Chandramohan⁵  
¹London School of Hygiene and Tropical Medicine, London, United Kingdom, ²National Institute of Medical Research, Tanga, United Republic of Tanzania
442

FIRST AUTOCHTHONES OF LEISHMANIA TROPICA IN A REMOTE BORDER AREA OF NORTH-SINAI, EGYPT
Magdi Gebril Shehata\textsuperscript{1}, Abdallah Mohammed Samy\textsuperscript{1}, Said Abdallah Doha\textsuperscript{2}, Adel Ramzy Fahmy\textsuperscript{1}, Rania M. Kaldas\textsuperscript{1}, Jeffrey T. Villinski\textsuperscript{1}
\textsuperscript{1}Faculty of Science, Ain Shams University, Cairo, Egypt, \textsuperscript{2}Research and Training Center on Vector of Diseases, Ain Shams University, Cairo, Egypt, \textsuperscript{3}U.S. Navy Medical Research Unit No. 3, Cairo, Egypt

443

NEAR-FATAL ANAPHYLACTIC SHOCK FROM PERCUTANEOUS ASPIRATION OF AN ECHINOCOCCAL CYSTS IN A PATIENT WHO UNDERWENT FOUR PREVIOUS UNEVENTFUL INTERVENTIONS FOR ABDOMINAL ECHINOCOCOSIS
Enrico Brunetti\textsuperscript{1}, Giuseppe Mariani\textsuperscript{1}, Francesca Tamarozzi\textsuperscript{1}, Carlo Filice\textsuperscript{1}, Giuseppe Sala Gallini\textsuperscript{1}
\textsuperscript{1}University of Pavia- S.Matteo Hospital Foundation, Pavia, Italy, \textsuperscript{2}S.Matteo Hospital Foundation, Pavia, Italy

445

CLINICAL SPECTRUM OF PATIENTS PRESENTING WITH TROPICAL PARASITIC LUNG DISEASES IN NEPAL
Narendra Bhatta, Subodh Sagar Dhakal, Suman Rizal, Basudha Khanal, Avdesh Tiwari
B.P. Koirala Institute of Health Sciences, Dharan, Nepal

446

INTERRELATIONSHIP BETWEEN THROMBOCYTOPENIA, ACUTE RENAL FAILURE AND PULMONARY INVOLVEMENT IN SEVERE LEPTOSPIROSIS
Anne Spichler\textsuperscript{1}, Daniel A. Athanazio\textsuperscript{1}, Pedro Villaça\textsuperscript{1}, Marcia Buzzi\textsuperscript{1}, Bronislawa Castro\textsuperscript{1}, Erica Chapolla\textsuperscript{1}, Antonio Seguro\textsuperscript{1}
\textsuperscript{1}University of São Paulo, São Paulo, Brazil, \textsuperscript{2}Federal University of Bahia, Salvador, Brazil, \textsuperscript{3}Health Municipality Secretariat of São Paulo, São Paulo, Brazil

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FACTORS RELATED WITH POOR OUTCOMES IN CHILDREN HOSPITALIZED WITH SEVERE MALARIA IN PEDIATRIC INTENSIVE CARE UNIT (PICU) IN NEPAL
Nisha Keshary Bhatta, Prakash poudel, Balakrishna Kalakheti, Rupa Singh, Basudha Khanal
B.P. Koirala Institute of Health Sciences, Dharan, Nepal

448

NOVEL EXO-ANTIGEN BASED ELISAS FOR DIAGNOSIS OF VISCERAL AND CUTANEOUS LEISHMANIA INFECTIONS
G-Halli R. Rajasekariah, Diane Dogcio, Anthony M. Smithyman
Cellabs Pty Ltd Brookvale, Australia

449

PHARMACOKINETICS AND BIOEQUIVALENCE EVALUATION OF TWO FIXED TABLET FORMULATIONS OF D I HYDROARTEMISININ AND PIPERALINE IN VIETNAMESE SUBJECTS
Nguyen T. Chinh\textsuperscript{1}, Nguyen N. Quang\textsuperscript{1}, Nguyen X. Thanh\textsuperscript{1}, Bui Dai\textsuperscript{1}, Thomas Travers\textsuperscript{2}, Michael D. Edstein\textsuperscript{1}
\textsuperscript{1}Central Military Hospital 108, Hanoi, Vietnam, \textsuperscript{2}Military Institute of Hygiene and Epidemiology, Hanoi, Vietnam, \textsuperscript{3}Australian Army Malaria Institute, Brisbane, Australia

450

EVALUATION OF ARTEMISONE COMBINATIONS IN MALARIA-INFECTED AOTUS MONKEYS
Nicanor Obaldia III\textsuperscript{1}, Barbara M. Kotecka\textsuperscript{2}, Richard K. Haynes\textsuperscript{3}, Burkhard Fugmann\textsuperscript{4}, Michael D. Edstein\textsuperscript{1}, Dennis E. Kyle\textsuperscript{5}, Karl H. Rieckmann\textsuperscript{6}
\textsuperscript{1}Gorgas Memorial Institute, Panama, Panama, \textsuperscript{2}Australian Army Malaria Institute, Brisbane, Australia, \textsuperscript{3}The Hong Kong University of Science and Technology, Kowloon, Hong Kong, \textsuperscript{4}Bayer Innovation, Düsseldorf, Germany, \textsuperscript{5}University of South Florida, Tampa, FL, United States

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MALARIA AMONG ASYMPTOMATIC SCHOOL CHILDREN IN EZNATIONAL INSTITUTES OF HEALTHITCE LOCAL GOVERNMENT AREA OF IMO STATE, NIGERIA
Ikechukwu N. Dozie\textsuperscript{1}, Uchechukwu M. Chukwuocha\textsuperscript{2}, Celestine O. Onwuliri\textsuperscript{1}, Betram E. Nwoke\textsuperscript{1}
\textsuperscript{1}Imo State University, Owerri, Imo State, Nigeria, \textsuperscript{2}Federal University of Technology, Owerri, Imo State, Nigeria, \textsuperscript{3}Imo State University, Owerri, Imo State, Nigeria

452

PATIENTS WHO HAVE RECOVERED FROM LEPTOSPIROSIS WITH NO DEMONSTRABLE IN VITRO MEMORY T-CELL RESPONSES TO LEPTOSPIRA OR LEPTOSPIRAL PROTEIN ANTIGENS
Iskra Tuero\textsuperscript{1}, Joseph Vinetz\textsuperscript{2}, Gary Klimpel\textsuperscript{3}
\textsuperscript{1}Universidad Peruana Cayetano Heredia, Lima, Peru, \textsuperscript{2}University of California, San Diego, CA, United States, \textsuperscript{3}University of Texas Medical Branch, Galveston, TX, United States

453

ETHNO MEDICAL SURVEY OF ANTIMALARIAL HERBS AND ANTIMALARIAL ACTIVITY OF MOMORDICA CHARANTIA LINN
Mojisola C. Olutayo\textsuperscript{1}, Olufunke C. Adeloye\textsuperscript{1}, Taiwo T. Elufuye\textsuperscript{2}
\textsuperscript{1}Department of Plant Science and biotechnology, Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria, \textsuperscript{2}Department of Pharmacognosy, Faculty of Pharmacy, Obafemi Awolowo University Ile Ife, Nigeria

454

EXTRALESIONAL PRESENCE OF LEISHMANIA VIANNIA IN ACTIVE AMERICAN CUTANEOUS LEISHMANIASIS
Roger Figueroa, Maria Teresa Cardona, Leyder Elena Lozano, Ibeth Romero, Martin Prager, Maria Consuelo Miranda, Nancy Saravia
CIDEIM, Centro Internacional de Entrenamiento e Investigaciones Medicas, Cali, Colombia
Detailed Program

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A SURVEY OF THE CARE SEEKING BEHAVIOUR OF MOTHERS OF SICK INFANTS IN AJEROMI/IFELODUN LOCAL GOVERNMENT AREA OF LAGOS STATE, NIGERIA

Nneoma Idika¹, Chimere C. Agomo¹, Christiana Nennen Okoroma¹, Adeniyi K. Adeneye¹, Emmanuel O. Idigbe¹
¹Nigerian Institute of Medical Research, Lagos, Nigeria

456

USEFULNESS OF TELEDIAGNOSIS IN THE IDENTIFICATION OF TISSUE PARASITES: AN EVALUATION BASED ON TWO YEARS (FROM 2006 TO 2008) OF TELEDIAGNOSIS SUBMISSIONS TO THE CDC DPDX PROJECT

Blaine A. Mathison¹, Alexandre J. da Silva², Stephanie P. Johnston², Henry S. Bishop², Earl Long², Mark Eberhard²
¹Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED and Atlanta Research and Education Foundation, Atlanta, GA, United States, ²Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States

457

POPULATION PHARMACOKINETICS OF ARTESUNATE AND DIHYDROARTEMISININ IN HEALTHY VOLUNTEERS

B. Tan¹, L. Fleckenstein¹, KS Yu¹, DJ Jang²
¹College of Pharmacy, The University of Iowa, Iowa City, IA, United States, ²Department of Pharmacology and Clinical Pharmacology, Seoul National University College of Medicine and Hospital, Seoul, Republic of Korea

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THE USE OF ANTI-MSP1 ELISA TO IDENTIFY NON-IMMUNE INDIVIDUALS FOR INCLUSION IN MALARIA PROPHYLAXIS TRIALS

Gregory Deye¹, Shon Remich², Stephen Ntoburi³, Earnest Cook⁴, Duncan Apollo⁴, Brent House⁴, Colin Oht⁴
¹Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²Walter Reed Army Medical Center, Silver Spring, DC, United States, ³Kenya Medical Research Institute/Wellcome Trust Research Programme, Nairobi, Kenya, ⁴Malaria Diagnostics Centre of Excellence, Centre for Clinical Research, Kenya Medical Research Institute, Kisumu, Kenya

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ACCELERATED LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) OF ENTEROCYTOZOON BIENEUSI AND ENCEPHALITOZOON INTESTINALIS (PHYLUM MICROSPORIDIA)

Lisa C. Bowers, Terri A. Rasmussen, Trevor Thompson, Yuliya Y. Sokolova, Elizabeth S. Didier
Tulane National Primate Research Center, Covington, LA, United States

460

CLINICAL PRESENTATIONS OF STRONGYLOIDES

DeVon C. Hale, Theresa Sofarelli
University of Utah, Salt Lake City, UT, United States

461

TRAVEL HEALTH ADVICE-SEEKING BEHAVIOR OF US TRAVELERS TO YELLOW FEVER- AND JAPANESE ENCEPHALITIS-ENDEMIC COUNTRIES: FINDINGS FROM THE 2007 HEALTHSTYLES SURVEY

Pauline Han¹, Emad Yanni¹, Xiaohong Davis², William Pollard², Nina Marano²
¹Centers for Disease Control and Prevention/Oak Ridge Institute for Science and Education, Atlanta, GA, United States, ²Centers for Disease Control and Prevention, Atlanta, GA, United States

462

AN OPEN LABEL, RANDOMISED TRIAL OF ARTEMESunate + AModIAQUINE, ARTEMESunate + CHLORPROGUANIL-DAPsonE AND ARTEMETHER-LUMEFANTRINE FOR THE TREATMENT OF UNCOMPLICATED MALARIA

Kwaku P. Asante¹, Seth Owusu-Agyei¹, Ruth Owusu¹, Martin Adjiku¹, Stephen Amenga-Etego¹, David Dosoo¹, John Gyapong¹, Brian Greenwood¹, Daniel Chandramohan¹
¹Kintampo Health Research Centre, Brong Ahafo Region, Ghana, ²Navrongo Health Research Centre, Ministry of Health, Ghana, ³Health Research Unit, Ghana Health Service, Ghana, ²London School of Hygiene and Tropical Medicine, London, United Kingdom

463

FACILITATING PROGRAMMING OF QUESTIONNAIRES FOR PERSONAL DIGITAL ASSISTANTS BY NON-PROGRAMMERS

Fredy Muñoz¹, Kim A. Lindblade², Wences Arvelo¹, Gerard Lopez¹
¹Centers for Disease Control and Prevention-UVG Collaboration, Guatemala, Guatemala, ²Centers for Disease Control and Prevention, Guatemala, Guatemala

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TESTING VALIDITY OF REPORTED DRUG COVERAGE RATES OF THE NEGLECTED TROPICAL DISEASE CONTROL PROGRAM IN FOUR COUNTRIES

Margaret C. Baker¹, Lily Trofimovich¹, Dieudonne Sankara¹, Mary Linehan¹, Simon Brooker⁴, Elisa Bosque-Oliva¹, Amadou Garba⁴, Seydou Toure⁴, Nana Biritwum⁴, Ambrose Onapa⁴, Harriet Namwanje⁴
¹RTI International, Washington, DC, United States, ²Centre for The Control of Tropical Disease, London, United Kingdom, ³Schistosomiasis Control Initiative, London, United Kingdom, ⁴Schistosomiasis Control Initiative, Ouagadougou, Burkina Faso, ⁵Ghana Health Services, Accra, United Kingdom, ⁶RTI International, Kampala, Uganda, ⁷Schistosomiasis Control Initiative, Kampala, Uganda

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AMERICAN VISCERAL LEISHMANIASIS: FEATURES EPIDEMIOLOGIC, CLINIC AND THERAPEUTIC RESPONSE: TRUJILLO STATE, VENEZUELA

Laura C. Vasquez-Ricciardi¹, Libia R. Vasquez P¹, Gilberto Bastidas¹, EfRAIN Miliani¹, Yolanda Mendez¹, Miladros Oviedo²
¹Universidad de Los Andes, Valera, Venezuela, ²Universidad de Los Andes, Trujillo, Venezuela
466

IGG AS A RISK FACTOR FOR NON-HEALING DERMAL LEISHMANIASIS CAUSED BY LEISHMANIA (VIANIA) PANAMENSIS

Olga L. Fernández
Centro Internacional de Entrenamiento e Investigaciones Médicas, Cali, Colombia
(ACMCP Abstract)

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EFFECTIVENESS OF RAPID DIAGNOSTIC TESTS FOR THE TREATMENT OF UNCOMPLICATED Falciparum Malaria in Central Vietnam

Nguyen X. Thanh1, Trieu N. Trung2, Nguyen C. Phong1, Nguyen X. Thien1, Bui Dai1, Dennis Shanks3, Marina Chavchich4, M. D. Edstein1
1Military Institute of Hygiene and Epidemiology, Hanoi, Vietnam, 2Institute of Malarialogy, Parasitology and Entomology, Qui Nhon, Vietnam, 3Australian Army Malaria Institute, Brisbane, Australia

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OPPORTUNISTIC INFECTIONS ASSOCIATED WITH ACUTE CARRION’S DISEASE IN A REFERENCE NATIONAL HOSPITAL IN LIMA, PERU

Eduardo Sanchez, Miriam Callacna, Andres Kobashigawa, Luis Diaz, Gladys Patino, Arturo Tocechi
National Hospital Hipolito Unanue, Lima, Peru

469

THE DOMESTIC DOG IS A POTENTIAL RESERVOIR OF CUTANEOUS LEISHMANIASIS IN COLOMBIA

Julian Santaella-T1, Ruppert J. Quinnell2, Fabian Mendez3, Clara B. Ocampo-D4, Leonard Munstermann4
1CIDEIM, Cali, Valle, Colombia, 2Leeds University, Leeds, United Kingdom, 3Universidad del Valle, Cali, Valle, Colombia, 4Yale University, New Haven, CT, United States

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EFFECTS OF APPLYING NEW MALARIA TREATMENT POLICIES IN A RURAL DISTRICT OF CASAMANCE, SOUTHERN SENEGAL

Philippe M. Brasseur1, Patrice Agnamey2, Oumar Gaye3, Moustapha Cisse4, Malick Badiane5, Michel Vaillant6, Walter R. Taylor6, Pierre L. Olliaro7
1Institut de Recherche pour le Développement, Dakar, Senegal, 2Centre Hospitalier Universitaire, Amiens, France, 3Université Cheikh Anta Diop, Dakar, Senegal, 4Centre de Santé, Oussouye, Senegal, 5Centre de Recherche Public de la Santé, Luxembourg, Luxembourg, 6OUCRU, Hanoi, Vietnam, 7WHO/TDR, Geneva, Switzerland

471

DOSES ACCURACY OF ARTESUNATE AND AMODIAquine AS TREATMENT FOR FALCIPARUM MALARIA IN CASAMANCE, SENEGAL

Philippe M. Brasseur1, Patrice Agnamey2, Oumar Gaye3, Moustapha Cisse4, Malick Badiane5, Michel Vaillant6, Walter R. Taylor6, Pierre L. Olliaro7
1Institut de Recherche pour le Développement, Dakar, Senegal, 2Centre Hospitalier Universitaire, Amiens, France, 3Université Cheikh Anta Diop, Dakar, Senegal, 4Centre de Santé, Oussouye, Senegal, 5Centre de Recherche Public de la Santé, Luxembourg, Luxembourg, 6OUCRU, Hanoi, Vietnam, 7WHO/TDR, Geneva, Switzerland

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DEVELOPMENT AND IMPLEMENTATION OF A LIFE CYCLE-DEPENDENT, PHENOTYPIC HIGH THROUGHPUT LEISHMANIA MAJOR PROMASTIGOTE DRUG SUSCEPTIBILITY ASSAYS

Elizabeth R. Sharlow1, Heather Grieser2, Archibong Yellow-Duke3, Stephanie Leimgruber4, David Close5, Rebecca Barrett6, Jacob Johnson7, Michael O’Neill7, Alan Magill8, John S. Lazo8
1University of Pittsburgh, Drug Discovery Institute, Department of Pharmacology and Chemical Biology, Pittsburgh, PA, United States, 2University of Pittsburgh, Drug Discovery Institute, Pittsburgh, PA, United States, 3Walter Reed Army Institute of Research, Silver Spring, MD, United States

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MALARIA CLINICAL TRIALS CAPACITY DEVELOPMENT IN AFRICA: CHALLENGES AND EXPERIENCES FROM THE KINTAMPO HEALTH RESEARCH CENTRE, GHANA

Kwaku Poku Asante, Ruth Owusu, Kingsley Osei-Kwakye, Boahen Owusu, Livesy Abokyi, George Adjei, David Dosoo, Seth Owusu-Agyei
Kintampo Health Research Centre, Brong Ahafo Region, Ghana

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WHEN MULTIPLE REGRESSION IS JUST NOT ENOUGH

Eric B. Faragher1, Job C. Calis2, Kamija S. Phiri3, Michael Boele van Hensbroek4
1Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 2Emma Children’s Hospital, Academic Medical Center, Amsterdam, Netherlands, 3Malawi-Liverpool-Wellcome Trust Clinical Programme, College of Medicine, Blantyre, Malawi

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MALARIA DECISION SUPPORT SYSTEMS – LESSONS LEARNED

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THE SEROEPIDEMIOLOGIC INVESTIGATION OF DENGUE ILLNESS VERSUS DENGUE INFECTION AFTER THE 2007 OUTBREAK IN TAINAN CITY, TAIWAN
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CHARACTERIZATION AND GROWTH OF A DEN-2 PDK-53-BASED CHIMERIC TETRAVALENT VACCINE
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Rapid molecular typing of dengue viruses
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Use of a high throughput dengue reporter virus neutralization assay to screen patient and vaccinee sera
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Important strategies to prevent severe epidemics of dengue hemorrhagic fever: Taiwan’s epidemiologic findings to help global control
Chwan-Chuen King1, Day-Yu Chao1, Tzai-Hung Wen1, Chuan-Liang Kao1, Jan-Jang Scott Huang1, Mathuros Tipayamongkhhol1, Chuin-Shee Shang1, Shu-Fang Chiang1, Wei-Kung Wang2
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Potential use of statins in prevention and treatment of dengue virus infection: in vitro study
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Role of interferon in response to west nile vaccination
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BIOTINYLATION OF ANTIBODIES IN SERUM SAMPLES ALLEVIATES THE NEED FOR SPECIES-SPECIFIC DETECTION CONJUGATES WHEN ASSAYED FOR IN A MICROSPHERE-BASED SYSTEM

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ANTIBODIES TO WEST NILE VIRUS DETECTED IN WILD MAMMALS IN IOWA: 2005 – 2007

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CREATION OF A CHIMERIC WEST NILE VIRUS CONTAINING DENGUE-2 PRE-MEMBRANE AND ENVELOPE GENES

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LIVE ATTENUATED WEST NILE VIRUS VACCINE BASED ON DEN-2 PDK-53 VECTOR PROTECTS HAMSTERS FROM WILD-TYPE WEST NILE VIRUS CHALLENGE

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APRAMER TECHNOLOGY FOR THE IDENTIFICATION OF NOVEL INHIBITORS OF WOLBACHIA ENZYMES FOR ANTIFILARIAL THERAPY
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WOLBACHIA HEME BIOSYNTHESIS AS A POTENTIAL ANTIFILARIAL TARGET SET
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LATERAL TRANSFER OF THE FERROCHELATASE GENE IN THE HUMAN PARASITE BRUGIA MALAYI
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Aryc W. Mosher1, Moses Katabarwa1, Teshome Gebre2, Estifanos Biru Shargie1, Patricia Graves1, Frank O. Richards1
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Kim Brustoski, Amy G. Hise, Daniel J. Tisch, Moses J. Bockarie, James W. Kazura
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AN UNUSUAL CASE OF STRONGYLOIDES STERCORALIS COLITIS MIMICKING CROHN’S DISEASE
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GASTROINTESTINAL PARASITE COMMUNITIES OF NON-HUMAN PRIMATES FROM CAMEROON
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OPTIMIZATION OF AN ELISA ASSAY FOR THE DETECTION OF S. STERCORALIS INFECTION IN HUMANS
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ACUTE CENTRAL NERVOUS SYSTEM INFECTION BY TRYPANOSOMA CRUZI IN PREGNANCY RATS
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ECG ALTERATIONS IN FIRST AND SECOND STAGE HUMAN AFRICAN TRYPANOSOMIASIS BEFORE AND AFTER TREATMENT
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EVALUATION OF THE IMMUNOBLOT WITH TESA FROM THREE DIFFERENT TRYPANOSOMA CRUZI STRAINS FOR THE SEROLOGICAL DIAGNOSIS OF CHAGAS DISEASE IN THE USA
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APPLICATION OF A 384 WELL T.B.BRUCEI BS 427 WHOLE CELL VIABILITY ASSAY TO THE HTS OF A NATURAL PRODUCT MARINE FRACTIONATED LIBRARY
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GENETICALLY DISTINCT L. DONOVANI CAUSING CUTANEOUS LEISHMANIASIS IN SRI LANKA: A STUDY ON LEISHMANIA SPECIES/STRAIN VARIATION
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LEISHMANIASIS IN SRI LANKA: STUDY OF CLINICAL DISEASE
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Norma E. Padilla-Mejia, Luis E. Florencio-Martinez, Elisa Figueroa-Angulo, Claudia M. Gomez-Hurtado, Juan C. Vizuete-de-Rueda, Santiago Martinez-Calvillo
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MAGNETIC RESONANCE IMAGING INVESTIGATION OF MEGASYNDROME OF THE GASTROINTESTINAL TRACT IN EXPERIMENTAL TRYPANOSOMA CRUZI INFECTION
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INNATE IMMUNITY IN THE CONTROL OF LEISHMANIA AMAZONENSIS INFECTION: A ROLE FOR TYPE I IFN RECEPTOR AND NEUTROPHIL
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QUANTITATIVE STRUCTURE-ACTIVITY RELATIONSHIPS (QSARS) FOR CANDIDATE ANTIMALARIALS AGAINST CHLOROQUINE-RESISTANT PLASMODIUM FALCIPARUM
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Alfred Tiono,1, Alassane Dicko,2 Dennis A. Ndububa,3 Tsirí Abenega,4 Simon Pitman,5 Jacob Awobusuyi,6 Allan Pamba,7 Stephan Duparc,8 Li-Ean Goh,9 Emma Harrell,10 Nick Carter,11 Stephen A. Ward1, Brian Greenwood10,10 Peter A. Winstanley1,11 1Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, 2Malaria Research and Training Centre, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, 3Obafemi Awolowo University Teaching Hospital, Department of Medicine, Ile Ife, Nigeria, 4Komfo Anokye Teaching Hospital, Kumasi, Ghana, 5Department of Medicine, Plateau State Specialist Hospital, Jos, Plateau State, Nigeria, 6Lagos State University Teaching Hospital, Department of Medicine, Ikeja, Lagos, Nigeria, 7GlaxoSmithKline, Greenford, Middlesex, United Kingdom, 8Formerly at GlaxoSmithKline, Greenford, United Kingdom, now at Medicines for Malaria Venture, Geneva, Switzerland, 9Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 10Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom, 11School of Clinical Sciences, University of Liverpool, Liverpool, United Kingdom

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Belén Jiménez-Díaz,1 Teresa Mulet,2 Sara Viera,3 Vanesa Gómez,4 Helen Garuti,5 Angela Alvarez,6 Iñigo Angulo-Barturen,7 Javier Ibáñez,8 Elena Jiménez,9 Pablo Castañeda,10 Isabel Camino,11 Magdalena Jiménez,8 Domingo Gargallo-Viola8 GlaxoSmithKline, Tres Cantos, Spain

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NOD-SCID IL2R–/– MICE ENGRAFTED WITH HUMAN ERYTHROCYTES SUPPORT HIGHER P. FALCIPARUM PARASITEMIAS THAN NOD-SCID BETA2 MICROGLOBULIN–/– ENGRAFTED MICE
Belén Jiménez-Díaz,1 Teresa Mulet1, Sara Viera1, Vanesa Gómez1, Helen Garuti1, Angela Alvarez1, Javier Ibáñez1,1 Leonor Shultz2,2 Domingo Gargallo-Viola1, Iñigo Angulo-Barturen1 1GlaxoSmithKline, Tres Cantos, Spain, 2The Jackson Laboratory, Bar Harbor, ME, United States

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DEVELOPMENT OF A HIGH-THROUGHPUT IN-VITRO SCREEN TO IDENTIFY INHIBITORS OF THE PLASMODIUM FALCIPARUM HEAT SHOCK PROTEIN 90 BINDING ACTIVITY
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PHARMACOKINETIC CHARACTERIZATION STUDIES IN MICE AND BEAGLE DOGS OF 4(1H)-PYRIDONE DERIVATIVE GS932121
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COMPLEXITY OF PLASMODIUM FALCIPARUM CLINICAL SAMPLES FROM UGANDA DURING SHORT-TERM CULTURE
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PLASMODIUM FALCIPARUM HEME DETOXIFICATION PROTEIN (HDP) IS NOT LINKED TO CHLOROQUINE RESISTANCE GENOTYPE

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RANDOMIZED CONTROLLED CLINICAL TRIAL OF ARTEUNATE/MEFLOQUINE PAEDIATRIC FORMULATION VERSUS ARTEMETHER/LUMEFANTRINE FOR UNCOMPLICATED CHILDHOOD FALCIPARUM MALARIA IN IVORY COAST

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MOLECULAR GENOTYPING AND DRUG RESISTANCE ANALYSES OF PLASMODIUM FALCIPARUM RECURRENT PARASITEMIAS IN A CLINICAL TRIAL IN THE PERUVIAN AMAZON REGION

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SELECTION OF PLASMODIUM FALCIPARUM MULTIDRUG RESISTANCE GENE 1 ALLELE IN ASEXUAL STAGES AND GAMETO CYTES BY ARTE METHER-LUMEFANTRINE IN NIGERIAN CHILDREN WITH FALCIPARUM MALARIA

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SELECTION OF P. FALCIPARUM WITH DIMINISHED RESPONSE TO AMODIAQUINE FOLLOWING TREATMENT WITH COMBINATION THERAPY IN UGANDA

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FAILURE OF ARTESUNATE-MEFLOQUINE COMBINATION THERAPY FOR UNCOMPLICATED P. FALCIPARUM MALARIA IN SOUTHERN CAMBODIA

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STABILITY OF PFM DR1 AMPLIFICATION IN PLASMODIUM FALCIPARUM IN VITRO

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A DECLINING BURDEN OF MALARIA IN NORTHEASTERN TANZANIA

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KNOWLEDGE AND UTILIZATION OF MALARIA PREVENTION STRATEGIES IN PREGNANCY IN TWO STATES OF INDIA
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SPATIAL DISTRIBUTION AND TEMPORAL DYNAMICS OF CLINICAL MALARIA CASES IN A WESTERN KENYA HIGHLAND SITE
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MICROSATELLITE ANALYSIS OF MULTIPLE-CLONE PLASMODIUM VIVAX INFECTIONS
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A COMMUNITY EFFECTIVENESS TRIAL ON STRATEGIES PROMOTING INTERMITTENT PREVENTIVE ANTIMALARIAL TREATMENT IN PREGNANT WOMEN IN RURAL BURKINA FASO
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IMPROVING UPTAKE OF INTERMITTENT PREVENTIVE ANTIMALARIAL TREATMENT IN ANTENATAL CLINICS THROUGH COMMUNITY BASED PROMOTION IN RURAL BURKINA FASO: A HEALTH CENTRE RANDOMIZED TRIAL
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PREVALENCE AND DISTRIBUTION OF PLASMODIUM VIVAX CIRCUMSPOROZOITE PROTEIN, VK210 AND VK247 VARIANTS, IN PAPUA NEW GUINEA
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MAPPING THE NUMBER OF PREGNANT WOMEN AT RISK OF MALARIA GLOBALLY
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EVOLUTIONARY FITNESS OF MINORITY-VARIANT CHLOROQUINE-RESISTANT PLASMODIUM FALCIPARUM IN MADAGASCAR
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Peter D. Crompton, Matt Kayala, Boubacar Traore, Greta Weiss, Chad Burk, Kassoum Kayentao, Aissata Onoiga, Safiatou Dombo, Louis H. Miller, Ogobara K. Dumbo, Denise L. Doolan, Pierre Baldi, Philip L. Felgner, Susan K. Pierce
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(ACMCIP Abstract)
THE MEMORY B CELL RESPONSE TO AMA1-C1/ALHYDROGEL® VACCINATION IN SEMI-IMMUNE ADULTS IN MALI, WITH OR WITHOUT THE CPG 7909 OLIGODEOXYNUCLEOTIDE ADJUVANT

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(ACMCIP Abstract)

VACCINATION WITH MSP142-C1/ALHYDROGEL® GENERATES ANTIGEN-SPECIFIC MEMORY B CELLS IN MALARIA-NAÏVE U.S. ADULTS AND THE CPG 7909 OLIGODEOXYNUCLEOTIDE ADJUVANT ENHANCES THIS RESPONSE

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(ACMCIP Abstract)

SOME CHILDREN THAT LACK MEROZOITE SURFACE PROTEIN-1(MSP1) SECONDARY PROCESSING – INHIBITORY ANTIBODIES STILL POSSESS MSP1α-SPECIFIC ERYTHROCYTE INVASION-INHIBITORY ANTIBODIES

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(ACMCIP Abstract)

TRANSPLACENTAL TRANSFER OF ANTIBODIES TO THE FETUS THAT COULD PROTECT INFANTS FROM MALARIA

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IMMUNOGLOBULIN G SUBTYPE RESPONSES TO UB05, A DOMINANT PLASMODIUM FALCIPARUM ANTIGEN BY INDIVIDUALS LIVING IN A HIGH TRANSMISSION ENDEMIC AREA OF THE CAMEROONIAN RAINFOREST

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(ACMCIP Abstract)

CYTOKINE PROFILE IN MURINE MODEL OF PREGNANCY-ASSOCIATED MALARIA

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(ACMCIP Abstract)

IDENTIFY B-CELL EPITOPES IN DUFFY BINDING PROTEIN ASSOCIATE WITH PROTECTION P. VIVAX INVASION

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MALARIA RECRUDESCENCE IN MICE PREGNANCY

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(ACMCIP Abstract)

IGG ANTIBODIES AGAINST MSP-1 (19-KDA) IN PATIENTS INFECTED WITH DIFFERENT PLASMODIUM FALCIPARUM GENOTYPES IN IQUITOS, PERU

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(ACMCIP Abstract)
Malaria – Molecular Biology

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MSP1 AND MSP2-BASED ESTIMATES OF GENETIC DIVERSITY IN PLASMODIUM FALCIPARUM FROM THE ARTIBONITE VALLEY OF HAITI, 2006-2007

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DETERMINATION OF GENETIC DIVERSITY OF VACCINE CANDIDATE ANTIGENS IN PLASMODIUM VIVAX ISOLATES FROM THE AMAZON BASIN OF PERU

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GENETIC ANALYSIS OF THE DIHYDROFOLATE REDUCTASE-THYMIDYLATE SYNTHASE GENE FROM GEOGRAPHICALLY DIVERSE ISOLATES OF PLASMODIUM MALARIAE

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EXTENSIVE GENETIC DIVERSITY IN THE HUMAN MALARIA PARASITE PLASMODIUM VIVAX

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SEQUENCE ANALYSIS OF THE CIRCUMSPOROZOITE PROTEIN GENE OF PLASMODIUM FALCIPARUM POPULATIONS IN THAILAND

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PROSPECTIVE IDENTIFICATION OF MALARIA PARASITE ANTIGEN GENES UNDER BALANCING SELECTION

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SEQUENCE DIVERSITY IN THE MEROZOITE SURFACE PROTEIN 1 GENE OF PLASMODIUM VIVAX AS INFERRED FROM 200 THAI ISOLATES

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PFRC GENETIC MUTATIONS AS MARKERS OF CHLOROQUINE RESISTANCE AMONG SEVERE MALARIA PATIENTS IN GHANA

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GENETIC VARIATION AMONG PLASMODIUM VIVAX PRIMATE ISOLATES AND THE IMPLICATION FOR VACCINE DEVELOPMENT

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(ACMCIP Abstract)
Malaria – Vaccines

ASSESSMENT OF THE ABILITY OF ANTIBODY REAGENTS WITH SPECIFICITY AGAINST VAR2CSA TO RECOGNIZE THE SURFACE OF INFECTED ERYTHROCYTES FROM PREGNANT WOMEN

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(ACMCIP Abstract)

A PHASE 1 STUDY OF THE BLOOD STAGE MALARIA VACCINE CANDIDATE AMA1-C1/ALHYDROGEL WITH CPG 7909, USING TWO DIFFERENT FORMULATIONS AND DOSING INTERVALS

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EVALUATION OF HUMORAL AND CELLULAR RESPONSES INDUCED BY P. BERGHEI CELTOS ADMINISTERED BY RECOMBINANT PROTEIN AND GENE-GUN DELIVERY

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ADVANCED GENERATION ADENO-BASED VECTORS FOR MALARIA VACCINE DEVELOPMENT

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COMPARATIVE ANALYSIS OF MALARIA VACCINE CANDIDATE AMA1-C1/ALHYDROGEL WITH THE ADDITION OF UNIQUE CPG SEQUENCES

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MULTI-FUNCTIONAL T-CELL RESPONSES INDUCED BY THE AS01 OR AS02 ADJUVANTED MALARIA VACCINE CANDIDATE APICAL MEMBRANE ANTIGEN-1 (AMA-1) ADMINISTERED TO MALARIA-NAÏVE ADULTS

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ADJUVANT AND CARRIER EFFECT OF SELF-ASSEMBLING POLYPEPTIDE NANOPARTICLES (SAPN)

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Mosquitoes – Biochemistry and Molecular Biology

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RECOMBINANT PVS230C SPECIFICALLY RECOGNIZES GAMETE STAGE PARASITES OF PLASMODIUM VIVAX AND MAY BE USED TO DETECT ANTIBODIES IN HUMAN SERUM, BUT DOES NOT BLOCK OOCYST DEVELOPMENT IN EXPERIMENTAL MOSQUITO INFECTION
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(ACMCIP Abstract)

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IMMUNOGENICITY STUDIES OF PLASMODIUM VIVAX MALARIA VACCINE CANDIDATES BASED ON RECOMBINANT MODULAR CHIMERAS
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STABILITY OF PLASMODIUM FALCIPARUM MSP 1-19 HAPLOTYPES INFECTING KENYAN CHILDREN IN TWO REGIONS
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(ACMCIP Abstract)

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ANTI-APICAL MEMBRANE ANTIGEN 1 IGG IS MORE EFFECTIVE IN INHIBITING PLASMODIUM FALCIPARUM GROWTH AS MEASURED BY IN VITRO GROWTH INHIBITION ASSAY THAN ANTI-MEROZOITE SURFACE PROTEIN 1 42 IGG
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THE STATUS OF THE PFMSP3 N-TERMINUS AS A VACCINE CANDIDATE: CROSS-REACTIVE ANTIBODIES IN HYPOENDEMIC TRANSMISSION
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POLYMORPHISM OF Aedes aegypti DEFENSIN A GENE
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TRANSCRIPTION PROFILING OF FAT METABOLISM GENES IN DIAPAUSING CULEX PIPIENS
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ENERGY METABOLISM IN DIAPAUSING CULEX PIPIENS MOSQUITOES
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REGULATION AND FUNCTION OF MIDGUT PROTEASE GENES IN Aedes aegypti MOSQUITOES
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REGULATION OF FATTY ACID METABOLISM IN Aedes aegypti MOSQUITOES
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POSSIBLE INVOLVEMENT OF AGSGS PROTEINS DURING INVASION OF ANOPHELES SALIVARY GLANDS BY PLASMODIUM SPOROZOITES
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BINDING OF THE CRY4B TOXIN OF BACILLUS THURINGIENSIS SUBSP. ISRAELENSIS TO THE CADHERIN RECEPTOR OF ANOPHELES GAMBIAE MEDIATES CELL DEATH
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GLYCOCONJUGATE ANALYSIS IN ANOPHELES GAMBIAE
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THE RELATIONSHIP BETWEEN VITELLOGENIN EXPRESSION AND AUTOGENY IN CULEX TARSALIS
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CHARACTERIZATION OF IMMUNE PEPTIDES IN RESPONSE TO FILARIAL WORM INFECTION IN THE MOSQUITO, ARMIGERES SUBALBATUS
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EX VIVO PROMOTER ANALYSIS OF ANOPHELES GAMBIAE HEAT SHOCK COGNATE (HSC70) GENE DURING O’NYONG-NYONG VIRUS INFECTION
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(ACMCIP Abstract)

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BLOODMEAL ANALYSIS OF CULEX SPECIES IN CENTRAL ILLINOIS
Nina M. Krasavin
University of Illinois, Champaign, IL, United States

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SELECTION OF A PEPTIDE INHIBITOR OF WEST NILE VIRUS INFECTIVITY FROM A PHAGE DISPLAY LIBRARY
Young S. Hong1, Seokyoung Kang1, Brian D. Byrd2
1Tulane University, New Orleans, LA, United States, 2Western Carolina University, Cullowhee, NC, United States

(ACMCIP Abstract)

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COMPARATIVE GENOMICS OF ANTI-VIRAL RNA INTERFERENCE PATHWAYS IN MOSQUITOES
Corey L. Campbell, Ann M. Hess, William C. Black, IV, Brian D. Foy
Colorado State University, Fort Collins, CO, United States

(ACMCIP Abstract)

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CHARACTERIZATION OF PI3K AND ITS REPRODUCTIVE ROLE IN THE MOSQUITO AEDES AEGYPTI
Michael A. Riehle1, Benjamin M. Pri-Tal2
1University of Arizona, Tucson, AZ, United States, 2Portland State University, Portland, OR, United States

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THE AGING MOSQUITO: INCREASED INSULIN SIGNALING IN THE MIDGUT OF AN. STEPHensi REDUCES LIFESPAN
Laurel Watkins de Jong, Michael Riehle
University of Arizona, Tucson, AZ, United States

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GENE EXPRESSIN IN ADULT MOSQUITOES DURING POST-EMERGENCE DEVELOPMENT
Jinsong Zhu, Jeff Busche, Xing Zhang
Virginia Tech, Blacksburg, VA, United States

Mosquitoes – Molecular Genetics

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DEVELOPMENT OF A MULTIPLEXED PCR DIAGNOSTIC TO IDENTIFY COMMON MEMBERS OF THE SUBGENERA CULEX (CULEX) AND CULEX (PHENACOMYIA) IN GUATEMALA
Rebekah J. Kent, Stephen Aspen, Martin Williams, Harry Savage
Centers for Disease Control and Prevention, Fort Collins, CO, United States

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THE POPULATION GENETIC STRUCTURE OF ANOPHELES GAMBIAE IN KENYA
Janet T. Midega1, Charles M. Mbogo1, Guiyun Yan2, John I. Githure1, John Beier1
1Kenya Medical Research Institute, Kilifi, Kenya, 2University of California, Irvine, CA, United States, 3International Centre for Insect Physiology and Ecology, Nairobi, Kenya, 4University of Miami, Miami, FL, United States

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GENE FLOW OF Aedes aegypti IN URBAN REGIONS BASED ON THE USE OF NEW MICROSATellite MARKERS
Paulo R. Melo1, Luciano K. Silva1, Gilmar J. Ribeiro1, Carlos G. Santos1, Ronald E. Blanton2, Mitermayer G. Reis1
1Oswaldo Cruz Foundation, Salvador, Brazil, 2Case Western Reserve University, Cleveland, OH, United States

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EVOLUTIONARY PLASTICITY OF THE MALARIA MOSQUITO GENOME
Ai Xia, Maria V. Sharakhova, Zhijian Tu, Igor V. Sharakhov
Virginia Tech, Blacksburg, VA, United States

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HIGH-RESOLUTION CYTOGENETIC PHOTOMAP FOR THE MAJOR MALARIA VECTOR ANOPHELES GAMBIAE
Phillip George, Maria V. Sharakhova, Igor V. Sharakhov
Virginia Tech, Blacksburg, VA, United States
Mosquitoes – Vector Biology – Epidemiology

WHAT IS THE IMPACT OF ARBOVIRAL INFECTION ON VECTOR LONGEVITY?
Louis Lambrechts, Thomas W. Scott
University of California, Davis, CA, United States

THE EVOLUTION OF ANTI-MALARIAL IMMUNE GENES IN THE ANOPHELES GAMBIAE COMPLEX
Michel A. Slotman1, Aristeidis Parmakelis2, Nicolas Poulakakis3, Kostas Tselentis3, Nikolas Poulopoulos3, Nektarios Tzamalos3, Kristin B. Dion1, Jonathon C. Marshall1, Christophe Antoniou-Nkondji6, perfait H. Awono-Ambene5, Frederic Simard6, Adélia Durieux6, Jeffrey R. Powell1
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ASSOCIATIONS BETWEEN URBAN STRUCTURE AND Aedes aegypti LARVAL HABITATS IN PUNTARENAS, COSTA RICA
Adriana Troyo1, Kristopher L. Arheart2, Douglas O. Fuller2, Olger Calderon-Arguedas1, John C. Beier1
1University of Costa Rica, San Jose, Costa Rica, 2University of Miami, Miami, FL, United States

SURPRISES IN THE CLIMATE-MALARIA LINK IN THE AMAZON
Sarah H. Olson1, Ronald Gangnon1, Eric Elguero2, Laurent Durieux3, Jean-François Guégan3, Jonathan A. Foley1, Jonathan A. Patz1
1University of Wisconsin Madison, Madison, WI, United States, 2IRD/CNRS/Montpellier University, Montpellier, France, 3Institut de Recherche pour le Développement, Brasilia, Brazil

EVALUATION OF A PCR-RFLP METHOD FOR IDENTIFICATION OF ANOPHELINES SPECIES FROM THE PACIFIC AND ATLANTIC COASTS OF COLOMBIA
Astrid V. Cienfuegos1, Doris A. Rosero1, Luz M. Jaramillo1, Lina A. Gutiérrez1, Shirley Luckhart1, Jan E. Conn1, Margarita M. Correa1
1Grupo de Microbiologia Molecular, Escuela de Microbiologia, Universidad de Antioquia, Medellin, Colombia, 2Department of Medical Microbiology and Immunology, University of California, Davis, CA, United States, 3Griffin Laboratory, Wadsworth Center, New York State Department of Health, Albany, NY, United States

ASTMH 57th Annual Meeting

GENETIC STRUCTURE IN THE ARBOVIRAL VECTOR Cx. Tarsalis: A SPATIAL ANALYSIS OF POPULATION DIFFERENTIATION ACROSS THE WESTERN UNITED STATES
Meera Venkatesan, Jason L. Rasgon
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

RECONSTRUCTING ANCESTRAL CHROMOSOMAL ARRANGEMENTS IN THE ANOPHELES GAMBIAE COMPLEX
Igor V. Sharakhov, Al Xia, Maria V. Sharakhova
Virginia Tech, Blacksburg, VA, United States

STRUCTURAL ORGANIZATION OF THE MALARIA MOSQUITO HETEROCHROMATIN
Maria V. Sharakhova1, Irina V. Brusentsova1, Zhijian Tu1, Igor V. Sharakhov2
2Virginia Tech, Blacksburg, VA, United States, 1Institute of Cytology and Genetics, Novosibirsk, Russian Federation

CONTRASTING PATTERNS OF EVOLUTION IN FIVE CHROMOSOMAL INVERSIONS OF ANOPHELES GAMBIAE
Bradley J. White1, Changde Cheng2, Matthew W. Hahn2, Marcia Kern3, Marco Pombi3, Neil F. Lob3, Mamadou Coulibaly1, Frederic Simard2, Nora J. Besansky1
1University of Notre Dame, Notre Dame, IN, United States, 2University of Indiana, Bloomington, IN, United States, 3University of Rome "La Sapienza", Rome, Italy, 4IRD/OCEAC, Yaoundé, Cameroon

DEMOGRAPHIC HISTORY AND MICRO-GEOGRAPHIC POPULATION GENETICS OF ANOPIHELES ALBIMANUS IN CENTRAL AMERICA BASED ON MITOCHONDRIAL DNA COI AND CYT B SEQUENCES
Jose R. Loaiza
Wadsworth Center, Albany, NY, United States

CHROMOSOMAL PLASTICITY AND EVOLUTIONARY POTENTIAL IN THE MALARIA VECTOR ANOPHELES GAMBIAE SENSU STRICTO: INSIGHTS FROM THREE DECADES OF RARE PARACENTRIC INVERSIONS
Marco Pombi1, Beniamino Caputo1, Carlo Costantini2, Maria Angela Di Deco1, Mario Coluzzi3, Alessandra della Torre1, Frederic Simard1, Nora J. Besansky1, Vincenzo Petraca1
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EVALUATING THE IMPACT OF ENVIRONMENTAL VARIABLES ON THE TRANSMISSION OF AMERICA CUTANEOUS LEISHMANNIASIS IN RURAL COLOMBIA
Carlos Valderrama-A, Neal Alexander, Clara B. Ocampa, Cristina Ferro, Horacio Cadena, Dairo Marin, Theodore Holford, Leonard Munstermann
1Universidad ICESI, Cali, Valle, Colombia, 2CIDEM, Cali, Valle, Colombia, 3Instituto Nacional de Salud, Bogota, Colombia, 4Yale University, New Haven, CT, United States

SPATIAL DISTRIBUTION OF MOSQUITO LARVAE AND THE POTENTIAL FOR TARGETED LARVAL CONTROL IN THE GAMBIA
Silas Majambere, Ulrike Fillinger, David Sayer, Clare Green, Steve W. Lindsay
Durham University, Durham City, United Kingdom

HABITAT SEGREGATION AND CHARACTERIZATION OF ANOPELES LARVAE IN LOWLAND WESTERN KENYA
Francis Mutuku, Nabie M. Bayoh, Allen W. Hightower, John M. Vulule, Jones M. Mueke, John E. Gimnig, Edward D. Walker
1Kenya Medical Research Institute, Kisumu, Kenya, 2Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, 3Kenyatta University, Nairobi, Kenya, 4Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, 5Department of Microbiology and Molecular Genetics, Michigan State University, East Lansing, MI, United States

LAND COVER ASSOCIATIONS OF IMMATURE ANOPELES HABITATS IN A WESTERN KENYA LOWLAND ENDEMIC FOR MALARIA
Francis Mutuku, Nabie M. Bayoh, Allen W. Hightower, John M. Vulule, Jones M. Mueke, John E. Gimnig, Edward D. Walker
1Kenya Medical Research Institute, Kisumu, Kenya, 2Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, 3Kenyatta University, Nairobi, Kenya, 4Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, 5Department of Microbiology and Molecular Genetics, Michigan State University, East Lansing, MI, United States

ROLE OF A SERINE PROTEASE FROM A. GAMBIAE IN PLASMODIUM DEVELOPMENT
Janneth Rodrigues, Eku Abban, Corrie Ortega, Alvaro Molina-Cruz, Carolina Barrillas Mury
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

EFFECTS OF WEST NILE VIRUS DOSE ON SPATIOTEMPORAL MIDGUT INFECTION PATTERNS IN CULEX PIPIENS QUINQUEFASCiATiUS SAY (DIPTERA: CULiCiDAE)
Sheri L. Anderson, Chelsea T. Smartt, Walter J. Tabachnick, Stephanie L. Richards
University of Florida, Vero Beach, FL, United States

HIGH RATES OF FEEDING ON HUMANS IN THE GENERALIST BITER AEDeS ALBOPIcTuS IN ROME (ITALY)
Laura Valerio, Francesca Marini, Gioia Bongiorno, Luca Facchinelli, Marco Pombi, Beniamino Caputo, Michele Maroli, Alessandra della Torre
1Dip. Scienze di Sanità Pubblica, Università Sapienza, Rome, Italy, 2Section of Vector-Borne Diseases and International Health, MIPI Department, Istituto Superiore di Sanità, Rome, Italy

FREQUENCY OF MULTIPLE HUMAN BLOODMEALS TAKEN BY ANOPELES ARABIENSIS MOSQUITOES IN MACHA, ZAMBIA
Laura C. Norris, Fernando J. Pineda, Douglas E. Norris
Johns Hopkins School of Public Health, Baltimore, MD, United States

CHARACTERIZATION OF WATER-HOLDING CONTAINERS AS MOSQUITO-HABITATS, AND DENGUE-PREVENTION COMMUNITY EDUCATION IN RURAL ECUADORIAN COMMUNITIES
Mauricio Lascano, Christine Leistner, Abbey Wojno, Margaret Romoser, David Dohm, Richard Trudel, Christa Tomc, William S. Romoser
1Tropical Disease Institute, Biomedical Sciences, College of Osteopathic Medicine, Ohio University, Athens, OH, United States, 2International Development Studies, Ohio University, Athens, OH, United States, 3Communication Studies, Scripps College of Communication, Ohio University, Athens, OH, United States, 4U.S. Army Medical Research Institute of Infectious Diseases, Frederick, MD, United States, 5Sociétè de protection des forêts contre les insectes et maladies (SOPFIM), Quebec, QC, Canada, 6College of Osteopathic Medicine, Ohio University, Athens, OH, United States

MICROFILARIAL UPTAKE AND PENETRATION OF THE MIDGUT AMONG DIFFERENT MOSQUITO SPECIES FED SIMULTANEOUSLY ON THE SAME MICROFILAREMIC HOST
Jefferson A. Vaughan, Joseph O. Mehus, Jeffrey A. Bell, Michael J. Turell
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MODELING WEST NILE VIRUS TRANSMISSION AMONG BIRDS IN CONNECTICUT

Jennifer E. Simpson1, Alison Galvani1, Jan Medlock1, Goudarz Moaleemi, Theodore Andreadis2, Maria Diuk-Wasser3
1Yale University, New Haven, CT, United States; 2The Connecticut Agricultural Experiment Station, New Haven, CT, United States

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VECTORS IN CRINE IN A HIGHLY ENDEMIC MALARIA LOCALITY OF CÓRDOBA, COLOMBIA

Lina A. Gutiérrez1, Martha I. Castro2, John J. González2, Giovan F. Gomez3, Jan E. Conn4, Shirley Luckhart5, Margarita M. Correa1
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FLUCTUATION IN WATER LEVEL OF LAKE VICTORIA AFFECTS ABUNDANCE OF ANOPHELES FUNESTUS

Noboru Minakawa1, Kyoko Futami1, Satoshi Kaneko1, George Sonye2, Gabriel O. Dida3
1Nagasaki University, Nagasaki, Japan; 2International Centre for Insect Physiology and Ecology, Mbita, Kenya; 3Maseno University, Maseno, Kenya

Pneumonia, Respiratory Infections and Tuberculosis

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ADENOVIRUS 21 OUTBREAK AT THE COAST GUARD TRAINING CENTER IN CAPE MAY, NEW JERSEY

Theodore R. Brown1, Luis J. Martinez2, Joseph K. Llanos3, Julia A. Lynch4, Rodney L. Coldren1
1Uniformed Services University of the Health Sciences, Bethesda, MD, United States; 2Walter Reed Army Institute of Research, Silver Spring, MD, United States; 3United States Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, MD, United States

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VENTRICULAR DYSFUNCTION IN A PROBABLE MYOCARDIAL INFARCTION CASE

Antoni Soriano Arandes, Esther Guirado Sayago, Olga Calavia Garsaball, Laia Call Ramon, Ester Castellarnau Figueras, Juan Carretero Bellón
Hospital Universitari Joan XXIII, Tarragona, Spain

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MYCOBACTEREMIA IN RURAL THAILAND: INVASIVE SPECIES AND ANTIBIOTIC SUSCEPTIBILITY WITHIN AN IMMUNOCOMPROMISED POPULATION

Posanawat Jorakate1, Somkid Yooprakhon2, Pokasem Sirinarn1, Somsak Rienthong1, Sathapana Naorat1, Sirirat Makprasert1, Jeeranun Areerob1, Charnchai Thipsuk1, Warunyu Phordee1, Leonard Peruski1
1International Emerging Infections Program, Sa Kao, Thailand; 2Crown Prince Hospital, Ministry of Public Health, Sa Kao, Thailand; 3National Tuberculosis Reference Laboratory, Bangkok, Thailand; 4International Emerging Infections Program, Nonthaburi (Bangkok), Thailand

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EVIDENCE OF PRIMARY MDR RESISTANCE AMONG TUBERCULOSIS CASES IN PAPUA NEW GUINEA

Suparat Phuanukoonnon1, Dagwin Luang Suarkia1, Lisol Nirai Luke1, Ivo Mueller1, Jethro Usurup2, Robyn Carter1, Christopher M. Gilpin1, Christopher Coulter3, James McCarthy4, Peter Max Sila1
1PNG Institute of Medical Research, Goroka, Papua New Guinea; 2Modilon Hospital, Madang, Papua New Guinea; 3Mycobacterium Reference Laboratory, Brisbane, Australia; 4Queensland Institute of Medical Research, Brisbane, Australia

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HIGH FREQUENCY OF ANTIBIOTIC RESISTANCE IN NASOPHARYNGEAL CARRIERS OF STREPTOCOCCUS PNEUMONIAE IN CHILDREN YOUNGER THAN 2 YEARS OF AGE IN LIMA, PERU

Jackeline Pando1, Gertrudiz Horna1, Lidia Mejia2, Roger Hernandez1, Maria Esther Castillo1, Wilda Silva3, Francisco Campos1, Theresa Ochoa1
1Royal College of Physicians of Ireland, Dublin, Ireland; 2Universidad Peruana Cayetano Heredia, Lima, Peru; 3Hospital Cayetano Heredia, Lima, Peru; 4Instituto de Salud del Niño, Lima, Peru; 5Hospital Edgardo Rebagliati-Essalud, Lima, Peru; 6Hospital San Bartolome, Lima, Peru; 7Universidad Cayetano Heredia, Lima, Peru

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RESPIRATORY VIRUSES IN A PROSPECTIVE COMMUNITY-BASED PEDIATRIC COHORT IN NICARAGUA

Aubree Gordon1, Saira Sabori2, Guillermina Kuan2, Elsa Videa3, Nathan Yozwiak4, Oscar Ortega5, Miguel Reyes5, Arthur Reingold5, Angel Balmaseda6, Eva Harris5
1Division of Infectious Diseases, School of Public Health, University of California, San Francisco, San Francisco, CA, United States; 2Department of Virology, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua; 3Socrates Flores Vivas Health Center, Managua, Nicaragua; 4University of California, San Francisco, San Francisco, CA, United States; 5Division of Epidemiology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States
Detailed Program

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A FAST THERAPEUTIC EFFICACY ASSAY WHICH DISCRIMINATES CIDAL AND STATIC ANTITUBERCULAR COMPOUNDS AGAINST MYCOBACTERIUM TUBERCULOSIS GROWING EXPONENTIALLY IN THE LUNGS OF MICE
Joaquín Rullas, Juan García, Manuela Beltrán, Domingo Gargallo-Viola, Iñigo Angulo-Barturen GlaxoSmithKline, Tres Cantos, Spain (ACMCIP Abstract)

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TUBERCULOSIS PRESENTING AS A CARCINOID TUMOR
Hemavarna Tiruvury, Deborah Asnis, Nageswara Mandava Flushing Hospital Medical Center, Flushing, NY, United States

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H5N1 SURVEILLANCE IN RESIDENT, CAPTIVE, AND MIGRATORY BIRDS IN JAVA, INDONESIA
K. A. Barbara1, M. Indrawan2, B. Wicaksana1, S. Wijaya1, A. Farzelli1, U. Antonjaya1, L. W. Sien1, A. Maruli1, N. Hidayatullah1, S. Purmana1, I. Kristanto1, I. N. Ibrahim1, T. H. Burgess1, M. Williams1, S. Tobias1, C. A. Stoops1, P. J. Blair1
1U.S. Naval Medical Research Unit No. 2, Jakarta, Indonesia, 2IdOU – Indonesian Ornithologists’ Union, PILI – Pusat Informasi Lingkungan hidup Indonesia, Bogor, Indonesia

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DESCRIPTION OF FOUR ACUTE RESPIRATORY ILLNESS OUTBREAKS IN PERUVIAN MILITARY TRAINING UNITS – 2007
Moises A. Huaman1, Roger V. Araujo-Castillo1, Rollin A. Cruz1, Giselle Soto1, Cecilia C. Mundaca1, Mariana Ramos-Rodriguez1, Alberto V. Laguna-Torres1, Gloria Chauca1, Joan M. Neyra1, Miguel Fernandez2, Carlos Leturia2, Tadeusz Kochel3, David L. Blazes1, Joel M. Montgomery1
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SURVEILLANCE OF EMERGING DISEASE IN RESOURCE LIMITED SETTINGS
Jacqueline S. Coberly1, Richard Wojcik2, Jean-Paul Chretien2, Sheri Lewis1
1Johs Hopkins University Applied Physics Laboratory, Laurel, MD, United States, 2Walter Reed Army Institute for Research, Global Emerging Infection System, Silver Spring, MD, United States

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A SYSTEMATIC REVIEW AND META-ANALYSIS OF TUBERCULOSIS INFECTION RISK IN DEPLOYED MILITARY PERSONNEL AND LONG-TERM CIVILIAN TRAVELERS
Randall J. Freeman, Jamie Mancuso, Lisa Keep Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Viruses – Other

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PREVENTING NIPAH VIRUS INFECTION: INTERVENTIONS TO INTERRUPT BATS ACCESSING DATE PALM SAP
Nazmun Nahar, Rebeca Sultana, Elizabeth Oliveras, Utpal Kumar Mondal, M. Jahangir Hossain, Emily S. Gurlay, Ma Saiful Islam, M. S. Khan, Stephen P. Luby International Center for Diarrhoeal Disease Research, B, Dhaka, Bangladesh

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PREDICTING HANTAVIRUS RISK IN CHILE
Gregory E. Glass1, Pablo A. Marquet2, Eduardo R. Palma3, Iván Barria4, Terry L. Yates5, Pablo A. Vial2, Marcela Ferrés2, Gregory J. Mertz3
1The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, 2Center for Advanced Studies in Ecology and Biodiversity (CASEB) & Departamento de Ecología, Pontificia Universidad Católica de Chile, Santiago, Chile, 3Division of Infectious Diseases, Department of Internal Medicine, University of New Mexico, Albuquerque, NM, United States, 4Facultad de Medicina, Clínica Alemana-Universidad del Desarrollo, Santiago, Chile, 5Department of Biology and Museum of Southwestern Biology, University of New Mexico, Albuquerque, NM, United States

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DEVELOPMENT AND EVALUATION OF RECOMBINANT ARENAVIRUS PROTEINS FOR USE IN DIAGNOSTIC, PROPHYLACTIC & THERAPEUTIC APPLICATIONS
Joseph Fair1, Mary Guttiérrez2, Luis Branco3, Jon Geske4, Humarr Khan5, Randal Schoeppe6, Augustine Goba3, Joan Geisbert4, Robert Garry1, Daniel Bausch6
1Tulane University, New Orleans, LA, United States, 2U.S. Army Medical Research Institute for Infectious Diseases, Fort Detrick, MD, United States, 3Biofactura, INC, Rockville, MD, United States, 4Corgenix, Denver, CO, United States, 5Kenema Government Hospital, Kenema, Sierra Leone, 6Boston University, Boston, MA, United States

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HOME POULTRY RAISING PRACTICES IN BANGLADESH: THE SETTING FOR ANIMAL TO HUMAN INFLUENZA TRANSMISSION
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ENVELOPE REGION GENETIC CHARACTERIZATION OF CHIKUNGUNYA VIRUS ISOLATES FROM INDONESIA
1Naval Medical Research Unit 2, Jakarta, Indonesia, 2University of Indonesia, Depok, Indonesia, 3American Type Culture Collection, Manassas, VA, United States, 4Naval Medical Research Center, Silver Spring, MD, United States, 5National Institutes of Health Research and Development, Ministry of Health, Jakarta, Indonesia

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HOW TO IMPLEMENT A SUCCESSFUL TRAINING PROGRAM AT YOUR INSTITUTION?
Anne-Sophie Brocard, Je T’Aime Newton, Karin Loftin, Marian Downing, Joanna Taormina, Dominica Zimmerman
University of Texas Medical Branch, Galveston, TX, United States

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WORLD RABIES DAY: A ONE HEALTH INITIATIVE TO...MAKE RABIES HISTORY!
Robert E. Redmon, Cathleen A. Hanlon, Abbigail Tumpey, Deborah J. Briggs, Peter J. Costa
1Medical College of Wisconsin, Milwaukee, WI, United States, 2Kansas State University, Manhattan, KS, United States, 3Centers for Disease Control and Prevention, Atlanta, GA, United States, 4Alliance for Rabies Control, Midlothian, United Kingdom, 5Global Alliance for Rabies Control, Manhattan, KS, United States

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AVIAN INFLUENZA IN WILD BIRDS FROM THE CENTRAL COAST OF PERU
Bruno M. Gherzi, David Blazes, Eliana Icochea, Rosa I. Gonzalez, Tadeusz Kochel, Yeny Tinoco, Merly Sovery, Stephen Lindstrom, Bo Shu, Alexander Klimov, Armando E. Gonzalez, Joel M. Montgomery
1Naval Medical Research Center Detachment, Lima, Peru, 2San Marcos University, Lima, Peru, 3Johns Hopkins University, School of Public Health, MD, United States, 4Center for Disease Control and Prevention, Atlanta, GA, United States

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DETECTION OF FEBRILE RESPONSES IN VENEZUELAN EQUINE ENCEPHALITIS VIRUS (VEEV) INFECTED MICE
Shannon S. Martin, Michael D. Parker, Russell Bakken, Jessica L. Price, Mary Kate Hart, Donald L. Fine
1DynPort Vaccine Company, Frederick, MD, United States, 2United States Army Medical Research Institute of Infectious Diseases, Frederick, MD, United States

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MAYARO FEVER VIRUS OUTBREAK IN SANTA BARBARA, PARÁ STATE, BRAZIL, 2008
Instituto Evandro Chagas, Belém, Brazil

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ANTIGENIC DRIFT AND THE REASSORTMENT OF GENOMIC RNA SEGMENTS PROTAGONIST THE MICROEVOLUTION OF PUUMALA HANTAVIRUS IN A BANK VOLE (MYODES GLAREOLUS) POPULATION
Maria Razzautti Sanfelici, Angelina Plyusnina, Heikki Henttonen, Alexander Plyusnin
1Haartman Institute/University of Helsinki, Helsinki, Finland, 2Finnish Forest Research Institute, Vantaa, Finland

(ACMCIP Abstract)

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GENETIC CHARACTERIZATION OF THE RABIES VIRUS STRAIN QR 18867 (RHABDOVIRIDAE, LYSSAVIRUS) ISOLATED FROM THE URODERMA BILOBATUM BAT IN PORTEL MUNICIPALITY, PARÁ STATE, 2004
Keley N. Nunes, Elizabeth S. Travassos da Rosa, Taciana F. Barbosa, Armando S. Pereira, Daniele B. Medeiros, Lívia M. Casseb, Pedro F. Vasconcelos, Márcio R. Nunes
Instituto Evandro Chagas, Belém, Brazil

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MATERNAL-FETAL TRANSMISSION OF CHIKUNGUNYA VIRUS IN MICE
Sarah A. Ziegler, Amelia P. Travassos da Rosa, Shu-Yuan Xiao, Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

Poster Session B ACMCIP Abstracts – Molecular, Cellular and Immunoparasitology

CME/Courses Committee Meeting
Salon 816
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.
Mid-Day Session 83

What are the Roles of Community in Malaria Eradication?: A Roundtable Discussion

Rhythms II/III

Tuesday, December 9, 12:15 p.m. – 1:15 p.m.

In the latest call for malaria eradication, much has been discussed regarding the roles of health professionals, medico-scientific innovation, NGOs and local governments in designing, implementing and funding malaria eradication. Little has been discussed regarding the roles of the estimated 2-3 billion people at risk for malaria. This roundtable discussion and open forum addresses the potential roles for community, broadly defined, to participate in planning, implementing, sustaining and evaluating malaria programs. Issues that may hinder or facilitate current eradication strategies including reliance on large international programs, technical interventions and expanding roles of affected communities will be discussed. Roundtable participants include health professionals with backgrounds in social sciences; broad historical perspectives on the relationships between malaria, malaria control practices and affected communities; and community-based research and intervention experience in Africa, Asia, the Americas and Europe.

CHAIR
Frank Mannix
Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States

12:15 p.m.
Peter Brown
Emory University, Atlanta, GA, United States

12:25 p.m.
Caroline Jones
London School of Hygiene and Tropical Medicine, London, United Kingdom

12:35 p.m.
Peter Kunstadter
University of California at San Francisco, San Francisco, CA, United States

12:45 p.m.
Holly A. Williams
Centers for Disease Control and Prevention, Atlanta, GA, United States

1 p.m.
Marcel Tanner
Swiss Tropical Institute, Basel, Switzerland

Mid-Day Session 84

Constructive Consilience: Applying the Legacy of Robert E. Shope

Waterbury

Tuesday, December 9, 12:15 p.m. – 1:15 p.m.

The purpose of this symposium is to reflect on how the ASTMH research community and the NASA research community might work together in constructive consilience to raise public awareness about the connections between emerging infectious diseases and global climate change. “Constructive consilience” is a phrase that refers to the effort to bring together people of different disciplines and world views to work together to solve common problems. Robert E. Shope was well-known among his colleagues for his knack for overcoming interdisciplinary obstacles. In his final public talk, he encouraged the science community to commit itself to science education and public awareness of emerging infectious diseases. This session organizer is a science educator and research analyst with NASA's Jet Propulsion Laboratory, the principal investigator of Arctica Science Research Projects for Urban Youth — an official project of the International Polar Year, carried out by the Urban Science Corps in Los Angeles and Baltimore and other metropolitan areas around the nation. Presenters include esteemed colleagues of Robert E. Shope and an outstanding recipient of the Robert E. Shope Fellowship to participate in this symposium.

CHAIR
Richard E. Shope
NASA-Jet Propulsion Laboratory, Pasadena, CA, United States
Charles Calisher
Colorado State University, Fort Collins, CO, United States

12:15 p.m.
Scott C. Weaver
University of Texas Medical Branch, Galveston, TX, United States

12:30 p.m.
Rebekah J. Kent
The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

12:45 p.m.
Charles Calisher
Colorado State University, Fort Collins, CO, United States

1 p.m.
Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

Mid-Day Session 84A

Attenuated Sporozoite Vaccines for Malaria

Bayside BC

Tuesday, December 9, 12:15 p.m. - 1:15 p.m.

It was previously demonstrated that irradiated infected mosquitoes fed on volunteers protected them against challenge with fully virulent sporozoites. This observation has led to the development of purified, attenuated sporozoites to be prepared as a vaccine administered by needle and syringe. This symposium will present the current approaches of irradiation and genetic modification of sporozoites to develop a vaccine.

CHAIR
Laurence Lemiale
PATH Malaria Vaccine Initiative, Bethesda, MD, United States
12:15 p.m.
RADIATION ATTENUATED SPOROZOITE VACCINE FOR MALARIA
Stephen L Hoffman
Sanaria Inc, Rockville, MD, United States

12:35 p.m.
GENETIC ENGINEERING OF LIVE ATTENUATED MALARIA VACCINES
Stefan Kappe
SBRI, Seattle, WA, United States

12:55 p.m.
GENETICALLY ATTENUATED SPOROZOITE VACCINE FOR MALARIA
Robert Sauerwein
Radboud University Nijmegen Medical Center, Nijmegen, Netherlands

Meet the Professors 85
Meet the Professors B: Enigmatic and Teaching Cases

Grand Ballroom A
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.
A panel of professors will each present one clinical case 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. An open discussion will be encouraged, with audience participation.

CHAIR
Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada

PRESENTERS
David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States
J. Dick MacLean
McGill Univ. Center for Tropical Disease, Montreal, QC, Canada

Mid-Day Session 86
Preparation and Review of Scientific Manuscripts for the American Journal of Tropical Medicine & Hygiene

Grand Ballroom D
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.
This symposium is aimed at trainees and others interested in better understanding 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; and 6) How to respond to reviewer comments; and 6) The publication process: what happens after your paper is accepted.

CHAIR
James Kazura
Case Western Reserve University, Cleveland, OH, United States
Cathi Siegel
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

12:30 p.m.
MANUSCRIPT PROCESSING AT AJTMH
Cathi Siegel
Case Western Reserve University, Cleveland, OH, United States

12:45 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

12:55 p.m.
THE REVIEW: EDITORIAL, CORRESPONDING AUTHOR AND REVIEWER PERSPECTIVES
James Kazura
Case Western Reserve University, Cleveland, OH, United States

1 p.m.
THE REVIEW: EDITORIAL, CORRESPONDING AUTHOR AND REVIEWER PERSPECTIVES
Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

1:05 p.m.
OPEN FORUM WITH AUDIENCE
Mid-Day Session 86A

Video on Neglected Tropical Diseases: “Survival - Distant Places, Forgotten Lives”

Grand Ballroom E
Tuesday, December 9, 12:15 p.m. - 1:15 p.m.

The people of Niger, one of the poorest countries in the world, suffer from a host of forgotten, parasitic diseases. Schistosomiasis and Lymphatic Filariasis were defeated long ago in the developed world but still blight the lives of millions, especially in sub-Saharan Africa. Yet the drugs which can cure these and other neglected diseases are cheap and safe to use. Now, thousands of ordinary people - farmers and teachers, not doctors - are being recruited to distribute these drugs to millions of their fellow citizens. Their ambitious goal - to eliminate five neglected diseases in just five years.

CHAIR
Ann-Marie Sevcsik
Drugs for Neglected Diseases initiative, Geneva, Switzerland

Poster Session B Viewing

Armstrong Ballroom
Tuesday, December 9, 1:30 p.m. – 7 p.m.

Symposium 87

Dengue Viruses, Antibodies and Macrophages: A Lethal Combination

Gallery
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

These several papers provide substantial new, direct evidence from living and deceased humans of the role of monocytes/macrophages in supporting dengue infections in human beings. More importantly, evidence is presented describing a new phenomenon, “intrinsic antibody dependent enhancement (ADE) in which infection in macrophages by dengue virus-antibody complexes (at appropriate antibody concentrations or directed at appropriate sites on the virion), suppresses innate immunity. The result is a significant increase in the production of virus per cell. As evidenced in two presentations, dengue viruses differ in their ability to be neutralized by heterotypic dengue antibodies. During second dengue infections, high levels of pre-existing cross-neutralization correlate with protection against severe disease; low levels of neutralization accurately predict susceptibility to overt disease presumably via intrinsic ADE.

CHAIR
Scott B. Halstead
Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea
Susie Kliks
Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea

1:30 p.m.

ASSAY OF ANTIBODIES IN FCR-BEARING CELLS, VARIANT VIRAL ANTIGENS ON DENGUE 3 VIRUSES
Aravinda de Silva
University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

1:55 p.m.

IMMUNOCYTOLOGY OF INFECTED TARGET CELLS: STUDIES ON PATIENTS AND FATAL CASES
Eva Harris
University of California at Berkeley, Berkeley, CA, United States

2:20 p.m.

DENGUE ANTIBODIES ASSAYED IN HUMAN FCGR-ENGINEERED CELLS: IMPROVING THE CORRELATION BETWEEN NEUTRALIZATION AND PROTECTION
Jacob Schlesinger
University of Rochester School of Medicine, Rochester, NY, United States

2:45 p.m.

INTRINSIC ANTIbody DEPENDENT ENHANCEMENT (ADE) IN MONOCYTES
Xia Jin
University of Rochester School of Medicine, Rochester, NY, United States

Symposium 88

Use of Fluorescent Probes and Transgenic Parasites to Enhance Drug Screening

Rhythms II/III
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

The development of new therapeutics for important parasitic diseases of humans is essential for the control of these pathogens. Such efforts rely on screening potentially effective compounds in pathogen growth/multiplication assays, both in vitro and in vivo. However, in the case of the parasites that cause malaria and leishmaniasis, these assays have technical limitations that potentially restrict drug development. In response to this problem, the WHO/TDR established a network of investigators from disease endemic and non-endemic countries with capabilities and interests in drug screening using new genomic technology. This symposium will highlight the progress made by the network and will focus on the use of fluorescent probes and transgenic parasites expressing proteins, such as green fluorescent protein (GFP) and luciferase, that have opened up new possibilities for high throughput drug screening.

CHAIR
Ayo Oduola
WHO/TDR, Geneva, Switzerland

Dennis E. Kyle
University of South Florida, Tampa, FL, United States

1:30 p.m.

TRANSGENIC LEISHMANIA FOR IN VITRO AND IN VIVO DRUG SCREENING
Dennis E. Kyle
University of South Florida, Tampa, FL, United States

1:55 p.m.

IN VITRO PLASMODIUM DRUG SUSCEPTIBILITY TESTING IN CONTEXT: TRANSGENIC PARASITES AND ALTERNATIVE METHODS FOR DRUG DISCOVERY AND EPIDEMIOLOGY.
Martin J. Smilkstein
Portland VA Medical Center, Portland, OR, United States

2:20 p.m.

USE OF TRANSGENIC P. BERGHEI RODENT MALARIA MODEL FOR IN VITRO AND IN VIVO DRUG SCREENING
Andrew P. Waters
University of Glasgow, Glasgow, United Kingdom
2:45 p.m.
DEVELOPMENT OF TRANSGENIC P FALCIPARUM FOR IN VITRO
DRUG SCREENING
Chairat Uthaipabull
National Center for Genetic Engineering and Biotechnology
(BIOTEC), Pathumthani, Thailand

Symposium 89
Malaria, Health and Education: New Perspectives and Prospects

Waterbury
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.
Recent evidence from randomized trials has demonstrated the gains for
health and education of effective malaria control in schools (Fernando et
al, 2006; Clarke et al 2008), equal to or exceeding that seen in previous
approaches within school health. Yet, to date, the importance of malaria
in school-aged children has been largely overlooked within malaria control.
The speakers in this symposium will draw on recent, and past, evidence
from Africa and Asia to demonstrate the profound epidemiological conse-
quences of malaria infection and disease for the health, cognition and edu-
cation of schoolchildren. The symposium will conclude by a panel discussion
looking at prospects for integrated control in schools, illustrated by recent
developments in school health policy and practice in various countries.

CHAIR
Sian E. Clarke
London School of Hygiene and Tropical Medicine, London, United
Kingdom
Simon Brooker
London School of Hygiene and Tropical Medicine, London, United
Kingdom
Feiko ter Kuile
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

1:30 p.m.
THE IMPACT OF MALARIA ON THE HEALTH OF
SCHOOLCHILDREN IN AFRICA: A REVIEW OF THE EVIDENCE
Sian E. Clarke
London School of Hygiene and Tropical Medicine, London, United
Kingdom

2 p.m.
IMPACT OF MALARIA ON THE EDUCATION OF
SCHOOLCHILDREN: EXPERIENCE FROM ASIA
Deepika Fernando
University of Colombo, Colombo, Sri Lanka

2:25 p.m.
MALARIA CONTROL WITHIN AN INTEGRATED SCHOOL
HEALTH PROGRAM: EXPERIENCES FROM MALAWI
Seung Lee
Save The Children Malawi, Lilongwe, Malawi

2:50 p.m.
THE IMPACT OF MALARIA CONTROL ON COGNITION AND
EDUCATION OF SCHOOLCHILDREN: A REVIEW OF THE
EVIDENCE
Matthew C. Jukes
Harvard Graduate School of Education, Cambridge, MA, United
States

Scientific Session 90
Malaria – Chemotherapy

Napoleon A123
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.
CHAIR
Kalifa A. Bojang
MRC Laboratories, Banjul, Gambia
Miriam Laufer
University of Maryland, Baltimore, MD, United States

1:30 p.m.
725
INTERMITTENT PREVENTIVE TREATMENT (IPT) IN
SCHOOLCHILDREN: A RANDOMIZED TRIAL TO COMPARE THE
EFFICACY, SAFETY, AND TOLERABILITY OF ANTIMALARIAL
REGIMENS IN UGANDA
Joaniter I. Nankabirwa¹, Sian E. Clarke², Narcis Kabaterine³,
Bonnie Cundill¹, Simon Brooker¹, Sarah G. Staedke²
¹Makerere University, Kampala, Uganda, ²London School
of Hygiene and Tropical Medicine, London, United Kingdom,
³Ministry of Health, Kampala, Uganda

1:45 p.m.
726
A RANDOMISED TRIAL TO COMPARE THE SAFETY,
TOLERABILITY AND EFFICACY OF THREE POTENTIAL DRUG
COMBINATIONS FOR INTERMITTENT PREVENTIVE TREATMENT
IN CHILDREN AGED ONE TO FIVE YEARS IN AN AREA OF
SEASONAL MALARIA TRANSMISSION IN UPPER RIVER
REGION, THE GAMBIA
Kalifa A. Bojang¹, Francis Akor¹, David Conway¹, Paul Milligan²,
Ousman Bittaye¹, Brian Greenwood²
¹MRC Laboratories, Banjul, Gambia, ²London School of Hygiene
and Tropical Medicine, London, United Kingdom

2 p.m.
727
IMPACT OF ARTEMISININ-BASED COMBINATION THERAPY
INTERMITTENT PREVENTIVE TREATMENT ON MALARIA
MORBIDITY IN ELEMENTARY SCHOOL STUDENTS IN MALI
Hamma Maiga¹, Breanna Barger², Oumar B. Traore¹, Mamadou
Tekete¹, Atine Timbine¹, Antoine Darai¹, Zoumana I. Traore¹,
Ogobara K. Doumbo¹, Abdoulaye A. Djimde¹
¹University of Bamako, Bamako, Mali, ²University of Washington,
Seattle, WA, United States
2:15 p.m.  

PUBLIC HEALTH IMPLICATIONS OF RECRUDESCENT VERSUS NEW INFECTIONS IN DRUG EFFICACY TRIALS  
Miriam K. Lauber1, Matthew B. Laurens1, Fraction K. Dzinjalamala2, Osward Nyirenda2, Phillip C. Thesing1, Terrie E. Taylor3, Christopher V. Plowe1  
1Center for Vaccine Development, University of Maryland, Baltimore, MD, United States, 2Blantyre Malari Project, Blantyre, Malawi, 3College of Osteopathic Medicine, Michigan State University, East Lansing, MI, United States

2:30 p.m.  

ARTEMETHER-LUMEFANTRINE VERSUS DIHYDROARTESININ-PIPERAQUINE FOR THE TREATMENT OF UNCOMPLICATED MALARIA: A RANDOMIZED LONITUDINAL TRIAL IN A COHORT OF UGANDAN INFANTS  
Emmanuel Arinaitwe1, Taylor Sandison2, Jaco Homsy1, Julius Kalama1, Abel Kakuru1, Humphrey Wanzira1, Neil Vora3, Philip J. Rosenthal1, Moses Kamya4, Jordan W. Tappero5, Grant Dorsey5  
1MU-University of California at San Francisco Malaria Research Collaboration, Kampala, Uganda, 2Department of Medicine, University of Washington, Seattle, WA, United States, 3Centers for Disease Control and Prevention – Uganda, Entebbe, Uganda, 4Centers for Disease Control and Prevention – Uganda, Tororo Field Station, Tororo, Uganda, 5Department of Medicine, University of California, San Francisco, CA, United States, 6Department of Medicine, Makerere University, Kampala, Uganda

2:45 p.m.  

PHARMACOKINETICS OF ARTEMISININ COMBINATION THERAPY IN CHILDREN IN KAMPALA, UGANDA  
Julia Mwesigwa1, Bryan McGee2, Joan Nakayaga3, Tamara Clark2, Grant Dorsey3, Philip J. Rosenthal1, Niklas Lindegardh4, Moses R. Kamya5, Francesca Aweeka6, Sunil Parikh2  
1Mahidol University, Bangkok, Thailand, 2Colorado State University, Fort Collins, CO, United States, 3Department of Medicine, University of California, San Francisco, CA, United States, 4Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, 5Department of Medicine, Makerere University, Kampala, Uganda, 6University of California-San Francisco, San Francisco, CA, United States

3 p.m.  

REGIONAL AGE-BASED DOSE REGIMENS FOR A NEW FIXED-DOSE COMBINATION OF ARTESUNATE-MEFLOQUINE FOR THE TREATMENT OF UNCOMPLICATED FALCIPARUM MALARIA IN LATIN AMERICA AND ASIA  
Dianne J. Terlouw1, Daniel J. Hayes1, Stef van Buuren1, Isabela Ribeiro1, Piero L. Olliaro1, Feiko O. ter Kuile1  
1Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 2The Netherlands Organization for Applied Scientific Research, Leiden, Netherlands, 3Drugs for Neglected Diseases initiative, Geneva, Switzerland, 4World Health Organization Special Programme for Research and Training in Tropical Diseases/(WHO/TDR), Geneva, Switzerland

1:30 p.m.  

SCIENTIFIC SESSION 91  

Bayside BC  
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

CHAIR  
Lars Eisen  
Colorado State University, Fort Collins, CO, United States

1:45 p.m.  

DENGUE VIRUS-INFECTED Aedes aegypti IN THE HOME ENVIRONMENT  
Julian Garcia-Rejon1, Maria Alba Lorono-Pino2, Jose Arturo Farfan-Ale1, Luis Flores-Flores1, Elsy del Pilar Rosedo-Paredes1, Nubia Rivero-Cardenas1, Rosario Najera-Vazquez2, Salvador Gomez-Carro2, Victor Lira-Zumbardo2, Pedro Gonzalez-Martinez2, Saul Lozano-Fuentes3, Darwin Elizondo-Quiroga1, Barry Beaty1, Lars Eisen2  
1Universidad Autonoma de Yucatan, Merida, Mexico, 2Servicios de Salud de Yucatan, Merida, Mexico, 3Colorado State University, Fort Collins, CO, United States

2 p.m.  

IMPACT ON SEROLOGICAL, ENTOMOLOGICAL, AND BEHAVIORAL INDICES OF AN EVIDENCE-BASED COMMUNITY-DERIVED COMMUNICATION PROGRAM FOR THE CONTROL OF Aedes aegypti AND DENGUE IN MANAGUA, NICARAGUA  
Jorge Arostegui1, Harold Suazo1, Josefin Coloma2, Alvaro Carcamo1, Carlos Hernandez2, Angel Balmaseda1, Neil Andersson1, Eva Harris3, CIETNicaragua Dengue Group1  
1CIETNicaragua, Managua, Nicaragua, 2Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, 3Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

2:45 p.m.  

A RESIDUAL DEMOGRAPHY METHOD FOR ESTIMATING AGE STRUCTURE OF WILD MOSQUITO VECTOR POPULATIONS  
Thomas W. Scott1, James R. Carey1, Thanyalak Fansiri2, Jason Richardson2  
1University of California, Davis, CA, United States, 2Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand
2:15 p.m.

SCREENING HOMES TO PREVENT MALARIA: A RANDOMISED CONTROLLED TRIAL
Matthew J. Kirby1, Paul J. Milligan2, Momodou Jasseh3, David J. Conway4, Steve W. Lindsay1
1Durham University, Durham, United Kingdom, 2London School of Hygiene and Tropical Medicine, London, United Kingdom, 3Medical Research Council Laboratories, Banjul, Gambia

2:30 p.m.

THE ROLE OF SUGAR IN THE MATING BEHAVIOR OF ANOPHELES GAMBIAE S.S.
Chris M. Stone, Woodbridge A. Foster
The Ohio State University, Columbus, OH, United States

2:45 p.m.

HUMAN IGG RESPONSE TO ANOPHELES GAMBIAE SALIVARY PROTEINS AS AN IMMUNO-EPIDEMIOLOGICAL MARKER OF EXPOSURE TO MALARIA VECTOR BITES
Anne Poignignon1, Sylvie Cornelie1, Montserrat Mestres-Simon2, Alessandra Lanfranconi2, Marie Rossignol1, Denis Boulanger1, Badara Cisse1, Cheikh Sokhna3, Bruno Arcà1, François Simondon1, Franck Remoué1
1Institut de Recherche pour le Développement, Montpellier, France, 2Sapienza University, Rome, Italy, 3Université Cheikh Anta Diop, Dakar, Senegal

3 p.m.

CHARACTERIZATION OF HOST-SEEKING ACTIVITY OF ANOPHELES MELAS IN RESPONSE TO INDOOR-BASED ANTI-VECTO INTERVENTIONS ON BIOKO ISLAND, EQUATORIAL GUINEA
Michael R. Reddy1, Michel A. Slotman1, Arcadio Edu2, Simon Abaga3, Valeriano Aloy1, Jaime Kuklinski1, Adgalisa Caccone1
1Yale University, New Haven, CT, United States, 2Ministerio de Sanidad y Bienestar Social, Malabo, Equatorial Guinea, 3One World Development Group Inc., Malabo, Equatorial Guinea
2:15 p.m.  

**741**  
DEORPHANIZATION OF TWO NOVEL SCHISTOSOMA MANSONI G-PROTEIN COUPLED RECEPTORS (GPCRS), USING A YEAST EXPRESSION SYSTEM  
Fouad El-Shehabi, Paula Ribeiro  
Institute of Parasitology-McGill University, Montreal, QC, Canada  

2:30 p.m.  

**1235**  
UNEXPECTED TRNA ENCODED WITHIN THE MITOCHONDRIAL 12S RNA OF TRYPANOSOMA BRUCEI  
Melissa Lerch, Matt Beverly, Ken Stuart, Steve Hajduk  
Seattle Biomedical Research Institute, Seattle, WA, United States, University of Georgia, Biochemistry and Molecular Biology Department, Athens, GA, United States  

2:45 p.m.  

**742**  
DIFFERENTIAL PATTERNS OF PROTEIN EXPRESSION IN HEPATOSPLENIC SCHISTOSOMIASIS  
Bhagashree Manivannan (Uradey)¹, Thomas William Jordan¹, William Evan Secor², Anne Camille LaFlamme¹  
¹Victoria University of Wellington, Wellington, New Zealand, ²Centers for Disease Control and Prevention, Atlanta, GA, United States  

3 p.m.  

**743**  
HIGH THROUGHPUT QUANTITATIVE ANALYSIS OF ICAM-1 BINDING TO 3D7 DUFFY-BINDING LIKE (DBL) DOMAINS  
Andrew V. Oleinikov, Emily Amos, Tyler Frye, Eddie Rossnadle, Theonest K. Mutabingwa, Michal Fried, Patrick E. Duffy  
Seattle Biomedical Research Institute, Seattle, WA, United States  

1:30 p.m.  

**744**  
CHARACTERIZATION OF A DOMESTIC TRANSMISSION FOCUS OF AMERICAN CUTANEOUS LEISHMANIASIS IN RURAL COLOMBIA  
Clara B. Ocampo-D¹, Cristina Ferro², Horacio Cadena³, Dairo Marín³, Layder Lozano³, Cesar Ramirez³, Leonard Munstermann³  
¹CIDEM, Cali, Valle, Colombia, ²Instituto Nacional de Salud, Bogota, Colombia, ³Yale University, New Haven, CT, United States  

1:45 p.m.  

**745**  
MOLECULAR SYSTEMATICS OF THE BARBIROSTRIS SUBGROUP AND HYRCANUS GROUP OF THE GENUS ANOPHELES IN SOUTHEAST ASIA  
Claudia C. Paredes-Esquivel, Harold Townson  
Liverpool School of Tropical Medicine, Liverpool, United Kingdom  

2 p.m.  

**746**  
CHROMOSOMAL INVERSIONS, NATURAL SELECTION AND ADAPTATION IN THE MALARIA VECTOR ANOPHELES FUNESTUS  
Diego Ayala¹, Michael C. Fontaine², Anna Cohuet¹, Carlo Costantini³, Didier Fontenille¹, Renaud Vitalis⁴, Frederic Simard⁵  
¹Institut de Recherche pour le Développement, UR Caractérisation et contrôle des populations de vecteurs, Montpellier, France, ²Institute of Integrative and Comparative Biology, Faculty of Biological Sciences, University of Leeds, Leeds, United Kingdom, ³Institut de Recherche pour le Développement, UR Caractérisation et contrôle des populations de vecteurs, Yaoundé, Cameroon, ⁴Muséum National d’Histoire Naturelle – Centre National de la Recherche Scientifique UMR 5145 – Université Paris 7, Éco-Anthropologie et Ethnobiologie, Musée de l’Homme, Paris, France, ⁵Institut de Recherche pour le Développement, UR Caractérisation et contrôle des populations de vecteurs, Bobo-Dioulasso, Burkina Faso  

2:15 p.m.  

**747**  
DOES HEMOLYMPH FLOW DRIVE MALARIA SPOROZOITE MIGRATION THROUGH THE MOSQUITO HEMOCOEL?  
Julián F. Hillyer, Jonas G. King, Justin D. Glenn  
Vanderbilt University, Nashville, TN, United States  

2:30 p.m.  

**748**  
IDENTIFICATION OF THE BARRIERS PREVENTING SUCCESSFUL DEVELOPMENT OF PLASMODIUM FALCIPARUM IN CULEX MOSQUITOES  
Jen Hume, Tovi Lehmann  
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Rockville, MD, United States  

Scientific Session 93  

Arthropods/Entomology  

Grand Ballroom B  
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.  

CHAIR  
Clara B. Ocampo  
CIDEM, Cali, Colombia  
Claudia C. Paredes-Esquivel  
Liverpool School of Tropical Medicine, Liverpool, United Kingdom
2:45 p.m. 749

ENVIRONMENTAL FACTORS INFLUENCE CULEX PIPIENS QUINQUEFASCiATUS (DIPTERA: CULICIDAE) SUSCEPTIBILITY TO WEST NILE AND ST. LOUIS ENCEPHALITIS VIRUSES
Stephanie L. Richards, Cynthia C. Lord, Kendra Pesko, Walter J. Tabachnick University of Florida /Florida Medical Entomology Laboratory, Vero Beach, FL, United States

3 p.m. 750

BLOOD FEEDING IN MOSQUITOES PROMPTS EXPRESSION OF TWO HEAT SHOCK PROTEINS
Joshua Benoit, Giancarlo Lopez-Martinez, David L. Denlinger The Ohio State University, Columbus, OH, United States

Symposium 94
Clinical Group I

Supported with funding from International Association for Medical Assistance to Travelers
Grand Ballroom C
Tuesday, December 9, 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 Travellers (IAMAT) and organized physicians from all over the world into a network assisting travelers.

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

1:30 p.m.

VINCENZO MARCOLONGO MEMORIAL LECTURE: UNDERSTANDING NEUROCYSTICERCOSIS: ADVANCES IN THE LAST 50 YEARS
Raul Istituriz
Hospital Privado Centro Medico de Caracas, Caracas, Venezuela.

2:15 p.m.

GEOSENTINEL SURVEILLANCE REPORT
David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States

Symposium 95

Toward a Second-Generation Malaria Vaccine Development: The Expanding Horizons of Malaria Vaccine Development

Grand Ballroom D
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

In late 2008 or early 2009, the world's most clinically advanced malaria vaccine candidate is expected to enter a Phase 3 trial, among the last hurdles en route to it being made available for use. If successful, one of two milestones endorsed by the malaria vaccine development community will have been achieved on schedule, that is, the development of a partially efficacious vaccine by 2015. Achieving the next milestone — a vaccine of at least 80 percent efficacy against clinical disease by 2025 — comes next. This symposium will bring together leaders in the vaccine development field to discuss the challenges and opportunities to developing a safe and highly effective “next-generation” malaria vaccine. The symposium will feature presentations on the new approaches that are being explored, and the new or improved tools to be developed, from nanoparticles to challenge models.

CHAIR
Christian Loucq
PATH Malaria Vaccine Initiative, Bethesda, MD, United States
Tonya Villafana
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

1:30 p.m.

Tonya Villafana
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

1:50 p.m.

DELIVERY PLATFORMS, INCLUDING VIRAL VECTORS, BACTERIA, REPLICONS AND VIROSOMES
Ashley Birkett
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

2:10 p.m.

EVALUATION TECHNOLOGIES FOR MALARIA VACCINE DEVELOPMENT
Carole Long
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

2:30 p.m.

ANTIGENS AND THE PROSPECTS FOR ACCELERATING ANTIGEN DISCOVERY
Patrick Duffy
Seattle Biomedical Research Institute, Seattle, WA, United States

2:50 p.m.

ADJUVANTS AND OTHER IMMUNOPOTENTIATORS FOR MALARIA VACCINE DEVELOPMENT
Robert A. Seder
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States
Scientific Session 96

Schistosomiasis III – Molecular Biology/Biochemistry

Grand Ballroom E
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

CHAIR
Ronald Blanton
Case Western Reserve University, Cleveland, OH, United States
Timothy Yoshino
University of Wisconsin, Madison, WI, United States

1:30 p.m.

751
STUDIES OF *S. MANSONI* POPULATION STRUCTURE BY MICROSATELLITE ANALYSIS OF AGGREGATED SAMPLES

W.A. Blank\(^1\), E.A. Reis\(^2\), J.F. Braghiroli\(^2\), J.M. Santos\(^2\), P.S. Melo\(^2\), L.K. Silva\(^2\), M.G. Reis\(^1\), R.E. Blanton\(^1\)
\(^1\)Case Western Reserve University, Cleveland, OH, United States, \(^2\)Oswaldo Cruz Foundation, Salvador, Brazil

1:45 p.m.

752
THE EFFECT OF PRAZIQUANTEL TREATMENT ON THE GENETIC DIVERSITY OF *SCHISTOSOMA MANSONI* INFECTIONS IN PRIMARY SCHOOL CHILDREN WITHIN MAYUGE DISTRICT, UGANDA

Poppy H. Lamberton\(^1\), Alice J. Norton\(^1\), Alan Fenwick\(^1\), Narcis Kabaterene\(^2\), Joanne P. Webster\(^2\)
\(^1\)Imperial College London, London, United Kingdom, \(^2\)Vector Control Division, Ministry of Health, Kampala, Uganda

2 p.m.

753
INTEGRATION OF LASER MICRODISSECTION AND MICROARRAY ANALYSIS FOR TISSUE SPECIFIC GENE EXPRESSION PROFILES OF *SCHISTOSOMA JAPONICUM*

Geoffrey N. Gobert
Queensland Institute for Medical Research, Brisbane, Australia

2:15 p.m.

754
THE IDENTIFICATION OF PUTATIVE MOLECULAR PATHWAYS REGULATING SCHISTOSOMA MANSONI MIRACIDIAL TRANSFORMATION BY THE USE OF A HIGH-THROUGHPUT SMALL-MOLECULE SCREEN

Andrew S. Taft, Timothy P. Yoshino
UW-Madison, Madison, WI, United States

2:30 p.m.

755
NEW SCHISTOSOMIASIS DRUGS

Alexander Doemling\(^1\), Sanaa Botros\(^2\)
\(^1\)University of Pittsburgh, Pittsburgh, PA, United States, \(^2\)Theodor Bilharz Institute, Imbaba, Giza, Egypt

2:45 p.m.

756
RANDOMIZED DOUBLE BLIND CLINICAL TRIAL, COMPARING THE EFFECTIVENESS OF ARTESTUNATE+SULFAMETHOXPYRIMETHAMINE VERSUS PRAZIQUANTEL IN THE TREATMENT OF *SCHISTOSOMA HAEMATOBIUM* IN MALIAN CHILDREN

Mahamadou S. Sissoko
MRTC, Bamako, Mali

3 p.m.

757
MOLECULAR AND BIOCHEMICAL CHARACTERIZATION OF *SCHISTOSOMA MANSONI* CAMP-DEPENDENT PROTEIN KINASE (PKA): A POTENTIAL NEW DRUG TARGET

Brett E. Swierczewski, Stephen J. Davies
Uniformed Services University of the Health Sciences, Department of Microbiology and Immunology, Bethesda, MD, USA

Exhibit Hall Open
Napoleon Ballroom
Tuesday, December 9, 3 p.m. – 4 p.m.

Coffee Break
Napoleon Ballroom
Tuesday, December 9, 3:15 p.m. – 3:45 p.m.
Symposium 97

Status of Phase 1 and Phase 2 Clinical Trials of Dengue Vaccines

**Gallery**  
**Tuesday, December 9, 3:45 p.m. – 5:30 p.m.**  
The pipeline of dengue vaccine candidates is progressing rapidly, and Phase I/II clinical trials in dengue-exposed populations have begun. Candidate dengue vaccines in clinical stages of development include live vaccines attenuated by passage in cell lines or constructed as live flavivirus chimeras. In his introduction, the chair will review the current pipeline of dengue vaccines in development, summarize the unique safety issues surrounding deployment of dengue vaccines, and justify the need to provide simultaneous protection against the four dengue serotypes. After this introduction, each of the three leading, live-attenuated vaccine candidates will be discussed in separate presentations, to include updates on vaccine safety and immunogenicity in healthy adult and pediatric (if tested) volunteers in the U.S. and several dengue-endemic countries. The fourth talk will be a discussion of the issues and progress made in providing future field sites for Phase 3 efficacy trials of dengue vaccines.

**CHAIR**  
Robert Edelman  
University of Maryland School of Medicine, Baltimore, MD, United States

**3:45 p.m.**  
**INTRODUCTION**  
Robert Edelman  
University of Maryland School of Medicine, Baltimore, MD, United States

**3:55 p.m.**  
**TETRAVALENT, PDK-DERIVED, LIVE-ATTENUATED VACCINE CANDIDATES**  
Stephen Thomas  
Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand

**4:20 p.m.**  
**SAFETY AND IMMUNOGENICITY IN CHILDREN AND ADULTS FROM ENDEMIC COUNTRIES AND ADULTS FROM NONENDEMIC COUNTRIES OF A TETRAVALENT, LIVE ATTENUATED DENGUE VACCINE**  
Alain Bouckenooghe  
sanofi pasteur, Swiftwater, PA, United States

**4:45 p.m.**  
**NIAID CHIMERIC VACCINE CANDIDATES**  
Anna Durbin  
Johns Hopkins University, Baltimore, MD, United States

**5:10 p.m.**  
**THE DEVELOPMENT OF FUTURE FIELD SITES FOR PHASE 3 EFFICACY TRIALS**  
Bill Letson  
Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea

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Symposium 98

**Plasmodium vivax: Beyond the Genome**

**Rhythms IV**  
**Tuesday, December 9, 3:45 p.m. – 5:30 p.m.**  
This symposium will review and update the progress of genomic studies in the human malaria parasite *P. vivax* since the unraveling of its genome. The developments in the *P. vivax* genomic studies will be discussed in parallel to the more extensively studied species *P. falciparum*. A review and discussion of the extent of genetic diversity in the *P. vivax* will be presented, as well as how this information can be utilized to understand the biology, pathogenesis and evolutionary aspects of this organism. Finally, applications of these findings on investigations of human infection with *P. vivax* will be discussed. It is the goal of this symposium to explore how population genetic approaches can reveal mechanisms of malaria disease, pathogenesis and evolution.

**CHAIR**  
Nadira D. Karunaweera  
University of Colombo, Colombo, Sri Lanka  
Marcelo U. Ferreira  
University of Sao Paolo, Sao Paolo, Brazil

**3:45 p.m.**  
**PLASMODIUM VIVAX: GENOME AND COMPARATIVE GENOMICS**  
Jane Carlton  
New York University School of Medicine, New York, NY, United States

**4:10 p.m.**  
**GENETIC DIVERSITY IN PLASMODIUM VIVAX**  
Nadira Karunaweera  
Faculty of Medicine, University of Colombo, Colombo, Sri Lanka  
Marcelo Ferreira  
University of Sao Paolo, Sao Paolo, Brazil

**4:35 p.m.**  
**APPLICATION OF GENOMICS TO THE STUDY OF BIOLOGY AND VACCINE DEVELOPMENT IN PLASMODIUM VIVAX**  
John W. Barnwell  
Centers for Disease Control and Prevention, Atlanta, GA, United States

**5 p.m.**  
**MOLECULAR MARKERS OF ANTIMALARIAL DRUG RESISTANCE IN P. VIVAX FIELD ISOLATES**  
Ric Price  
Menzies School of Health Research, Darwin, Australia
Symposium 99

Measurement and Prediction of Malaria Treatment Outcome: Parasite, Drug and Host Factors

Waterbury
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

Reliable methods to measure and predict the usefulness of therapies are needed for effective malaria treatment policies. Malaria treatment outcome is determined by parasite (susceptibility to the drug(s) used), pharmacological (drug pharmacokinetics, PK and dynamics, PD) and host factors (ability to deal with parasites and their effects). These can be assessed by molecular methods (molecular markers in the parasite related to drug resistance; genetic markers in the host related to resistance to infection and parasite clearance); in vitro assays to measure parasite susceptibility to drugs; in vivo clinical trials in patients to assess response to treatment; measurement of drug levels. Information on the correlation between these methods is incomplete. To date, no single method available alone can provide the information needed and predict how a patient will respond to treatment. Leading experts will review the current protocols for the in vitro and molecular measurements of antimalarial drug resistance and discuss limitations and how these relate to the other factors involved with treatment outcome in patients.

CHAIR
Abdulaje Djjime
University of Bamako, Bamako, Mali
Olumide Ogundahunsi
World Health Organization, Geneva, Switzerland

3:45 p.m.

METHODOLOGICAL ISSUES WITH THE ANALYSIS OF CRUDE AND PCR-ADJUSTED OUTCOMES IN MALARIA CLINICAL TRIALS
Elisabeth Ashley
Epicentre, Paris, France

4:10 p.m.

MOLECULAR TOOLS FOR GENOTYPING ISOLATES AND CHARACTERIZING RESISTANCE IN MALARIA TRIALS
Kefas Mugittu
Novartis Institute of Tropical Diseases, Singapore, Singapore

4:35 p.m.

MOLECULAR/IN VIVO CORRELATES OF ANTIMALARIAL TREATMENTS
Stéphane Picot
University Claude Bernard, Lyon, France

5 p.m.

PHARMACOKINETIC/PHARMACODYNAMIC CORRELATES OF ANTIMALARIAL TREATMENTS
Karen Barnes
University of Cape Town, Cape Town, South Africa

Scientific Session 100

Malaria – Drug Development

Napoleon A123
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR
Myaing M. Nyunt
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States
Bryan L. Smith
Walter Reed Army Institute of Research, Silver Spring, MD, United States

3:45 p.m.

ANTI-MALARIAL ACTIVITY OF MIRINCAMYCIN AND ITS ANALOGS IN VITRO AND IN AN IN VIVO PRESUMPTIVE CAUSAL PROPHYLACTIC MOUSE MODEL
Susan Fracisco1, Yarrow Rothstein1, Montip Gettayacamin2, Richard Westerman3, Colin Ohrt1
1Walter Reed Army Institute of Research Experimental Therapeutics, Silver Spring, MD, United States, 2Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand, 3MALDEVCO, LLC, Kalamazoo, MI, United States

4 p.m.

MALARIA-INFECTED MICE ARE CURED BY NEW TRIOXANE DIMERS
Gary H. Posner
Johns Hopkins University, Baltimore, MD, United States

4:15 p.m.

OPTIMIZATION OF DUAL-FUNCTION ACRIDONE ANTIMALARIALS: IMPROVED EFFICACY AND SYNERGY WITH PIPERAQUINE
Jane X. Kelly1, Martin Smilstein2, Victor Menendez1, Roland Cooper1, Rolf Winter1, Dave Hinrichs1, Mike Riscoe1
1Portland VA Medical Center, Portland, OR, United States, 2Walter Reed Army Institute of Research, Silver Spring, MD, United States

4:30 p.m.

RANDOMIZED CROSSOVER TRIAL TO EXAMINE THE SAFETY AND PHARMACOKINETICS OF 2100 MG DOSE OF AQ-13 AND THE FOOD EFFECT ON ITS BIOAVAILABILITY
Fawaz Mzayek1, Haiyan Deng1, Vidya Mave1, Azam Hadi1, Juan J. Lertora2, Donald J. Krogsstad1
1Tulane University, New Orleans, LA, United States, 2National Institutes of Health, Bethesda, MD, United States
4:45 p.m.

762

ASSESSMENT OF THE CAUSAL PROPHYLACTIC ACTIVITY OF DB289 IN HEALTHY VOLUNTEERS CHALLENGED WITH PLASMODIUM FALCIPARUM

Myaing M. Nyunt1, Craig W. Hendrix2, Rahul Bakshi1, Nirbhad Kumar1, Theresa A. Shapiro2
1Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, 2Johns Hopkins University School of Medicine, Baltimore, MD, United States

5 p.m.

763

A PHASE II, RANDOMIZED, OPEN-LABEL, DOSE-RANGING STUDY OF GMP INTRAVERSUS ARTESUNATE FOR OPTIMIZING PARASITE CLEARANCE IN UNCOMPLICATED P. FALCIPARUM MALARIA

Bryan L. Smith1, Mark E. Polhemus1, Krisada Jongsakul2, Bernhards Ogutu1, Peter J. Weina1, R. Scott Miller1
1Walter Reed Army Institute of Research, Silver Spring, MD, United States, 2Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, 3United States Army Medical Research Unit-Kenya, Nairobi, Kenya

5:15 p.m.

764

CHLORPROGUANIL-DAPSONE-ARTESUNATE VS. ARTEMETHER-LUMEFANTRINE: A RANDOMISED, DOUBLE-BLIND PHASE III TRIAL FOR THE TREATMENT OF ACUTE, UNCOMPPLICATED PLASMODIUM FALCIPARUM MALARIA IN AFRICAN CHILDREN AND ADOLESCENTS

Zul Premji1, Rich E. Umeh2, Seth Owusu-Agyei3, Fabian Esama4, Emmanuel Ezedinachi4, Stephen Oguche4, Steffen Borrmann5, Akintunde Sowunmi6, Stephan Duparc9, Paula L. Kirby10, Allan Pamba11, Lynda Kellam12, Robert Guiguedé13, Brian Greenwood13, Stephen A. Ward14, Stephen Oguche15, 9Ifakara Health Research and Development Center, Ifakara, Kilombero, Morogoro, United Republic of Tanzania, 13University of Nigeria College of Medicine, Enugu Campus, Enugu, Nigeria, 14Kintampo Health Research Centre, Kintampo, Ghana, 1 Department of Child Health and Paediatrics, Faculty of Health Sciences, Moi University, Eldoret, Kenya, 2Institute of Tropical Diseases Research and Prevention, University of Calabar Teaching Hospital, Calabar, Nigeria, 3Department of Paediatrics, Jos University Teaching Hospital, Jos, Plateau State, Nigeria, 4Kenya Medical Research Institute (KEMRI)/Wellcome Trust Research Programme, Kilifi, Kenya, and University of Heidelberg School of Medicine, Germany, 5Malaria Research Laboratories, Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, Ibadan, Nigeria, 6Formerly at GlaxoSmithKline, Greenford, United Kingdom, now at Medicines for Malaria Venture, Geneva, Switzerland, 7GlaxoSmithKline, Stockley Park West, Middlesex, United Kingdom, 8GlaxoSmithKline, Greenford, Middlesex, United Kingdom, 9Centre Muraz, Bobo-Dioulasso, Burkina Faso, 10Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom, 11Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 12School of Clinical Sciences, University of Liverpool, Liverpool, United Kingdom

4 p.m.

766

ENTOMOLOGICAL EVALUATION OF PERMETHRIN IMPREGNATED BEDNETS AGAINST AN. DARLINGI IN THE PERUVIAN AMAZON

Elvira Zamora Perea1, Wagner Orellana Rios2, Ernesto Curto2, Yuri Alegre Palomino2, Victor Lopez Sifuentes2, Norma Padilla4, 1Laboratorio de Salud Publica, Iquitos, Peru, 2Direccion General de Salud Ambiental, Iquitos, Peru, 3Naval Medical Research Center Detachment, Iquitos, Peru, 4Universidad del Valle de Guatemala, Guatemala City, Guatemala, 5Rothamsted Research, Harpenden, United Kingdom

4:15 p.m.

767

SPATIO-TEMPORAL ORDERING OF A CHAGAS DISEASE VECTOR ELIMINATION CAMPAIGN

Michael Z. Levy1, Fernando Malaga2, Juan G. Cornejo del Carpio3, Ellis McKenzie1, Joshua B. Plotkin4
1 Fogarty International Center, National Institutes of Health, Bethesda, MD, United States, 2Region de Salud, Arequipa, Peru, 3Region de Salud, Arequipa, Peru, 4University of Pennsylvania, Philadelphia, PA, United States
Detailed Program

Scientific Session 102

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Molecular Parasitology II

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom A
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR
Ian H. Cheeseman
MRC Gambia, Banjul, Gambia

Jennifer S. Sims
Harvard School of Public Health, Boston, MA, United States

VALIDATION OF PLASMODIUM FALCIPARUM Isoleucyl TRNA SYNTHETASE AS A DRUG TARGET

Eva S. Istvan, Daniel E. Goldberg
Washington University School of Medicine, St. Louis, MO, United States

DEVELOPMENT OF A MOSQUITOCIDAL VACCINE AGAINST AE. AEGYPTI USING THE MOSQUITO LYSOSOMAL ASPARTIC PROTEASE (MLAP) AS AN IMMUNIZATION ANTIGEN

Kelsey M. Deus1, Tereza Magalhaes2, Brian D. Foy1
1Colorado State University, Fort Collins, CO, United States, 2Cidade Universitaria, Recife, Brazil

DEVELOPMENT OF CONTROLLED VOCABULARIES AND ONTOLOGIES FOR SURVEILLANCE AND CONTROL OF VECTORS OF HUMAN DISEASE AGENTS

Marlize Coleman1, Lars Eisen1, Saul Lozano-Fuentes1, Sanika Chitari1, Chester G. Moore1, Natasha Morris1, Michael Coleman2
1Colorado State University, Fort Collins, CO, United States, 2Medical Research Council, Durban, South Africa

GENOME-WIDE SURVEY OF GENE COPY NUMBER VARIATION IN THE MALARIA PARASITE PLASMODIUM FALCIPARUM

Ian H. Cheeseman1, Natalia Gomez-Escobar1, Celine Carret2, Alasdair Ivens3, Kevin K. Tetteh4, Lindsay Stewart1, Micheal Walther1, Dominic Kwiatkowski2, David Conway1
1MRC Gambia, Banjul, Gambia, 2Wellcome Trust Sanger Institute, Cambridge, United Kingdom, 3London School of Hygiene and Tropical Medicine, London, United Kingdom

4:15 p.m.

4:30 p.m.

EFFECTS OF FOREST FRAGMENTATION ON RELATIVE ABUNDANCE, BLOOD MEAL SPECIES COMPOSITION, AND TRYPANOSOME INFECTION OF THE CHAGAS DISEASE VECTOR RHODNIUS PALPEBROSCENS IN A PANAMANIAN LANDSCAPE

Nicole L. Gottdenker1, Ana Maria Santamaria2, Jose Calzada3, Azael Saldaña1, Vanessa Pineda1, C. Ronald Carroll1
1Odum School of Ecology, University of Georgia, Athens, GA, United States, 2Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama, 3Odum School of Ecology, University of Georgia, Athens, GA, United States

4:45 p.m.

THE EFFECT OF IVERMECTIN (MECTIZAN®) TREATMENT OF HUMANS ON FIELD-CAUGHT BLOODFEED ANOPHELES SP: SURVIVAL RATES IN SENEGAL

Kevin C. Kobylinski1, Massamba Sylla2, Jason Meckel1, Brian D. Foy1
1Colorado State University, Fort Collins, CO, United States, 2Centre IRD de Hann, Dakar, Senegal

5 p.m.

5:15 p.m.

5:30 p.m.

4:45 p.m.

REMARKS
4:30 p.m.  774

ANALYSIS OF DRUG RESISTANCE USING PLASMODIUM FALCIPARUM GENETIC CROSSES
Juliana M. Sa, Olivia Twu, Karen Hayton, Pascal Ringwald, Thomas E. Wellems
National Institutes of Health, Rockville, MD, United States

4:45 p.m.  1237

PROBING CENTRAL CARBON METABOLISM IN PLASMODIUM FALCIPARUM
Kellen Olszewski¹, Joshua D. Rabinowitz², Manuel Llinás¹
¹Molecular Biology and Lewis-Sigler Institute for Integrative Genomics, Princeton University, Princeton, NJ, United States,
²Chemistry and Lewis-Sigler Institute for Integrative Genomics, Princeton University, Princeton, NJ, United States

5 p.m.  775

INSIGHTS INTO GENE EXPRESSION THROUGH ANALYSIS OF TRANSCRIPTIONAL ACTIVITY DURING THE INTRAERYTHROCYTIC DEVELOPMENTAL CYCLE OF PLASMODIUM FALCIPARUM
Jennifer S. Sims¹, Kevin T. Militello², Peter A. Sims¹, Vishal P. Patel¹, Jacob M. Kasper³, Dyann F. Wirth¹
¹Harvard School of Public Health, Boston, MA, United States,
²State University of New York at Geneseo, Geneseo, NY, United States,
³Harvard University, Cambridge, MA, United States

5:15 p.m.  776

IDENTIFICATION OF BIOLOGICAL PATHWAYS CRITICAL FOR MALARIA PARASITE DEVELOPMENT, THROUGH TRANSPONSON-MEDIATED MUTAGENESIS
Bharath Balu, Steven P. Maher, Chitra Chauhan, John H. Adams
University of South Florida, Tampa, FL, United States

Scientific Session 103

Ectoparasite-Borne Diseases

Grand Ballroom B

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR
Philip McCall
Liverpool School of Tropical Medicine, Liverpool, United Kingdom
Kathryn E. Reif
Louisiana State University, Baton Rouge, LA, United States

4:30 p.m.  780

IDENTIFICATION OF BACTERIAL PATHOGENS AND HOSTS OF BLOOD MEALS IN QUESTING IxODID TICKS IN THE NORTH CAROLINA PIEDMONT
Michael P. Smith¹, Loganathan Ponnusamy¹, Allen Richards², Charles S. Apperson¹
¹N.C. State University, Raleigh, NC, United States, ²Naval Medical Research Unit, Silver Spring, MD, United States

4:45 p.m.  781

ISOLATION OF FRANCISCELLA TULARENSIS TULARENSIS SUBPOPULATION A.I. FROM MISSOURI LONE STAR TICKS
Zenda L. Berrada, Heidi K. Goethert, Sam R. Telford, III
Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States
5 p.m.  

 EARLY INNATE IMMUNE EVENTS IN THE SKIN AFTER TRANSMISSION OF YERSINIA PESTIS BY FLEAS  
Christopher F. Bosio, Clayton O. Jarrett, B. Joseph Hinnebusch  
Rocky Mountain Laboratories, National Institutes of Health, Hamilton, MT, United States  
(ACMCIP Abstract)

5:15 p.m.  

 RICKETTSIA FELIS INFECTION IN A MURINE MODEL  
Kathryn E. Reif, Rhett W. Stout, Timothy W. Morgan, Kevin R. Macaluso  
Louisiana State University, Baton Rouge, LA, United States  
(ACMCIP Abstract)

Symposium 104  
Clinical Group II  
Grand Ballroom C  
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.  
This session features a malaria update and travel vaccine update.  
CHAIR  
Alan Magill  
Walter Reed Army Institute of Research, Silver Spring, MD, United States

3:45 p.m.  
MALARIA PREVENTION UPDATE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION  
Paul Arguin  
Centers for Disease Control and Prevention, Atlanta, GA, United States

4 p.m.  
TRAVELERS’ VACCINE UPDATE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION  
Nina Marano  
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:40 p.m.  
MAPPING OF EPITOPES IN VARIANT SURFACE ANTIGENS  
Ali Salanti  
University of Copenhagen and Rigshospitalet, Copenhagen, Denmark

Symposium 105  
Development of Plasmodium falciparum Vaccines Based on Variant Surface Antigens  
Grand Ballroom D  
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.  
Variant surface antigens (VSA) mediate the receptor-specific adhesion of Plasmodium falciparum-infected red blood cells (iRBC) and are key to the pathogenesis of P. falciparum malaria. These antigens are targeted by acquired antibodies that predict protection from infection and disease. Although this makes them attractive vaccine candidates, vaccine development is hindered by the extensive inter- and intraclonal diversity of the best-known VSA family called PIEMP1 (P. falciparum erythrocyte membrane protein 1), and the capacity of P. falciparum to switch among transcription of PIEMP1 family members that encode antigenically and functionally distinct adhesive proteins. Strategies for VSA vaccine development include defining the key VSA epitopes that mediate iRBC adhesion or are targeted by broadly reactive inhibitory antibodies. This requires the identification of the host receptors that are involved in severe P. falciparum malaria. Two multinational consortia are currently tackling these issues in a coordinated effort to design VSA-based vaccines. The Pregnancy Malaria Initiative is systematically assessing immunogens for a vaccine against pregnancy-associated malaria, with a focus on the VAR2CSA member of the PIEMP1 family. Pregnancy-associated malaria is a major cause of morbidity and mortality for mothers, fetuses and infants. The Severe Malaria Grand Challenges in Global Health consortium is engaged in a parallel effort aimed at characterizing the VSA and host receptors involved in the pathogenesis of life-threatening malaria complications in small children. The symposium is composed of four presentations by lead scientists in these consortia. Each talk will give particular attention to a key aspect of their endeavors to develop P. falciparum vaccines based on variant surface antigens.  
CHAIR  
Lars Hviid  
University of Copenhagen and Rigshospitalet, Copenhagen, Denmark

3:45 p.m.  
INTRODUCTION  
Lars Hviid  
University of Copenhagen, Copenhagen, Denmark

4:20 p.m.  
MECHANISMS OF VAR GENE SWITCHING  
Artur Scherf  
Institut Pasteur, Paris, France

4:40 p.m.  
MAPPING OF EPITOPES IN VARIANT SURFACE ANTIGENS  
Ali Salanti  
University of Copenhagen and Rigshospitalet, Copenhagen, Denmark
5:05 p.m.
MEASURING AND INTERFERING WITH INFECTED RED BLOOD CELL ADHESION
Patrick E. Duffy
Seattle Biomedical Research Institute, Seattle, WA, United States

Scientific Session 106
Helminthic Coinfections

Grand Ballroom E
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR
Subash Babu
National Institutes of Health, Bethesda, MD, United States
W. Evan Secor
Centers for Disease Control, Atlanta, GA, United States

3:45 p.m.
A COHORT STUDY EVALUATING IMMUNOLOGICAL AND CLINICAL CONSEQUENCES OF THE CO-INFECTION HTLV-1 AND SCHISTOSOMA MANSONI
Aurelia Porto, Silvane B. Santos, Isadora Siqueira, Andre Luiz Muniz, Edgar M. Carvalho
Federal University of Bahia, Salvador, Brazil

4 p.m.

HELMINTH INFECTIONS DURING PREGNANCY IS ASSOCIATED WITH IMPAIRED HIB VACCINE RESPONSES IN KENYAN INFANTS
John Kiko1, Indu Malhotra2, Peter Mungai2, Alex Wamachi2, A. Desiree LaBeaud2, John Ouma1, Davy Koech2, Eric Muchiri1, Christopher L. King2
1Division of Vector Borne Diseases, Nairobi, Kenya, 2Case Western Reserve University, Cleveland, OH, United States, 3Kenya Medical Research Institute, Nairobi, Kenya

4:15 p.m.
INHIBITION OF TYPE 1 DIABETES IN FILARIA INFECTED NOD MICE IS ASSOCIATED WITH A TH2 SHIFT AND INDUCTION OF REGULATORY T CELLS
Marc P. Hübner, Marina N. Torrero, David Larson, J. Thomas Stocker, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

4:30 p.m.

INFLUENCE OF PRE-EXISTING FILARIAL INFECTION ON THE INCIDENCE AND SEVERITY OF CLINICAL MALARIA IN CHILDREN AND YOUNG ADULTS IN A COENDEMIC REGION OF MALI
Benoit Dembele1, Housseine Dolo1, Siaka Konate1, Siaka Y. Coulibaly1, Dramane Sanogo1, Simon Metenou2, Siddhartha Mahanty2, Michel E. Coulibaly1, Lamine Soumaoro1, Salif S. Doumbia1, Marissa Wagner1, Boubacar Guindo1, Abdallah A. Diallo1, Aldouma Guindo1, Seidina Diakite1, Meripin A. Guindo1, Renion Saye1, Ousmane Kante1, Dapa A. Diallo1, Sekou F. Traore1, Thomas B. Nutman1, Yaya I. Coulibaly1, Amy D. Klion2
1Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, 2National Institutes of Health, Bethesda, MD, United States, 3Harvard Medical School, Boston, MA, United States

4:45 p.m.

T LYMPHOCYTE SUBSETS IN CHILDREN WITH SCHISTOSOMIASIS MANSONI COMPARED TO CHILDREN WITH SCHISTOSOMA MANSONI AND PLASMODIUM FALCIPARUM CO-INFECTIONS IN WESTERN KENYA
Erick M. Muok1, Pauline N. Mwinzi1, Carla L. Black2, Jennifer M. Carter2, Zopporah W. Ng’ang’a1, Michael M. Gicheru1, W. Evan Secor2, Diana M. Karanja1, Daniel G. Colley2
1Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, 2University of Georgia, Athens, GA, United States, 3Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, 4Kenyatta University, Nairobi, Kenya, 5Centers for Disease Control and Prevention, Atlanta, GA, United States

5 p.m.

WUCHERERIA BANCROFTI AND MANSONELLA PERSTANS INFECTIONS MAY PROTECT AGAINST P. FALCIPARUM INDUCED ANEMIA IN FILARIA/MALARIA CO-INFECTED POPULATIONS
Benoit Dembele1, Siaka Konate1, Housseine Dolo1, Dramane Sanogo1, Siaka Y. Coulibaly1, Michel E. Coulibaly1, Lamine Soumaoro1, Simon Metenou2, Salif S. Doumbia1, Abdallah Diallo1, Yaya I. Coulibaly1, Sekou F. Traore1, Amy Klion2, Thomas B. Nutman2, Siddhartha Mahanty2
1Filariasis Unit, FMPOS, University of Bamako, Bamako, Mali, 2LPD, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States
Plenary Session 107

Plenary Session III: Commemorative Fund Lecture

Grand Ballroom C
Tuesday, December 9, 6 p.m. – 6:45 p.m.
The ASTMH Commemorative Fund Lecture is presented annually by an invited senior researcher in the tropics.

CHAIR
Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

RESEARCH, DEVELOPMENT AND INNOVATION ON NEGLECTED DISEASES: A DEVELOPING COUNTRY PERSPECTIVE
Carlos Morel
Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

Poster Session B Dismantle

Armstrong Ballroom
Tuesday, December 9, 7 p.m. – 8 p.m.

Satellite Symposium


Sponsored by Pfizer, Inc.
Gallery
Tuesday, December 9, 7 p.m. – 8:15 p.m.
The recent move toward worldwide implementation of artemisinin-based combination therapies (ACTs), as a replacement for the former first-line antimalarials chloroquine and sulfadoxine-pyrimethamine, has focused attention on how to identify the most suitable ACTs. Synergy between combination partners is a particularly desirable property. This symposium will present a series of talks that dissect issues relating to the study and identification of synergistic, additive or antagonistic interactions between antimalarials. Factors affecting the experimental investigation and definition of synergy will be explored, and current knowledge about synergistic interactions between distinct classes of antimalarials will be presented. The symposium will also discuss clinical investigations that have permitted an investigation into the clinical efficacy of synergistic drug combinations, and provide a perspective on promising avenues to develop new antimalarial combinations that partner compounds with synergistic modes of action.

CHAIR
David Fidock
Columbia University, New York, NY, United States

INVESTIGATIONS INTO POSSIBLE SYNERGISTIC INTERACTIONS BETWEEN AZITHROMYCIN AND QUINOLINE-BASED ANTIMALARIALS
David Fidock
Columbia University, New York, NY, United States

DOES SYNERGY CONTRIBUTE TO EFFICACY WITH ANTIMALARIAL COMBINATION THERAPIES IN CLINICAL USE?
Harald Noedl
Medical University of Vienna, Vienna, Austria

PROSPECTS OF DEVELOPING NOVEL ANTIMALARIAL COMBINATIONS USING SYNERGISTIC PARTNER DRUGS
Philip Rosenthal
University of California at San Francisco, San Francisco, CA, United States

Satellite Symposium

Dihydroartemisinin/Piperaquine: An Innovative ACT in the Treatment of P. falciparum Malaria

Sponsored by Medicines for Malaria Venture and sigma-tau
Grand Ballroom A
Tuesday, December 9, 7 p.m. – 8:15 p.m.
Malaria is a widespread disease prevalent in many developing countries. Dihydroartemisinin/Piperaquine (DHA + PQP) is a fixed-ratio drug combination developed to treat uncomplicated P. falciparum malaria. It can be given in a once a day dosing over three days. This session reports on two Phase III comparative trials with DHA + PQP versus artemether/mefloquine (AS+MQ), and artesunate/lumefantrine (A+L), as well as the pharmacokinetics. These studies included over 2,500 patients in different epidemiological settings in Africa and Asia. The results demonstrate that DHA + PQP is an effective and well tolerated treatment for uncomplicated P. falciparum malaria, showing also significantly higher cure-rate at day 42 versus A+L and at day 63 versus AS+MQ. These findings, from one of the largest pivotal trials conducted for an innovative antimalarial, provide significant insights into the usage of ACTs in the treatment of uncomplicated P. falciparum malaria.

CHAIR
Nicholas White
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

Christopher Hentschel
Medicines for Malaria Venture, Geneva, Switzerland

PHARMACOKINETICS OF PIPERAQUINE AND DIHYDROARTEMISININ
Allan Evans
University of South Australia, Adelaide, Australia

PHASE III, RANDOMIZED, NON-INFERIORITY TRIAL OF DIHYDROARTEMISININ/PIPERAQUINE IN COMPARISON WITH ARTEMETHER/LUMEFANTRINE IN AFRICAN CHILDREN
Umberto D’Alessandro
Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium
PHASE III, RANDOMIZED, NON-INFERIORITY TRIAL OF DIHYDROARTEMISININ/PIPERAQUINE IN COMPARISON WITH ARTESUNATE/MEFLOQUINE IN PATIENTS IN ASIA

Neena Valecha
National Institute of Malaria Research, Delhi, India

COMPARING THE PERSPECTIVE OF THE EPIDEMIOLOGIST WITH THAT OF THE REGULATOR
Antonella Bacchieri
sigma-tau, Pomizia, Italy

Satellite Symposium

The Positive Impact of Artemether/ Lumefantrine on Malaria Morbidity and Mortality

Sponsored by Novartis Pharma AG.
Grand Ballroom D
Tuesday, December 9, 7 p.m. – 8:15 p.m.
To date, 34 countries in Africa, Asia and Latin America have adopted Artemether/Lumefantrine (A/L) as first-line treatment for uncomplicated falciparum malaria. Since 1999, when A/L was first registered, over 200 million treatments have been used, the vast majority of them through public sector distribution. In 2001, the World Health Organization adopted a new policy on artemisinin-based combination therapy (ACTs), leading to scaling up of A/L. Widespread use of A/L started in 2005, resulting in a steady accumulation of solid data supporting its positive impact on malaria mortality and morbidity. Time-series data and community based studies are contributing to the growing body of evidence that case management with A/L significantly reduces the burden of malaria in a time where LLINs (long lasting insecticidal nets) coverage is improving but not yet achieving targets in most countries. This symposium will discuss health impact data from several African countries, including evaluation of safety.

CHAIR
Ambrose Talisuna
Ministry of Health, Kampala, Uganda

EPIDEMIOLOGICAL CHANGES IN MALARIA IN AFRICA – REAL OR A MIRAGE?
Ambrose Talisuna
Ministry of Health, Kampala, Uganda

THE IMPACT OF ARTEMETHER/LUMEFANTRINE COMMUNITY DEPLOYMENT ON MORTALITY AND MORBIDITY IN TIGRAY, ETHIOPIA AT TWO YEARS
Hailemariam Lemma
Tigray Health Bureau, Tigray, Ethiopia.

THE ALIVE STUDY – MEASURING THE IMPACT OF ARTEMETHER/LUMEFANTRINE IN VULNERABLE POPULATIONS IN TANZANIA
Blaise Genton
Ifakara Health Research and Development Center, Dar Es Salaam, United Republic of Tanzania

KENYAN HOSPITAL TIME-SERIES DATA TO MEASURE THE IMPACT OF ARTEMETHER/LUMEFANTRINE
Emelda Okiro
Wellcome Trust Collaborative Programme, Nairobi, Kenya

Wednesday, December 10

Registration
Napoleon Ballroom
Wednesday, December 10, 7 a.m. – 5 p.m.

Cyber Cafe
Lagniappe
Wednesday, December 10, 7 p.m. – 5 p.m.

Speaker Ready Room
Nottoway
Wednesday, December 10, 7 a.m. – 6 p.m.

ASTMH Past Presidents Meeting
Grand Couteau
Wednesday, December 10, 7 a.m. – 8 a.m.

Web Site Committee Meeting
Salon 816
Wednesday, December 10, 7 a.m. – 8 a.m.

Scientific Program Committee
Oak Alley
Wednesday, December 10, 7 a.m. – 8 a.m.

Symposium 108

Tick-Host-Pathogen Research in the Post-Genomic Era

Gallery
Wednesday, December 10, 8 a.m. – 9:45 a.m.
Tick genomics research is expanding dramatically with the Ixodes scapularis genome sequencing project and availability of expressed sequence tags (ESTs) from specific tissues and life cycle stages of several tick species. Speakers will focus on how this wealth of emerging data can be used to achieve more robust insights into tick genome organization, gene function, evolutionary relationships, modulation of the host environment, vector competence, control and physiological processes, including those not previously amenable to study.

CHAIR
Stephen Wikel
University of Texas Medical Branch, Galveston, TX, United States
Francisco Alarcon-Chaidez
University of Texas Medical Branch, Galveston, TX, United States

8 a.m.
TICK GENOME PROJECT AND BEYOND
Catherine A Hill
Purdue University, West Lafayette, IN, United States
8:25 a.m.
 TICK NEUROBIOLOGY IN THE POST-GENOMIC ERA
 Alan Bowman
 University of Aberdeen, Aberdeen, United Kingdom

8:50 a.m.
 MOLECULAR DETERMINANTS OF TICK SUSCEPTIBILITY AND RESPONSE TO RICKETTSIA
 Kevin Macaluso
 Louisiana State University, Baton Rouge, LA, United States

9:15 a.m.
 COMPLEXITY OF THE TICK SALIVARY GLAND TRANSCRIPTOME AND PROTEOME
 Jose Ribeiro
 National Institutes of Health, NIAID/LPD, Rockville, MD, United States

Symposium 109

Genital Schistosomiasis as a Risk Factor for HIV Transmission

Rhythms I
Wednesday, December 10, 8 a.m. – 9:45 a.m.
Up to 75% of the women excreting S. haematobium eggs in the urine have been found to have schistosome eggs in the genital tract. S. haematobium is associated with sandy patches in the genital mucosa, as well as contact bleeding. The manifestations may mimic some of the sexually transmitted diseases, and the disease may be found to be associated with HIV. The symposium will address some of the key issues of the disease as a neglected public health problem for women and for men.

CHAIR
Eyrun F. Kjetland
Centre for Imported and Tropical Diseases, Oslo, Norway

8 a.m.
INTRODUCTION
Eyrun F. Kjetland
Centre for Imported and Tropical Diseases, Oslo, Norway

8:10 a.m.
TREATMENT OF SCHISTOSOMIASIS AS INTERVENTION AGAINST HIV TRANSMISSION IN AFRICA
Eyrun F. Kjetland
Centre for Imported and Tropical Diseases, Oslo, Norway

8:30 a.m.
THE RELATIONSHIP BETWEEN URINARY AND GENITAL SCHISTOSOMIASIS
Patricia D. Ndhlovu
University of Zimbabwe, Harare, Zimbabwe

8:55 a.m.
FEMALE GENITAL SCHISTOSOMIASIS AS A RISK FACTOR FOR HIV TRANSMISSION, A HISTOPATHOLOGICAL TAKE ON THE ISSUE
Peter M. Jourdan
Centre for import and Tropical Diseases, Oslo, Norway

9:20 a.m.
MALE GENITAL SCHISTOSOMIASIS AS A RISK FACTOR FOR HIV TRANSMISSION TO WOMEN – A NEW INTERVENTION POINT AGAINST HIV TRANSMISSION?
Peter D. C. Leutscher
DBL Centre for Health and Research, Frediksberg, Copenhagen, Denmark

Scientific Session 110

Malaria – Epidemiology I

Rhythms I/III
Wednesday, December 10, 8 a.m. – 9:45 a.m.

CHAIR
Nakul Chitnis
Swiss Tropical Institute, Basel, Switzerland
J.R. Poespoprodjo
District Health Authority, Darwin, Australia

8 a.m.

790
STEEP INCREASE IN CHILD SURVIVAL AFTER FOUR YEARS OF INTEGRATED MALARIA CONTROL IN BIOKO ISLAND, EQUATORIAL GUINEA
Immo Kleinschmidt1, Christopher Schwabe2, Luis Segura2, Luis Benavente2
1London School of Hygiene and Tropical Medicine, London, United Kingdom, 2Medical Care Development International, Silver Spring, MD, United States

8:15 a.m.

791
THE IMPACT OF HOME BASED MANAGEMENT OF MALARIA (HMM) ON UNDER FIVE MALARIA MORTALITY: THE RWANDAN EXPERIENCE
Waltruda Van Doren1, Daniel Ngamije2, Corine K. Karema3, François Nyitegeka4, Jean B. Ahoranayezu4, Jean-Pierre Van Geertruyden1
1Malaria Control Programme of Rwanda/Belgian Technical Cooperation, Kigali, Rwanda, 2National Malaria Control Programme of Rwanda, Kigali, Rwanda, 3National Malaria Control Programme of Rwanda, Kigali, Rwanda, 4WHO, Kigali, Rwanda, 5Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium

8:30 a.m.

792
COMPARISON OF THE EFFECTIVENESS OF ITNS, IRS, AND CHEMOTHERAPEUTIC INTERVENTIONS, IN REDUCING MALARIA TRANSMISSION, USED INDIVIDUALLY AND IN COMBINATION, THROUGH A MATHEMATICAL MODEL
Nakul Chitnis1, Allan Schapira1, Thomas A. Smith2, Richard Steketee2
1Swiss Tropical Institute, Basel, Switzerland, 2PATH, Ferney-Voltaire, France
8:45 a.m. 793

IMPACT OF LARVICIDING ON MALARIA IN THE GAMBIA
Margaret Pinder1, Silas Majambere1, David Ameh2, David Jeffries2, Musa Jawara2, Ann Kelly3, Clare Green1, Robert Hutchinson1, David Conway2, Steve Lindsay3
1Durham University, Durham, United Kingdom, 2MRC Laboratories, Banjul, Gambia, 3London School of Hygiene and Tropical Medicine, London, United Kingdom, Centre for Infectious Diseases and International Health, London, United Kingdom

9 a.m. 794

A CROSS-NATIONAL COMPARISON OF INSECTICIDE-TREATED NET HOUSEHOLD POSSESSION AND USE AMONG CHILDREN UNDER FIVE YEARS OLD AND PREGNANT WOMEN
Thomas P. Eisele, Joseph Keating, Megan Littrell, David Larsen, Kate Macintyre
Department of International Health and Development, Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

9:15 a.m. 795

POTENTIAL CONTRIBUTION OF SERO-EPIDEMIOLICAL ANALYSIS FOR MALARIA ELIMINATION: HISTORICAL AND CURRENT PERSPECTIVES
Chris Drakeley1, Jackie Cook1, Patrick Corran1, Jamie Griffin1, Lucy Okell1, Azra Ghani3, Eleanor Riley1
1London School of Hygiene and Tropical Medicine, London, United Kingdom, 2NIBSC, South Mimms, United Kingdom, 3Imperial College, London, United Kingdom

9:30 a.m. 796

MULTIDRUG RESISTANT VIVAX MALARIA: A MAJOR CAUSE OF MORBIDITY IN EARLY LIFE
J.R. Poesp ropodjo1, W. Fobia2, E. Kenangalem1, D.A. Lampahi1, A. Hasanuddin1, N. Warikar1, P. Sugiantoro1, E. Tjitra3, N.M. Anstey4, R.N. Price1
1District Health Authority, Timika, Papua, Indonesia, 2Menzies School of Health Research-National Institutes of Health Research and Development Malaria Research Program, Timika, Papua, Indonesia, 3Mitra Masyarakat Hospital, Timika, Papua, Indonesia, 4Menzies School of Health Research, Darwin, Australia

Symposium 111

Predicting and Mitigating Outbreaks of Vector-Borne Disease Utilizing Satellite Remote Sensing Technology and Models

Waterbury
Wednesday, December 10, 8 a.m. – 9:45 a.m.

The symposium is designed to review progress in the effort to predict and mitigate vector-borne disease using remote sensing parameters. 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 update 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
John A. Haynes
NASA, Washington, DC, United States

8 a.m.
Introduction
John A. Haynes
NASA, Washington, DC, United States

8:10 a.m.
AN OVERVIEW OF NASA PUBLICATIONS APPLICATIONS USING REMOTE SENSING DATA AND HOW TO BECOME A RESEARCH COLLABORATOR WITH NASA
Sue M. Estes
NASA/USRA, Huntsville, AL, United States

8:25 a.m.
AN OVERVIEW OF NASA PUBLICATIONS APPLICATIONS USING REMOTE SENSING DATA AND HOW TO BECOME A RESEARCH COLLABORATOR WITH NASA
John Haynes
NASA, Washington, DC, United States

8:45 a.m.
REMOTE SENSING BASED MODELING AND SURVEILLANCE OF MALARIA AND AVIAN INFLUENZAE RISK PREDICTION IN SOUTH EAST ASIA AND EARLY WARNING OF PANDEMIC INFLUENZAE
Richard K. Kiang
NASA, Greenbelt, MD, United States

9 a.m.
UTILIZATION OF NASA EARTH SCIENCE RESEARCH RESULTS TO ENHANCE THE CDC ARBONET/PLAGUE SURVEILLANCE SYSTEM AND PREDICTING ZOONOTIC HEMORRHAGIC FEVER EVENTS IN SUB-SAHARAN AFRICA USING NASA EARTH SCIENCE DATA FOR DOD – GLOBAL EMERGING INFECTIONS SURVEILLANCE
Jorge Pinzon E. Pinzon
NASA, Greenbelt, MD, United States
9:15 a.m.
MALARIA EARLY WARNING SYSTEM (MEWS/FAMINE EARLY WARNING SYSTEM (FEWS)
Molly E. Brown
NASA, Greenbelt, MD, United States

9:30 a.m.
INTEGRATION OF REMOTE SENSING INTO ENCEPHALITIS VIRUS INTERVENTION DECISION SUPPORT SYSTEMS
William Reisen
University of California – Davis, Davis, CA, United States

Symposium 112

Wolbachia Endosymbionts of Filarial Parasites: From Basic Symbiosis Research to New Treatment Approaches for Filariasis

Napoleon A123
Wednesday, December 10, 8 a.m. – 9:45 a.m.
Wolbachia are obligatory symbionts required for development and reproduction in most filarial species. Depletion of these alpha-proteobacteria by antibiotics leads to sterility of the female worms and to the death of adult worms. Because many pathogenic filarial species depend on Wolbachia, they represent a breakthrough target for the development of new anti-filarial drugs and a novel insight into the pathogenesis of filariasis by stimulating an inflammatory immune response in the human host. Recent genome sequencing of the filarial parasite Brugia malayi and its Wolbachia revealed new hypotheses on the nature of their mutualistic relationship which will form the basis for post-genomic experiments. The Wolbachia/filarial parasite system offers the possibility to study the nature of symbiosis taking place within a unique three-dimensional vertebrate host/parasite/endosymbiont relationship.

CHAIR
Peter Fischer
Washington University School of Medicine, St. Louis, United States
Mark Taylor
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

8 a.m.
BIOLOGY OF WOLBACHIA AND THEIR ROLE IN PATHOGENESIS OF HUMAN FILARIASIS
Mark Taylor
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

8:25 a.m.
GENOME ORGANIZATION OF WOLBACHIA AND FURTHER DIRECTIONS OF POST-GENOMIC RESEARCH
Barton Slatko
New England Biolabs, Ipswich, MA, United States

8:50 a.m.
LATERAL GENE TRANSFER FROM WOLBACHIA TO THE NUCLEAR GENOME OF FILARIAL PARASITES
Peter Fischer
Washington University School of Medicine, St. Louis, MO, United States

9:15 a.m.
TREATMENT OF HUMAN FILARIASIS USING ANTIBIOTICS TARGETING WOLBACHIA ENDOSYMBIONTS
Achim Hoerauf
Institute for Medical Parasitology, Bonn, Germany

Symposium 113

Update on Cholera

Maurepas
Wednesday, December 10, 8 a.m. – 9:45 a.m.
Cholera remains an important cause of morbidity and mortality in the developing world. The symposium will update clinical and epidemiological data on cholera, and review molecular epidemiologic studies from India and Bangladesh, mathematical modeling of cholera transmission and recent vaccine studies.

CHAIR
J. Glenn Morris
University of Florida, Gainesville, FL, United States
O. Colin Stine
University of Maryland, Baltimore, Baltimore, MD, United States

8 a.m.
CLINICAL AND EPIDEMIOLOGICAL UPDATE
J. Glenn Morris
University of Florida, Gainesville, FL, United States

8:25 a.m.
MOLECULAR EPIDEMIOLOGY OF CHOLERA IN INDIA AND BANGLADESH
O. Colin Stine
University of Maryland, Baltimore, Baltimore, MD, United States

8:50 a.m.
MATHEMATICAL MODELS OF CHOLERA
Elsa Schaefer
Marymount College, Arlington, VA, United States

9:15 a.m.
CHOLERA VACCINES: THE KOLKATA VACCINE TRIAL
John Clemens
International Vaccine Institute, Seoul, Republic of Korea

Scientific Session 114

Pneumonia, Respiratory Infections and Tuberculosis

Bayside A
Wednesday, December 10, 8 a.m. – 9:45 a.m.

CHAIR
W. Abdullah Brooks
International Center for Diarrhoeal Disease Research, B: Centre for Health & Population Research, Dhaka, Bangladesh
Davidson H. Hamer
Center for International Health and Development, Boston, MA, United States
8 a.m.

797

PNEUMOCOCCAL DISEASE IN MALI AND THE INTRODUCTION OF 7-VALENT VACCINE INTO THE EPI

Samba O. Sow1, Milagritos D. Tapia2, Mariam Sylla3, Souleymane Diallo2, Mahamadou Keita1, Nouhoum Kone4, Karen Kotloff5, Myron M. Levine2
1Center for Vaccine Development-Mali, Bamako, Mali; 2Center for Vaccine Development Baltimore, CVD-Baltimore, MD, United States; 3Hopital Gabriel Toure, Bamako, Mali; 4EPI, Ministere de la Sante, Bamako, Mali

8:15 a.m.

798

NEW DIAGNOSTIC APPROACHES FOR PEDIATRIC TB AMONG PERUVIAN CHILDREN

Richard Oberhelman1, Giselle Soto-Castellares2, Luz Caviedes3, Maria Castillo4, Mayuko Saito5, Alberto Laguna6, Robert Gilman6
1Tulane School of Public Health, New Orleans, LA, United States; 2US Army Medical Research Unit – Peru, Lima, Peru; 3Universidad Peruana Cayetano Heredia, Lima, Peru; 4Asociacion Benefica PRISMA, Lima, Peru; 5Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

8:30 a.m.

799

A REPORT OF THE FIRST TWO AND A HALF YEARS OF A COMPREHENSIVE INFLUENZA SENTINEL SURVEILLANCE SYSTEM IN KENYA AND ITS IMPLICATIONS FOR VACCINE STRAIN SELECTION IN THE EAST AFRICA REGION

David Schnabel1, Wallace Bulimo2, Jason Garner3, Rachel Achilla2, Virginia Headley1, Sam Martin1
1US Army Medical Research Unit – Kenya, Nairobi, Kenya; 2Kenya Medical Research Institute, Nairobi, Kenya; 3US Air Force School of Aerospace Medicine, Brooks City-Base, TX, United States

8:45 a.m.

800

THE EPIDEMIOLOGY OF HUMAN PARAINFLUENZA VIRUS-ASSOCIATED PNEUMONIA IN THAILAND

Oliver Morgan1, Malinee Chittagampitch1, Birgit Claque1, Wiwan Sansuttipun2, Teresa C. Peret3, Dean D. Erdman4, Henry C. Baggett5, Sonja J. Olsen1, Alicia Fry7
1Division of Emerging Infections and Surveillance Services, Centers for Disease Control and Prevention, Atlanta, GA, United States; 2Thailand National Institutes of Health, Ministry of Public Health, Nonthaburi, Thailand; 3International Emerging Infections Program, Thailand MOPH-U.S. CDC Collaboration, Nonthaburi, Thailand; 4Division of Viral Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States; 5International Emerging Infections Program, Thailand MOPH-U.S. CDC Collaboration, Nonthaburi, Thailand; 7Division of Viral Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States

9 a.m.

801

RESPIRATORY DISEASE SURVEILLANCE IN 6 ROYAL THAI ARMY HOSPITALS ALONG THAI BORDERS

Jaryianart Gaywee1, Naronggrid Sirisopana1, Chirapa Eamsila3, Pochaman Watcharapichat1, Thipawan Chuenchitra1, Judpon Vudtakanok3, Vim Jangyodusk1, Smin Boonlikit2, Wisuth Srichantrapunt1, Surat Paonin4, Rattaporn Pattanarangsan6, Thongdang Arthayapan3, Ladaporn Bodhidatta1, Richard G. Jarman1, Julie A. Pavlin3, Carl J. Mason1
1Armored Forces Research Institute of Medical Sciences, Bangkok, Thailand; 2Fort Surasi Hospital, Kanchanaburi, Thailand; 3Fort Surasinghanath Hospital, Sa-Kaew, Thailand; 4Fort Sunpasithiprasong Hospital, Ubon Ratchathani, Thailand; 5Fort Mengraimaharat Hospital, Chiangrai, Thailand; 6Fort Khetudomsak Hospital, Chumphon, Thailand; 7Fort Ingkayuthaborihan Hospital, Pattani, Thailand

9:15 a.m.

802

EPIDEMIOLOGY AND GENETIC CHARACTERIZATION OF INFLUENZA VIRUSES ISOLATED FROM PATIENTS ENROLLED IN A HOSPITAL-BASED FEBRILE SURVEILLANCE STUDY IN CAMBODIA

Patrick J. Blair1, Thomas F. Wierzb2, Sok Touch3, Saphonn Vonthanak4, Rebecca J. Garten5, Xiyan X. Xu6, Alexander I. Klimov7, Shannon D. Putnam8
1Naval Health Research Center, San Diego, CA, United States; 2Naval Medical Research Unit 2-Phnom Penh, Phnom Penh, Cambodia; 3Communicable Diseases Control Department, Phnom Penh, Cambodia; 4National Institute of Public Health, Phnom Penh, Cambodia; 5Centers for Disease Control and Prevention, Atlanta, GA, United States; 6Naval Medical Research Unit #2, Jakarta, Indonesia

9:30 a.m.

803

EVALUATION OF SYMPTOM RECALL DURING A TWO-WEEK INTERVAL IN HOME-BASED MORBIDITY SURVEILLANCE, KISUMU AND NAIROBI, KENYA

Daniel Feikin1, Allen Audi2, James Ndirango2, Cristina Polya3, Godfrey Bigogo3, Beatrice Olack2, John Williamson3, Heather Burke1, Robert Breiman2
1Centers for Disease Control and Prevention, Kisumu, Kenya; 2Centers for Disease Control and Prevention, Nairobi, Kenya; 3Centers for Disease Control and Prevention, Atlanta, GA, United States
A common feature of chronic helminth infection is the inability of T cells to proliferate or produce IFN-γ in response to parasite Ag. Considerable published data suggest that dysregulation of professional antigen presenting cells (APCs) — e.g., dendritic cells (DC) and macrophages (Mac) — can explain the lack of an antigen-specific T cell response. Although the detailed mechanisms remain elusive, common data from human studies and mouse studies are beginning to emerge. Nonetheless, differences in the experimental systems need to be resolved. Our knowledge of T cell hypo-responsiveness is probably best studied in filarial disease and thus that will be the topic of this symposium. Microfilaria of *Brugia malayi* affect human DC in at least two ways: 1) by interfering with their viability and 2) by altering their function. In addition, the infective larval stage (L3, has been shown to alter the function of human Langerhans’ cells (LC) quite profoundly. Interestingly, these same filarial parasites, in mouse models of filariasis, generate suppressive nematode-elicted macrophages (NeMac), capable of blocking T cell proliferative responses. Moreover, data from another mouse system indicate that a phosphorylcholine-containing glycoprotein, ES-62, secreted by *Acanthocheilonema viteae* induces the maturation of DC with the capacity to induce Th2 responses that may cross regulate Th1 responses. This symposium is organized to review the existing data on the role of professional APCs in helminth infection. The goal is to address the role of APCs in mouse and human models and to give an overview of the differences and similarities that exist between these models, as well to compare and contrast in vitro models and clinical or in vivo studies that have been done so far. The final goal is to address the research needs for a better understanding of APC function in filariasis and other helminth infections.

**CHAIR**

Roshanak T. Semnani  
*National Institutes of Health, Bethesda, MD, United States*

**8 a.m.**

MODULATION OF DENDRITIC CELL FUNCTION BY NEMATODES  
Mary M. Stevenson  
*McGill University Health Centre, Montreal, Canada*

**8:25 a.m.**

THE ROLE OF MACROPHAGES IN MURINE MODELS OF FILARIASIS  
Judith E. Allen  
*The University of Edinburgh, Edinburgh, United Kingdom*

**8:50 a.m.**

GENERATING PROTECTIVE IMMUNITY TO INTESTINAL PARASITES  
Jackie Perrigoue  
*University of Pennsylvania, Philadelphia, PA, United States*

**9:15 a.m.**

THE ROLE OF HUMAN DENDRITIC CELLS IN FILARIAL INFECTION  
Roshanak T. Semnani  
*National Institutes of Health, Bethesda, MD, United States*
Symposium 117
Presumptive Therapy and Medical Screening of Migrating Refugees and Immigrants

Grand Ballroom B
Wednesday, December 10, 8 a.m. – 9:45 a.m.

This symposium will address the development of the Centers for Disease Control and Prevention pre-departure and post-arrival presumptive therapy and medical screening for infectious diseases for refugees relocating to the United States. In addition, the domestic medical screening guidelines for immigrants and refugees relocating to Canada are under development and will be introduced. The symposium will include an in-depth discussion around infectious diseases of immigrants and refugees with high prevalence and large public health impact. Some of these interventions are based on mass presumptive therapy, which is a new concept for U.S.- and Canadian-based clinicians (common in developing country settings).

CHAIR
William M. Stauffer
University of Minnesota, Minneapolis, MN, United States
Christina A. Greenaway
SMBD Jewish General Hospital, Montreal, QC, Canada

8 a.m.
INTRODUCTION TO THE CDC’S OVERSEAS AND DOMESTIC PRESUMPTIVE THERAPY AND MEDICAL SCREENING GUIDELINES
William M. Stauffer
University of Minnesota, Minneapolis, MN, United States

8:15 a.m.
EVIDENCE REVIEWS TO RECOMMENDATIONS FOR CANADIAN CLINICAL PREVENTIVE GUIDELINES FOR NEWLY ARRIVED IMMIGRANTS AND REFUGEES
Kevin Pottie
University of Ottawa, Ottawa, ON, Canada

8:50 a.m.
MALARIAS MANAGEMENT IN U.S.-BOUND REFUGEES
Christina Phares
Centers for Disease Control and Prevention, Atlanta, GA, United States

9:15 a.m.
ENHANCED MEDICAL SCREENING FOR TUBERCULOSIS IN U.S.-BOUND REFUGEES
John Painter
Centers for Disease Control and Prevention, Atlanta, GA, United States

Scientific Session 118
Flavivirus V

Grand Ballroom C
Wednesday, December 10, 8 a.m. – 9:45 a.m.

CHAIR
Carol Blair
Colorado State University, Fort Collins, CO, United States
Amadou A. Sall
Institut Pasteur Dakar, Dakar, Senegal

8 a.m.
THE USE OF HUMAN-MURINE CHIMERIC ANTIBODIES FOR TREATMENT OF YELLOW FEVER IN THE AG129 MOUSE MODEL
Brett A. Thibodeaux1, John T. Roehrig2, Carol D. Blair1
1Colorado State University, Fort Collins, CO, United States, 2Centers for Disease Control, Fort Collins, CO, United States

8:15 a.m.
YFV-INDUCED CYTOKINE EXPRESSION IN HUMAN HEPATOCYTES.
Sara E. Woodson, Michael R. Holbrook
University of Texas Medical Branch, Galveston, TX, United States

8:30 a.m.
PHYLOGENETIC ANALYSIS OF WEST AFRICAN ZIKA VIRUS USING SEQUENCES OF PARTS OF E, NS5 AND NS5/3’NC
Faye E Oumar1, Faye Ousmane1, Dupressoir Anne1, Ndiaye Mady1, Diallo Mawlouth1, Sall Amadou Alpha1
1Institut Pasteur Dakar, Senegal, Dakar, Senegal, 2Institut Gustave Roussy, Paris, France, 3University Cheikh Anta Diop Dakar, Dakar, Senegal

8:45 a.m.
INSECT-ONLY FLAVIVIRUSES DETECTED IN CULEX SPECIES MOSQUITOES FROM NORTHERN COLORADO
Bethany G. Bolling, Lars Eisen, Chester G. Moore, Barry J. Beaty, Carol D. Blair
Colorado State University, Fort Collins, CO, United States

9 a.m.
EVALUATION OF IGM CAPTURE ELISA ASSAYS FOR THE DETECTION ANTI-JEY IG M IGANTIBODIES IN CEREBROSPINAL FLUID SAMPLES
Ravi Vasanpathapuram1, Jamie S. Robinson2, Brandy Russell2, Anita Desai1, Nalini Ramamurty1, David A. Featherstone1, Barbara W. Johnson2
1Department of Neurovirology, National Institute of Mental Health and Neuro Sciences, Bangalore, India, 2Centers for Disease Control and Prevention, Division of Vector-Borne Infectious Diseases, Fort Collins, CO, United States, 3World Health Organization – South Asia Regional Office, Immunization and Vaccine Development, New Delhi, India, 4World Health Organization, Geneva, Switzerland
9:15 a.m.  

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**FIRST CLINICAL TRIAL OF A VERO CELL DERIVED, INACTIVATED JAPANESE ENCEPHALITIS (JE) VACCINE IC51 IN PEDIATRIC POPULATION**

Elisabeth Schuller  
Intercell AG, Vienna, Austria

9:30 a.m.  

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**SIX MONTHS SAFETY OF A VERO-CELL CULTURE DERIVED JAPANESE ENCEPHALITIS VACCINE, IC51, ACROSS PHASE 3 TRIALS AND IN A LONG-TERM FOLLOW-UP COHORT**

Katrin Dubischar-Kastner  
Intercell AG, Vienna, Austria

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**Scientific Session 119**

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Cellular Parasitology I

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom D

Wednesday, December 10, 8 a.m. – 9:45 a.m.

**CHAIR**

Brian Cooke  
Monash University, Victoria, Australia

Rana Nagarkatti  
Virginia Bioinformatics Institute, Blacksburg, VA, United States

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8 a.m.

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**RAPID MEMBRANE DISRUPTION BY A PERFORIN-LIKE PROTEIN FACILITATES PARASITE EXIT FROM THE HOST CELL**

Björn F.C. Kafsack1, Janethe D.O. Pena1, Isabelle Coppens1, Sandeep Ravindran1, John C. Boothroyd1, Vern B. Carruthers1  
1Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor, MI, United States

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8:15 a.m.

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**HDP- A NOVELHEME DETOXIFICATION PROTEIN IN THE MALARIA PARASITE**

Rana Nagarkatti1, Dewal Jani1, Wendy Beatty1, Ross Angel1, Carla Slebodnick1, John Andersen3, Sanjai Kumar2, Dharmendar Rathore1  
1Virginia Bioinformatics Institute, Blacksburg, VA, United States,  
2Washington University School of Medicine, St. Louis, MO, United States,  
3Virginia Polytechnic Institute and State University, Blacksburg, VA, United States,  
4Laboratory of Malaria and Vector Research, National Institutes of Health, Rockville, MD, United States

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8:30 a.m.

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**DEFINING THE INTERACTION BETWEEN P. FALCIPARUM SKELETON BINDING PROTEIN 1 AND THE MEMBRANE SKELETON OF MALARIA-INFECTED RED BLOOD CELLS**

Lev M. Kats1, Donna W. Buckingham1, Kate Fernandez1, XinHong Pei1, Xiuli An2, Narla Mohandas2, Brian M. Cooke1  
1Monash University, Melbourne, Australia,  
2New York Blood Center, New York, NY, United States

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8:45 a.m.

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**A CALCIUM DEPENDENT PROTEIN KINASE MODULATES MICRONEME SECRETION IN TOXOPLASMA GONDII**

Sebastian Lourido, L. David Sibley  
Washington University School of Medicine, St. Louis, MO, United States

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9 a.m.

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**BROAD-SPECTRUM ANTI-INFECTIVE DRUGS THAT TARGET METABOLIC PATHWAYS AND E. HISTOLYTICA TROPHOZOITE GROWTH**

Avelina Espinosa1, David Rowley1, George Perdrizet1, Aaron Socha3, Erika Rye1  
1Roger Williams University, Bristol, RI, United States,  
2University of Rhode Island, Kingston, RI, United States,  
3University of Rhode Island, Kingston, RI, United States

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9:15 a.m.

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**MOLECULAR CHARACTERIZATION OF FATTY ACID BINDING PROTEINS FROM THE HOOKWORM ANCYLOSTOMA CELYANICUM**

Keke C. Fairfax, Jon J. Vermeire, Richard D. Bungiro, Lisa M. Harrison, Sohail Husain, Michael Cappello  
Yale University, New Haven, CT, United States
9:30 a.m.

815

HOOKWORM SECRETED TISSUE INHIBITORS OF METALLOPROTEINASE: CLONING, CHARACTERIZATION AND FUNCTIONS

Bin Zhan, Richi Gupta, Susan P. Wang, Stacia Bier, Desheng Jiang, Gammad Goud, Helton Santiago, Peter J. Hotez
The George Washington University Medical Center, Washington, DC, United States

Symposium 120
Antimalarial and Glucose 6-Phosphate Dehydrogenase Deficiency

Grand Ballroom E
Wednesday, December 10, 8 a.m. – 9:45 a.m.

Glucose 6-phosphate dehydrogenase (G6PD) deficiency is the most common enzymopathy affecting approximately 400 million people worldwide. The G6PD deficient genotypes are relatively protected against malaria, but are sensitive to hemolytic episodes triggered by oxidative stress due to viral/bacterial infections or treatments with oxidant drugs. The use of certain class of antimalarials has been restricted in G6PD deficient population due to hemolytic toxicities. Recent advancements in generation of transgenic animals have provided the tools for producing the experimental animals with required phenotypic traits. Also, better understanding on mechanism of hemolytic toxicities produced by the oxidant drugs has helped in standardization of alternate cellular models of G6PD deficiency and in vitro evaluation of hemolytic potential of new candidate drugs. This symposium shall discuss the current status of the knowledge on malaria and G6PD deficiency. Development of experimental models of G6PD deficiency and their applications for discovery of non-hemolytic antimalarials shall also be discussed.

CHAIR
Larry A. Walker
University of Mississippi, University, MS, United States
Babu L. Tekwani
University of Mississippi, University, MS, United States
Colin Ohrt
Walter Reed Army Institute of Research, Germantown, MD, United States

8 a.m.

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

8:15 a.m.

MALARIA AND G-6-PD: CLINICAL ASPECTS
Colin Ohrt
Walter Reed Army Institute of Research, Silver Spring, MD, United States

8:35 a.m.

LABORATORY ANIMAL MODELS FOR G-6-PD DEFICIENCY
Rosemary Rochford
SUNY Upstate Medical University, Syracuse, NY, United States

8:55 a.m.

PHARMACOLOGICAL MODELS FOR G-6-PD DEFICIENCY
David McMillan
University of Nebraska Medical Center, Omaha, NE, United States

9:15 a.m.

ROS INTERMEDIATES AND HEMOLYSIS IN G-6-PD DEFICIENT ERYTHROCYTES
Jeff Friedman
The Scripps Research Institute, La Jolla, CA, United States

Exhibit Hall Open

Napoleon Ballroom
Wednesday, December 10, 9:30 a.m. – 10:30 a.m.

Coffee Break

Napoleon Ballroom
Wednesday, December 10, 9:45 a.m. – 10:15 a.m.

Poster Session C Set-Up

Armstrong Ballroom
Wednesday, December 10, 10:15 a.m. – Noon

Symposium 121
Post-Treatment Reactions in Loiasis: Clinical and Programmatic Implications

Gallery
Wednesday, December 10, 10:15 a.m. – Noon

Loa loa is a filarial infection affecting approximately 13 million people in Central and West Africa, with a geographic distribution that overlaps considerably with that of Wuchereria bancrofti and Onchocerca volvulus. Although the majority of patients with Loa loa infection are asymptomatic despite high levels of microfilariae in the blood, microfilaricidal treatment with DEC or ivermectin can provoke severe reactions, including fatal encephalopathy. This has created significant problems for the Lymphatic Filariasis Eradication Program ongoing in Africa as drug distribution in Loa-endemic areas has been suspended. This symposium is designed to: 1) provide an overview of Loa loa infection and its impact on the mass treatment programs for filariasis, 2) describe recent advances in our understanding of post-treatment reactions and 3) highlight research advances necessary for the continued success of mass treatment programs for filariasis in Africa.

CHAIR
Amy D. Klion
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

LOA LOA: A CLINICAL OVERVIEW
Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

10:40 a.m.

MASS TREATMENT PROGRAMS FOR FILARIASIS IN AFRICA: IMPACT OF LOA LOA INFECTION
Yao Sodahlon
Mectizan Donation Program, Atlanta, GA, United States

11:05 a.m.

POST-TREATMENT REACTIONS IN LOIASIS: PAST AND PRESENT
Joseph Kamgno
National Onchocerciasis Task Force, Yaounde, Cameroon
Symposium 122

Monetary and Non-Monetary Burden of Human Larval Cestode Infections

Rhythms / Wednesday, December 10, 10:15 a.m. – Noon

As part of the World Health Organization's Global Burden of Disease Study, the disability adjusted life year (DALY) has been utilized to assess non-financial burden of disease for more than one hundred communicable and non-communicable conditions. DALYS simultaneously evaluate morbidity and mortality, associated with a condition, thereby permitting comparison of dissimilar afflictions. The DALY is now under review; especially for infectious diseases, where the data is typically poor. In addition, this approach strictly focuses on the human impact of an infection and, in the case of zoonoses, completely ignores the impact on the agricultural sector. This impact can have tremendous consequences on the well-being of smallholders farming communities. Studying the extent of human larval cestode infections will most likely raise awareness of these potentially eradicable zoonoses among policy makers and stakeholders in both the public health and agricultural sectors of developing and developed countries where any of the human larval cestode infections are a burden. This symposium will provide examples of calculating the burden of larval cestodes, with both the DALY's approach and the monetary impact approach. The latter takes the animal impact into account. These estimates are key to supporting international efforts to raise awareness about neglected diseases and their impact.

CHAIR
Ana Flisser
Universidad Nacional Autonoma de Mexico, Mexico City, Mexico
Arve Lee Willingham
WHO/FAO Collaborating Center for Parasitic Zoonoses Faculty of Life Sciences, University of Copenhagen, Frederiksberg, Denmark

10:15 a.m.

ESTIMATION OF THE NON-MONETARY BURDEN OF ECHINOCOCCOSIS, WITH SPECIAL REFERENCE TO CHINA
Christine M. Budke
Texas A&M University, College Station, TX, United States

10:35 a.m.

ESTIMATION OF THE ECONOMIC BURDEN OF NEUROCYSTICERCOSIS IN PERU
Andres G. Lescano
Universidad Peruana Cayetano Heredia, Lima, Peru

10:55 a.m.

ESTIMATION OF THE COST-BENEFIT OF A HEALTH-EDUCATION INTERVENTION TRIAL TO REDUCE PORCINE CYSTICERCOSIS IN MBULU DISTRICT, TANZANIA
Helena Ngowi
Sokoine University of Agriculture, Morogoro, United Republic of Tanzania.

11:15 a.m.

ESTIMATION OF THE MONETARY IMPACT OF CYSTICERCOSIS IN THE EASTERN CAPE PROVINCE, SOUTH AFRICA
Hélène Carabin
University of Oklahoma, Oklahoma City, OK, United States
11 a.m.

819

POPULATION HEMOGLOBIN LEVELS: A NEW METRIC FOR DEFINING MALARIA ENDEMICITY
Nicolas Senn¹, Albert Sie¹, Seri Maraga¹, Stephen Rogerson², John Reeder³, Ivo Mueller¹
¹PNG IMR, Madang, Papua New Guinea, ²University of Melbourne, Melbourne, Australia, ³Burnet Institute, Melbourne, Australia

11:15 a.m.

820

EFFICACY AND COST-EFFECTIVENESS OF MALARIA PREVENTION IN PREGNANCY IN LOW AND UNSTABLE TRANSMISSION: RESULTS OF A RANDOMISED CONTROLLED TRIAL
Richard Ndyomugenyi¹, Sian E. Clarke², Coll Hutchison², Kristian Schultz Hansen³, Daniel Chandramohan², Pascal Magnussen⁴
¹Vector Control Division, Ministry of Health, Kampala, Uganda, ²London School of Hygiene and Tropical Medicine, London, United Kingdom, ³University of Aarhus, Aarhus, Denmark, ⁴DBL-Institute for Health Research and Development, Copenhagen, Denmark

11:30 a.m.

821

EFFICACY OF INTERMITTENT PREVENTIVE TREATMENT WITH SULFADOXINE-PYRIMETHAMINE IN PRIMI- AND SECUNDIGRAVIDAE IN RURAL BURKINA FASO: IMPACT ON PARASITAEMIA, ANAEMIA AND BIRTH WEIGHT
Sabine Gies¹, Sheick O. Coulibaly¹, Florence T. Ouattara³, Umberto D’Alessandro¹
¹Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium, ²UFR Sciences de la Santé, Université de Ouagadougou, Ouagadougou, Burkina Faso, ³District Sanitaire Boromo, Boromo, Burkina Faso

11:45 a.m.

822

GLUCOSE 6-PHOSPHATE DEHYDROGENASE (G6PD) DEFICIENCY GENOTYPE-PHENOTYPE CORRELATIONS IN MALARIA ASSOCIATION STUDIES
Sunil Parikh¹, Marla K. Johnson¹, Moses R. Kamya², Grant Dorsey¹, Philip J. Rosenthal¹
¹University of California-San Francisco, San Francisco, CA, United States, ²Makerere University, Kampala, Uganda

### Symposium 124

**Update on Epidemic and Endemic Vector-Borne Diseases in Brazil: Dengue Fever, Yellow Fever, Orally Transmitted Chagas Disease and Malaria**

**Waterbury**

**Wednesday, December 10, 10:15 a.m. – Noon**

This symposium will provide an update of the marked epidemiological changes in four vector-borne diseases in Brazil, and discuss the implications for diagnosis, treatment and control. The diseases are: dengue fever, Chagas disease, yellow fever and malaria. The massive 2008 outbreak of dengue fever in Brazil is characterized by a shift to the pediatric age group and historically high levels of hemorrhagic complications and mortality. Oral transmission of Chagas disease has emerged as the leading mode of infection in the Amazon region, with distinct clinical manifestations; it indicates an emerging relationship between sylvatic transmission cycle, non-domiciliated vectors, and encroachment of human populations on new spaces in the ecosystem. The 2007 outbreak of yellow fever in humans is a signal event for intensive concurrent epizootic transmission. Far-reaching changes in the ecology and population of the Amazon basin have been paralleled by changes in the epidemiology of malaria in the region, with consequent implications for control and prevention.

**CHAIR**

Jeremy Sobel
Centers for Disease Control and Prevention, Atlanta, GA, United States

Gerson O. Penna
Ministry of Health of Brazil, Brasília, Brazil

**10:15 a.m.**

**DENGUE FEVER IN BRAZIL: EPIDEMIOLOGY AND CLINICAL OUTCOMES, WITH EMPHASIS ON THE OUTBREAKS OF 2008**

João B Siqueira
Federal University of Goiás, Goiânia, Brazil

**10:40 a.m.**

**UPDATE ON YELLOW FEVER IN BRAZIL, WITH EMPHASIS ON THE 2007 OUTBREAK**

Gerson O. Penna
Ministry of Health of Brazil, Brasília, Brazil

**11:05 a.m.**

**EPIDEMIOLOGY, DIAGNOSIS AND TREATMENT OF ORALLY TRANSMITTED CHAGAS DISEASE, AN IMPORTANT MODE OF TRANSMISSION IN BRAZIL**

Eduardo H. Carmo
Ministry of Health of Brazil, Brasília, Brazil

**11:30 a.m.**

**THE CHANGING EPIDEMIOLOGY OF MALARIA IN THE BRAZILIAN AMAZON REGION, AND IMPLICATIONS FOR TREATMENT AND CONTROL**

Ana Carolina F. Santelli
Ministry of Health of Brazil, Brasília, Brazil
Symposium 125

Accelerating the Development and Deployment of Diagnostic Tools into Developing World: Promises and Challenges

Napoleon A123

Wednesday, December 10, 10:15 a.m. – Noon

Although high-quality diagnostic tests for infectious diseases are available, they are neither affordable nor accessible to patients in developing countries, largely due to the lack of laboratory infrastructure and expertise. The few tests that are available in developing countries are often sold and used with little evidence of their effectiveness, because diagnostics are not subject to strict regulatory approval standards as for drugs and vaccines. There is an urgent need for quality-assured diagnostics for infectious diseases of public health importance in the developing world. This symposium aims to describe promises and challenges along the pathway from diagnostic target discovery to test development and deployment to reduce disease burden in the developing world.

CHAIR
Rosanna W. Peeling
World Health Organization, Geneva, Switzerland
Steven G. Reed
Infectious Disease Research Institute, Seattle, WA, United States

10:15 a.m.
AFFORDABLE AND ACCESSIBLE DIAGNOSTICS FOR TROPICAL DISEASES: NEEDS AND RECENT ADVANCES
Rosanna W. Peeling
World Health Organization, Geneva, Switzerland

10:40 a.m.
THE CHALLENGE OF TARGET DISCOVERY AND DEVELOPING APPROPRIATE DIAGNOSTIC TOOLS FOR TROPICAL DISEASES
Steven G. Reed
Infectious Disease Research Institute, Seattle, WA, United States

11:05 a.m.
DEPLOYMENT OF DIAGNOSTIC TOOLS AT VARIOUS LEVELS OF THE HEALTH CARE SYSTEM: BARRIERS AND THE WAY FORWARD
Andrew R. Ramsay
World Health Organization, Geneva, Switzerland

11:30 a.m.
FROM BRIGHT IDEAS TO AN FDA CLEARED DEVICE: LESSONS LEARNED FROM A MALARIA RAPID DIAGNOSTIC TEST PROGRAM AND THE REALITIES OF PRODUCT DEVELOPMENT
Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Symposium 126

Diarrhea in Children Living in Poverty: Current Reflections on an Old Affliction

Maurepas

Wednesday, December 10, 10:15 a.m. – Noon

Diarrheal disease is still one of the most important public health problems in developing countries, despite advances in understanding and management that have occurred in recent years. Multiple episodes of acute diarrhea and persistent diarrhea seriously affect growth, nutritional status and cognition. This symposium will review the changing epidemiology of diarrheal diseases in children in developing countries, the pathogens associated with diarrhea, the effect on growth and intellectual function and new topics on management and prevention.

CHAIR
Theresa J. Ochoa
Universidad Peruana Cayetano Heredia, Lima, Peru
A. Clinton White
The University of Texas Medical Branch, Galveston, TX, United States

10:15 a.m.
EPIDEMIOLOGY AND BURDEN OF DIARRHEAL DISEASE
Margaret Kosek
Johns Hopkins School of Public Health, Baltimore, MD, United States

10:40 a.m.
DIARRHEAGENIC E. COLI: PREVALENCE, PATHOGENESIS AND ANTIBIOTIC RESISTANCE
Theresa J. Ochoa
Universidad Peruana Cayetano Heredia, Lima, Peru

11:05 a.m.
DIARRHEA AND INTESTINAL PARASITES
A. Clinton White
The University of Texas Medical Branch, Galveston, TX, United States

11:30 a.m.
DIARRHEA, NUTRITION AND COGNITION
Richard Guerrant
University of Virginia, Charlottesville, VA, United States

Scientific Session 127

HIV in the Tropics

Bayside A

Wednesday, December 10, 10:15 a.m. – Noon

CHAIR
Rocio Hurtado
Massachusetts General Hospital, Boston, MA, United States
Jean B. Nachega
Johns Hopkins University, Baltimore, MD, United States
10:15 a.m.  
823
HIV-1 INFECTION INCREASES THE RISK OF SEVERE MALARIA IN SEMI-IMMUNE ADULTS IN ZAMBIA
Victor Chalwe1, Jean-Pierre Van Geertruyden2, Felix Mutale3, Doreen Mukwambata4, Joris Monten5, John Kamalamba6, Modest Mulenga7, Umberto D’Alessandro8
1Tropical Disease Research Centre, Ndola, Zambia, 2Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium, 3Thomson Hospital, Luanshya, Zambia, 4Tropical Disease Research Centre, Nola, Zambia

10:30 a.m.  
824
IMMUNE RECONSTITUTION INFLAMMATORY SYNDROME IN THE FIRST SIX MONTHS OF ANTIRETROVIRAL THERAPY IN HIV-INFECTED UGANDAN CHILDREN
Fredrick K. Kateera1, Jane Achau,2,1 Ted Theodore3,4,5,6,7, Joan Kalyango8,9, Edwin Charlebois10,11,12, Moses Kamya13,14,15, Diane Havlir16,17,18,19,20,21
1Muko University of California at San Francisco Malaria Research Collaboration, Kampala, Uganda, 2University of California at San Francisco, San Francisco, CA, United States, 3Makerere University, Kampala, Uganda, 4University of Pretoria, Pretoria, South Africa

10:45 a.m.  
825
DIARRHEAGENIC E. COLI IN PERUVIAN CHILDREN WITH HIV
Anicia M. Medina1, Fulton P. Rivera2, Liliana M. Romero2, Francesca Barletta3, Lenka A. Kolevic4, Maria E. Castillo5, Eduardo Verne6, Yovanna E. Mayor7, Theresa J. Ochoa8
1Universidad Peruana Cayetano Heredia, Lima, Peru, 2Hospital Nacional Hipolito Unanue, Lima, Peru, 3Hospital Nacional Cayetano Heredia, Lima, Peru, 4Hospital Nacional Hipolito Unanue, Lima, Peru

11 a.m.  
826
DETECTION AND GENOTYPING OF ENTEROCYTOZOOON BIENEUS IN STOOL SPECIMENS FROM HIV-INFECTED RURAL KENYANS
Ozgur Koru1, John T. Brooks2, Yvonne Varnstrom2, Mark Eberhard2, Stephanie P. Johnston2, Mariana Wilson3, Laurence Slutsker3, Mary Hamel4, Ya Ping Shi5, Tom Chiller6, Alexandre J. da Silva7
1Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED and Atlanta Research and Education Foundation, Atlanta, GA, United States, 2Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States, 3Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States, 4Division of Fungal Bacterial and Mycotic Diseases, NCZVED, Atlanta, GA, United States

11:15 a.m.  
827
CARING FOR THE MOTHER AND CHILD IN AN INTEGRATED HEALTH SYSTEM: THE UTILITY OF A POSTNATAL BRIDGING CARD
Eugene Richardson1, Robert Pattinson2, Anne-Marie Bergh3, Elise Etsane4, Jenny Makin5
1Yale University School of Medicine, New Haven, CT, United States, 2University of Pretoria, Pretoria, South Africa

11:30 a.m.  
828
BIOLOGY IS DESTINY OR SOCIAL STATUS MEETS SERO-STATUS?: DETERMINANTS OF HIV INFECTION IN AFRICA
Ashley M. Fox
Columbia University, New York, NY, United States

11:45 a.m.  
829
IMPACT OF HIV-1 INFECTION ON THE HEMATOLOGICAL RECOVERY AFTER CLINICAL MALARIA
Jean-Pierre Van Geertruyden1,2, Modest Mulenga3, Victor Chalwe3, Michael Nambozi4, Filip Moerman5, Doreen Mukwambata6, Umberto D’Alessandro7
1Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium, 2Tropical Disease Research Centre, Ndola, Zambia, 3Tropical Disease Research Center, Ndola, Zambia

Symposium 128
Avian Influenza: Collaborative Clinical Research from Southeast Asia

Bayside BC
Wednesday, December 10, 10:15 a.m. – Noon
This symposium will provide an overview of recent clinical research on avian influenza from regional collaboration in SEA. Content will include an overview of avian influenza in Southeast Asia, overview and findings from an H5N1 clinical data base, recent pharmacokinetic studies on influenza therapeutics, and a presentation of viral kinetics and pathogenesis of human H5N1 disease.

CHAIR
Elizabeth S. Higgs
National Institutes of Health, National Institute of Allergy and Infectious Diseases, DCR, Bethesda, MD, United States

Taweek Chatpityasunondh
Queen Sirikit National Institute of Child Health, Bangkok, Thailand

10:15 a.m.  
829
OVERVIEW OF HUMAN H5N1 DISEASE IN SEA WITH EMPHASIS ON EPIDEMIOLOGY AND CLINICAL OUTCOMES IN H5N1
Endang Rahayu Sedyaningsih
National Institutes of Health Research and Development, Jakarta, Indonesia
10:40 a.m.
FINDING FROM A COLLABORATIVE SEA CLINICAL DATABASE
STUDY
Sardikin Giriputro
Sulianti Saroso Hospital, Jakarta, Indonesia

11:05 a.m.
THERAPEUTIC CONSIDERATIONS FOR H5N1 DISEASE IN
HUMANS: OPTIONS FOR VARIOUS CLADES OF H5N1,
POTENTIAL IMPORTANCE OF LOADING DOSE, DRUG LEVELS
AFTER NG ADMINISTRATION OF OSELTAMIVIR IN H5N1
DISEASE.
Yupaporn Wattanagoon
Mahidol University, Bangkok, Thailand

11:30 a.m.
H5N1 VIRAL KINETICS, DEVELOPMENT OF RESISTANCE, AND
PATHOGENESIS
Tran Tinh Hien
Hospital for Tropical Diseases, HCMC, Vietnam.

Symposium 129
Launching Careers in Tropical Disease
Research: Progress Reports from Burroughs
Wellcome Fund/ASTMH Fellows

Supported with funding from The Burroughs Wellcome
Fund
Grand Ballroom A
Wednesday, December 10, 10:15 a.m. – Noon
This session will highlight the work of 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 careers that are expected to involve
long-term research presence both abroad and at their home institutions in
the U.S. There will also be a discussion of career issues faced by those who
take on working in two countries (home and abroad).

CHAIR
Victoria McGovern
Burroughs Wellcome Fund, Research Triangle Park, NC, United
States
Terrie Taylor
Michigan State University, East Lansing, MI, United States

10:15 a.m.
A CAREER IN TROPICAL DISEASE RESEARCH
Rebeca M. Plank
Brigham and Women’s Hospital, Boston, MA, United States

10:55 a.m.
QUESTIONS AND ANSWERS
Fellowship Program Awardees and Advisors

Symposium 130
Clinical Research in Disease-Endemic
Countries: The New Clinical Research Center
in Mali

Grand Ballroom B
Wednesday, December 10, 10:15 a.m. – Noon
Moving candidate drugs and vaccines from the laboratory to the field (from
Phase 1 to Phase 2 and 3 testing) requires testing for efficacy in a disease-
endemic area, which must be performed according to the guidelines of FDA,
National Institutes of Health, Centers for Disease Control and Prevention,
WHO and other federal and international agencies. Because the extensive
clinical observations, laboratory testing and record-keeping required for
those studies is not feasible at most clinical facilities in disease-endemic
areas, the development of clinical research centers in sub-Saharan Africa is
a necessary step in the control of diseases such as malaria, HIV and TB. This
symposium will review the planning, construction and training that have
been necessary to develop a new Clinical Research Center in Mali. It will
also examine the training (capacity building) that was necessary to ensure
that study design, record-keeping, laboratory results and quality control in
this facility are indistinguishable from those in the U.S. and Europe. Finally,
it will examine the ways in which such facilities will need to collaborate
with developed country investigators to ensure that interventions which
are efficacious in Phase 2 proceed to larger scale (Phase 3) testing and
subsequently to implementation.

CHAIR
Donald J. Krogstad
Tulane University Health Sciences Center, New Orleans, LA,
United States
Fawaz Mzayek
Tulane University, New Orleans, LA, United States

10:15 a.m.
THE NEED FOR CLINICAL RESEARCH FACILITIES ON-SITE IN
DISEASE-ENDEMIC COUNTRIES

10:35 a.m.
Daniel J. Carucci
United Nations Foundation, Washington, DC, United States

10:55 a.m.
STUDY DESIGN, STATISTICAL SUPPORT, QUALITY CONTROL
AND OTHER RESOURCES FOR RANDOMIZED CLINICAL TRIALS
Seydou Doumbia
Malaria Research and Training Center, Bamako, Mali

11:15 a.m.
CLINICAL AND RESEARCH LABORATORY SUPPORT FOR
CLINICAL RESEARCH ON MALARIA, HIV AND TB
Ousmane A. Koita
University of Bamako, Bamako, Mali

11:35 a.m.
CLINICAL RESEARCH BY DEVELOPED COUNTRY
INVESTIGATORS ON-SITE IN DISEASE-ENDEMIC COUNTRIES
Terrie Taylor
Michigan State University, East Lansing, MI, United States
### Symposium 131

**American Committee on Arthropod-Borne Viruses (ACAV): Yellow Fever**

**Grand Ballroom C**

**Tuesday, December 9, 10:15 a.m. – 12:45 p.m.**

Yellow fever (YF) is among the oldest known arboviral diseases and a disease for which there is a very effective vaccine. Yet, the virus continues to be the cause of thousands of human cases in Africa and South America with fatality rates ranging from 20-50 percent. Could the public health importance of this disease be increasing, as suggested by recent outbreaks in unusual areas of South America and the unexplained occurrence of severe and fatal cases associated with YF vaccine? The symposium will provide excellent overall coverage of YF as an emerging sylvatic disease with some insight regarding the absence of urban transmission of YF virus for decades.

**CHAIR**

Douglas M. Watts  
University of Texas El Paso, El Paso, TX, United States

**10:15 a.m.**

**ACAV BUSINESS MEETING AND AWARDS PRESENTATION**  
Douglas M. Watts  
University of Texas El Paso, El Paso, TX, United States

**10:45 a.m.**

**OVERVIEW OF YELLOW FEVER, THEN AND NOW**  
Thomas P. Monath  
Kleiner Perkins Caufield & Byers, Harvard, MA, United States

**11 a.m.**

**EMERGING PATTERN OF YELLOW FEVER OUTBREAKS IN SOUTH AMERICA**  
Pedro F. Vasconcelos  
Instituto Evandro Chagas, Belém, Brazil

**11:25 a.m.**

**OUTBREAK OF YELLOW FEVER IN PARAGUAY: URBAN OR SYLVATIC?**  
Antonio Arbo  
Ministry of Health, Asuncion, Paraguay

**11:50 p.m.**

**SAFETY OF YELLOW FEVER VACCINES: AN UPDATE**  
Dirk E. Teuwen  
Catholic University Leuven, Leuven, Belgium

**12:15 p.m.**

**THREAT OF YELLOW FEVER TO ASIA**  
Jack Woodall  
Federal University of Rio De Janeiro, Petropolis, Brazil

### Scientific Session 132

**American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Cellular Parasitology II**

**Supported with funding from The Burroughs Wellcome Fund**

**Grand Ballroom D**

**Wednesday, December 10, 10:15 a.m. – Noon**

**CHAIR**

Megan J. Downie  
University of Connecticut Health Center, Farmington, CT, United States

Prakash Srinivasan  
National Institutes of Health, Rockville, MD, United States

**10:15 a.m.**

**837**

**PLASMODIUM PYRUVATE DEHYDROGENASE IS ONLY ESSENTIAL FOR LIVER STAGE DEVELOPMENT**  
Alice S. Tarun, Stefan H. Kappe  
Seattle Biomedical Research Institute, Seattle, WA, United States

**10:30 a.m.**

**838**

**DISTINCT ROLES OF PLASMODIUM RHOMBOID 1 IN PARASITE DEVELOPMENT AND MALARIA PATHOGENESIS**  
Prakash Srinivasan¹, Isabelle Coppens², Marcelo Jacobs-Lorena²  
¹National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, ²Johns Hopkins School of Public Health, Malaria Research Institute, Baltimore, MD, United States

**10:45 a.m.**

**839**

**ISOLATION OF INVASIVE LONG LIVED PLASMODIUM FALCIPARUM MEROZOITES BY CELL SIEVING**  
David L. Narum¹, J. David Haynes², J. Kathleen Moch³, Sheetij Dutta²  
¹National Institutes of Health, Rockville, MD, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

**11 a.m.**

**840**

**A COMPLEX FORMATION OF RHOPYRY NECK PROTEIN 2 WITH A MICRONEME PROTEIN, AMA1, IN PLASMODIUM FALCIPARUM**  
Jun Cao¹, Osamu Kaneko², Amporn Thongkukiatkul³, Mayumi Tachibana¹, Hitoshi Otsuki¹, Takafumi Tsuboi², Motomi Torii³  
¹Jiangsu Institute of Parasitic Diseases, Wuxi, China, ²Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan, ³Faculty of Science, Burapha University, Chonburi, Thailand

**11/08 3:51:29 PM**
11:15 a.m.  

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A PURINE TRANSPORTER IN THE ENDOPLASMIC RETICULUM OF PLASMODIUM FALCIPARUM  
Megan J. Downie¹, Kamal El Bissati¹, April M. Bobenchik¹, Kiaran Kirk², Choukri Ben Mamoun¹  
¹University of Connecticut Health Center, Farmington, CT, United States, ²The Australian National University, Canberra, Australia

11:30 a.m.  

ACMCIP ANNUAL BUSINESS MEETING  
Sarah Volkman  
Harvard School of Public Health, Boston, MA, United States

Symposium 133
Towards Non-Hemolytic 8-Aminoquinolines: New Developments

Grand Ballroom E  
Wednesday, December 10, 10:15 a.m. – Noon  
8-Aminoquinolines are the only class of antimalarials active against all the life cycle stages of the malaria parasite with utility for treatment and prophylaxis against falciparum malaria, as well as treatment and radical cure of relapsing vivax malaria. Recently, their utility against other protozoal infections has also been suggested. However, severe hemolytic toxicities seen in G6PD deficient individuals have limited their therapeutic applications. This symposium will discuss the importance and necessity of development of non-hemolytic 8-aminoquinoline antimalarials; updates on 8-aminoquinolines under preclinical evaluations and clinical development; current status of the knowledge on understanding the mechanism of hemolytic toxicity and development of in vitro assays for prediction of hemolytic potential of candidate molecules; and their applications in development of non-hemolytic 8-aminoquinolines.

CHAIR  
Babu L. Tekwani  
University of Mississippi, University, MS, United States  
Larry Walker  
University of Mississippi, University, MS, United States

10:15 a.m.  

INTRODUCTION  
Wilbur K. Milhous  
University of South Florida, Tampa, FL, United States

10:30 a.m.  

NON-HEMOLYTIC 8-AMINOQUINOLINES: CONSORTIUM APPROACH  
Larry Walker  
University of Mississippi, University, MS, United States

11 a.m.  

UPDATES ON TAFENOQUINE DEVELOPMENT  
Colin Ohrt  
Walter Reed Army Institute of Research, Silver Spring, MD, United States

11:30 a.m.  

ENANTIOSELECTIVITY IN METABOLISM, EFFICACY AND SAFETY OF 8-AMINOQUINOLINES  
Babu L. Tekwani  
University of Mississippi, University, MS, United States  

Exhibit Hall Open/Light Lunch  
Napoleon Ballroom  
Wednesday, December 10, Noon – 2:30 p.m.

Poster Session 134 (#842-1111 and Late Breakers)  
Poster Session C/Light Lunch  
Armstrong Ballroom  
Wednesday, December 10, Noon – 1:30 p.m.

Arthropods/Entomology – Other

842  

STUDY ON PREVALENCE, DISTRIBUTION AND BEHAVIORAL ASPECTS OF THE POTENTIAL VECTOR/S OF CUTANEOUS LEISHMANIASIS IN SELECTED AREAS OF SRI LANKA  
Sanath C. Senanayake¹, Nadira D. Karunaweera¹, Wimaladharma Abeyewickreme²  
¹University of Colombo, Colombo, Sri Lanka, ²University of Kelaniya, Faculty of Medicine, Ragama, Sri Lanka

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GENETIC STRUCTURE OF A HIGHLY TRYPSANOSOMA CRUZI-INFECTED POPULATION OF TRIATOMA SANGUISUGA IN NEW ORLEANS, LOUISIANA, USA  
Nicolas de la Rua¹, Kristina Cesá³, Leon Perniciaro¹, Dawn Wesson², Patricia L. Dorn¹  
¹Loyola University New Orleans, New Orleans, LA, United States, ²Tulane University Health Sciences Center, New Orleans, LA, United States

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ANALYSIS OF THE SPATIO-TEMPORAL DYNAMICS OF HOUSE INFESTATION BY NON-DOMICILIATED TRIATOMA DIMIDIATA REVEALS AN HETEROGENOUS DISTRIBUTION OF CHAGAS DISEASE TRANSMISSION RISK AND POTENTIAL VECTOR MANIPULATION BY TRYPSANOSOMA CRUZI  
Eric Dumonteil¹, Melba Herrera-Aguilar¹, Maria Euan-Gracia¹, Leysi Chavez-Nuñez¹, Sébastien Gourbière², Maria Jesus Ramirez-Sierra¹  
¹Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico, ²University of Perpignan, Perpignan, France

845  

EFFECTS OF VIRAL INFECTION ON BLOOD FEEDING BEHAVIOR AND FECUNDITY IN CULICOIDES SONORENSIS (DIPTERA: CERATOPOGONIDAE)  
Kristine Bennett¹, Jessica E. Hopper¹, Melissa A. Stuart¹, Mark West¹, Barbara S. Drolet¹  
¹USDA/ARS/ABADRL, Laramie, WY, United States, ²USDA/ARS/NPA, Fort Collins, CO, United States

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CHARACTERIZATION OF TRYSINS IN LUTZOMYIA LONGIPALPIS, THE MAIN VECTOR OF VISCERAL LEISHMANIASIS IN BRAZIL  
Erich L. Tellera, Claudia M. d’Avila-Levy, Yara M. Traub-Cseko  
Instituto Oswaldo Cruz – Fiocruz, Rio de Janeiro, Brazil
RESPONSE OF PHLEBOTOMUS PAPATASI (DIPTERA: PSYCHOIDAE) TO COMMERCIAL MOSQUITO TRAPS IN SOUTHERN EGYPT

D.F. Hoel¹, S.S. El-Hossary², H.A. Hanafi³, N. Watany⁴, E.Y. Fawaz⁵, B.D. Furman⁵, P.J. Ombemauer⁵, D.E. Szumlas⁵, D.L. Kline¹
¹Navy Liaison Officer, USDA, Gainesville, FL, United States, ²U.S. Naval Medical Research Unit No. 3, Cairo, Egypt, ³University of Florida, Departments of Entomology and Nematology, Gainesville, FL, United States, ⁴Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁵Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL, United States

SEARCHING FOR MOLECULAR DETERMINANTS OF SPECIES SPECIFICITY IN SAND FLIES COLONIZED BY LEISHMANIA PARASITES

Ryan C. Jochim, Jesus G. Valenzuela
National Institute of Allergy and Infectious Diseases, Rockville, MD, United States

PERSISTENCE OF PLASMODIUM DNA IN DESICCATED ANOPHELES MOSQUITOES AS DETERMINED BY REAL-TIME PCR

Mark A. Rider, Brian D. Byrd, Kevin A. Caillouët, Dawn M. Wesson
Tulane University, New Orleans, LA, United States

IDENTIFICATION OF BLOODMEALS IN SANDFLIES BY ELISA, IN PERU

Carmen Flores-Mendoza¹, Nelson Solorzano², Roberto Fernandez³, Fanny Castro-Llanos¹, John Grieco⁴, David Florin¹
¹Naval Medical Research Center Detachment, Lima, Peru, ²Caraz Hospital, Ancash, Peru, ³Uniformed Services University of the Health Sciences, Department of Preventive Medicine and Biometrics, Bethesda, MD, United States

A DOUBLE BLIND, RANDOMIZED, CONTROLLED, DOSE ESCALATION PHASE IB FIELD TRIAL IN 12 TO 24 MONTH OLD CHILDREN IN BURKINA FASO TO EVALUATE THE SAFETY AND IMMUNOGENICITY OF THE P. FALCIPARUM MEROZOITE SURFACE PROTEIN-3 LONG SYNTHETIC PEPTIDE (MSP 3-LSP) ADJUVANTED IN ALUMINIUM HYDROXIDE VERSUS ENGERIX B

Sirima Sodomon Bienvenu¹, Tiono B. Alfred², Ouedraogo Alphone³, Diarra Amidou⁴, Yaro Jean Baptiste⁵, Ouedraogo Espérance⁶, Gansané Adama⁷, Ouedraogo André Lin⁸, Bougouma Edith⁹, Konaté T. Amadou¹⁰, Soulama Issiaka¹⁰, Traoré Abdoulaye¹⁰, Kaboré Youssouf¹⁰, Roma Chilenga¹¹, Druilhe Pierre¹¹, Luty Adrián¹¹, Cousens Simon¹¹, Nébli Issa¹¹
¹¹Centre National de Recherche et de Formation sur le Paludisme, Groupe d’action et de Recherche en Santé, Ouagadougou, Burkina Faso, ¹²Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, ²African Malaria Network Trust, Dar Es Salaam, United Republic of Tanzania, ³Institut Pasteur, Paris, France, ⁴Medical Research Unit Nijmegen Centre, Nijmegen, Netherlands, ⁵London School of Hygiene and Tropical Medicine, London, United Kingdom

MULTIPLE-DOSE POPULATION PHARMACOKINETICS OF PYRONARIDINE IN HEALTHY VOLUNTEERS

T. Wattanavijitkul¹, L. Fleckenstein¹, K. S. Yu², I. J. Jang²
¹College of Pharmacy, The University of Iowa, Iowa City, IA, ²Department of Pharmaceutical Sciences, College of Pharmacy and Pharmacology, Seoul National University College of Medicine and Hospital, Seoul, Republic of Korea

MONITORING OF INTERNATIONAL OUTBREAKS WITH AN OUTBREAK SURVEILLANCE DATABASE

Naomi Bryant¹, Joanne Lawrence², Jane Jones², Alexandra Jordan¹, Hilary Simons¹, David R. Hill¹
¹National Travel Health Network and Centre, London, United Kingdom, ²Health Protection Agency, Centre for Infections, London, United Kingdom

IN VITRO HEMOLYTIC EFFECTS OF 8-AMINOQUINOLINES IN NORMAL AND GLUCOSE 6-PHOSPHATE DEHYDROGENASE DEFICIENT ERYTHROCYTES

Shobana Ganesan, Babu L. Tekwani, Lalit M. Tripathi, Dhammika Nanayakkara, Larry A. Walker
University of Mississippi, Oxford, MS, United States
PILOT TRIAL OF THE HECT-CL DEVICE AS THERMOTHERAPY FOR CUTANEOUS LEISHMANIASIS IN PERU
David A. Miller1, Cesar Miranda-Verastegui2, Dalila Martinez-Medina3, Alejandro Llanos-Cuentas2, Richard S. Witzig4
1University of Chicago, Chicago, IL, United States, 2Universidad Peruana Cayetano Heredia Hospital, Lima, Peru, 3Universidad Peruana Cayetano Heredia, Lima, Peru, 4Tulane University, New Orleans, LA, United States

POPULATION PHARMACOKINETICS OF ARTESUNATE AND AMODIAQUINE IN AFRICAN CHILDREN
Kasia Stepniewska1, William Taylor2, Sodiomon Sirima3, Nicholas J. White1, Jean-Rene Kiechel1
1Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand, 2University of Oxford Clinical Research Unit, Hanoi, Vietnam, 3Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, 4Drugs for Neglected Diseases Initiative, Geneva, Switzerland

SEROPOSITIVE WOMEN AND THEIR NEWBORNS DETECTED BY ELISA WITH ANTIGENS OF A LOCAL STRAIN OF TRYpanosoma cruzi AND FOLLOW-UP TO IDENTIFY CASES OF CONGENITAL TRANSMISSION IN TWO MEXICAN STATES
Rubi Gamboa-Leon1, Claudia Gonzalez-Ramirez1, Nicolas Padilla-Raygosa2, Sergio Sosa-Estani3, Pierre Buekens4, Eric Dumonteil5
1Centro de Investigaciones Regionales “Dr. Hideyo Noguchi”, Merida, Mexico, 2Facultad de Enfermería y Obstetricia de Celaya, Universidad de Guanajuato, Celaya, Celaya, Mexico, 3Instituto de Efectividad Clínica y Sanitaria, y Centro Nacional de Diagnóstico e Investigación de Endemopatías (CeNDIE) ANLIS Dr. Carlos G. Malbrán, Ministerio de Salud, Buenos Aires, Argentina, 4School of Public Health and Tropical Medicine, Tulane University, New Orleans, LA, United States
(ACMCIP Abstract)

GMM AND THE LOSS OF ACQUIRED IMMUNITY: LESSONS LEARNED FROM HISTORY
Shannon Famenini
University of California at Los Angeles, Los Angeles, CA, United States

J. Jeremy Sueker
Department of Defense Global Emerging Infections Surveillance System, Silver Spring, MD, United States

THE ADDED BURDEN OF MALARIA AND ITS HEALTH IMPLICATIONS IN RURAL WOMEN IN OKIGWE ONCHOENDEMIC AREA OF IMO STATE, NIGERIA
Preet I. Onyeka
Imo State University, Owerri, Nigeria

DEVELOPMENT OF SCHISTOSOMA JAPONICUM FAST-ELISA ASSAY FOR SCHISTOSOMIASIS DIAGNOSIS
Yeuk-Mui Lee1, John Noh2, Patricia Wilkins1, Victor C. Tsang2
1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2Georgia State University, Atlanta, GA, United States

TREATMENT OF ACUTE PLASMODIUM VIVAX MALARIA WITH PYRAMAX® (PYRONARIDINE TETRAPHOSPHATE/ARTESUNATE) IN A CONTROLLED PHASE III CLINICAL TRIAL
Emiliana Tjitra1, Ronnatri Ruangweerayut2, Duong Socheat3, Neena Valecha4
1National Institutes of Health Research and Development, Jakarta, Indonesia, 2Mae Sod General Hospital, Tak, Thailand, 3National Malaria Center, Phnom Penh, Cambodia, 4National Institute of Malaria Research, Delhi, India

HUMANS FROM AN ENDEMIC AREA OF CUTANEOUS LEISHMANIASIS IN MALI PRODUCE IFN-GAMMA TO SAND FLY SALIVARY PROTEINS
Fabiano Oliveira, Regis Gomes, Clarissa Teixeira, Ousmane Faye, Pierre Traore, Souleymane S. Diarra, Jeniffer M. Anderson, Eliaem A. Dia-Eldin, Sibiry Samake, Bourama Traore, Cheick A. Coulibaly, Fairhurst Rick, Somita Keita, Seydou Doumbia, Shaden Kamhawi, Jesus G. Valenzuela National Institutes of Health, Rockville, MD, United States

ESSENCE DESKTOP EDITION; A SELF-CONTAINED DISEASE SURVEILLANCE APPLICATION
Charles J. Hodanics, Jacqueline Coberly
Johns Hopkins University Applied Physics Laboratory, Laurel, MD, United States

EVALUATION OF A RAPID IMMUNOCHROMATOGRAPHIC TEST FOR GLUCOSE-6-PHOSPHATE DEHYDROGENASE DEFICIENCY
Kathleen E. Tinley, Elizabeth D. Barnett, Anita M. Loughlin
Boston Medical Center, Boston, MA, United States

TWO CASES OF CUTANEOUS AND VISCERAL LEISHMANIASIS IMPORTED INTO GUATEMALA FROM SOUTH AMERICA AND ITS POSSIBLE PUBLIC HEALTH IMPLICATIONS
Rodrigo A. Gramajo, Nidia R. Rizzo, Byron A. Arana
Center for Health Studies, Universidad del Valle de Guatemala, Guatemala City, Guatemala
VILLAGE BASED MALARIA CONTROL IN UNDERPRIVILEGED COMMUNITIES-RWANDA: SHOWCASE OF RWANDA VILLAGE CONCEPT PROJECT IN MUYOGORO VILLAGE

Remy Serge Muhire Manzi, Felicien Shimaka, Christian Rusangwa, Edmond Baganizi
1Rwanda Village Concept Project/National University of Rwanda, HUYE, Rwanda, 2Rwanda Village Concept Project/National University of Rwanda, Huye, Rwanda

PRELIMINARY STUDY ON THE INCIDENCE OF SNAKEBITES IN BOLIVIA

Jean-Philippe F. Chippaux, Jorge R. Postigo, Leonardo Belmonte, Gabriela C. Onofre Arce
Institut de Recherche pour le Développement, La Paz, Bolivia

CLUSTERING OF HANSEN’S DISEASE (LEPROSY) IN A POPULATION IN NORTHEAST BRAZIL

José W. Queiroz, Gutemberg H. Dias, Mauricio L. Nobre, Marcia C. De Sousa Dias, Sérgio F. Araújo, James D. Sousa, Jenefer M. Blackwell, Suresh Ramanathan, Walter Taylor, J. Vaillant
1Universidade Federal do Rio Grande do Norte, Natal, Brazil, 2Universidade Estadual do Rio Grande do Norte, Mossoró, Brazil, 3Telethon Institute for Child Health Research, The University of Western Australia, 4Western Australia, 5Universidade Estadual do Rio Grande do Norte, Mossoró, Brazil, 6Universidade Federal do Rio Grande do Norte, Natal, Brazil, 7Universidade Peruana Cayetano Heredia, Lima, Peru

ASSESSING THE CARDIAC EFFECTS OF ARTESUNATE (AS) AND MEFLOQUINE (MQ) IN HEALTHY VOLUNTEERS IN A SAFETY AND PK, SINGLE DOSE, RANDOMISED, TWO PHASE CROSS OVER STUDY OF A NEW FIXED DOSE AS/MQ COMBINATION AND LOOSE AS + MQ

Walter Taylor, Srijiva Kruudos, Noppadon Tangpukdee, Polrat Wilairatana, Polrat Wilairatana, Sornchai Loareaeewanan, Suresh Ramathan, Viswanwaran Navaratnam, Michel Vaillant, Piero Olliaro, Jean-Rene Kiechel
1Oxford University, Hanoi, Vietnam, 2Mahidol University, Bangkok, Thailand, 3Universiti Sains Malaysia, Penang, Malaysia, 4Centre for Health Studies, Luxembourg, Luxembourg, 5WHO/ TDR, Geneva, Switzerland, 6DNDi, Geneva, Switzerland

INTEGRATED MAPPING FOR TRACHOMA AND URINARY SCHISTOSOMIASIS IS MORE COST EFFICIENT THAN SINGLE DISEASE APPROACHES. A STUDY OF “COST DRIVERS” IN PLATEAU AND NASARAWA STATES, NIGERIA

1Rollins School of Public Health of Emory University, Atlanta, GA, United States, 2The Carter Center, Jos, Nigeria, 3The Carter Center, Atlanta, GA, United States, 4Plateau State Ministry of Health, Jos, Nigeria, 5Nasarawa State Ministry of Health, Lafia, Nigeria, 6Federal Ministry of Health, Nigeria, Abuja, Nigeria

HIGH ACCEPTABILITY OF A NEW POU SAFE WATER SYSTEM FOR TANZANIAN RURAL HOUSEHOLDS

Esther Mwakitalu, Steven Himley, Charles Mackenzie, Nsa Klasí, Mwele Malecela, Mickey Bridges, Jeffrey Williams
1National Institute for Medical Research, Dar es Salaam, United Republic of Tanzania, 2Halosource Incorporated, Bothwell, WA, United States, 3Michigan State University, Dimondale, MI, United States

MALARIA MORTALITY AND MORBIDITY IN THE FIRST FIVE YEARS OF LIFE IN A BIRTH COHORT OF CHILDREN IN NORTHERN GHANA

1Navrongo Health Research Centre, Navrongo, Ghana, 2Naval Medical Research Unit No. 2, Jakarta, Indonesia, 3Noguchi Memorial Institute for Medical Research, Legon, Ghana, 4Naval Medical Research Center, Silver Spring, MD, United States

AGE-SPECIFIC INCIDENCE OF CLINICAL MALARIA IN A POTENTIAL MALARIA VACCINE CANDIDATE TESTING SITE OF BURKINA FASO

Tiono B. Alfred, Ouedraogo Alphonse, Diarra Amidou, Sanon Souleymane, Yaro Jean Baptiste, Ouedraogo Espérance, Ouedraogo Amathe, Soulama Issiaka, Bougouma Edith, Konaté T. Amadou, Nébié Issa, Sirima Sodimon Bienvenu
1Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, 2Centre National de Recherche et de Formation sur le Paludisme, Groupe d'action et de Recherche en Santé, Ouagadougou, Burkina Faso

LEUKOCITURIA AND BACTERIURIA AS INDICATORS OF URINARY TRACT INFECTION

Lida Mejia-Zuluaga, Frine Salamvides, Humberto A. Guerra, Theresa Ochoa
Instituto de Medicina Tropical Alexander Von Humboldt – Universidad Peruana Cayetano Heredia, Lima, Peru

DEMODEX FOLLICULORUM COUNT ON EYELID SCRAPING FROM PATIENTS ATTENDING CAYETANO HEREDIA NATIONAL HOSPITAL

Henry Anchante-Herrera, Marco Canales, Angelica Terashima, Frine Samalvides, Edwin Miranda-Choque
1Institute of Tropical Medicine Alexander von Humboldt, Universidad Peruana Cayetano Heredia, Lima, Peru, 2Departamento de Enfermedades, Infecciosas, Tropicales y Dermatológicas, Hospital Nacional Cayetano Heredia, Lima, Peru, 3Universidad Peruana Cayetano Heredia, Lima, Peru

ASTMH 57th Annual Meeting

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ASSESSMENT OF RISK FACTORS FOR DRUG RESISTANT TUBERCULOSIS IN LOUISIANA, 1993-2005

Adiba Hassan
Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States

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ASYMPTOMATIC PARASITEMIA AND COMPLEX SPECIES ASSOCIATIONS IN MALARIA ENDEMIC SUB-SAHARAN AFRICA

Chidi Nwizu1, Tsiri Agbenyega2, Daniel Ansong2, Maurine R. Hobbs1, Benjamin Crookston1, Stephen Alder1, De Von Hale1
1University of Ghana, Accra, Ghana; 2University of Massachusetts Medical School, Worcester, MA, United States

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ARTEMETHER-LUMEFANTRINE (COARTEM) IN TREATMENT OF UNCOMPPLICATED MALARIA AT KASANGATI HEALTH CENTRE, UGANDA

Hakim Sendagire, Mark Kaddu-Mukasa, Steven M. Kiwuwa, Fred A. Kironde
Makerere University, Kampala, Uganda

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SAFETY AND IMMUNOGENICITY OF A NEW MENINGOCOCCAL A CONJUGATE VACCINE IN A HEALTHY AFRICAN POPULATION AGED 2-29 YEARS

Fadima Cheick Haidara1, Samba O. Sow1, Okoko Brown2, Aldjouma Diallo3, Marie Pierre Preziosi3, Elisa Marcheti3, Julie Chaumont3, Milagritos Tapia4, Richard Agdebo4, Ilubukola Idoko4, Pascal Arduin5, Ray Borow5, Georges Carlone5, Adebayo Akinsola5, Varsha Parulekar6, Brian Pikyatis6, Jamie Findlow7, Cheryl Elie7, Marc Laforce7, Prasad Kulkarni8, Samba O. Sow9, Ilubukola Idoko10
1MVP-WHO, Ganava, Switzerland; 2MVP-France, Ferney, France; 3Centro de Investigacion y Estudios Avanzado del Instituto Politecnico Nacional, Mexico City, Mexico; 4MVP-Mali, Bamako, Mali; 5MRC The Gambia, Banjul, Gambia; 6MRC The Gambia, Brikama, Gambia; 7MRC The Gambia, Fajara, Gambia; 8Pipeline Technologies, Inc., Beltsville, MD, USA; 9IRD-Dakar, Dakar, Senegal; 10MRC The Gambia, Banjul, Gambia

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FIELD VALIDITY AND COMPARATIVE PERSISTENT ANTIGENICITY OF HRP-2 RAPID DIAGNOSTIC TESTS FOR MALARIA IN A HYPERENDEMIC REGION OF UGANDA

Daniel J. Kyabayinze
Malaria Consortium, Kampala, Uganda

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POTENTIAL HEALTH IMPLICATION OF CHRONIC PARACETAMOL EXPOSURE IN AFRICAN POPULATION STUDY

Elaine Holmes
Imperial College London, London, United Kingdom

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FLAVIVIRIDAE – DENGUE

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PASSIVE IMMUNIZATION WITH SERUM FROM SECONDARY DENGU VIRAL RECOMBINANT PROTEINS IN SERUM SAMPLES OF PATIENTS WITH IN DF AND DHF

Balam May1, Garcia Cordero2, Escobar Gutierrez2, Cedillo Rivera2, Gutierrez Castañeda2, Cedillo Barron1
1Centro de Investigacion y Estudios Avanzado del Instituto Politecnico Nacional, Mexico City, Mexico; 2Instituto Nacional de Diagnostico y Referencia Epidemiologicas, Departamento de Enfermedades Inmunolologicas, Mexico City, Mexico

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ANALYSIS OF ANTIBODY RESPONSE AGAINST DENGUE VIRAL RECOMBINANT PROTEINS IN SERUM SAMPLES OF PATIENTS WITH IN DF AND DHF

Xiomara Mercado1, Yisel Rivera1, Sun Wellington2, Elizabeth Hunsperger2, Idali Martinez1
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THE ROLE OF HUMAN FIBROBLAST IN THE INNATE IMMUNITY AGAINST DENGUE VIRUS

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Maria Alice S. Zarife1, Eliana A. Reis1, Glenda C. Meira1, Theomira M. Carmo1, Gisele B. Menezes1, Emilia C. Malafaia1, Helder R. Silva1, Nelma Santana1, Olimdo A. Martins-Filho1, Mitermayer G. Reis1
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DO WE NEED TO USE LABILE SERUM FACTOR FOR DETECTION OF NEUTRALIZING ANTIBODIES IN ARBOVIRAL DIAGNOSTICS?
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EVALUATION OF NUCLEIC ACID AMPLIFICATION ASSAYS FOR DETECTION OF JAPANESE ENCEPHALITIS VIRUS RNA IN CEREBRAL SPINAL FLUID FROM ACUTE ENCEPHALITIS PATIENTS
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MOLECULAR DETECTION OF FLAVIVIRUS IN ENDEMIC AREAS IN PERU
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THE NATURAL HISTORY OF YELLOW FEVER IN EAST AFRICA REVISITED
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ONE STEP RT-PCR FOR DETECTION OF ZIKA VIRUS
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ONE STEP RT-PCR FOR DETECTION OF ZIKA VIRUS
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Maria Garcia1, Enrique Maman1, Jose Bolarte1, Paul Pachas2, Dana Figueroa1, Nancy Gore Saravia1, Maria Valderrama1, Manuel Espinoza1, Cesar Cabezas1
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Kinetoplastida – Molecular Biology and Immunology

TH1/TH2 DIFFERENTIATION IN CHRONIC AND RECURRENT AMERICAN CUTANEOUS LEISHMANIASIS AND ASYMPTOMATIC INFECTION WITH LEISHMANIA VIANNIA PANAMENSIS
Adriana Navas1, Beatriz Parra2, Liliana Valderrama2, Nancy Gore Saravia1
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CHARACTERIZATION OF THE EARLY INFLAMMATORY RESPONSE TO BITES OF LEISHMANIA MAJOR INFECTED PHLEBOTOMUS DUBOISI SAND FLIES IN NAÎVE AND PRE-EXPOSED MICE
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IDENTIFICATION, CHARACTERIZATION, AND EVALUATION OF THE TRYPANOSOMA BRUCEI CA2+ CHANNEL (TBCC1) AS A POTENTIAL DRUG AND VACCINE TARGET
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LUTZOMYIA LONGIPALPIS RECOMBINANT SALIVARY YELLOW-RELATED PROTEIN (LJM11) CONBERS PROTECTION AGAINST LEISHMANIA INFECTED SAND FLIES
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EFFECT OF THIADIAZOLE AND ARIL-SYDNONE DERIVATIVES ON A CONSTITUTIVE NITRIC OXIDE SYNTHASE OF LEISHMANIA AMAZONENSIS
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THERAPEUTIC AND IMMUNOLOGICAL EFFECTS OF PYRAZOLE CARBOHYDRIDES DERIVATIVES ON THE MOUSE MODEL OF LEISHMANIA AMAZONENSIS INFECTION
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CHARACTERIZATION OF SECRETED PROTEINS OF L. CHAGASI
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EVALUATION OF THE CHRONIC PHASE IN DOGS NATURALLY INFECTED BY *TRYPANOSOMA CRUZI*

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(ACMCIP Abstract)

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TRYPANOSOMA CRUZI STRAINS INDUCED DIFFERENTIAL DETACHMENT OF THE PLACENTAL TROPHOBLAST THROUGH OXIDATIVE STRESS AND COULD PARTICIPATE IN THE CONGENITAL CHAGAS INFECTION

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(ACMCIP Abstract)

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TRYPANOSOMA CRUZI UP-REGULATES HUMAN DEFENSIN A-1 IN EPITHELIAL CELLS TO CAUSE TRYPANOSOME MEMBRANE PORE FORMATION AND REGULATE CELLULAR INFECTION

Marisa N. Madison, Maria F. Lima, Yulyia Y. Kleshchenko, Pius N. Nde, Fernando Villalta

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(ACMCIP Abstract)

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GENETIC POLYMORPHISM IN THE VISCERALIZING GENE SEQUENCE OF *LEISHMANIA TROPICA* ISOLATED FROM THE SOLDIERS RETURNING FROM IRAQ

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STUDY OF TRYPANOSOMATID VIRULENCE FACTORS USING BIOINFORMATIC AND EXPERIMENTAL APPROACHES

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(ACMCIP Abstract)

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IDENTIFICATION OF *PLASMODIUM* GENES INVOLVED IN THE PROTECTIVE PRE-ERYTHROCYTIC IMMUNE RESPONSE

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REAL-TIME IN VIVO IMAGING OF LIVER STAGES OF *PLASMODIUM YOELII*: GFP/LUCIFERASE REPORTER PARASITES

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EFFECT OF CHLOROQUINE, METHYLENE BLUE AND ARTEMETHER ON THE HEPATIC OXIDATIVE STRESS AND ANTIOXIDANT DEFENCE SYSTEM OF *P. YOELII NIGERIENSIS*-INFECTED MICE

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ERYTHROCYTE INVASION AND VARIATION IN MEROZOITE LIGAND GENE EXPRESSION IN *PLASMODIUM FALCIPARUM*

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HIGH-THROUGHPUT, QUANTITATIVE DISSECTION OF INTRA-ERYTHROCYTIC GROWTH OF THE HUMAN MALARIA PARASITE, *PLASMODIUM FALCIPARUM*, USING FLOWCYTOMETRY

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GAMETOCYTOGENESIS IN *PLASMODIUM FALCIPARUM*

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(ACMCIP Abstract)

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DIVERSITY OF *PLASMODIUM FALCIPARUM* PLASTOME IN GAMBIAN ISOLATES

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INFLUENCE OF THE PREGNANCY-ASSOCIATED HORMONE HUMAN CHORIONIC GONADOTROPHIN ON GROWTH OF PLASMODIUM FALCIPARUM IN VITRO
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(ACMCIP Abstract)

MALARIA IN PREGNANCY IN INDONESIA: CHARACTERIZATION OF VAR2CSA TRANSCRIPTS, ANTIBODY RESPONSE TO PLASMODIUM FALCIPARUMERYTHROCYTE MEMBRANE PROTEIN (PFEMP1), AND PLACENTAL HISTOLOGY
Rintis Noviyanti1, Leily Trianty1, Michael Duffy2, Jeanne Rini Poespoprodjo2, Harsha Mani3, Nilam Nand9, Stephen Lacy4, Maya Mulyadi5, Jane Aspinall6, William Proctor7, Rintis Noviyanti1, 1Eijkman Institute for Molecular Biology, Jakarta, Indonesia, 2Department of Medicine, The University of Melbourne, Australia, 3Timika Research Centre, Papua, Indonesia, 4National Institutes of Health, Research and Development, Ministry of Health, Indonesia, 5Menzies School of Health Research, Darwin, Australia
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INFLAMMATORY MEDIATORS AS BIOMARKERS FOR MALARIAL ANEMIA SEVERITY IN PEDIATRIC POPULATIONS RESIDING IN HOLOENDEMIC P. FALCIPARUM TRANSMISSION AREAS
John M. Ong’echa1, Greg Davenport2, Emmanuel O. Yamo3, Tom Were1, Collins Ouma4, John M. Vulule5, James B. Hittner2, Douglas J. Perkins6
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DECREASED PEDIATRIC SEVERE MALARIAL ANEMIA IS ASSOCIATED WITH REDUCED INTRA-MONOCYTIC HEMOZOIN DEPOSITION
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Malaria – Chemotherapy

A RANDOMIZED CLINICAL TRIAL OF THE PROTECTIVE EFFICACY OF TRIMETHOPRIM-SULFAMETHOXAZOLE PROPHYLAXIS AGAINST MALARIA IN HIV-EXPOSED CHILDREN

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THE COST-EFFECTIVENESS OF RECTAL ARTESUNATE FOR TREATING SEVERE CHILDHOOD MALARIA AT THE COMMUNITY LEVEL

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IN VITRO ACTIVITY OF A DICHLOROMETHANE FRACTION OF LANSIUM DOMESTICUM LEAVES AGAINST PLASMODIUM FALCIPARUM CLONE 3D7

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ADHERENCE TO ARTEMETHER LUMEFANTRINE AS FIRST-LINE TREATMENT FOR UNCOMPLICATED MALARIA IN TANZANIA

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EVALUATION OF THE ANTIMALARIAL AND ANTIOXIDANT ACTIVITIES OF METHANOLIC EXTRACT OF NIGELLA SATIVA IN MICE INFECTED WITH PLASMODIUM YOELI NIGERIENSIS

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PHARMACOKINETIC AND CLINICAL DETERMINANTS OF RESPONSE TO CHLOROQUINE TREATMENT IN NIGERIAN CHILDREN WITH ACUTE UNCOMPLICATED FALCIPARUM MALARIA

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PHARMACOKINETICS OF SULFADOXINE-PYRIMETHAMINE ADMINISTERED ALONE OR IN COMBINATION WITH AMODIAQUINE OR ARTESUNATE IN CHILDREN UNDER FIVE IN MALI

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IMPACT OF PROGRAMMATIC USE OF A NEW FIXED-DOSE COMBINATION OF ARTESUNATE-MEFLOQUINE FOR THE TREATMENT OF FALCIPARUM MALARIA IN THE JURUÁ VALLEY, ACRE – BRAZIL

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Efficacy and Safety of Artesunate + Amodiaquine (AS+AQ) in Comparative Trials in South-Saharan Africa: A Systematic Review and an Individual Patient Meta-Analysis

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Clindamycin Plus Quinine for Treating Uncomplicated Falciparum Malaria: A Meta-Analysis

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Applying a Real Time PCR Assay to the Routine Laboratory Diagnosis of Falciparum Malaria

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Variable Sensitivity of Malaria Rapid Diagnostic Tests in Household Surveys – Tanzania, 2006

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Validation of Microscope Equipped with a Versatile Illuminator (The Earl-Light) in Detecting Malaria Parasites

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The Validation of the DmSc Malaria Pf/Pv. Rapid Diagnostic Device for the Detection of Falciparum and Non Falciparum Malaria in Thailand 2006

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Mapping Epitopes Recognised by Monoclonal Antibodies Against PFHRP2 and Implications Towards Optimisation of Malaria Rapid Diagnostic Tests

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Field Evaluation of a Rapid Malaria Diagnostic Test (Parascreen™) for Malaria Diagnosis in the Peruvian Amazon

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Isolation and Characterization of the MSP1 Gene from Plasmodium Malariae and Ovale

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Seroprevalence of Plasmodium Falciparum, Vivax, Malariae and Ovalae Antibodies Among Blood Donors from Cameroon

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UTILITY OF MSP1-19 RECOMBINANT ANTIGENS FOR DETECTION OF ANTIBODIES TO PLASMODIUM FALCIPARUM, OVALE, MALARIAE AND VIVAX
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OPTIMAL-IT® AS AN ALTERNATIVE TO MICROSCOPY FOR MALARIA DIAGNOSIS IN REMOTE AREAS UNABLE TO ACCESS GOOD LABORATORY SERVICES IN BURKINA FASO
Innocent Valea
Centre Muraz- Bobo-Dioulasso, Bobo-Dioulasso, Burkina Faso

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PLASMODIUM FALCIPARUM HISTIDINE-RICH PROTEIN 2 ELISA FOR USE IN MALARIA INTERVENTION TRIALS
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IN VITRO AND IN VIVO EVALUATIONS OF NEW QUINOLINE METHANOL ANALOGS OF MEFLOQUINE

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Malaria – Immunology

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(ACMCIP Abstract)

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(ACMCIP Abstract)

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(ACMCIP Abstract)

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(ACMCIP Abstract)
MULTIPLEX ANALYSIS OF CYTOKINE RESPONSES TO PRE-ERYTHROCYTIC AND ERYTHROCYTIC MALARIA ANTIGENS IN A HIGHLAND KENYA POPULATION

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(ACMCI Abstract)

ANTIBODY MEDIATED BLOOD STAGE IMMUNITY AS MEASURED BY FUNCTIONAL GROWTH INHIBITION ASSAYS IS GREATER IN AREAS OF UNSTABLE AS COMPARED TO STABLE TRANSMISSION

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(ACMCI Abstract)

RESTRICTION OF SEROLOGICAL CROSS-REACTIVITY BETWEEN VARIANTS OF PLASMODIUM VIVAX DUFFY BINDING PROTEIN FOLLOWING SINGLE MALARIA INFECTION

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(ACMCI Abstract)

Malaria – Molecular Biology

POLYMORPHIC VARIABILITY IN THE IL-4 -589T/C PROMOTER IS ASSOCIATED WITH INCREASED SUSCEPTIBILITY TO HIGH-DENSITY MALARIA PARASITEMIA

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(ACMCI Abstract)

IDENTIFICATION OF PLASMODIUM YOELII RBC MEMBRANE PROTEINS INVOLVED IN ADHERENCE TO A MURINE ENDOTHELIAL CELL LINE

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(ACMCI Abstract)
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STRAIN SPECIFICITY IN THE REQUIREMENT FOR MITOCHONDRIAL ELECTRON TRANSPORT IN ERYTHROCYTIC STAGE PLASMODIUM FALCIPARUM

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(ACMCIP Abstract)

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PLASMODIUM FALCIPARUM ERYTHROCYTE BINDING ANTIGEN (EBA) 175 GENE DIVERSITY IN MALARIA ENDEMIC AREA WITH SEASONAL VARIATION IN BURKINA FASO

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(ACMCIP Abstract)

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GENETIC DIVERSITY OF THE CRITICAL BINDING MOTIF OF P. VIVAX DUFFY BINDING PROTEIN IN SRI LANKA

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(ACMCIP Abstract)

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EFFECT OF INSECTICIDE-TREATED BED NETS (ITNS) ON GENE POLYMORPHISMS OF PLASMODIUM FALCIPARUM VACCINE CANDIDATE ANTIGENS IN A MALARIA HOLOENDEMIC AREA OF WESTERN KENYA

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IMMUNOGENICITY OF TWO DOESES OF A MULTI-STAGE, MULTI-ANTIGEN ADENOVIRUS-VECTOR P. FALCIPARUM MALARIA VACCINE IN A PHASE 1 TRIAL

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DIFFERENT ASSESSMENT METHODS OF MALARIA MORBIDITY FOR FUTURE MALARIA VACCINE TRIAL IN A HIGH AND SEASONAL MALARIA TRANSMISSION AREA OF BURKINA FASO

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RANDOMIZED, CONTROLLED, DOSE ESCALATION PHASE 1 CLINICAL TRIAL TO EVALUATE THE SAFETY AND IMMUNOGENICITY OF WALTER REED ARMY INSTITUTE OF RESEARCH’S AMA-1 MALARIA VACCINE (FMP2.1) ADJUVANTED IN GSK BIOLOGICALS’ AS02 Vs. RABIES VACCINE IN 1-6 YEAR OLD CHILDREN IN BANDIAGARA, MALI

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A P. FALCIPEARUM MULTI-ANTIGEN MULTI-STAGE PLASMID DNA PRIME/ADENOVIRUS BOOST VACCINE, NAVAL MEDICAL RESEARCH CENTER-M3V-AD-PFCA, IS IMMUNOGENIC IN BALB/C MICE

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PRODUCTION, CHARACTERIZATION AND IMMUNOLOGICAL EVALUATION OF AN ESCHERICHIA COLI EXPRESSED PLASMODIUM FALCIPEARUM THROMBOSPONDIN RELATED APLICAL MEROZOITE PROTEIN (PTRAMP), A PUTATIVE MALARIA VACCINE CANDIDATE

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RATIONAL DESIGN OF A PAN-REACTIVE APICAL MEMBRANE ANTIGEN-1 BASED MALARIA VACCINE USING SEROTYPES AND EPITOPE MAPS

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HEMATOLOGICAL PARAMETERS CHANGES IN CHILDREN LESS THAN SIX YEARS LIVING IN MALARIA ENDEMIC AREA: IMPLICATION FOR FUTURE MALARIA VACCINE TRIALS

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EXPRESSION AND LOCALIZATION OF PLASMODIUM FALCIPEARUM MEROZOITE SURFACE PROTEIN 8 IN BLOOD STAGE MALARIA PARASITES

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(ACMCIP Abstract)

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NOVEL ANTIGENS AT PLASMODIUM FALCIPEARUM SCHIZOONTE MEROZOITE STAGES AS POTENTIAL VACCINE CANDIDATES

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(ACMCIP Abstract)
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(ACMCIP Abstract)

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Malaria/Mosquitoes – Prevention of Transmission

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TARGETING SCHOOL CHILDREN FOR THE PREVENTION AND CONTROL OF COMMON ENDEMIC DISEASES IN SOUTHEAST NIGERIA

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TESTING COMPREHENSION AND ACCEPTABILITY OF PARASITE SYMBOLS TO STRENGTHEN ADHERENCE TO ANTIMALARIAL TREATMENT IN TANZANIA AND UGANDA

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

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Guadalupe C. Reyes-Solis1, Karla L. Saavedra-Rodriguez1, Ludmel Urdaneta-Marquez1, Nydia A. Rodriguez-Neaves2, Gustavo Ponce-Garcia1, Adriana E. Flores-Suarez2, William C. Black IV1, 1Colorado State University, Fort Collins, CO, United States, 2Universidad Autonoma de Nuevo Leon, San Nicolas de los Garza, Mexico

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DIFFERENTIAL SUSCEPTIBILITY OF PERMETHRIN-RESISTANT ANOPELE S GAMBIAE TO INDIVIDUAL TOXINS OF A NEW ISOLATE OF BACILLUS THURINGIENSIS SUBSP. ISRAELIENSIS
Mohamed Ibrahim1, Natalya Griko, Lee Bulia Biological Targets, Inc., Pilot Point, TX, United States

1065
ACTIVITY OF ORAL INSECTICIDAL DRUGS AGAINST Aedes aegypti AND Anopheles gambiæ
J. Jason Meckel1, Kevin C. Kobyliński, Douglas E. Brackney, Massamba Sylla, Brian D. Foy Colorado State University, Fort Collins, CO, United States

1066
Aedes Aegypti Monitoring in Public and Private Buildings Using Ovitraps, GPS and a Simple Computer System in the Cities of Chetumal and Playa del Carmen Mexico
Pedro Mis-Avila1, Marco Domínguez-Galera1, William May1, Ildelino Hernandez-Salas2, Lars Eizen2, Saul Lozano-Fuentes2, 1Secretaría de Salud, Quintana Roo, Chetumal, Mexico, 2Universidad Autonoma de Nuevo Leon, Monterrey, Mexico, 3Colorado State University, Fort Collins, CO, United States

1067
THE RISE OF A KDR MUTATION IN Aedes aegypti (L) IN MÉXICO
Gustavo Ponce1, Karla Saavedra1, Saul Lozano5, Guadalupe Reyes1, Adriana E. Flores2, William C. Black IV5, 1Colorado State University, Fort Collins, CO, United States, 2Universidad Autonoma de Nuevo León, Monterrey, Mexico

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GENETIC TECHNOLOGY FOR CONTROL OF DENGUE AND CHIKUNGUNYA
Luke Alphey1, S. S. Vasan, Derric Nimmo Oxitec Limited, Oxford, United Kingdom

Mosquitoes – Molecular Genetics

1069
MOLECULAR BASES OF POST-MATING BEHAVIOU IN Anopheles gambiae
David W. Rogers1, Emilián Mancini1, Miranda M. Whitten1, Francesco Baldini5, Janis Thailayil2, Alessandra della Torre5, Elena Levashina5, Flaminia Catteruccia5, 1Imperial College London, London, United Kingdom, 2Dip. Scienze di Sanità Pubblica, Università Sapienza, Rome, Italy, 3IBMC, Strasbourg, France, 4University of Perugia, Perugia, Italy
1070
IDENTIFICATION AND MOLECULAR CATALOGING OF HEMOCYTE SPECIFIC IMMUNE GENES FROM MALARIA VECTOR A. GAMBIAE
Rajnikant Dixit, Sanjeev Kumar, Lalita Gupta, Alvaro Molina-Cruz, Janneth Rodrigues, Jesus Valenzuela, Jose M. Ribeiro, Carolina Barillas-Mury
National Institutes of Health, Rockville, MD, United States

1071
DISSECTING Aedes aegypti innate immune responses to Dengue virus infection
Jayme A. Souza-Neto, Jose L. Ramirez, Shuzhen Sim, Zhiyong Xi, George Dimopoulos
1Johns Hopkins University – BSPH, Baltimore, MD, United States, 2Michigan State University, East Lansing, MI, United States

1072
MEIOTIC DRIVE SYSTEM GENE EXPRESSION PROFILING IN Aedes aegypti
Dongyoung Shin, Dave D. Chadee, Jeanne Romero-Severson, David W. Severson
1The Eck Family Institute for Global Health and Infectious Diseases, Department of Biological Sciences, Notre Dame University, Notre Dame, IN, United States, 2Department of Life Sciences, University of West Indies, St. Augustine, Trinidad and Tobago

1073
A PUZZLING PATTERN OF INTROGRESSION IN THE CULEX PIPENS COMPLEX IN EAST ASIA
Emilie Cameron, Dina Fonseca
Rutgers University, New Brunswick, NJ, United States

1074
QTL ANALYSIS OF DENV-2 DISSEMINATION IN A FERAL POPULATION OF Aedes aegypti FROM TRINIDAD, WEST INDIES
Ryan R. Hemme, Dave D. Chadee, David D. Severson
1The Eck Family Institute for Global Health and Infectious Diseases, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States, 2Department of Life Sciences, University of West Indies, St. Augustine, Trinidad and Tobago

1075
GUilt BY ASSOCIATION: GENE EXPRESSION DIFFERENCES IMPLICATED IN MATE RECOGNITION IN ANOPHELES GAMBIAE M AND S FORMS
Bryan J. Cassone, Zhong Guan, Bradley J. White, Karine Mouline, Nora J. Besansky
1University of Notre Dame, Notre Dame, IN, United States, 2University of Indiana, South Bend, IN, United States

1076
POPULATION STRUCTURE OF COLLECTIONS OF THE MOSQUITO Aedes aegypti (DIPTERA: CULICIDAE) FROM COSTA RICA
Adrián E. Avendaño-López, Gustavo Gutiérrez-Espeleta, José M. Gutiérrez, Adriana Duarte-Madrigal, Olger Calderón-Arguedas
Universidad de Costa Rica, San José, Costa Rica

1077
POPULATION STRUCTURE OF THE MALARIA VECTOR Anopheles albimanus IN THE ATLANTIC AND PACIFIC REGIONS OF COLOMBIA BASED ON SEQUENCES OF THE MTDNA CoI gene
Lina A. Gutiérrez, Nelson Naranjo, Astrid V. Cienfuegos, Giovon F. Gomez, Shirley Luckhart, Jan E. Conn, Margarita M. Correa
1Grupo de Microbiologia Molecular, Escuela de Microbiologia, Universidad de Antioquia, Medellín, Colombia, 2Department of Medical Microbiology and Immunology, University of California, Davis, CA, United States, 3Griffin Laboratory, Wadsworth Center, New York State Department of Health, Albany, NY, United States

1078
DEVELOPMENT OF A HIGH-DENSITY SNP GENOTYPING ARRAY FOR THE VECTOR MOSQUITO Anopheles gambiae, BY THE AGSNP CONSORTIUM
Marc Muskavitch, Dan Neafsey, Mara Lawnczak, Daniel Park, Seth Redmond, Nora Besansky, George Christophides, Roger Wiegand, Frank Collins, Dyann Wirth, Fotis Kafatos
1Boston College, Chestnut Hill, MA, United States, 2Broad Institute, Cambridge, MA, United States, 3Imperial College London, London, London, United Kingdom, 4University of Notre Dame, South Bend, IN, United States, 5Harvard School of Public Health, Boston, MA, United States

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GENETIC ASSOCIATION AND LINKAGE DISEQUILIBRIUM IN ANOPHELES GAMBIAE IMMUNE GENES
Caroline Harris, Isabelle Morlais, François Rousset, Luc Abate, Didier Fontenille, François Rousset, Anna Cohuet
1Institut de Recherche pour le Développement, Montpellier, France, 2Laboratoire de Recherche sur le Paludisme IRD-OCEAC, Yaoundé, Cameroon, 3University of Montpellier, Montpellier, France

Mosquitoes – Vector Biology – Epidemiology

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INTEGRATE MOSQUITO FORAGING IN ENVIRONMENTAL MANAGEMENT OF AQUATIC HABITATS FOR MALARIA CONTROL
Weidong Gu, Robert Novak
University of Alabama at Birmingham, Birmingham, AL, United States
1081

IDENTIFYING COVARIATES OF ANOPHELES GAMBIAE S.S. (DIPTERA: CULICIDAE) AQUATIC HABITAT DISTRIBUTION USING A POISSON REGRESSION MODEL, WITH A NON-CONSTANT, GAMMA-DISTRIBUTED MEAN

Benjamin G. Jacob, Robert Novak
University of Alabama, Birmingham, AL, United States

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ECOLOGICAL BASIS OF SWARMING AND MATING BEHAVIOUR IN NATURAL POPULATIONS OF ANOPHELES GAMBIAE S.S., IN BURKINA FASO

Simon P. Sawadogo1, Antoine Sanon2, Idrissa Dicko3, Abdoulaye Diabate4, Robert T. Guiguemde4, Jean-Bosco Ouedraogo1, Roch K. Dabire1
1Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, 2University of Ouagadougou, Ouagadougou, Burkina Faso, 3Polytechnical University of Bobo-Dioulasso, Bobo-Dioulasso, Burkina Faso, 4Centre Muraz, Bobo-Dioulasso, Burkina Faso

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HOST-FEEDING PATTERNS OF Aedes aegypti AND Aedes albopictus IN NEW ORLEANS, LOUISIANA, 2006

Sarah R. Michaels1, Jason W. Houdek1, Brian D. Byrd1, Mark A. Rider1, Gabriela Estrada1, Dawn M. Wesson1
1Tulane University, New Orleans, LA, United States, 2Loyola University, New Orleans, LA, United States

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LARVAL ECOLOGY OF TWO CHROMOSOMAL FORMS OF ANOPHELES FUNESTUS IN WEST OF BURKINA FASO: LARVAE TRANSPANTATION EXPERIENCE

Hyacinthe K. Toe1, N’Falé Sañon2, Robert T. Guiguemde3, Jean-Bosco Ouedraogo1, Roch K. Dabire1
1Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, 2Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, 3Centre Muraz, Bobo-Dioulasso, Burkina Faso

1085

THE ROLE OF THE RNAI PATHWAY IN THE MIDGUT OF Aedes aegypti MOSQUITOES ON VECTOR COMPETENCE FOR ARBOVIRUSES

Cynthia C. Khoo1, Joe Piper1, Kenneth E. Olson1, Alexander W. Franz
1Colorado State University, Fort Collins, CO, United States

(ACMCIP Abstract)

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COMPARATIVE POPULATION GENETICS: Culex restuans VERSUS Cx. Pipiens IN THE EASTERN US

Dina M. Fonseca1, Laura D. Kramer2
1Rutgers University, New Brunswick, NJ, United States, 2Wadsworth Center, NYSDH, Albany, NY, United States

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EFFECTS OF SINGLE HOST ODORS AND ODOR COMBINATIONS ON FLIGHT CHARACTERISTICS OF Aedes aegypti AND Aedes albopictus

Sandra A. Allan1, Ulrich R. Bernier1, Daniel L. Kline1, Miriam F. Cooperband1
1United States Department of Agriculture, Gainesville, FL, United States, 2United States Department of Agriculture, Otis, MA, United States

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RISK FACTORS RELATED TO THE NUMBER OF Aedes aegypti PUPAE IN THE DISTRICT OF COMAS, LIMA, PERU

Fanny Castro-Llanos1, Carmen Flores-Mendoza1, Fernando Chapilliquen4, Luis Cubillas3, Andrés G. Lescano2, Juan Pérez4, Karin Cruz2, Julio Lacma2, David Florin1
1Naval Medical Research Center Detachment, Callao, Peru, 2Ministerio de Salud, Lima, Peru, 3Naval Medical Research Center Detachment – UPCH, FASPA, Callao, Peru

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OVIPOSITION SITE SELECTION IN THE DENGUE VECTOR, Aedes aegypti

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

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DETERMINING FACTORS THAT PREDICT WEST NILE VIRUS POSITIVE MOSQUITO POOLS IN THREE LOUISIANA PARISHES

Rebecca C. Christofferson1, Christopher N. Mores1, Alma Roy1, Dawn M. Wesson2
1Louisiana State University, Baton Rouge, LA, United States, 2Tulane University, New Orleans, LA, United States

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SIMULATION MODELS WILL INFORM SITUATION-SPECIFIC DENGUE PREVENTION STRATEGIES

Tessa B. Knox1, Dana A. Focks1, Andres J. Garcia2, Tadeusz J. Kochel1, Amy C. Morrison1, Thomas W. Scott1
1University of California, Davis, CA, United States, 2Infectious Disease Analysis, Gainesville, FL, United States, 3Naval Medical Research Center Detachment, Lima, Peru

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RAINFALL AND THE Culex pipiens COMPLEX: HOW MUCH IS TOO MUCH?

Christopher M. Barker1, William K. Reisen1, Wesley O. Johnson1, Bborie K. Park1, Bruce F. Eldridge1
1University of California, Davis, CA, United States, 2University of California, Irvine, CA, United States
1093
CHARACTERIZATION OF IMMUNOGENIC PROTEINS IN AN. GAMBIAE SALIVARY GLANDS AND THEIR POTENTIAL USE AS A MARKER OF EXPOSURE TO MALARIA
Sylvie Cornelie1, MArei Senglät1, Souleymane Doucoure1, Edith Demettre2, Franck Remoué3
1IRD, Montpellier, France, 2IRD, Dakar, Senegal, 3CNRS, Montpellier, France

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MALARIA VECTOR BREEDING SITES AND ASSESSING THEIR IMPACT ON LOCAL MALARIA RISK: PRELIMINARY DATA ON THE RISK FACTORS FOR MALARIA INFECTION
Themba Mzilahowa
Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi

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THE IMPACT OF IMPREGNATED SUDANESE THOBS ON HUMAN/VESPECT CONTACT OF ANOPELENS ARABIENSIS IN ENDEMIC AREA OF MALARIA – SUDAN
Raya A. El Awad1, Samia Amin El Karib2, Omer Zaid Baraka1, Abdel Hameed Derdeery Nugud2, Suad Mohamed Sulaiman3
1National Health Lab. M of H, Khartoum, Sudan, 2The National Research Center, Khartoum, Sudan, 3Faculty of Medicine, Khartoum, Sudan, 4Nile Faculty Of Medical Science, Khartoum, Sudan

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ENTOMOLOGICAL SURVEY ON DENGUE VECTORS AS FOR BASIS ON PREVENTION AND CONTROL IN BARANGAY POBLACION, MUNITLUPA CITY, 2008
Estrella Irlandez C ruz1, Juancho Bunyi2
1Research Institute for Tropical Medicine, Metro Manila, Philippines, 2Assistant City Health Officer, Muntinlupa City, Philippines

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CALCIUM ALGINATE FORMULATIONS OF BACTERIA FROM PLANT INFUSIONS PRODUCE OVIPOSITION ATTRACTANTS AND STIMULANTS FOR GRAVID Aedes aegypti and Aedes albopictus
Loganathan Ponnesamy1, Luma Abu Ayyash1, Toshi Nojima1, Philipp Kirsch1, Dawn M. Wesson1, Coby Schall2, Charles S. Apperson1
1N.C. State University, Raleigh, NC, United States, 2APTIV, Inc., Portland, OR, United States, 3Tulane University, New Orleans, LA, United States

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MOSQUITOES, CATCH BASINS, HYDROLOGY, AND RISK OF WEST NILE VIRUS IN ILLINOIS
Marilyn O. Ruiz1, Kelly DeBaene1, Jane Messina2, Murugegu Sivapalan1, Hongyi Li1, Gabe Hamer2, William Brown1, Edward Walker3
1University of Illinois – Urbana, Urbana, IL, United States, 2Michigan State University, East Lansing, MI, United States

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VIRAL ETIOLOGY OF ACUTE FEBRILE ILLNESSES IN SOUTH AMERICA, 2000-2007
Brett M. Forshey1, Carolina Guevara1, V. Alberto Laguna1, Luis Suarez2, Paul Pachas1, Jorge Gómez2, Manuel Céspedes2, Eduardo Gotuzzo3, Nora Reyes3, Roberto Agudo4, Efrain Vallejo5, Jorge Vargas6, Yelin Roca7, Nicolas Aguayo8, Cesar Madrid9, Franklin Delgado10, Silvia Montano11, Tadeusz J. Kochel12
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2General Directorate of Epidemiology, Ministry of Health, Lima, Peru, 3National Institutes of Health, Ministry of Health, Lima, Peru, 4Cayetano Heredia Peruvian University, Lima, Peru, 5San Marcos National University, Lima, Peru, 6Ministry of Health, Cochabamba, Bolivia, 7National Center of Tropical Diseases, Santa Cruz, Bolivia, 8NGO, Rayos de Sol, Asuncion, Paraguay, 9Naval Hospital, Guayaquil, Ecuador

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REEMERGENCE OF BOLIVIAN HEMORRHAGIC FEVER IN BOLIVIA 2007 – 2008
Roiana Caceda1, Patricia Aguilar1, Vidal Felices1, Alfredo Huaman1, Carolina Guevara1, Jorge Vargas2, Tadeusz Kochel2
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2National Center of Tropical Diseases, Santa Cruz, Bolivia

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RESISTANCE TO ADAMANTANES AND NEURAMINIDASE INHIBITORS AMONG INFLUENZA VIRUSES ISOLATED IN CENTRAL AND SOUTH AMERICA IN 2005-2007
Josefina García1, Merly Soveryo1, Alberto Laguna1, Jorge Gómez2, Richard Douce3, Melvin Barrantes4, Felix Sanchez5, Mirna Jiménez6, Guillermo Comach7, Ivette de Rivera8, Roberto Agudo9, Tadeusz J. Kochel10
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2Dirección General de Epidemiología, Ministerio de Salud, Lima, Peru, 3Hospital Vozandes, Quito, Ecuador, 4Hospital Solano, Buenos Aires, Argentina, 5Hospital Infantil Manuel de Jesus Rivera, Managua, Nicaragua, 6Hospital Nacional del Metapan, Metapan, El Salvador, 7LARDIDEV-Biomed-UC, Maracay, Venezuela, 8Universidad Nacional Autónoma de Honduras, Tegucigalpa, Honduras, 9Dirección General de Epidemiología, Ministerio de Salud, Cochabamba, Bolivia

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DERMATOLOGIC CONDITIONS IN “HEALTHY HTLV-I CARRIERS”
Manuel Villaran1, Eberth Quijano1, Marie Wang2, Silvia M. Montano1, Joseph R. Zunt2
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2Centro de Referencia para ETS “Alberto Barton”, Lima, Peru, 3University of Washington National Institutes of Health Fogarty Fellow, Seattle, WA, United States, 4University of Washington, Seattle, WA, United States
1103

ANDES VIRAL RNA LOAD IN CHILEAN PATIENTS WITH HANTAVIRUS CARDIOPULMONARY SYNDROME

†Clínica Alemana Universidad del Desarrollo, Santiago, Chile, ‡University of New Mexico, Albuquerque, NM, United States, §P Universidad Católica de Chile, Santiago, Chile, ∥Instituto de Salud Pública, Santiago, Chile, ∥∥Universidad de la Frontera, Temuco, Chile, ∥∥∥Ministerio de Salud, Santiago, Chile

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DETECTION OF HAMSTER CYTOKINE RESPONSES BY REAL-TIME PCR

Stephanie James, Tony Schountz
University of Northern Colorado, Greeley, CO, United States

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FIRST CHARACTERIZATION OF CYTOKINE GENES FROM A BAT, USING SEBA'S SHORT-TAILED BAT (CAROLLLIA PERSPICILLATA)

Ann C. Cogswell†, Charles H. Calisher‡, Rick Adams¹, Tony Schountz²
¹University of Northern Colorado, Greeley, CO, United States, ²Colorado State University, Fort Collins, CO, United States

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GENETIC VARIABILITY OF RVFV IN WEST AFRICA: IMPLICATIONS FOR VIRUS DISPERSAL AND DISTRIBUTION

Peinda O. Soumaré†, Paolo M. Zanotto‡, Ousmane Faye§, Mohamadou L. Soumaré∥, Mady Ndiaye‡, Mawlouth Diallo∥, Amadou A. Sall∥∥
†Pasteur Institut, Dakar, Senegal, ‡University of Sao Paulo, Sao Paulo, Brazil, ∥Cheikh Anta Diop University, Dakar, Senegal

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EARLY DETECTION OF HANTAVIRUS ACUTE INFECTION AND ECOTOLOGY STUDIES IN TONOSI, PANAMA. 2007-2008

Blas Armien¹, Jamileth Mariñàs², Carlos Muñoz³, Anibal Armien⁴, Juan M. Pascale⁴, Ariosto Hernandez⁵, Deyanira Sanchez⁶, Mario Avila⁶, Pablo Gonzalez⁶, Candida Broce⁶, Ricardo Correa⁶, Loyd Marchena⁶, Fernando Gracia⁶, Gregory E. Glass⁶, Frederick Koster⁶
¹ICGES, Panama, Panama, ²Hospital de Tonosi, Los Santos, Panama, ³Ministerio de Salud, Los Santos, Panama, ⁴University of Minnesota, Minnesota, MN, United States, ⁵Ministerio de Salud, Azuero, Panama, ⁶Hospital Santo Tomas, Panama, Panama, ⁷The Johns Hopkins Bloomberg School of Public Health, Baltimore, MA, United States, ⁸Lovelace Respiratory Research Institute, Albuquerque, NM, United States

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VECTOR COMPETENCE OF ANOPHELES GAMBIEN SENSU STRICTU FOR O’NYONG-NYONG VIRUS

Rodman D. Tompkins II, Corey L. Campbell, Brian D. Foy
Colorado State University, Fort Collins, CO, United States

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DISEASE BURDEN DUE TO DENGUE AND INFLUENZA IN AN INDONESIAN FACTORY WORKER COHORT

Nugroho H. Susanto†, Ardini S. Raksanegara‡, Bachti Alisjahbana³, Primal Sudjana³, Hadi Jusuf³, Pandji I. Rudiman³, Haditya L. Mukhir³, Maya Williams¹, Patrick J. Blair², Charmagne G. Beckett³, Kevin R. Porter⁴, Ratna I. Tan¹, Timothy H. Burgess¹, Herman Kosasi³
†Viral Diseases Program, United States Naval Medical Research Unit-2, Jakarta, Indonesia, ‡Public Health Department – Medical Faculty Padjadjaran University, Bandung, Indonesia, ³Hasan Sadikin Hospital, Bandung, Indonesia, ⁴Naval Medical Research Center, Silver Spring, MD, United States

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NOVEL METHODS OF DETECTION AND CHARACTERIZATION OF RNA VIRUS PATHOGENS AND THEIR HOSTS IN THE KYRGYZ REPUBLIC

Benjamin J. Briggs
University of Buffalo, Buffalo, NY, United States

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CHIKUNGUNYA VIRUS – MECHANISM OF ADAPTATION TO AE. ALBOPICTUS MOSQUITO

Konstantin A. Tsetsarkin, Dana Vanlandingham, Charles E. McGee, Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States (ACMCIP Abstract)
Mid-Day Session 135

Pediatric Tuberculosis: A Neglected Tropical Disease?

Rhythms II/III
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.
The Speaker, a pediatric infectious diseases specialist with expertise in pediatric tuberculosis, will review the worldwide impact of this disease and the special challenges for diagnosing, treating and controlling tuberculosis in children.

CHAIR
Richard Oberhelman
Tulane School of Public Health, New Orleans, LA, United States

PEDIATRIC TUBERCULOSIS: A NEGLECTED TROPICAL DISEASE?
Jeffrey R. Starke
Baylor College of Medicine, Houston, TX, United States

Mid-Day Session 136

How Can We Tackle the Misuse of Science by Alarmists?

Waterbury
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.
Alarmists are increasingly powerful in matters of public policy. At present, climate change is their defining moral and political issue, and vector-borne diseases feature high in their list of prophecies. These prophecies are couched in the language of science, but sidestep complexity by providing the media and the public with authoritative, clear-cut and intuitively plausible statements that omit all elements of doubt. Scientists who question them are denounced as an insignificant minority, often as stooges of industry. As a result, alarmists are highly influential in science-based issues, including the public funding of science. This session will present a statistical analysis of networks of authorship that have had a prominent impact on public perception of two issues in the climate change debate: (1) mean temperature changes in the northern hemisphere over the past millennium—the controversial “Hockey Stick” reconstruction, and (2) the impact of current and future climate change on the prevalence and incidence of vector-borne diseases. In both cases I demonstrate that the authors involved operate as a clique or “social group” that has little or no interaction with the mainstream of the respective fields, but are nevertheless pivotal players in the climate change debate, with substantial influence on authoritative bodies such as the Intergovernmental Panel on Climate Change (IPCC). The objective of the symposium is to promote discussion of strategies to counter alarmist tactics and the misuse of science.

CHAIR
Paul Reiter
Institut Pasteur, Paris, France

SPEAKER
Paul Reiter
Institut Pasteur, Paris, France

Mid-Day Session 136A

Video on Malaria: “Survival - The Plant That Cures Malaria”

Bayside BC
Wednesday, December 10, 12:15 p.m. - 1:15 p.m.
Malaria kills a child in Africa every 30 seconds. The disease is both the cause and effect of Africa’s poverty. But in Uganda, a pioneering farmer, Clovis Kabaseke, believes he has an answer to both problems. Artemisia, a Chinese herb, produces chemicals in its leaves that can cure Malaria in just three days. These exciting new drugs – Artemisinin-based Combination Therapies, or ACTs - are one of the best new hopes for defeating Malaria. Clovis hopes that by encouraging African farmers to grow the plant in ever increasing amounts, he can cure both poverty and this deadly disease.

Meet the Professors 137

Meet the Professors C: Enigmatic and Teaching Cases

Grand Ballroom A
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.
A panel of professors will each present one clinical case 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. An open discussion will be encouraged, with audience participation.

CHAIR
Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada

PRESENTERS
Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States
Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada
Mid-Day Session 138

Wellcome Trust Public Health and Tropical Medicine Fellowships Masterclass

Grand Ballroom D
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.

At this symposium, speakers will discuss research opportunities, funding schemes and application tips for a successful research career in tropical medicine. If you are an aspiring scientist or a potential supervisor or sponsor of fellows, this Masterclass could provide the knowledge you need for success.

CHAIR
Michael Chew
The Wellcome Trust, London, United Kingdom

12:15 p.m.
TIPS FOR A SUCCESSFUL FELLOWSHIP APPLICATION
Michael Chew
The Wellcome Trust, London, United Kingdom

12:35 p.m.
THE INTERVIEW PROCESS – HOW TO MAXIMIZE YOUR CHANCES
Philip T. LeVerde
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

12:50 p.m.
RESEARCH OPPORTUNITIES AND FUNDING SCHEMES
Annabel Phillips
The Wellcome Trust, London, United Kingdom

1 p.m.
QUESTIONS AND ANSWERS

Poster Session C Viewing

Armstrong Ballroom
Wednesday, December 10, 1:30 p.m. – 7 p.m.

Symposium 139

Potentiation of Disease by Arthropod Saliva

Gallery
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

The topics of this symposium will be directed towards salivary immune modulation, potentiation of disease and disease pathogenesis by salivary components. Salivary components role in anti-arthropod vaccines will also be covered.

CHAIR
Richard Titus
Colorado State University, Fort Collins, CO, United States
William Wheat
Colorado State University, Fort Collins, CO, United States

1:30 p.m.
SALIVARY COMPONENT MAXADILAN AFFECTS MURINE DENDRITIC CELLS BY POTENTIALLY ENHANCING TYPE 2 IMMUNITY
William Wheat
Colorado State University, Fort Collins, CO, United States

1:55 p.m.
VARIABILITY IN THE SAND FLY SALIVARY PROTEIN MAXADILAN: IMPLICATIONS TO HOST IMMUNE RESPONSE AND LEISHMANIA PATHOGENESIS
Gregory C. Lanzaro
University of California, Davis, CA, United States

2:20 p.m.
HOW TO TURN POTENTIATION TO PROTECTION: IMPACT OF IMMUNITY TO SAND FLY SALIVA ON LEISHMANIASIS
Jesus G. Valenzuela
National Institute of Allergy and Infectious Disease, National Institutes of Health, Rockville, MD, United States

2:45 p.m.
TICKS, BORRELIA AND SALIVA: A TALE OF CYTOKINES AND CYTOTOXIC
Nordin Zeidner
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Scientific Session 140

Filariasis III – Epidemiology I

Rhythms I
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR
LeAnne M. Fox
Centers for Disease Control and Prevention, Atlanta, GA, United States
Dominique Kyelem
Lymphatic Filariasis Support Center, Decatur, GA, United States

1:30 p.m.
DETERMINANTS AFFECTING OUTCOMES OF NATIONAL PROGRAMS TO ELIMINATE LYMPHATIC FILARIASIS (LF): DEFINING RESEARCHABLE PRIORITIES
Dominique Kyelem1, Gautam Biswas1, Moses Bockarie2, Mark Bradley2, Maged El-Setouhy El-Setouhy3, Peter Fischer4, Ralph Henderson1, James Kazura3, Patrick J. Lammie2, Sammy M. Ngenga4, Eric A. Ottesen1, Kapa Ramaiah9, Frank Richards8, Gary Well1, Steve Williams11
1Lymphatic Filariasis Support Center, Decatur, GA, United States,
2World Health Organization, Geneva, Switzerland,
3Case Western Reserve University, Cleveland, OH, United States,
4GlaxoSmithKline, London, United Kingdom,
5Ain Shams University, Cairo, Egypt,
6Washington University, St. Louis, MO, United States,
7Centers for Disease Control and Prevention, Atlanta, GA, United States,
8Kenya Medical Research Institute, Nairobi, Kenya,
9Vector Control Research Centre, Pondicherry, India,
10Carter Center, Atlanta, GA, United States,
11Clark Science Center, Smith College, Northampton, MA, United States
1:45 p.m.

**1113**

**EVALUATION OF DIAGNOSTIC TOOLS FOR BRUGIAN FILARIAISIS ELIMINATION PROGRAMS**

Taniawati Supali1, Rahmah Noordin1, Felix Liaw1, Heri Wibowo1, Tajul A. Awang Mohd1, Kimberly Y. Wong4, Peter U. Fischer5, Gary J. Weil1

1University of Indonesia, Jakarta, Indonesia, 2University Sains Malaysia, Penang, Malaysia, 3Vector-Borne Disease Section, Sabah Health Office, Kota Kinabalu, Malaysia, 4Centers for Disease Control, Atlanta, GA, United States, 5Washington University School of Medicine, St. Louis, MO, United States

2 p.m.

**1114**

**SPATIAL MODELING OF LYMPHATIC FILARIAISIS RISK IN AMERICAN SAMOA BASED ON EPIDEMIOLOGICAL AND ENTOMOLOGICAL DATA**

Eric W. Chambers1, Janice Madonicky1, Jonathan D. King1, Jennifer L. Liang3, Shannon K. McClintock1, Mark A. Schmaedick1, Molisama Pa’au4, Mark H. Bradley1, Thomas R. Burkot2, Patrick J. Lammie1

1Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, 2Division of Community and Natural Resources, American Samoa Community College, Pago Pago, American Samoa, 3American Samoa Department of Health, Pago Pago, American Samoa, 4Global Community Partnerships, GlaxoSmithKline, Brentford, United Kingdom

2:15 p.m.

**1115**

**COMPREHENSIVE MONITORING OF THE IMPACT OF A PILOT MASS DRUG ADMINISTRATION PROJECT FOR FILARIAISIS IN PAPUA NEW GUINEA**

Gary J. Wei1, Will Kastens2, Melinda Susapu2, Sandra Laney3, Steven A. Williams4, Christopher L. King1, James W. Kazura2, Moses J. Bockarie1

1Washington University School of Medicine, St. Louis, MO, United States, 2Case Western Reserve University, Cleveland, OH, United States, 3Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, 4Smith College, Northampton, MA, United States

2:30 p.m.

**1116**

**IMPLEMENTATION AND MANAGEMENT OF LF CONTROL AND ELIMINATION PROGRAMMES: EIGHT YEARS OF EXPERIENCE FROM TANZANIA**

Mwete N. Malecele1, Peter Kiliima1, Charles D. Mackenzie1

1National Institute for Medical Research, Dar-es-salaam, United Republic of Tanzania, 2Senior Consultant, Dar-es-salaam, United Republic of Tanzania, 3Filarial Diseases Unit, Michigan State University, East Lansing, MI, United States

2:45 p.m.

**1117**

**PROGRESS TOWARD LYMPHATIC FILARIAISIS (LF) ELIMINATION IN PLATEAU AND NASARAWA STATES, NIGERIA: SENTINEL VILLAGE EPIDEMIOLOGICAL AND ENTOMOLOGICAL EVALUATIONS AFTER SIX YEARS OF ANNUAL MASS DRUG ADMINISTRATION WITH IVERMECTIN AND ALBENDAZOLE.**

Frank O. Richards1, Abel Eigege1, Alphonsoz Kal2, Y. Sambo3, J. Danboyi1, B. Ibrahim1, D. Kumbak1, Gladys Ogha4, D. Goshit1, Ngozi A. Njepuome1, John Umaru1, Lindsay J. Rakers1, Donald R. Hopkins1, Emmanuel S. Miri1

1The Carter Center, Atlanta, GA, United States, 2The Carter Center, Jos, Nigeria, 3Plateau State Ministry of Health, Jos, Nigeria, 4Nasarawa State Ministry of Health, Lafia, Nigeria

3 p.m.

**1118**

**INCREASING ADHERENCE TO MASS DRUG ADMINISTRATION FOR LYMPHATIC FILARIAISIS – ORISSA STATE, INDIA**

Paul T. Cantey1, Jonathan Rout1, Grace Rao2, Soumendra Dhir2, LeAnne Fox1

1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2Church’s Auxiliary for Social Action, Bhubaneswar, India

**Symposium 141**

**Benign Tertian Malaria? Examining Severe Disease Caused by Plasmodium vivax**

**Rhythms II/III**

**Wednesday, December 10, 1:30 p.m. – 3:15 p.m.**

Molecular diagnostics in a few clinical malaria studies in endemic areas ruled out falciparum malaria in patients experiencing otherwise typical severe and complicated falciparum malaria syndromes. Patients with hyperparasitemia, anemia, hypoglycemia, jaundice, respiratory distress, renal failure and seizures or coma had nested PCR findings negative for *P. falciparum* and positive for *P. vivax*. If more detailed studies of such patients also rule out infections like dengue, leptospirosis, viral encephalitides, the rickettsiae, bacterial sepsis and typhoid, the broad perception of infection by *P. vivax* as “benign” may require reassessment. This symposium examines the available evidence, both historic and contemporary, supporting the hypothesis that *P. vivax* mono-infection causes, at least occasionally and perhaps under specific conditions of exposure to infection(s), a spectrum of syndromes of severe & complicated malaria largely mirroring those of *P. falciparum*. Three separate research groups, all working at different sites on the island of New Guinea, report findings from recent or ongoing prospective hospital-based studies of vivax malaria from this heavily endemic zone. One group also presents pathophysiological studies of lung injury with vivax malaria. The symposium aims to provide clinicians & investigators with an understanding of the available evidence for a malignant vivax malaria, and, more importantly, the gaps in that body of evidence.

**CHAIR**

J. Kevin Baird

**Oxford University, Jakarta, Indonesia**

Nicholas J. White

**Mahidol University, Bangkok, Thailand**
1:30 p.m.
BENIGN TERTIAN MALARIA?
Robert W. Taylor
Oxford University Clinical Research Unit, Hanoi, Vietnam.

1:50 p.m.
SEVERE AND COMPLICATED VIVAX MALARIA: GOROKA, PAPUA NEW GUINEA
Blaise Genton
Swiss Tropical Institute, Basel, Switzerland

2:10 p.m.
SEVERE & COMPLICATED VIVAX MALARIA: TIMIKA, INDONESIAN PAPUA
Ric Price
Menzies School of Health Research and Charles Darwin University, Darwin, Australia

2:30 p.m.
SEVERE AND COMPLICATED VIVAX MALARIA: JAYAPURA, INDONESIAN PAPUA
Din Syafruddin
Eijkman Institute for Molecular Biology, Jakarta, Indonesia

2:50 p.m.
PATHOPHYSIOLOGY OF SEVERE VIVAX MALARIA
Nick Anstey
Menzies School of Health Research, Charles Darwin University, Darwin, Australia

Symposium 142

Global Enteric Multi-Center Study (GEMS): The Asian Sites And An Overall Progress Report

Waterbury
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.
Diarrheal diseases remain the second most common cause of infant and young child deaths in developing countries. The Global Enteric Multi-Center Study funded by the Bill & Melinda Gates Foundation follows a common rigorous protocol to measure the burden of moderate and severe diarrheal illness and to identify etiologic agents (utilizing state of the art molecular diagnostic techniques) from cases and controls in three sites in Asia and five in sub-Saharan Africa. This symposium will provide descriptions and updates of data from the three Asian sites (Mirzapur, Bangladesh, Kolkata India and Sind Province, Pakistan), as well as an overview progress report and a compilation of data from all eight GEMS sites.

CHAIR
Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

1:30 p.m.
PEDIATRIC DIARRHEAL DISEASE IN MIRZAPUR, BANGLADESH, A RURAL SETTING
ASG Faruque
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

1:55 p.m.
PEDIATRIC DIARRHEAL DISEASE IN SIND PROVINCE, PAKISTAN
Anita Zaidi
Aga Khan University Medical College, Karachi, Pakistan

2:20 p.m.
PEDIATRIC DIARRHEAL DISEASE IN KOLKATA, INDIA, AN URBAN SETTING
Dipika Sur
National Institute of Cholera and Enteric Diseases, Kolkata, India

2:45 p.m.
OVERVIEW OF THE FULL GEMS PROJECT AND INITIAL INSIGHTS ON BURDEN, CLINICAL PRESENTATIONS AND ETIOLOGY OF PEDIATRIC DIARRHEAL DISEASE IN DEVELOPING COUNTRIES IN ASIA AND SUB-SAHARAN AFRICA
Karen Kotloff
University of Maryland School of Medicine, Baltimore, MD, United States

Symposium 143

Information Technology for Research Collaboration and Training in Developing Countries

Napoleon A123
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.
This symposium will explore how information technology is being used to facilitate research collaboration and training in developing countries in Africa, Asia and Latin America by infectious disease researchers supported by the Fogarty International Center’s Global Infectious Research Training and the Informatics Training for Global Health programs. Presentations will describe the success and limitations of using currently available technologies for distance learning, internet conferencing, online curriculum and electronic data collection, analysis and exchange.

CHAIR
Barbara Sina
Fogarty International Center, National Institutes of Health, Bethesda, United States

1:30 p.m.
BUILDING RESEARCH AND HUMAN CAPACITY ONE LINK AT A TIME: THE NATIONAL LIBRARY OF MEDICINE’S INTERNATIONAL INFORMATION INTERVENTIONS
Julia Royall
National Library of Medicine/National Institutes of Health, Bethesda, MD, United States

1:30 p.m.
INTERNET CONFERENCING FOR INFECTIOUS DISEASE RESEARCH TRAINING IN COLOMBIA
Nancy Gore Saravia
CIDEIM, Cali, Colombia

2:20 p.m.
INFORMATICS TRAINING FOR MALARIA RESEARCH IN MALI
Frances Mather
Tulane University, New Orleans, LA, United States
2:45 p.m.
ONLINE CURRICULUM FOR PUBLIC HEALTH RESEARCH
TRAINING IN INDIA
Gagandeep Kang
Christian Medical College, Vellore, India

Scientific Session 144
Malaria – Drug Resistance

Maurepas
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR
Franka Teuscher
Queensland Institute of Medical Research, Enoggera, Brisbane, Australia
Chansuda Wongsrichanalai
USAID Regional Development Mission – Asia, Bangkok, Thailand

1:30 p.m.

1119
DELAYED P. FALCIPARUM PARASITE CLEARANCE FOLLOWING
ARTESUNATE-MEFLOQUINE COMBINATION THERAPY IN
THAILAND, 1997-2007
Saowanit Vijaykada1, Alisa P. Aker2, Dokrak Tongkong1, Malee Chansawang1, Agat Nakavet1, Thaiboonyong Puangpeepachai1, Sawat Cholpol1, Arunya Pinyoratanachote1, Sanya Sukkam1, Wichai Satimai1, Steven R. Meshnick2, Chansuda Wongsrichanalai4
1Bureau of Vector Borne Diseases, Department of Diseases
Control, Ministry of Public Health, Bangkok, Thailand,
2Department of Medicine, University of North Carolina
School of Medicine, Chapel Hill, NC, United States,
3University of Notre Dame, South Bend, IN, United
States, 4USAID Regional Development Mission – Asia, Bangkok, Thailand

1:45 p.m.

1120
TREATMENT OF P. FALCIPARUM MALARIA WITH ARTESUNATE-
MEFLOQUINE-PRIMAQUINE COMBINATION THERAPY IN
THAT PROVINCE, THAILAND
Wichai Satimai1, Delia Bethell1, Krisada Jongsakul2, Bryan Smith1, Sabaiithip Sriwichai2, Dokrak Tongkong1, Mark Fukuda2, 1Ministry of Public Health, Nonthaburi, Thailand, 2Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand, 3Office of Vector-Borne Disease Control, Maung, Thailand

2 p.m.

1121
DURATION AND RECOVERY RATES OF ARTEMISININ INDUCED
DORMANCY IN PLASMODIUM FALCIPARUM IN VITRO
Franka Teuscher1, Michelle Gattom1, Nanhua Chen2, Jennifer
Peters3, Dennis E. Kyle3, Qin Cheng2
1Queensland Institute of Medical Research, Brisbane, Australia,
2Australian Army Malaria Institute, Brisbane, Australia,
3University of South Florida, Tampa, FL, United States

2:15 p.m.

1122
EXAMINATION OF THE MOLECULAR BASIS OF RESISTANCE TO
ARTESININ DRUGS IN PLASMODIUM FALCIPARUM
Matthew S. Tucker1, Jennifer Peters2, Martin Nau3, Zhinning
Wang1, Qin Cheng3, Maryanne Vahey2, Susan Lukas2, Azliyati Azizan1, Dennis E. Kyle1
1University of South Florida, Tampa, FL, United States,
2Queensland Institute of Medical Research, Brisbane, Australia,
3Walter Reed Army Institute of Research, Rockville, MD, United
States, *Australian Army Malaria Institute, Enoggera, Australia
(ACMCIP Abstract)

2:30 p.m.

1123
ADAPTIVE COPY NUMBER EVOLUTION OF A KEY GENE IN THE
FOLATE PATHWAY OF MALARIA PARASITES
Shalini Nair1, Jigar Patel2, Becky Miller3, Marion Barends4,
Anchalee Jaidee5, Mayfong Mayxay1, Paul Newton2, Francois
Nosten3, Mike Ferdig3, Tim Anderson1
1Southwest Foundation for Biomedical Research, San Antonio,
TX, United States, 2Roche NimbleGen Inc, Madison, WI, United
States, 3University of Notre Dame, South Bend, IN, United
States, 4Shoklo Malaria Research Unit, Mae Sot, Thailand,
5Wellcome Trust – Mahosot Hospital – Oxford Tropical Medicine
Research Collaboration, Vientiane, Lao People’s Democratic
Republic

2:45 p.m.

1124
INTERMITTENT PRESCRIPTIVE TREATMENT FOR MALARIA
DURING PREGNANCY: REDUCED EFFICACY AND SELECTION
FOR RESISTANCE
Whitney E. Harrington1, Theonest K. Mutabingwa2, Melissa
Bolla3, Bess Sorensen2, Michael Fried2, Patrick E. Duffy2
1University of Washington and Seattle Biomedical Research
Institute, Seattle, WA, United States, 2Muhaza Designated
District Hospital, Muhaza, United Republic of Tanzania Tanzania,
3Seattle Biomedical Research Institute, Seattle, WA, United
States

3 p.m.

1125
ARTEMETHER-LUMEFANTRINE VERSUS DIHYDROARTESININ-PIPERAQUINE FOR TREATMENT OF
UNCOMPlicated FALCIPARUM MALARIA: A RANDOMIZED
TRIAL TO GUIDE NATIONAL POLICY IN UGANDA
Yeka Adoke1, Grant Dorsey2, Moses R. Kamya2, Ambrose
Talisauna3, Myers Lugewma2, John B. Rwakimari3, Sarah G.
Staedke3, Philip J. Rosenthal3, Fred W. Mangen3, Hasifa Bukirwa1
1Uganda Malaria Surveillance Project, Kampala, Uganda,
2University of California, San Francisco, CA, United States,
3 Makerere University, Kampala, Uganda, 4Uganda Ministry
of Health, Kampala, Uganda, 5London School of Hygiene and
Tropical Medicine, London, United Kingdom
Scientific Session 145

Viruses I

Bayside A
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR
Lina M. Moses
Tulane University, New Orleans, LA, United States
Rebeca Rico-Hesse
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

1:30 p.m.

1126

CYTOKINE EXPRESSION IN A HAMSTER MODEL OF HANTAVIRUS PULMONARY SYNDROME
Martin H. Richter, Mary Louise Milazzo, Eduardo J. Eyzaguirre, Charles F. Fulhorst
University of Texas Medical Branch Galveston, Galveston, TX, United States

1:45 p.m.

1127

CLINICAL COURSE OF HANTAVIRUS CARDIOPULMONARY SYNDROME IN CHILEAN PATIENTS
1Clinica Alemana Universidad del Desarrollo, Santiago, Chile, 2Universidad Católica, Santiago, Chile, 3Ministerio Salud, Santiago, Chile, 4University of New Mexico, Albuquerque, NM, United States

2 p.m.

1128

GUAROA VIRUS: AN EMERGENT PATHOGEN AMONG HUMANS IN PERU
Patricia V. Aguilar1, Cristopher Cruz1, Roxana Caceda1, Carmen Lopez2, William Mantilla1, Alfredo Huaman1, Douglas M. Watts1, Carolina Guevara1, Tadeusz Kochel1
1Naval Medical Research Center Detachment, Lima, Peru, 2Center for Biodefense and Emerging Infectious Diseases University of Texas Medical Branch, Galveston, TX, United States

2:15 p.m.

1129

HTLV INFECTION IN AMAZONIAN COMMUNITIES IN PERU
Cesar Carcamo1, Silvia M. Montano2, Issacc Alva3, Roberto Orellana4, Marina Chiappe1, Patricia Garcia1, Monica Nieto4, Tadeusz Kochel1, Antonio Bernabe1, Joseph R. Zunt4
1Universidad Peruana Cayetano Heredia, Lima, Peru, 2U.S. Naval Medical Research Center Detachment, Lima, Peru, 3University of Washington National Institutes of Health Fogarty Fellow, Universidad Peruana Cayetano Heredia, Lima, Peru, 4University of Washington, Seattle, WA, United States

2:30 p.m.

1130

KNOWLEDGE, ATTITUDES, AND PRACTICES REGARDING LASSA FEVER IN POST-CIVIL WAR SIERRA LEONE
Lina M. Moses1, Chandra Carter2, Kara Wilhite2, Augustine Goba1, Sheik Humarr Khan1, Richard Fonnie3, Sidiki Saffa4, Lansania Kanneh1, Victor Lungi1, Willie Robert1, Tiffany D. Imes1, Hannah Duggan1, Joshua Levy4, Daniel G. Bausch1
1Tulane University Department of Tropical Medicine, New Orleans, LA, United States, 2Xavier University, New Orleans, LA, United States, 3Kenema Government Hospital and Lassa Laboratory, Kenema, Sierra Leone, 4Tulane University School of Medicine, New Orleans, LA, United States

2:45 p.m.

1131

UNDERSTANDING BATS ACCESS TO DATE PALM SAP: IDENTIFYING PREVENTATIVE TECHNIQUES FOR NIPAH VIRUS TRANSMISSION
M.S.U. Khan, Nazmun Nahar, Rebeca Sultana, M. Jahangir Hossain, Emily S. Gurley, Stephen P. Luby
International Center for Diarrhoeal Disease Research, Dhaka, Bangladesh

3 p.m.

1132

RIFT VALLEY FEVER VIRUS INFECTION IN AFRICAN BUFFALO (SYNERCUS CAFFER) HERDS IN RURAL SOUTH AFRICA—EVIDENCE OF INTER-EPIZOOTIC TRANSMISSION
A. Desiree LaBeaud1, Paul C. Cross2, Wayne M. Getz2, Charles H. King1
1Case Western Reserve University, Cleveland, OH, United States, 2Northern Rocky Mountain Science Center, USGS, Bozeman, MT, United States, 3University of California, Berkeley, CA, United States
Scientific Session 146

Mosquitoes – Biochemistry, Molecular Biology and Molecular Genetics I

Bayside BC
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR
William Black
Colorado State University, Fort Collins, CO, United States
Rollie Clem
Kansas State University, Manhattan, KS, United States

1:30 p.m.

CHARACTERIZATION OF THE CELL DEATH MACHINERY IN Aedes aegypti
Qingzhen Liu, Rollie Clem
Kansas State University, Manhattan, KS, United States

1:45 p.m.

A ROLE FOR Aedes aegypti DNR1 IN REGULATING APOPTOSIS
Casey Devore, John Means, Rollie Clem
Kansas State University, Manhattan, KS, United States

2 p.m.

THE ROLE OF KEY PTEN SPLICE VARIANTS ON REPRODUCTION AND LIFESPAN IN THE MOSQUITO Aedes aegypti
Anam Javed, Jessica Brown, Michael A. Riehle
University of Arizona, Tucson, AZ, United States

2:15 p.m.

INSIGHT INTO METABOLIC PATHWAYS INVOLVED IN AMMONIA FIXATION, ASSIMILATION, AND EXCRETION IN Aedes aegypti MOSQUITOES
Patricia Y. Scaraffia, Jun Isole, Vicki H. Wysocki, Roger L. Miesfeld
University of Arizona, Tucson, AZ, United States

2:30 p.m.

Symposium 147

Bridging Pathogenesis and Pathology in Malarial Immunity and Anemia

Supported with funding from The Burroughs Wellcome Fund
Grand Ballroom A
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

RSA INTERERENCE (RNA) OF RIBOSOMAL PROTEIN S3A (RPS3A) SUGGESTS A LINK BETWEEN THIS GENE AND ARRESTED OVARIAN DEVELOPMENT DURING ADULT DIAPAUSE IN Culex pipiens
Mijung Kim, David L. Denlinger
The Ohio State University, Columbus, OH, United States

3 p.m.

TRANSCRIPTIONAL EFFECTS OF LONG-TERM BACTERIAL CHALLENGES DURING LARVAL DEVELOPMENT IN MOSQUITO VECTORS OF HUMAN DISEASE
Marco V. Neira Oviedo, Paul J. Linser
The Whitney Laboratory, University of Florida, St. Augustine, FL, United States

2:45 p.m.

MOLECULAR ANALYSIS OF LIGHT PULSE STIMULATED BLOOD FEEDING INHIBITION IN Anopheles gambiae
Suchismita Das, George Dimopoulos
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

2:50 p.m.

Linking parasite genomics and biology to disease pathologies and vaccines is urgently needed in malaria. This requires understanding the complexities of pathogenic mechanisms, acute and chronic disease pathologies and treatment strategies. This symposium will bring together strategies in the rational selection of malaria antigens for vaccine development, utilization of studies in model systems (murine, non human primates) and human infection and their role in disease pathologies such as anemia.

CHAIR
Kasturi Haldar
University of Notre Dame, Notre Dame, IN, United States

1:30 p.m.

MEROZOE PARASITE PROTEINS LINKED TO INVASION, ANEMIA AND IMMUNITY
Anthony Holder
National Institute of Medical Research, London, United Kingdom

1:55 p.m.

RODENT MODELS OF IMMUNITY AND ANEMIA
Kasturi Haldar
University of Notre Dame, Notre Dame, United States

2 p.m.

HUMAN MALARIAL ANEMIA IN CONTEXT OF HUMAN ANEMIAS IN GENETIC DISORDERS
Mohan Narla
New York Blood Center, New York, NY, United States
2:45 p.m.
A NON HUMAN PRIMATE MODEL OF MALARIAL ANEMIA
Alberto Moreno
Emory University, Atlanta, GA, United States

Scientific Session 148
Protozoa
Grand Ballroom B
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.
CHAIR
Thaddeus Graczyk
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

1:30 p.m.
1140
UNDERSTANDING TRANSMISSION OF CRYPTOSPORIDIOSIS IN THE UNITED STATES, 2007: MOLECULAR ANALYSIS OF SPORADIC CRYPTOSPORIDIUM ISOLATES WITH A CASE REPORT OF A HUMAN INFECTION WITH CRYPTOSPORIDIUM HORSE GENOTYPE
Lihua Xiao1, Michele Hlavsa1, Jonathan Yoder1, Christina Ewers2, Theresa Dearen1, Randall Nett1, Stephanie Harris3, Sarah Brend3, Maghan Harris4, Lisa Onischuk4, Amy L. Valderrama5, Shaun Cosgrove6, Karen Xiavier5, Nancy Hall5, Sylvia Romero7, Stephen Young7, Stephanie P. Johnston1, Michael Arrowood8, Sharon Roy1, Michael J. Beach1
1Centers for Disease Control and Prevention, Chamblee, GA, United States, 2New Mexico Department of Health, Santa Fe, NM, United States, 3Idaho Department of Health and Welfare, Boise, ID, United States, 4EPA Region 10 Laboratory, Port Orchard, WA, United States, 5Iowa Department of Public Health, Des Moines, IA, United States, 6Colorado Department of Public Health and Environment, Denver, CO, United States, 7Tricore Reference Laboratories, Albuquerque, NM, United States

1:45 p.m.
1141
TEMPOROSPATIAL DETERMINANTS OF CRYPTOSPORIDIOSIS IN UGANDAN CHILDREN
Siobhan M. Mor1, Elena N. Naumova2, James K. Tumwine3, Saul Tzipori1
1Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States, 2Tufts University School of Medicine, Boston, MA, United States, 3Makerere University Medical School, Kampala, Uganda

2 p.m.
1142
SOURCE OF TOXOPLASMA GONDII INFECTION IN THE UNITED STATES
Jeffrey L. Jones1, Valrie Dargelas2, Jacqueline Roberts1, Cynthia Press2, Jack S. Remington1, Jose G. Montoya3
1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2Palo Alto Medical Foundation Research Institute, Palo Alto, CA, United States, 3Palo Alto Medical Foundation Research Institute and Division of Infectious Diseases, Department of Medicine, Stanford University School of Medicine, Palo Alto and Stanford, CA, United States

2:15 p.m.
1143
URBAN FERAL PIGEONS (COLUMBIA LIVIA) AS A SOURCE FOR AIR-AND-WATERBORNE CONTAMINATION WITH ENTEROCYTOZOON BIENEUSSI SPORES
Thaddeus Graczyk1, Deirdre Sunderland1, Ana Rule1, Alexandre DaSilva2, Iaci Moura1, Autumn Girouard3, Kellogg Schwab1, Patrick Breyesse1
1Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, 2Centers for Disease Control and Prevention, Atlanta, GA, United States

2:30 p.m.
1144
REDUCTION OF CEREBRAL INFECTION AND MORTALITY, AND EFFECTS ON TRANSPLACENTAL TRANSMISSION OF NEOSPORA CANINUM, UPON IMMUNIZATION OF MICE WITH RECOMBINANT NCR0P2 ANTIGEN-BASED VACCINES
Andrew Hemphill, Karim Debache, Ferial Alaeddine, Christophe Guionaud Guionaud
University of Berne, Berne, Switzerland

3 p.m.
1145
THIOUREIDES OF 2-(PHENOXYMETHYL) BENZOIC ACID 4-R SUBSTITUTED: A NOVEL CLASS OF ANTI-MICROBIAL AND ANTI-PARASITIC AND ANTIMICROBIAL COMPOUNDS
Andrew Hemphill1, Carmen Limban2, Joachim Müller1
1University of Berne, Berne, Switzerland, 2“Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

1146
EVALUATION OF THE CYTOTOXICITY OF MULTIPLE AMPHIPATHIC ANTI-MICROBIAL PEPTIDE COMBINATIONS TO POTENTIAL BACTERIAL HOSTS AND TRYPSANOSOMA CRUZI
Annabeth Fieck, Ivy Hurwitz, Ravi Durvasula
University of New Mexico, Albuquerque, NM, United States
Symposium 149

Partnerships for the Development of Novel Vector Management Strategies (Part 1)

Grand Ballroom C
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

There is a pressing need to develop novel approaches for the management of vectors of human diseases such as malaria, dengue, yellow fever and others that are becoming more prevalent in many parts of the world. In response to this need, NIAID funded a series of projects focusing on diverse strategies to combat the vectors of malaria and arboviruses, domestically and abroad. During this symposium, the investigators heading each project will present the results of their work.

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

1:30 p.m.
ENGINEERED RECOMBINANT BACTERIAL LARVICIDES WITH HIGHLY IMPROVED EFFICACY AGAINST MAJOR ANOPHELINE AND CULEX HUMAN DISEASE VECTORS
Brian Federici
University of California, Riverside, Riverside, CA, United States

1:55 p.m.
IMPACT OF LARVICIDING ON CLINICAL MALARIA IN THE GAMBIA
Steve W. Lindsay
Durham University, Durham, United Kingdom

2:20 p.m.
ANOPHELES BIOLOGY AND CONTROL IN A RICE ECOSYSTEM: A FIVE-YEAR REVIEW
Robert J. Novak
University of Alabama, Birmingham, Birmingham, AL, United States

2:45 p.m.
MODE OF ACTION OF ITNS ON ANOPHELES: BEHAVIOR INTERACTS WITH LETHALITY
Edward Walker
Michigan State University, East Lansing, MI, United States

Symposium 150

Chagas Disease – Trypanosoma cruzi Infection. Women and Children, A Vulnerable Population

Grand Ballroom D
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

This symposium will address the diagnosis and management of T. cruzi infection among children and pregnant women. The focus on this population is based on the fact that a timely diagnosis of Chagas disease in children during the acute and chronic phase or as a result of congenital transmission allows us to prescribe effective treatment against infection. The goal of this symposium is to educate researchers and health care workers about Chagas disease, with a special focus on congenital transmission, which is one of the most important routes of T. cruzi transmission in non-endemic countries, primarily in North America.

CHAIR
Pierre Buekens
School of Public Health and Tropical Medicine – Tulane University, New Orleans, LA, United States
James Maguire
Brigham and Women’s Hospital, Boston, MA, United States

1:30 p.m.
PATHOGENY OF CONGENITAL TRANSMISSION OF TRYPNANOSOMA CRUZI
Yves Carlier
Faculté de Médecine-CP 616, Brussels, Belgium

1:55 p.m.
MANAGEMENT OF PREGNANT WOMEN INFECTED WITH TRYPNANOSOMA CRUZI
Faustino Torrico
San Simon University, School of Medicine, Cochabamba, Bolivia

2:20 p.m.
TIMELY DIAGNOSIS OF CONGENITAL TRYPNANOSOMA CRUZI TRANSMISSION. ETIOLOGICAL TREATMENT, POSSIBILITIES AND DIFFICULTIES
Sergio Sosa-Estani
National Center for Research on Endemic Diseases, and Institute for Clinical Effectiveness and Health Policy, Buenos Aires, Argentina

2:45 p.m.
CONGENITAL TRANSMISSION OF TRYPNANOSOMA CRUZI IN NORTH AMERICA
Pierre Buekens
Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States
Scientific Session 151

Intestinal and Tissue Helminths III: Nematodes

Grand Ballroom E

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR
David Abraham
Thomas Jefferson University, Philadelphia, PA, United States
Mark Eberhard
Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

1:30 p.m.

1147

LANDSCAPE GENETICS REVEALS FOCAL TRANSMISSION OF ASCARIS LUMBRICOIDES
Charles D. Criscione1, Dan Sudimack2, Joel D. Anderson2, Janardan Subedi3, Dev R. Rai4, Ram P. Upadhyay2, Bharat Jha5, Kimberly D. Williams6, Sarah Williams-Blangero2, Timothy J. Anderson2
1Department of Biology, Texas A&M University, College Station, TX, United States, 2Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio, TX, United States, 3Perry R. Bass Marine Fisheries Research Station, Coastal Fisheries Division, Texas Parks and Wildlife Department, Palacios, TX, United States, 4Department of Sociology and Gerontology, Miami University, Oxford, OH, United States, 5Tribhuvan University Institute of Medicine, Kathmandu, Nepal, 6Lifespan Health Research Center, Department of Community Health, Boonshoft School of Medicine, Wright State University, Dayton, OH, United States

1:45 p.m.

1148

FACTORS AFFECTING THE FECUNDITY OF ASCARIS LUMBRICOIDES AND THEIR IMPACT ON PATTERNS OF DENSITY DEPENDENCE
Martin Walker1, Andrew Hall2, Roy M. Anderson1, Maria-Gloria Basáñez1
1Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom, 2Centre for Public Health Nutrition, University of Westminster, London, United Kingdom

2 p.m.

1149

TEMPORAL DYNAMICS OF THE SEX RATIO OF ASCARIS LUMBRICOIDES AND ITS IMPLICATIONS FOR TRANSMISSION
Martin Walker1, Maria-Gloria Basáñez1, Andrew Hall2, Roy M. Anderson1
1Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom, 2Centre for Public Health Nutrition, University of Westminster, London, United Kingdom

2:15 p.m.

1150

EFFECT OF DEWORMING AND INTESTINAL HELMINTH (RE) INFECTIONS ON ATOPY AND ATOPIC DISEASE: LONGITUDINAL ANTHELMINTHIC TREATMENT STUDIES IN CUBAN SCHOOLCHILDREN
Meike Woerdemann1, Joris Menten1, Raquel Junco Diaz2, Lenina Menocal Heredia2, Aniran Ruiz Espinosa3, Bruno Gryseels4, Mariano Bonet Gorbea5, Katja Polman2
1Institute of Tropical Medicine, Antwerp, Belgium, 2National Institute of Hygiene, Epidemiology and Microbiology, Havana, Cuba, 3Institute Pedro Kouri, Havana, Cuba

2:30 p.m.

1151

THE INTERPLAY BETWEEN HUMAN B CELLS, EOSINOPHILS AND HELMINTHS: A NOVEL ASPECT OF THE HYGIENE HYPOTHESIS
Ansu Mammen1, Francis A. Farraye1, YanMei Liang1, William Harnett2, Hyunjin Shin1, Margaret Harnett2, Barbara Nikolajczyk1, Lisa Ganley-Leal1
1Boston University School of Medicine, Boston, MA, United States, 2University of Strathclyde, Strathclyde, United Kingdom

2:45 p.m.

1152

NEUTROPHIL RECRUITMENT TO SOLUBLE EXTRACT FROM STRONGYLOIDES STERCORALIS IS IL-17 INDEPENDENT
David Abraham, Amy E. O’Connell, Kevin M. Redding
Thomas Jefferson University, Philadelphia, PA, United States

(ACMCIP Abstract)

3 p.m.

1153

DIFFERENTIAL GENE EXPRESSION BETWEEN INFECTIVE AND NON-INFECTIVE STAGE STRONGYLOIDES STERCORALIS LARVAE REVEALED BY MICROARRAY
Roshan Ramanathan1, David Abraham2, Timothy G. Myers1, Thomas B. Nutman1
1National Institutes of Health, Bethesda, MD, United States, 2Thomas Jefferson University, Philadelphia, PA, United States

Break

Wednesday, December 10, 3:15 p.m. — 3:45 p.m.
Symposium 152
Progress and Challenges in Building an Antimalarial Drug Discovery Portfolio

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.
Medicines for Malaria Venture (MMV), a product development partnership, is supporting a number of discovery research projects aimed at designing new drugs targeting novel mechanisms for the treatment and prevention of malaria. MMV supports individual research projects and the mini-portfolios of a number of R&D organizations. These exciting projects aim to discover completely new ways of attacking the parasite. The aim of the symposium is to demonstrate how molecular biologists, parasitologists, biophysicists, medicinal chemists and pharmacists work together to seek to achieve their goals through new thinking and cutting-edge technologies. By illustrating how modern genomics, combinatorial chemistry and high-throughput screening have revolutionized the process, we aim to push the research agenda not only discovering novel ways of treating malaria, but ultimately also to developing tools to eradicate it.

CHAIR
Winston Gutteridge
Medicines for Malaria Venture, Geneva, Switzerland
Timothy Wells
Medicines for Malaria Venture, Geneva, Switzerland

3:45 p.m.
CHALLENGES IN DEVELOPING DHODH (DIHYDROOROTATE DEHYDROGENASE) AS AN ANTIMALARIAL DRUG TARGET
Margaret Phillips
University of Texas Southwestern Medical Center, Dallas, TX, United States

4:05 p.m.
MINING A NOVEL LEAD SERIES AND EXPLORING HOW CHEMISTRY CAN ALTER A DRUG’S PROPERTIES
José García-Bustos
GlaxoSmithKline, Tres Cantos, Spain

4:25 p.m.
INVESTIGATING NATURAL PRODUCTS AND LARGE CHEMICAL LIBRARIES VIA HIGH THROUGHPUT SCREENING FOR POTENTIAL ANTIMALARIAL CANDIDATES
Thierry Diagana
Novartis – Institute for Tropical Diseases, Singapore, Singapore

4:45 p.m.
MAXIMIZING THE EXPERTISE AND INFRASTRUCTURE OF A PUBLIC-PRIVATE PARTNERSHIP IN ACCELERATING THE IDENTIFICATION OF ANTIMALARIAL CANDIDATES
Roger Wiegand
The Broad Institute of Harvard and MIT, Cambridge, MA, United States

5:05 p.m.
PANEL DISCUSSION AND CLOSING

Scientific Session 153
Filariasis IV – Epidemiology II

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR
Yaya I. Coulibaly
MRTC, Bamako, Mali
Mwele N. Malecela
National Institute for Medical Research, Dar-es-salaam, United Republic of Tanzania.

3:45 p.m.
ONE STEP FORWARD, TWO STEPS BACK? ASSESSING THE IMPACT OF A MISSED MDA CYCLE IN HAITI
Kimberly Y. Won1, Madsen Beau de Rochars2, Dominique Kyelem3, Sandra J. Laney4, Steven A. Williams4, Thomas Streit5, Patrick J. Lammie1
1Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States, 2Hôpital Sainte Croix, Leogane, Haiti, 3Task Force for Child Survival and Development, Emory University, Decatur, GA, United States, 4Clark Science Center, Department of Biological Sciences, Smith College, Northampton, MA, United States, 5Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States

4 p.m.
RATES OF MICROFILARIAL PRODUCTION ON OCHOCERCA VOLVULUS ARE NOT CUMULATIVELY REDUCED BY MULTIPLE IVERMECTIN TREATMENTS
Christian Bottomley1, Valerie Isham2, Richard C. Collins2, Maria-Gloria Basañez4
1Department of Primary Care & Population Sciences, Royal Free Hospital, London, United Kingdom, 2Department of Statistical Science, University College London, London, United Kingdom, 3Sonoita, AZ, United States, 4Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom

4:15 p.m.
DYNAMICS OF OCHOCERCA VOLVULUS MICROFILARIAL LOADS OF CAMEROONIAN PATIENTS SUBMITTED TO REPEATED (5 – 23) IVERMECTIN TREATMENTS OVER 14 YEARS (1994 – 2007)
Sebastien D. Pion1, Hugues Nana-Djeunga2, Catherine Bourguinat1, Jacques Cabaret1, Claude Charvet1, Jacques Gardou1, Joseph Kamgnio3, Flobert Njiokou4, Roger Prichard2, Samuel Wanji1, Michel Boussinesq1
1Institut de recherche pour le Développement, Montpellier, France, 2Université Yaoundé I, Yaoundé, Cameroon, 3Institute of Parasitology, McGill University, Saint Anne de Bellevue, QC, Canada, 4Institut National de la Recherche Agronomique, Tours – Nouzilly, France,

1154

1155

1156
4:30 p.m.  
1157  
PROGRESS TOWARD LYMPHATIC FILARIASIS (LF) ELIMINATION IN PLATEAU AND NASARAWA STATES, NIGERIA: INTEGRATED POPULATION-BASED PREVALENCE SURVEYS AFTER SIX YEARS MASS DRUG ADMINISTRATION  
Jonathan D. King1, Abel Eigege2, John Umaru2, Nimzing Jip2, Emmanuel Mirt2, Paul Emerson2, D. Danjuma Goshit2, Gladys G. Ogah1, N. Njiepuome3, Frank Richards4  
1The Carter Center, Atlanta, GA, United States, 2The Carter Center, Jos, Nigeria, 3Plateau State Ministry of Health, Jos, Nigeria, 4Nasarawa State Ministry of Health, Lafia, Nigeria, 5Nigeria Federal Ministry of Health, Abuja, Nigeria

4:45 p.m.  
1158  
LONG TERM REDUCTION OF WUCHERERIA BANCROFTI TRANSMISSION IN PAPUA NEW GUINEA AFTER CESSION OF MASS DRUG ADMINISTRATION  
Moses J. Bockarie1, Melinda Susapu2, Steven Paniu2, Henry Dagoro2, Daniel Tisch1, Thomas Adiguma1, William Kastens1, Peter A. Zimmerman1, Peter Siba3, James W. Kazura1  
1Case Western Reserve University, Cleveland, OH, United States, 2PNG Institute of Medical Research, Madang, Papua New Guinea, 3PNG Institute of Medical Research, Goroka, Papua New Guinea

5 p.m.  
1159  
PROGRESS TOWARDS ELIMINATION OF ONCHOCERCIASIS AS PUBLIC HEALTH PROBLEM IN PROBLEMATIC AREAS IN WEST AFRICA  
Wilma A. Stolk1, Sake J. de Vlas2, Laurent Yaméogo2, J. Dik Habbema2  
1Erasmus Medical Center, Rotterdam, Netherlands, 2African Program for Onchocerciasis Control, Ouagadougou, Burkina Faso

5:15 p.m.  
1160  
ONCHOCERCIASIS ELIMINATION IN AFRICA: THE POSSIBILITY OF SUCCESS IN AN ISOLATED FOCUS IN SUDAN  
Tong Chor1, Charles Mackenzie1, Mahdi Shamad1, Alia Bilal1, Kamal Hashim1, Moses Katabarwa3, Frank Richards1  
1Ministry of Health, Khartoum, Sudan, 2Michigan State University, East Lansing, MI, United States, 3The Carter Center, Atlanta, GA, United States
Heterogeneity in West Nile Virus Transmission

Waterbury
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

West Nile virus (WNV) spread across North and Central America in less than five years with the unprecedented consequence of establishing endemic transmission cycles in diverse ecosystems and biomes, dramatically altering the risk of arbovirus transmission to humans and wildlife. Unlike the closely related St. Louis encephalitis virus, native to the Americas, WNV is able to overwinter in temperate areas, generate intense avian epizootics with high mosquito infection rates (10-20 percent), and “spills over” to numerous urban mammals. The temporal and geographic variability in incidence of human cases in the United States supports the hypotheses that regional biotic and abiotic factors regulate the intensity of WNV transmission. This symposium addresses mechanisms that govern the observed heterogeneity, particularly host and vector abundance, composition, and competency; vector infection rates and host viremia; and vector feeding pattern on reservoir and incidental hosts. Roger Nasci (co-chair) briefly summarizes the regional differences in human incidence of WNV in the United States. John Anderson explores the enzootic and epizootic nature of West Nile virus transmission in the northeastern United States. Harry Savage reports on the vector competency and host-seeking patterns in the Culex pipiens complex within a hybrid zone (Memphis, Tenn.). Marm Kilpatrick reviews West Nile virus risk assessment and important vectors in Colorado and the mid-Atlantic. Bill Reisen discusses the factors associated with transmission of West Nile virus across diverse landscapes in California. Richard Lampman summarizes the various perspectives of how host and vector heterogeneity impacts transmission cycles. These talks provide a forum where ASTMH members can address the wide range of ecological hypotheses presented in the recent literature on the topic of WNV epidemiology.

CHAIR
Roger S. Nasci
Centers for Disease Control and Prevention, Fort Collins, CO, United States

3:45 p.m.
INTRODUCTION: SPATIAL AND TEMPORAL HETEROGENEITY IN HUMAN CASES OF WEST NILE VIRUS IN THE UNITED STATES
Roger S. Nasci
Centers for Disease Control and Prevention, Fort Collins, CO, United States

3:55 p.m.
EPIZOOTIOLOGY OF WEST NILE VIRUS IN THE NORTHEASTERN U.S. (CONNECTICUT)
John Anderson
The Connecticut Agricultural Experiment Station, New Haven, CT, United States

4:15 p.m.
VECTOR COMPETENCY AND HOST-SEEKING PATTERNS IN THE CULEX PIPIENS COMPLEX WITHIN A HYBRID ZONE (MEMPHIS, TENNESSEE)
Harry M. Savage
Centers for Disease Control and Prevention, Ft. Collins, CO, United States

4:35 p.m.
WEST NILE VIRUS RISK ASSESSMENT AND IMPORTANT VECTORS IN COLORADO AND THE MID-ATLANTIC
A. Marm Kilpatrick
University of California, Santa Cruz, CA, United States
5 p.m.
THE EPIDEMIOLOGICAL IMPLICATIONS OF RECENT ADVANCES IN PLAGUE ECOLOGY
Kenneth L. Gage
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Symposium 157
Stopping Vector-Borne Diseases at the Bite: Recent Progress in Anti-Vector and Transmission-Blocking Vaccines and Drugs
Maurepas
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.
Exciting new discoveries and control strategies have recently emerged that are moving anti-vector and transmission-blocking research forward. Both research avenues aim to prevent community-transmission of vector-borne diseases by inducing host blood components to target vector survival and/or vector-pathogen interactions. Recent mathematical models confirm the power that this approach can have on stemming certain vector-borne diseases. Even more importantly, modern molecular, genetic, and immunological assays are being applied in vector-pathogen systems to discover and test novel molecular targets in a variety of different vectors (including ticks, mosquitoes, and sandflies). This symposium will highlight these recent advancements and will help to bring together those in diverse vector-pathogen systems to share their experiences in this research.

CHAIR
Brian D. Foy
Colorado State University, Fort Collins, CO, United States
Peter Billingsley
Sanaria Inc., Rockville, MD, United States

3:45 p.m.
RECENT PROGRESS IN IDENTIFYING NOVEL ACARICIDAL AND TRANSMISSION-BLOCKING TARGETS IN TICKS
Katherine M. Kocan
Oklahoma State University, Stillwater, OK, United States

4:10 p.m.
ENDECTOCIDES AND MOSQUITO ANTIGENS THAT HIGHLIGHT THE POSSIBILITY OF CONTROLLING MALARIA AND ARBOVIRUSES THROUGH MOSQUITOCIDAL APPROACHES
Brian D. Foy
Colorado State University, Fort Collins, CO, United States

4:35 p.m.
DISCOVERY OF MALARIA PARASITE RECEPTORS IN MOSQUITO MIDGUTS THAT COULD BE TARGETED BY TRANSMISSION-BLOCKING VACCINES
Rhoel R. Dinglasan
Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States

5 p.m.
DISCOVERY OF LEISHMANIA PARASITE-SANDFLY INTERACTION TARGETS FOR TRANSMISSION-BLOCKING AND/OR SANDFLY-KILLING VACCINES
Jesus G. Valenzuela
National Institute of Allergy and Infectious Disease, National Institutes of Health, Bethesda, MD, United States

Scientific Session 158
Viruses II
Bayside A
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR
Kevin Myles
Virginia Tech, Blacksburg, VA, United States
Jorge E. Osorio
University of Wisconsin, Madison, WI, United States

3:45 p.m.
1161
VISUALIZATION OF MONKEYPOX VIRUS PATHOGENESIS BY IN VIVO IMAGING
Jorge E. Osorio1, Keith P. Iams1, Carol Meteyer2, Nicola Pussini2, Elizabeth Falendyz3, Angela Londono-Navas1, Tonie E. Rocke1
1University of Wisconsin, Madison, WI, United States, 2USGS-National Wildlife Health Center, Madison, WI, United States

4 p.m.
1162
IDENTIFICATION AND RELATIVE ABUNDANCE OF SMALL RNAs IN ALPHAVIRUS INFECTED MOSQUITOES
Elaine M. Morazzani, Zach N. Adelman, Kevin M. Myles
Virginia Tech, Blacksburg, VA, United States

4:15 p.m.
1163
ALPHAVIRUS DERIVED SMALL RNAs MODULATE PATHOGENESIS IN DISEASE VECTOR MOSQUITOES
Kevin M. Myles, Michael R. Wiley, Elaine M. Morazzani, Zach N. Adelman
Virginia Tech, Blacksburg, VA, United States

4:30 p.m.
1164
TEMPORAL PATTERNS OF ROTAVIRUS GENOTYPE VARIATION IN RURAL, NORTHERN ECUADOR
Owen D. Solberg1, Maria Eloisa Hasing2, Gabriel Trueba2, Joseph N. Eisenberg3
1University of California Berkeley, Berkeley, CA, United States, 2Universidad San Francisco de Quito, Quito, Ecuador, 3University of Michigan, Ann Arbor, MI, United States
4:45 p.m. 1165

MOLECULAR EVOLUTION OF CHIKUNGUNYA VIRUS IN WEST AFRICA AND EPIDEMIOLOGICAL IMPLICATIONS
Cheikh O. Diene1, Ousmane Faye1, Paolo M. Zanotto2, Ngor Faye3, Mawslouth Diallo1, Amadou A. Sall1
1Institut Pasteur Dakar, Dakar, Senegal, 2University of Sao Paulo, Sao Paulo, Brazil, 3University Cheikh Anta Diop, Dakar, Senegal

5 p.m. 1166

DOUBLE INTRODUCTION OF HIGHLY PATHOGENIC AVIAN INFLUENZA H5N1 IN GHANA IN 2007
Magdi D. Saad1, William Ampofo2, Gregory Racznik1, Marshall Monteville1, Buhari A. Oyofo1, Jeffrey A. Tjaden1
1U.S. Naval Medical Research Unit No. 3, Cairo, Egypt, 2Goguchi Memorial Institute of Medical Research, Accra, Ghana

5:15 p.m. 1167

CASE FATALITY OF SEVERE ACUTE RESPIRATORY SYNDROME (SARS) IN MAINLAND CHINA AND ASSOCIATED RISK FACTORS
Sake J. de Vlas1, Na Jia1, Dan Feng2, Jan Hendrik Richardus1, Wu-Chun Cao2
1Erasmus MC, Rotterdam, Netherlands, 2Beijing Institute of Microbiology and Epidemiology, Beijing, China

Scientific Session 159

Mosquitoes – Biochemistry, Molecular Biology and Molecular Genetics II

Bayside BC
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR
Carlo Costantini
IRD/OCEAC, Yaounde, Cameroon
Alessandra della Torre
University of Rome, Rome, Italy

3:45 p.m. 1168

HIGH HYBRIDIZATION RATE BETWEEN ANOPHELES GAMBIAE MOLECULAR FORMS AT THE WESTERN EXTREME OF THEIR RANGE HIGHLIGHTS POSSIBLE GENE-FLOW IN THE X-CHROMOSOME “SPECIATION ISLAND”
Alessandra Della Torre1, Federica Santolamazza1, Beniamino Caputo1, Emiliano Mancini1, Katinka Pålsson2, Davis Nwakanama1, Musa Jawara1, David Conway1, Zhijian Tu1, Vincenzo Petrarca5, Joao Pinto5
1Dip. Scienze di Sanita’ Pubblica, Universita Sapienza, Rome, Italy, 2Department of Systematic Zoology, Evolutionary Biology Center, Uppsala University, Norbyvägen, Sweden, 3Medical Research Council, Fajara, Gambia, 4Department of Biochemistry, Virginia Polytechnic Institute and State University of Blacksburg, Blacksburg, VA, United States, 5Dip. Genetica e Biologia Molecolare, Universita Sapienza, Rome, Italy, 6Centro de Malaria e outras Doencas Tropicais, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, Lisbon, Portugal

4 p.m. 1169

ECOLOGICAL DIVERGENCE AND REPRODUCTIVE ISOLATION ALONG AN URBANIZATION GRADIENT: HABITAT SEGREGATION OF ANOPHELES GAMBIAE MOLECULAR FORMS IN A FOREST AREA OF CAMEROON
Colince Kamdem1, Carlo Costantini1, Joachim Etouna1, Diego Ayala2, Jean-Pierre Agbor1, Christophe Antonio-Nkondjio1, Didier Fontenille2, Nora J. Besansky3, Frederic Simard4
1Institut de Recherche pour le Developpement (IRD)/Organisation de Coordination pour la lutte contre les grandes Endemies en Afrique Centrale (OCEAC), Yaounde, Cameroon, 2Institut de Recherche pour le Developpement (IRD), Montpellier, France, 3Eck Family Center for Global Health and Infectious Diseases, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States, 4Institut de Recherche pour le Developpement (IRD)/Institut de Recherche en Sciences de la Sante (IRSS), Bobo-Dioulasso, Burkina Faso

4:15 p.m. 1170

A TEP1 MEDIATED RESPONSE IS REQUIRED BUT NOT SUFFICIENT FOR MELANIZATION OF PLASMODIUM FALCIPARUM IN THE ANOPHELES GAMBIAE MIDGUT
Alvaro Molina-Cruz5, Corrie Ortega5, Randall DeJong2, Janneth Rodrigues5, Giovanna Jaramillo-Gutierrez5, Ekuab Abban2, Carolina Barillas-Mury2
1National Institutes of Health, Bethesda, MD, United States, 2National Institutes of Health, Rockville, MD, United States
4:30 p.m.  

1171  

LARVAL ANOPHELINE MOSQUITO RECTA EXHIBIT A DRAMATIC CHANGE IN ION TRANSPORT PROTEINS IN RESPONSE TO SHIFTING SALINITY  

Kristin E. Smith¹, Leslie A. VanEkeris¹, William R. Harvey¹, Peter J. Smith², Paul J. Linser¹  
¹University of Florida, Saint Augustine, FL, United States, ²BioCurrents Research Center, Program in Molecular Physiology, Marine Biological Center, Woods Hole, MA, United States

4:45 p.m.  

1172  

FUNCTIONAL CHARACTERIZATION OF A PLATELET AGGREGATION INHIBITOR FROM THE SALIVARY GLANDS OF Aedes Aegypti  

Saravanan Thangamani¹, Venkata D. Boppana¹, Francisco Alarcon-Chaidez², Jianxin Sun², José M.C Ribeiro¹, Stephen K. Wikel¹  
¹University of Connecticut Health Center, Farmington, CT; Current address: Department of Pathology, University of Texas Medical Branch, Galveston, TX, United States, ²University of Connecticut Health Center, Farmington, CT, United States

5 p.m.  

1173  

SURVIVAL AND REPLICATION OF Wolbachia Pipientis IN Anopheles Gambiae  

Chaoyang Jin  
Johns Hopkins Malaria Research Institute, Baltimore, MD, United States

5:15 p.m.  

1174  

THE ROLE OF SERPINS IN MELANIZATION AND TOLL IMMUNE PATHWAY IN THE MOSQUITO, Aedes Aegypti  

Zhen Zou, Sang Woon Shin, Alexander S. Raikhel  
University of California Riverside, Riverside, CA, United States

5:30 p.m.  

Symposium 160  

Update from the Intermittent Preventive Treatment in Infants (IPTi) Consortium: Community Effectiveness, Status of Policy Recommendations and Future Directions  

Grand Ballroom A  
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.  
The symposium will provide an update on the progress of the IPTi Consortium. Information will be presented regarding the community effectiveness of IPTi with sulfadoxine-pyrimethamine in Tanzania. The findings of the Institute of Medicine (IOM) review of IPTi will be presented. The status of the policy review process at WHO will be reviewed, and the future of IPT as a malaria control strategy (in both infants and children) will be discussed. The history of the IPTi Consortium will be discussed as a model for quickly generating evidence for public health interventions.

CHAIR  
Robert D. Newman  
Centers for Disease Control and Prevention, Atlanta, GA, United States

4 p.m.  

REPORT FROM THE INSTITUTE OF MEDICINE (IOM) REVIEW OF IPTI WITH SP  

Myron M. Levine  
University of Maryland School of Medicine Center for Vaccine Research, Baltimore, MD, United States

4:15 p.m.  

IPT AS A PREVENTION STRATEGY FOR INFANTS AND CHILDREN: WHERE DO WE GO FROM HERE?  

Robert D. Newman  
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:30 p.m.  

THE IPTI CONSORTIUM – A MODEL FOR ACCELERATING PROGRAMMATICALLY RELEVANT SCIENCE  

Pedro Alonso  
Barcelona Center for International Health Research, Barcelona, Spain

4:45 p.m.  

PANEL DISCUSSION
Symposium 161

New Insights on Predictors of Cerebral Malaria Severity

Grand Ballroom B
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

*Plasmodium falciparum* can cause a diffuse encephalopathy known as cerebral malaria (CM), a major contributor to malaria associated mortality. Despite treatment, mortality due to CM can be as high as 30 percent, while 10 percent of survivors of the disease may experience short- and long-term neurological complications. The pathogenesis of CM and other forms of severe malaria is multi-factorial and involve cytokine and chemokine homeostasis, inflammation and vascular injury/repair. Identification of prognostic markers that can predict CM severity is urgently needed to enable development of better intervention. This symposium will provide insights and updates on recent findings that identify factors mediating CM that may have utility in accurately predicting risk and management of CM.

**CHAIR**
Jonathan K. Stiles
Morehouse School of Medicine, Atlanta, GA, United States

3:45 p.m.
NEW INSIGHTS ON CEREBRAL MALARIA MANAGEMENT (CLINICAL OBSERVATIONS)
Charles Newton
KEMRI/Wellcome Trust Collaborative Programme, Kilifi, Kenya

4:10 p.m.
COGNITIVE IMPAIRMENT AFTER CEREBRAL MALARIA IN CHILDREN
Chandy C. John
University of Minnesota, Minneapolis, MN, United States

4:35 p.m.
CEREBROSPINAL FLUID AND SERUM BIOMARKERS OF CEREBRAL MALARIA MORTALITY (SURVEY OF INDIAN AND AFRICAN PATIENTS)
Jonathan K. Stiles
Morehouse School of Medicine, Atlanta, GA, United States

5 p.m.
CHEMOKINE RECEPTOR CXCR3 AND ITS LIGANDS CXCL9 AND CXCL10 IN CEREBRAL MALARIA DEVELOPMENT (MURINE FUNCTIONAL STUDIES)
Andrew Luster
Massachusetts General Hospital, Charlestown, MA, United States

Symposium 162

Partnerships for the Development of Novel Vector Management Strategies (Part 2)

Grand Ballroom C
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

There is a pressing need to develop novel approaches for the management of vectors of human diseases such as malaria, dengue, yellow fever and others, which are becoming more prevalent in many parts of the world. In response to this need, NIAID funded a series of projects focusing on diverse strategies to combat the vectors of malaria and Arboviruses, both domestically and abroad. During this symposium, the investigators heading each project will present the results of their work.

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

3:45 p.m.
PROGRESS TOWARD DEVELOPMENT OF AN ATTRACTANT-BAITED LETHAL OVITRAP FOR *Aedes aegypti* CONTROL
Dawn M. Wesson
Tulane University, New Orleans, LA, United States

4:10 p.m.
CONTROL OF URBAN AND PERI-URBAN *Culex* MOSQUITOES
Gregory C. Lanzaro
University of California, Davis, Davis, CA, United States

4:35 p.m.
MOLECULAR AND GENETIC BASIS OF PYRETHROID RESISTANCE IN *Anopheles funestus*, MAJOR MALARIA VECTOR IN AFRICA
Charles S. Wondji
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

5 p.m.
BEHAVIOR MODIFYING COMPOUNDS FOR DISEASE VECTOR CONTROL
John P. Grieco
Uniformed Services University, Bethesda, MD, United States
Symposium 163
Chagas Disease in the U.S.: How Much is Autochthonous?

Grand Ballroom D
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

This symposium will describe the history and current knowledge of the epidemiology of the parasite Trypanosoma cruzi in the U.S., including the vector-reservoir host cycle and human epidemiology. New information on autochthonous transmission in people and the current distribution of all human infections will be presented. One presentation will describe the experiences of the Chagas disease clinical center of excellence in Los Angeles.

CHAIR
Susan Montgomery
Centers for Disease Control and Prevention, Atlanta, GA, United States

Caryn Bern
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.
OVERVIEW OF EPIDEMIOLOGY AND ECOLOGY OF TRYPSANOSOMA CRUZI IN THE U.S., INCLUDING VECTORS AND RESERVOIRS
Sonia Kjos
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:15 p.m.
TRYPSANOSOMA CRUZI STRAIN DIFFERENCES FROM U.S. ISOLATES
Michael Yabsley
University of Georgia, Athens, GA, United States

4:30 p.m.
AUTOCHTHONOUS RISK OF CHAGAS DISEASE IN THE U.S.; BLOOD DONOR SCREENING AND IMMIGRANT INFECTIONS
Paul Cantey
Centers for Disease Control and Prevention, Atlanta, GA, United States

5:30 p.m.
MEDICAL AND CLINICAL ASPECTS OF CHAGAS DISEASE IN AN AREA OF RELATIVELY HIGH PREVALENCE IN THE U.S.
Sheba Meymandi
David Geffen School of Medicine at UCLA, Sylmar, CA, United States

Scientific Session 164
Intestinal and Tissue Helminths IV

Grand Ballroom E
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR
Raffi V. Aroian
University of California San Diego, La Jolla, CA, United States

Alex DaSilva
Centers for Disease Control and Prevention, Atlanta, GA, United States
**Plenary Session 165**

**Plenary Session IV: Presidential Address and ASTMH Annual Business Meeting**

*Grand Ballroom C*

**Wednesday, December 10, 6 p.m. – 7:30 p.m.**

ASTMH presidential address and annual business meeting.

**CHAIR**

George Hillyer  
*University of Puerto Rico School of Medicine, San Juan, PR, United States*

Edward T. Ryan  
*Massachusetts General Hospital, Boston, MA, United States*

**6 p.m.**

**INTRODUCTION**

Terrie Taylor  
*Michigan State University, East Lansing, MI, United States*

**6:15 p.m.**

**MINDSHARE: WHAT THE HECK IS IT? WHY DO WE NEED IT? HOW DO WE GET IT?**

Claire Panosian  
*UCLA School of Medicine, Los Angeles, CA, United States*

**6:45 p.m.**

**ASTMH ANNUAL BUSINESS MEETING**

George Hillyer  
*University of Puerto Rico School of Medicine, San Juan, PR, United States*

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**Thursday, December 11**

**Registration**

*Napoleon Ballroom*

**Thursday, December 11, 7 a.m. – 10:30 a.m.**

**Cyber Cafe**

*Lagniappe*

**Thursday, December 11, 7 a.m. – 10:30 a.m.**

**Speaker Ready Room**

*Nottoway*

**Thursday, December 11, 7 a.m. – Noon**

**ASTMH Council Meeting**

*Grand Couteau*

**Thursday, December 11, 7:30 a.m. – 9:30 a.m.**

**Press Room**

*Nottoway*

**Thursday, December 11, 7 a.m. – Noon**

**Symposium 166**

**Latin America: Confronting Dengue in the XXI Century**

*Gallery*

**Thursday, December 11, 8 a.m. – 9:45 a.m.**

Dengue is among the fastest expanding urban infectious diseases of the present time, with no vaccine, no therapeutic available and overall lack of understanding of its severe outcome from the point of view of its molecular basis. This situation requires bridging expertise from large areas of knowledge, including geography, epidemiology, public health, entomology, immunology, vaccinology, genomics, and structure and molecular biology, to try to solve this urgent health problem. Among the affected dengue areas of the world, Latin America has a complex political, social and health situation that may aggravate disease outcome. Due to the large-scale and impact of dengue in the region, urgent measures are required in areas of basic research and applied sciences. Particularly, in clinical research, there is a need to redefine dengue fever as hemorrhagic fever syndrome, evaluate immune evasion mechanisms, propose new therapeutics, study neutralizing antibody responses in the light of new data on viral genome variations, etc. This session will exhibit the reality of dengue research in Latin America in order to project future interventions. In the light of this discussion, worldwide organizations need to move forward as axes of knowledge-gatherers, and most importantly, as action generators in this region. Five experts in the field speak about first-hand experiences and present results from their clinical studies.

**CHAIR**

*H. L. Munoz-Jordan*

*Centers For Disease Control and Prevention, San Juan, Puerto Rico*

Irene Bosch Blumenfeld  
*University of Massachusetts Medical School, Worcester, MA, United States*

Jorge Muñoz-Jordán  
*Center for Disease Control and Prevention, San Juan, PR, United States*
Over the last decade, several new zoonotic paramyxoviruses have emerged from fruit bats to cause serious disease outbreaks in man and livestock. Hendra virus was the cause of fatal infections of horses and man in Australia in 1994, 1999 and 2004. Nipah virus infection was first reported in peninsular Malaysia and Singapore in 1998-1999 when it caused an outbreak of severe respiratory disease in pigs and fatal encephalitis in humans with high mortality rates (~40 percent). Spillover events of human Nipah infection have continued in this region, with outbreaks sporadically occurring in Bangladesh and West Bengal, India. The outbreaks in Bangladesh were associated with a higher incidence of acute respiratory distress syndrome in conjunction with encephalitis, person-to-person transmission, and appeared to be associated with higher case fatality rates (~75 percent) than the original Malaysian outbreak. Because of their genetic constitution, virulence and wide host range, these viruses have been given Biosafety Level 4 status in a new genus Henipavirus within the family Paramyxoviridae. This symposium will cover the current knowledge of Hendra and Nipah virus ecology and epidemiology, with an emphasis on the role of fruit bats as a reservoir and the potential importance of person-to-person transmission in fueling outbreaks. Speakers will also present new findings on the mechanisms of henipavirus pathogenesis and discuss newly developed animal models and candidate treatment modalities.

Chair

Thomas Geisbert
National Emerging Infectious Diseases Laboratories Institute, Boston, MA, United States
Christopher Broder
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Symposium 167

Nipah and Hendra Viruses: Transmission, Pathogenesis, and Treatment

Waterbury

Thursday, December 11, 8 a.m. – 9:45 a.m.

Over the last decade, several new zoonotic paramyxoviruses have emerged from fruit bats to cause serious disease outbreaks in man and livestock. Hendra virus was the cause of fatal infections of horses and man in Australia in 1994, 1999 and 2004. Nipah virus infection was first reported in peninsular Malaysia and Singapore in 1998-1999 when it caused an outbreak of severe respiratory disease in pigs and fatal encephalitis in humans with high mortality rates (~40 percent). Spillover events of human Nipah infection have continued in this region, with outbreaks sporadically occurring in Bangladesh and West Bengal, India. The outbreaks in Bangladesh were associated with a higher incidence of acute respiratory distress syndrome in conjunction with encephalitis, person-to-person transmission, and appeared to be associated with higher case fatality rates (~75 percent) than the original Malaysian outbreak. Because of their genetic constitution, virulence and wide host range, these viruses have been given Biosafety Level 4 status in a new genus Henipavirus within the family Paramyxoviridae. This symposium will cover the current knowledge of Hendra and Nipah virus ecology and epidemiology, with an emphasis on the role of fruit bats as a reservoir and the potential importance of person-to-person transmission in fueling outbreaks. Speakers will also present new findings on the mechanisms of henipavirus pathogenesis and discuss newly developed animal models and candidate treatment modalities.

Chair

Thomas Geisbert
National Emerging Infectious Diseases Laboratories Institute, Boston, MA, United States
Christopher Broder
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Scientific Session 168

Malaria – Biology and Pathogenesis I

Napoleon A123
Thursday, December 11, 8 a.m. – 9:45 a.m.

Chair

Fiona E. Lovegrove
University of Toronto, Toronto, ON, Canada
Demba Sarr
Pasteur Institute of Dakar, Dakar, Senegal

1182

Nitric Oxide Depletion and Endothelial Dysfunction in Children with Malaria and Marked Anemia

Jacqueline Janka1, Ousmane A. Koita1, Maya Joseph2, Broulayé Traoré2, Fawaz Mzayek2, Lansana Sangare2, Ousmane Cissé2, Laurel Mendelsohn1, Xunde Wang1, Henry Masur1, Mark Gladwin1, Donald J. Krogstad2

1National Institutes of Health, Bethesda, MD, United States, 2University of Bamako, Bamako, Mali, 3Hôpital Gabriel Touré, Bamako, Mali, 4Tulane University, New Orleans, LA, United States
8:15 a.m. 1183

ANGIOPOIETIN-2, AN AUTOCRINE MEDIATOR OF ENDOTHELIAL ACTIVATION IS ASSOCIATED WITH PARASITE BIOMASS, ENDOTHELIAL DYSFUNCTION AND MORTALITY IN SEVERE FALCIPARUM MALARIA

Tsun W. Yeo1, Daniel Lampah2, Emiliana Tjitra2, Retno Gitawati1, Enny Kenangalem3, Kim Piera1, Ric Price2, Stephen Duffull1, David Celermajer1, Nick Anstey1

1Menzies School of Health Research, Darwin, Australia, 2Menzies-National Institutes of HealthRD Timika Malaria Research Program and District Ministry of Health, Timika, Papua, Indonesia, 3National Institutes of Health Research and Development, Jakarta, Indonesia, 4Menzies-National Institutes of HealthRD Timika Malaria Research Program, Timika, Papua, Indonesia, 5University of Otago, Dunedin, New Zealand, 6University of Sydney, Sydney, Australia

8:30 a.m. 1184

ANGIOPOIETIN-1 AND -2 AS NOVEL BIOMARKERS OF CEREBRAL MALARIA

Fiona E. Lovegrove1, Erin I. Lafferty1, Andrea Conroy1, Nimerta Rajwans1, Noppapon Tangpukdee2, Srinvicha Krudsood2, Robert O. Opoka3, Chandy John4, W. Conrad Liles1, Kevin C. Kain1

1McLaughlin-Rotman Centre for Global Health, University Health Network, University of Toronto, Toronto, ON, Canada, 2Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, 3Department of Paediatrics and Child Health, Makerere University, Kampala, Uganda, 4Department of Pediatrics, University of Minnesota Medical School, Minneapolis, MN, United States

8:45 a.m. 1185

ADAMTS13 DEFICIENCY WITH ELEVATED LEVELS OF ULTRA-LARGE AND ACTIVE VON WILLEBRAND FACTOR IN MALARIA

Quirijn de Mast1, Andre J. van der Ven1, Puij B. Asih1, Din Syarifuddin1, Silvie Sebastian1, Evelyn Groot2, Philip G. de Groot3, Rob Fijnheer4

1Radboud University Nijmegen Medical Center, Nijmegen, Netherlands, 2Eijkman Institute for Molecular Biology, Jakarta, Indonesia, 3University Medical Center Utrecht, Utrecht, Netherlands

9 a.m. 1186

SINGLE MOLECULAR FORCE SPECTROSCOPY STUDY OF PLASMODIUM FALCIPARUM-INFECTEDERYTHROCYTE CYTOADHERENCE TO ENDOTHELIAL RECEPTORS

Ang Li, Tong Seng Lim, Hui Shi, Jing Yin, Shyong Wei Tan, Chwee Teck Lim

National University of Singapore, Singapore, Singapore

9:30 a.m. 1187

CSA POTENTIALITIES DYSREGULATED INFLAMMATORY AND ANGIOGENIC RESPONSES IN PREGNANCY-ASSOCIATED MALARIA

Andrea L. Conroy1, Constance Finney1, Lena Serghides1, Simon O. Owino1, D. Channe Gowda2, W. Conrad Liles1, Julie M. Moore1, Kevin C. Kain1

1University of Toronto, Toronto, ON, Canada, 2Center for Tropical and Emerging Global Diseases and Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, GA, United States, 3Department of Biochemistry and Molecular Biology, Pennsylvania State University, College of Medicine, Hershey, PA, United States

8:15 a.m. 1188

DIFFERENTIAL IMMUNOPATHOGENIC OUTCOMES OF PLASMODIUM CHABAUDI AS INFECTION DURING PREGNANCY IN A/J AND B6 MICE

Demba Sarr1, Jayakumar Poovassery2, Geoffrey Smith1, Tamas Nagy1, Julie M. Moore1

1University of Georgia, Athens, GA, United States, 2University of Iowa, Ames, IA, United States

Drug Resistance in Helminth Parasites: Fact, Fiction and Uncertainty

Bayside A
Thursday, December 11, 8 a.m. – 9:45 a.m.

There are increasing reports of decreased drug efficacy or sub-optimal responses to treatment in parasitic helminth infections of humans, as well as emerging evidence of genetic changes in parasite populations that have been subjected to multiple rounds of anthelmintic treatment, suggestive of treatment-induced selection. At the same time, there are unprecedented efforts to implement mass drug administration on a global scale to control helminth infections in human populations. Anthelmintic resistance is now widespread in parasitic helminths of livestock and lessons can be learned from that experience. The symposium will explore methods that can be employed to monitor for drug resistance, examine the evidence that resistance may or may not be developing, assess the current level of monitoring for resistance, discuss the implications of resistance development for control programs and consider how mathematical models of drug resistance can help determine research questions that need addressing and inform policy, such that parasite control can be achieved yet resistance be delayed or managed.

CHAIR
Roger K. Prichard
McGill University, Sainte Anne-de-Bellevue, QC, Canada
Ray M. Kaplan
University of Georgia, Athens, GA, United States
8 a.m.
ANTHELMINTIC RESISTANCE IN SOIL TRANSMITTED
HELMINTHS? CURRENT EVIDENCE, TOOLS FOR MONITORING
AND RESEARCH NEEDS
James McCarthy
University of Queensland, Herston, Australia

8:25 a.m.
SHOULD WE BE CONCERNED ABOUT DRUG RESISTANCE
DEVELOPING IN LYMPHATIC FILARIA?
Patrick Lammie
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:50 a.m.
SUB-OPTIMAL RESPONSES TO IVERMECTIN IN ONCHOCERCA
VOLVULUS: CURRENT SITUATION, FUTURE PROSPECTS
Michel Boussinesq
Institut de Recherche en Developpement, Montpellier, France

9:15 a.m.
THE DETECTION AND SPREAD OF ANTHELMINTIC
RESISTANCE: LESSONS FROM MODELING
María-Gloria Basáñez
Imperial College, London, United Kingdom

Scientific Session 171
Clinical Tropical Medicine III

Grand Ballroom C
Thursday, December 11, 8 a.m. – 9:45 a.m.

8 a.m.

Progress Towards Understanding Fitness of Transgenic Mosquitoes

Bayside BC
Thursday, December 11, 8 a.m. – 9:45 a.m.

Genetic modification of mosquitoes offers a promising strategy for the
prevention and control of mosquito-borne diseases. Although various
genetically modified strains have been designed and established in the
laboratory, the debate about the potential effects of genetic modification
on mosquito fitness, and deployment for success for disease control, is
significant. In this symposium, speakers will present their latest findings
on the ecology of genetically modified mosquitoes, with special emphasis
on the role of fitness in experimental, field and modeling studies of Aedes
aegypti.

CHAIR
Laura C. Harrington
Cornell University, Ithaca, NY, United States
Constantianus J.M. Koenraad
Wageningen University, Wageningen, Netherlands

8 a.m.
COMPETITION AMONG THE LARVAL STAGES OF WILD,
INBRED AND TRANSGENIC AE. AEGYPTI
Constantianus J.M. Koenraad
Wageningen University, Wageningen, The Netherlands.

8:25 a.m.
MALE FITNESS AND MATING BIOLOGY OF TRANSGENIC AE.
AEGYPTI
Laura C. Harrington
Cornell University, Ithaca, NY, United States
8:15 a.m.

1190

THE LAMBARÉNÉ-ORGAN-DYSFUNCTION SCORE (LODS) IS A SIMPLE CLINICAL PREDICTOR FOR FATAL MALARIA IN AFRICAN CHILDREN

Raimund Helbok¹, Eric Kendjo², Saadou Issifou¹, Peter Lackner³, Charles R. Newton⁴, Maryvonne Kombila⁵, Tsiri Agbenye⁶, Klaus Dietz⁷, Kalifa Bojang⁸, Erich Schmutzhard¹, Peter G. Kremsner²

¹Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon; Innsbruck Medical University, Clinical Department of Neurology, Austria, ²Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon; Department of Parasitology, Institute of Tropical Medicine, University of Tübingen, Tübingen, Germany, ³Innsbruck Medical University, Clinical Department of Neurology, Innsbruck, Austria, ⁴Centre for Geographical Medicine, Kenya Medical Research Institute Kilifi, Kilifi, Kenya; ⁵Neuroscience Unit, Institute of Child Health, University College London, London, United Kingdom, ⁶Department of Parasitology, Mycology and Tropical Medicine, Faculty of Medicine, University of Health Sciences Libreville, Libreville, Gabon, Gabon, ⁷University of Science and Technology, School of Medical Sciences Libreville, Libreville, Gabon, Gabon, ⁸University of Science and Technology, School of Medical Science, Kumasi, Ghana, ⁹Department of Medical Biometry, University of Tübingen, Tübingen, Germany, ¹⁰Medical Research Council Laboratories, Banjul, Banjul, Gambia

8:30 a.m.

1191

SULFADOXINE-PYRIMETHAMINE VERSUS UNSUPERVISED ARTEMETHER-LUMEFANTRINE VERSUS UNSUPERVISED AMODIAQUINE-ARTESUNATE FIXED-DOSE FORMULATION FOR UNCOMPLICATED FALCIPARUM MALARIA IN BENINESE CHILDREN: A RANDOMIZED EFFECTIVENESS NON-INFERIORITY TRIAL

Jean-François Faucher¹, Agnes Aubouy¹, Adicat Adeothy¹, Justin Donritchamou¹, Hortense Kossou¹, Hyacinthe Amedome¹, Achille Massougbdjiki², Michel Cot³, Philippe Deloron⁴

¹IRD, Cotonou, Benin, ²PNLP, Cotonou, Benin, ³Ministry of Public health, Cotonou, Benin, ⁴FSS, Cotonou, Benin, ⁵IRD, Paris, France

8:45 a.m.

1192

RISK FOR SEVERE DISEASE IN ADULTS WITH FALCIPARUM MALARIA

Geoffrey Pasvol¹, Anastasia Phillips², Paul Bassett², Sebastian Szekri³, Stanton Newman¹

¹Imperial College London, Harrow, United Kingdom, ²Northwick Park Hospital, Harrow, United Kingdom, ³University College London, London, United Kingdom

9 a.m.

1193

ASSESSING THE CARDIAC EFFECTS OF ARTESUNATE (AS) AND AMODIAQUINE (AQ) IN HEALTHY VOLUNTEERS IN A SAFETY AND PK, SINGLE DOSE, RANDOMISED, TWO PHASE CROSS OVER STUDY OF A NEW FIXED DOSE AS/AQ COMBINATION AND LOOSE AS + AQ

Walter Taylor¹, Mohamed Suhaimi², Siew Gab³, Suresh Ramanathan¹, Sharif Mansor⁴, Michel Vaillant⁵, NW Sir⁶, Piero Oliaro⁷, Jean-Rene Kiechel², Viswerwaran Navaratnam²

¹Oxford University, Hanoi, Vietnam, ²Universiti Sains Malaysia, Klang, Kuala Lumpur, Malaysia, ³Universiti Sains Malaysia, Penang, Malaysia, ⁴Centre for Health Studies, Luxembourg, Luxembourg, ⁵WHO/TDR, Geneva, Switzerland, ⁶DNDi, Geneva, Switzerland

9:15 a.m.

1194

INTRAVASCULAR HEMOLYSIS: A NEGLECTED MECHANISM OF NITRIC OXIDE QUENCHING, ENDOTHELIAL DYSFUNCTION AND IMPAIRED PERFUSION IN SEVERE FALCIPARUM MALARIA?

Tsn W. Yeo¹, Daniel Lampah², Emiliama Tjitra³, Retno Gitawati³, Enny Kenangalem⁴, Kim Piera⁵, Bert Lopansri⁶, Don Granger⁶, J Brice Weinberg⁶, Ric Price³, David Celermajer³, Stephen Duffull³, Nick Anstey¹

¹Menzies School of Health Research, Darwin, Australia, ²MSHR-National Institutes of HealthRD Research Program and District Health Authority, Timika, Papua, Indonesia, ³National Institutes of Health Research and Development, Jakarta, Indonesia, ⁴MSHR-National Institutes of HealthRD Timika Research Program and District Health Authority, Timika, Papua, Indonesia, ⁵University of Utah, Salt Lake City, UT, United States, ⁶Duke University, Durham, NC, United States, ⁷University of Sydney, Sydney, Australia, ⁸University of Otago, Dunedin, New Zealand

9:30 a.m.

1195

PHARMACOKINETIC PROPERTIES OF CHLOROQUINE AND SULFADOXINE-PYRIMETHAMINE IN PREGNANCY

Harin A. Karunajeewa¹, Ivo Mueller², Madhu Page-Sharp³, Irwin Law¹, Sam Salman¹, Gomorrai Servina², Jovitha Lammy², Stephen Rogers³, Peter Siba³, Kenneth F. Ilett³, Timothy M. Davis¹

¹University of Western Australia, Perth, Australia, ²Papua New Guinea Institute of Medical Research, Goroka, Papua New Guinea, ³University of Melbourne, Melbourne, Australia
Scientific Session 172

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Immunoparasitology I

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom D

Thursday, December 11, 8 a.m. – 9:45 a.m.

CHAIR
Matthew Collins
University of Georgia, Athens, GA, United States
Constance A. Finney
University of Toronto, Toronto, ON, Canada

8 a.m.

1240
THE ROLE OF TNF AND MYD88 IN THE INDUCTION OF B CELL PATHOLOGY FOLLOWING TRYPANOSOMA BRUCEL INFECTION

Viki Bockstal1, Patrick Guirnalda1, Deborah Frenkel1, Stefan Magez2, Samuel Black1
1University of Massachusetts, Department of Veterinary and Animal Sciences, Amherst, MA, United States, 2Flanders Interuniversity Institute for Biotechnology (VIB), Vrije Universiteit Brussels Laboratory of Cellular and Molecular Immunology, Department of Molecular and Cellular Recognition, Brussels, Belgium

8:15 a.m.

1196
CD8+ T CELL RESPONSES IN NONLYMPHOID TISSUE AND PARASITE CONTROL DURING TRYPANOSOMA CRUZI INFECTION

Matthew H. Collins, Rick L. Tarleton
University of Georgia, Athens, GA, United States

8:30 a.m.

1241
NEUTROPHILS ARE THE PREDOMINANT INITIAL HOST CELL FOR LEISHMANIA MAJOR AND ARE ESSENTIAL FOR THE ESTABLISHMENT OF SAND FLY TRANSMITTED INFECTION

Nathan C. Peters1, Jackson G. Egen2, Naglia Secundino1, Alain Debrabant1, Nicola Kimblin1, Shaden Kamhawi1, Phillip Lawyer1, Ronald N. Germain2, David Sacks1
1National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Parasitic Diseases, Bethesda, MD, United States, 2National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunology, Bethesda, MD, United States, 3Division of Emerging and Transfusion Transmitted Diseases, OBR, CBER, Food and Drug Administration, Bethesda, MD, United States

8:45 a.m.

1197
LEISHMANIA BRAZILIENSIS INTERACTION WITH DENDRITIC CELLS: DISTINCT ROLES FOR TLR2 AND TLR3

Diego A. Vargas-Inchaustegui, Lijun Xin, Lynn Soong
University of Texas Medical Branch, Galveston, TX, United States

9 a.m.

1198
TLR INVOLVEMENT DURING EXPERIMENTAL MALARIA: IMPLICATIONS FOR BOTH ENDS OF THE CLINICAL SPECTRUM OF HUMAN DISEASE

Constance A. Finney, Ziyue Lu, W. Conrad Liles, Kevin C. Kain
University of Toronto, Toronto, ON, Canada

9:15 a.m.

1199
MOSQUITO RUNX4 IN THE IMMUNE REGULATION OF PPO GENES AND ITS EFFECT ON AVIAN MALARIA INFECTION

Sang Woon Shin, Zhen Zou, Kanwal Alvarez, Vladimir Kokoza, Alexander Raikhel
University of California Riverside, Riverside, CA, United States

9:30 a.m.

1200
STIMULATION OF TOLL-LIKE RECEPTOR 2 BY PLASMODIUM FALCIPARUM GLYCOSYPHOSPHATIDYLSINOSITOLS ENHANCES MACROPHAGE INTERNALIZATION OF PARASITIZED AND UNINFECTED ERYTHROCYTES

Laura Erdman, Kevin C. Kain
University of Toronto, Toronto, ON, Canada

Scientific Session 173

Kinetoplastida II: Epidemiology, Diagnosis and Treatment

Grand Ballroom E

Thursday, December 11, 8 a.m. – 9:45 a.m.

CHAIR
Frederick S. Buckner
University of Washington, Seattle, WA, United States
Peter J. Weina
Walter Reed Army Institute of Research, Silver Spring, MD, United States

8 a.m.

1201
CONGENITAL CHAGAS DISEASE TRANSMISSION IN SANTA CRUZ, BOLIVIA

Caryn Bern1, Maritza Calderon2, Carlos LaFuente3, Gerson Galdos3, Maria del Carmen Abastorflor4, Hugo Aparicio4, Mark Brady5, Lisbeth Ferrufino5, Manuela Verastegui6, Robert H. Gilman5, Cesar Naquira4
1Centers for Disease Control and Prevention, Atlanta, GA, United States, 2Universidad Peruana Cayetano Heredia, Lima, Peru, 3Hospital Universitario Japones, Santa Cruz, Bolivia, 4Asociacion Benefica PRISMA, Lima, Philippines, 5Asociacion Benefica PRISMA, Lima, Peru, 6Johns Hopkins University School of Public Health, Baltimore, MD, United States
8:15 a.m.

1202

DIAGNOSTIC ACCURACY OF LEISHMAMIA OLIGOC-TEST FOR THE DIAGNOSIS OF CUTANEOUS LEISHMANIASIS IN PERU

Diego Espinosa 1, Andrea K. Bogd 1, Stijn Deborghgraeven 1, Thierry Laurent 1, Cristian Valencia 1, César Miranda-Verástegui 1, Alejandro Llanos-Cuentas 1, Thierry Leclipteux 1, Jean-Claude Dujardin 1, Philippe Büscher 1, Jorge Arévalo 1

1 Instituto de Medicina Tropical "Alexander von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru; 2 Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada; 3 Department of Parasitology, Institute of Tropical Medicine, Antwerp, Belgium; 4 Coris BioConcept, Gembloux, Belgium

8:30 a.m.

1203

EQUIVALENCE STUDY USING REDUCED DOSES OF ANTIMONY PLUS RECOMBINANT HUMAN GM-CSF COMPARED WITH ANTIMONY IN STANDARD DOSES FOR CUTANEOUS LEISHMANIASIS: A RANDOMIZED, DOUBLE BLIND STUDY

Roque P. Almeida 1, Maria Elisa A. Rosa 1, Josiane S. Carvalho 1, Julia Ampuero 1, Luis Henrique Guimaraes 1, Paulo R. Machado 2, Edgar M. Carvalho 2

1 Federal University of Sergipe, Aracaju-SE, Brazil; 2 Federal University of Bahia, Salvador-BA, Brazil; 3 Federal University of Brasilia, Brasilia-DF, Brazil

8:45 a.m.

1204

A NOVEL AND HIGHLY POTENT CLASS OF COMPOUNDS FOR THE TREATMENT OF TRYPANOSOMIASIS

Richard C. Thompson 1, Tanya Armstrong 1, Wayne M. Best 2, Susan Charman 1, Robert Don 1, Caroline Laverty 1, Giuseppe Luna 1, Colette Colette 1

1 Murdoch University, Murdoch, Australia; 2 Epicentrum Pty Ltd, Murdoch, Australia; 3 Centre for Drug Candidate Optimisation, Monash University, Melbourne, Australia; 4 Drugs for Neglected Diseases Initiative, Geneva, Switzerland

9 a.m.

1205

AN2920, A NOVEL OXABORALE, SHOWS IN VITRO AND IN VIVO ACTIVITY AGAINST TRYPANOSOMA BRUCEI

Yvonne R. Freund 1, Jacob Plattner 1, Maha Abdulla 1, James McKerrow 1, Tana Bowling 1, Luke Mercer 1, Bakela Nare 1, Steven Wring 1, Robert Jacobs 1, Nigel Yarlett 1, Cyrus Bacchi 1, Louis Maes 1, Robert Don 2

1 Anacor Pharmaceuticals, Inc., Palo Alto, CA, United States; 2 Sandler Center, University of California San Francisco, San Francisco, CA, United States; 3 Scynexis, Inc., Research Triangle Park, NC, United States; 4 Haskins Laboratory, Pace University, New York, NY, United States; 5 University of Antwerp, Antwerp, Belgium; 6 Drugs for Neglected Diseases initiative, Geneva, Switzerland

9:15 a.m.

1206

SCREENING FDA APPROVED DRUGS FOR ACTIVITY AGAINST TRYPANOSOMA CRUZI: LOOKING FOR COMBINATION CHEMOTHERAPY FOR CHAGAS DISEASE

Frederick S. Buckner, Joseph D. Planer

University of Washington, Seattle, WA, United States

(ACMCIP Abstract)

9:30 a.m.

1207

ANTILEISHMANIAL ACTIVITY OF SELECTED FDA-APPROVED DRUGS IN A MURINE CUTANEOUS LEISHMANIASIS MODEL

David Saunders, Qiqui Li, Carlson Misty, Lisa Xie, Qing Zheng, Jing Zhang, Juan Mendez, John Tally, Alan Magill, Grogi Max, Suping Jiang, Peter Weina

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

Coffee Break

Napoleon Ballroom

Thursday, December 11, 9:45 a.m. – 10:15 a.m.

Symposium 174

Measuring Disease Burden and Cost of Illness of Neglected Tropical Diseases: Lessons from a Multi-Country Dengue Study

Gallery

Thursday, December 11, 10:15 a.m. – Noon

This session will review challenges and solutions for measuring health impact and quality of life during an acute illness episode that affects children or adults. Challenges and solutions for merging and extrapolating survey and incomplete surveillance data on illness cases and deaths will be discussed. Participants will study methodological challenges and approaches for estimating cost of illness including costs of medical care and productivity losses from patients’ illness and death and the family’s time in providing care. Finally, presenters will explore approaches for combining information on illness episodes with data on vector control to obtain the total cost of dengue, and the implications for other neglected tropical diseases.

Chair

Jose A. Suaya

Brandeis University, Waltham, MA, United States

Donald S. Shepard

Brandeis University, Waltham, MA, United States

Scott B. Halstead

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

10:15 a.m.

Introduction

Jose Suaya

Brandeis University, Waltham, MA, United States
10:25 a.m.  
INTRODUCTION  
Scott B. Halstead  
Uniformed Services University of the Health Science, North Bethesda, MD, United States  

10:40 a.m.  
ANALYZING THE HEALTH IMPACT OF DENGUE  
Celina T. Martelli  
Federal University of Goias, Goiania, Brazil  

10:55 a.m.  
ASSESSING QUALITY OF LIFE DURING A DENGUE ILLNESS EPISODE  
Lucy C. Lum  
University Malaya, Kuala Lumpur, Malaysia  

11:10 a.m.  
ESTIMATING COST OF DENGUE TREATMENT  
Sukontha Kongsin  
Mahidol University, Bangkok, Thailand  

11:25 a.m.  
ESTIMATING COST OF DENGUE IN PUERTO RICO: COST PER EPISODE  
Hamish Mohammed  
Centers for Disease Control and Prevention, San Juan, PR, United States  

11:40 a.m.  
ESTIMATING COST OF DENGUE IN PUERTO RICO: AGGREGATE COST  
Donald S. Shepard  
Brandeis University, Waltham, MA, United States  

Symposium 175  
Viral Hemorrhagic Fevers  
Waterbury  
Thursday, December 11, 10:15 a.m. – Noon  

Hemorrhagic fever viruses pose threats to human health in populations in endemic areas, as well as through potential use as bioterrorist agents. Ebola, Marburg, Lassa, and Rift Valley fever virus are among the agents of particular concern. Recent field research has shed light on the natural reservoirs and modes of transmission of many of these agents. Furthermore, intensive laboratory research has begun to produce candidate diagnostics, treatments and vaccines with the potential to drastically reduce case fatality rates and curtail outbreaks. Recent progress in the field of viral hemorrhagic fevers will be discussed.

CHAIR  
Daniel G. Bausch  
Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States  

10:15 a.m.  
IS THE MYSTERY OF THE FILOVIRUS RESERVOIR SOLVED?  
Jonathan Towner  
Centers for Disease Control and Prevention, Atlanta, GA, United States  

10:40 a.m.  
RECOMBINANT DIAGNOSTICS FOR THE ARENAVIRUSES  
Joseph Fair  
Southern Research Institute, Birmingham, AL, United States  

11:05 a.m.  
EXPERIMENTAL THERAPIES  
Brian Gowen  
Utah State University, Logan, UT, United States  

11:30 a.m.  
VACCINES  
Heinz Feldmann  
Public Health Agency of Canada, Winnipeg, MB, Canada  

Scientific Session 176  
Malaria – Biology and Pathogenesis II  
Napoleon A123  
Thursday, December 11, 10:15 a.m. – Noon  

CHAIR  
Amanda K. Lukens  
Harvard School of Public Health, Boston, MA, United States  
Kayla T. Wolofsky  
University of Toronto, Toronto, ON, Canada  

10:15 a.m.  
ROLE OF RED CELL COMPLEMENT REGULATORY PROTEINS IN ERYTHROPHAGOCYTOSIS DURING PLASMODIUM CHABAUDI INFECTION  
Juliana V. Harris1, Catherine N. Stracener1, Xiaobo Wu2, Dirk Spitzer2, John P. Atkinson2, José A. Stout1  
1Uniformed Services University, Bethesda, MD, United States, 2Washington University, St. Louis, MO, United States  
(ACMCIP Abstract)  

10:30 a.m.  
ATP DEPLETION OF RED BLOOD CELLS Recapitulates The Phenotype Associated With Pyruvate Kinase Deficiency and Protects Against Plasmodium Falciparum Malaria  
Kodjo Ayi1, Conrad W. Conrad2, Kevin C. Kain3  
1Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health, University of Toronto, Toronto, ON, Canada, 2Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine; Institute of Medical Sciences, Toronto, ON, Canada, 3Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine; Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada
10:05 a.m.

**Symposium 177**

**Sepsis in the Tropics**

Bayside A

**Thursday, December 11, 10:15 a.m. – Noon**

Sepsis is an increasingly recognized cause of death in the tropics, particularly in sub-Saharan Africa where the burden of HIV infection contributes to the susceptibility to invasive bacterial infections. However, the ability to treat critical illnesses, including sepsis, severe sepsis, and septic shock, is often limited by lack of human and material resources in tropical regions. A better understanding of the current state of intensive care in the tropics is needed to improve capacity to treat these illnesses. Furthermore, successful empirical treatment of sepsis relies upon an understanding of local microbiology and resistance patterns which differ geographically between tropical and non-tropical regions, as well as within the tropics. The interaction of malaria and HIV infection with invasive bacterial infections must also be considered. Additionally, due to lack of resources, different strategies regarding diagnosis and treatment of sepsis are required compared to resource rich regions where comprehensive but heavily resource dependent early goal-directed therapy and sepsis “bundles” are standard of care. This symposium will address these topics and strategies for managing the septic patient in the tropics.

**CHAIR**

Christopher C. Moore

University of Virginia, Charlottesville, VA, United States

W. Michael Scheld

University of Virginia, Charlottesville, VA, United States

10:15 a.m.

**THE CURRENT STATE OF INTENSIVE CARE IN THE TROPICS**

Patrick Banura

Masaka Regional Referral Hospital, Masaka, Uganda

10:40 a.m.

**THE MICROBIOLOGY OF SEPSIS IN THE TROPICS**

Christopher Moore

University of Virginia, Charlottesville, VA, United States

11:05 a.m.

**SPECIAL CONSIDERATIONS FOR SEPSIS IN THE TROPICS: AGE, GEOGRAPHY, AND HIV IMMUNE RECONSTITUTION SYNDROME**

David Boulware

University of Minnesota, Minneapolis, MN, United States

11:30 a.m.

**THE DIAGNOSIS AND MANAGEMENT OF SEPSIS IN THE TROPICS**

Shevin T. Jacob

University of Washington, Seattle, WA, United States
Scientific Session 178
Mosquitoes – Insecticide Resistance and Control

Bayside BC
Thursday, December 11, 10:15 a.m. – Noon

CHAIR
Audrey Lenhart
Liverpool School of Tropical Medicine, Liverpool, United Kingdom
Charles Wendjii
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:15 a.m.

1216

TOXICITY OF HIGHLY SELECTIVE CARBAMATES TOWARDS THE MALARIA MOSQUITO, ANOPELELES GAMBIAE
James M. Mutunga1, Troy D. Anderson1, Bryan T. Jackson1, Joshua A. Hartsel1, Sally L. Paulson2, Paul R. Carlier3, Jeffrey R. Bloomquist4
Virginia Tech, Blacksburg, VA, United States

10:30 a.m.

1217

COMBINING ORGANOPHOSPHATES AND REPELLENTS ON FABRICS: A PROMISING STRATEGY TO BETTER CONTROL PYRETHROID RESISTANT MOSQUITOES
Cédric Pennetier1, Costantini Carlo2, Chabi Joseph3, Dabiré Rock4, Corbel Vincent5, Lapied Bruno5, Pagès Frédéric6, Hougard Jean-Marc7
1Institut de Recherche pour le Développement, Montpellier, France, 2Institut de Recherche pour le Développement, Bobo-Dioulasso, Burkina Faso, 3Institut de Recherche pour le Développement, Cotonou, Benin, 4Institut de Recherche en Sciences de la Santé (IRSS), Bobo-Dioulasso, Burkina Faso, 5Université d’Angers, Angers, France, 6Institut de Médecine Tropicale du service de Santé des Armées, Marseille, France

10:45 a.m.

1218

DEVELOPMENT OF A NOVEL FORMULATION FOR USE IN INDOOR RESIDUAL SPRAY PROGRAMS
John R. Lucas1, Takaaki Itoh2, Yoshinori Shono2, Luc Djogbéniou3, Jean-Marc Hougard4
1Sumitomo Chemical Co. (UK) Plc, London, United Kingdom, 2Sumitomo Chemical Co., Ltd., Environmental Health Division, Tokyo, Japan, 3Centre de Recherches Entomologiques de Cotonou (CREC), Cotonou, Benin

11 a.m.

1220

EFFICACY OF INSECTICIDE TREATED MATERIALS (ITMS) FOR DENGUE CONTROL IN LATIN AMERICA AND ASIA: CLUSTER RANDOMIZED CONTROLLED TRIALS IN VENEZUELA AND THAILAND
Audrey Lenhart1, Elci Villegas2, Carmen Elena Castillo2, Yuwadee Trongtokit3, Channarn Apiwathnasorn2, Neal Alexander1, Philip J. McCall1
1Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 2Universidad de los Andes, Trujillo, Venezuela, 3Mahidol University, Bangkok, Thailand, 4London School of Hygiene and Tropical Medicine, London, United Kingdom

11:15 a.m.

1221

REDUCED EFFICACY OF PYRETHROID SPACE SPRAYS FOR DENGUE CONTROL IN PYRETHROID RESISTANCE AREA (MARTINIQUE)
Sebastien Marcombe1, Alexandre Carron2, Frédéric Darriet2, Manuel Etienne Etienne3, Michel Tolosa Tolosa2, Marie-Michèle Yp-Tcha1, Christophe Lagneau2, André Yébakima1, Vincent Corbel1
1Institut de Recherche pour le Développement, Montpellier, France, 2Entente Interdépartementale pour la Démoustication du littoral méditerranéen (EID Méditérranée), Montpellier, France, 3Centre de Démoustication, Fort de France, Martinique

Scientific Session 179
Clinical Tropical Medicine IV

Grand Ballroom C
Thursday, December 11, 10:15 a.m. – Noon

CHAIR
Christina Greenaway
SMBD Jewish General Hospital, Montréal, QC, Canada
Parsotam Hira
Kuwait University, Kuwait City, Kuwait

10:15 a.m.

1222

FATAL OUTBREAK FROM CONSUMING XANTHIUM STRUMARIUM SEEDLINGS DURING TIME OF FOOD SCARCITY IN NORTHEASTERN BANGLADESH
Emily S. Gurley1, Mahmudur Rahman2, M. Jahangir Hossain1, Nazmun Nahar1, Be-Nazir Ahmed2, Rebeca Sultana1, Selina Khatun1, M. Saffir Haider1, M. Saiful Islam1, Utpal K. Mondal1, Stephen P. Luby1
1International Center for Diarrhoeal Disease Research, B, Dhaka, Bangladesh, 2IEDCR, Ministry of Health and Family Welfare, Dhaka, Bangladesh
10:30 a.m.  

1223  

EFFECT OF READY-TO-USE-THERAPEUTIC FOOD SUPPLEMENTATION ON THE NUTRITIONAL STATUS, MORTALITY AND MORBIDITY OF CHILDREN 6 TO 60 MONTHS IN NIGER: A CLUSTER RANDOMIZED TRIAL  
Sheila Isanaka,1 Nohelly Nombella,2 Ali Djibo3, Marie Poupard3, Dominique Van Beckhoven3, Valerie Gaboulaud2, Philippe J. Guerin,2 Rebecca F. Grais3  
1Departments of Epidemiology and Nutrition, Harvard School of Public Health, Boston, MA, United States, 2Epicentre, Paris, France, 3Ministry of Health, Niamey, Niger

10:45 a.m.  

1224  

PATHOGENESIS OF HAEMORRHAGE ASSOCIATED WITH DENGUE INFECTION IN ADULTS IN VIETNAM  
Dinh The Trung1, Tran Tinh Hien2, Le Thi Thu Thao3, Nguyen Minh Dung4, Tran Van Ngoc5, Robert Goldin6, Edward Tuddenham6, Cameron Simmons7, Jeremy Farrar7, Bridget Wills4  
1University of Medicine and Pharmacy of Ho Chi Minh City, Ho Chi Minh City, Vietnam, 2Hospital for Tropical Diseases, Ho Chi Minh city, Vietnam, 3Department of Investigative Sciences, Imperial College, London, United Kingdom, 4Katherine Dormandy Haemophilia Centre and Thrombosis Unit University College, London, United Kingdom, 5Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Ho Chi Minh city, Vietnam

11 a.m.  

1225  

IMPACT OF MASS AZITHROMYCIN TREATMENT ON THE PREVALENCE OF ACTIVE TRACHOMA AND OCULAR CHLAMYDIA TRACHOMATIS IN THE GAMBIA  
Emma Harding-Esch1, Martin J. Holland1, Ansumana Sillah1, Sandra Molina2, Aura Aguirre-Andreasen1, Paul Snell1, Tansy Edwards1, Robin L. Bailey1, David C. Mabey1  
1London School of Hygiene and Tropical Medicine, London, United Kingdom, 2National Eye Care Programme, Banjul, Gambia, 3Medical Research Council Laboratories, Fajara, Gambia

11:15 a.m.  

1226  

EXTRA-HEPATIC CYSTIC HYDATID DISEASE: A DIAGNOSTIC DILEMMA?  
Parsotam R. Hira1, Faiza Al-Ali2, Fahmy A. Al-Shelah2, Nabilah Khalid3, Nadia A. Al-Enezy1, Santosh Hebar4, Deena Al-Rifaai5, Mehraj Sheikhi6  
1Department of Microbiology, Faculty of Medicine, Kuwait City, Kuwait, 2Department of Laboratories, Farwaniya Hospital, Kuwait City, Kuwait, 3Department of Laboratories, Mubarak Al-Kabeer Hospital, Kuwait City, Kuwait, 4Department of Radiology, Farwaniya Hospital, Kuwait City, Kuwait, 5Department of Radiology, Farwaniya Hospital, Kuwait City, Kuwait, 6Department of Radiology, Faculty of Medicine, Kuwait City, Kuwait

11:30 a.m.  

1227  

SEROPREVALENCE OF STRONGYLOIDES IN NEWLY ARRIVED IMMIGRANTS AND REFUGEES  
Christina A. Greenaway1, J. Dick MacLean2, Brian J. Ward3, Momar Ndiao4  
1SMBD Jewish General Hospital, Montreal, QC, Canada, 2McGill University Centre for Tropical Diseases, Montreal, QC, Canada, 3National Reference Centre for Parasitology, Montreal, QC, Canada

11:45 a.m.  

1228  

PHENOTYPIC AND GENOTYPIC EVIDENCE OF EMERGING IVERMECTIN RESISTANCE IN ONCHOCERCIASIS  
Mike Y. Osei-Atweneboana1, Simon K. Atta2, Kwablah Awadzi2, Daniel A. Boakye1, John O. Gyapong3, Roger K. Prichard4  
1McGill University, Ste. Anne-De-Bellevue, QC, Canada, 2Onchocerciasis Chemotherapy Research Center, Hohoe, Ghana, 3Onchocerciasis Chemotherapy Research Center, Hohoe, Ghana, 4Noguchi Memorial Institute for Medical Research, Accra, Ghana, 5Health Research Center, Ghana Health Services, Accra, Ghana

Scientific Session 180  

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Immunoparasitology II  

Supported with funding from The Burroughs Wellcome Fund  
Grand Ballroom D  
Thursday, December 11, 10:15 a.m. – Noon  
CHAIR  
Olivia Finney  
London School of Hygiene and Tropical Medicine, Banjul, Gambia

Simon Metenou  
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.  

1242  

DENDRITIC CELL IL-23 PRODUCTION IN RESPONSE TO SCHISTOSOME EGGS INDUCES TH17 CELLS IN A MOUSE STRAIN PRONE TO SEVERE IMMUNOPATHOLOGY  
Mara G. Shainheit, Patrick M. Smith, Lindsey E. Bazzone, Laura I. Rutitzky, Miguel J. Stadecker  
Tufts University School of Medicine, Department of Pathology, Boston, MA, United States
10:30 a.m.  1229
CO-CULTURE WITH P. FALCIPARUM-INFECTED RED BLOOD
CELLS INDUCES DIFFERENTIATION OF FUNCTIONALLY
COMPETENT REGULATORY T CELLS FROM LYMPHOCYTES OF
MALARIA-NAÏVE DONORS
Olivia Finney1, Emma Lawrence2, Judith Satoguina2, David
Conway3, Eleanor Riley1, Michael Walther3
1LSHTM, London, United Kingdom, 2Manchester University,
Manchester, United Kingdom, 3MRC, Banjul, Gambia

10:45 a.m.  1230
FUNCTIONAL RELATIONSHIP BETWEEN IL-1BETA PROMOTER
HAPLOTYPES (-31C/T AND -511A/G) AND PEDIATRIC SEVERE
MALARIAL ANEMIA
Collins Ouma1, Tom Were1, Greg Davenport2, Christopher
Keller3, Samuel Anyona1, Henry Ndege1, Michael Otieno3,
John Vulule2, Jeremy Martinson3, Robert Ferrell2, John Michael
Ong’echa1, Douglas Perkins8
1University of New Mexico/KEMRI, Kisian, Kenya, 2University
of Pittsburgh, Pittsburgh, PA, United States, 3Lake Erie College
of Osteopathic Medicine, Erie, PA, United States, 4Kenyatta
University, Nairobi, Kenya, 5KEMRI, Kisian, Kenya, 6University
of New Mexico, Albuquerque, NM, United States

11 a.m.  1231
INHIBITION OF ANCYLOSTOMA CEYLANICUM
MACROPHAGE MIGRATION INHIBITORY FACTOR (ACEMIF):
POTENTIAL FOR PREVENTING HOOKWORM-ASSOCIATED
IMMUNOMODULATION AND DISEASE PATHOGENESIS
Jon J. Vermeire1, Yoonsang Cho2, Lin Leng3, Elias Lolis2,
Richard Bucala2, Michael Cappello1
1Program in International Child Health and Department of
Pediatrics, Yale University School of Medicine, New Haven, CT,
United States, 2Department of Pharmacology, Yale University
School of Medicine, New Haven, CT, United States, 3Department
of Medicine, Yale University School of Medicine, New Haven, CT,
United States

11:15 a.m.  1243
PERIPHERAL TREG INDUCTION CAN BE DIRECTLY MEDIATED
BY HELMINTH-DERIVED PRODUCTS
John R. Grainger, Henry J. McSorley, Yvonne M. Harcus,
Edward J. Greenwood, Rick M. Maizels
Institute of Immunology and Infection Research, University of
Edinburgh, Edinburgh, United Kingdom

11:30 a.m.  1232
PATENT FILARIAL INFECTION MODULATES MALARIA-SPECIFIC
TYPE 1 CYTOKINE RESPONSES IN AN IL-10 DEPENDENT
MANNER IN A FILARIA/MALARIA CO-INFECTED POPULATION
Simon Metenou1, Benoit Dembele1, Siaka Konate2, Housseini
Dolo2, Lamine Soumaoro2, Abdallah A. Diallo2, Michel E.
Coulibaly2, Siaka Y. Coulibaly2, Dramane Sanogo2, Yaya I.
Coulibaly2, Sekou F. Traore1, Amy Klion1, Thomas B. Nutman1,
Siddhartha Mahanty1
1National Institutes of Health, Bethesda, MD, United States,
2Filaria Unit, FMPOS, University of Bamako, Bamako, Mali

11:45 a.m.  1233
CO-INFECTION WITH HELMINTHS AND MALARIA DURING
PREGNANCY EFFECT SUSCEPTIBILITY TO FALCIPARUM
MALARIA DURING CHILDHOOD
Indu Malhotra1, Peter Munjai1, Alex Wamachi2, John Ouma1,
Davy Koech1, Eric Muchiri9, Christopher L. King7
1Case Western Reserve University, Cleveland, OH, United
States, 2Kenyatta University, Nairobi, Kenya, 3Division Of Vector Born
Diseases, Nairobi, Kenya

Symposium 181
Influenza in Tropical Countries: An
Unrecognized Player

Grand Ballroom E
Thursday, December 11, 10:15 a.m. – Noon
While influenza has been widely studied in developed countries with tem-
perate climates, little is known about the epidemiology and burden of
disease of influenza in developing, tropical countries. This symposium will
highlight findings from recent influenza surveillance in developing, tropical
countries in Africa, Asia and Latin America.

CHAIR
Robert F. Breiman
Centers for Disease Control and Prevention-Kenya, Nairobi,
Kenya

10:15 a.m.  1234
INTO AFRICA: INFLUENZA SURVEILLANCE IN KENYA
Mark A. Katz
Centers for Disease Control and Prevention-Kenya, Nairobi,
Kenya

10:30 a.m.  1235
SEVERE ACUTE RESPIRATORY INFECTION SURVEILLANCE IN
THE MIDDLE EAST
Anthony A. Marfin
U.S. Naval Medical Research Unit – 3, Cairo, Egypt.
10:45 a.m.
HIGH PREVALENCE AND OFF AXIS SEASONALITY OF INFLUENZA IN BANGLADESH
Rashid Uz Zaman
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

11 a.m.
AN EARLY REPORT FROM A RANDOMIZED CONTROLLED TRIAL OF NONPHARMACEUTICAL INTERVENTIONS TO REDUCE HOUSEHOLD INFLUENZA TRANSMISSION: THE BANGKOK HITS STUDY
James Mark Simmerman
Centers for Disease Control and Prevention Thailand, Bangkok, Thailand

11:15 a.m.
INFLUENZA AND SEVERE ACUTE RESPIRATORY INFECTION IN GUATEMALA
Kim Lindblade
International Emerging Infections Program, Centers for Disease Control and Prevention Regional Office in Central America and Panama, Guatemala City, Guatemala

11:30 a.m.
QUESTION AND ANSWER SESSION

ASTMH 57th Annual Meeting Adjourns
Thursday, December 11, Noon

See you next year in Washington, D.C!
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☐ 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

☐ 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
HOTEL FLOORPLAN

First Floor — Gallery Ballroom

Second Floor

Rhythms I
Rhythms II/III
Lagniappe (Cyber Cafe)
Waterbury Ballroom

Hotel Restaurant
Lagniappe (Cyber Cafe)
Waterbury Ballroom
HOTEL FLOORPLAN

Third Floor

Fourth Floor

Bayside A
Bayside BC
Nottoway
(Speaker Ready Room)
Oak Alley
Crescent
Ellendale
Estherwood
Evergreen
Gallier AB
Oakley