Final Program
American Society of Tropical Medicine and Hygiene
54th Annual Meeting

December 11–15, 2005
Hilton Washington Hotel and Towers
Washington, DC, USA

Supplement to
The American Journal of Tropical Medicine and Hygiene
ASTMH Thanks the 54th Annual Meeting Supporters

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(Italian Society of Ultrasound in Medicine and Biology)
TechLab Inc.
See the ASTMH 54th Annual Meeting Abstract Book, included with your registration packet, to view the full text of abstracts presented at the annual meeting.
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 based on research and education. 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 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, molecular parasitology and clinical tropical diseases. The mission of ASTMH is to promote world health by the prevention and control of tropical diseases through research and education.

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 234.

Questions

If you have any questions regarding the program or registration, visit the ASTMH registration desk in the Concourse Foyer.
Friday, December 9
4 p.m. – 6 p.m. Registration

Saturday, December 10
7 a.m. – 1 p.m. Registration
8:30 a.m. – 4:30 p.m. Pre-Meeting Course — Immune Regulation: Parasites and Chronic Infectious Diseases
Noon – 5:15 p.m. Pre-Meeting Course — Anti-Malaria Chemoprophylaxis

Sunday, December 11
7:30 a.m. – 3 p.m. Pre-Meeting Course — Anti-Malaria Chemoprophylaxis
8 a.m. – 5:30 p.m. ASTMH Council Meeting
11 a.m. – 3:30 p.m. Young Investigator Award Presentations
10:30 a.m. – 6 p.m. Registration
11 a.m. – Noon ACAV SIE Subcommittee Meeting
Noon – 2 p.m. ACAV SIRACA Subcommittee Meeting
2 – 3:30 p.m. ACAV SALS Subcommittee Meeting
3:30 p.m. – 5 p.m. ACME Council Meeting
3:30 p.m. – 5:30 p.m. ACAV Council Meeting
4 p.m. – 5 p.m. Student Reception
5:30 p.m. – 7:30 p.m. Opening Plenary Session and Awards Ceremony
7:30 p.m. – 9:30 p.m. Opening Reception

Monday, December 12
7 a.m. – 5 p.m. Registration
7 a.m. – 8 a.m. Meet the Professors
7 a.m. – 8 a.m. Clinical Group Council Meeting
7 a.m. – 8 a.m. Program Certification Committee Meeting
8 a.m. – 9:45 a.m. Scientific Sessions/Symposia
9:30 a.m. – 10:30 a.m. Exhibits
9:45 a.m. – 10:15 a.m. Break
10:15 a.m. – Noon Scientific Sessions/Symposia
Noon – 1:30 p.m. Exhibits
Noon – 1:30 p.m. Poster Session A Setup
1:30 p.m. – 7 p.m. Poster Session A Viewing
12:15 p.m. – 1:15 p.m. Meet the Professors and Mid-Day Sessions
1:30 p.m. – 3:30 p.m. Scientific Sessions/Symposia
3:15 p.m. – 3:45 p.m. Break
3:45 p.m. – 5:30 p.m. Scientific Sessions/Symposia
4:30 p.m. – 5:30 p.m. Exhibits
6 p.m. – 6:45 p.m. Plenary Session: Soper Lecture
7 p.m. – 9 p.m. Late Breakers in Basic Science/Molecular Biology
7 p.m. – 9 p.m. Late Breakers in Clinical Tropical Medicine

Tuesday, December 13
7 a.m. – 5 p.m. Registration
7 a.m. – 8 a.m. Journal Editorial Board Breakfast
7 a.m. – 8 a.m. Clinical Group Past Presidents Breakfast
7 a.m. – Noon Poster Session A Viewing
8 a.m. – 9:45 a.m. Scientific Sessions/Symposia
9:30 a.m. – 10:30 a.m. Exhibits
9:45 a.m. – 10:15 a.m. Break
10:15 a.m. – Noon Scientific Sessions/Symposia
Noon – 1:30 p.m. Exhibits
Noon – 1:30 p.m. Poster Session A Presentations/Exhibits/Box Lunches
12:15 p.m. – 1:15 p.m. Meet the Professors and Mid-Day Sessions
1:30 p.m. – 1:45 p.m. Poster Session A Dismantle
1:30 p.m. – 3:30 p.m. Scientific Sessions/Symposia
3 p.m. – 3:45 p.m. Poster Session B Setup
3 p.m. – 4 p.m. Exhibits
3:30 p.m. – 3:45 p.m. Break
3:45 p.m. – 5:30 p.m. Scientific Sessions/Symposia
4:30 p.m. – 5:30 p.m. Poster Session B Viewing
6 p.m. – 6:45 p.m. Plenary Session: Commemorative Fund Lecture
7 p.m. – 9 p.m. Diploma Course Directors Meeting

Wednesday, December 14
7 a.m. – 5 p.m. Registration
7 a.m. – 5:30 p.m. Poster Session B Viewing
7 a.m. – 8 a.m. ASTMH Past Presidents Breakfast
7 a.m. – 8 a.m. Cyberspace Committee Meeting
7 a.m. – 8 a.m. Program Committee Meeting
8 a.m. – 9:45 a.m. Scientific Sessions/Symposia
9:30 a.m. – 10:30 a.m. Exhibits
9:45 a.m. – 10:15 a.m. Break
10:15 a.m. – Noon Scientific Sessions/Symposia
Noon – 2:30 p.m. Exhibits
Noon – 2:30 p.m. Poster Session B Presentations/Box Lunches
Noon – 1:30 p.m. Burroughs Wellcome Fund-ASTMH Fellowship Committee Meeting
12:15 p.m. – 1:15 p.m. Meet the Professors and Mid-Day Sessions
12:15 p.m. – 1:15 p.m. CME/Courses Committee Meeting
12:15 p.m. – 1:15 p.m. Exam Executive Committee Meeting
1:30 p.m. – 3:15 p.m. Scientific Sessions/Symposia
3:15 p.m. – 3:45 p.m. Break
3:45 p.m. – 5:30 p.m. Scientific Sessions/Symposia
3:45 p.m. – 4 p.m. Exhibits
3:45 p.m. – 5:30 p.m. Scientific Sessions/Symposia
3:45 p.m. – 7 p.m. Poster Session B Dismantle
6 p.m. – 7:30 p.m. Plenary Session: Presidential Address, Annual Business Meeting

Thursday, December 15
7 a.m. – 10:30 a.m. Registration
7:30 a.m. – 9:30 a.m. ASTMH Council Meeting
8 a.m. – 9:45 a.m. Scientific Sessions/Symposia
9:45 a.m. – 10:15 a.m. Break
10:15 a.m. – Noon Scientific Sessions/Symposia
11:30 a.m. – 4 p.m. Exam Committee Meeting
Noon Meeting Adjourns
<table>
<thead>
<tr>
<th>Time</th>
<th>Concourse Foyer</th>
<th>International Ballroom East</th>
<th>Jefferson</th>
<th>Lincoln West</th>
<th>Caucus</th>
<th>Map</th>
<th>Grant</th>
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<tbody>
<tr>
<td>6:30 - 7:00 a.m.</td>
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* Please note that Affiliate Meetings are by invitation only.
## Schedule-at-a-Glance

**Sunday, December 11**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>9:00 - 10:00 a.m.</td>
<td>Registration</td>
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<tr>
<td>10:00 - 10:30 a.m.</td>
<td>Welcome, General Information</td>
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<tr>
<td>10:30 - 11:00 a.m.</td>
<td>Plenary Session</td>
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<td>11:00 a.m. - 1:00 p.m.</td>
<td>Scientific Session</td>
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<tr>
<td>1:00 - 2:00 p.m.</td>
<td>Affiliate Meetings (by invitation only)</td>
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<tr>
<td>2:00 - 2:30 p.m.</td>
<td>Scientific Session</td>
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<tr>
<td>2:30 - 3:00 p.m.</td>
<td>Affiliate Meetings (by invitation only)</td>
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<tr>
<td>3:00 - 4:00 p.m.</td>
<td>Scientific Session</td>
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<td>4:00 - 6:00 p.m.</td>
<td>Affiliate Meetings (by invitation only)</td>
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<tr>
<td>6:00 - 6:30 p.m.</td>
<td>Dinner</td>
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</table>

* Please note that Affiliate Meetings are by invitation only.
# Schedule-at-a-Glance

**Monday, December 12**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Details</th>
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<tr>
<td>7:30 - 7:00 a.m.</td>
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<tr>
<td>7:00 - 7:30 a.m.</td>
<td>Registration</td>
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<td>7:30 - 8:00 a.m.</td>
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<td>8:00 - 8:45 a.m.</td>
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<td>8:45 - 9:15 a.m.</td>
<td>Coffee Break</td>
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<td>9:15 - 9:45 a.m.</td>
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* Please note that Affiliate Meetings are by invitation only.
### Schedule-at-a-Glance

#### Monday, December 12

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Scientific</th>
<th>Symposium</th>
<th>Scientific</th>
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<tr>
<td>9:00am</td>
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<td>Emerging</td>
<td>Translational</td>
<td>Artemether/</td>
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<td>Malaria</td>
<td>Parasitology</td>
<td>Typhoid</td>
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<td>11</td>
<td>Epi I</td>
<td>Disease</td>
<td>Malaria</td>
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<td>p. 43</td>
<td>p. 44</td>
<td>p. 45</td>
<td>p. 45</td>
<td>p. 46</td>
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<tr>
<td>10:15am</td>
<td>19</td>
<td>Trop Med</td>
<td>Genome/</td>
<td>Malaria</td>
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<td>Epi II</td>
<td>Ultrasound</td>
<td>Arbovirology</td>
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<td>p. 50</td>
<td>p. 51</td>
<td>p. 51</td>
<td>p. 52</td>
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<tr>
<td>11:30am</td>
<td>28</td>
<td>History of</td>
<td>Medicine:</td>
<td>Abroad ICM</td>
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<td>27</td>
<td>Danque</td>
<td>p. 53</td>
<td>p. 53</td>
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<td>29</td>
<td>Measles</td>
<td>p. 54</td>
<td>p. 54</td>
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<tr>
<td>12:45pm</td>
<td>30</td>
<td>Malaria</td>
<td>Research</td>
<td>Africa</td>
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<td>31</td>
<td>Epi II</td>
<td>Combo-Rx</td>
<td>p. 61</td>
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<td>32</td>
<td>Epi II</td>
<td>Clinical Top</td>
<td>p. 62</td>
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<td>33</td>
<td>Epi II</td>
<td>Mosquito</td>
<td>p. 63</td>
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<td>34</td>
<td>Epi II</td>
<td>ACNIP Mol</td>
<td>p. 64</td>
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<td>Epi II</td>
<td>Academia</td>
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<td>36</td>
<td>Epi II</td>
<td>Malaria</td>
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<td>37</td>
<td>Epi II</td>
<td>ACNIP Mol</td>
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<td>2:45pm</td>
<td>Plenary</td>
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<td>Meeting</td>
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### Additional Notes
- Late Breakers: London, Institute
- Basic Science: Molecular, Medicine
- Clinical Tropical: Hyg and Trop, One World
- Molecular: Med Alumni, Health
# Schedule-at-a-Glance

**Tuesday, December 13**

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Events</th>
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<tbody>
<tr>
<td>6:30-7:00 a.m.</td>
<td>Concours Foyer</td>
<td>Poster</td>
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<tr>
<td>7:00-7:30 a.m.</td>
<td>Thurogonized</td>
<td>Press Session A</td>
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<tr>
<td>7:30-8:00 a.m.</td>
<td>Registration</td>
<td>Session A</td>
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<td>8:00-9:45 a.m.</td>
<td>Ampitote</td>
<td>poster viewing, Room #1, Room #2, Session 46</td>
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<td>8:00-9:45 a.m.</td>
<td>AV Prep Room</td>
<td>Mosquito Bio, Harptraviruses, p. 65</td>
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<td>9:45-10:15 a.m.</td>
<td>Coffee Break</td>
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<td>10:15 a.m. -</td>
<td>Noon</td>
<td>Symposium, Session 58, Session 59, Session 60, Session 62, Session 63</td>
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<tr>
<td>Noon - 12:15 p.m.</td>
<td>Exhibits</td>
<td>Vaccine, Malaria, Kinetoplasts, Design FIC, Malaria, p. 74</td>
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<tr>
<td>12:15 - 12:30 p.m.</td>
<td>Poster Open</td>
<td>Box Lunch, p. 82, Session Sess A, p. 120</td>
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<tr>
<td>12:30 - 1:15 p.m.</td>
<td>Poster Sess A</td>
<td>Meet the Meds, Disease Models, Comb C, p. 79</td>
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<td>1:15 - 1:30 p.m.</td>
<td>Coffee Break</td>
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<td>1:30 - 2:00 p.m.</td>
<td>1:30 - 3:15 p.m.</td>
<td>Poster Session B, set-up</td>
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<td>2:00 - 3:15 p.m.</td>
<td>Cinema</td>
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<tr>
<td>3:15 - 3:45 p.m.</td>
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<td>8:00 - 8:30 p.m.</td>
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<td>9:30 - 10:00 p.m.</td>
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* Please note that Affiliate Meetings are by invitation only.
# Schedule-at-a-Glance

## Tuesday, December 13

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<tr>
<th>Jefferson East</th>
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<th>International Ballroom West</th>
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<th>Dupont</th>
<th>Chevy Chase</th>
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<tr>
<td><strong>Mol Bio - p. 70</strong></td>
<td>p. 71</td>
<td>p. 72</td>
<td>p. 73</td>
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# Schedule-at-a-Glance

**Wednesday, December 14**

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<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Details</th>
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<tr>
<td>6:30 - 7:00 a.m.</td>
<td>Concourse Foyer</td>
<td>55A Symposium</td>
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<td>7:00 - 7:30 a.m.</td>
<td>Registration Ready</td>
<td>Roll Back Gala p. 103</td>
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<td>7:30 - 8:00 a.m.</td>
<td>Room Prep (AV Room)</td>
<td>MV. Insect Growth / Botulinum I</td>
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<td>8:00 - 9:45 a.m.</td>
<td>Room Prep (AV Room)</td>
<td>Session #1: Session 09 / Session #2: Session 89</td>
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<td>Room Preopen (AV Room)</td>
<td>Session 90 / Session 91 / Session 92 / Session 93 / Session 94</td>
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<td>Room Preopen (AV Room)</td>
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<td>Scientific / Scientific / Session 103 / Session 104 / Session 105</td>
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<td>African / session / Malaria - Mol / Trypano / Pathogenesis</td>
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<td>Room Preopen (AV Room)</td>
<td>Regulators / Diarrhea / Vector Bio / Markers of Drug / somnax - I / Pathology</td>
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<td>Room Preopen (AV Room)</td>
<td>p. 134 / p. 134 / p. 135 / p. 137 / p. 138 / p. 139</td>
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<td>9:45 - 10:15 a.m.</td>
<td>Coffee Break</td>
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<td>3:45 - 5:30 p.m.</td>
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<td>5:30 - 6:00 p.m.</td>
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<td>6:00 - 6:45 p.m.</td>
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<td>6:45 - 7:00 p.m.</td>
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*Please note that Affiliate Meetings are by invitation only.*
## Schedule-at-a-Glance
### Wednesday, December 14

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Speaker</th>
<th>Abstract Title</th>
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<tr>
<td>09:00</td>
<td>Plenary</td>
<td>Hall A</td>
<td>Dr. Smith</td>
<td>Overview of Infectious Diseases</td>
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<td>09:30</td>
<td>Symposium</td>
<td>Room 1</td>
<td>Prof. Jones</td>
<td>The Role of Vaccines in Global Health</td>
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<tr>
<td>10:30</td>
<td>Workshop</td>
<td>Room 2</td>
<td>Dr. Lee</td>
<td>Strategies for Controlling Emerging Diseases</td>
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<tr>
<td>11:30</td>
<td>Panel</td>
<td>Room 3</td>
<td>Prof. Brown</td>
<td>Challenges and Opportunities in Public Health</td>
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**Note:**
- Plenary: Keynote presentation on the current state of global infectious diseases.
- Symposium: In-depth discussion on specific infectious disease research.
- Workshop: Interactive session for learning and networking.
- Panel: Expert-led discussion on the future of public health.
# Schedule-at-a-Glance

**Thursday, December 15**

*Please note that Affiliate Meetings are by invitation only.*

<table>
<thead>
<tr>
<th>Time</th>
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<td>8:00 - 9:45 a.m.</td>
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<td>Room #2</td>
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<td>9:45 - 10:15 a.m.</td>
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<tr>
<td>10:15 - Noon</td>
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<tr>
<td>Noon - 12:15 p.m.</td>
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<td>3:00 - 4:30 p.m.</td>
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<td>4:30 - 6:00 p.m.</td>
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<td>8:45 - 9:30 p.m.</td>
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<td>9:30 - 10:15 p.m.</td>
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ASTMH 54th Annual Meeting

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Fax 847/480-9282
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www.astmh.org
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Pavani Kalluri  
Regina LaRocque  

Bioterrorism  
Chair: Daniel Carucci  
Carter Diggs  
James Hughes  
George Korch  

Clinical Tropical Medicine  
Chair: Alan Magill  
Robert Gasser  
Davidson Hamer  
Larry Laughlin  
Alan Spira  
Marty Wolfe  
David McNeely  
Joe Vinetz  

Corporate Industry Liaison  
Chair: Thomas Monath  
Jeff Chulay  
Bradley Connor  
Adel Mahmoud  
Jaco Smit  

Entomology  
Chair: William Black  
Kathryn Aultman  
David Severson  

Filariasis  
Chair: Amy Klion  
Sara Lustigman  
Thomas Nutman  
T.V. Rajan  
Gary Weil  

Schistosomiasis-Helminths  
Chair: Tom Wynn  
Evon Secor  
Miguel Stadecker  

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

Kinetoplastida  
Chair: Rick Tarleton  
Barbara Burleigh  
Diane McMahon-Pratt  

Late Breakers in Clinical Tropical Medicine  
David McNeely  
Barbara Herwaldt  

Late Breakers in Molecular Biology  
Anthony James  
Stefan Kappe  

Malaria  
Chair: Carol Sibley  
Jeanne Courval  
Johanna Daily  
Mary Hamel  
Sanjai Kumar  
Monica Parise  
Chris Plowe  
Joe Vinetz  
Sarah Volkman  
Kim Williamson  
Yimin Wu  

Meet the Professors  
Alan Spira  

Molecular Parasitology  
Chair: Michael Cappello  
John Adams  
Barbara Burleigh  
Daniel Carucci  
Beth Kirkpatrick  
Barbara Mann  
Diane McMahon-Pratt  
Thomas Nutman  
Evon Secor  
Joe Vinetz  
Sarah Volkman  
David Williams  
Kim Williamson  
Tom Wynn  

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

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

Tropical HIV  
Chair: Jean Nachega  
Davidson Hamer  
Rocio Hurtado  

Virology  
Chair: David Vaughn  
Carol Blair  
Scott Halstead  
George Ludwig  
Rebeca Rico-Hesse  
Michael Turell
ASTMH Committees

Archives
Donald Burke, Chair

Audit
George Hillyer; Stephen Hoffman; Dyann Wirth

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Benjamin H. Kean Traveling Fellowship in Tropical Medicine
Christopher Plowe, Chair; Alberto Acosta; Frank Bia; Stephen Hoffman; Colette Kean; 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; Victoria McGovern; Claire Panosian

Certificate Examination
David Freedman, Chair; Jovita Fernandez; Mary Gabriel; Lisa Keep; Ali Khan; Victor Kovner; Sheila Mackell; James Maguire; Susan McLellan; Claire Panosian; Alan Spira; A. Clinton White

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Tom Monath, Chair (2005)

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Thomas Monath, Chair; Bradley Connor; Jeff Chulay; Adel Mahmoud; Jaco Smit

Courses
Alan Magill, Chair; Jonathan Berman; David Hill; Elaine Jong; Kevin Kain; Edward Ryan

Credentiaing
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

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Peter Weller, Acting Chair

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

Gorgas Memorial Institute Research Award
Rebeca Rico-Hesse, Chair; Rodney Adam; Kathryn Aultman; Ynes Ortega

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

Legislative Action
Peter Hotez, Co-Chair; Eric Ottesen, Co-Chair; Donald Burke; Stephen Hoffman; Alan Magill; Philip Russell

Membership
George Hillyer, Acting Chair

Newsletter Editorial Board
Michael Hollingdale, Editor (2005-2007); Kathryn Aultman; Latha Rajan; Mitzi Sereno; Karl Western

Nominations
Pfizer Centennial Travel Award
Joe Vinetz, Chair; John Adams; Barbara Burleigh; Michael Cappello; Barbara Mann; Diane McMahon-Pratt

Program Certification
James Maguire, Chair; Robert Goldsmith; Richard Guerrant; Stephen Hoffman; James Kazura; Jay Keystone; Donald Krogstad; Leonard Marcus; Peter Weller

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

Scientific Program
Edward T. Ryan, Chair (2005-2007)

Travel Awards
James LeDuc, Chair; James Maguire; Barry Miller; Terrie Taylor; Eileen Villasante; Joe Vinetz

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

Young Investigator Award
Peter Zimmerman, Chair; Daniel Bausch; Brenda Beerntsen; Caryn Bern; Michael Ferdig; Anthony James; Christopher King; Nicholas Komar; Julian Rayner; Evan Secor

ASTMH Headquarters Staff

Sally Finney
Executive Director

Judy DeAcetis
Administrator

Sherri Kamensky
Administrator

Jennifer Waxman
Administrative Assistant

Lyn Maddox
Conference Director

Madhuri Carson
Conference Manager

Jill Hronek
Communications Director
Continuing Medical Education

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

Continuing Medical Education Credits
ASTMH designates its 54th Annual Meeting for a maximum of 35.5 hours in Category 1 credit toward the AMA Physician’s Recognition Award. Each physician should claim only those hours of credit actually spent in the meeting.

Register for CME Credit
The CME documentation fee is $100. CME certificates will be mailed shortly after the annual meeting.

New for 2005! Visit the ASTMH Cyber Café and complete your online CME Attendance and Evaluation Form while at the meeting. Or use your own computer to 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.

Meeting Information

Registration Hours
Concourse Foyer
Sunday, December 11 10:30 a.m. – 6 p.m.
Monday, December 12 7 a.m. – 5 p.m.
Tuesday, December 13 7 a.m. – 5 p.m.
Wednesday, December 14 7 a.m. – 5 p.m.
Thursday, December 15 7 – 10:30 a.m.

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.

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.

Hotel Information
All ASTMH annual meeting activities will take place at the Hilton Washington Hotel and Towers.

Hilton Washington Hotel and Towers
1919 Connecticut Ave. NW
Washington, DC 20009
202/483-3000
Fax 202/232-0438

Hotel Parking
Parking at the Hilton Washington Hotel and Towers is currently available at the following rates:
1 hour $9.00
2 hours $13.00
3 hours $16.00
4 hours or more $21.00

There is no valet parking available at the hotel.
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 202/483-3000, the main switchboard of the Hilton Washington Hotel and Towers. Faxes can be sent to the hotel at 202/232-0438.

Americans with Disabilities Act
ASTMH fully complies with the legal requirements of the ADA and the rules and regulations thereof. Please notify us if you have any special needs.

Exhibits

Exhibit Hall
The ASTMH 54th Annual Meeting features an exposition of displays by leading suppliers and vendors. A complete exhibitor and supporter directory is included in the registration packet.

Exhibit Hours

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Sunday, December 11</td>
<td>7:30 – 9:30 p.m.</td>
</tr>
</tbody>
</table>
| Monday, December 12   | 9:30 – 10:30 a.m.  
                     | Noon – 1:30 p.m.   
                     | 4:30 – 5:30 p.m.   |
| Tuesday, December 13  | 9:30 – 10:30 a.m.  
                     | Noon – 1:30 p.m.   
                     | 3 – 4 p.m.         |
| Wednesday, December 14| 9:30 – 10:30 a.m.  
                     | Noon – 2:30 p.m.   |

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

Food Functions
The following food functions are included in the registration fee:
Opening reception (Sunday)
Poster session lunches (Tuesday and Wednesday)
Coffee breaks

Special functions for students, fellows and residents
Student reception (Sunday)
Meet the Professors continental breakfast (Monday)

Cyber Café
Visit the Cyber Café in the Concourse Foyer. As a courtesy to other attendees, we ask that you limit your computer use to ten minutes per visit.

Committee Meetings
The Caucus Room and Dupont Room, located on the terrace level of the hotel, are designated for committee meetings and other group meetings. Meeting room reservations are available on a first-come, first-served basis. A sign-up sheet is located outside these rooms. Visit these rooms to sign up for meeting space and reserve time for your group. A complete list of pre-scheduled ASTMH committee meetings can be found on page 31.

Press Room
The press room is located in the Adams Room on the terrace level. ASTMH press kits are available. Press announcements and other details can be found in the Adams Room.

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.

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

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

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

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

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 meeting literature. 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 this number along to an interested non-member. We hope that the trial subscriptions are used and that more people will be interested in joining ASTMH as a result.

AJTMH Symposium
This is the first year that the journal will have a symposium. The session is designed to educate attendees about the journal and the publishing process as a whole. We will discuss how manuscripts are reviewed, edited and processed by the journal, and will include pointers on preparation and review of manuscripts. See the handout in your meeting literature for more information. We encourage you to ask questions at this session and would like to hear your feedback on the journal.

Stop by the ASTMH booth in the exhibit hall to view sample copies of the journal, or to see a demonstration of the journal's submission/review site and AJTMH Online.

ASTMH Affiliate Members

**Patron**
GlaxoSmithKline

**Donor**
Acambis Inc.
Techlab Inc.

**Contributor**
Concentra
Hydas World Health
Presutti Laboratories
Romark Laboratories, L.C.
Vical Inc.
World Health Organization
Program Information

Late Breaker Abstracts
Late Breakers in Clinical Tropical Medicine
Monday, December 12
7 – 9 p.m.
International Ballroom West

Late Breakers in Basic Science/Molecular Biology
Monday, December 12
7 – 9 p.m.
International Ballroom East

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 evening. Poster late breaker presentations will take place during the poster sessions on 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. A special student session will be held on Monday at 7 a.m. Other sessions will be held on Monday, Tuesday and Wednesday from 12:15 - 1:15 p.m. The sessions are open to all meeting participants. While the professors will lead the program and have some prepared remarks, the sessions will be largely question and answer and discussion in format.

ACMCIP Abstracts
Throughout this book, you will notice that some abstracts are followed by the notation (ACMCIP abstract). This notation means the abstract submitter indicated that the abstract pertains to molecular, cellular or immunoparasitology. ACMCIP refers to the American Committee of Molecular, Cellular and Immunoparasitology, an ASTMH subgroup.

Speaker Ready Room and Audiovisual Facilities
Thoroughbred Room

Audiovisual preview and submission facilities are provided beginning Sunday, December 11, at 7 a.m. in the Thoroughbred Room, located on the concourse level of the hotel.

All oral presentations must be in PowerPoint. Slides and overheads are not permitted (slide projectors and overhead projectors will not be used at the annual meeting).

Load your presentation in the Speaker Ready Room 24 hours prior to your session. If you are unable to do so, and you have a morning presentation, please go directly to the meeting room to load your presentation. If you have an afternoon presentation and are unable to load your presentation the day before, visit the Speaker Ready Room on the morning of your talk.

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.

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 load your presentation in the Speaker Ready Room 24 hours prior to presentation time.

Hours of Operation:

<table>
<thead>
<tr>
<th>Date</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Sunday, December 11</td>
<td>7 a.m. - 5 p.m.</td>
</tr>
<tr>
<td>Monday, December 12</td>
<td>7 a.m. - 7 p.m.</td>
</tr>
<tr>
<td>Tuesday, December 13</td>
<td>7 a.m. - 5:30 p.m.</td>
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<tr>
<td>Wednesday, December 14</td>
<td>7 a.m. - 5:30 p.m.</td>
</tr>
<tr>
<td>Thursday, December 15</td>
<td>7 a.m. - Noon</td>
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</table>
Detailed Program

Poster Sessions

Exhibit Hall

There will be two poster sessions at the ASTMH 54th Annual Meeting, both held in the exhibit hall. There will be additional times for poster viewing (presenters need not be in attendance during these time periods).

Poster Session Schedule

**Poster Session A**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Time</th>
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<tbody>
<tr>
<td><strong>Setup:</strong></td>
<td>Monday, December 12 Noon – 1:30 p.m.</td>
</tr>
<tr>
<td><strong>Viewing:</strong></td>
<td>Monday, December 12 1:30 – 7 p.m.</td>
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<tr>
<td></td>
<td>Tuesday, December 13 7 a.m. – Noon</td>
</tr>
<tr>
<td><strong>Presentations:</strong></td>
<td>Tuesday, December 13 Noon – 1:15 p.m. (presenters in attendance)</td>
</tr>
<tr>
<td><strong>Removal:</strong></td>
<td>Tuesday, December 13 1:30 – 1:45 p.m.</td>
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**Poster Session B**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Time</th>
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<tbody>
<tr>
<td><strong>Setup:</strong></td>
<td>Tuesday, December 13 3 – 3:45 p.m.</td>
</tr>
<tr>
<td><strong>Viewing:</strong></td>
<td>Tuesday, December 13 3:45 – 7 p.m.</td>
</tr>
<tr>
<td></td>
<td>Wednesday, December 14 7 a.m. – Noon</td>
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<td></td>
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<tr>
<td></td>
<td>Wednesday, December 14 3:45 – 7 p.m.</td>
</tr>
<tr>
<td><strong>Presentations:</strong></td>
<td>Wednesday, December 14 Noon – 1:30 p.m. (presenters in attendance)</td>
</tr>
<tr>
<td><strong>Removal:</strong></td>
<td>Wednesday, December 14 5:30 – 7 p.m.</td>
</tr>
</tbody>
</table>

Special Events for Students, Fellows and Residents

**Student Reception**

Sunday, December 11
4 – 5 p.m.
Georgetown

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.

**Session 1: Meet the Professors A**

**Fireside Chat: Personal Experiences, Words of Wisdom and Institutional Perspectives**

Monday, December 12
7 – 8 a.m.
Military

Designed for the next generation of tropical medicine leaders, a panel of professors will share information on their background, weaving their life experience in tropical medicine from undergraduate days through their current activities, incorporating their favorite science along the way. Breakfast will be served.
History of Tropical Medicine Sessions
Take note of the following sessions highlighting the history of tropical medicine:

**Mid-Day Session 26**
History of Medicine: Dengue  
Jefferson West  
Monday, December 12  
12:15 p.m. – 1:15 p.m.

**Mid-Day Session 70**
History of Medicine: Kyasanur Forest Disease (Movie)  
Monroe East  
Tuesday, December 13  
12:05 p.m. – 1:20 p.m.

“The Story of Kyasanur Forest Disease,” was filmed in 1956-1957 by Telford H. Work, then director of the Virus Research Center in Poona, India.

**Mid-Day Session 114**
History of Medicine: Yellow Fever (Movie)  
Lincoln West  
Wednesday, December 14  
12:15 p.m. – 1:15 p.m.

This 40-minute film relates the expedition undertaken in 1954 by Richard Moreland Taylor and young scientists Herbert Hurlbut and Telford H. Work, all working under the auspices of the Rockefeller Foundation at NAMRU-3, Cairo, Egypt.

Online Program Options
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 and post-publication changes in the program and abstracts can be found on the ASTMH Web site.

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.

SAVE THE DATE!
ASTMH 55th Annual Meeting  
November 12–16, 2006  
Marriott Atlanta Marquis  
Atlanta, GA USA

ASTMH 56th Annual Meeting  
November 4–8, 2007  
Philadelphia Marriott  
Philadelphia, PA USA
Workers in Tropical Medicine Video Presentation

Concourse Foyer

Workers in Tropical Medicine: Oral History Project Re-Initiated

This project, originally the brainchild of Linda Brink (former ASTMH archivist) is being re-initiated this year. Selected biographical videos of ASTMH members who have made important contributions to the field of tropical medicine will be shown at the annual meeting. The original tapes of the interviews have been converted to DVD format. A viewing area in the concourse foyer 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
- And others......
In addition, the Society will begin to produce new video biographies, with the intention to publish these in the ASTMH journal with links to the video/audio versions on the Web. The first of the new series will be produced at this year’s meeting. This project has obvious importance to the field of tropical medicine in general and to the Society in particular. We urge you to visit the viewing area and will value your comments and suggestions.


2005 Travel Awards

Supported with funding from the National Institutes of Health/National Institute of Allergy and Infectious Diseases

Andrea Bertolotti-Ciarlet
University of Pennsylvania
Philadelphia, Pennsylvania, United States
Abstract 580

Douglas Boettner
University of Virginia
Charlottesville, Virginia, United States
Abstract 485

Juan Calix
Loyola University New Orleans
New Orleans, Louisiana, United States
Abstract 147

Lon Chanthap
National Malaria for Parasitology, Entomology and Malaria Control Program (CNM)
Phnom Penh City, Cambodia
Abstract 188

Tran Thuy Chau
Hospital for Tropical Diseases
Ho Chi Minh City, Vietnam
Abstract 578

Marina Chavchich
Australian Army Malaria Institute
Enoggera, Australia
Abstract 123

Julie Clennon
University of Illinois
Urbana, Illinois, United States
Abstract 136

Hanan Helmy
Ain Shams University
Cairo, Egypt
Abstract 563

Sulggi Lee
University of Southern California
South Pasadena, California, United States
Abstract 21

Khaled Mahmoud Abd Elaziz
Ain Shams University
Cairo, Egypt
Abstract 283

Joao Luiz Mendes Wanderley
National Cancer Institute/Brazil
Rio de Janeiro, Brazil
Abstract 542

Sammy Njenga
University of Liverpool
Nairobi, Kenya
Abstract 279

Mike Osei-Atweneboana
McGill University
St Anne-De-Bellevue, Quebec, Canada
Abstract 532

Tasanee Panichakul
Mahidol University
Bangkok, Thailand
Abstract 315

Narong Ponsa
Armed Forces Research Institute of Medical Sciences
Bangkok, Thailand
Abstract 421

Innocent Safeukui Nobissi
Laboratoire d'Immunologie-Parasitologie
Bordeaux, France
Abstract 318

Melanie Samuel
Washington University
St Louis, Missouri, United States
Abstract 1018

Hai-Wei Wu
Nanjing Medical University
Nanjing, Jiangsu, China
Abstract 495

2005 American Committee of Medical Entomology (ACME) Travel Awards

Rebekah Kent
Johns Hopkins University Bloomberg School of Public Health
Baltimore, Maryland, United States
Abstract 587

Sharon Minnick
University of California at Davis
Davis, California, United States
Abstract 13
ASTMH Committee and Subgroup Meetings

Sunday, December 11

**ACAV SIE Subcommittee Meeting**
*Dupont*
11 a.m. – Noon

**ACAV SIRACA Subcommittee Meeting**
*Dupont*
Noon – 2 p.m.

**ACAV SALS Subcommittee Meeting**
*Dupont*
2:15 – 3:15 p.m.

**ACAV Council Meeting**
*Dupont*
3:30 – 5:30 p.m.

**ACME Council Meeting**
*Chevy Chase*
3:30 – 5 p.m.

**Young Investigator Award Committee Meeting**
*Monroe East*
3:30 – 5 p.m.

Monday, December 12

**Program Certification Committee**
*Edison*
7 – 8 a.m.

**Clinical Group Council Meeting**
*Chevy Chase*
7 – 8 a.m.

Tuesday, December 13

**Clinical Group Past Presidents Breakfast**
*State*
7 – 8 a.m.

**Journal Editorial Board Breakfast**
*State*
7 – 8 a.m.

Wednesday, December 14

**Cyberspace/Web Site Committee**
*Edison*
7 – 8 a.m.

**Program Committee Meeting**
*Caucus*
7 – 8 a.m.

**ASTMH Past Presidents Breakfast**
*State*
7 – 8 a.m.

**Burroughs Wellcome Fund - ASTMH Fellowship Committee**
*Chevy Chase*
Noon – 1:30 p.m.

Thursday, December 15

**Certificate Exam Committee Meeting**
*Edison*
11:30 a.m. – 4 p.m.
Friday, December 9

Registration
Concourse Foyer
Friday, December 9 4 – 6 p.m.

Saturday, December 10

Registration
Concourse Foyer
Saturday, December 10 7 a.m – 1 p.m.

Pre-Meeting Course

Immune Regulation: Parasites and Chronic Infectious Diseases
Jefferson
Saturday, December 10 8:30 a.m. – 4:30 p.m.

Pre-Meeting Course

Anti-Malaria Chemoprophylaxis
International Ballroom East
Saturday, December 10 Noon – 5:15 p.m.

Sunday, December 11

Pre-Meeting Course

Anti-Malaria Chemoprophylaxis
International Ballroom East
Sunday, December 11 7:30 a.m. – 3 p.m.

ASTMH Council Meeting
Map
Sunday, December 11 8 a.m. – 3:30 p.m.

Registration
Concourse Foyer
Sunday, December 11 10:30 a.m. – 6 p.m.

ACAV SIE Subcommittee Meeting
Dupont
Sunday, December 11 11 a.m. – Noon

Young Investigator Award Presentations

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

Young Investigator Award Session A

Lincoln East
Sunday, December 11 11 a.m. – 3:30 p.m.

CHAIR
Caryn Bern
Centers for Disease Control and Prevention, Atlanta, GA, United States

W. Evan Secor
Centers for Disease Control and Prevention, Atlanta, GA, United States

11 a.m.

POLYPARASITISM AND CHILDHOOD ANEMIA: EVIDENCE OF SYNERGISTIC AND ANTAGONISTIC INTERACTIONS BETWEEN HELMINTH SPECIES IN MULTIPLY INFECTED CHILDREN
Amara E. Ezeamama1, Stephen T. McGarvey1, Luz P. Acosta2, Jonathan D. Kurtis1, Vincent Mor1, Remy M. Olveda2, Jennifer F. Friedman1
1Brown University, Providence, RI, United States, 2Research Institute of Tropical Medicine, Manila, Philippines

11:15 a.m.

ANALYSIS OF THE POPULATION GENETICS OF CONCURRENT SELECTION WITH ALBENDAZOLE AND IVERMECTIN ON THE POSSIBLE DEVELOPMENT OF ALBENDAZOLE RESISTANCE
Anne E. Schwab1, Andreas J. Schwab2, Thomas S. Churcher3, Maria-Gloria Basanez4, Roger K. Prichard1
1McGill University, Ste-Anne-de-Bellevue, PQ, Canada, 2McGill University, Montreal, PQ, Canada, 3Imperial College, London, United Kingdom

11:30 a.m.

HUMAN ECHINOCOCCOSIS IN NINGXIA HUI AUTONOMOUS REGION, NORTH-CENTRAL CHINA: FROM PAST TO PRESENT
Yu R. Yang1, Yu R. Yang2, Philip S. Craig3, Dominique A. Vuitton4, Patrick Giraudoux5, David Pleydell5, Tao Sun2, Malcolm Jones1, Donald P. McManus1
1Queensland Institute of Medical Research, Brisbane, Australia, 2Ningxia Medical College, Yinchuan, Ningxia Hui Autonomous Region, China, 3National Institutes of Health Echinococcosis China Work Group, Salford, United Kingdom, 4National Institutes of Health Echinococcosis China Work Group, Besancon, France

11:45 a.m.

UNDERSTANDING PHAGOCYTOSIS FOLLOWING HOST-CELL KILLING BY ENTAMOEBA HISTOLYTICA
Douglas R. Boettner1, Christopher D. Huston2, William A. Petri1
1University of Virginia, Charlottesville, VA, United States, 2University of Vermont, Burlington, VT, United States
IMPROVEMENT OF NUTRITIONAL STATUS AFTER TREATMENT OF SCHISTOSOMA JAPONICUM-INFECTED CHILDREN, ADOLESCENTS AND YOUNG ADULTS

Hannah M. Coutinho, Luz P. Acosta, Stephen T. McGarvey, Blanca Jarilla, Archie Pablo, Li Su, Daria L. Manalo, Remigio M. Olveda, Jonathan D. Kurtis, Jennifer F. Friedman

1International Health Institute, Brown University, Providence, RI, United States; 2Research Institute of Tropical Medicine, Manila, Philippines

12:15 p.m.
RE-INVESTIGATING THE GLOBAL BURDEN OF DISEASE DUE TO SCHISTOSOMA JAPONICUM

Julia L. Finkelstein, Stephen T. McGarvey, Mark D. Schleinitz

1Department of Community Health, Brown University, Providence, RI, United States; 2International Health Institute, Department of Community Health, Brown University, Providence, RI, United States; 3Rhode Island Hospital, Providence, RI, United States

12:30 p.m.
LEISHMANIA SPECIES SELECTIVELY PRIME HUMAN DENDRITIC CELLS FOR INTERLEUKIN-12 PRODUCTION

Asha Jayakumar, Mary Ann McDowell

University of Notre Dame, Notre Dame, IN, United States

12:45 p.m.
INFECTION BY MYCOBACTERIUM LEPRAE AND IMMUNE CHARACTERISTICS OF HOUSEHOLD CONTACTS AND LEPROSY PATIENTS FROM COLOMBIA

Nora M. Cardona-Castro, Miryan M. Sánchez, Camilo Beltrán-Alzate, Rubén D. Manrique-Hernández

1Instituto Colombiano de Medicina Tropical - CES, Sabaneta, Antioquia, Colombia; 2Instituto de Ciencias de la Salud- CES, Medellín, Antioquia, Colombia

1 p.m.
T HELPER 2 CYTOKINE RESPONSES PREDICT RESISTANCE TO REINFECTION WITH SCHISTOSOMA JAPONICUM AFTER PRAZIQUANTEL (PZQ) TREATMENT IN 7 - 30 YEAR-OLD INHABITANTS OF LEYTE, THE PHILIPPINES


1Brown University, Providence, RI, United States; 2RITM, Manila, Philippines

1:15 p.m.
A NOVEL PRO-INFLAMMATORY T CELL SUBSET MEDIATES HIGH PATHOLOGY IN SCHISTOSOMIASIS

Laura I. Rutitzky, Jessica R. Lopes da Rosa, Miguel J. Stadecker

Tufts University School of Medicine, Boston, MA, United States

1:30 p.m.
DETECTION OF ANTIBODIES AGAINST FASCIOLA HEPATICA IN PATIENTS WITH LIVER CIRRHOSIS IN PERU

Luis Marcos, Alejandro Bussalleu, Angelica Terashima, José R. Espinoza

1Instituto de Medicina Tropical Alexander von Humboldt, Lima, Peru; 2Facultad de Ciencias y Filosofía “Alberto Cazorla Talleri” - Universidad Peruana Cayetano Heredia, Lima, Peru

1:45 p.m.
SCHISTOSOMA MANSONI PRX PROTEINS: ARE THEY A NEW DRUG TARGET?

Ahmed A. Sayed, David L. Williams

Illinois State University, Normal, IL, United States

2 p.m.
DENGUE-3 IN LIMA, PERU, 2005

Vidal Felices, Cristopher Cruz, Victor Laguna -Torres, Luis Becingolea, Victor Suarez, G. Jave, Gloria Chauca, Tadeusz Kochel, James Olson

1U.S. Naval Medical Research Center Detachment, Lima, Peru; 2Oficina General de Epidemiologia, Lima, Peru; 3Instituto Nacional de Salud, Ministerio de Salud, Peru; 4Oficina General de Epidemiologia, Ministerio de Salud, Peru; 5Centro de Salud de Comas, Ministerio de Salud, Peru; 6U.S. Naval Medical Research Center Detachment, APO AA, AE, United States

Young Investigator Award Session B

Monroe West

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

CHAIR

Brenda T. Beerntsen

University of Missouri-Columbia, Columbia, MO, United States

Nicholas Komar

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

11:00 a.m.
GENERATION OF ARTIFICIAL WOLBACHIA INFECTIONS IN Aedes MOSQUITO AND MANIPULATION OF POPULATION WITH CYTOPLASMIC INCOMPATIBILITY

Zhiyong Xi, Jeffry L. Dean, Cynthia Khoo, Stephen L. Dobson

University of Kentucky, Lexington, KY, United States

11:15 a.m.
AGE-DEPENDENT DENGUE TRANSMISSION AND IMPLICATIONS FOR CONTROL PROGRAMS

Sharon L. Minnick, Amy C. Morrison, Tadeusz J. Kochel, James G. Olson, Thomas W. Scott

1University of California at Davis, Davis, CA, United States; 2US Naval Medical Research Center, Lima, Peru
Detailed Program

11:30 a.m.
ARBOVIRAL CAUSES OF FEVER IN ECUADOR, BOLIVIA AND PERU, 2000 – 2005
Carolina Guevara, Karla Block, Claudio Rocha, Zonia Rios, Alfredo Huaman, Roger Castillo, Vidal Felices, Cristhopher Cruz, Kevin Russell, Tadeusz Kochel, Patrick Blair, Cesar Naquira, Eduardo Gotuzzo, Luis Suarez, Jorge Vargas, Steve Manock, Narcisa Brito, Cesar Madrid, M. Merizalde, Tadeusz Kochel
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2U.S. Naval Medical Research Center Detachment, APO AA, AE, United States, 3Instituto Nacional de Salud, Ministerio de Salud, Peru, 4Universidad Peruana Cayetano Heredia, Universidad Peruana Cayetano Heredia, Peru, 5Oficina General de Epidemiologia, Ministerio de Salud, Peru, 6Centro Nacional de Enfermedades Tropicales, Cenetrop Santa Cruz, Bolivia, 7Hospital Vozandes, Shell, Ecuador, 8Hospital Naval, Guayaquil, Ecuador, 9Hospital Militar, Puyo, Ecuador

11:45 a.m.
HUMAN ILLNESS CAUSED BY CARAPARU AND MURUTUCU (GROUP C) VIRUSES, PERU, 2003 AND 2004
Alfredo Huaman, Roxana Cáceda, Juan Perez, Roger Castillo, Zonia Rios, Carolina Guevara, Claudio Rocha, Karla Block, Claudia Zavaleta, Patrick Blair, Carlos Vidal, Luis Suarez, Cesar Naquira, Eduardo Gotuzzo, James Olson
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2Universidad Peruana Cayetano Heredia, Universidad Peruana Cayetano Heredia, Peru, 3U.S. Naval Medical Research Center Detachment, APO AA, AE, United States, 4Direccion de Salud, Iquitos, Peru, 5Oficina General de Epidemiologia, Ministerio de Salud, Lima, Peru, 6Universidad Peruana Cayetano Heredia, Lima, Peru

Noon
ISOLATION OF ILHEUS VIRUS FROM A FEBRILE HUMAN IN ECUADOR
Cristhopher Cruz, Vidal Felices, Roxana Cáceda, Barbara Johnson, Alfredo Huaman, Roger Castillo, M. Merizalde, Steve Manock, Cesar Madrid, Carolina Guevara, Tadeusz Kochel, James Olson
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2Universidad Peruana Cayetano Heredia, Universidad Peruana Cayetano Heredia, Peru, 3U.S. Naval Medical Research Center Detachment, APO AA, AE, United States, 4Direccion de Salud, Iquitos, Peru, 5Oficina General de Epidemiologia, Ministerio de Salud, Lima, Peru, 6Universidad Peruana Cayetano Heredia, Lima, Peru

12:00 p.m.
INCIDENCE OF ARBOVIRAL ILLNESSES IN SCHOOL CHILDREN, IQUITOS, PERU, 2000-2004
Cecilia Rivera, Carolina Guevara, Alfredo Huaman, Roger Castillo, Roxana Cáceda, Juan Perez, Claudio Rocha, Karla Block, Tadeusz Kochel, Patrick Blair, James Olson, Amy Morrison, Tomas Scott
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2U.S. Naval Medical Research Center Detachment, APO AA, AE, United States, 3University of Davis, Davis, CA, United States

12:15 p.m.
CLINICAL EVALUATION AND VIROLOGIC DIAGNOSIS OF VENEZUELAN EQUINE ENCEPHALITIS IN PERU, JANUARY 2000-FEBRUARY 2005
Zonia Rios, Roger Castillo, Silvia Montano, Alfredo Huaman, Roxana Caceda, Carolina Guevara, Claudio Rocha, Karla Block, Patrick Blair, Tadeusz Kochel, Eduardo Gotuzzo, Carlos Vidal, Luis Suarez, Cesar Naquira, James Olson
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2U.S. Naval Medical Research Center Detachment, APO AA, AE, United States, 3Universidad Peruana Cayetano Heredia, Lima, Peru, 4Direccion de Salud, Iquitos, Peru, 5Oficina General de Epidemiologia, Ministerio de Salud, Peru, 6Instituto Nacional de Salud, Ministerio de Salud, Lima, Peru

12:45 p.m.
A PREDICTIVE MODEL FOR IDENTIFYING PERSISTENT POPULATIONS OF PEROMYSCUS MANICULATUS INFECTED WITH SIN NOMBRE VIRUS
Christine L. Hice, Timothy M. Shields, Greg E. Glass, James N. Mills, Terry L. Yates
1University of New Mexico, Albuquerque, NM, United States, 2John Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, 3Centers for Disease Control and Prevention, Atlanta, GA, United States

1:00 p.m.
SEROLOGIC EVIDENCE OF EMCV IN RODENTS IN PERU 2004 – 2005
Roger Castillo, Christian Albujar, Alfredo Huaman, Carolina Guevara, Victor Pacheco, Ursula Fajardo, James Olson
1U.S. Naval Medical Research Center Detachment, Lima, Peru, 2Museum of Natural History. University Nac. Mayor de San Marcos, Lima, Peru, 3Museum of Natural History University Nac. Mayor de San Marcos, Lima, Peru

1:15 p.m.
DIVERSITY OF BORRELIA BURGDORFERI OSPC IN PERSISTENTLY INFECTED PEROMYSCUS LEUCOPUS
Katherine Swanson, Douglas Norris
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States
1:30 p.m.
TEMPOSPATIAL DISTRIBUTION OF CLUSTERING DENGUE CASES IN KAOSHIUNG, 2001-2003
Chih-Chun Kan1, Neal H. Lin2, Chuiin-Chew Shang2, Tsung-Shu Wu2, Tsai-Hung Wen2, Min-Hui Wu2, Konan Peck2, Pei-Fen Lee2, I-Chuin Fan2, Wu-Hsiung Tsai2, Hui-Chu Chen2, Pei-Yun Shu2, Shu-Hui Tseng2, Chwan-Chuen King2
1Graduate Institute of Life Sciences, National Defense Medical Center, Taipei, Taiwan Republic of China, 2Institute of Epidemiology, College of Public Health, National Taiwan University (NTU), Taipei, Taiwan Republic of China, 3Department of Bioenvironmental Systems Engineering, NTU, Taipei, Taiwan Republic of China, 4Institute of Biomedical Science, Academia Sinica, Taipei, Taiwan Republic of China, 5Institute of Ecology and Evolutionary Biology, NTU, Taipei, Taiwan Republic of China, 6Institute of History and Philosophy and Geographic Information System Center, Academia Sinica, Taipei, Taiwan Republic of China, 7Center for Disease Control of Kaohsiung City Health Department, Kaohsiung, Taiwan Republic of China

1:45 p.m.
DEVELOPMENT AND CHARACTERIZATION OF A DOUBLE SUBGENOMIC CHIKUNGUNYA VIRUS INFECTIOUS CLONE TO EXPRESS HETEROLOGOUS GENES IN Aedes aegypti MOSQUITOES
Dana L. Vanlandingham1, Konstantin Tsetarkin2, Chao Hong2, Kimberly Klingler2, Kate L. McElroy4, Stephen Higgs2, Michael J. Lehane1
1Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 2University of Texas Medical Branch, Galveston, TX, United States

2:00 p.m.
DENGUE KNOWLEDGE AND PRACTICES AND THEIR IMPACT ON Aedes aegypti POPULATIONS IN KAMPHAENG PHET, THAILAND
Constantianus J. Koenraadt1, Wieteke Tuiten2, Ratana Sithiprasasna3, Udom Kijchalao2, James W. Jones2, Thomas W. Scott3
1University of California, Davis, CA, United States, 2Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

Young Investigator Award Session C
Monroe East
Sunday, December 11
11 a.m. - 3:30 p.m.
CHAIR
Michael Ferdig
University of Notre Dame, Notre Dame, IN, United States

Julian Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

11:00 a.m.
IS THERE AN ADVANTAGE TO MAKING YOUR HOST SICK? STUDIES ON AVIAN DEFENSIVE BEHAVIOR AND MOSQUITO BLOOD FEEDING SUCCESS
Jonathan M. Darbro, André A. Dhondt, Laura C. Harrington
Cornell University, Ithaca, NY, United States
12:30 p.m.
INDUCTION OF MAPK SIGNALING AND GENE EXPRESSION CHANGES IN SYNCYTIOΤROPHOBLAST FOLLOWING BINDING OF CYTOADHERENT PLASMODIUM FALCIPARUM
Naomi W. Lucchi, Rebecca Koopman, David S. Peterson, Julie M. Moore
University of Georgia, Athens, GA, United States

12:45 p.m.
IDENTIFICATION OF CRYPTOSPORIDIUM MURIS IN A TEXAS CANINE POPULATION
Philip J. Lupo¹, Rebecca C. Langer-Curry², Mary A. Robinson³, Cynthia C. Chappell¹
¹University of Texas School of Public Health, Houston, TX, United States, ²University of Texas Medical Branch, Galveston, TX, United States, ³University of Texas Health Science Center, Houston, TX, United States

1:00 p.m.
AN APPARENT CONTRADICTION: PLASMODIUM FALCIPARUM MAY BE AUXOTROPHIC FOR LIPOATE DESPITE THE PRESENCE OF A LIPOATE BIOSYNTHESIS PATHWAY
Marina Allary¹, Jeff Z. Lu¹, Liqun Zhu¹, Squire J. Booker², Sean T. Prigge¹
¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ²Pennsylvania State University, University Park, PA, United States

1:15 p.m.
INVESTIGATING UNIQUE FEATURES OF THE V-ATPASE OF MALARIA PARASITES
Julia K. Bolt-Ulschmid, Kamal D. Laroiya, Joanne M. Morrissey, Lawrence W. Bergman, Akhil B. Vaidya
Drexel University College of Medicine, Philadelphia, PA, United States

1:30 p.m.
POPULATION GENETIC STRUCTURE OF THE MALARIA VECTOR ANOPHELES DARLINGI USING THE NUCLEAR WHITE GENE: EVIDENCE FOR INCIPIENT SPECIATION OR CRYPTIC SPECIES?
Lisa Mirabello, Jan Conn
State University of New York at Albany, Albany, NY, United States

1:45 p.m.
CHARACTERIZATION OF MOSQUITO OSKAR ORTHOLOGOUS GENES FOR THE DEVELOPMENT OF A TRANPOSABLE ELEMENT-BASED GENE DRIVE MECHANISM
Jennifer Juhn, Anthony A. James
University of California, Irvine, CA, United States
Noon

PLASMODIUM FALCIPARUM MALARIA IN AFRICAN CHILDREN: THE ROLE OF THE SIMPLIFIED MULTI-ORGAN-DYSFUNCTION SCORE AS PROGNOSTIC DISCRIMINATOR

Raimund Helbok1, Saadou Issifou2, Pierre Blaise Matsiegui3, Peter Lackner4, Wolfgang Dent1, Erich Schmutzhard1, Peter G. Kremsner3

1Department of Neurology, University of Innsbruck, Austria, 2Albert Schweitzer Hospital, Lambaréné, Gabon, 3Department of Tropical Medicine, University of Tübingen, Germany

12:15 p.m.

CYTOKINE-ASSOCIATED MORBIDITY AMONG PLASMODIUM FALCIPARUM INFECTED CHILDREN UNDER THE AGE OF SIX

Virginia S. Baker1, Godwin Imade2, Norman Molta3, Sarah Belcher1, Pallavi Tawde1, Sunday Pam2, Michael Obadofin2, Solomon Sagay2, Daniel Egahi2, Daniel Iya2, Bangmboye Afolabi2, Murray Baker4, Karen Ford4, Robert Ford4, Kenneth Roux1, Thomas Keller1

1Florida State University, Tallahassee, FL, United States, 2Jos University Teaching Hospital and Medical School, Jos, Nigeria, 3Jos University, Jos, Nigeria, 4World Health Mission, Pittsburgh, PA, United States

12:30 p.m.

GENETIC DISSECTION OF DIFFERENTIAL GROWTH RATES IN PLASMODIUM FALCIPARUM IN CHLOROQUINE RESISTANT AND SENSITIVE PROGENY CLONES

Heather B. Reilly1, Hongjian Wang, Kyle Wong, Robert F. Easley, Michael T. Ferdig

University of Notre Dame, Notre Dame, IN, United States

12:45 p.m.

A CLINICAL TRIAL TO COMPARE THE EFFICACY OF INTRARECTAL VERSUS INTRAVENOUS QUININE IN THE TREATMENT OF CHILDHOOD CEREBRAL MALARIA IN UGANDA

Jane W. Achan1, Justus Byarugaba, James K. Tumwine

Makerere University, Kampala, Uganda

1:00 p.m.

LONGITUDINAL STUDY OF THE COMPLEXITY OF PLASMODIUM FALCIPARUM INFECTIONS IN CHILDREN IN WESTERN KENYA

Ardath W. Grills1, Behnards Ogutu2, Amos K’ungu2, Anjali Yadava3, Mala Ghai3, Jose Stoute3, Mark Withers3, Christian Ockenhouse3, John Waitumbi2

1Uniformed Services University of the Health Sciences, Bethesda, MD, United States, 2Kenya Medical Research Institute, Kisumu, Kenya, 3Walter Reed Army Institute of Research, Silver Spring, MD, United States

1:15 p.m.

TEMPORAL AND SPATIAL PROFILE OF ACTIVATED CASPASE-3 IN EXPERIMENTAL CEREBRAL MALARIA

Peter Lackner1, Christoph Burger1, Ronny Beer1, Kristian Pfaller1, Volker Heussler2, Raimund Helbok1, Egbert Tannich2, Erich Schmutzhard1

1Innsbruck Medical University, Innsbruck, Austria, 2Bernhard-Nocht-Institute for Tropical Medicine, Hamburg, Germany

1:30 p.m.

MULTIPlicity OF MSP-1 19 VARIANTS AMONG CAMEROonian WOMEN DURING PREGNANCY

Genevieve G.A Fouda1, Rose G.F. Leke2, Jianbing Mu3, Xiazhuan Su3, Carole Long3, Ababacar Diouf1, Grace Sama2, Armeead Johnson1, Diane W. Taylor1

1Georgetown University, Washington, DC, United States, 2Biotechnology Center, University of Yaounde I, Yaounde, Cameroon, 3National Institutes of Health, Bethesda, MD, United States

1:45 p.m.

THE EFFECT OF MOSQUITO SALIVA ON PLASMODIUM YOELII INFECTION

Michael J. Donovan, Deborah A. Scrafford, Mary A. McDowell

University of Notre Dame, Notre Dame, IN, United States

ACAV SIRACA Subcommittee Meeting

Dupont

Sunday, December 11 Noon – 2 p.m.

ACAV SALS Subcommittee Meeting

Dupont

Sunday, December 11 2:15 – 3:15 p.m.

ACME Council Meeting

Chevy Chase

Sunday, December 11 3:30 – 5 p.m.

ACAV Council Meeting

Dupont

Sunday, December 11 3:30 – 5:30 p.m.

Young Investigator Award Committee Meeting

Monroe East

Sunday, December 11 3:30 – 5 p.m.
Plenary Session I and Society Awards

International Ballroom Center
Sunday, December 11 5:30 – 7:30 p.m.
CHAIR
Thomas P. Monath
Acambis Inc., Cambridge, MA, United States
Edward T. Ryan
Massachusetts General Hospital, Boston, MA, United States

5:30 p.m.
INTERNATIONAL HEALTH AND TROPICAL INFECTIOUS DISEASES RESEARCH: AN NIAID PERSPECTIVE
Anthony Fauci
Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

6:15 p.m.
AWARDS CEREMONY
Hosted by Thomas P. Monath
Acambis Inc., Cambridge, MA, United States

Recognition Award in Global Health
Anthony Fauci
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States
Presented by Thomas P. Monath
Acambis Inc., Cambridge, MA, United States

Travel Awards
Presented by James LeDuc
Centers for Disease Control and Prevention/National Center for Infectious Diseases, Atlanta, GA, United States

American Committee of Medical Entomology (ACME) Travel Awards
Presented by Shirley Luckhart
University of California at Davis, Davis, CA, United States

Young Investigator Awards
Presented by Peter Zimmerman
Case Western Reserve University, Cleveland, OH, United States

Gorgas Memorial Institute Research Award
Presented by Rebeca Rico-Hesse
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

Burroughs Wellcome Fund — ASTMH Postdoctoral Fellowship in Tropical Infectious Diseases
Presented by Terrie Taylor
Michigan State University, East Lansing, MI, United States

Pfizer Centennial Travel Award in Basic Science Tropical Disease Research
Presented by Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

Benjamin H. Kean Traveling Fellowship in Tropical Medicine
Presented by Christopher V. Plowe
University of Maryland School of Medicine, Baltimore, MD, United States

Communications Award
Presented by Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

Honorary Members
Robert Killick-Kendrick
Imperial College, Berks, United Kingdom
Presented by John David
Harvard School of Public Health, Boston, MA, United States
Nicholas White
Wellcome Trust South East Asian Research Units, Bangkok, Thailand
Presented by Stephen L. Hoffman
Sanaria Inc., Rockville, MD, United States

Harry Hoogstraal Medal
For outstanding lifelong service to medical entomology
Robert Washino
University of California at Davis, Davis, CA, United States
Introduced by Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

Dalrymple/Young Award
Presented to a mid-career investigator who has made an outstanding contribution to arbovirology
Presented by Charles Calisher
Colorado State University, Fort Collins, CO, United States
Donald Mackay Medal
For outstanding work in tropical health, especially relating to improvements in the health of rural or urban workers in the tropics.
David L. Heymann
World Health Organization, Geneva, Switzerland
Introduced by Thomas P. Monath
Acambis Inc., Cambridge, MA, United States

Walter Reed Medal
For distinguished accomplishment in the field of tropical medicine.
Karl M. Johnson
Placitas, New Mexico, United States
Introduced by Thomas P. Monath
Acambis Inc., Cambridge, MA, United States

Bailey K. Ashford Medal
For distinguished work in tropical medicine.
J. Kevin Baird
NAMRU-2, Jakarta, Indonesia
Introduced by Stephen L. Hoffman
Sanaria Inc., Rockville, MD, United States
Frank O. Richards, Jr.
Centers for Disease Control and Prevention, Atlanta, GA, United States
Introduced by Donald R. Hopkins
The Carter Center, Atlanta, GA, United States

Meet the Professors 1
Meet the Professors A: Fireside Chat: Personal Experiences, Words of Wisdom and Institutional Perspectives
Supported with funding from GlaxoSmithKline
Military
Monday, December 12 7 – 8 a.m.
Designed for the next generation of tropical medicine leaders, a panel of professors will share information on their background, weaving their life experience in tropical medicine from undergraduate days through their current activities, incorporating their favorite science along the way. A continental breakfast will be served.
SESSION ORGANIZER
Alan Spira
The Travel Medicine Center, Beverly Hills, CA, United States
PANELISTS
Martin S. Wolfe
Travelers’ Medical Service, Washington, DC, United States
John Cross
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Symposium 2
Malaria Sexual Biology
Hemisphere
Monday, December 12 8 – 9:45 a.m.
Sexual differentiation and development of erythrocytic asexual stages represents a central stage in the malaria parasite’s transmission cycle. Mechanisms involved in this key stage of parasite’s life cycle are at best poorly understood. A few limited studies have implicated potential role for a few genes and it is expected that further functional genomic studies will reveal novel candidates. Identification of such genes and their products is likely to not only provide mechanistic understanding of the sexual development cycle but also provide novel targets for interrupting malaria transmission.
CHAIR
Nirbhay Kumar
Johns Hopkins University, Baltimore, MD, United States

8 a.m.
THE ASEXUAL-SEXUAL STAGE TRANSITION IN P. FALCIPARUM
Kim Williamson
Loyola University of Chicago, Chicago, IL, United States

8:25 a.m.
A TRANSLATIONAL REGULATOR DURING GAMETOCYTOGENESIS OF THE MALARIA PARASITE
Liwang Cui
Pennsylvania State University, University Park, PA, United States

Monday, December 12
Registration
Concourse Foyer
Monday, December 12 7 a.m. – 5 p.m.
Program Certification Committee Meeting
Edison
Monday, December 12 7 – 8 a.m.
Clinical Group Council Meeting
Chevy Chase
Monday, December 12 7 – 8 a.m.
Symposium 3

Non-Infectious Causes of Morbidity and Mortality in the Tropics

Military
Monday, December 12 8 – 9:45 a.m.

Often overlooked are non-infectious causes of illness and death that affect local populations and visitors to the tropics. This symposium will examine the socioeconomic impact, public health implications, disease/event processes and management of these problems.

CHAIR
John D. Cahill
St. Luke's/Roosevelt Hospital Center/Columbia University, New York, NY, United States

8 a.m.

AN OVERVIEW OF NON-INFECTIOUS CAUSES OF MORBIDITY AND MORTALITY IN THE TROPICS
John D. Cahill
St. Luke's/Roosevelt Hospital Center, New York, NY, United States

8:15 a.m.

ENVENOMATIONS IN THE TROPICS
Walter Simmons
US Army, Almagorda, NM, United States

8:45 a.m.

TOXICOLOGY IN THE TROPICS
Hei Hahn
St. Luke's/Roosevelt Hospital Center/Columbia University, New York, NY, United States

9:15 a.m.

LANDMINES
Lawrence Proano
International Fellowship Director, Rhode Island Hospital/Brown University, Providence, RI, United States

Scientific Session 4

Arthropods/Entomology

Monroe East
Monday, December 12 8 – 9:45 a.m.

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

William C. Black
Colorado State University, Fort Collins, CO, United States

8 a.m.

1
NONVIREMIC TRANSMISSION OF WEST NILE VIRUS
Stephen Higgs1, Bradley S. Schneider1, Dana L. VanLandingham1, Kimberly A. Klingler1, Ernest A. Gould2
1University of Texas Medical Branch, Galveston, TX, United States, 2Centre for Ecology and Hydrology, Oxford, United Kingdom

8:15 a.m.

2
QUANTITATIVE ASSESSMENT OF THE AMOUNT OF WEST NILE VIRUS INOCULATED BY MOSQUITOES INTO LIVE HOSTS
Linda M. Styer, Laura D. Kramer, Kristen A. Bernard
Wadsworth Center, New York State Department of Health, Albany, NY, United States

8:30 a.m.

3
RNA INTERFERENCE AS AN ANTAGONIST OF SINDBIS VIRUS INFECTION AND DISSEMINATION IN Aedes aegypti
Kimberly M. Keene, Brian D. Foy, Ken E. Olson, Carol D. Blair
Colorado State University, Fort Collins, CO, United States

8:45 a.m.

4
SPATIAL DISTRIBUTION OF ALPHAVIRUS GENETIC DETERMINANTS OF MIDGUT INFECTION IN MOSQUITOES
Dennis Pierro, Ken Olson
Colorado State University, Fort Collins, CO, United States
9 a.m.

5

DENGUE TYPE 2 VIRUS REPLICATION AND DISSEMINATION IN Aedes aegypti FROM TEXAS
Justin R. Anderson, Rebeca Rico-Hesse
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

9:15 a.m.

6

PEROXIDASES MEDIATE REFRACTORINESS TO PLASMODIUM INFECTION IN A. GAMBIAE
Carolina Barillas-Mury, Sanjeev Kumar
National Institutes of Health, Rockville, MD, United States

9:30 a.m.

7

QUALITATIVE TRAIT LOCI CONTROLLING REFRACTORINESS AGAINST PLASMODIUM FALCIPARUM IN ANOPHELES GAMBIAE FROM A MALARIA ENDEMIC REGION IN WESTERN KENYA
David M. Menge1, Tom Guda2, Guiyun Yan3
1SUNY at Buffalo, Buffalo, NY, United States, 2International Center for Insect Physiology and Ecology, Mbita, Kenya

Symposium 5

Cysticercosis Elimination in Peru
Monroe West
Monday, December 12 8 – 9:45 a.m.
A Bill and Melinda Gates-funded Cysticercosis Elimination Program is now working at full gear in Northern Peru, with over 40,000 people censed, mapped and GPS-referenced, and six different interventions being evaluated. This symposium will present the basis and initial results of this important program.

CHAIR
Armando E. Gonzalez
School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru

Hector H. Garcia
Universidad Peruana Cayetano Heredia, Lima, Peru

Overview of the Program
Robert H. Gilman
Department of International Health, Johns Hopkins University
Bloomberg School of Public Health, Baltimore, MD, United States

8:15 a.m.

FIELD APPLICABLE ASSAYS AND ITS USE IN CONTROL OF TAENIA SOLIUM TAENIASIS/CYSTICERCOSIS
Victor C. Tsang
Centers for Disease Control, Atlanta, GA, United States

8:45 a.m.

EDUCATIONAL INTERVENTIONS IN TAENIASIS/CYSTICERCOSIS
Ellie Leontsini
Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

9:15 a.m.

INITIAL RESULTS OF THE PERU ELIMINATION PROGRAM
Guillermo Gonzalez
Universidad Peruana Cayetano Heredia, Lima, Peru

Scientific Session 6

Flavivirus — Dengue I
Lincoln East
Monday, December 12 8 – 9:45 a.m.

CHAIR
Sharone Green
University of Massachusetts Medical School, Worcester, MA, United States

Charmagne G. Beckett
Viral Diseases Department, Naval Medical Research Center, Silver Spring, MD, United States

8 a.m.

PEDIATRIC COHORT STUDY OF DENGUE TRANSMISION IN NICARAGUA
Eva Harris1, Samantha N. Hammond1, Guillermina Kuan2, Crisanta Rocha3, William Aviles2, Andrea Nuñez4, Stephen Waterman5, Alcides Gonzalez6, Juan José Amador6, Angel Balmaseda4
1Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, 2Centro de Salud Socrates Flores Vivas, Managua, Nicaragua, 3Hospital Infantil Manuel Jesús de Rivera, Managua, Nicaragua, 4Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, 5Division of Global Migration, National Center for Infectious Diseases, Centers for Disease Control and Prevention, San Diego, CA, United States, 6Dirección de Salud Ambiental y Epidemiología, Ministerio de Salud, Managua, Nicaragua
A FOUR YEAR PROSPECTIVE STUDY OF DENGUE FEVER AND DENGUE HEMORRHAGIC FEVER AMONG ADULTS LIVING IN INDONESIA

Charmagne G. Beckett1, Herman Kosasih2, Ratna I. Tan2, Susana Widjaja2, Chairin Ma’roef2, Erlin Listyaniingsih2, Suharyono Wuryadi2, Bachti Alisjahbana3, Irani Rudiman3, Djoko Yuwono4, Kevin R. Porter1, Patrick Blair2

1Naval Medical Research Center, Silver Spring, MD, United States, 2US Naval Medical Research Unit No 2, Jakarta, Indonesia, 3Hasan Sadikin Hospital, Bandung, Indonesia, 4National Institute of Health Research and Development, Jakarta, Indonesia

SENSITIVITY OF TWO ACTIVE DENGUE SURVEILLANCE PROGRAMS IN IQUITOS, PERU

Claudio Rocha1, Amy Morrison2, Patrick Blair1, Tadeusz Kochel1, Jeff Stancil1, Roger Castillo1, Angelica Espinoza1, Moises Shiunicha3, Tom Scott2, James Olson1

1Naval Medical Research Center, Detachment, APO, AE, United States, 2University of California, Davis, CA, United States, 3Direccion de Salud, Laboratorio Referencial, Iquitos, Peru

VISUALIZING DENGUE HEMORRHAGIC FEVER IN TIME AND SPACE

Arthur Getis1, Jared Aldstadt2, Karen Campbell3, Thomas W. Scott3

1San Diego State University, San Diego, CA, United States, 2San Diego State University and University of California, Santa Barbara, San Diego, Santa Barbara, CA, United States, 3San Diego State University and Claremont Graduate University, San Diego and Claremont, CA, United States, 4University of California, Davis, CA, United States

CASES OF THREE CONSECUTIVE DENGUE INFECTIONS DURING A LONGITUDINAL COHORT STUDY

Herman Kosasih1, Ratna Irsiana1, Chairin Ma’roef1, Susana Widjaja1, Erlin Listyaniingsih1, Bachti Alisjahbana2, Irani Rudiman2, Agus Suwandono3, Charmagne Beckett4, Kevin R. Porter4, Patrick J. Blair4

1US Naval Medical Research Unit 2, Jakarta, Indonesia, 2Internal Medicine Department Hasan Sadikin Hospital, Bandung, Indonesia, 3National Institute of Health Research and Development Ministry of Health, Jakarta, Indonesia, 4Naval Medical Research Center, Silver Spring, MD, United States

AGE-DEPENDENT DENGUE TRANSMISSION AND IMPLICATIONS FOR CONTROL PROGRAMS

Sharon L. Minnick1, Amy C. Morrison1, Tadeusz J. Kochel2, James G. Olson2, Thomas W. Scott1

1University of California at Davis, Davis, CA, United States, 2US Naval Medical Research Center, Lima, Peru

THE STRUCTURE OF GENETIC DIVERSITY AND THE EVOLUTIONARY PROCESSES OF DENGUE VIRUSES CIRCULATING IN THAILAND

Chunlin Zhang1, Manmop P. Mammen1, Chonticha Klungthong1, Piyawan Chinnawiropisn1, Prinyada Rodpradit1, Siripen Kalayanarooj1, Edward C. Holmes3

1US Army Medical Component-Armed Forces Research Institute of Medical Sciences (USAMC-AFRIMS), Bangkok, Thailand, 2Queen Sirikit National Institute of Child Health (QSNICH), Bangkok, Thailand, 3Department of Biology, Pennsylvania State University, Pennsylvania, PA, United States

Malaria and Long-Term Travel

Lincoln West

Monday, December 12 8 – 9:45 a.m.

The symposium will focus on the prevention of malaria in long-term travelers. Speakers will examine the risk of malaria in long-term travelers, the safety of malaria chemoprophylaxis for long-term use, and compare strategies of prevention including continuous chemoprophylaxis, seasonal prophylaxis, and emergency standby treatment. Finally, vivax malaria in travelers will be discussed with attention to terminal prophylaxis in the long-term traveler.

CHAIR

Lin H. Chen
Mount Auburn Hospital, Cambridge, MA, United States

Mary E. Wilson
Harvard University, Cambridge, MA, United States

RISK OF MALARIA IN LONG-TERM TRAVELERS AND SAFETY OF CHEMOPROPHYLAXIS FOR LONG-TERM TRAVEL

Monica E. Parise
Centers for Disease Control and Prevention, Atlanta, GA, United States
8:35 a.m.
FROM NOUGHT TO ONE HUNDRED: MALARIA STAND-BY EMERGENCY MEDICATION, SEASONAL PROPHYLAXIS OR CONTINUOUS PROPHYLAXIS
Patricia Schlagenhauf
University of Zurich, Zurich, Switzerland

9:10 a.m.
VIVAX MALARIA AND TERMINAL PROPHYLAXIS
Alan J. Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Scientific Session 8
Malaria — Epidemiology I
Jefferson East
Monday, December 12 8 - 9:45 a.m.
CHAIR
G. Dennis Shanks
Gainesville, GA, United States
CHAIR
Blaise Genton
Swiss Tropical Institute, Basel, Switzerland

8 a.m.
15
MALARIA IN THE ANDAMAN ISLANDS (1875-1939): HOW DO HISTORICAL MALARIA EPIDEMICS RELATE TO THE TSUNAMI-AFFECTED AREAS OF ASIA?
G. Dennis Shanks, Simon I. Hay, David J. Bradley
University of Oxford, Oxford, United Kingdom

8:15 a.m.
16
OPEN LABEL, MULTI-CENTER, NON-COMPARATIVE EFFICACY, SAFETY AND TOLERABILITY STUDY OF ARTEMETHER/LUMEFANTRINE IN THE TREATMENT OF ACUTE, UNCOMPlicated P. FALCIPARUM MALARIA IN NON-IMMUNE TRAVELERS
Blaise Genton¹, H. D. Nothdurft², F. Gay³, J. Soto⁴, B. Geperli⁵, K. Andriano⁵, C. Hatz⁶
¹Swiss Tropical Institute, Basel, Switzerland, ²Abt. fuer Infektions und Tropenmedizin der Universitaet, Muenchen, Germany, ³Groupe Hospitalier Pitié-Salpêtrière Departement des maladies infec-
tieuses, parasitaires et tropicales, Paris, France, ⁴FADER / Cibic, Bogota, Colombia, ⁵Novartis Pharmaceuticals, East Hanover, NJ, United States, ⁶Swiss Tropical Institute, Basel, Switzerland

8:30 a.m.
17
DOES DAILY COTRIMOXAZOLE PROMOTE THE SELECTION OF PLASMODIUM FALCIPARUM DHYDROFOLATE REDUCTASE (DHFR) AND DHYHYDROPTEROATE SYNTHASE (DHPS) MUTATIONS?
Mary J. Hamel¹, Peter B. Bioland², Ananias Escalante³, Carolyn Greene¹, Tom Chiller¹, Ya Ping Shi¹, Peter Ouma¹, Kephas Otieno¹, Amanda Poe¹, Zhiyong Zhou¹, Ira Goldman¹, John Vulule¹, John Williamson¹, Venkatachalam Udhayakumar¹, Laurence Slutsker¹
¹Centers for Disease Control and Prevention/KEMRI Research Station, Kisumu, Kenya, ²Centers for Disease Control and Prevention, Atlanta, GA, United States, ³Arizona State University, Tempe, AZ, United States, ⁴Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁵Kenya Medical Research Institute, Kisumu, Kenya

8:45 a.m.
18
PITFALLS IN ASSESSING THE INTERACTION BETWEEN HIV AND MALARIA IN MALARIA-ENDEMIC REGIONS
Miriam Laufer¹, Joep J. vanOosterhout², Philip C. Thesing³, Feston Thumba³, Eduard E. Zijlstra², Terrie E. Taylor¹, Christopher V. Plowe¹
¹University of Maryland, Baltimore, MD, United States, ²University of Malawi College of Medicine, Blantyre, Malawi, ³Blantyre Malaria Project, Blantyre, Malawi, ⁴Michigan State University, E. Lansing, MI, United States

9 a.m.
19
PLASMODIUM FALCIPARUM AND PLASMODIUM VIVAX POPULATION AND WITHIN-HOST GENETIC DIVERSITY 10 YEARS AFTER THE PERUVIAN AMAZON MALARIA EPIDEMIC
OraLee H. Branch¹, Victor Neyra², Dionicia Gamboa³, Jean N. Hernandez², Katherine Soto², Carlos E. Vidal³, Alejandro Llanos-Cuentas²
¹University of Alabama at Birmingham, Birmingham, AL, United States, ²Universidad Peruana Cayetano Heredia, IMT-AVH, Lima, Peru, ³Ministerio de Salud, Direccion de Salud-Loreto, Iquitos, Peru (ACMCIP Abstract)

9:15 a.m.
20
THE DYNAMICS OF P. FALCIPARUM INFECTION AFTER THERAPY
Erika Leemann¹, Alissa Myrick¹, Chris Dokomajilar¹, Heidi Hopkins¹, Grant Dorsey¹, Moses Kamya³, Philip J. Rosenthal¹
¹UC San Francisco, San Francisco, CA, United States, ²Makerere University, Kampala, Uganda
Detailed Program

9:30 a.m.  COMPLEXITY OF PLASMODIUM FALCIPARUM INFECTIONS AND ANTIMALARIAL DRUG EFFICACY AT SEVEN SITES IN UGANDA
Suligi A. Lee1, Adoke Yeka2, Samuel L. Nsobya3, Christian Dokomajilar4, Philip J. Rosenthal4, Ambrose Talisuna5, Grant Dorsey4
1University of Southern California, Los Angeles, CA, United States, 2Ministry of Health, Kampala, Uganda, 3Makerere University Medical School, Kampala, Uganda, 4University of California, San Francisco, San Francisco, CA, United States, 5Ministry of Health, Kampala, Uganda

Symposium 9
Transdisciplinary Approaches to Understanding and Prevention of Emerging Infectious Diseases
Jefferson West
Monday, December 12 8 – 9:45 a.m.
The majority of infectious diseases characterized as emerging and re-emerging are caused by pathogen transmission, spread, or adaptation involving direct interaction of humans and wildlife, indirect interaction involving human encroachment and alteration of ecological systems or both. These interactions and changes are occurring on all scales, local to global, and involve biological processes across an even more daunting and complex range of phenomena — from the level of molecular evolution to global environmental change. Elucidating the mechanisms involved in emergence requires theoretical models, methodological approaches, and techniques that transcend disciplinary boundaries, including new thinking and methods. This symposium will illustrate this with case examples of transdisciplinary EID research programs addressing four different problems: human-wildlife disease linkages, malaria and tropical deforestation, the connection between human and simian retroviruses, and leptospirosis in Hawaiian taro farming communities.

CHAIR
Bruce A. Wilcox
Asia-Pacific Institute of Tropical Medicine and Infectious Diseases, University of Hawaii, Honolulu, HI, United States

8 a.m.
EXPLORING THE LINKS BETWEEN HUMAN AND WILDLIFE PATHOGENS
Peter Daszak
Consortium for Conservation Medicine, New York City, NY, United States

8:25 a.m.
TROPICAL DEFORESTATION, VECTOR ECOLOGY AND THE RE-EMERGENCE OF MALARIA
Jonathan A. Patz
University of Wisconsin, Madison, WI, United States

8:55 a.m.  CROSS-SPECIES TRANSMISSION OF PRIMATE RETROVIRUSES
Nathan Wolfe
Johns Hopkins University, Baltimore, MD, United States

9:20 a.m.  LEPTOSPIROSIS IN HAWAII’S MOUNTAIN TO SEA ECOSYSTEMS
Bruce A. Wilcox
University of Hawaii, Honolulu, HI, United States

Symposium 10
American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Translational Research in Parasitology
Supported with funding from the Burroughs Wellcome Fund
Georgetown
Monday, December 12 8 – 9:45 a.m.
The symposium will feature basic research that is leading to applications that improve human health for different parasitic diseases.

CHAIR
John H. Adams
University of Notre Dame, Notre Dame, IN, United States

8 a.m.
INTRODUCTION
John H. Adams
University of Notre Dame, Notre Dame, IN, United States

8:05 a.m.
DEVELOPMENT AND TESTING OF THE HUMAN HOOKWORM VACCINE
Peter J. Hotez
George Washington University, Washington, DC, United States

8:40 a.m.
TARGET SPECIFIC AND HIGH THROUGHPUT APPROACHES TO ANTIPARASITIC DRUG DEVELOPMENT
James H. McKerrow
University of California at San Francisco, San Francisco, CA, United States

9:15 a.m.
HOST AND PARASITE CONTRIBUTIONS TO THE PATHOGENESIS OF AMEBIASIS
William A. Petri, Jr.
University of Virginia Health System, Charlottesville, VA, United States
With malaria continuing to take its toll, especially in Africa, bold decisions must be made and implemented. Defeating malaria will require a well-coordinated comprehensive approach using available interventions and resources, and new tools and innovative strategies. In addition, it is now recognized that effective partnerships are critical in achieving success. The frontline in the combat against malaria remains the use of safe and effective antimalarial drugs. One of the leading fixed artemisinin-based combinations therapies (ACTs) that is now being deployed is artemether-lumefantrine. This drug has been successfully used to treat over ten million cases of acute uncomplicated *P. falciparum* malaria and will be discussed in perspective with other ACTs. The rationale for the development of a paediatric formulation will be reported together with progress on other leading projects managed by the Medicines for Malaria Venture in review of five years of successful public-private partnerships. MMV, a nonprofit organization, develops new, affordable, antimalarial drugs through partnerships with academic and industry partners — all with a vision in which drugs will help eliminate the devastating effects of malaria. The ultimate health impact is achieved when the tools to control malaria are deployed effectively. Thanks to the involvement of both public and private sector partners, great progress has been made in several countries including South Africa and Zambia. These can be used as models for scaled-up efforts across Africa.

CHAIR
Fred Newton Binka
INDEPTH Network, Ghana

CO-CHAIR
William Watkins
Nuffield Department of Medicine, Oxford University, Oxford, United Kingdom

8 a.m.
INTRODUCTION
Fred Newton Binka
INDEPTH Network, Ghana

William Watkins
Nuffield Department of Medicine, Oxford University, Oxford, United Kingdom

8:05 a.m.
MMV-5 YEARS OF SUCCESSFUL PARTNERSHIP
Christopher Hentschel
Medicines for Malaria Venture, Geneva, Switzerland

8:15 a.m.
OVERVIEW OF ARTEMISININ COMBINATION THERAPIES INCLUDING ARTEMETHER/LUMEFANTRINE META-ANALYSIS
Ric Price
Menzies School of Health Research, Darwin, Australia

Artemether/Lumefantrine Clinical Data Review

8:25 a.m.
ARTEMETHER/LUMEFANTRINE IN NON-IMMUNE TRAVELLERS
Christoph Hatz
Swiss Tropical Institute, Basel, Switzerland

8:35 a.m.
DEVELOPMENT OF THE ARTEMETHER/LUMEFANTRINE PEDIATRIC FORMULATION
David Ubben
Medicines for Malaria Venture, Geneva, Switzerland

8:45 a.m.
RESULTS OF THE ARTEMETHER/LUMEFANTRINE PEDIATRIC STUDY
Michael M. Makanga
European and Developing Countries Clinical Trials Partnership (EDCTP), Cape Town, South Africa

8:55 a.m.
BEST PRACTICE ACCESS MODEL IN AFRICA
Brian Sharp
Malaria Research Programme, Durban, South Africa

9:05 a.m.
PANEL DISCUSSION

9:40 a.m.
CLOSING REMARKS
Fred Newton Binka
INDEPTH Network, Ghana

William Watkins
Nuffield Department of Medicine, Oxford University, Oxford, United Kingdom
Symposium 12

Defining the Role of Vaccine in Reducing Typhoid Disease

Supported with funding from sanofi pasteur

International Ballroom West

Monday, December 12 8 – 9:45 a.m.

This symposium will describe the current situation, providing an update of typhoid epidemiology, burden of disease, and risk factors. Speakers will discuss increasing prevalence of multi-drug resistance and provide examples of clinical experience, contrasting vaccination and treatment options. The symposium will cover cost-effectiveness and implementation issues, including funding and logistics. In closing, the speakers will share future perspectives on typhoid vaccines and treatments, including Vi conjugate vaccines, oral vaccines etc.

CHAIR
John Clemens
International Vaccine Institute, Seoul, Republic of Korea

8 a.m.
INTRODUCTION
John Clemens
International Vaccine Institute, Seoul, Republic of Korea

8:05 a.m.
TYPHOID FEVER: THE CURRENT SITUATION
Zulfiqar Bhutta
The Aga Khan University, Karachi, Pakistan

8:25 a.m.
The Development and Clinical Investigation of Vi Conjugate Typhoid Vaccine
Shousun Szu
National Institutes of Health, Bethesda, MD, United States
Kimi Lin
National Institutes of Health, Bethesda, MD, United States

8:55 a.m.
ORAL VACCINES
Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

9:20 a.m.
WHAT DO WE DO IN THE MEANWHILE?
John Clemens
International Vaccine Institute, Seoul, Republic of Korea

9:40 a.m.
QUESTION AND ANSWER PERIOD

Exhibit Hall Open

Exhibit Hall
Monday, December 12 9:30 – 10:30 a.m.

Coffee Break

Exhibit Hall
Monday, December 12 9:45 – 10:15 a.m.

Symposium 13

The Biology of Schistosome Eggs: What We Know and What We Still Don’t Know

Supported with funding from BD Biosciences Pharmingen

Hemisphere

Monday, December 12 10:15 a.m. – Noon

The pathogenesis of schistosomiasis is almost entirely due to host cell-mediated immune responses against the parasite eggs, suggesting a particular role of the egg stage at the immunological interface of the host/parasite relationship. This symposium will review some recent work on the immunomodulatory properties of Schistosoma mansoni eggs and their molecular constituents and will end with a consideration of some aspects of egg biology which may deserve to be scrutinized in more depth.

CHAIR
Mike Doenhoff
School of Biological Sciences, University of Wales, Bangor, United Kingdom

10:15 a.m.
TH2 BIASING OF THE IMMUNE RESPONSE BY SCHISTOSOMA MANSONI EGG-DERIVED ANTIGENS
Dragana Jankovic
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

10:40 a.m.
MECHANISMS THAT CONTROL EGG-DRIVEN INFLAMMATION DURING MURINE SCHISTOSOMIASIS: INSIGHTS PROVIDED BY CELL-SPECIFIC DELETION OF THE INTERLEUKIN 4 RECEPTOR
DeBroski Herbert
University of Cape Town, Cape Town, South Africa

11:10 a.m.
IPSE/ALPHA-1, A SECRETORY GLYCOPROTEIN FROM S. MANSONI EGGS, WITH IMMUNOREGULATORY POTENTIAL
Gabriele Schramm
Zellulaere Allergologie, Forschungszentrum Borstel, Borstel, Germany
11:35 a.m.

**SCHISTOSOME EGG BIOLOGY: SOME THINGS WE KNOW, AND WHAT WE STILL DON’T KNOW**

Mike Doenhoff  
School of Biological Sciences, University of Wales, Bangor, United Kingdom

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10:45 a.m.

**WORLDWIDE POPULATION STRUCTURE OF TOXOPLASMA GONDII**

Tovi Lehmann\(^1\), Paula L. Marcet\(^2\), Douglas H. Graham\(^2\), Erica R. Dahl\(^2\), JP Dubey\(^3\)

\(^1\)National Institute of Allergy and Infectious Diseases/National Institutes of Health, Rockville MD, United States, \(^2\)DPD/Centers for Disease Control and Prevention, Chamblee, GA, United States, \(^3\)Department of Agriculture, Agricultural Research Service, Animal and Natural Resources Institute, Animal Parasitic Diseases Laboratory, Beltsville, MD, United States

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11 a.m.

**IDENTIFICATION OF CRYPTOSPORIDIUM MURIS IN A TEXAS CANINE POPULATION**

Philip J. Lupo\(^1\), Rebecca C. Langer-Curry\(^2\), Mary A. Robinson\(^3\), Cynthia C. Chappell\(^4\)

\(^1\)The University of Texas School of Public Health, Houston, TX, United States, \(^2\)University of Texas Medical Branch, Galveston, TX, United States, \(^3\)The University of Texas Health Science Center, Houston, TX, United States

(ACMCIP Abstract)

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11:15 a.m.

**CHARACTERIZATION OF LOW MOLECULAR WEIGHT MUCINS IN CRYPTOSPORIDIUM PARVUM**

Roberta O’Connor, Kristen Scarpato, Jonathan Greene, Toral Kamdar, Honorine Ward

New England Medical Center, Boston, MA, United States

(ACMCIP Abstract)

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11:30 a.m.

**MIXED PROTOZOA INFECTION IN CROSS BRED COWS**

Prince Y. Singh\(^1\), M. P. Gupta\(^2\), L. D. Singla\(^3\)

\(^1\)IT, Delhi, India, \(^2\)Department of Veterinary and Animal Husbandry, College of Veterinary Science, Punjab Agricultural University, Ludhiana, India, \(^3\)Department of Veterinary Parasitology, College of Veterinary Science, Punjab Agricultural University, Ludhiana, India

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11:45 a.m.

**GENETIC VARIATION IN GIARDIA LAMBLIA**

Smilja Teodorovic, John Braverman, Heidi G. Elmendorf

Georgetown University, Washington, DC, United States

(ACMCIP Abstract)
Detailed Program

Symposium 15
Developing a Career in Tropical Disease Research: Experiences of the ASTMH Fellows
Supported with funding from the Burroughs Wellcome Fund
Monroe East
Monday, December 12, 2011 10:15 a.m. – Noon
For the past five years, ASTMH (in conjunction with the Burroughs-Wellcome Fund and The Ellison Medical Foundation) has offered post-doctoral fellowships to support individuals interested in pursuing tropical disease research. Three of the ten fellows honored thus far will describe their work, the contribution of the fellowship and their plans. Each fellow will be introduced by a mentor, who will place their research in the larger context of their respective fields.

CHAIR
Terrie E. Taylor
Michigan State University, East Lansing, MI, United States
Victoria McGovern
The Burroughs Wellcome Fund, Research Triangle Park, NC, United States

10:15 a.m.
CAREER DEVELOPMENT IN THE TIME OF CHOLERA
Regina LaRocque
Massachusetts General Hospital, Boston, MA, United States

10:50 a.m.
24-MONTH OUTCOMES OF MATERNAL DIRECTLY OBSERVED THERAPY WITH ANTIRETROVIRALS TO PREVENT INFANT HIV INFECTION IN RURAL HAITI
Holly Murphy
Tulane University, New Orleans, LA, United States

11:25 a.m.
GLOBAL GENOMIC ASSESSMENT OF GENETIC DIVERSITY OF PLASMODIUM FALCIPARUM AND ITS IMPORTANCE IN SEVERE MALARIA: BLANTYRE, MALAWI
Dan Milner
Harvard Medical School, Boston, MA, United States

Symposium 16
Malaria Transmission Blocking Vaccines
Monroe West
Monday, December 12, 2011 10:15 a.m. – Noon
Malaria vaccines have long been the subject of intensive research, and although they have yet to be realized clinically, they are at least now becoming a technical possibility. Vaccines against malaria are being developed to achieve both protection of the vaccinated individual and the reduction of malaria transmission through the community. Unlike most other pathogens for which successful vaccines have been developed, the stages of the malaria parasite that cause disease are different from the stages that transmit the parasites from the mosquito vector to the human host and vice versa. Vaccines against stages that infect mosquitoes, known as transmission blocking vaccines (TBV), will directly prevent the spread of malaria through the community. In this symposia we will discuss the concept of malaria TBV and latest developments.

CHAIR
Sanjay Singh
National Institute of Health, Rockville, MD, United States
Nirbhay Kumar
Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States

10:15 a.m.
UNDERSTANDING MECHANISMS OF TRANSMISSION-BLOCKING IMMUNITY
Robert Sinden
Imperial College of Science, Technology and Medicine, London, United Kingdom

10:40 a.m.
NATURALLY ACQUIRED MALARIA TRANSMISSION BLOCKING IMMUNITY IN THAILAND
Jetsumon Sattabongkot
Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

11:10 a.m.
TRANSMISSION BLOCKING VACCINE TESTING MODEL: IMPLICATIONS IN THE VACCINE DEVELOPMENT
Socrates Herrera
Immunology Institute, Universidad del Valle, Calle, Colombia

11:35 a.m.
PRE-DEVELOPMENT RESEARCH ON TRANSMISSION BLOCKING VACCINE CANDIDATES
Sanjay Singh
National Institutes of Health, Rockville, MD, United States
Symposium 17

Proteomics and the Next Generation of Diagnostic Tests for Parasitic Diseases

Lincoln East

Monday, December 12 10:15 a.m. – Noon

Proteomic approaches to the development of new diagnostic tests for parasitic diseases of humans and domestic animals will be discussed. After a brief outline of the different proteomic techniques, ongoing work with a wide range of protozoan and helminthic infections will be presented. The application of proteomic tests to point-of-care testing and screening of the blood supply will be highlighted.

CHAIR
Brian J. Ward
McGill University, Montreal, Quebec, Canada

Momar Ndao
McGill University, Montreal, Quebec, Canada

10:15 a.m.
PROTEOMIC APPROACHES TO THE DIAGNOSIS OF PARASITIC DISEASES: TECHNICAL CONSIDERATIONS
Mark W. Duncan
University of Colorado, Denver, CO, United States

10:40 a.m.
SELDI-BASED AND SELDI-DERIVED ASSAYS TO PROTECT THE BLOOD SUPPLY
Momar Ndao
McGill University, Montreal, Quebec, Canada

11:10 a.m.
HIGH-THROUGHPUT APPROACHES TO PARASITIC DISEASE DIAGNOSIS BASED ON MASS SPECTROMETRY: MALARIA AND CRYPTOSPORIDIUM
Andrew B. Feldman
Johns Hopkins University, Laurel, MD, United States

11:35 a.m.
SELDI TOF MS FOR THE DIAGNOSIS OF HELMINTH INFECTIONS FROM STRONGYLOIDIASIS TO FASCIOLA HEPATICA
Brian J. Ward
McGill University, Montreal, Quebec, Canada

Symposium 18

Better Vaccines for Tuberculosis: A Progress Report

Lincoln West

Monday, December 12 10:15 a.m. – Noon

BCG vaccine has been in use since the early 1900s and showed good protection in several randomized prospective clinical trials a number of years ago. It is administered to newborns around the world and appears to reduce the risk of severe childhood TB. However, WHO estimates that about one third of the world’s population has been infected with TB and that the annual incidence of new TB cases and TB deaths is in the order of 8 million and 2 million, respectively. The high incidence of TB in many countries where BCG is widely used indicates that better TB immunization is sorely needed to help control this disease. This symposium will provide a perspective on BCG and describe the momentum behind global efforts to find better ways to immunize people against TB. A number of new TB vaccine candidates are in various stages of development, including at least three that have entered Phase I clinical testing. Status of preclinical and clinical work on experimental TB vaccine products and on a prime-boost strategy to improve protection over that provided by BCG will be described, as well as the preparation of field sites for large Phase III trials that are targeted to begin a few years from now in countries where TB is endemic.

CHAIR
Naomi E. Aronson
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Lewellys F. Barker
Aeras Global Tuberculosis Vaccine Foundation, Bethesda, MD, United States

10:15 a.m.
BCG VACCINE PERSPECTIVE
Naomi E. Aronson
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

10:40 a.m.
GLOBAL EFFORTS FOR A NEW TUBERCULOSIS VACCINE, BUILDING MOMENTUM
Michael F. Iademarco
Centers for Disease Control and Prevention, Atlanta, GA, United States

11:10 a.m.
NEW TUBERCULOSIS VACCINE CANDIDATES: STATUS, PLANS AND PROGRESS
Jerald C. Sadoff
Aeras Global Tuberculosis Vaccine Foundation, Bethesda, MD, United States

11:35 a.m.
FIELD SITE DEVELOPMENT FOR CLINICAL TRIALS: STATUS AND LESSONS
Lawrence J. Geiter
Aeras Global Tuberculosis Vaccine Foundation, Bethesda, MD, United States
Detailed Program

Scientific Session 19

Malaria — Epidemiology II

Jefferson East
Monday, December 12 10:15 a.m. – Noon

CHAIR
Indu Malhotra
Case Western Reserve University, Cleveland, OH, United States

Norma R. Padilla
Universidad del Valle de Guatemala, Guatemala, Guatemala

10:15 a.m. 31

LONGITUDINAL STUDY OF MALARIA IN PREGNANT WOMEN IN KINSHASA
Sarah Landis1, Alisa P. Alker1, Rinko Kinoshita1, Kim Powers1, Antoinette K. Tshefu2, Jef Atibu3, Robert W. Ryder1, Steven R. Meshnick1
1Department of Epidemiology, University of North Carolina, Chapel Hill, NC, United States, 2Kinshasa School of Public Health, Kinshasa, Congo, Democratic Republic of the, 3UNC-DRC Program, Kinshasa, Congo, Democratic Republic of the

10:30 a.m. 32

MALARIA IN PREGNANCY IN A HIGH RISK PROVINCE OF SOUTH AFRICA
Joyce M. Tsoka, Immo Kleinschmidt, Brian L. Sharp
Medical Research Council, Durban, South Africa

10:45 a.m. 33

CONGENITAL P. FALCIPARUM MALARIA ACQUIRED ANTENATALLY IN KENYA
Indu Malhotra1, Jesse J. Kwiek2, Steven R. Meshnick2, Eric Muchiri3, John H. Ouma4, Christopher L. King1
1Case Western Reserve University, Cleveland, OH, United States, 2University of North Carolina, Chapel Hill, NC, United States, 3Division of Vector Borne Diseases, Nairobi, Kenya, 4Maseno University, Maseno, Kenya

11 a.m. 34

RISSING MALARIA DEFERRALS AMONG BLOOD DONORS IN THE US AND PUERTO RICO
Megan Nguyen, Ed Notari, David A. Leiby
American Red Cross, Rockville, MD, United States

11:15 a.m. 35

CLUSTERED LOCAL TRANSMISSION AND ASYMPTOMATIC PLASMODIUM FALCIPARUM AND PLASMODIUM VIVAX MALARIA INFECTIONS IN A RECENTLY EMERGED, HYPOENDEMIC PERUVIAN AMAZON COMMUNITY
OraLee H. Branch1, Martin Casapia2, Dionicia V. Gamboa3, Jean N. Hernandez3, Freddy F. Alava5, Norma Roncal3, Eugenia Alvarez2, Enrique Perez2, Eduardo Gotuzzo3
1University of Alabama at Birmingham, Birmingham, AL, United States, 2Ministerio de Salud, Direccicon de Salud-Loreto, Iquitos, Peru, 3Universidad Peruana Cayetano Heredia - Instituto de Medicina Tropical Alexander von Humboldt, Lima, Peru

11:30 a.m. 36

IMPROVEMENT IN HEMOGLOBIN CONCENTRATION ONE YEAR AFTER STARTING INDOOR RESIDUAL SPRAYING IN BIOKO ISLAND, EQUATORIAL GUINEA
Luis Benavente, Immo Kleinschmidt2, Chris Schwabe1, Miguel Torrez1, Brian Sharp2
1Medical Care Development Inc., Silver Spring, MD, United States, 2Medical Research Council, Durban, South Africa

11:45 a.m. 37

WHAT IS THE POTENTIAL OF INSECTICIDE TREATED NETS FOR MALARIA CONTROL IN LATIN AMERICA?
Norma R. Padilla1, C. Cordon-Rosales1, J. Williamson2, R. Klein1
1CES-MERTU/G-Centers for Disease Control and Prevention, Guatemala, Guatemala, 2Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States