

Symposium 20

Ultrasound in Tropical Medicine

Supported with funding from ESAOTE S.p.A./ Biosound Inc. USA, ALOKA S.p.A., SIUMB (Italian Society of Ultrasound in Medicine and Biology) and GE Healthcare Italia

Jefferson West

Monday, December 12 10:15 a.m. – Noon

Ultrasound (US) is a safe, relatively inexpensive, repeatable imaging technique that can be used at the patient's bedside. Portable scanners weighing few kilograms are commercially available and can be used for mass screenings. US is increasingly used in tropical medicine, in many instances for a wide array of applications, including screening and diagnosis, as a guide for treatment and follow-up of several parasitic diseases. This symposium is designed to review and update the expanding use of US in tropical medicine. Each speaker is a noted expert and will discuss recent advances in his/her field of application and indicate areas of controversy and future developments.

CHAIR

Enrico Brunetti

Pavia University, IRCCS S.Matteo, Pavia, Italy

Carlo Filice

Pavia University, IRCCS S.Matteo, Pavia, Italy

10:15 a.m.

ULTRASOUND AND EPIDEMIOLOGY OF PARASITIC DISEASES

Calum N. Macpherson

St. George's University, Grenada, Grenada

10:40 a.m.

ULTRASOUND AND SCHISTOSOMIASIS

Joachim Richter

Heinrich Heine University, Duesseldorf, Germany

11:10 a.m.

ULTRASOUND AND FILARIASIS

Gerusa Dreyer

NEPAF-Hospital das Clinicas-Federal University of Pernambuco, Recife, Brazil

11:35 a.m.

ULTRASOUND AND CYSTIC ECHINOCOCCOSIS IN HIGHLY ENDEMIC AREAS

Eberhard E. Zeyhle

African Medical and Research Foundation (AMREF), Nairobi, Kenya

Symposium 21

Kinetoplast Genome Proteome

Georgetown

Monday, December 12 10:15 a.m. – Noon

The sequencing and annotation of the genomes of *Trypanosoma brucei*, *Trypanosoma cruzi* and *Leishmania major* has recently been completed. This symposium will focus on the major findings in this process, highlighting the unique characteristics of these genomes as well as the features that are in common between the three. Presenters will also discuss how this genome information is being used to obtain insights into parasite biology and exploited for the identification of drug and vaccine targets.

CHAIR

Rick L. Tarleton

University of Georgia, Athens, GA

10:15 a.m.

INTRODUCTION

Rick L. Tarleton

University of Georgia, Athens, GA, United States

10:20 a.m.

THE TRITRYP GENOMES: NEW REVELATIONS AND TANGLED TALES

Najib El-Sayed

The Institute for Genome Research, Rockville, MD, United States

10:45 a.m.

TRYPANOSOMATID MITOCHONDRIAL PROCESSES AS DRUG TARGETS

Ken Stuart

Seattle Biomedical Research Institute, Seattle, WA, United States

11:10 a.m.

INSIGHT INTO TRITRYP METABOLISM, WITH SPECIAL REFERENCE TO *LEISHMANIA MAJOR*

Fred Opperdoes

Christian de Duve Institute of Cellular Pathology and Catholic University of Louvain, Brussels, Belgium

11:35 a.m.

INSIGHTS FROM THE *TRYPANOSOMA CRUZI* PROTEOME

Rick L. Tarleton

University of Georgia, Athens, GA, United States

Symposium 22

Facing the Challenge: Invisible Victims, New Tools and Capacity Building in the Fight Against Malaria

Supported with funding from GlaxoSmithKline

International Ballroom East

Monday, December 12 10:15 a.m. – Noon

The Roll Back Malaria (RBM) initiative aims to halve malaria deaths by 2010. Meanwhile, the United Nations' Millennium Development Goal is to halt and then reverse the rising incidence of the disease by 2015. But are these targets even measurable, let alone achievable? Without improved epidemiological data and properly-funded strategies to evaluate the impact of interventions such as drugs and insecticide-impregnated bednets, control efforts will fail. This symposium examines new scientific tools aiming to fill this information gap. It explores the contribution of capacity building to the provision of creditable baseline data and discusses the roles of combination drug therapy and of the Global Fund to Fight Aids, Tuberculosis and Malaria.

CHAIR

Simon Croft

Drugs for Neglected Diseases Initiative, Geneva, Switzerland

10:15 a.m.

FINDING THE INVISIBLE VICTIMS: UNCOVERING THE HIDDEN BURDEN OF MALARIA

Fred Binka

INDEPTH Network, Accra, Ghana

10:40 a.m.

BICYCLES TO BIOCHEMISTRY: CAPACITY BUILDING IN AFRICA ENABLES COUNTRIES TO TACKLE THEIR OWN HEALTH PROBLEMS

Christopher White

African Medical and Research Foundation United Republic of Tanzania

11:10 a.m.

TOGETHER WE ARE STRONGER; ANTIMALARIAL COMBINATION THERAPY

Simon Croft

Drugs for Neglected Diseases Initiative, Geneva, Switzerland

11:35 a.m.

FOOTING THE BILL: THE GLOBAL FUND

Vinand Nantulya

The Global Fund to Fight AIDS, Tuberculosis and Malaria, Geneva, Switzerland

Symposium 23

American Committee on Arthropod-Borne Viruses (ACAV): Women in Arbovirology

International Ballroom West

Monday, December 12 10:15 a.m. – 12:45 p.m.

Female scientists have made significant contributions to science and in particular, arbovirology. This symposium will present a brief historical account of the role women have played in advancing arbovirology, followed by presentations of research by three esteemed female arbovirologists.

CHAIR

Laura D. Kramer

Wadsworth Center, New York State Department of Health, Albany, NY, United States

10:15 a.m.

ACAV BUSINESS MEETING

Laura D. Kramer

Wadsworth Center, Slingerlands, NY, United States

10:45 a.m.

A HISTORICAL PERSPECTIVE ON THE ROLE OF WOMEN IN SCIENTIFIC RESEARCH

Laura D. Kramer

Wadsworth Center, New York State Department of Health, Albany, NY, United States

11:10 a.m.

MOSQUITO DEFENSES TO INFECTION AND ARBOVIRUS RESPONSES

Carol Blair

Colorado State University, Fort Collins, CO, United States

11:35 a.m.

MULTIAGENT DNA VACCINES FOR BIODEFENSE

Connie Schmaljohn

US Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States

Noon

MICROEVOLUTION AND VIRULENCE OF DENGUE VIRUSES

Rebeca Rico-Hesse

Southwest Foundation for Biomedical Research, San Antonio, TX, United States

12:25 p.m.

OUTBREAK REPORT

Laura D. Kramer

Wadsworth Center, Slingerlands, NY, United States

Exhibit Hall Open

Exhibit Hall

Monday, December 12 Noon – 1:30 p.m.

Poster Session A Setup

Exhibit Hall

Monday, December 12 Noon – 1:30 p.m.

Mid-Day Session 24

Infectious Disease Physicians and Tropical Disease Research

Supported with funding from the Burroughs Wellcome Fund

Monroe East

Monday, December 12 12:15 – 1:15 p.m.

A discussion session on opportunities and barriers for ID physicians going into tropical disease research. This session is a complement to a preceding session featuring the Burroughs Wellcome Fund/ The Ellison Medical Foundation/ASTMH infectious disease fellows.

CHAIR

Victoria McGovern

Burroughs Wellcome Fund, Research Triangle Park, NC, United States

Moderator

Myron S. Magen

Michigan State University, East Lansing, MI, United States

Meet the Professors 25

Meet the Professors B: Enigmatic and Teaching Cases

Supported with funding from GlaxoSmithKline

Lincoln West

Monday, December 12 12:15 – 1:15 p.m.

A panel of professors will each present one clinical case of a tropical disease specific to a particular region that they have found a challenge to manage or diagnose. If there is time, participants may be able to present enigmatic cases for the audience and panel to consider. An open discussion will be encouraged with audience participation.

SESSION ORGANIZER

Alan Spira

The Travel Medicine Center, Beverly Hills, CA

CHAIR

Kenneth Dardick

University of Connecticut, Storrs, CT, United States

PANELISTS

Richard Guerrant

University of Virginia, Charlottesville, VA, United States

Richard D. Pearson

University of Virginia, Charlottesville, VA, United States

Mid-Day Session 26

History of Medicine: Dengue

Jefferson West

Monday, December 12 12:15 – 1:15 p.m.

38

ALBERT SABIN, THE ARMED FORCES EPIDEMIOLOGY BOARD, AND EPIDEMIC DENGUE IN HAWAI‘I: A CRASH PROGRAM TO FIND THE CAUSE OF DENGUE FEVER DURING WORLD WAR II, BASED ON NEW DATA FROM THE ALBERT B. SABIN ARCHIVES, UNIVERSITY OF CINCINNATI

David Morens

National Institutes of Health, Bethesda, MD, United States

Mid-Day Session 27

Healers Abroad – IOM Board on Global Health

International Ballroom East

Monday, December 12 12:15 – 1:15 p.m.

The Institute of Medicine (IOM) is the pre-eminent advisor to the government and nation on matters of health and health policy. This session will feature a panel discussion by senior staff and committee members regarding the current portfolio of projects in the IOM Board of Global Health with special emphasis on “Healers Abroad: Americans Responding to the Human Resource Crisis in HIV/AIDS” — a blueprint for a new, federally funded Global Health Service. Other projects to be discussed will include an evaluation of PEPFAR; an ongoing \$20 million effort to strengthen African academies of science; and national and international policy initiatives related to malaria control.

CHAIR

Claire Panosian

UCLA School of Medicine, Los Angeles, CA, United States

Patrick Kelley

National Academies of Science, IOM Board on Global Health, Washington, DC, United States

12:15 p.m.

CHAIRPERSON: IOM COMMITTEE ON OPTIONS FOR OVERSEAS PLACEMENT OF US HEALTH PROFESSIONALS

Fitzhugh Mullan

Project Hope, Health Affairs, George Washington University Medical Center, Washington, DC, United States

Monday, December 12

12:30 p.m.

**COMMITTEE MEMBERS: IOM COMMITTEE ON
OPTIONS FOR OVERSEAS PLACEMENT OF US
HEALTH PROFESSIONALS**

Michele Barry

Yale University School of Medicine, New Haven, CT, United States

Richard Guerrant

*University of Virginia Medical School, Charlottesville, VA,
United States*

12:45 p.m.

**SENIOR PROGRAM OFFICER: IOM REPORT ON
ECONOMICS OF MALARIA DRUGS**

Hellen Gelband

*National Academy of Science/IOM Board on Global Health,
Washington, DC, United States*

1 p.m.

DIRECTOR, IOM BOARD ON GLOBAL HEALTH

Patrick Kelley

National Academies of Science, Washington, DC, United States

Poster A Viewing

Exhibit Hall

Monday, December 12

1:30 – 7 p.m.

Symposium 28

Schistosomiasis Control in Africa

Military

Monday, December 12

1:30 – 3:15 p.m.

The symposium will start with a review of the burden of morbidity due to schistosomiasis by Dr. Charles King. Since 2002, the Schistosomiasis Control Initiative has supported national schistosomiasis and intestinal helminth control programs in six African countries. SCI has also supported a program of surveillance and monitoring in all countries. The symposium will report on all aspects of the program, including a detailed account of three years of treatment and monitoring in Uganda, and GIS mapping in all six countries.

CHAIR

Alan Fenwick

Imperial College, London, United Kingdom

Narcis Kabatereine

Ministry of Health, Kampala, Uganda

1:30 p.m.

**A REVIEW OF DISABILITY ESTIMATES AND
COST-EFFECTIVENESS FOR DIFFERENT STRATEGIES**

Charles King

Case Western Reserve University, Cleveland, OH, United States

1:55 p.m.

**THE PRESENT AND FUTURE STATUS OF THE NATIONAL
BILHARZIA CONTROL PROGRAM OF UGANDA**

Narcis Kabatereine

Ministry of Health, Kampala, Uganda

2:25 p.m.

**THE APPLICATION OF GIS TO THE MAPPING OF
SCHISTOSOMIASIS**

Simon Brooker

London School of Hygiene and Tropical Medicine, London, United Kingdom

2:50 p.m.

**SCHISTOSOMIASIS CONTROL IN AFRICA —
PROGRESS AFTER 3 YEARS OF THE
SCHISTOSOMIASIS CONTROL INITIATIVE**

Alan Fenwick

*Schistosomiasis Control Initiative, Imperial College, London,
United Kingdom*

Symposium 29**Tropical Neurology***Monroe East*

Monday, December 12

1:30 – 3:15 p.m.

Tropical neurology encompasses a variety of neurologic disorders associated with infectious diseases or nutritional deficiencies. Although most such disorders were initially described in people living in developing countries, neurologists in all parts of the world are increasingly confronted with the diagnostic and therapeutic challenges associated with neurologic disorders in people who have immigrated from or traveled through developing countries. This course will review the diagnosis and management of a variety of “tropical” disorders: parasitic CNS infections, retroviral infections of the nervous system in developing countries, as well as CNS infections in international travelers.

CHAIR

Joseph R. Zunt*University of Washington, Seattle, WA, United States***1:30 p.m.****PARASITIC INFECTIONS OF THE CNS**

Ana Claire Meyer

*Harvard University, Boston, MA, United States***2:05 p.m.****RETROVIRAL INFECTIONS OF THE CENTRAL NERVOUS SYSTEM IN SOUTH AMERICA**

Silvia M. Montano

*Universidad Peruana Cayetano Heredia, Lima, Peru***2:40 p.m.****CNS INFECTIONS IN INTERNATIONAL TRAVELERS**

Joseph R. Zunt

*University of Washington, Seattle, WA, United States***Symposium 30****Innovative Strategies for Infectious Disease Surveillance in Developing Countries***Monroe West*

Monday, December 12

1:30 – 3:15 p.m.

Epidemic prevention and control requires surveillance systems that provide timely and accurate epidemiologic data. In the developing world, infectious disease surveillance faces many challenges, such as poor communication and transportation infrastructure and inadequate diagnostic and informatics resources. This symposium describes approaches to infectious disease surveillance in developing countries that are addressing such challenges through cost-effective technological and epidemiologic innovations. Speakers representing the World Health Organization, the US Centers for Disease Control and Prevention, the US Department of Defense, and the non-profit Foundation for Innovative New Diagnostics will describe current work to illustrate general approaches applicable to other settings.

CHAIR

Jean-Paul Chretien*Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS), Silver Spring, MD, United States***Rana Hajjeh***Centers for Disease Control and Prevention, Atlanta, GA and US Naval Medical Research Unit-3, Cairo, Egypt***1:30 p.m.****INTRODUCTION**

Jean-Paul Chretien

*Walter Reed Army Institute of Research, Silver Spring, MD, United States***1:35 p.m.****THE GLOBAL POLIO LABORATORY NETWORK**

Esther de Gourville

*World Health Organization, Geneva, Switzerland***2 p.m.****SYNDROME-BASED SURVEILLANCE NETWORKS IN THE MIDDLE EAST AND AFRICA**

Rana Hajjeh

*US Centers for Disease Control and Prevention, Atlanta, GA and US Naval Medical Research Unit-3, Cairo, Egypt***2:25 p.m.****ELECTRONIC SURVEILLANCE IN PERU**

Cecilia Mundaca

*US Naval Medical Research Center Detachment, Lima, Peru***2:50 p.m.****DEVELOPING ACCURATE, AFFORDABLE DIAGNOSTIC TESTS FOR DEVELOPING COUNTRIES**

Mark Perkins

Foundation for Innovative New Diagnostics, Geneva, Switzerland

Symposium 31

Update on Hepatitis E Virus (HEV): Global Burden of Disease and Recent Vaccine Trials with a Recombinant HEV Protein

Lincoln East

Monday, December 12 1:30 – 3:15 p.m.

Hepatitis E Virus is a water-borne hepatitis that results in large epidemics with a high degree of morbidity and mortality in developing countries. This symposium will feature updates on the burden of HEV disease in India and China. In addition, the efficacy results of the recent phase II study of the HEV recombinant protein vaccine conducted in Nepal will be presented. A summary of the human safety and immunogenicity data with this vaccine will be discussed.

CHAIR

Timothy P. Endy

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

Bruce Innis

GlaxoSmithKline Biologicals, King of Prussia, PA

Robert H. Purcell

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

1:30 p.m.

EPIDEMIOLOGY OF HEPATITIS E VIRUS DISEASE IN CHINA

Youchun Wang

National Institute for the Control of Pharmaceutical and Biological Products, Beijing, China

1:55 p.m.

EPIDEMIC AND SPORADIC HEPATITIS E IN INDIA (1955-2005)

Vidya A. Arankalle

National Institute of Virology, Pune, India

2:20 p.m.

SAFETY AND EFFICACY OF A RECOMBINANT HEPATITIS E VACCINE TRIAL CONDUCTED IN NEPAL

Mrigendra P. Shrestha, Robert M. Scott

Walter Reed Army Unit Nepal, Kathmandu, Nepal

2:55 p.m.

SUMMARY OF THE SAFETY AND IMMUNOGENICITY OF A RECOMBINANT HEPATITIS E VACCINE

Khin S. Myint

Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

Symposium 32

Artemisinin Drugs: Past, Present, and Future

Lincoln West

Monday, December 12 1:30 – 3:15 p.m.

Twenty years ago Dr. Daniel Klayman introduced the western world to the artemisinin class of antimalarial drugs (Science, 31 May 1985). The purpose of this symposium is to honor Dr. Klayman's contributions to antimalarial chemotherapy and to review progress in the field over the past two decades. The speakers will provide a historical review of the field, summarize recent developments, and focus on existing gaps in knowledge. John Vennerstrom will review Dr. Klayman's early efforts to extract active constituents from the plant and the variety of medicinal chemistry approaches to discover new derivatives. Dennis Kyle will present a review of the mechanism of action studies and provide new data on possible mechanisms of recrudescence. Kyle Webster will discuss data on the safety and toxicity of the class and present a new initiative to define the toxicity profiles for each clinically used compound. Nick White will discuss the rationale underlying the principle of ACT and focus on the selection of the most optimal regimens for implementation.

CHAIR

Dennis E. Kyle

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

Jonathan L. Vennerstrom

University of Nebraska Medical Center, Omaha, United States

1:30 p.m.

HOW DID WE GET FROM QINGHAO TO SYNTHETIC DERIVATIVES?

Jonathan L. Vennerstrom

University of Nebraska Medical Center, Omaha, NE, United States

1:55 p.m.

DO WE REALLY KNOW HOW ARTEMISININS WORK?

Dennis E. Kyle

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

2:25 p.m.

ARTEMISININ TOXICITY: THE CHICKEN LITTLE SYNDROME

H. Kyle Webster

Life Sciences Consultants, Los Gatos, CA, United States

2:50 p.m.

RATIONALE AND PROSPECTS FOR ARTEMISININ COMBINATION THERAPY (ACT)

Nicholas J. White

Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

Symposium 33

Rising to the Challenge: A Discussion of Successful Strategies for Conducting Clinical Trials in Developing Countries

Jefferson East

Monday, December 12 1:30 – 3:15 p.m.

As the pharmaceutical industry becomes more involved in developing medicines for people in resource-constrained regions, understanding the challenges associated with completing clinical trials in these regions is essential. The Institute for OneWorld Health will convene experts in clinical trials to explore how guidelines established elsewhere can be successfully translated into practice in developing countries and how to meet the challenges and needs of study participants as well as sponsors. Panelists will share their expertise and strategies for design and implementation of clinical trials, including site selection and solicitation of cooperative partnerships with the countries involved. Experts will also share insights and lessons learned from drug trials and present options for future direction.

CHAIR

Victoria Hale

Institute for OneWorld Health, San Francisco, CA, United States

Blair Palmer

Institute for OneWorld Health, San Francisco, CA, United States

1:30 p.m.

MODERATOR

Peter Smith

London School of Hygiene and Tropical Medicine; European and Developing Countries Clinical Trials Partnership; Wellcome Trust, London, United Kingdom

1:50 p.m.

PANELIST

Christian Burri

Swiss Tropical Institute, Basel, Switzerland

2:10 p.m.

PANELIST

Leigh Peterson

Family Health International, Research Triangle Park, NC, United States

2:30 p.m.

PANELIST

Ahvie Herskowitz

Institute for OneWorld Health, San Francisco, CA, United States

Scientific Session 35

Clinical Tropical Medicine I

Georgetown

Monday, December 12 1:30 – 3:15 p.m.

CHAIR

Blaise Genton

Swiss Tropical Institute, Basel, Switzerland

Alan Magill

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

1:30 p.m.

39

REVIEW OF THE EPIDEMIOLOGICAL SITUATION OF YELLOW FEVER IN AFRICA

Sylvie C. Briand, Laurence A. Cibrelus, William Perea, Mike Ryan

World Health Organisation, Geneva, Switzerland

1:45 p.m.

40

PLASMODIUM VIVAX IS ASSOCIATED WITH SEVERE MALARIA IN PAPUA NEW GUINEAN CHILDREN

Blaise Genton¹, Valerie D'Acremont¹, Kerry Lorry², Kay Baea², John Reeder², Ivo Mueller²

¹Swiss Tropical Institute, Basel, Switzerland, ²Papua New Guinea Institute of Medical research, Goroka, Papua New Guinea

2 p.m.

41

YAWS OUTBREAK IN THE DEMOCRATIC REPUBLIC OF CONGO: THE RETURN OF A FORGOTTEN DISEASE

S. Gerstl¹, L. Ferradini¹, G. Kiwila², M. Dhorda², S. Lonlas², T. N'Danu³, D. Lemasson², E. Szumilin², PJ Guerin¹

¹Epicentre, Paris, France, ²Médecins Sans Frontières-France, Paris, France, ³Ministry of Health, Nord Oubangui, Democratic Republic of the Congo

2:15 p.m.

42

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

Raimund Helbok¹, Saadou Issifou², Pierre Blaisse Matsiegui², Peter Lackner¹, 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

Monday, December 12

2:30 p.m.

43

CLINICAL MANIFESTATIONS OF HUMAN MONKEYPOX INFLUENCED BY ROUTE OF INFECTIONMary Reynolds¹, **Krista Yorita**¹, Matthew Kuehnert¹, Whitney Davidson¹, Gregory Huhn², Robert Holman¹, Inger Damon¹¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Rush University, School of Medicine, Chicago, IL, United States

2:45 p.m.

44

A SHORT COURSE OF RIFAMPIN AND/OR AZITHROMYCIN DOES NOT ERADICATE WOLBACHIA FROM ONCHOCERCA VOLVULUS IN GUATEMALA**Josef Amann**¹, Byron Arana², George Punkosdy¹, Robert Klein², Carlos Blanco³, Beatriz Lopez², Carlos Mendoza², Mark Eberhard¹, Alfredo Dominguez⁴, James H. Maguire¹, Frank O. Richards¹¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Universidad del Valle, Guatemala City, Guatemala, ³Ministry of Health, Guatemala City, Guatemala, ⁴Onchocerciasis Elimination Program for the Americas (OEPA), Guatemala City, Guatemala

3 p.m.

45

RANDOMIZED CONTROLLED TRIAL COMPARING ARTESUNATE/MEFLOQUINE VERSUS ARTEMETHER/LUMEFANTRINE IN TREATMENT OF UNCOMPLICATED FALCIPARUM MALARIA IN MALI**Issaka Sagara**, Alassane Dicko, Abdoul B. Diallo, Modibo Coulibaly, Abdoulaye Djimde, Mamady Kone, Mahamadou A. Thera, Mahamadou S. Sissoko, Sory I. Diawara, Ogobara K. Doumbo

University of Bamako, Bamako, Mali

Symposium 36**American Committee of Medical Entomology (ACME) I: Factors Affecting the Ability of Mosquitoes to Transmit Pathogens**

International Ballroom East

Monday, December 12

1:30 – 3:15 p.m.

The symposium will examine various factors that affect the ability of mosquitoes to transmit a pathogen. These would include “Virus factors” (viral genetics, receptor sites, interference between closely related viruses, etc.), “Vector factors” (arthropod genetics, receptors sites, etc.), “Vector factors” (population studies, field ecology, etc.), “Environmental factors” (temperature, rainfall, modifications to the environment [e.g., dam construction], etc.), “Presence of other pathogens” (interaction between microfilariae and viruses, between Plasmodium sporozoites and viruses, and between various virus), and effects of pathogen infection on the mosquito vector (reduced fitness, reduced ability to detect blood [enhancing vectorial capacity by increasing the number of hosts probed/blood meal], potentially reduced effectiveness of repellants against infected arthropods, etc.).

CHAIR

Michael J. Turell

USAMRIID, Fort Detrick, MD, United States

1:30 p.m.

INTRODUCTION

Michael J. Turell

USAMRIID, Fort Detrick, MD, United States

1:50 p.m.

VIRAL DETERMINANTS OF ARBOVIRAL-MOSQUITO INTERACTIONS AND IMPLICATIONS FOR DISEASE EMERGENCE

Scott C. Weaver

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

2 p.m.

POPULATION GENETICS OF DENV-2 SUSCEPTIBILITY IN AEADES AEGYPTI

William C. Black

Colorado State University, Fort Collins, CO, United States

2:25 p.m.

THE ROLE OF VECTOR FACTORS (POPULATION STUDIES AND FIELD ECOLOGY) ON THE TRANSMISSION OF ARBOVIRUSES

William K. Reisen

University of California, Bakersfield, CA, United States

2:50 p.m.

EFFECTS OF MOSQUITO INNATE IMMUNITY ON PATHOGEN TRANSMISSION

Shirley Luckhart

University of California at Davis, Davis, CA, United States

Scientific Session 37**American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) – Molecular Parasitology I****Supported with funding from the Burroughs Wellcome Fund**

International Ballroom West

Monday, December 12

1:30 – 3:15 p.m.

CHAIR

Daniel J. Carucci

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

Charles B. Shoemaker

Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States

1:30 p.m.

1100

IDENTIFICATION OF THE MOVING JUNCTION COMPLEX OF THE APICOMPLEXAN PARASITE, TOXOPLASMA GONDII: A COLLABORATION BETWEEN DISTINCT SECRETORY ORGANELLES

David Alexander¹, Jeffrey Mital², Gary Ward², Peter Bradley¹, John Boothroyd¹

¹Stanford University, Stanford, CA; ²University of Vermont, Burlington, VT

1:45 p.m.

46

NEW TOOLS FOR GENETIC ANALYSIS IN PARASITIC NEMATODES

Charles B. Shoemaker¹, Susan Stasiuk², Zainab Issa², Warwick N. Grant²

¹Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States, ²AgResearch Wallaceville Animal Research Centre, Upper Hutt, New Zealand

2 p.m.

47

PROMASTIGOTE SECRETORY GEL AND THE TRANSMISSION OF LEISHMANIA BY SAND FLIES

Paul A. Bates¹, Matthew E. Rogers¹, Andrei V. Nikolaev², Michael A. Ferguson²

¹Liverpool School of Tropical Medicine, Liverpool, United Kingdom, ²Division of Biological Chemistry and Molecular Microbiology, Dundee, United Kingdom

2:15 p.m.

1101

CONDITIONAL EXPRESSION OF TGAMA1 DEMONSTRATES ITS CRITICAL ROLE IN INVASION AND WILL ENABLE DIRECT FUNCTIONAL ANALYSIS OF AMA1 PROCESSING

Jeffrey Mital¹, Markus Meissner², Dominique Soldati², Gary E. Ward¹

¹University of Vermont, Burlington, VT; ²Imperial College London, London, United Kingdom

2:30 p.m.

48

FROM TRANSCRIPTOME TO IMMUNOME : IDENTIFICATION OF DTH INDUCING PROTEINS FROM A PHLEBOTOMUS ARIASI SALIVARY GLAND CDNA LIBRARY

Fabiano Oliveira, Shaden Kamhawi, Amy E. Seitz, Van My Pham, Laurent Fischer, Jerrold Ward, Jesus G. Valenzuela
National Institutes of Health, Rockville, MD, United States

2:45 p.m.

49

HEMOZOIN DISRUPTS ENDOTHELIAL BARRIER INTEGRITY

Mark R. Gillrie¹, Andre G. Buret², D. Channe Gowda³, Kristine Lee¹, May Ho¹

¹Department of Microbiology and Infectious Diseases, University of Calgary, Calgary, AB, Canada, ²Department of Biological Sciences, University of Calgary, Calgary, AB, Canada, ³Department of Biochemistry and Molecular Biology, Pennsylvania State University College of Medicine, Hershey, PA, United States

3 p.m.

1102

CHARACTERIZATION OF ACTIN-LIKE PROTEIN 1 (ALP1), A NOVELACTIN-RELATED PROTEIN IN APICOMPLEXAN PARASITES

Jennifer Gordon, David Sibley

Washington University School of Medicine, St. Louis, MO

Coffee Break

Exhibit Hall

Monday, December 12

3:15 – 3:45 p.m.

Symposium 37A

Scaling-up Antiretroviral Therapy Use in Sub-Saharan Africa: Achievements and Challenges

Monroe East

Monday, December 12

3:45 – 5:30 p.m.

The much anticipated influx of funds and resources under the initiatives such as WHO's 3-by-5 campaign and the Global Fund to Fight AIDS, Tuberculosis, and Malaria, the US President's Emergency Plan for AIDS Relief, the World Bank's Multi-Country HIV/AIDS Programme for the Africa Region and a growing number of national HIV/AIDS programmes initiatives, have led to a significant increase of HIV-infected patients being on antiretroviral therapy in Africa. This HIV/AIDS symposium will provide a progress report to include achievements and challenges of the current scaling up of HAART in Africa.

CHAIR

Jean Nachega

Johns Hopkins University, Baltimore, MD, United States

Thomas Quinn

Johns Hopkins University, Baltimore, United States

Charles Gilks

World Health Organization, Geneva, Switzerland

3:45 p.m.

THE EVOLVING GLOBAL EPIDEMIOLOGY OF HIV/AIDS

Thomas Quinn

Johns Hopkins University, Baltimore, MD, United States

Monday, December 12

4:15 p.m.**A FAMILY APPROACH TO HIV/AIDS-PREVENTION, CARE AND ANTIRETROVIRAL THERAPY IN AFRICA**

Jonathan Mermin

*Centers for Disease Control and Prevention-Uganda, Kampala, Uganda***4:40 p.m.****HIV TREATMENT ISSUES IN SUB-SAHARAN AFRICA**

Jean Nachega

*Johns Hopkins University, Baltimore, MD, United States***5:05 p.m.****WHO'S 3-BY-5 STRATEGIC PLAN: A PROGRESS REPORT AND THE WAY FORWARD**

Charles Gilks

*World Health Organization, Geneva, Switzerland***Symposium 38**

The Role of Human Ecology in the Control of Tropical and Vector-borne Diseases*Monroe West*

Monday, December 12

3:45 – 5:30 p.m.

This session will discuss ongoing research efforts that account for the role of human behavior and human ecology in the transmission and prevention of tropical and vector-borne diseases. Understanding the multiplicity of interactions involved in infectious disease transmission, such as the role of human behavioral factors in complex disease ecology models, is important in fostering scientifically rigorous research that can be used by the public health and infectious disease communities. Community-based field research, which focuses on applied outcomes, will be highlighted in the symposium by providing examples of successful, innovative intervention strategies that document the characteristics of the human environment most associated with disease risk.

CHAIR

Mary H. Hayden*University of Colorado, Colorado Springs, CO, United States***Emily Zielinski-Gutierrez***Centers for Disease Control and Prevention, Fort Collins, CO, United States***3:45 p.m.****LEPTOSPIROSIS IN HAWAII: A SOCIAL-ECOLOGICAL PERSPECTIVE AND THE ROLE OF LOCAL AND TRADITIONAL KNOWLEDGE IN RESEARCH AND PREVENTION**

Bruce A. Wilcox

*Asia-Pacific Institute for Tropical Medicine and Infectious Diseases, University of Hawaii, Honolulu, HI, United States***4:10 p.m.****IMPROVED PARTICIPATION IN MASS DRUG ADMINISTRATION FOR LYMPHATIC FILARIASIS IN AMERICAN SAMOA**

Jonathan King

*Centers for Disease Control and Prevention, Division of Parasitic Disease, Atlanta, GA, United States***4:35 p.m.****COMMUNITY-BASED SOURCE REDUCTION FOR DENGUE AND FILARIASIS VECTORS IN AMERICAN SAMOA**

Mark Schmaedick

*American Samoa Community College, Pago Pago, American Samoa***5 p.m.****KNOWLEDGE, ATTITUDES AND PRACTICES CONCERNING WEST NILE VIRUS ON THE CALIFORNIA/BAJA CALIFORNIA BORDER**

Maureen Fonseca-Ford

*Centers for Disease Control and Prevention; Division of Global Migration and Quarantine, San Diego, CA, United States***Symposium 39**

The Globalization of Diseases of Public Health Significance*Lincoln East*

Monday, December 12

3:45 – 5:30 p.m.

As a consequence of globalization and population mobility, the burden of tropical diseases is no longer confined in clinical practice nor in public health policy to endemic areas. Longstanding gaps in prevalence between affected and non-affected zones are rapidly bridged by migrants and long-staying travelers. Changes in the patterns of residence, work and travel supported by evolving late 20th Century advances in telecommunication, technology, trade and transportation have narrowed the distance between endemic and epidemic events in tropical to temperate zones. High-speed travel now allows for the greater presentation of imported disease pathology beyond traditional ports of entry, influencing both the demand need for diagnostic and clinical management capacity throughout the health care sector. This symposium will present a framework of global disease management and policy formation that describes shifts from the classical tools of disease control and clinical assessment to an approach that is as applicable to the bedside clinician, educator, as well as the international public health policy maker. Discussion will draw on existing knowledge of tropical diseases and control practices taking as examples HIV/AIDS, syphilis, SARS and the 2005 revision of the international health regulations.

CHAIR

Douglas W. MacPherson*Migration Health Consultants Inc., Cheltenham, ON, Canada***Brian D. Gushulak***Migration Health Consultants Inc., Vienna, Austria*

3:45 p.m.

INTRODUCTION

Douglas W. MacPherson
Migration Health Consultants Inc., Cheltenham, ON, Canada

4:05 p.m.

MANAGING THE HEALTH OF MIGRANTS TO THE US — SHIFTING POLICIES AND PRACTICES

Martin Cetron
Centers for Disease Control, Atlanta, GA, United States

4:30 p.m.

MIGRANT HEALTH CARE IN THE US: HEALTH SCREENING, IMMUNIZATIONS, AND OTHER CHALLENGES

Elizabeth Barnett
Boston Medical Center, Boston, MA, United States

4:50 p.m.

SHIFTING THE APPROACH TO GLOBAL DISEASE THREATS AND RISKS — THE 2005 REVISIONS OF THE INTERNATIONAL HEALTH REGULATIONS AND POPULATION MOBILITY

David Heymann
World Health Organization, Geneva, Switzerland

5:15 p.m.

PANEL DISCUSSION

Symposium 40

Viral Hemorrhagic Fevers

Lincoln West

Monday, December 12 3:45 – 5:30 p.m.

Due to their clinical severity, person-to-person transmissibility, ability to form stable infectious aerosols, absence of licensed vaccines or anti-viral therapies, and tendency to cause outbreaks associated with high mortality and public panic, the viral hemorrhagic fevers have become a major public health concern. Recent years have seen increasing outbreaks of Ebola, Marburg, and Lassa viruses, among others. How serious is the threat of viral hemorrhagic fevers and what progress is being made to address these pathogens?

CHAIR

Daniel G. Bausch

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Joel Montgomery

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

3:45 p.m.

ANGOLA 2005: MARBURG RESURFACES

Joel M. Montgomery
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:05 a.m.

FIELD DIAGNOSTICS FOR THE VIRAL HEMORRHAGIC FEVERS

Heinz Feldmann
Public Health Agency of Canada, Winnipeg, MB, Canada

4:25 p.m.

VACCINES AND THERAPEUTICS FOR THE VIRAL HEMORRHAGIC FEVERS

Thomas Geisbert
United States Army Medical Research Institute, Fort Detrick, MD, United States

4:45 p.m.

BUILDING CAPACITY FOR VHF CONTROL: THE MANO RIVER UNION LASSA FEVER NETWORK

May Chu
World Health Organization, Geneva, Switzerland

5:05 p.m.

FILOVIRUS CONNECTIONS WITH WILDLIFE AND RURAL COMMUNITIES

William Karesh
Wildlife Conservation Society, Bronx, NY, United States

Symposium 41

Ethics of International Collaborative Research

Jefferson East

Monday, December 12 3:45 – 5:30 p.m.

Health research is a public good and the burden and benefits of doing health research should be shared equally by the partners involved. International researchers must develop a deeper understanding of the context within which their research is being conducted. Educating researchers and members of research ethics committees about research ethics is a requirement for making moral progress in international health research.

CHAIR

Fernando J. Andrade-Narvaez

Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico

Eric M. Meslin

Indiana University Center for Bioethics, Indianapolis, IN, United States

3:45 p.m.**COLLABORATIVE RESEARCH: STRATEGIES AND ETHICAL CONDUCT**

Miriam F. Kelty

*National Institute on Aging, National Institutes of Health, Bethesda, MD, United States***4:10 p.m.****TAILORING US REQUIREMENTS FOR RCR EDUCATION TO COLLABORATIVE RESEARCH IN LATIN AMERICA**

Elizabeth Heitman

*Vanderbilt University Medical Center, Nashville, TN, United States***4:40 p.m.****ARE HEALTH RESEARCH ACCOMPLISHMENT RELATED TO POPULATION REQUIREMENTS?**

Angélica Ángeles Llerenas

*Instituto Nacional de Salud Pública, Mexico, DF, Mexico***5:05 p.m.****ISSUES OF TRANSNATIONAL CAPACITY BUILDING IN RESEARCH ETHICS**

Eric M. Meslin

*Indiana University Center for Bioethics, Indianapolis, IN, United States***Symposium 42****New Fixed-Dose Artemisinin Combination Therapies to Treat Falciparum Malaria***Jefferson West*

Monday, December 12

3:45 – 5:30 p.m.

Artemisinin-based therapies in free combinations have been effective in treating malaria and no known cases of resistance to artemisinin have been identified so far. Fixed-dose artemisinin combinations will increase compliance, further reduce the occurrence of resistance, and improve efficacy; and several new artemisinin fixed-dose combinations are in the pipeline. The challenge, however, lies in developing stable formulations as quickly as possible, accelerating the development and registration of the drugs, and ensuring availability and adoption.

CHAIR

Jaya Banerji*Drugs for Neglected Diseases Initiative, Geneva, Switzerland***Nick White***Wellcome Trust Mahidol University Oxford Tropical Medicine Research Programme, Bangkok, Thailand***3:45 p.m.****ARTESUNATE AMODIAQUINE**

Sodiomon Sirima

*Centre National de Recherche et de Formation sur le Paludisme (CNRFP), Ouagadougou, Burkina Faso***4:15 p.m.****ARTESUNATE MEFLOQUINE**

Elizabeth Ashley

*Shoklo Malaria Research Unit, Mae Sod, Tak, Thailand***4:40 p.m.****ARTEKIN – DIHYDROARTEMISININ-PIPERAQUINE**

Umberto D'Alessandro

*Prince Leopold Institut of Tropical Medicine, Antwerp, Belgium***5:05 p.m.****PYRONARIDINE-ARTESUNATE**

Larry Fleckenstein

*University of Iowa, Iowa City, IA, United States***Scientific Session 43****Clinical Tropical Medicine II***Georgetown*

Monday, December 12

3:45 – 6 p.m.

CHAIR

Davidson H. Hamer*Boston University, Center for International Health and Development, Boston, MA, United States***Robert A. Gasser, Jr.***Walter Reed Army Medical Center, Washington, DC, United States***3:45 p.m.****50****WEB-BASED GUIDELINES FOR THE EVALUATION OF FEVER IN RETURNING TRAVELERS AND MIGRANTS WWW.FEVERTRAVEL.CH : AN ONLINE 'GLOBAL' STUDY ON FEASIBILITY AND SAFETY FOR USE BY THE PRIMARY CARE PHYSICIAN****Blaise Genton¹**, Yolanda Mueller¹, Anne-Emmanuelle Ambresin¹, Bernard Burnand², Valerie D'Acremont¹*¹Travel Clinic, Medical Outpatient Clinic, University of Lausanne, Lausanne, Switzerland, ²Center for Clinical Epidemiology, University of Lausanne, Lausanne, Switzerland***4 p.m.****51****FEASIBILITY AND ACCEPTABILITY OF USE OF COARTEM FOR EARLY APPROPRIATE HOME MANAGEMENT OF FEVERS IN CHILDREN AGED 6-59 MONTHS IN GHANA****Margaret A. Chinbuah**, John O. Gyapong, Edith K. Wellington, Margaret Gyapong*Ghana Health Service, Accra, Ghana*

4:15 p.m.

52

OUTBREAK OF CYCLOSPORIASIS AT A NAVAL BASE IN ANCÓN, LIMA, PERÚ

Paola A. Torres¹, Carmen C. Mundaca¹, José Quispe², Andrés G. Lescano¹, David L. Blazes¹

¹Naval Medical Research Center Detachment, Lima, Peru, ²Centro Medico Naval, Lima, Peru

4:30 p.m.

53

HIGH PREVALENCE OF UNTREATED TROPICAL INFECTIOUS DISEASES AMONG SUDANESE REFUGEES LIVING IN THE US

Carlos Franco-Paredes, Russell Kempker, Roberta Dismukes, Deborah Nicolls, Phyllis Kozarsky
Emory University School of Medicine, Atlanta, GA, United States

4:45 p.m.

54

INTERMITTENT PRESUMPTIVE THERAPY OF MALARIA WITH SP IN HIV-SEROPOSITIVE ZAMBIAN WOMEN: A PLACEBO-CONTROLLED, RANDOMIZED TRIAL

Davidson H. Hamer¹, Victor Mwanakasale², Victor Chalwe², Lawrence Mwanayanda², Doreen Mukwamataba², Roma Chilengi², M. Mubikayi³, C. Mulele⁴, Davies Champo², Modest Mulenga², Donald M. Thea¹, William B. MacLeod¹, Christopher J. Gill¹

¹Center for International Health and Development, Boston, MA, United States, ²Tropical Diseases Research Centre, Ndola, Zambia, ³Ndola Central Hospital, Ndola, Zambia, ⁴Mines Hospital, Kitwe, Zambia

5 p.m.

55

TYPHOID FEVER INCIDENCE IN 2 SUB-DISTRICTS OF NORTH JAKARTA, INDONESIA, THROUGH PASSIVE SURVEILLANCE

Narain H. Punjabi¹, Magdarina D. Agtini², Cyrus H. Simanjuntak¹, Decy S. Subekti¹, Lorenz von Seidlein³, Sri P. Pulungsih⁴, Ferry Wangsasaputra², Santoso Soeroso⁴, Jacqueline H. Deen³, Hye Joon Lee³, Agus Suwandono², John D. Clemens³

¹NAMRU-2, Jakarta, Indonesia, ²National Institutes of Health, Jakarta, Indonesia, ³IVI, Seoul, Republic of Korea, ⁴RSPiSS, Jakarta, Indonesia

5:15 p.m.

56

BURDEN OF INVASIVE DISEASE CAUSED BY HAEMOPHILUS INFLUENZAE TYPE B AND STREPTOCOCCUS PNEUMONIAE AMONG INFANTS IN BAMAKO, MALI

Samba O. Sow¹, Milagritos D. Tapia², Souleymane Diallo³, James D. Campbell², Karen Kotloff², Myron M. Levine²
¹Center for Vaccine Development-Mali, Bamako, Mali, ²University of Maryland School of Medicine, Baltimore, MD, United States, ³Hopital Gabriel Toure, Bamako, Mali

5:30 p.m.

670

AN OPEN, DOSE-RANGING, PHASE II TRIAL OF CHLORPROGUANIL/DAPSONE WITH THREE DOSES OF ARTESUNATE FOR THE TREATMENT OF ACUTE UNCOMPLICATED PLASMODIUM FALCIPARUM (P.F) MALARIA

Dan Wootton¹, Hyginus Opara², Maggie Nyirenda³, Hannah Blencoe³, Maxwell Kanjala⁴, Ignatius Baldeh², Mary Woessner⁵, Colin Neate⁶, Stephan Duparc⁶, Paula Kirby⁶, Paul Milligan⁷, Malcolm Molyneux⁴, Sam Dunyo², Peter Winstanley⁸

¹Tropical and Infectious Disease Unit, Royal Liverpool University Hospital, Liverpool, United Kingdom, ²MRC Laboratories, Fajara, Gambia, ³College of Medicine, Blantyre, Malawi, ⁴Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi, ⁵GlaxoSmithKline, Philadelphia, PA, United States, ⁶GlaxoSmithKline, London, United Kingdom, ⁷London School of Hygiene and Tropical Medicine, London, United Kingdom, ⁸University of Liverpool, Liverpool, United Kingdom

5:45 p.m.

1095

A CASE REPORT OF MEFLOROQUINE-INDUCED ALTERATION OF CARDIAC PACEMAKER THRESHOLDS

Neil E. Gibson
Department of National Defence, Canada, St. Albert, AB, Canada

Symposium 44

American Committee of Medical Entomology (ACME) II: Factors Affecting the Ability of Mosquitoes to Transmit Pathogens

International Ballroom East

Monday, December 12 3:45 – 5:30 p.m.

This session is the continuation of the ACME Symposium on Factors Affecting the Ability of Mosquitoes to Transmit Pathogens and will be immediately followed by the ACME business meeting.

CHAIR

Michael J. Turell

United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States

Monday, December 12

3:45 p.m.

EFFECTS OF ENVIRONMENTAL FACTORS ON THE TRANSMISSION OF VIRUSES

Kenneth J. Linthicum

USDA-Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL, United States

4:20 p.m.

EFFECTS OF THE PRESENCE OF OTHER PATHOGENS ON THE TRANSMISSION OF VIRUSES

Michael J. Turell

United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States

4:55 p.m.

EFFECTS OF PATHOGEN INFECTION AND NUTRITIONAL FACTORS ON PATHOGEN TRANSMISSION

Peter F. Billingsley

*School of Biological Sciences, University of Aberdeen, Aberdeen, United Kingdom***Scientific Session 45****American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) — Molecular Parasitology II****Supported with funding from the Burroughs Wellcome Fund***International Ballroom West*

Monday, December 12

3:45 – 5:30 p.m.

CHAIR

Peter Zimmerman*Case Western Reserve University, Cleveland, OH, United States***Mary Ann McDowell***University of Notre Dame, Notre Dame, IN, United States*

3:45 p.m.

1103

EXCLUSIVE EXPRESSION OF VIRULENCE GENES BY THE MALARIA PARASITES *P. FALCIPARUM* IS REGULATED INDEPENDENTLY OF ANTIGEN PRODUCTION**Ron Dzikowski**, Frank Matthias, Kirk Deitsch*Weill Medical College of Cornell University, New York, NY*

4 p.m.

57

A WOLBACHIA ENDOSYMBIONT DNA SEQUENCE IS HORIZONTALLY TRANSFERRED TO THE NUCLEAR GENOME OF THE FILARIAL PARASITE *BRUGIA MALAYI***Peter Fischer**¹, Jessica Ingram², Dietrich W. Buttner³, Christel Schmetz³, Barton Slatko²*¹Washington University School of Medicine, St. Louis, MO, United States, ²New England Biolabs, Beverly, MA, United States,**³Bernhard Nocht Institute, Hamburg, Germany*

4:15 p.m.

58

ESTABLISHING RNAI TO KNOCKDOWN *FREP2* EXPRESSION IN THE SNAIL, *BIOMPHALARIA GLABRATA*, AN INTERMEDIATE HOST FOR *SCHISTOSOMA MANSONI***Si-Ming Zhang**, Yiguo Jiang, Eric S. Loker*University of New Mexico, Albuquerque, NM, United States*

4:30 p.m.

1104

PLASMODIUM* LIVER STAGE DEVELOPMENT DEPENDS ON RECRUITMENT OF A HOST HEPATOCYTE FACTOR*Ann-Kristin Mueller**¹, Kristin Goetz¹, Stefan Kappe², Kai Matuschewski¹*¹University of Heidelberg, Heidelberg, Germany²Seattle Biomedical Research Institute, Seattle, WA*

4:45 p.m.

59

DIAGNOSING INFECTION LEVELS OF FOUR HUMAN MALARIA PARASITE SPECIES BY A PCR/LDR FLUORESCENT MICROSPHERE-BASED ASSAY**David T. McNamara**¹, Laurin J. Kasehagen¹, Brian T. Grimberg¹, Jennifer Cole-Tobian¹, William E. Collins², **Peter A. Zimmerman**¹*¹Case Western Reserve University, Cleveland, OH, United States,**²Centers for Disease Control and Prevention, Chamblee, GA, United States*

5 p.m.

60

GENE GUN IMMUNIZATION AGAINST CIRCUMSPOROZOITE PROTEIN OF *PLASMODIUM BERGHEI* INDUCES PROTECTIVE IMMUNITY INDEPENDENT OF EFFECTOR T CELLS**Elke S. Bergmann-Leitner**¹, Elizabeth H. Duncan¹, Wolfgang W. Leitner², Jackie L. Williams¹, Jeffrey A. Lyon¹*¹Walter Reed Army Institute, Silver Spring, MD, United States,**²National Institutes of Health, Bethesda, MD, United States*

5:15 p.m.

61

INVESTIGATING THE ROLE OF *PLASMODIUM FALCIPARUM* ERYTHROCYTE MEMBRANE PROTEIN 1 INTERACTION WITH CHONDROITIN SULFATE A IN THE PATHOGENESIS OF PLACENTAL MALARIA**Michael F. Duffy**¹, Alexander G. Maier², Timothy J. Byrne¹, Salenna R. Elliott¹, Allison J. Marty², Paul D. Payne¹, Stephen J. Rogerson¹, James G. Beeson², Matthew O'Neil², Alan F. Cowman², Brendan S. Crabb², **Graham V. Brown**¹*¹University of Melbourne, Victoria, Australia, ²The Walter and Eliza Hall Institute of Medical Research, Melbourne, Victoria, Australia*

Exhibit Hall Open

Exhibit Hall

Monday, December 12 4:30 – 5:30 p.m.

Plenary Session II

International Ballroom Center

Monday, December 12 6 – 6:45 p.m.

Fred L. Soper Lecture

The Fred L. Soper Lecture is an honor bestowed on a distinguished scientist involved in studies related to environmental control and preventive medicine in the tropics.

CHAIR

Robert B. Tesh

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

Q FEVER

Didier Raoult

Unite des Rickettsies, Marseille, France

**Late Breakers in Basic Science/
Molecular Biology**

International Ballroom East

Monday, December 12 7 – 9 p.m.

CHAIR

Rebeca Rico-Hesse

Southwest Foundation for Biomedical Research, San Antonio, TX, United States

Stefan Kappe

Seattle Biomedical Research Institute, Seattle, WA, United States

This session is specifically designed for brief presentations of important, new data obtained after the closing date for abstract submission.

See Late Breaker handout for presentation schedule.

Late Breakers in Clinical Tropical Medicine

International Ballroom West

Monday, December 12 7 – 9 p.m.

CHAIR

Barbara L. Herwaldt

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

David F. McNeeley

Tibotec, Raritan, NJ, United States

This session is specifically designed for presentations of new data of interest to practicing clinicians, obtained after the closing date for abstract submission. Reports of clinical trials, preliminary data on new outbreaks of disease and individual case reports will be presented.

See Late Breaker handout for presentation schedule.

Tuesday, December 13

Registration

Concourse Foyer

Tuesday, December 13 7 a.m. – 5 p.m.

Journal Editorial Board Breakfast

State

Tuesday, December 13 7 – 8 a.m.

Clinical Group Past Presidents Breakfast

Chevy Chase

Tuesday, December 13 7 – 8 a.m.

Poster Session A Viewing

Exhibit Hall

Tuesday, December 13 7 a.m. – Noon

Scientific Session 46

Malaria – Mosquito Biology

Hemisphere

Tuesday, December 13 8 – 9:30 a.m.

CHAIR

Jan E. Conn

New York State Department of Health, Slingerlands, NY, United States

Mary Ann McDowell

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

8 a.m.

62

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

8:15 a.m.

63

AN ENTOMOPATHOGENIC FUNGUS AGAINST ADULT AFRICAN MALARIA MOSQUITOES

Ernst-Jan Scholte¹, Kija Ng'habi², Japheth Kihonda³, Willem Takken¹, Krijn Paaijmans¹, Salim Abdulla², Gerry Killeen², Bart G.j. Knols⁴

¹Wageningen University, Wageningen, Netherlands, ²Ifakara Health Research and Development Centre, Ifakara, United Republic of Tanzania, ³Swiss Tropical Institute, Basel, Switzerland, ⁴International Atomic Energy Agency, Seibersdorf, Austria

Tuesday, December 13

8:30 a.m.

64

DYNAMIC MODELING OF MALARIA TRANSMISSIONS WITH APPLICATIONS TO A STUDY SITE IN WESTERN THAILAND

Richard K. Kiang¹, **Farida Adimi**¹, Gabriela E. Zollner², Russell E. Coleman²

¹NASA Goddard Space Flight Center, Greenbelt, MD, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

8:45 a.m.

65

GENETIC DIFFERENTIATION BETWEEN THE BAMAKO AND SAVANNA CHROMOSOMAL FORMS OF ANOPHELES GAMBIAE AS INDICATED BY AFLP ANALYSIS

Michel Slotman¹, Monique Mendez¹, Alessandra della Torre², Guimogo Dolo³, Yeya Toure⁴, **Adalgisa Caccone**¹

¹Yale University, New Haven, CT, United States, ²Universita of Rome "La Sapienza", Rome, Italy, ³Ecole Nationale de Medecine et de Pharmacie, Bamako, Mali, ⁴World Health Organization, Geneva, Switzerland

9 a.m.

66

GENETIC DIFFERENTIATION AND ORIGIN OF SÃO TOMÉ AND PRÍNCIPE (WEST AFRICA) ANOPHELES GAMBIAE POPULATIONS

Jonathan Marshall¹, J. Pinto², J. D. Charlwood³, G. Gentile⁴, F. Santolamazza⁵, F. Simard⁶, A. dellaTorre⁵, A. Caccone¹

¹Yale University, New Haven, CT, United States, ²University Nova de Lisboa, Lisboa, Portugal, ³Institute for Health Research, Copenhagen, Denmark, ⁴University "Tor Vergata", Rome, Italy, ⁵University "La Sapienza", Rome, Italy, ⁶Oceac, Yaoundé, Cameroon

9:15 a.m.

67

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
(ACMCIP Abstract)

Scientific Session 47

Viruses I — Hantaviruses

Military

Tuesday, December 13

8 – 9:45 a.m.

CHAIR

Brian Hjelle

University of New Mexico, Albuquerque, NM, United States

Connie Schmaljohn

USAMRIID, Fort Detrick, MD, United States

8 a.m.

68

A NEW PUUMALA HANTAVIRUS AS CAUSE OF AN NEPHROPATHIA EPIDEMICA OUTBREAK IN SOUTH-EAST GERMANY IN 2004

Sandra S. Essbauer¹, Jonas Schmidt², Franz C. Conraths², Robert Friedrich², Judith Koch³, Wolfgang Hautmann⁴, Martin Pfeffer¹, Roman Wölfel¹, Ernst J. Finke¹, Gerhard Dobler¹, Rainer Ulrich²

¹Bundeswehr Institute of Medical Microbiology, Munich, Germany, ²Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Institute of Epidemiology, Wusterhausen, Germany, ³Robert Koch-Institut, Berlin, Germany, ⁴Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, Munich, Germany

8:15 a.m.

69

IMPACT OF LAND COVER CHANGE ON HANTAVIRUS ECOLOGY IN THE INTER-ATLANTIC FOREST OF PARAGUAY

Colleen B. Jonsson¹, Douglas G. Goodin², Robert D. Owen³, Yong-Kyu Chu¹, David Koch²

¹Southern Research Institute, Birmingham, AL, United States, ²Department of Geography, Kansas State University, Manhattan, KS, United States, ³Department of Biological Sciences, Texas Tech University, Lubbock, TX, United States

8:30 a.m.

70

A HOSPITAL-BASED PROSPECTIVE STUDY OF HANTAVIRUS INFECTIONS IN BANDUNG, INDONESIA

Bachti Alisjahbana¹, Herman Kosasih², Yumilia Hoo³, Mia Milanti¹, Susana Widjaja², Erlin Listiyaningsih², Djatnika Setiabudi⁴, Charmagne G. Beckett⁵, **Patrick J. Blair**²

¹Internal Medicine Department Hasan Sadikin Hospital, Bandung, Indonesia, ²US Naval Medical Research Unit 2, Jakarta, Indonesia, ³Internal Medicine Department Immanuel Hospital, Bandung, Indonesia, ⁴Pediatrics Department Hasan Sadikin Hospital, Bandung, Indonesia, ⁵Naval Medical Research Center, Silver Spring, MD, United States

8:45 a.m.

71

THE FINDING OF PUUMALA AND SEOUL HANTAVIRUSES IN RATTUS SP, WITHIN JAVA, INDONESIA

Erlin Listiyaningsih¹, Gustiani Gustiani¹, Herman Kosasih¹, Ima N. Ibrahim², Susana Widjaja¹, Ratna Irsiana Tan³, Kevin R. Porter³, Charmagne G. Beckett³, Patrick J. Blair¹

¹United States Naval Medical Research Unit No. 2, Jakarta, Indonesia, ²Center for Health Ecology Research and Development, National Institutes of Health R&D, Jakarta, Indonesia, ³Viral Diseases Department Naval Medical Research Center, Silver Spring, MD, United States

9 a.m.

72

A PREDICTIVE MODEL FOR IDENTIFYING PERSISTENT POPULATIONS OF PEROMYSCUS MANICULATUS INFECTED WITH SIN NOMBRE VIRUS

Christine L. Hice¹, Timothy M. Shields², Greg E. Glass², James N. Mills³, Terry L. Yates¹

¹University of New Mexico, Albuquerque, NM, United States, ²The John Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ³Centers for Disease Control and Prevention, Atlanta, GA, United States

9:15 a.m.

73

INNATE IMMUNE RESPONSES TO SIN NOMBRE VIRUS COMPONENTS SUGGEST THAT ENDOTHELIAL CELLS RECOGNIZE A SPECIFIC PATHOGEN-ASSOCIATED MOLECULAR PATTERN (PAMP) IN THE VIRAL PARTICLE

Joseph B. Prescott, Chunyan Ye, **Brian Hjelle**

University of New Mexico HSC, Albuquerque, NM, United States

9:30 a.m.

74

SHOCK IN HAMSTER MODELS OF HANTAVIRUS INFECTION

Matthew Campen¹, Mary Lou Milazzo², Charles Fulhorst², **Frederick T. Koster**¹

¹Lovelace Respiratory Research Institute, Albuquerque, NM, United States, ²University of Texas Medical Branch, Galveston, TX, United States

Scientific Session 48

Kinetoplastida I

Monroe East

Tuesday, December 13

8 - 9:45 a.m.

CHAIR

Richard Titus

Colorado State University, Fort Collins, CO, United States

Charles L. Jaffe

Hebrew University-Hadassah Medical School, Jerusalem, Israel

8 a.m.

75

CHAGAS TRANSMISSION IN A PRIMATE COLONY IN LOUISIANA

Megan Daigle¹, Frank Cogswell², Patricia L. Dorn¹

¹Loyola University New Orleans, New Orleans, LA, United States, ²Tulane National Primate Research Center, Covington, LA, United States

8:15 a.m.

76

ASYMPTOMATIC LEISHMANIAL INFECTION AND KALA-AZAR IN A BANGLADESHI COMMUNITY

Caryn Bern¹, John Williamson¹, Rashidul Haque², Katie Kurkjian¹, Josef Amann¹, Rajib Chowdhury², Mustakim Ali², Louise Vaz¹, Catherine Cetre-Sossah¹, Allen Hightower¹, Yukiko Wagatsuma², Robert Breiman¹, James Maguire¹, Evan Secor¹

¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²ICDDR,B, Dhaka, Bangladesh

8:30 a.m.

77

THE EPIDEMIOLOGY OF THE CHAGAS DISEASE VECTOR, TRIATOMA INFESTANS, IN A PERIURBAN COMMUNITY, AREQUIPA, PERU

Michael Z. Levy¹, Natalie Bowman², Vivian Kawai², Lance Waller³, Eleazer Cordova⁴, Juan Cornejo del Carpio⁵, Robert Gilman², Caryn Bern¹

¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²A.B. PRISMA, Lima, Peru, ³Emory University, Atlanta, GA, United States, ⁴San Agustin National University, Arequipa, Peru, ⁵Arequipa Regional Office of the Peruvian Ministry of Health, Arequipa, Peru

8:45 a.m.

78

IDENTIFICATION OF ANTIKINETOPLASTID COMPOUNDS FROM PLANTS

Karl Werbovets, Manar Salem, Mitali Mukherjee, Samia Zidan, Mark Bahar, Joshua Fletcher, Nasir Hassan, A. Douglas Kinghorn

Ohio State University College of Pharmacy, Columbus, OH, United States

9 a.m.

79

SCREENING FOR NEW DRUGS AGAINST LEISHMANIA MAJOR

Richard Titus¹, Stephanie St. George², Jeanette Bishop¹, Claude Selitrennikoff²

¹Colorado State University, Fort Collins, CO, United States, ²Mycologics, Inc., Aurora, CO, United States

9:15 a.m.

80

EFFECTIVE CLEARANCE OF LEISHMANIA MAJOR INFECTION IN SUSCEPTIBLE BALB/C MICE BY NANODISK-BOUND AMPHOTERICIN B

Richard Titus¹, Keith Nelson¹, Jeanette Bishop¹, Robert Ryan²

¹Colorado State University, Fort Collins, CO, United States, ²Children's Hospital Oakland Research Institute, Oakland, CA, United States

9:30 a.m.

81

REVERSE LINE BLOT — POLYMERASE CHAIN REACTION (RLB-PCR) FOR THE DIAGNOSIS OF OLD WORLD LEISHMANIASIS

Ester Bensoussan¹, Abedelmajeed Nasereddin¹, Gad Baneth², **Charles L. Jaffe**¹

¹Hebrew University-Hadassah Medical School, Jerusalem, Israel, ²Koret School of Veterinary Medicine, Hebrew University, Rehovot, Israel

Scientific Session 49

Cestodes I

Monroe West

Tuesday, December 13

8 – 9:45 a.m.

CHAIR

A. Clinton White

Baylor College of Medicine, Houston, TX, United States

Peter Kern

University Hospital and Medical Center, University of Ulm, Ulm, Germany

8 a.m.

82

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 Giraudoux⁴, David Pleydell³, 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

8:15 a.m.

83

SPATIAL AND TEMPORAL EPIDEMIOLOGY OF ECHINOCOCCUS MULTILOCULARIS: RESULTS OF THE EUROPEAN PROJECT ECHINORISK

Peter Kern¹, Patrick Giraudoux², Thomas Romig³

¹University of Ulm, Ulm, Germany, ²University of Franche-Comté, Ulm, France, ³University of Hohenheim, Stuttgart-Hohenheim, Germany

8:30 a.m.

84

CYSTIC ECHINOCOCCOSIS (CE) IN THE HIGHLAND OF PERU: STUDY OF AGE AND GENDER EFFECT USING CHEST X-RAY, ULTRASOUND AND ENZYME-LINKED IMMUNOELECTROTRANSFER BLOT (EITB) TESTS

Cesar M. Gavidia¹, Armando E. Gonzalez¹, Luis Lopera¹, Berenice Ninaquispe¹, Eduardo Barron¹, Hugo H. Garcia², Siliva Rodriguez², Manuela R. Verastegui³, Carmen Calderon¹, Robert H. Gilman⁴, Jose A. Chabalgoity⁵

¹San Marcos University, Veterinary School, Lima, Peru, ²Instituto de Ciencias Neurológicas, Santo Toribio de Mogrovejo, Lima, Peru, ³Universidad Peruana Cayetano Heredia, Lima, Peru, ⁴Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD, United States, ⁵Facultad de Medicina, Universidad de la Republica, Montevideo, Uruguay

8:45 a.m.

85

WATCH AND WAIT AS AN ALTERNATIVE “TREATMENT” FOR ACTIVE AND TRANSITIONAL ECHINOCOCCAL CYSTS. SINGLE CENTER EXPERIENCE

Enrico Brunetti, Giuliana Troia, Rosario Gulizia, Anna Lisa Garlaschelli, Carlo Filice

University of Pavia, IRCCS S.Matteo, Pavia, Italy

9 a.m.

86

DIAGNOSIS AND SURGICAL TREATMENT OF CYSTIC ECHINOCOCCOSIS IN CHILDREN IN TURKMENISTAN

Esen Saklapov¹, Batyr Geldiev¹, **Oguljahan Babayeva**¹, Peter Schantz²

¹Turkmen National Medical Institute, Ashgabat, Turkmenistan, ²Division of Parasitic Diseases, National Center for Infectious Diseases, Centers for Disease Control, Atlanta, GA, United States

9:15 a.m.

87

SEROLOGICAL DIAGNOSIS OF CYSTIC HYDATID DISEASE: COMPARISON BETWEEN ELISA USING THE SYNTHETIC P176 PEPTIDE AND WESTERN BLOT USING CYSTIC FLUID

Patricia Arias¹, **Milagrytos Portocarrero**¹, Silvia Rodriguez¹, Saul Santivañez², Manuela Verastegui¹, Juan Jimenez¹, Mary L. Rodriguez¹, Hector H. Garcia¹, Armando E. Gonzalez³, Robert H. Gilman¹, Cesar M. Gavidia³, for the Cysticercosis Working Group in Peru⁴

¹Department of Microbiology, Universidad Peruana Cayetano Heredia, Lima, Peru, ²School of Medicine, Universidad Peruana Cayetano Heredia, Lima, Peru, ³School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, ⁴Universidad Peruana Cayetano Heredia, Lima, Peru

(ACMCIP Abstract)

9:30 a.m.

88

IN VITRO EFFICACY OF FLAVONOIDS AGAINST ECHINOCOCCUS MULTILOCULARIS AND ECHINOCOCCUS GANULOSUS LARVAL STAGES

Arunasalam Naguleswaran¹, Martin Spicher¹, Luis Ortega Mora², Jean Francois Rossignol³, **Andrew Hemphill**

¹University of Berne, Berne, Switzerland, ²Universidad Complutense de Madrid, Madrid, Spain, ³Romark Research Laboratories, Tampa, FL, United States

Scientific Session 50

Malaria – Drug Development

Lincoln East

Tuesday, December 13

8 – 9:45 a.m.

CHAIR

Jane X. Kelly

Portland VA Medical Center, Portland, OR, United States

Norman C. Waters

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

8 a.m.

89

STRONG ANTI-LIVER STAGE ACTIVITY OF A NOVEL 4(1H)-PYRIDONE ANTIMALARIAL COMPOUND

Stéphanie Hez-Deroubaix¹, Esmâ Bentchikou¹, Catherine Blanc¹, Philippe Gripon², Jacques Belghiti³, Robert W. Sauerwein⁴, Catherine Bourgooin⁵, Inigo Angulo⁶, Santiago Ferrer⁶, Domingo Gargallo-Viola⁶, Pierre Druilhe¹

¹Institut Pasteur- Biomedical Parasitology Unit, Paris, France, ²INSERM U522, Hôpital de Pontchaillou, Rennes, France, ³Service de Chirurgie Générale et Digestive, Hôpital Beaujon, Clichy, France, ⁴Department of Medical Microbiology, University of Nijmegen, Nijmegen, Netherlands, ⁵Institut Pasteur- Unité Postulante de Biologie et Génétique du Paludisme, Paris, France, ⁶GlaxoSmithKline I&D S.L. MMPD CEDD, DDW Centre, Madrid, Spain

8:15 a.m.

90

COMPARING ATOVAQUONE AND 4(1H)-PYRIDONES, ANTIMALARIAL COMPOUNDS THAT SELECTIVELY TARGET THE PARASITE MITOCHONDRION

Joanne M. Morrissey¹, Heather J. Painter¹, Francisco-Javier Gamo², Jose-Francisco Garcia-Bustos², Akhil B. Vaidya¹

¹Drexel University College of Medicine, Philadelphia, PA, United States, ²GlaxoSmithKline, Madrid, Spain

(ACMCIP Abstract)

8:30 a.m.

91

PHASE 1 STUDIES OF A CANDIDATE AMINOQUINOLINE ANTIMALARIAL (AQ-13) IN HUMANS

Fawaz Mzayek, Christiane Hadi, Haiyan Deng, Bekir H. Melek, Juan J. Lertora, Donald Krogstad

Tulane University, New Orleans, LA, United States

8:45 a.m.

92

REVERSED CHLOROQUINES: MOLECULES DESIGNED TO REVERSE THE RESISTANCE TO CQ FOUND IN P. FALCIPARUM MALARIA

David H. Peyton¹, Steven J. Burgess¹, Simeon Andrews¹, Katherine Liebman¹, Jane Xu Kelly², Michael Riscoe²

¹Portland State University, Portland, OR, United States, ²Portland VAMC, Portland, OR, United States

9 a.m.

93

TARGETING THE KAS ENZYMES OF PLASMODIUM FALCIPARUM

Sean T. Prigge¹, Patricia J. Lee², Heather Gaona², Apurba K. Bhattacharjee², Maroya Spalding¹, Jeff Z. Lu¹, Norman C. Waters²

¹Johns Hopkins School of Public Health, Baltimore, MD, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

9:15 a.m.

94

INTRAVENOUS ARTESUNATE: A NEW PRODUCT FOR THE TREATMENT OF SEVERE AND COMPLICATED MALARIA

Peter J. Weina¹, Adam Haeberle¹, Michael C. Lowe¹, Louis Cantilena², Wilbur K. Milhous¹

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

9:30 a.m.

95

ANTIMALARIAL AND ANTICANCER ACTIVITIES OF A NEW TRIOXANE DIMER

Gary Posner¹, Kristina Borstnik², Suji Xie³, Theresa A. Shapiro⁴

¹Johns Hopkins University, Johns Hopkins Malaria Institute, Baltimore, MD, United States, ²Johns Hopkins University, Baltimore, MD, United States, ³Johns Hopkins School of Medicine, Baltimore, MD, United States, ⁴Johns Hopkins School of Medicine, Johns Hopkins Malaria Institute, Baltimore, MD, United States

Symposium 51

Social and Political Issues in Tropical Medicine

Lincoln West

Tuesday, December 13 8 – 9:45 a.m.

ASTMH members logically focus the bulk of their scientific endeavors on entities that exist in tropical or “developing” countries. In addition to classic tropical disease pathogens, residents of these countries often combat a complicated host of social and political problems, including civil strife, unstable transitions of government and extreme poverty. In order to conduct our work ethically and efficiently, we must realize that these countries represent much more than simply sources of pathogens not commonly found in the industrialized world. In fact, the prevalent health issues and socio-political environment are often inextricably linked. This session is designed to provide an open forum for presentation and discussion of pertinent social and political issues related to tropical medicine research and development.

CHAIR

Frederique A. Jacquerioz

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Daniel G. Bausch

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

8 a.m.

CHALLENGES TO ETHICAL INFORMED CONSENT IN DEVELOPING COUNTRIES

Don Krogstad

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

8:25 a.m.

A HUMAN RIGHTS APPROACH TO RESEARCH IN DEVELOPING COUNTRIES

Timothy Holtz

Doctors for Global Health, Atlanta, GA, United States

8:50 a.m.

WAR AND CIVILIAN HEALTH IN IRAQ: MONITORING THE EFFECTS

Les Roberts

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

9:15 a.m.

PUBLIC HEALTH AND SOCIAL JUSTICE IN POST-KATRINA NEW ORLEANS

Daniel G. Bausch

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Scientific Session 52

Schistosomiasis I – Immunology and Molecular Biology

Jefferson East

Tuesday, December 13 8 – 9:45 a.m.

CHAIR

Paul J. Brindley

Tulane University, New Orleans, LA, United States

Stephen Davies.

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

8 a.m.

96

PERIPHERAL BLOOD LEVELS OF CD3⁺/CD4⁺/CD25^{HI} T REGULATORY CELLS IN HUMAN SCHISTOSOMIASIS MANSONI

Kanji Watanabe¹, Pauline N. Mwinzi², Lisa N. Steele³, Diana M. Karanja², W. Evan Secor³, Daniel G. Colley¹

¹University of Georgia, Athens, GA, United States, ²Kenya Medical Research Institute, Kisumu, Kenya, ³Centers for Disease Control and Prevention, Atlanta, GA, United States

(ACMCIP Abstract)

8:15 a.m.

97

HELMINTH GLYCANS ACTIVATE SUPPRESSOR MACROPHAGES AND BIAS CD4⁺ T CELL RESPONSES TO TH2-TYPE

Donald Harn, Olga Atochina, Luis Terrazas, Maureen Drakes, Mirjam Walker

Harvard School of Public Health, Boston, MA, United States

(ACMCIP Abstract)

8:30 a.m.

98

THE ROLE OF T CELL ACTIVATION IN SCHISTOSOME DEVELOPMENT

Erika W. Lamb, Emily T. Crow, Brian C. Schaefer, Stephen J. Davies

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

(ACMCIP Abstract)

8:45 a.m.

99

IDENTIFICATION AND ANALYSIS OF GENES INFLUENCED BY PAIRING AND SEXUAL MATURATION IN *SCHISTOSOMA MANSONI*

Jennifer M. Fitzpatrick, Karl F. Hoffmann

University of Cambridge, Cambridge, United Kingdom

9 a.m.

100

SCHISTOSOMA MANSONI TYPE II TGF-BETA RECEPTOR BINDS HOST LIGAND AND TRANSDUCES A SIGNAL THAT REGULATES A TARGET GENE IN THE SCHISTOSOME

Ahmed Osman¹, Edward G. Niles¹, Philip T. LoVerde²

¹State University of New York, Buffalo, NY, United States,

²Southwest Foundation for Biomedical Research, San Antonio, TX, United States

(ACMCIP Abstract)

9:15 a.m.

101

PATTERN RECOGNITION RECEPTORS IN BIOPHALARIA GLABRATA, THE INTERMEDIATE HOST OF SCHISTOSOMA MANSONI

Judith Humphries, Timothy Yoshino

University of Wisconsin-Madison, Madison, WI, United States

(ACMCIP Abstract)

9:30 a.m.

102

ARE SERCAS THE TARGET OF ARTEMISININ ACTIVITY AGAINST SCHISTOSOMA MANSONI?

Hilary P. Kruse, Fengli Liu, Craig Gatto, David L. Williams

Illinois State University, Normal, IL, United States

(ACMCIP Abstract)

Symposium 53

In Vivo Gene Expression Responses of Human Cells to Pathogens: A Global Experience

Jefferson West

Tuesday, December 13

8 - 9:45 a.m.

This symposium will have four representative speakers from different areas of human pathogens: RNA viruses, DNA viruses, bacteria and protozoa infections. The symposium will cover the experience studying host cell responses for different pathogens. The unique aspect of the symposium is to offer translational human research opportunities using global gene expression profiling *in vivo*. The symposium will show the expertise of few laboratories offering global gene expression data and discussion on *in vivo* human models of disease or relevant *in vitro* human cell models. It will be an opportunity to offer computational biology data analysis options and future strategies for data usage and hypothesis testing. The lessons learned in the past years and the future problems that need to be solved in this area of research will be among the objectives of this symposium.

CHAIR

Irene Bosch

University of Massachusetts Medical School, Worcester, MA, United States

Katherine J. Martin

University of Massachusetts Medical School, Worcester, MA, United States

8 a.m.

IN VIVO GENE EXPRESSION RESPONSES OF HUMAN CELLS TO PATHOGENS

Damien Chaussabel

Institute for Immunology Research, Dallas, TX, United States

8:15 a.m.

BLOOD BIOSIGNATURES FOR DIAGNOSIS OF INFECTIOUS DISEASES

Octavio Ramilo

Children's Medical Center of Dallas, Dallas, TX, United States

8:30 a.m.

MAPPING OF PARASITE GENES RESPONSIBLE FOR DIFFERENCES IN HOST RESPONSES TO DIFFERENT TOXOPLASMA STRAINS AND IDENTIFICATION OF THE HOST TRANSCRIPTION FACTORS INVOLVED

Jeroen Saeij

Stanford University School of Medicine, Stanford, CA, United States

8:45 a.m.

SURVEYING GENE EXPRESSION IN WHOLE BLOOD: HOST RESPONSES AND CLASSIFICATION OF SYSTEMIC INFECTIONS. GENOMEWIDE ANALYSIS OF THE HOST RESPONSE TO MALARIA IN KENYAN CHILDREN

Stephen Popper, Michael Griffith

Stanford University, VA Palo Alto Health Care System, Palo Alto, CA, United States

9 a.m.

A GENOME-WIDE APPROACH TO IDENTIFY ACTIVE PATHWAYS IN FLAVIVIRUS INFECTION

Rajas Warke, Kris Xhaja, Katherine Martin

University of Massachusetts Medical School, Worcester, MA, United States

9:15 a.m.

GENE EXPRESSION OF THE HOST RESPONSE TO LYMPHATIC FILARIASIS

Thomas B. Nutman

Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

9:30 a.m.

CONCLUDING REMARKS

Jairo Antonio Rodriguez

Grupo de Parasitología y Medicina Tropical Universidad Surcolombiana, Colombia

Scientific Session 54

Malaria — Biology and Pathogenesis I

Georgetown East

Tuesday, December 13 8 – 9:45 a.m.

CHAIR

Sarah K. Volkman

Harvard School of Public Health, Boston, MA, United States

Matthias Frank

Weill Medical College of Cornell University, New York City, NY,
United States

8 a.m.

103

ANTIGENIC VARIATION IN *PLASMODIUM FALCIPARUM* MALARIA: VAR GENE SWITCHING IN CLONAL *PLASMODIUM FALCIPARUM* CULTURES SHOWS PREFERENTIAL ACTIVATION OF SUBSETS OF VAR GENES

Matthias Frank, Ron Dzikowski, Christian Epp, Kirk Deitsch
Weill Medical College of Cornell University, New York City, NY,
United States

(ACMCIP Abstract)

8:15 a.m.

104

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,
Armead 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

(ACMCIP Abstract)

8:30 a.m.

105

IDENTIFICATION OF A NOVEL PROTEIN, SAGLIN, AS A POTENTIAL SALIVARY GLAND MEDIATOR FOR *PLASMODIUM* SPOOROZITE

Mobolaji A. Okulate¹, Dário E. Kalume², Troels Kristiansen²,
Mrinal K. Bhattacharyya³, Akhilesh Pandey², Nirbhay
Kumar³

¹University of Maryland Eastern Shore, Princess Anne, MD, United
States, ²McKusick-Nathans Institute of Genetic Medicine and
Department of Biological Chemistry, Johns Hopkins School of
Medicine, Baltimore, MD, United States, ³Department of Molecular
Microbiology and Immunology, Johns Hopkins Malaria Research
Institute, Johns Hopkins Bloomberg School of Public Health,
Baltimore, MD, United States

(ACMCIP Abstract)

8:45 a.m.

106

ROLES OF 1-CYS PEROXIREDOXIN IN HEME DETOXIFICATION IN *PLASMODIUM FALCIPARUM*

Shin-ichiro Kawazu¹, Nozomu Ikenoue¹, Hitoshi Takemae²,
Kanakano Komaki-Yasuda², Shigeyuki Kano¹

¹International Medical Center of Japan, Tokyo, Japan,
²PRESTO/Japan Science and Technology Agency, Saitama, Japan

9 a.m.

107

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

(ACMCIP Abstract)

9:15 a.m.

108

RAPID AND EFFICIENT SITE-SPECIFIC INTEGRATION SYSTEM IN *PLASMODIUM FALCIPARUM* MEDIATED BY MYCOBACTERIOPHAGE BXB1 INTEGRASE

Louis J. Nkrumah¹, Pedro A. Moura¹, Graham F. Hatfull²,
William R. Jacobs³, David A. Fidock¹

¹Department of Microbiology and Immunology, Albert Einstein
College of Medicine, Bronx, NY, United States, ²Department of
Biological Sciences and Howard Hughes Medical Institute,
University of Pittsburgh, Pittsburgh, PA, United States,
³Department of Microbiology and Immunology and Howard
Hughes Medical Institute, Albert Einstein College of Medicine,
Bronx, NY, United States

9:30 a.m.

109

A HAPLOTYPE MAP FOR *PLASMODIUM FALCIPARUM*

Sarah K. Volkman¹, Pardis C. Sabeti², Daniel L. Hartl³, Bruce
Birren², Eric Lander², Dyann F. Wirth¹

¹Harvard School of Public Health, Boston, MA, United States,
²Broad Institute/MIT, Cambridge, MA, United States, ³Harvard
University, Cambridge, MA, United States

(ACMCIP Abstract)

Symposium 55

Migration through Cells and Infectivity of Apicomplexan Parasites

Georgetown West

Tuesday, December 13 8 – 9:45 a.m.

Plasmodium sporozoites and ookinetes traverse several host cells before they transform into the next development stages. The passage through cells has been also documented in other apicomplexan parasites. In this symposium, the presentations will deal with the mechanisms used by the parasites to traverse cells, and the relevance of passage through cells for achieving productive infections. The symposium will bring together scientists interested in this intriguing topic while working with different parasite models.

CHAIR

Victor Nussenzweig

NYU School of Medicine Pathology, New York, NY, United States

David Sibley

Washington University School of Medicine, Saint Louis, MO, United States

8 a.m.

PLASMODIUM SPOROZOITE MIGRATION THROUGH CELLS AND INFECTION

Ana Rodriguez

New York University, New York, NY, United States

8:15 a.m.

MIGRATION THROUGH CELLS BY PLASMODIUM SPOROZOITES: A CLUE TO PROPHYLAXIS?

Maria Mota

Instituto de Medicina Molecular, Portugal

8:30 a.m.

HOW DO MALARIAL PARASITES ARRIVE AT AND INVADE HEPATOCYTES?

Tomoko Ishino, Yasuo Chinzei, Masao Yuda

Mie University, School of Medicine, Mie-Pref, Japan

8:45 a.m.

POTASSIUM CONCENTRATION SHIFTS ENHANCE SPOROZOITE INFECTIVITY WHILE INHIBITING THEIR MIGRATION THROUGH CELLS

Victor Nussenzweig, Sr.

NYU School of Medicine, New York, NY, United States

9 a.m.

THE REGULATION OF TOXOPLASMA MOTILITY DURING EGRESS AND INVASION

Con Beckers

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

9:15 a.m.

CONDITIONAL EXPRESSION OF MIC2 REVEALS A CENTRAL ROLE IN CELL INVASION AND HELICAL GLIDING

Vern B. Carruthers

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

9:30 a.m.

UNUSUAL ACTIN DYNAMICS CONTROL MOTILITY IN APICOMPLEXAN PARASITES

David Sibley

Washington University School of Medicine, St Louis, MO, United States

Symposium 56

Current Strategies in the Management of Leptospirosis

International Ballroom East

Tuesday, December 13 8 – 9:45 a.m.

Leptospirosis is increasingly recognized as a cause of febrile illness in all reaches of the globe. Subsequently management strategies have focused on improving the many aspects of diagnosis and clinic care. We propose to discuss epidemiology, antimicrobial therapy including *in vitro* and animal testing, approaches to vaccine development and diagnosis of acute leptospirosis.

CHAIR

Clinton K. Murray

Brooke Army Medical Center, Fort Sam Houston, TX, United States

Duane R. Hospenthal

Brooke Army Medical Center, Fort Sam Houston, TX, United States

8 a.m.

THE EPIDEMIOLOGY OF LEPTOSPIROSIS

Joseph Vinetz

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

8:30 a.m.

DIAGNOSIS OF ACUTE LEPTOSPIROSIS

Albert Ko

Centro de Pesquisas Goncalo Moniz, Salvador, Brazil

8:55 a.m.

ANTIMICROBIAL AGENTS: *IN VITRO* AND ANIMAL MODELS

Clinton K. Murray

Brooke Army Medical Center, Fort Sam Houston, TX, United States

9:20 a.m.

VACCINE DEVELOPMENT

David Haake

University of California at Los Angeles, Los Angeles, CA, United States

Symposium 57

Enhancing ORT: Current Status and Future Directions

International Ballroom West

Tuesday, December 13 8 – 9:45 a.m.

Due to continuous efforts of global health groups, awareness of Oral Rehydration Therapy (ORT) is relatively high in most developing countries. However, compliance with this treatment falls short, likely because ORT does not reduce diarrheal output. With fatalities due to diarrheal disease occurring in the range of two million per year, there is a need to develop and implement tools that complement the use of ORT. The Institute for OneWorld Health brings together a panel of clinicians and global health experts to review the current situation and practice of ORT in developing countries, and discuss novel interventions to combat secretory diarrheal disease. In addition, these experts will share their insight on how these new strategies can be integrated into health policies that influence the current system of care.

CHAIR

Victoria Hale

Institute for OneWorld Health, San Francisco, CA, United States

Katherine Woo

Institute for OneWorld Health, San Francisco, CA, United States

MODERATOR

Pradip Bardhan

ICDDR,B, Dhaka, Bangladesh

8 a.m.

PANELIST

Patricia Paredes

US Agency for International Development (USAID), Washington, DC, United States

8:30 a.m.

PANELIST

Chuck Szymanski

Population Services International, Washington, DC, United States

8:55 a.m.

PANELIST

Mathuram Santosham

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

Exhibit Hall Open

Exhibit Hall

Tuesday, December 13 9:30 – 10:30 a.m.

Coffee Break

Exhibit Hall

Tuesday, December 13 9:45 – 10:15 a.m.

Symposium 58

Alternative Routes for Vaccine Design Against Parasitic Diseases

Hemisphere

Tuesday, December 13 10:15 a.m. – Noon

This symposium aims to promote the incorporation of new knowledge from genomics, molecular biology and immunology in the development of more effective new vaccines against parasitic diseases. Vaccination against infectious diseases has been recognized as a cost-effective method to control infections. However, in spite of the great effort and inventiveness of several labs, the development of effective vaccines against parasitic diseases remains elusive in most of the cases. There is great hope that this situation may substantially change in the next years due to the new insights offered by the increased comprehension of the immune response and the genetic make-up of parasites and hosts. Genomic information continuously leads us to search for potential vaccine candidates, using new genomic and proteomic technology. On the other hand, vaccinologists have now recognized that the specific immunity induced by the vaccinal antigens could be improved by the antigen formulation, which also offers effective novel routes of delivery. The use of needle-free vaccination is of special interest for the design of vaccines to use in parasitic tropical diseases that most importantly affect countries of limited resources. In particular mucosal delivery could be of special relevance for those parasites that penetrate or infect at mucosal sites. Thus, in this symposium the use of new vaccine formulations that could increase vaccine efficacy, reduce the cost and refusal rates and increase their safety will be highlighted.

CHAIR

Edda L. Sciutto

Departamento de Inmunología, Instituto de Investigaciones Biomedicas, Universidad Nacional Autónoma de México (UNAM), México, D. F., México

Gabriela Rosas

Facultad de Medicina, Universidad Autónoma del Estado de Morelos, Cuernavaca, México

10:15 a.m.

THE IMPACT OF GENOMICS ON VACCINE DESIGN

Giuseppe Del Giudice

Chiron Vaccines, Siena, Italy

10:50 a.m.

THE HOLY GRAIL: PROSPECTS FOR DEVELOPMENT OF ANTI-SCHISTOSOME VACCINES

Donald P. McManus

Molecular Parasitology Laboratory, Australian Centre for International and Tropical Health and Nutrition, The Queensland Institute of Medical Research and The University of Queensland, Brisbane, Australia

11:25 a.m.**THE MULTI-EPI TOPE ANTI-CYCTICERCOSIS VACCINE FROM THE LABORATORY TO THE FIELD: COST-BENEFITS OF NEW DELIVERY SYSTEMS AND ALTERNATIVE ROUTES FOR VACCINE ADMINISTRATION**

Edda L. Sciutto

*Departamento de Inmunologia, Instituto de Investigaciones Biomedicas, Universidad Nacional Autonoma de Mexico (UNAM), Mexico, D. F., Mexico***Symposium 59****New Insights into the Pathogenesis of Malaria Anemia***Military*

Tuesday, December 13 10:15 a.m. – Noon

In 2001-2002 the National Institute of Allergy and Infectious Diseases, the National Heart, Lung and Blood Institute and the Fogarty International Center supported research and research training grants to explore the diverse mechanisms of pathogenesis implicated in severe malaria anemia in patients in endemic areas as well as monkey models of malaria. The investigators and trainees from Kenya, Thailand and Colombia will present the research results from this initiative.

CHAIR

Barbara Sina*Fogarty International Center, National Institutes of Health, Bethesda, MD, United States***10:15 a.m.****INTRODUCTION: MALARIAL ANEMIA – A MULTIFACTORIAL HEMOTOLOGICAL SYNDROME**

Douglas J. Perkins

*University of Pittsburgh, Pittsburgh, PA, United States***10:20 a.m.****ERYTHROCYTE PRODUCTION AND DESTRUCTION IN MALARIAL ANEMIA: NEW METHODS FOR MEASUREMENT**

Wattana Leowattana

*Mahidol University, Bangkok, Thailand***10:35 a.m.****PERSISTENT ANEMIA AFTER SUCCESSFUL TREATMENT OF ACUTE FALCIPARUM MALARIA**

Srivicha Krudsood

*Mahidol University, Bangkok, Thailand***10:45 a.m.****ROLE OF INNATE IMMUNITY IN REGULATING THE PATHOGENESIS OF MALARIAL ANEMIA**

Gordon A. Awandare

*University of Pittsburgh, Pittsburgh, PA, United States***10:55 a.m.****MECHANISMS OF MALARIA ANEMIA: HUMAN AND PRIMATE STUDIES**

Carolina Gallegos

*Universidad del Valle, Cali, Colombia***11:10 a.m.****CLASS AND SUBCLASS ANTIBODY ANALYSIS OF IMMUNE COMPLEXES IN CHILDREN WITH SEVERE PLASMODIUM FALCIPARUM MALARIA**

Erick Mibei

*Kenya Medical Research Institute, Kenyatta University and the U.S. Army Medical Research Unit, Nairobi, Kenya***11:20 a.m.****GENETIC VARIATION AS A DETERMINANT OF MALARIAL ANEMIA SUSCEPTIBILITY**

John Michael Ongecha

*University of Pittsburgh, Pittsburgh, PA, United States***11:35 a.m.****STUDIES ON THE AGE DEPENDENT PREVALENCE OF THE SWAIN-LANGLEY AND MCCOY BLOOD GROUP POLYMORPHISMS OF COMPLEMENT RECEPTOR 1 IN WESTERN KENYA**

Bernard Guyah

*Kenya Medical Research Institute, Kenyatta University and the U.S. Army Medical Research Unit, Nairobi, Kenya***11:45 a.m.****EXPRESSION OF ERYTHROCYTE COMPLEMENT REGULATORY PROTEINS IN INDIVIDUALS WITH SICKLE CELL TRAIT AND NORMAL HEMOGLOBIN IN A MALARIA ENDEMIC AREA OF WESTERN KENYA**

Walter Otieno

*Kenya Medical Research Institute, Kenyatta University and the U.S. Army Medical Research Unit, Nairobi, Kenya***Scientific Session 60****Kinetoplastida II***Monroe East*

Tuesday, December 13 10:15 a.m. – Noon

CHAIR

Abhay Satoskar*Ohio State University, Columbus, OH, United States***Stuart Kahn***Infectious Disease Research Institute, Seattle, WA, United States*

10:15 a.m.

110

**THE FUNCTION OF T_{REG} CELLS DURING
TRYPANOSOMA CRUZI INFECTION****Maria F. Kahn**, Malcolm S. Duthie, Maria White, Stuart J. Kahn*Infectious Disease Research Institute, Seattle, WA, United States*

(ACMCIP Abstract)

10:30 a.m.

111

**ARE REGULATORY T CELLS IMPORTANT IN THE
PATHOLOGY OF HUMAN VISCERAL LEISHMANIASIS?****Susanne Nylen**¹, Radeshyam Maurya², Liv Eidsmo³, Shyam Sundar², David Sacks¹¹National Institutes of Health, Bethesda, MD, United States,²Institute of Medical Sciences, Banaras Hindu University, Institute of Medical Sciences, Banaras Hindu University, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India, ³Karolinska Institutet, Stockholm, Sweden

(ACMCIP Abstract)

10:45 a.m.

112

**MALE SUSCEPTIBILITY TO LEISHMANIA
CHAGASI INFECTION: THE IMMUNOCOMPROMISING
EFFECT OF TESTOSTERONE****Alyssa M. Lovell**¹, Nilda E. Rodriguez¹, Gloria R. Monteiro², Eliana T. Nascimento², Selma M. Jeronimo², Mary E. Wilson¹¹University of Iowa, Iowa City, IA, United States, ²Federal University of Rio Grande do Norte, Natal, Brazil

(ACMCIP Abstract)

11 a.m.

113

**REDUCED TH1 CELL DEVELOPMENT FOLLOWING
INFECTION WITH LEISHMANIA MEXICANA****Alice Hsu**, Phillip Scott*University of Pennsylvania, Philadelphia, PA, United States*

(ACMCIP Abstract)

11:15 a.m.

114

**IL-27R (WSX-1/TCCR) GENE DEFICIENT MICE DISPLAY
ENHANCED RESISTANCE TO LEISHMANIA DONOVANI
INFECTION BUT DEVELOP SEVERE LIVER
IMMUNOPATHOLOGY****Abhay Satoskar**¹, Lucia Rosas¹, Joseph Barbi¹, Fred deSavage², Christopher Hunter³, Kimberly Roth¹, Anjali Satoskar¹¹Ohio State University, Columbus, OH, United States, ²Genentech, San Francisco, CA, United States, ³University of Pennsylvania, Philadelphia, PA, United States

(ACMCIP Abstract)

11:30 a.m.

115

**UNRAVELING THE ROLE OF THE ARGINASE OF
LEISHMANIA MEXICANA DURING INFECTION IN
BALB/C MICE****Upasna Gaur**¹, Sigrid C. Roberts², Buddy Ullman², Mary E. Wilson³¹University of Iowa, Iowa City, IA, United States, ²Department of Biochemistry and Molecular Biology, Oregon Health and Science University, Portland, OR, United States, ³Departments of Internal Medicine and Microbiology, University of Iowa and the VA Medical Center, Iowa City, IA, United States

(ACMCIP Abstract)

Scientific Session 61**Cestodes II***Monroe West*

Tuesday, December 13

10:15 a.m. – Noon

CHAIR

A. Clinton White*Baylor College of Medicine Houston, TX, United States***Peter Kern***University Hospital and Medical Center, University of Ulm, Ulm, Germany*

10:15 a.m.

116

**ISOLATION AND CHARACTERIZATION OF EM492, A
SECRETORY COMPONENT FROM ECHINOCOCCUS
MULTILOCCULARIS METACESTODES POTENTIALLY
INVOLVED IN SUPPRESSION OF THE CELLULAR
IMMUNE RESPONSE**Mirjam Walker, Martin Spicher, Thomas Brunner, Bruno Gottstein, **Andrew Hemphill***University of Berne, Berne, Switzerland*

(ACMCIP Abstract)

10:30 a.m.

117

EPILEPSY AND NEUROCYSTICERCOSIS: AN INCIDENCE STUDY IN A PERUVIAN RURAL POPULATION

Manuel V. Villaran¹, Silvia M. Montano², Christian T. Bautista³, Guillermo Gonzalez¹, Luz Maria Moyano¹, Silvia Rodriguez¹, Armando E. Gonzalez⁴, Juan J. Figueroa¹, Victor C. Tsang⁵, Robert H. Gilman⁶, Hector H. Garcia¹

¹Universidad Peruana Cayetano Heredia, Lima, Peru, ²US Naval Medical Research Center Detachment, Lima, Peru, ³US Military HIV Research Program and Henry M. Jackson Foundation, Rockville, MD, United States, ⁴School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, ⁵Immunology Branch, Division of Parasitic Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁶Department of International Health, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States

10:45 a.m.

118

QUALITATIVE STAKEHOLDER ANALYSIS TO APPRAISE THE INSTITUTIONAL CONTEXT OF THE ELIMINATION PROGRAM OF CYSTICERCOSIS IN PERÚ

Ursula Alarco¹, **Jaime R. Romero**², Armando E. González¹, Hector H. García², Robert H. Gilman², Fernando Llanos², Víctor C. Tsang³, Cysticercosis Working Group Peru²

¹School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, ²Universidad Peruana Cayetano Heredia, Lima, Peru, ³Centers for Disease Control and Prevention, Atlanta, GA, United States

11 a.m.

119

NEUROCYSTICERCOSIS: ANTIGEN AND ANTIBODY DIAGNOSIS IN SERUM AND CEREBROSPINAL FLUID

Silvia Rodriguez¹, Javier Pretell¹, Maria Silva², Manuel Martinez¹, Armando E. Gonzalez², Robert H. Gilman³, V.C.W. Tsang⁴, L.J.S. Harrison⁵, R.M.E. Parkhouse⁶, Hector H. Garcia¹, for the Cysticercosis Working Group in Peru⁷

¹Cysticercosis Unit, Instituto Especializado en Ciencias Neurologicas, Lima, Peru, ²School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, ³Departamento de Microbiología, Universidad Peruana Cayetano Heredia, Lima, Peru, ⁴Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁵Centre for Tropical Veterinary Medicine (CTVM), University of Edinburgh, Edinburgh, United Kingdom, ⁶Instituto Gulbenkian de Ciencia, Oeiras, Portugal, ⁷Universidad Peruana Cayetano Heredia, Lima, Peru

11:15 a.m.

120

DROP IN ANTIGEN LEVELS FOLLOWING SUCCESSFUL TREATMENT OF SUBARACHNOID NEUROCYSTICERCOSIS

Humberto Zamora¹, Yesenia Castillo¹, Hector H. Garcia¹, Javier Pretell¹, Silvia Rodriguez¹, Pierre Dorny², Armando E. Gonzalez³, Robert H. Gilman¹, Victor W. Tsang⁴, Jef Brandt², for the Cysticercosis Working Group in Peru⁵

¹Departamento de Microbiología, Universidad Peruana Cayetano Heredia, Lima, Peru, ²Institute for Tropical Medicine, Antwerp, Belgium, ³School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, ⁴Division of Parasitic Diseases, Center for Disease Control and Prevention, Atlanta, GA, United States, ⁵Universidad Peruana Cayetano Heredia, Lima, Peru

11:30 a.m.

121

BENEFICIAL USE OF METHOTREXATE IN NEUROCYSTICERCOSIS

Theodore E. Nash, Kawsar R. Talaat, Edward E. Mitre
National Institutes of Health, Bethesda, MD, United States

11:45 a.m.

122

NEWS OF PROMISING RESULTS IN THE FIELD EVALUATION OF A PHAGE RECOMBINANT VACCINE AGAINST TAENIA SOLIUM PIG CYSTICERCOSIS

Edda L. Sciutto¹, Julio Morales¹, Jose J. Martinez², Andrea Toledo¹, Karen Manoutcharian¹, Gohar Gevorgian¹, Gladis Fragosol¹, Marisela Hernández¹, Gonzalo Acero¹, Carmen Cruz¹, Jaqueline Cervantes¹, Luis F. Rodarte², Aline de Aluja², Carlos Larralde¹

¹Instituto de Investigaciones Biomedicas, Mexico, D. F., Mexico, ²Facultad de Medicina Veterinaria y Zootecnia, Mexico, D. F., Mexico

Scientific Session 62

Malaria — Artemisinin Combination Therapy

Lincoln East

Tuesday, December 13

10:15 a.m. – Noon

CHAIR

Ronan Jambou

Institut Pasteur de Dakar, Dakar, Senegal

Qin Cheng

Australian Army Malaria Institute, Brisbane, Australia

10:15 a.m.

123

MECHANISMS OF *P. FALCIPARUM* RESISTANCE TO ARTEMISININ DERIVATIVES: ROLE OF *PFMDR1* AMPLIFICATION AND EXPRESSION

Marina Chavchich¹, Lucia Gerena², Jennifer Peters¹, Qin Cheng¹, Dennis Kyle²

¹Australian Army Malaria Institute, Enoggera, Australia, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

10:30 a.m.

124

COMPARISON OF THE POLYMORPHISM OF [PFATP6] AND [PFTCTP] GENES IN THREE ENDEMIC COUNTRIES: CAMBODIA, FRENCH GUYANA, SENEGAL

Ronan Jambou¹, Eric Legrand², Makhtar Niang¹, Nimol Kim³, Philippe Esterre², Christianne Bouchier⁴, Thierry Fandeur³, Odile Puijalon⁴

¹Institut Pasteur de Dakar, Dakar, Senegal, ²Institut Pasteur de Guyane française, Cayenne, French Guiana, ³Institut Pasteur du Cambodge, Phnom Penh, Cambodia, ⁴Institut Pasteur, Paris, France

10:45 a.m.

125

EFFICACY AND SAFETY OF ARTEMETHER-LUMEFANTRINE VERSUS AMODIAQUINE PLUS ARTESUNATE: RANDOMISED CONTROLLED TRIAL IN UGANDA

Hasifa Burkirwa¹, Yeka Adoke¹, Nathan Bakyaita², Ambrose Talisuna², Philip J. Rosenthal³, Arthur Reingold⁴, Fred Wabwire-Mangen⁵, Grant Dorsey³, Moses R. Kanya⁶, Sarah G. Staedke³

¹Uganda Malaria Surveillance Project, Kampala, Uganda, ²Ministry of Health, Kampala, Uganda, ³University of California San Francisco, San Francisco, CA, United States, ⁴University of California, Berkeley, CA, United States, ⁵Institute of Public Health, Kampala, Uganda, ⁶Makerere University Medical School, Kampala, Uganda

11 a.m.

126

AZITHROMYCIN IN COMBINATION WITH ARTESUNATE OR QUININE FOR THE TREATMENT OF UNCOMPLICATED FALCIPARUM IN ADULTS: A RANDOMIZED PHASE 2 CLINICAL TRIAL IN THAILAND

Harald Noedl¹, Srivicha Krudsood², Kobsiri Chalermratana², Udomsak Silachamroon², Sornchai Looareesuwan², Robert S. Miller¹, Mark Fukuda¹, Krisada Jongsakul¹, Colin Ohrt³, Jacqueline Rowan⁴, Knirsch Charles⁴

¹USAMC-AFRIMS, Bangkok, Thailand, ²Hospital for Tropical Diseases, Mahidol University, Bangkok, Thailand, ³Walter Reed Army Institute of Research, Washington, DC, United States, ⁴Anti-Infectives, Pfizer Inc, New York, NY, United States

11:15 a.m.

127

A RANDOMIZED CONTROLLED TRIAL OF AZITHROMYCIN OR ARTESUNATE ADDED TO SULFADOXINE-PYRIMETHAMINE AS INTERMITTENT PRESUMPTIVE THERAPY FOR MALARIA IN PREGNANCY

Linda Kalilani¹, Innocent Mofolo², Marjorie Chaponda³, Stephen Rogerson⁴, Steven R. Meshnick¹

¹University of North Carolina, Chapel Hill, NC, United States, ²University of Malawi, College of Medicine, Blantyre, Malawi, ³University of North Carolina Project, Lilongwe, Malawi, ⁴University of Melbourne, Parkville, Australia

11:30 a.m.

128

THE EFFICACY AND TOLERABILITY OF ARTESUNATE PLUS HIGH DOSE PRIMAQUINE FOR THE TREATMENT OF *PLASMODIUM VIVAX* MALARIA IN VIETNAM

Michael D. Edstein¹, Nguyen V. Dao², Nguyen D. Ngoa², Nguyen P. Quoc², Le T. Thuy², Nguyen D. The², Bui T. Cuong³, Nguyen N. Quang³, Nguyen T. Chinh³, Tran D. Anh³, Dinh N. Duy³, Bui Dai³, Vu Q. Binh⁴, Nguyen X. Thanh⁴, Thomas Travers¹, Karl H. Rieckmann¹

¹Australian Army Malaria Institute, Brisbane, Australia, ²Military Hospital 175, Ho Chi Minh City, Viet Nam, ³Central Military Hospital 108, Hanoi, Viet Nam, ⁴Military Institute of Hygiene and Epidemiology, Hanoi, Viet Nam

11:45 a.m.

129

ALTERNATIVE TREATMENT OPTIONS FOR CHLOROQUINE RESISTANT *PLASMODIUM VIVAX* IN PAPUA, INDONESIA

R. N. Price¹, A. Ratcliff¹, H. Siswantoro², E. Kanangalem³, R. Rumaseuw⁴, E. P. Ebsworth⁴, N. Anstey¹, E. Tjitra²

¹Menzies School of Health Research, Darwin, Australia, ²National Institute of Health Research and Development, Jakarta, Indonesia, ³Dinas Kesehatan Kabupaten, Papua, Indonesia, ⁴International SOS, Timika, Indonesia

Symposium 63**Classical Genetics Meets Genomics in Malaria Research***Lincoln West*

Tuesday, December 13 10:15 a.m. – Noon

Genetic mapping using crosses to generate segregating progeny populations is proving to be an entry point into the amassing genome sequence data in human and rodent malaria parasites. Phenotypes remain the fundamental currency of malaria studies. Quantitative trait loci (QTL) mapping and linkage group selection (LGS) effectively superimpose phenotypes on the genome data by pinpointing chromosomal segments that can be sifted for key coding and regulatory polymorphisms. The integration of positional information with rapidly developing genome-wide comparative sequence, transcription, and functional data is a powerful tool for discovery of genetic mechanisms underlying complex phenotypes.

CHAIR

Michael T. Ferdig*University of Notre Dame, Notre Dame, IN, United States***Akhil B. Vaidya***Drexel University College of Medicine, Philadelphia, PA, United States*

10:15 a.m.

PAST, PRESENT AND FUTURE: MAKING CROSSES TO MAP DRUG RESISTANCE AND VIRULENCE PHENOTYPES IN *PLASMODIUM FALCIPARUM*

Thomas E. Wellems

Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

10:45 a.m.

A FAST TRACK TO FINDING GENES FOR IMPORTANT PHENOTYPES IN MALARIA

Richard Carter

University of Edinburgh, Ashworth Laboratories, Edinburgh, United Kingdom

11:10 a.m.

SEARCHING FOR *PLASMODIUM FALCIPARUM* QUANTITATIVE TRAIT LOCI DETERMINING DIFFERENTIAL INFECTIVITY TO ANOPHELES MOSQUITOES

Lisa C. Ranford-Cartwright

University of Glasgow, Glasgow, United Kingdom

11:35 a.m.

INTEGRATING GENETICS AND GENOMICS TO DISSECT COMPLEX MALARIA PHENOTYPES

Pradip K. Rathod

*University of Washington, Seattle, WA, United States***Scientific Session 64****Schistosomiasis II – Epidemiology I***Jefferson East*

Tuesday, December 13 10:15 a.m. – Noon

CHAIR

Ronald E. Blanton*Case Western Reserve University, Cleveland, OH, United States***Jennifer F. Friedman***Brown University, Providence, RI, United States*

10:15 a.m.

130

***SCHISTOSOMA MANSONI* EXACERBATES HEPATOSPLENOMEGALY IN AN AREA OF MESO-ENDEMIC MALARIA TRANSMISSION**

Shona Wilson¹, Mark Booth¹, Birgitte J. Vennervald², Frances M. Jones¹, H. Curtis Kariuki³, Clifford Amaganga⁴, Hilda Kadzo⁵, Edmund Ireri⁶, Joseph K. Mwatha⁶, Gachuhi Kimani⁶, John H. Ouma⁷, Eric Muchiri³, David W. Dunne¹

¹University of Cambridge, Cambridge, United Kingdom, ²Danish Bilharziasis Laboratory, Charlottenlund, Denmark, ³Division of Vector Borne Diseases, Ministry of Health, Nairobi, Kenya, ⁴Kakamega Provincial Hospital, Kakamega, Kenya, ⁵Kenyatta National Hospital, Nairobi, Kenya, ⁶Kenya Medical Research Institute, Nairobi, Kenya, ⁷Maseno University, Kisumu, Kenya

10:30 a.m.

131

HUMAN SCHISTOSOMIASIS *JAPONICA* RESULTS IN PLACENTAL INFLAMMATION, APOPTOSIS AND POOR BIRTH OUTCOMES

Jonathan D. Kurtis¹, Luz Acosta², Daria Manalo², Jemaima Yu², Mary Paz Urbina², Gretchen C. Langdon¹, Surrendra Sharma³, Remigio Olveda², Jennifer F. Friedman¹

¹Brown University, Providence, RI, United States, ²RITM, Manila, Philippines, ³Woman and Infants Hospital, Providence, RI, United States

10:45 a.m.

132

CARCINOMA OF THE BLADDER AND *SCHISTOSOMA HAEMATOBIIUM* IN GHANA

Clive Shiff¹, Jean Naples¹, Robert Veltri¹, Kwabena Bosompem², Joseph Quartey², Joseph Otchere², Cameron Marlow¹

¹Johns Hopkins University, Baltimore, MD, United States, ²Noguchi Memorial Institute for Medical Research, Accra, Ghana

11 a.m.

133

PROINFLAMMATORY CYTOKINES AND C-REACTIVE PROTEIN ARE ASSOCIATED WITH SCHISTOSOMA JAPONICUM-INFECTION AND UNDERNUTRITION IN CHILDREN, ADOLESCENTS AND YOUNG ADULTS

Hannah M. Coutinho¹, Tjalling Leenstra¹, Luz P. Acosta², Stephen T. McGarvey¹, Mario Jiz², Blanca Jarilla², Gretchen C. Langdon¹, Daria L. Manalo², Remigio M. Olveda², Jonathan D. Kurtis¹, Jennifer F. Friedman¹

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

11:15 a.m.

134

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

Tjalling Leenstra¹, Luz P. Acosta², Gretchen C. Langdon¹, Hai-Wei Wu¹, Julie S. Solomon¹, Blanca Jarilla², Daria L. Manalo², Li Su¹, Remigio M. Olveda², Stephen T. McGarvey¹, Jennifer F. Friedman¹, Jonathan D. Kurtis¹

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

11:30 a.m.

135

THE USE OF STOOL EGG OR POOLED DNA SAMPLES FOR GENETIC EPIDEMIOLOGY STUDIES OF SCHISTOSOMA MANSONI

Ronald E. Blanton¹, Eliana A. Reis², Fredrick W. Thiong'o³, João F. Braghirioli², Jarbas M. Santos², Paulo S. Melo², Isabel C. Guimarães⁴, Luciano K. Silva¹, Mitermayer G. Reis²

¹Case University, Cleveland, OH, United States, ²Oswaldo Cruz Foundation, Salvador, Brazil, ³University of Nairobi, Nairobi, Kenya, ⁴Federal University of Bahia, Salvador, Brazil

(ACMCIP Abstract)

11:45 a.m.

136

THE DISPERSAL POTENTIAL OF *BULINUS NASUTUS* SNAILS IN COASTAL KENYA

Julie A. Clennon¹, Masemo A. Idd², Eric Muchiri³, Charles H. King⁴, Uriel Kitron¹

¹University of Illinois, Urbana, IL, United States, ²CWRU/DVBD/KEMRI Schistosomiasis Research Unit, Msambweni, Kenya, ³Division of Vector Borne Diseases, Ministry of Health, Nairobi, Kenya, ⁴Case Western Reserve University, Cleveland, OH, United States

Symposium 65

New Approaches to Soil-transmitted Helminth Control: A Feischrift in Honor of Professor Gerhard A. Schad

Jefferson West

Tuesday, December 13 10:15 a.m. – 12:30 p.m.

In 2001, the World Health Assembly urged its member states to control the morbidity of soil-transmitted helminth infections through frequent periodic deworming with anthelmintics (benzimidazoles [BZAs]). However the high rates of post treatment re-infection, the diminishing efficacy with frequent and periodic use of BZAs, and the possible emergence of anthelmintic drug resistance suggest that this approach could fail in areas of high endemicity. Therefore new strategies for STH control need to be explored. This symposium will examine the possibility of emerging anthelmintic drug resistance and new approaches to control that employ alternative control measures including vaccines.

CHAIR

Peter J. Hotez

George Washington University, Washington, DC, United States

10:15 a.m.

HONORING DR. GERHARD A. SCHAD

Peter J. Hotez, John Hawdon

The George Washington University, Washington, DC, United States

10:20 a.m.

ANTHELMINTHIC DRUG RESISTANCE: HAS IT ALREADY HAPPENED?

Marco Albonico

Fondazione Ivo de Carneri, Milan, Italy

10:35 a.m.

THEORETICAL BASIS OF VACCINATING AGAINST SOIL-TRANSMITTED HELMINTHS

Jeffrey Bethony

George Washington University, Washington, DC, United States

10:50 a.m.

DEVELOPING A PORTFOLIO OF ANTIGENS FOR VACCINE DEVELOPMENT

Bin Zhan

George Washington University, Washington, DC, United States

11:10 a.m.

FASHIONING AN ANTIGEN INTO A MANUFACTURED PRODUCT

Maria Elena Bottazzi

George Washington University, Washington, DC, United States

11:30 a.m.

MODELING DISTRIBUTIONS OF SOIL-TRANSMITTED HELMINTH INFECTIONS ACROSS AFRICA TO TARGET CONTROL

Simon Brooker

London School of Hygiene and Tropical Medicine, London, United Kingdom

Scientific Session 66

Mosquitoes – Biochemistry, Molecular Biology and Molecular Genetics I

Georgetown East

Tuesday, December 13 10:15 a.m. – Noon

CHAIR

Donald E. Champagne

University of Georgia, Athens, GA, United States

Michelle Riehle

University of Minnesota, St Paul, MN, United States

10:15 a.m.

137

NATURAL GENETIC POLYMORPHISM OF THE TEP4 GENE IN THE ANOPHELES GAMBIAE POPULATION OF MALI

Oumou Niaré¹, Abdoulaye Adamou¹, Abdrahamane Fofana¹, Adama Sacko¹, Adama Dao¹, Abdoulaye M. Touré¹, Ousmane Koita², Sékou F. Traoré¹, Michelle M. Riehle³, Jiannong Xu³, Ken Vernick³

¹University of Bamako, Bamako, Mali, ²Faculty of Arts, Science and Technology, Bamako, Mali, ³University of Minnesota, St Paul, MN, United States

10:30 a.m.

138

GENETIC IDENTIFICATION AND SCREENING OF CANDIDATE ANOPHELES GAMBIAE GENES CONTROLLING NATURAL P. FALCIPARUM RESISTANCE

Michelle M. Riehle¹, Oumou Niaré², Kyriacos Markianos³, Jun Li¹, Jiannong Xu¹, Abdoulaye M. Touré², Belco Podiougou², Moctar Diallo², Boubacar Coulibaly², Ahmed Ouatarra², Sékou F. Traoré², Ken Vernick¹

¹University of Minnesota, St Paul, MN, United States, ²University of Bamako, Bamako, Mali, ³Fred Hutchinson Cancer Research Center, Seattle, WA, United States

10:45 a.m.

139

GALECTIN GENE FAMILY IN ANOPHELES GAMBIAE

Jiannong Xu, Michelle M. Riehle, Jun Li, Ken Vernick

University of Minnesota, St Paul, MN, United States

11 a.m.

140

THE IMMUNOGLOBULIN SUPERFAMILY OF ANOPHELES GAMBIAE: INSIGHTS INTO NOVEL PROTEINS IMPORTANT FOR IMMUNITY

Lindsey S. Garver, Yuemei Dong, George Dimopoulos

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

11:15 a.m.

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DIFFERENTIAL GENE EXPRESSION PROFILES IN THE GASTRIC CAECA, ANTERIOR AND POSTERIOR MIDGUT OF LARVAL ANOPHELES GAMBIAE

Maria del Pilar Corena, Leslie VanEkeris, Carolina Ceballos, Elizabeth Jiménez, Alexandra Santoro, Paul J. Linsler

The Whitney Laboratory for Marine Bioscience, St Augustine, FL, United States

11:30 a.m.

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THE IMPLICATION OF DOWN SYNDROME CELL ADHESION MOLECULE, DSCAM, IN THE MOSQUITO INNATE IMMUNITY

Yuemei Dong, George Dimopoulos

Johns Hopkins University, Baltimore, MD, United States

11:45 a.m.

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CONTRASTING EFFECTS OF Aedes Aegypti SALIVA ON MURINE AND HUMAN IMMUNE EFFECTOR FUNCTIONS

Donald E. Champagne, Heather A. Wasserman

University of Georgia, Athens, GA, United States

(ACMCIP Abstract)

Symposium 67

Structural Basis of Antibody-Mediated Neutralization of Flaviviruses

Georgetown West

Tuesday, December 13 10:15 a.m. – Noon

Antibodies have been shown to play a critical role in protection from infection against flaviviruses. Recent molecular and crystallographic studies on the envelope protein of flaviviruses have provided new insights into the structural basis of antibody mediated protection against flaviviruses. This symposia will review the most current models for antibody-mediated protection and the implications for the development of immunotherapeutics and safer, more effective vaccines against flaviviruses.

CHAIR

Michael S. Diamond

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

10:15 a.m.

STRUCTURAL STUDIES OF ANTIBODY-DENGUE VIRUS AND ANTIBODY-WEST NILE VIRUS COMPLEXES

Richard Kuhn

Purdue University, West Lafayette, IN, United States

10:45 a.m.

MOLECULAR BASIS OF ANTIBODY-MEDIATED NEUTRALIZATION OF WEST NILE AND JAPANESE ENCEPHALITIS VIRUS

David Beasley

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

11:10 a.m.

STRUCTURAL BASIS OF NEUTRALIZATION OF WEST NILE AND DENGUE VIRUSES BY MONOCLONAL ANTIBODIES

Michael S. Diamond

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

11:35 a.m.

MOLECULAR MAPPING OF NEUTRALIZING ANTIBODIES AGAINST DENGUE VIRUS

John Roehrig

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

Symposium 68

Tropical Medicine and the Media

International Ballroom East

Tuesday, December 13 10:15 a.m. – Noon

Popular books, newspaper and magazine articles, and television shows can have a powerful impact on public awareness of tropical diseases and global health. Original essays and reports in medical journals also influence public opinion and policy. This interactive session will feature panelists with professional experience and insights with regard to their own works of journalism or other outreach efforts related to global health. The session will conclude with a question and answer period meant to encourage further media and advocacy efforts by ASTMH members.

CHAIR

Claire Panosian

UCLA School of Medicine, Los Angeles, CA, United States

10:15 a.m.

INTRODUCTION

Claire Panosian

UCLA School of Medicine, Los Angeles, CA, United States

10:25 a.m.

FROM RESEARCHER TO POPULAR AUTHOR: THE STORY OF MOSQUITO

Andrew Spielman

Harvard School of Public Health, Boston, MA, United States

10:45 a.m.

FROM DOCTOR TO JOURNALIST

Susan Okie

Contributing Editor, New England Journal of Medicine, Washington, DC, United States

11:05 a.m.

MAKING A BBC MALARIA DOCUMENTARY: THE STORY OF FEVER ROAD

Kevin Hull

BBC/Films of Record, London, United Kingdom

11:25 a.m.

THE WGBH/NOVA GLOBAL HEALTH SERIES: WHAT HAPPENS NEXT?

Harvey Fineberg

Institute of Medicine, Washington, DC, United States

11:45 a.m.

DISCUSSION

Claire Panosian

UCLA School of Medicine, Los Angeles, CA, United States

Symposium 69

Why Current Strategies to Control Epidemic Measles Fail? A Debate for the Future

International Ballroom West

Tuesday, December 13 10:15 a.m. – Noon

Although progress has been made towards reducing measles morbidity and mortality, further action is required in endemic-epidemic contexts. Aside from the need to reinforce routine vaccination programs, a serious question emerges as to what type of action should be taken once an outbreak has begun. Current WHO recommendations suggest that outbreak response vaccination strategies may not be efficacious. This idea has recently been challenged through research into measles transmission dynamics in endemic-epidemic areas and through the demonstration of benefits from interventions, even when instituted late in the epidemic. We propose a symposium devoted to the debate about how to best control measles epidemics and how to prevent them from occurring. Our list of proposed invitees come from different perspectives and are noted experts in their respective fields.

CHAIR

Philippe J. Guerin

Epicentre, Paris, France

Rebecca F. Grais

Epicentre, Paris, France

10:15 a.m.

POLICY AND PROGRAMMATIC IMPLICATIONS OF OUTBREAK RESPONSE VACCINATION STRATEGIES

Peter Strebel

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

10:45 a.m.

DYNAMICS, PERSISTENCE AND CONTROL OF MEASLES IN HIGH BIRTH-RATE COUNTRIES

Bryan Grenfell

Pennsylvania State University, University Park, PA, United States

11:45 a.m.

LESSONS FROM OUTBREAK RESPONSE VACCINATION CAMPAIGNS: QUESTIONING CURRENT WHO RECOMMENDATIONS

Florence Fermon

Medecins Sans Frontiers, Paris, France

11:10 a.m.

ISSUES IN MEASLES CONTROL: A CASE STUDY OF DISEASE DYNAMICS IN CAMEROON

Donald S. Burke

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

Exhibit Hall Open/Box Lunches

Exhibit Hall

Tuesday, December 13

Noon – 1:30 p.m.

Poster Session A

Exhibit Hall

Tuesday, December 13

Noon – 1:15 p.m.

Arthropods/Entomology – Other

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CHARACTERIZATION OF DIFFERENTIALLY EXPRESSED MIDGE GENES IN ORBIVIRUS VECTOR POPULATIONS

Corey L. Campbell¹, William C. Wilson¹, Katja Manninen²

¹*US Department of Agriculture, Laramie, WY, United States,*

²*University of Wyoming, Laramie, WY, United States*

(ACMCIP Abstract)

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A PCR-BASED ASSAY TO SURVEY FOR KNOCKDOWN RESISTANCE TO PYRETHROID ACARICIDES IN HUMAN SCABIES MITES (*SARCOPTES SCABIEI* VAR *HOMINIS*)

Cielo J. Pasay¹, Shelley Walton², Katja Fischer¹, Deborah Holt³, James Mc Carthy¹

¹*Queensland Institute of Medical Research, Brisbane, Queensland, Australia,*

²*Menzies School of Health Research, Casuarina, Darwin, NT, Australia,*

³*Menzies School of Health Research, Casuarina, Darwin NT, Australia*

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IDENTIFICATION OF ABC TRANSPORTERS FROM *SARCOPTES SCABIEI* AND THEIR POTENTIAL ASSOCIATION WITH EMERGING IVERMECTIN RESISTANCE

Kate E. Mounsey¹, Deborah C. Holt¹, James McCarthy², Bart J. Currie¹, Shelley F. Walton¹

¹*Menzies School of Health Research, Casuarina, NT, Australia,*

²*Queensland Institute of Medical Research, Brisbane, QLD, Australia*

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GENE FLOW AMONG *TRITOMA DIMIDIATA* POPULATIONS ACROSS CENTRAL AMERICA AND MEXICO

Juan J. Cáliz¹, Carlota Monroy², Patricia Dorn¹

¹*Loyola University New Orleans, New Orleans, LA, United States,*

²*Universidad San Carlos, Guatemala City, Guatemala*

Tuesday, December 13

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EVIDENCE-BASED, COMMUNITY-DERIVED INTERVENTIONS FOR THE CONTROL OF THE DENGUE VIRUS VECTOR *Aedes Aegypti* IN MANAGUA, NICARAGUA

Jorge Arostegui¹, **Samantha N. Hammond**², Alvaro Carcamo¹, Josefina M. Coloma², Angel Balmaseda³, Neil Andersson¹, Eva Harris², CIET Dengue Group-Nicaragua¹

¹CIET International, Managua, Nicaragua, ²Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, ³Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

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PORTABLE, NONDESTRUCTIVE MEASUREMENT OF DELTAMETHRIN ON BEDNETS USING X-RAY FLUORESCENCE SPECTROMETRY

Stephen C. Smith

Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

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FIELD EVALUATION OF ARTHROPOD REPELLENTS AGAINST PHLEBOTOMINE SAND FLIES IN SINAI, EGYPT

Daniel E. Szumlas¹, Hanafi A. Hanafi¹, David J. Fryauff¹, Watanaporn Dheranetra², Scott W. Gordon², Moustafa Debboun²

¹U.S. Naval Medical Research Unit Number Three, Cairo, Egypt, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

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SEASONAL VARIATIONS IN ACTIVE DISPERSAL OF NATURAL POPULATIONS OF *Triatoma infestans* (HEMIPTERA: REDUVIIDAE) IN RURAL NORTHWESTERN ARGENTINA

Gonzalo M. Vazquez Prokopec¹, Leonardo A. Ceballos¹, Paula L. Marcet¹, Maria C. Cecere¹, Victoria M. Cardinal¹, Uriel Kitron², Ricardo E. Gürtler¹

¹Laboratorio de Eco-Epidemiología, Universidad de Buenos Aires, Buenos Aires, Argentina, ²University of Illinois at Urbana Champaign, Urbana, IL, United States

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TEMPORAL VARIATION IN WING SIZE AND SHAPE OF *Triatoma infestans* IN NORTHWESTERN ARGENTINA

Judith Schachter-Broide¹, Jean-Pierre Dujardin², Uriel Kitron³, **Ricardo E. Gürtler**¹

¹Laboratorio de Eco-Epidemiología, Universidad de Buenos Aires, Buenos Aires, Argentina, ²Unité Mixte de Recherche (UMR), Institut de Recherches pour le Développement (IRD)-Centre National de Recherche Scientifique (CNRS), Montpellier, France, ³College of Veterinary Medicine, University of Illinois at Urbana-Champaign, Urbana, IL, United States

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SPATIO-TEMPORAL PATTERNS OF REINFESTATION BY *Triatoma infestans* FOLLOWING INSECTICIDE SPRAYING IN NEIGHBORING COMMUNITIES IN NORTHWESTERN ARGENTINA

Maria C. Cecere¹, **Gonzalo M. Vazquez**¹, Ricardo E. Gürtler¹, Uriel Kitron²

¹Laboratorio de Eco-Epidemiología, Universidad de Buenos Aires, Buenos Aires, Argentina, ²University of Illinois at Urbana-Champaign, Urbana, IL, United States

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EVALUATION OF CHAGAS DISEASE TRANSMISSION RISK IN THE CITY OF MERIDA, YUCATAN, MEXICO, AND IDENTIFICATION OF RISK FACTORS FOR HOUSE INFESTATION BY VECTORS

Yadira Guzman-Tapia, Maria Jesus Ramirez-Sierra, Javier Escobedo-Ortegon, Eric Dumonteil

Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico

155

REPELLENCY OF FENNEL OIL-DERIVED PRODUCTS TO MOSQUITOES (DIPTERA: CULICIDAE) UNDER LABORATORY AND FIELD CONDITIONS

Kyu-Sik Chang, Hye-Eun Lee, Won-Ja Lee

Korea National Institute of Health, Seoul, Republic of Korea

Bacteria – Diarrheal Diseases/Mucosal Immunity

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COMPARISON OF THE ANTIBODIES IN LYMPHOCYTE SUPERNATANT (ALS) AND ANTIBODY-SECRETING CELL (ASC) ASSAYS FOR MEASURING THE INTESTINAL MUCOSAL IMMUNE RESPONSE TO A NOVEL ORAL TYPHOID VACCINE (M01ZH09)

Meera V. Sreenivasan¹, **Beth D. Kirkpatrick**², Matthew D. Bentley³, Anette M. Thern³, Catherine J. Larsson², Cassandra Ventrone², Lou Bourgeois⁴

¹University of Vermont and George Washington University, Washington, DC, United States, ²University of Vermont College of Medicine, Burlington, VT, United States, ³Microscience Limited, Berkshire, United Kingdom, ⁴Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States

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USE OF FECAL LACTOFERRIN IN DIFFERENTIATION BETWEEN AMOEBIC AND BACILLARY DYSENTRY

Osama Nasr Eldeen Mohamed Moustafa Moustafa, Jr.¹, Doaa El-Saied Sidahmed, Dr², Safia Mahmoud Aly, Dr², Lobna Abdel-Aziz El-Zawawi, Dr², Sonia Refaat Allam²

¹High Institute of Public Health, Alexandria, Egypt ²Faculty of Medicine, Alexandria, Egypt

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FECAL POLYMERASE CHAIN REACTION FOR THE DIAGNOSIS OF INTESTINAL TUBERCULOSIS**Balamurugan Ramadass**, Venkataraman Subramanian, K.R John, Balakrishnan S. Ramakrishna*Christian Medical College, Vellore, India*

159

DETECTION OF SPVR GENE GIFSY-1 AND GIFSY-2 PROPHAGES IN SALMONELLA ENTERICA SEROVARS ISOLATED FROM COLOMBIAN PATIENTS**Nora M. Cardona-Castro**¹, Miryan M. Sánchez Jiménez¹, Nunzia Canu², Sergio Uzzau², Salvatore Rubino²¹*Instituto Colombiano de Medicina Tropical - CES, Sabaneta, Antioquia, Colombia*, ²*Section of Clinical and Experimental Microbiology, University of Sassari. Sassari-Italia, Italy***Bacteria – Other**

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LEPTOSPIROSIS IN WEST UKRAINE**Emad W. Mohareb**¹, Natalia Vynograd², Caroline Fayez¹, Ken Earhart¹¹*NAMRU-3, Cairo, Egypt*, ²*L'viv National Medical University, L'viv, Ukraine*

161

STUDIES ON THE FEEDING RELATIONSHIPS WITHIN MACROINVERTEBRATES IN WATER BODIES ASSOCIATED WITH MYCOBACTERIUM ULCERANS DISEASE TRANSMISSION**Charles Quaye**¹, Dzedzom de Souza¹, Lydia Mosi¹, Joseph Amakye², Michael David Wilson¹, Daniel Agyei Boakye¹¹*Noguchi Memorial Institute for Medical Research, Accra, Ghana*, ²*Water Research Institute, Council for Scientific and Industrial Research, Accra, Ghana*

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INFECTION BY MYCOBACTERIUM LEPRAE AND IMMUNE CHARACTERISTICS OF HOUSEHOLD CONTACTS AND LEPROSY PATIENTS FROM COLOMBIA**Nora M. Cardona-Castro**¹, Miryan M. Sánchez¹, Camilo Beltrán-Alzate¹, Rubén D. Manrique-Hernández²¹*Instituto Colombiano de Medicina Tropical - CES, Sabaneta, Antioquia, Colombia*, ²*Instituto de Ciencias de la Salud- CES, Medellín, Antioquia, Colombia*

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LABORATORY-ACQUIRED BRUCELLOSIS**Kristin B. Uhde**¹, Michelle A. Chang¹, Gina Oda², Judith I. Rosen², Mark Holodniy², Sara Cody³, Mary D. Bajani Ari¹, Sandra L. Bragg¹, Marc Fischer¹, Thomas A. Clark¹¹*Centers for Disease Control and Prevention, Atlanta, GA, United States*, ²*VA Palo Alto Health Care System, Palo Alto, CA, United States*, ³*Santa Clara County Health Department, Palo Alto, CA, United States***Bacteria – Respiratory Infections**

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EPIDEMIOLOGY OF TRANSMISSION OF MYCOBACTERIUM TUBERCULOSIS IN SOUTHERN MEXICO**Maria Eugenia Jimenez**¹, Maria de Lourdes Garcia¹, Alfredo Ponce-de-León², Jose Sifuentes², Leticia D. Ferreyra¹, Miriam Bobadilla², Areli Gamboa², Bulmaro Cano¹, Sergio Canizales¹, Peter Small³, Kathryn DeRiemer⁴¹*National Institute of Public Health, Cuernavaca, Morelos, Mexico*, ²*National Institute of Medical Sciences and Nutrition, Mexico, D.F., Mexico*, ³*Bill and Melinda Gates Foundation, Seattle, WA, United States*, ⁴*Stanford University, Palo Alto, CA, United States*

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PENICILLIN BINDING PROTEINS (PBPS) IN STREPTOCOCCUS PNEUMONIAE: DATABASE SETTING UP AND APPLICATION**Loi P. Luu**, Chuong H. Nguyen, Quan K. Thai, Minh T. Thai, Duong H. Ho*Natural Science University, HCM, Viet Nam*

(ACMCIP Abstract)

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EVALUATION OF A RAPID CULTURE METHOD FOR TUBERCULOSIS DIAGNOSIS: A LATIN AMERICAN MULTI-CENTER STUDY, R1**Jaime A. Robledo**¹, Gloria I. Mejía¹, Nora Morcillo², Luis Chacón³, Mirta Camacho⁴, Julieta Luna⁵, Janeth Zurita⁶, Maritza Velasco⁷, Juan C. Palomino⁸, Anandi Martin⁸, Françoise Portaels⁸¹*Bacteriology and Mycobacteriology Unit, Corporación para Investigaciones Biológicas and Escuela de Ciencias de la Salud, Universidad Pontificia Bolivariana, Medellín, Antioquia, Colombia*, ²*Hospital Cetrángolo, Mycobacterial Regional Reference Laboratory, Buenos Aires, Argentina*, ³*Centro Nacional de Diagnóstico y Referencia, Departamento de Micobacterias, Ministerio de Salud de Nicaragua, Managua, Nicaragua*, ⁴*Instituto Nacional de Laboratorios de Salud INLASA, La Paz, Bolivia*, ⁵*Escuela Nacional de Ciencias Biológicas, Instituto Politecnico Nacional, Mexico DF., Mexico*, ⁶*Hospital Vozandes, Laboratorio de Microbiología y Tuberculosis, Quito, Ecuador*, ⁷*Instituto de Salud Pública de Chile, Sección de Micobacterias, Santiago de Chile, Chile*, ⁸*Institute of Tropical Medicine, Antwerp, Belgium*

Bacteria – Systemic Infections**167****LEPTOSPIROSIS AS A CAUSE OF FEBRILE ILLNESS DURING AN OUTBREAK OF DENGUE FEVER IN BANGLADESH**

Regina C. LaRocque¹, Robert F. Breiman², Mary D. Ari³, Roger E. Morey³, Firdous Ara Janan⁴, John Mosely Hayes⁵, M. Anowar Hossain², W. Abdullah Brooks², Paul N. Levett³

¹Massachusetts General Hospital, Boston, MA, United States, ²ICDDR,B: Centre for Health and Population Research, Dhaka, Bangladesh, ³Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁴Dhaka Medical College Hospital, Dhaka, Bangladesh, ⁵Centers for Disease Control and Prevention, San Juan, PR, United States

168**CHARACTERIZATION OF SALMONELLA ENTERICA SEROTYPE TYPHI ISOLATED FROM FEBRILE PATIENTS IN EGYPT, JORDAN, QATAR, PAKISTAN AND UZBEKISTAN BY ANTIMICROBIAL RESISTANCE PROFILES AND PULSED FIELD GEL ELECTROPHORESIS (PFGE)**

J. Clark¹, G. Pimentel¹, J. Klena¹, N. Khuri-Bulos², A. Shehabi², S. S. Elshafie³, A. Zaidi⁴, M. Abdel-Maksoud¹, M. Morcos¹, K. Earhart¹, R. Hajjeh¹

¹US Naval Medical Research Unit #3, FPO, AE, United States, ²Jordan University Hospital, Amman, Jordan, ³Hamad Medical Corporation, Doha, Qatar, ⁴Aga Khan University, Karachi, Pakistan

169**EFFICACY OF TELITHROMYCIN IN THE TREATMENT OF A HAMSTER MODEL OF LEPTOSPIROSIS**

James E. Moon, Michael C. Ellis, Matthew E. Griffith, Joshua S. Hawley, Robert G. Rivard, Suzanne McCall, Duane R. Hospenthal, Clinton K. Murray

Brooke Army Medical Center, Fort Sam Houston, TX, United States

Bacteria – Vaccines**170****IMMUNE RESPONSE INDUCED BY CATIONIC LIPOSOME ENCAPSULATING DNA-HSP65 TUBERCULOSIS VACCINE**

Rogério S. Rosada¹, Fabiani G. Frantz², Lucimara Gaziola de La Torre³, Ana P. Trombone¹, Lúcia H. Faccioli², Célio L. Silva¹, Maria H. Santana³, Arlete A. Coelho-Castelo¹

¹FMRP/Universidade de São Paulo, Ribeirão Preto-SP, Brazil, ²FCFRP/Universidade de São Paulo, Ribeirão Preto-SP, Brazil, ³FEQ/UNICAMP, Campinas - SP, Brazil

(ACMCIP Abstract)

Cestodes – Cysticercosis**171****FIVE-MONTH VACCINATION PROGRAM WITH S3PVAC SHOWS EFFECTIVE PROTECTION AGAINST PIG-CYSTICERCOSIS BUT DOES NOT IMPACT DISEASE-TRANSMISSION AT THE COMMUNITY LEVEL**

Julio Morales¹, **Edda L. Sciuotto**¹, José J. Martínez², Andrea Toledo¹, Nelly Villalobos², Carmen L. Cruz¹, Gabriela Meneses¹, Marisela Hernández¹, Alicia Díaz³, Luis F. Rodarte², Gonzalo Acero¹, Gohar Gevorkian¹, Karen Manoutcharian¹, Jorge Paniagua⁴, Gladis Fragoso¹, Agnes Fleury⁵, Rosa Larralde¹, Aline de Aluja², Carlos Larralde¹

¹Instituto de Investigaciones Biomedicas, Mexico, D. F., Mexico, ²Facultad de Medicina Veterinaria y Zootecnia, Universidad Nacional Autónoma de México, Mexico, D. F., Mexico, ³Centro de Investigación Biomédica de Oriente, Instituto Mexicano del Seguro Social, Puebla, Mexico, ⁴Laboratorios Silanes, Mexico, D. F., Mexico, ⁵Instituto Nacional de Neurología y Neurocirugía, Mexico, D. F., Mexico

172**SYMPTOMATIC NEUROCYSTICERCOSIS IN MEXICO: CLINICAL, RADIOLOGICAL AND INFLAMMATORY DIFFERENCES BETWEEN PEDIATRIC AND ADULT PATIENTS**

Brenda I. Sáenz¹, **Edda L. Sciuotto**¹, Matilde Ruíz-García², Enequina Jiménez³, Juan Hernández-Aguilar³, Roberto Suástegui³, Carlos Larralde¹, Agnes Fleury⁴

¹Instituto de Investigaciones Biomedicas, Mexico, D. F., Mexico, ²Instituto Nacional de Pediatría, Mexico, D. F., Mexico, ³Hospital Infantil de México, Mexico, D. F., Mexico, ⁴Instituto Nacional de Neurología y Neurocirugía, Mexico, D. F., Mexico

Cestodes – Echinococcosis/Hydatid Disease**173****INVESTIGATIONS ON THE USE OF THIAZOLIDES FOR IN VITRO TREATMENT AGAINST ECHINOCOCCUS GRANULOSUS LARVAL STAGES**

Arunasalam Naguleswaran¹, Martin Spicher¹, Jean Francois Rossignol², **Andrew Hemphill**¹

¹University of Berne, Berne, Switzerland, ²Romark Research Laboratories, Tampa, FL, United States

174**WHO-CLASSIFICATION OF HUMAN ALVEOLAR ECHINOCOCCOSIS: PRINCIPLES AND APPLICABILITY IN THREE DIFFERENT CENTERS**

Peter Kern¹, Beate Gruener¹, Eric Delabrousse², Dominique A. Vuitton², Hao Wen³, Yinmei Shao⁴, Solange Bresson-Hadni²

¹University of Ulm, Ulm, Germany, ²University of Franche-Comté, Besancon, France, ³Xinjiang Hydatid Clinical Research Institute, Urumqi, China, ⁴Xinjiang Hydatid Clinical Research Institute, Urumqi, China

Cestodes – Other

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LETHAL INFECTION OF IL-4 KO MICE WITH MESCOESTOIDES CORTI IS ASSOCIATED WITH INCREASED PARASITE NUMBERS AND A SHIFT TO A TH1 IMMUNE RESPONSE

Amy E. O’Connell¹, Laura A. Krepesi¹, Edward J. Pearce², D. Craig Hooper¹, David Abraham¹

¹Thomas Jefferson University, Philadelphia, PA, United States,

²University of Pennsylvania, Philadelphia, PA, United States

(ACMCIP Abstract)

Clinical Tropical Medicine

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INCREMENTAL COST-BENEFIT OF SCREENING FOR ANTI-HAV IN MASS SCREENING AND IMMUNIZATION PROGRAMS: RESULTS OF A 2004 U.S. ARMY SEROPREVALENCE SURVEY

Remington L. Nevin¹, David W. Niebuhr²

¹Army Medical Surveillance Activity, Washington, DC, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

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TOXOPLASMOSIS IN THE ARABIAN GULF: NUISANCE OR A SIGNIFICANT DISEASE?

Parsotam R. Hira¹, Nabila Khalid¹, Jamshaid Iqbal¹, Faiza Al-Ali², Fatma Shelahi², Marianna Wilson³

¹Department of Microbiology, Faculty of Medicine, Kuwait City, Kuwait, ²Department of Laboratories, Farwania Hospital, Kuwait City, Kuwait, ³Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States

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THE EFFICACY OF COMBINED CRYOTHERAPY AND INTRALESIONAL GLUCANTIME VERSUS CRYOTHERAPY OR INTRALESIONAL GLUCANTIME ALONE FOR THE TREATMENT OF CUTANEOUS LEISHMANIASIS IN CHILDREN: A COMPARATIVE STUDY

Shahin Aghaei¹, Ahmad Moradi²

¹Jahrom Medical School, Jahrom, Iran (Islamic Republic of),

²Moradi Skin Laser Clinic, Shiraz, Iran (Islamic Republic of)

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MALARIA AND INTESTINAL HELMINTHIASIS IN SCHOOL CHILDREN OF KUMBA URBAN AREA, CAMEROON

Martina B. Adio, Kenneth J. Ndamukong, Helen K. Kimbi,

Judith Veshiyi Mbuh

University of Buea, Buea, Cameroon

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THE BURDEN OF CO-MORBID ILLNESS IN WOMEN RESIDING IN ACCRA, GHANA

Rosemary B. Duda¹, Allan G. Hill²

¹BIDMC/HMS, Boston, MA, United States, ²HSPH, Boston, MA, United States

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PREDICTORS OF ANAEMIA IN CHILDREN WITH ACUTE, UNCOMPLICATED, PLASMODIUM FALCIPARUM MALARIA

Akintunde Sowunmi, **Babasola A. Fateye**, Ahmed A. Adedeji, Ernest Tambo, Grace O. Gbotosho, Fatai A. Fehintola, Christian T. Happi, Ayo E. Bamgboye

Department of Pharmacology and Therapeutics and Institute for Medical Research and Training, University of Ibadan, Ibadan, Oyo State, Nigeria

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HEPATITIS B RISKS AND IMMUNIZATION COVERAGE AMONG US TRAVELERS

Bradley A. Connor¹, **R. Jake Jacobs²**, Allen S. Meyerhoff²

¹New York Center for Travel and Tropical Medicine, New York, NY, United States, ²Capitol Outcomes Research, Inc., Alexandria, VA, United States

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EXPERIMENTAL STUDY OF THE EFFICACY OF THE BLACK STONE

Jean-Philippe Chippaux¹, Ismaila Diédhiou¹, Jackson Malukissa², Ermus Musama², Roberto Stock³

¹Institut de Recherche pour le Développement, Dakar, Senegal, ²Centre antivenimeux, Kinshasa University, Kinshasa, Congo, Democratic Republic of the, ³Instituto de Biotecnologia, UNAM, Cuernavaca, Mexico

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SEASONALITY OF ROTAVIRUS DISEASE IN THE TROPICS: A META-ANALYSIS

Karen Levy, Alan B. Hubbard, Joseph N. Eisenberg

University of California Berkeley, Berkeley, CA, United States

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THE COSTS OF MALARIA AMONG THE POOR AND VULNERABLE: RESULTS FROM A LONGITUDINAL STUDY IN RURAL KENYA

Jane Chuma

Kenya Medical Research Institute, Kilifi, Kenya

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LOW COMMUNITY COVERAGE OF AN ANTIMALARIAL COMBINATION OF ARTESUNATE AND AMODIAQUINE IN MAKAMBA PROVINCE, BURUNDI

Sibylle Gerstl¹, Sandra Cohuet¹, Kodjo Edoh², Dismas Baza³, Christopher Brasher², Jean-Paul Guthmann¹, Francesco Checchi¹

¹Epicentre, Paris, France, ²Médecins Sans Frontières-France, Paris, France, ³Ministère de la Santé, Bujumbura, Burundi

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PCR-BASED DETECTION OF ANGIOSTRONGYLUS CANTONENSIS IN SLUGS

Yvonne Qvarnstrom¹, Henry Bishop¹, James J. Sullivan¹, Robert Hollingsworth², Alexandre J. da Silva¹

¹National Center for Infectious Diseases/Centers for Disease Control and Prevention, Atlanta, GA, United States, ²USDA-ARC, Hilo, HI, United States

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FAKE ANTI MALARIAL DRUGS IN CAMBODIA: A DANGER TO PUBLIC HEALTH

Chanthap Lon¹, Tsuyuoka Reiko², Souly Phanouvong³, Nivanna Nam⁴, Socheat Duong¹, Sokhan Chroeng⁵, Nancy Blum³, Eva Maria Christophel⁶, Abdelkrim Smine³

¹National Malaria Center, Phnom Penh, Cambodia, ²World Health Organization, Phnom Penh, Cambodia, ³United States Pharmacopeia / Drug Quality and Information Program, Rockville, MD, United States, ⁴National Laboratory for Drug Quality Control, Phnom Penh, Cambodia, ⁵Department of Drug and Food, Ministry of Health, Phnom Penh, Cambodia, ⁶World Health Organization Western Pacific Regional Office, Manila, Philippines

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Alon Warburg¹, Jan Votycka², Lionel Schnur¹, Abdelmajeed Nasserredin¹, Milena Svobodova²

¹Hebrew University of Jerusalem, Jerusalem, Israel, ²Charles University, Prague, Czech Republic

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¹Makerere University Medical School, Kampala, Uganda, ²Ministry of Health, Uganda, Kampala, Uganda, ³Makerere University Medical School, Dept of Biochemistry, Kampala, Uganda, ⁴University of California, San Francisco, San Francisco, CA, United States

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Agnes Kurniawan¹, Teguh Karyadi², Evy Yuniastuti², Huw V. Smith³, Henry Bishop⁴

¹Faculty of Medicine, University of Indonesia, Jakarta, Indonesia, ²Dept. of Internal Medicine, University of Indonesia, Jakarta, Indonesia, ³SPDL Stobhil Hospital, Glasgow, Scotland, UK, ⁴DPDx, Centers for Disease Control and Prevention Government, Atlanta, GA, United States

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Achuyt Bhattarai¹, Mwinyi Msellem², Scott Montgomery¹, Anders Björkman¹

¹Karolinska Institutet, Stockholm, Sweden, ²Zanzibar Malaria Control Programme, Zanzibar, United Republic of Tanzania

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¹Naval Medical Research Center Detachment, Lima, Peru, ²Centro Medico Naval, Lima, Peru, ³Clinica Naval Iquitos, Iquitos, Peru

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¹Faculdade de Ciências Farmacêuticas-USP-RP, Ribeirão Preto, Brazil, ²Faculdade de Ciências Farmacêuticas-USP-RP, Ribeirão Preto, Brazil, ³Faculdade de Medicina de Ribeirão Preto-USP, Ribeirão Preto, Brazil

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¹Ifakara Health Research and Development Centre, Dares salaam, United Republic of Tanzania, ²Centers for Disease Control and Prevention, Atlanta, GA, United States

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¹Faculty of Medicine, Alexandria University, Alexandria, Egypt, ²Microbiology Department, High Institute of Public Health, Alexandria, Egypt

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¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Ministry of Public Health and Population, Gonaives, Haiti, ³Centers for Disease Control and Prevention, Port au Prince, Haiti, ⁴Pan American Health Organization, Port au Prince, Haiti, ⁵Centers for Disease Control and Prevention, San Juan, Puerto Rico

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¹Research Sciences Directorate, U.S. Naval Medical Research Unit Number Three, Cairo, Egypt, ²Faculty of Science, Helwan University, Cairo, Egypt, ³Egyptian Company for Chemicals and Pharmaceuticals (ADWIA), Cairo, Egypt, Cairo, Egypt

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¹TechLab, Inc., Blacksburg, VA, United States, ²ICDDR,B, Dhaka, Bangladesh, ³University of Virginia, Charlottesville, VA, United States

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¹University of California Berkeley, Berkeley, CA, United States, ²Universidad San Francisco de Quito, Quito, Ecuador, ³Trinity College, Hartford, CT, United States

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¹US Naval Medical Research Center, Lima, Peru, ²Hospital 2 de Mayo, Lima, Peru, ³Hospital E. Rebagliati Martins, Lima, Peru, ⁴Hospital Naval, Lima, Peru, ⁵Naval Medical Research Center, Miami, FL, United States, ⁶Instituto Nacional de Salud, Lima, Peru, ⁷Pan American Health Organization, Washington, DC, United States

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¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²China Centers for Disease Control and Prevention, Beijing, China, ³Fujian Provincial Centers for Disease Control and Prevention, Fuzhou, China, ⁴Procter & Gamble Company, Cincinnati, OH, United States, ⁵Procter & Gamble Company, Guangzhou, China, ⁶Procter & Gamble Company, Beijing, China, ⁷ICDDR,B: Center for Health and Population Research, Dhaka, Bangladesh

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Richard Reithinger¹, Paul G. Coleman²

¹Thermosurgery Technologies Inc, Phoenix, AZ, United States, ²London School of Hygiene and Tropical Medicine, London, United Kingdom

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Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, México City, Mexico

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¹Walter Reed Army Medical Center, Washington, DC, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

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¹TECHLAB, Inc., Blacksburg, VA, United States, ²LSG & Associates, Santa Monica, CA, United States, ³University of Virginia, Charlottesville, VA, United States

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¹McGill University, Montreal, QC, Canada, ²Asociacion Civil Selva Amazonica, Iquitos, Peru

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¹Centro Nacional de Control de Enfermedades Tropicales, Santo Domingo, Dominican Republic, ²Pan American Health Organization, Santo Domingo, Dominican Republic, ³Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁴Berlin Institute of Tropical Medicine, Berlin, Germany, ⁵Public Health Agency of Canada, Ottawa, ON, Canada

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Fred Amimo¹, **Ole Skovmand**², Edward D. Walker³, Jim Miller³

¹Vector Biology and Control Research Centre, Kenya Medical Research Institute, Kisumu, Kenya, ²Intelligent Insect Control, Castelnau le Lez, France, ³Michigan State University, E. Lansing, MI, United States

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¹FADER / Cibic, Bogotá, Colombia, ²MinProtección Social, Bogotá, Colombia, ³Zentaris, AG, Frankfurt, Germany, ⁴ABF, Rockville, MD, United States

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Mark S. Riddle¹, Shannon D. Putnam², David Tribble³, John W. Sanders¹

¹Naval Medical Research Unit No. 3, Cairo, Egypt, ²Naval Medical Research Unit No. 2, Jakarta, Indonesia, ³Naval Medical Research Center, Silver Spring, MD, United States

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¹Brazilian Ministry of Health, Brasilia, Brazil, ²Division of International Health, OGH, Centers for Disease Control and Prevention, Atlanta, GA, United States

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¹U.S. Naval Medical Research Unit #3, Cairo, Egypt, ²Cairo University, Cairo, Egypt

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¹London School of Hygiene and Tropical Medicine, London, United Kingdom, ²Universidad de Buenos Aires, Buenos Aires, Argentina, ³Center for Chagas Disease Reservoirs and Vectors, Cordoba, Argentina

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Uniformed Services University of Health Sciences, Bethesda, MD, United States

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¹Institute of Tropical Medicine, Nagasaki University, Nagasaki-city, Japan, ²San Lazaro Hospital, Manila, Philippines, ³St. Luke's Medical Center, Quezon City, Philippines

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University of Benin School of Medicine, Benin City, Edo State, Nigeria

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¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Department of Ophthalmology, Federal University of Sao Paulo, Pualista School of Medicine, Sao Paulo, Brazil, ³University of California, Los Angeles, Ocular Inflammatory Disease Center, the Jules Stein Eye Institute and the Department of Ophthalmology, UCLA School of Medicine, Los Angeles, CA, United States, ⁴Clinica Silveira, Erechim, Brazil

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¹University of California, San Francisco, San Francisco, CA, United States, ²Makerere University, Kampala, Uganda

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¹University of Queensland, Herston, Australia, ²Queensland Institute of Medical Research, Herston, Australia

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¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Medical Entomology Research and Training Unit, Guatemala City, Guatemala, ³Procter & Gamble, Cincinnati, OH, United States

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¹Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States, ²Tulane National Primate Research Center, Covington, LA, United States, ³Universidad Peruano Cayetano Heredia Instituto de Medicina, Lima, Peru, ⁴University of Alabama at Birmingham, Birmingham, AL, United States

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Sungano Mharakurwa¹, Christopher Simoloka¹, Philip Thuma¹, Clive Shiff², David Sullivan²

¹The Malaria Institute at Macha, Choma, Zambia, ²Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

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Tara K. Jha¹, Shyam Sundar², Chandreshwar P. Thakur³, Antony J. Sabin⁴, John Horton⁵, J. Mark Felton⁴

¹Kala-azar Research Center, Muzaffarpur, India, ²Kala-azar Medical Research Center, Banaras Hindu University, Varanasi, India, ³Balaji Uthan Sansthan, Patna, India, ⁴GlaxoSmithKline, Greenford, United Kingdom, ⁵Liverpool University, Liverpool, United Kingdom

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¹Department of Infectious Diseases, Tropical Medicine and AIDS, Academic Medical Center, University of Amsterdam, Amsterdam, Netherlands, ²Centre for Vector Biology and Control Research, Kenya Medical Research Institute, Kisumu, Kenya, ³International Health Institute and Department of Pathology and Laboratory Medicine, Brown University, Providence, RI, United States, ⁴Child and Reproductive Health Group, Liverpool School of Tropical Medicine, Liverpool, United Kingdom

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¹DoD Global Emerging Infections Surveillance and Response System, Silver Spring, MD, United States, ²US Naval Medical Research Center Detachment, Lima, Peru, ³US Army Medical Research Unit - Kenya, Nairobi, Kenya, ⁴Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, ⁵US Army Medical Research Institute for Infectious Diseases, Frederick, MD, United States, ⁶US Navy Medical Research Unit - 3, Cairo, Egypt, ⁷US Navy Medical Research Unit - 2, Jakarta, Indonesia, ⁸Uniformed Services University of the Health Sciences, Bethesda, MD, United States, ⁹Walter Reed Army Institute of Research, Silver Spring, MD, United States

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Jean-Paul Chretien¹, Bonnie Smoak², Joseph Malone¹

¹DoD Global Emerging Infections Surveillance and Response System, Silver Spring, MD, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

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¹US Naval Medical research Unit-3, Cairo, Egypt, ²Virology Institute, Tashkent, Uzbekistan, Cairo, Uzbekistan, ³Samarqand Fever Hospital, Samarqand, Uzbekistan

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¹Yale University, New Haven, CT, United States, ²Michigan State University, East Lansing, MI, United States, ³University of Illinois, Urbana, IL, United States, ⁴University of California Irvine, Irvine, CA, United States, ⁵Children's Hospital Harvard University, Boston, MA, United States, ⁶Centers for Disease Control and Prevention-DVBID, Ft. Collins, CO, United States

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Douglas S. Walsh¹, Eduardo C. Delacruz², Rodolfo M. Abalos², Esterlina V. Tan², Allen Richards³, KS Myint⁴
¹Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²Leonard Wood Memorial Center for Leprosy Research, Cebu City, Philippines, ³Naval Medical Research Center, Silver Spring, MD, United States, ⁴US Army Medical Component, Armed Forces Research Institute of Medical Sciences (AFRIMS), Bangkok, Thailand

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Ólger Calderón-Arguedas¹, **Adrián Avendaño**¹, Cynthia Vargas-Castro²
¹Universidad de Costa Rica, San José, Costa Rica, ²Hospital San Rafael, Caja Costarricense de Seguro Social, Alajuela, Costa Rica

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¹Institute of Tropical Medicine “Pedro Kourí”, Havana, Cuba, ²Center for Infectious Disease and Vaccine Research, University of Massachusetts Medical School, Worcester, MA, United States, ³Center for Genetic Engineering and Biotechnology, Havana, Cuba

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Brett R. Ellis¹, Elephas Munene², Sharon Isern³, Moses G. Otsyula², Scott F. Michael³
¹Tulane University, New Orleans, LA, United States, ²Institute of Primate Research, Nairobi, Kenya, ³Florida Gulf Coast University, Fort Meyers, FL, United States

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Omar A. Caceres
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Andrea Valks¹, Norton Beth¹, Greg Hafner¹, **Barbara Hanson**², Stuart Hazell¹
¹Panbio, Ltd., Brisbane, Australia, ²Panbio, Inc., Columbia, MD, United States

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Emily S. Jentes¹, Joseph Fair¹, Augustine Goba², Alpha Bah², Michel Tounkara², Mohamed C. Diallo², Mamadi Coulibaly², Daniel G. Bausch¹
¹Tulane University, New Orleans, LA, United States, ²Centre International de Recherche sur les Infections Tropicales, N'zerekore, Guinea

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Magdi D. Saad¹, Emad William Mohareb¹, Ahmed Al-Jaufy², Abdelhakeem A. Alkohani³, Hashem A. Elzein⁴, Hassan Elbushra⁵, Sameh Safwat¹, Emad M. Labib¹, Kenneth C. Earhart¹
¹U.S. NAMRU-3, Cairo, Egypt, ²Faculty of Medicine, Sana'a University, Sana'a, Yemen, ³National Center for Epidemiology and Diseases Surveillance, Ministry of Health, Sana'a, Yemen, ⁴World Health Organization, Sana'a, Yemen, ⁵World Health Organization, Eastern Mediterranean Regional Office, Cairo, Egypt

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Enrique Mamani¹, Omar Caceres¹, María Garcia¹, Victoria Gutierrez¹, Cesar Cabezas¹, Eva Harris²

¹National Institute of Health - Ministry of Health of Peru, Lima, Peru, ²Division of Infectious Diseases, School of Public Health, University of California, Berkeley, CA, United States

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DYNAMICS OF SEROLOGICAL RESPONSE TO DENGUE VIRUS INFECTION OVER A ONE-YEAR PERIOD IN NICARAGUAN CHILDREN

Angel Balmaseda¹, Samantha Hammond², Yolanda Tellez¹, Saira Saborío¹, Juan Carlos Mercado¹, Celia Machado¹, Juan Carlos Matute¹, Leonel Pérez¹, Maria Angeles Pérez³, Sheyla Silva³, Crisanta Rocha³, Eva Harris²

¹Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, ²Division of Infectious Diseases, School of Public Health, University of California, Berkeley, CA, United States, ³Hospital Infantil Manuel Jesús de Rivera, Managua, Nicaragua

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THE ROLE OF A CODING REGION RNA STRUCTURAL ELEMENT IN THE LIFECYCLE OF DENGUE VIRUS TYPE 2

Karen Clyde, Eva Harris

Division of Infectious Diseases, School of Public Health, University of California, Berkeley, CA, United States

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Dianna Edgil, Charlotta Polacek, Eva Harris

Division of Infectious Diseases, School of Public Health, University of California, Berkeley, CA, United States

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E. Mayda, D. R. Palmer, R. Hammamieh, V. Gunther, J. Bisbing, W. Sun, M. Jett, R. Das

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

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CLIMATE AND DENGUE IN THE CARIBBEAN: REVISITING THE LINKAGES IN TRINIDAD

Joan L. Aron¹, Roger S. Pulwarty², Dave D. Chadee³

¹Science Communication Studies, Columbia, MD, United States, ²National Oceanic and Atmospheric Administration / University of Colorado, Climate Diagnostics Center, Boulder, CO, United States, ³Department of Life Sciences, University of the West Indies, St. Augustine, Trinidad and Tobago

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DENGUE INCIDENCE AND DIRECT COSTS TO A HEALTH INSURANCE COMPANY, PUERTO RICO 2000-2004

Aurimar Ayala-López¹, Mark Beatty¹, Gary G. Clark¹, Yaisa M. Román², Carlos A. Morell²

¹Centers for Disease Control and Prevention, San Juan, PR, United States, ²Triple-S, Inc. Statistical Research and Analysis Department Technical Services Division, San Juan, PR, United States

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Anon Srikiatkachorn¹, Anchalee Krautrachue², Warangkana Ratanaprakarn², Lawan Wongtapradit², Narong Nithipanya², Siripen Kalayanarooj², Ananda Nisalak³, Stephen J. Thomas³, Robert V. Gibbons³, Mammen P. Mammen³, Daniel H. Libraty¹, Francis A. Ennis¹, Alan L. Rothman¹, Sharone Green¹

¹Center for Infectious Disease and Vaccine Research, University of Massachusetts Medical School, Worcester, MA, United States, ²Queen Sirikit National Institute of Child Health, Bangkok, Thailand, ³Department of Virology, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

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IDENTIFICATION OF QUANTITATIVE AND QUALITATIVE DIFFERENCES IN CELLULAR IMMUNE RESPONSES FOLLOWING NATURAL DENGUE INFECTION BY INTRACELLULAR CYTOKINE STAINING ASSAYS

Susana Widjaja¹, Patrick J. Blair¹, Andrew Jeremenjenko¹, Timothy Burgess², Gary T. Brice¹

¹Navy Medical Research Unit-2, Jakarta, Indonesia, ²Navy Medical Research Center, Silver Spring, MD, United States

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Sanofi Pasteur, Marcy-L'Etoile, France

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Amgad EIKholy¹, Fawaz Shihab², Sameh Safwat¹, Abdelhakem Alkohani³, Sultan Al-Moktary³, Ahmed Al-Bourji³, Hashem Elzein², Osama Ahmed², Magdi D. Saad¹, Kenneth Earhart¹, Hassan Elbushra⁴, Rana Hajjeh⁵

¹US Naval Medical Research Unit 3, Cairo, Egypt, ²World Health Organization, Eastern Mediterranean Regional Office, Sanaa, Yemen, ³National Center for Epidemiology and Diseases surveillance, Ministry of Health, Sanaa, Yemen, ⁴World Health Organization, Eastern Mediterranean Regional Office, Cairo, Egypt, ⁵US Naval Medical Research Unit 3, Cairo, Egypt; Centers for Disease Control and Prevention, Atlanta, GA, United States

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DENGUE-3 IN LIMA, PERU, 2005

Vidal Felices¹, Cristhopher Cruz¹, Victor Laguna -Torres¹, Luis Beingolea², Victor Suarez³, Luis Suarez⁴, G. Jave⁵, Gloria Chauca¹, Tadeusz Kochel⁶, James Olson⁶

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, United States

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SPATIAL AND TEMPORAL INCIDENCE OF DENGUE VIRUS INFECTIONS IN SCHOOL-CHILDREN FROM MARACAY, VENEZUELA: 2001 - 2003

Guillermo Comach¹, Gloria Sierra¹, Andreina Figuera², Diamelis Guzman¹, Maritza Soler¹, Carolina Guevara³, Maritza Cabello de Quintana¹, Angelica Espinoza³, Zonia Rios³, Juan Perez³, Mergior Bracho¹, Oscar Feo¹, Iris Villalobos⁴, Nidia Sandoval⁴, Kevin Russell⁵, Tadeusz Kochel³, Patrick Blair³, James G. Olson³

¹Lardidev/Biomed-Universidad de Carabobo/Corposalud Aragua, Maracay, Venezuela, ²Biomed-Universidad de Carabobo, Maracay, Venezuela, ³U.S. Naval Medical Research Center Detachment, Lima, Peru, ⁴Hospital Central de Maracay/Corposalud Aragua, Maracay, Venezuela, ⁵Center for Deployment Health Research, Naval Health Research Center, San Diego, CA, United States

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SUSCEPTIBILITY TO DENGUE HEMORRHAGIC FEVER IN BRAZIL AND THE TYPE 1 INTERFERON PATHWAY

Luciano K. Silva¹, Maria Glória Teixeira², Katrina A. Goddard¹, Mitermayer G. Reis³, Ronald E. Blanton¹

¹Case University, Cleveland, OH, United States, ²Instituto de Saúde Coletiva-UFBA, Salvador-BA, Brazil, ³Oswaldo Cruz Foundation, Salvador-BA, Brazil

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Cesar Cabezas¹, Lely Solari¹, Elisa Solano¹, Suarez Victor¹, Walter Leon-Cueto¹, Miguel Cobos¹, Mauricio Rubin², Cubillas Luis², Luis Fuentes Tafur²

¹National Institutes of Health Peru, Lima, Peru, ²DISA Lima Norte, Lima, Peru

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Jonathan Glass

US NAMRU-2, FPO, AE, United States

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Ganesh Raj Pant

Central Veterinary Laboratory, Kathmandu, Nepal

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Carson Baldwin, Chris Whitehouse

USAMRIID, Frederick, MD, United States

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Ebenezer Tumban, Jenna Painta, William B. Lott

New Mexico State University, Las Cruces, NM, United States

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Flaviviridae – West Nile

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Rosa I. Mateo, Shu-Yuan Xiao, Hilda Guzman, Hao Lei, Amelia P. Travassos da Rosa, Robert B. Tesh

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

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Michael A. Johansson¹, Scott M. Shone¹, Andrew S. Walsh¹, Cyrus R. Lesser², Douglas E. Norris¹, Gregory E. Glass¹

¹Johns Hopkins School of Public Health, Baltimore, MD, United States, ²Maryland Department of Agriculture, Annapolis, MD, United States

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NEUTRALIZATION OF WEST NILE VIRUS BY MONOCLONAL ANTIBODIES AND HORSE SERA

Melissa D. Sanchez¹, Theodore C. Pierson¹, Fabio Del Piero², Ann H. Davidson³, Josie L. Traub-Dargatz³, Sheri L. Hanna¹, James A. Hoxie⁴, Robert W. Doms¹

¹Department of Microbiology, University of Pennsylvania, Philadelphia, PA, United States, ²Department of Pathobiology-School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA, United States, ³Department of Clinical Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO, United States, ⁴Department of Medicine, Hematology-Oncology Division, University of Pennsylvania, Philadelphia, PA, United States

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CHUKAR PARTRIDGE (ALECTORIS CHUKAR) SHOW MODERATE SUSCEPTIBILITY TO WNV AND MAY PLAY A ROLE IN THE MAINTENANCE OF WNV AT ENZOOTIC SITES IN THE WESTERN U.S.

Erik K. Hofmeister¹, Rob Porter²

¹USGS NWHC, Madison, WI, United States, ²Wisconsin Veterinary Diagnostic Laboratory, Madison, WI, United States

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Maria E. Morales-Betoulle¹, Herber Morales², Bradley J. Blitvich³, Ann M. Powers⁴, Ann Davis⁵, Robert Klein⁶, Celia Córdón-Rosales¹

¹Universidad del Valle de Guatemala, Guatemala, Guatemala, ²Ministry of Agriculture and Livestock, Guatemala, Guatemala, ³Colorado State University, Fort Collins, CO, United States, ⁴Centers for Disease Control and Prevention, Fort Collins, CO, United States, ⁵United States Department of Agriculture, Guatemala, Guatemala, ⁶Centers for Disease Control and Prevention, Guatemala, Guatemala

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PERFORMANCE OF THE DOMAIN III PROTEIN FRAGMENT OF THE ENVELOPE GLYCOPROTEIN OF WEST NILE AND ST. LOUIS ENCEPHALITIS VIRUSES AS A SERODIAGNOSTIC ANTIGEN

Ann R. Hunt, G.-J. Chang, John T. Roehrig

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

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CHARACTERIZATION OF A SMALL PLAQUE MUTANT OF WEST NILE VIRUS ISOLATED IN NEW YORK IN 2000

Yongqing Jia, Alan P. Dupuis II, Kristen A. Bernard, Mary A. Franke, Joseph G. Maffei, Greta A. Jerzak, Elizabeth B. Kauffman, **Laura D. Kramer**

Wadsworth Center, New York State Department of Health, Albany, NY, United States

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Angelle D. LaBeaud¹, Chris Kippes², Jacek M. Mazurek³, Charles H. King¹, Anna M. Mandalakas⁴

¹Case Western Reserve University: Center for Global Health and Diseases, Cleveland, OH, United States, ²Cuyahoga County Board of Health, Cleveland, OH, United States, ³Centers for Disease Control, Morgantown, WV, United States, ⁴Case Western Reserve University: Department of Pediatrics, Cleveland, OH, United States

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Francesc Puig-Basagoiti¹, Tia S. Deas², Ping Ren¹, Mark Tilgner¹, Pei-Yong Shi¹

¹Wadsworth Center, New York State Department of Health, Albany, NY, United States, ²Department of Biomedical Sciences, University at Albany, State University of New York, Albany, NY, United States

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Susan J. Wong¹, A. P. Dupuis II¹, A. M. Kilpatrick², P. P. Marra³, A. L. Glaser⁴, T. Victor¹, P. Daszak², L. D. Kramer¹

¹Wadsworth Center NYSDOH, Albany, NY, United States, ²Consortium for Conservation Medicine, New York, NY, United States, ³Smithsonian Environmental Research Center, Edgewater, MD, United States, ⁴NYS College of Veterinary Medicine, Cornell University, Ithaca, NY, United States

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WEST NILE VIRUS PRODUCED IN HUMAN CELLS SELECTIVELY INFECTS CELLS EXPRESSING DC-SIGNR, BUT NOT CELLS EXPRESSING DC-SIGN

Carl W. Davis¹, Hai-Yen Nguyen¹, Sheri L. Hanna¹, Melissa D. Sánchez¹, Robert W. Doms¹, Theodore C. Pierson²

¹University of Pennsylvania School of Medicine, Philadelphia, PA, United States, ²Laboratory of Viral Diseases, National Institutes of Health, Bethesda, MD, United States

Helminths – Nematodes – Filariasis (Clinical)

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IMPACT OF MASS DRUG ADMINISTRATION OF DIETHYLCARBAMAZINE/ALBENDAZOLE TO ELIMINATE LYMPHATIC FILARIASIS, MALINDI, KENYA

Sammy M. Njenga¹, Njeri Wamae¹, Charles Mwandawiro¹, David Molyneux²

¹Kenya Medical Research Institute, Nairobi, Kenya, ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom

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ACTIVITY OF THE CYCLOOCTADEPSIPEPTIDE EMODEPSIDE AGAINST ONCHOCERCA GUTTUROSA, ONCHOCERCA LIENALIS AND BRUGIA PAHANGI

Simon Townson¹, Andrew Freeman¹, Angela Harris¹, Achim Harder²

¹Northwick Park Institute for Medical Research, Harrow, United Kingdom, ²Bayer HealthCare AG, Monheim, Germany

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SAFETY AND EFFICACY OF DOXYCYCLINE FOR THE TREATMENT OF MANSONELLA PERSTANS INFECTION IN AN AREA COENDEMIC FOR WUCHERERIA BANCROFTI

Yaya I. Coulibaly¹, Benoit Dembele¹, Abdallah A. Diallo¹, Dapa Diallo¹, Mady Sissoko¹, Daniel Yalcoué¹, Ettie Lipner², Michael Fay², Ogobara Doumbo¹, Thomas B. Nutman², Sekou F. Traore¹, Amy D. Klion²

¹University of Mali School of Medicine, Pharmacy, and Dentistry, Bamako, Mali, ²National Institutes of Health, Bethesda, MD, United States

Helminths – Nematodes – Filariasis (Epidemiology)

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STATUS OF FORST ONCHOCERCIASIS IN THE LOWER CROSS RIVER BASIN NIGERIA ENTOMOLOGIC PROFILE AFTER FIVE YEARS OF IVERMECTIN INTERVENTION

Kenneth N. Opara¹, Olakunle B. Fagbemi², Asuquo Ekwe³, Daniel M. Okenu⁴

¹University of Uyo Nigeria, Uyo, Nigeria, ²University of Ibadan Nigeria, Ibadan, Nigeria, ³Ministry of Health Cross River State Nigeria, Calabar, Nigeria, ⁴Emory University School of Medicine, Atlanta, GA, United States

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THE IMPACT OF MASS DRUG ADMINISTRATION WITH DIETHYLCARBAMAZINE AND ALBENDAZOLE ON BANCROFTIAN FILARIASIS IN EGYPT

Khaled M. Abd Elaziz¹, Maged El-Setouhy¹, Hanan Helmy², Reda M. Ramzy², Gary J. Weil³

¹Faculty of Medicine-Ain Shams University, Cairo, Egypt, ²Research and Training Center on Vector of Diseases-Ain Shams University, Cairo, Egypt, ³Washington University School of Medicine, Saint Louis, MO, United States

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David Reeve, Wayne Melrose

James Cook University, Townsville, Australia

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Bethel K. Kwansa-Bentum, Fred Aboagye-Antwi, Evans D. Glah, Philip Doku, Sampson Otoo, Haruna Abdul, Michael D. Wilson, Daniel A. Boakye

Noguchi Memorial Institute for Medical Research, Accra, Ghana

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A SURVEY OF CURRENT TREATMENT PRACTICES AND BURDEN OF LYMPHEDEMA IN TOGO

Els Mathieu¹, Stephanie Richard¹, David Addiss¹, Yao Sodahlon²

¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Ministry of Health, Lome, Togo

Helminths – Nematodes – Filariasis (Immunology)

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MACROPHAGE ADHERENCE TO BRUGIA PAHANGI IS MEDIATED BY ANTIGEN SPECIFIC IGM AND IGM RECEPTORS AND IS MODULATED BY TH2 CYTOKINES

Manish Ramesh, Thiruchandurai V. Rajan

UConn Health Center, Farmington, CT, United States

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Yashodhara Dash, Thiruchandurai V. Rajan

UConn Health Center, Farmington, CT, United States

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KINETICS OF GENDER-REGULATED GENE EXPRESSION IN BRUGIA MALAYI

Ben-wen Li, Amy C. Rush, Gary J. Weil

Washington University School of Medicine, St Louis, MO, United States

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Helminths — Nematodes — Intestinal and Tissue Helminths

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Jesus A. Benitez¹, Carmen Sierra¹, **Alfonso J. Rodriguez-Morales**²

¹DGSACS-Ministry of Health, Maracay, Venezuela, ²Universidad de Los Andes, Trujillo, Venezuela

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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

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Renee Larocque¹, Wilfredo Martin Casapia², Eduardo Gotuzzo³, Theresa W. Gyorkos¹

¹McGill University, Montreal, QC, Canada, ²Asociacion Civil Selva Amazonica, Iquitos, Peru, ³Universidad Peruana Cayetano Heredia, Lima, Peru

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Nicholas N. Midzi, D. Sangwe, S. Zinyowera, K. Brower, A. Munatsi, E. Gomo, S. Mutambu, S. Munyati, G. Woelk, T. Mduluzi

National Institute of Health Research, Harare, Zimbabwe

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PARTICIPATION OF EOSINOPHILS, MONONUCLEAR CELLS AND IGE IN THE IMMUNE RESPONSE IN 5LO KNOCKOUT MICE INDUCED BY *STRONGYLOIDES* *VENEZUELENSIS*

Eleuza R. Machado¹, Elaine Vicente Lourenço², Marlene Tiduko Ueta³, Lúcia Paula¹, Daniela Carlos¹, Fernanda Anibal Freitas¹, Érika Gonçalves Silva¹, Carlos Artério Sorgi¹, Lúcia Helena Faccioli¹

¹Faculdade de Ciências Farmacêuticas de Ribeirão Preto, Ribeirão Preto, Brazil, ²Faculdade de Medicina de Ribeirão Preto, Ribeirão Preto, Brazil, ³Universidade Estadual de Campinas, Campinas, Brazil

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CODON USAGE PATTERNS IN NEMATODA: ANALYSIS BASED UPON 26 MILLION CODONS IN 32 SPECIES

JP McCarter¹, M. Mitreva¹, M. C. Wendl¹, J. Martin¹, T. Wylie¹, J. Parkinson², M. Blaxter³, R.H. Waterston⁴, JP McCarter⁵

¹Genome Sequencing Center, Washington University, St. Louis, MO, United States, ²Hospital for Sick Children, Toronto, ON, Canada, ³University of Edinburgh, United Kingdom, ⁴University of Washington, Seattle, WA, United States, ⁵Divergence, Inc., St. Louis, MO, United States

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Hafeez U. Rehman, Raouf Arafat, Marcia L. Wolverton

Houston Department of Health and Human Services, Houston, TX, United States

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Arvind K. Singh, Randeep Guleria, Anant Mohan, Rajesh Sharma, Sneh Arora, Nazima Nisar

All India Institute of Medical Sciences, New Delhi, India

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Ivette J. Lorenzana¹, Alberto Laguna-Torres², Gladys Carrion², Wendy Murillo¹, Leda Parham¹, Cesar Nunez³, Jose Sanchez⁴, Jean Carr⁵, Jim Olson⁴

¹University of Honduras, Tegucigalpa, Honduras, ²U.S. Naval Medical Research Center Detachment, Lima, Peru, ³AIDS Action of Central America Project (PASCA), Guatemala, Guatemala, ⁴U.S. Military HIV Research Program and Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Rockville, MD, United States, ⁵Military HIV Research Program and Henry M Jackson Foundation for the Advancement of Military Medicine, Rockville, MD, United States

Kinetoplastida — Diagnosis and Treatment

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APPLICATION OF NESTED PCR FOR IDENTIFICATION OF CAUSATIVE AGENTS OF CUTANEOUS AND VISCERAL LEISHMANIASIS IN ARCHIVED GAIMSA STAINED SLIDES

Mohammad H. Motazedian, Mehdi Karamian, Sadreddin Ardehali, Mohammad Vasei

Shiraz Medicine Faculty, Shiraz, Iran (Islamic Republic of)

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DEVELOPMENT OF GEOGRAPHICALLY ROBUST LATERAL FLOW IMMUNOASSAY FOR DIAGNOSIS OF *TRYPANOSOMA CRUZI* INFECTION WITH HIGH CORRELATION TO RADIO-IMMUNOPRECIPITATION ASSAY (RIPA)

Raymond L. Houghton¹, Yvonne Y. Stevens¹, Jeff Guderian², Masahiko Okamoto¹, Mazbahul Kabir¹, Patricia Arauz-Ruiz³, Kristen Visona³, Steven G. Reed², David A. Leiby⁵, Syamal Raychaudhuri¹

¹InBios International Inc, Seattle, WA, United States, ²IDRI, Seattle, WA, United States, ³LSU-ICMRT, San Jose, Costa Rica, ⁴American Red Cross, Rockville, MD, United States

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Shyam Sundar

Institute of Medical Sciences, Banaras Hindu University, Varanasi, India

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EVALUATION OF NOVEL ANTILEISHMANIAL ANTIMITOTIC AGENTS

Adam Yakovich, Tesmol George, Jayaseharan Johnsamuel, Dawn Delfin, James Dalton, Di Wu, Mitch Phelps, Karl Werbovetz

Ohio State University College of Pharmacy, Columbus, OH, United States

Kinetoplastida – Epidemiology

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GENETIC AND ENVIRONMENTAL CONTRIBUTIONS TO VARIATION IN SEROPOSITIVITY TO *TRYPANOSOMA CRUZI* IN A BABOON POPULATION

Jeff T. Williams, Gene B. Hubbard, John L. VandeBerg
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

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TRANSMISSION OF LEISHMANIASIS THROUGH THE ALIMENTARY TRACT IN BALB/C SYNGENEIC MICE GAVAGED PARASITE PROMASTIGOTES

Raja' Fakhoury Makki¹, **Nuha Nuwayri-Salti**², Hania Nakkash Shmaissi²

¹Beirut Arab University, Beirut, Lebanon, ²American University of Beirut, Beirut, Lebanon

Kinetoplastida – Molecular Biology and Immunology

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A GENOMIC APPROACH TO IDENTIFY DIFFERENTIALLY EXPRESSED GENES IN *LEISHMANIA DONOVANI* ISOLATES FROM PATIENTS OF POST KALA-AZAR DERMAL LEISHMANIASIS (PKDL) IN COMPARISON WITH KALA-AZAR (KA)

Balaraju Venkat Subba Raju¹, Ruchi Singh¹, Gannavaram Sreenivas¹, Robert Duncan², Hira Lal Nakhasi², Poonam Salotra¹

¹Institute Of Pathology (ICMR), New Delhi, India, ²Center for Biologics Evaluation and Research, Food and Drug Administration, Bethesda, MD, United States

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IMMUNOLOGICAL DETERMINANTS OF DISEASE PATHOGENESIS IN INDIAN KALA AZAR (KA) AND POST KALA AZAR DERMAL LEISHMANIASIS (PKDL)

Nasim Akhtar Ansari¹, Venkatesh Ramesh², Poonam Salotra¹

¹Institute Of Pathology(ICMR), New Delhi, India, ²Department of Dermatology, Safdarjung Hospital, New Delhi, India

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THE STUDY OF THE ROLE OF ACRIFLAVIN IN INHIBITION OF THE PROLIFERATION OF *TRYPANOSOMA LEWISI* BY INDUCING APOPTOSIS WITH SPECIFIC BINDING AFFINITY TO KDNA OF THE PARASITE *IN VITRO*

Solomon T. Ghebregziabher, Dino Vaira
University of Bologna, Bologna, Italy

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CARBOXY-TERMINAL TAIL OF *LEISHMANIA DONOVANI* PROTON PUMPS REGULATES THEIR ACTIVITY IN A YEAST COMPLEMENTATION SYSTEM

Daniela Grigore, Chris Meade

University of Mississippi Medical Center, Jackson, MS, United States

(ACMCIP Abstract)

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ESTROGEN-MEDIATED NITRIC OXIDE PRODUCTION IS ASSOCIATED WITH A FAVORABLE CLINICAL AND PARASITOLOGICAL RESPONSE TO *LEISHMANIA* DURING PREGNANCY

Elvia Y. Osorio Esparza¹, Diana L. Bonilla¹, Peter C. Melby², Bruno L. Travi²

¹Centro Internacional de Entrenamiento e Investigaciones Médicas (CIDEIM), Cali-Valle del Cauca, Colombia, ²Medical Service, Department of Veterans Affairs Medical Center, San Antonio, Texas, TX, United States

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CONGENITAL TRANSMISSION IN EXPERIMENTAL LEISHMANIASIS

Elvia Y. Osorio Esparza¹, Diana L. Bonilla¹, Alex G. Peniche¹, Bruno L. Travi²

¹Centro Internacional de Entrenamiento e Investigaciones Médicas (CIDEIM), Cali-Valle del Cauca, Colombia, ²Medical Service, Department of Veterans Affairs Medical Center, South Texas Veterans Health Care System, San Antonio, Texas, TX, United States

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THE ROLE OF NEUTROPHILS IN AMERICAN CUTANEOUS LEISHMANIASIS

Diana L. Bonilla¹, Bruno L. Travi², Elvia Y. Osorio Esparza¹

¹Centro Internacional de Entrenamiento e Investigaciones Médicas (CIDEIM), Cali-Valle del Cauca, Colombia, ²Medical Service, Department of Veterans Affairs Medical Center, South Texas Veterans Health Care System, San Antonio, Texas, TX, United States

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EFFICACY OF VIRAL VECTOR VACCINATION AGAINST *TRYPANOSOMA CRUZI* INFECTION

Yasushi Miyahira¹, Yasuhiro Takashima², Seiki Kobayashi³, Yasunobu Matsumoto², Tsutomu Takeuchi³, Hideo Yagita¹, Ko Okumura¹, Hideoki Ogawa¹

¹Juntendo University Sch. Med., Tokyo, Japan, ²Graduate School of Agricultural and Life Sciences, University of Tokyo, Tokyo, Japan, ³Keio University Sch. Med., Tokyo, Japan

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EVALUATION OF THE THERAPEUTIC EFFICACY OF DNA VACCINES ENCODING DIFFERENT ANTIGENS FOR THE IMMUNOTHERAPY OF *TRYPANOSOMA CRUZI* INFECTION IN MICE

Gilma Sanchez-Burgos, Javier Escobedo-Ortegon, Maria Jesus Ramirez-Sierra, Eric Dumonteil

Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico

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ESTABLISHMENT OF ERYTHROPOIETIC CELLS *IN VITRO* FOR CONTINUOUS CULTURE OF *PLASMODIUM VIVAX*

Tasane Panichakul¹, Jetsumon Sattabongkot², Kesinee Chotivanich¹, Liwang Cui³, Rachanee Udomsangpetch⁴

¹Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, ²Department of Entomology, AFRIMS, Bangkok, Thailand, ³Department of Entomology, Pennsylvania State University, Philadelphia, PA, United States, ⁴Department of Pathobiology, Faculty of Science, Mahidol University, Bangkok, Thailand

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***P. FALCIPARUM* IN THE GAMBIA: PERSISTENCE IN THE DRY SEASON AND INCREASED COMPLEXITY IN MOSQUITOES IN THE WET SEASON**

Davis Nwakanma¹, Sam Duny², Musa Jawara², Amani Kheir³, Margaret Pinder², Margaret Mackinnon³, Paul Milligan², David Walliker³, **Hamza A. Babiker**⁴

¹The Medical Research Council Laboratories, Banjul, Gambia, ²The Medical Research Council Laboratories, Banjul, Gambia, ³Edinburgh University, Edinburgh, United Kingdom, ⁴Sultan Qaboos University, Al-khod, Oman

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THE ASSOCIATION BETWEEN *P.FALCIPARUM* INFECTIONS, C-REACTIVE PROTEIN AND PREGNANCY OUTCOME

Ayola A. Adegnika¹, Jaco Verweij², Sanders K. Chai¹, Selidji T. Agnandji¹, Lutz PH Breitling¹, Adrian Luty¹, Saadou Issifou¹, Peter G. Kremsner¹, Maria Yazdanbakhsh¹

¹Medical Research Unit of Albert Schweitzer Hospital, Lambarene, Gabon, Lambarene, Gabon, ²Department of Parasitology, Leiden University Medical Center, Leiden, The Netherlands, Leiden, Netherlands