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ASSOCIATION OF A PROMOTER POLYMORPHISM IN THE GENE ENCODING INTERLEUKIN-12 P40 (IL12B) WITH CEREBRAL MALARIA IN A POPULATION LIVING IN BAMAKO

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

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EVALUATION OF THE IMPACT OF HELMINTH CO-INFECTION ON MALARIA TRANSMISSION IN A MURINE MODEL

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TREATMENT WITH CHLOROQUINE INCREASES APOPTOSIS AND DECREASES IL-10 EXPRESSION IN BALB/C MICE INFECTED WITH *PLASMODIUM YOELII* 17XL

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INVESTIGATING FACTORS PROMOTING ERYTHROCYTIC GROWTH OF *PLASMODIUM FALCIPARUM*

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NEUROLOGICAL DEFICITS ASSOCIATED WITH CEREBRAL MALARIA IN INDIA

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INDUCTION OF MAPK SIGNALING AND GENE EXPRESSION CHANGES IN SYNCYTIOTROPHOBLAST FOLLOWING BINDING OF CYTOADHERENT *PLASMODIUM FALCIPARUM*

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NITRIC OXIDE SYNTHASE TYPE 2 PROMOTER POLYMORPHISM G-954C AND MALARIAL ANEMIA IN CHILDREN IN A RURAL HOLOENDEMIC AREA OF *FALCIPARUM* MALARIA

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ASSOCIATION OF FC γ RECEPTOR IIA (CD32) POLYMORPHISM WITH MALARIAL ANEMIA AND HIGH-DENSITY PARASITEMIA IN INFANTS AND YOUNG CHILDREN

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REGULATION OF ERYTHROID DEVELOPMENT IN CD34+ STEM CELLS IN RESPONSE TO *PLASMODIUM FALCIPARUM*-INDUCED INFLAMMATORY MEDIATORS

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Malaria — Chemotherapy

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COMPARATIVE EFFICACY OF CHLOROQUINE AND PYRIMETHAMINE-SULFADOXINE FOR UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA AND IMPACT ON GAMETOCYTE CARRIAGE RATES IN UNDER-FIVE YEAR OLDS IN AN ENDEMIC AREA

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COMMUNITY'S PERCEPTIONS AND USE OF ANTIMALARIAL DRUGS IN THE HOME MANAGEMENT OF MALARIA IN RURAL TANZANIA

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VILLAGE BASED EDAT FOR MALARIA — THE EMERGENCY STRATEGY OF CHOICE FOR REMOTE AND HYPERENDEMIC VILLAGES IN CAMBODIA

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SEASONAL INTERMITTENT PREVENTIVE TREATMENT WITH ARTESUNATE AND SULFADOXINE PYRIMETHAMINE TO REDUCE MALARIA MORBIDITY IN SENEGALESE CHILDREN

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

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ANTIMALARIAL ACTIVITY OF HIV-1 PROTEASE INHIBITORS

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COMPARATIVE EFFICACY AND SAFETY OF QUININE AND ARTEMETHER IN THE TREATMENT OF SEVERE *FALCIPARUM* MALARIA

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Malaria — Diagnosis

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FEASIBILITY OF URINE DIAGNOSIS FOR *PLASMODIUM FALCIPARUM*

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HIGH THROUGHPUT IDENTIFICATION OF THE PREDOMINANT MALARIA PARASITE CLONE IN COMPLEX BLOOD STAGE INFECTIONS USING AN OLIGONUCLEOTIDE LIGATION ASSAY

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Malaria — Drug Development

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IN VITRO REVERSAL OF QUINOLINE RESISTANCE IN *PLASMODIUM FALCIPARUM* WITH DIHYDROETHANOANTHRACENE DERIVATIVES**Bruno Pradines**¹, Maud Henry¹, Sandrine Alibert², Thierry Fusai¹, Joel Mosnier¹, Eric Baret¹, Jacques Barbe², Christophe Rogier¹¹Institut de Médecine Tropicale du Service de Santé des Armées, Marseille, France, ²GERCTOP-UMR CNRS 6178 Faculté de Pharmacie, Marseille, France

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THE TOXICITY OF PYRROLOQUINAZOLINE AND ITS TETRA-ACETAMIDE ANALOG ASSOCIATED WITH THEIR ABSORPTION**Yuanzheng Si**¹, Qiang Zeng¹, Jing Zhang¹, Todd O. Johnson², Lisa Xie¹, Peter J. Weina¹, Wilbur K. Milhous¹, Qigui Li¹¹Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²NMRC, Silver Spring, MD, United States

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THE ROLE OF QUANTITATIVE WHOLE BODY AUTORADIOGRAPHY AND TISSUE DISSECTION TECHNIQUES IN THE EVALUATION OF TISSUE DISTRIBUTION AND METABOLIC PROFILES OF [14C] ARTESUNATE IN RATS**Qigui Li**, Peter Weina, Lisa Xie, Adam Haeberle, Jing Zhang, Wilbur Milhous

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TISSUE DISTRIBUTION, PHARMACOKINETICS, MASS BALANCE, AND ELIMINATION OF [14C]-ARTESUNATE IN RATS, AND PROTEIN BINDING WITH HUMAN AND RAT BLOOD AND PLASMA

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DIPHENYLAMINO-MODIFIED CHLOROQUINES THAT ARE EFFECTIVE AGAINST CHLOROQUINE RESISTANT MALARIA**Steven J. Burgess**¹, Simeon S. Andrews¹, Audrey Selzer¹, Jane Xu Kelly², Michael Riscoe², David H. Peyton¹¹Portland State University, Portland, OR, United States, ²Portland VAMC, Portland, OR, United States

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SYNTHESIS AND EVALUATION OF ANTIMALARIALS FORMED BY LINKING CHLOROQUINE TO DIBENZYLAMINES**Simeon S. Andrews**¹, Steven J. Burgess¹, Audrey Selzer¹, Jane Xu Kelly², Michael Riscoe², David H. Peyton¹¹Portland State University, Portland, OR, United States, ²Portland VAMC, Portland, OR, United States

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INDIVIDUAL BASED MODEL AND SIMULATION OF *PLASMODIUM FALCIPARUM* IN VITRO CULTURES**Jordi Ferrer**¹, Esperanza Herreros², Joaquim Valls¹, Clara Prats¹, Daniel López¹, Domingo Gargallo-Viola²¹Universitat Politècnica de Catalunya, Castelldefels, Spain, ²GlaxoSmithKline, Madrid, Spain

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LC/MS ANALYSIS OF ARTESUNATE AND DIHYDROARTEMISININ IN PLASMA FOLLOWING A SINGLE STEP PROTEIN PRECIPITATION**D. Siriyanonda**¹, P. Teja-Isavadharm¹, N. Chanarat¹, A. Lim¹, S. Wannaying¹, M. Fukuda¹, R. Miller², P. Weina², V. Melendez¹¹Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

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IN VIVO DRUG INTERACTION STUDIES OF ARTESUNATE USING RHESUS MONKEYS AND LC/MS ANALYSIS**V. Melendez**¹, P. Teja-Isavadharm¹, M. Gettayamacin¹, D. Siriyanonda¹, M. Rasameesoraj¹, N. Chanarat¹, A. Lim¹, S. Wannaying¹, W. Chuenarom¹, M. Fukuda¹, P. Weina², R. Miller²¹Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States

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IN SILICO 3D PHARMACOPHORE MODEL FOR CHALCONE TO AID THE DESIGN AND SYNTHESIS OF NOVEL ANTIMALARIAL THERAPEUTICS**Apurba K. Bhattacharjee**¹, Lucia Gerena¹, Dennis E. Kyle¹, Clare Gutteridge²¹Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²U.S. Naval Academy, Annapolis, MD, United States

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QSAR STUDIES OF BACTERIAL ENOYL ACYL CARRIER PROTEIN REDUCTASE (FAB I)**Jayendra Bhonsle**, Apurba Bhattacharjee

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DATABASE MINING AND ITERATIVE SCREENING IN THE SEARCH OF SELECTIVE INHIBITORS OF THE PLASMODIAL CYCLIN DEPENDENT PROTEIN KINASES (CDKS)

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ANTI-PLASMODIUM ACTIVITY OF IMIDAZOLE-DIOXOLANE COMPOUNDS

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ARTESUNATE ADMINISTERED INTRAVENOUSLY TO RHESUS MONKEYS (MACACA MULATTA): A NEUROLOGY AND NEUROPATHOLOGY STUDY. I. THE MEDULLA OBLONGATA, PONS, AND CEREBELLUM

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ARTESUNATE ADMINISTERED INTRAVENOUSLY TO RHESUS MONKEYS (MACACA MULATTA): A NEUROLOGY AND NEUROPATHOLOGY STUDY. III. BRAINSTEM AUDITORY AND VISUAL SYSTEMS NUCLEAR GROUPS

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ARTELINATE ADMINISTERED INTRAVENOUSLY TO RHESUS MONKEYS (MACACA MULATTA): A NEUROLOGY AND NEUROPATHOLOGY STUDY. I. THE MEDULLA OBLONGATA, PONS, AND CEREBELLUM

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IN VITRO ANTIMALARIAL ACTIVITY OF 4(1H)-PYRIDONE DERIVATIVES

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THERAPEUTIC EFFICACY OF 4(1H) PYRIDONES IN A PLASMODIUM YOELII MURINE MODEL OF MALARIA, PRELIMINARY TOXICITY AND THERAPEUTIC WINDOW IN MICE

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COMBINATION STUDIES OF 4(1H)-PYRIDONE DERIVATIVES WITH OTHER ANTIMALARIAL DRUGS

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STAGE SPECIFIC EFFECTS OF ANTIMALARIAL 4(1H)-PYRIDONES

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SINGLE-DOSE PHARMACOKINETIC CHARACTERIZATION STUDIES IN MICE AND BEAGLE DOGS OF A NEW FAMILY OF ANTIMALARIAL AGENTS

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TARGETING BETA-KETOACYL ACP SYNTHASE III (KASIII) INHIBITORS TO DISRUPT FATTY ACID BIOSYNTHESIS IN *PLASMODIUM FALCIPARUM*

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Malaria – Drug Resistance

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ESSENTIAL OILS: NEW TOOL TO COMBAT TROPICAL DISEASES?

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GENETIC DIVERSITY IN *PLASMODIUM FALCIPARUM* INFECTIONS AND THE PRESENCE OF MEROZOITE SURFACE PROTEIN 1 AND 2 IN SYMPTOMATIC MALARIA CHILDREN IN THE KINTAMPO DISTRICT OF GHANA: A BASELINE STUDY

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USEFULNESS OF THE PFCRT T76 GENOTYPE FAILURE INDEX (GFI) FOR THE ESTIMATION OF *IN VIVO* CHLOROQUINE RESISTANCE IN BURKINA FASO

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GEOGRAPHIC DISTRIBUTION OF PFMDR1 MUTATIONS AND COPY NUMBER IN CAMBODIA

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ACT AND POLYMORPHISM OF *PFATP6* AND *PFTCTP* GENES IN THREE ENDEMIC COUNTRIES: CAMBODIA, FRENCH GUYANA, SENEGAL

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GENOME-WIDE SIGNIFICANCE LEVEL FOR LINKAGE ANALYSIS IN *PLASMODIUM FALCIPARUM*

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ANTIMALARIAL DRUG RESISTANCE TESTING WITH AFFORDABLE, FIELD-FEASIBLE TECHNOLOGY

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ANTIMALARIAL DRUG RESISTANCE IN ISIOLO, KENYA

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ASSOCIATION OF SINGLE NUCLEOTIDE POLYMORPHISMS IN THE DIHYDROFOLATE REDUCTASE AND DIHYDROPTEROATE SYNTHASE GENES WITH SULFADOXINE-PYRIMETHAMINE (SP) RESISTANCE IN *PLASMODIUM FALCIPARUM* IN THE AMAZON REGION OF PERU

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ORIGIN AND DISSEMINATION OF CHLOROQUINE-RESISTANT *PFCRT* ALLELES IN PAPUA NEW GUINEA, INDONESIA, AND INDIA

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PILOT STUDY OF SULFADOXINE-PYRIMETHAMINE RESISTANCE USING A NOVEL METHOD TO ANALYZE MIXED INFECTIONS

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MOLECULAR MARKERS OF RESISTANCE IN *PLASMODIUM FALCIPARUM* AND *IN VIVO* OUTCOMES OF CHLOROQUINE OR FANSIDAR TREATMENTS FOR UNCOMPLICATED *FALCIPARUM* MALARIA IN YOUNG CHILDREN OF NORTHERN GHANA

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Malaria — Epidemiology

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COMMUNICATING RESEARCH RESULTS TO RURAL WOMEN IN AFRICA: A CASE STUDY OF DEMAND CREATION FOR INSECTICIDE TREATED NETS

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FIELD ASSESSMENT OF THE BEST STRATEGIES TO INCREASE ACCESS AND COVERAGE OF INSECTICIDE-TREATED NETS (ITNS) IN TWO MALARIA-PRONE DISTRICTS IN WESTERN KENYA

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PREVALENCE OF AND RISK FACTORS FOR PERIPHERAL MALARIA PARASITEMIA AND ANEMIA AMONG ANTENATAL CLINIC ATTENDEES IN KISUMU, WESTERN KENYA

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EPIDEMIOLOGY OF MALARIA IN AN AREA OF LOW MALARIA TRANSMISSION IN CENTRAL INDIA

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ASSOCIATION OF MALARIA WITH CLIMATIC FACTORS AND ENVIRONMENTAL FACTORS IN THE BIGGEST PILGRIM TOWN OF SOUTH INDIA

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EPIDEMIOLOGY OF MALARIA IN AN AREA OF STABLE MALARIA TRANSMISSION IN CENTRAL INDIA

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RECENT ANTIMALARIAL TREATMENT AMONG KENYAN ADULTS PRESENTING TO CLINICS WITH POSITIVE MALARIA SMEARS.

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MALARIA SUSCEPTIBILITY AND MULTIPLE ERYTHROCYTE POLYMORPHISMS IN PAPUA NEW GUINEA

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BURDEN OF HIV ASSOCIATED MALARIA ON PREGNANT WOMEN IN FEDERAL MEDICAL CENTRE IN OWERRI IMO STATE NIGERIA

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A CASE-CONTROL STUDY EXAMINING RECENT ANTI-MALARIAL USE AMONG PATIENTS ADMITTED WITH MALARIA AND OTHER FEBRILE ILLNESSES IN KENYA

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MOLECULAR EPIDEMIOLOGY OF *PLASMODIUM VIVAX* IN THE STATE OF AMAZONAS, BRAZIL

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IN VITRO ACTIVITY OF PYRIMETHAMINE-RESISTANT DIHYDROFOLATE REDUCTASE ENZYMES OF *P. FALCIPARUM*

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POLYMORPHISM IN MEROZOITE SURFACE PROTEIN 1 OF *PLASMODIUM VIVAX* POPULATION IN THAILAND CORRELATES WITH MALARIA ENDEMICITY

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CHARACTERIZATION OF MALARIA IN MESOENDEMIC AREA IN WESTERN INDONESIA

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EXPRESSION OF CYCLOOXYGENASE IN PLACENTAL MALARIA BY REAL TIME PCR

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THE GNPB GENE FAMILY AND ITS ROLE IN THE INNATE IMMUNE SYSTEM OF *ANOPHELES GAMBIAE* AND IN ANTI-*PLASMODIUM* DEFENSE

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INFECTION-INDUCED CYTOKINE PRODUCTION INFLUENCES PROTECTION AGAINST BLOOD-STAGE MALARIA IN MICE IMMUNIZED WITH MEROZOITE SURFACE PROTEIN-8

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

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CELLULAR IMMUNE RESPONSE TO *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN AND SUSCEPTIBILITY TO INFECTION AMONG PAPUA NEW GUINEAN CHILDREN

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DISSECTING: THE TRANSLATIONAL MACHINERY OF *PLASMODIUM FALCIPARUM***Indu Sharma**¹, Jun Fang¹, Thomas F. McCutchan¹¹National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States,

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A HIGH-THROUGHPUT METHOD FOR GENOTYPING THE 19KDA REGION OF *PLASMODIUM FALCIPARUM* MEROZOITE SURFACE PROTEIN 1 (MSP-1) USING ALLELE FREQUENCY DETERMINATION AND HAPLOTYPE ESTIMATION**Shannon L. Takala**¹, David L. Smith², Drissa Coulibaly³, Mahamadou A. Thera³, Amed Ouattara¹, Colin Stine¹, Ogobara Doumbo³, Christopher Plowe¹¹University of Maryland School of Medicine, Baltimore, MD, United States, ²Fogarty International Center, National Institutes of Health, Bethesda, MD, United States, ³University of Bamako, Bamako, Mali

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IDENTIFYING BINDING RESIDUES IN THE *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN LIGAND DOMAIN**Amy M. McHenry**, Kelley M. VanBuskirk, Elitza S. Sevova, John H. Adams

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EXPRESSION AND PRELIMINARY ANALYSIS OF THE LIGAND DOMAINS OF MAEBL**Sarita R. Mendonca**, John H. Adams

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MORPHOLOGICAL EFFECTS OF ARTEMISININ TREATMENT ON THE *PLASMODIUM FALCIPARUM* DIGESTIVE VACUOLE**Carmony L. Hartwig**, Roland A. Cooper

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GENE CONVERSION AND EXTENSIVE POLYMORPHISM OF THE RHOPH1/CLAG FAMILY MEMBERS IN *PLASMODIUM FALCIPARUM***Hideyuki Iriko**¹, Osamu Kaneko², Hitoshi Otsuki², Takafumi Tsuboi³, Motomi Torii²¹Ehime University School of Medicine, Toon, Ehime, Japan,²Department of Molecular Parasitology, Ehime University School of Medicine, Toon, Ehime, Japan, ³Cell-Free Science and Technology Research Center, Ehime University, Matsuyama, Ehime, Japan

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EXTENSIVE GENETIC POLYMORPHISM AND HIGH PREVALENCE OF MOLECULAR MARKERS FOR DRUG RESISTANCE IN *PLASMODIUM FALCIPARUM* IN DIFFERENT ENDEMIC AREAS OF ZIMBABWE**Godfree Mlambo**¹, Susan L. Mutambu², David Sullivan¹, Thomas Jaenisch¹, Armin Gemperli¹, James Chivenga², Joel Mbedzi², White Soko², Nirbhay Kumar¹¹Johns Hopkins University School of Public Health, Baltimore, MD, United States, ²National Institute of Health Research in Zimbabwe, Harare, Zimbabwe

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MOLECULAR FUNCTION OF A TRANSLATIONAL REGULATOR DURING GAMETOCYTOGENESIS OF THE MALARIA PARASITE *PLASMODIUM FALCIPARUM***Liwang Cui**¹, Jinfang Li²¹Pennsylvania State University, University Park, PA, United States,²Pennsylvania State University, University Park, PA, United States

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CLONING, EXPRESSION AND *IN VITRO* ANALYSIS OF DIHYDROOROTASE FROM *PLASMODIUM FALCIPARUM***Regina L. Davey**¹, Thomas H. Hudson¹, Michael T. O'Neil¹, Lucia Gerena¹, Karen M. Kopydlowski¹, Olakunle O. Kassim², Norman C. Waters¹¹Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²Howard University College of Medicine, Washington, DC, United States

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GENETIC DIVERSITY OF MEROZOITE SURFACE PROTEIN 1 OF *PLASMODIUM VIVAX* ISOLATES FROM THE REPUBLIC OF KOREA**Seok-Hyun Yoon**¹, Jae-Sun Park¹, Jetsumon Prachumsri², Won-Ja Lee¹¹Korea National Institute of Health, Seoul, Republic of Korea,²USAMC-AFRIMS, Bangkok, Thailand

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GENETIC ANALYSIS OF DIHYDROFOLATE REDUCTASE AND DIHYDROPTEROATE SYNTHASE OF *PLASMODIUM VIVAX* ISOLATES FROM THE REPUBLIC OF KOREA

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BINDING OF PLASMA FROM CHILDREN LIVING IN A MALARIA ENDEMIC AREA TO INHIBITORY AND BLOCKING EPITOPES ON MSP-1₁₉ OF *PLASMODIUM FALCIPARUM*

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ANTIGENICITY AND IMMUNOGENICITY OF THE N-TERMINAL 33 KDA PROCESSED FRAGMENT OF THE *P. FALCIPARUM* MSP1-42: IMPLICATIONS FOR VACCINE DEVELOPMENT

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IMMUNOGENICITY AND PROTECTIVE EFFICACY IN AOTUS MONKEYS OF RECOMBINANT *PLASMODIUM FALCIPARUM* MSP142 AND EBP2/BAEBL RII PROTEIN VACCINES

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CPG BINDING TO MALARIA VACCINE CANDIDATES: INTERACTIONS AND IMMUNE RESPONSES

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Joseph T. Bruder¹, Keith Limbach², Duncan McVey¹, Maureen E. Stefaniak², Ping Chen¹, Noelle Patterson², Damodar Ettyreddy¹, Joseph J. Campo², C. Richter King¹, Thomas L. Richie², **Denise L. Doolan**²

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PROFILING THE HUMORAL IMMUNE RESPONSE TO *PLASMODIUM FALCIPARUM* INFECTION IN HUMANS USING PROTEOME MICROARRAY CHIPS

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CHARACTERIZATION OF VACCINE INDUCED ANTI-REPEAT ANTIBODIES USING A TRANSGENIC PARASITE EXPRESSING *PLASMODIUM FALCIPARUM* CIRCUMSPOROZOITE REPEATS

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A QUANTITATIVE SLOT BLOT ASSAY FOR BACTERIAL HOST CELL PROTEIN IMPURITIES IN RECOMBINANT PROTEINS EXPRESSED IN *E. COLI*

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ANTIGENICALLY CONSERVED EPITOPES BETWEEN *PLASMODIUM FALCIPARUM* AND *PLASMODIUM YOELII* BLOOD-STAGE PARASITES

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COMPARATIVE SUSCEPTIBILITY OF WILD-CAUGHT (F1) AND LABORATORY COLONIZED MOSQUITOES TO *PLASMODIUM VIVAX* IN THAILAND

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SUCCESSFUL INTEGRATION OF INSECTICIDE-TREATED BEDNET DISTRIBUTION AND MASS DRUG ADMINISTRATION IN CENTRAL NIGERIA

Brian Blackburn¹, Abel Eigege², E. Miri², J. Agu³, A. Umar³, Henry Filden⁴, R. Bitrus⁴, Gladys Ogah⁵, M. Jinadu⁶, G. Gerlong², John Umaru², Els Mathieu¹, Frank Richards⁷

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NITROQUINE ACETATE-INDUCIBLE MELANIZATION OF *PLASMODIUM YOELII* OOCYSTS IN THE MIDGUT OF *ANOPHELES STEPHENSI* AND POTENTIAL MECHANISM

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STUDY ON MECHANISM OF DELTAMETHRIN RESISTANCE IN THE MOSQUITO, *ANOPHELES ANTHROPOPHAGUS*

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THE EFFECT OF BLOOD FEEDING AND EXOGENOUS SUPPLY OF L-TRYPTOPHAN ON THE SALIVARY GLAND QUANTITY OF XANTHURENIC ACID IN *ANOPHELES STEPHENSI* (DIPTERA: CULICIDAE)

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DIPHENOL OXIDASE-A2 IN THE MALARIA VECTOR MOSQUITO *ANOPHELES GAMBIAE* AND THE FRUIT FLY *DROSOPHILA MELANOGASTER*: DOES IT REGULATE MELANIN PRODUCTION?

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A MULTIPLEX TAQMAN REAL TIME RT-PCR FOR IDENTIFICATION AND QUANTIFICATION OF CRYPTIC SPECIES OF THE *CULEX PIPIENS* COMPLEX IN NORTH AMERICA

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EFFECT OF PLASMODIUM BERGHI INFECTION ON *ANOPHELES GAMBIAE* MIDGUT RESPONSES TO OXIDATIVE STRESS

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GAMBOL AND TC1 ARE TWO DISTINCT FAMILIES OF DD34E TRANSPOSONS: ANALYSIS OF THE *ANOPHELES GAMBIAE* GENOME EXPANDS THE DIVERSITY OF THE IS630-TC1-MARINER SUPERFAMILY

Monique R. Coy, Zhijian Tu

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DIAPAUSE-SPECIFIC GENE EXPRESSION IN ADULTS OF THE NORTHERN HOUSE MOSQUITO, *CULEX PIPIENS* L., IDENTIFIED BY SUPPRESSIVE SUBTRACTIVE HYBRIDIZATION

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SUSCEPTIBILITY STATUS OF *ANOPHELES GAMBIAE* SL. TO PYRETHROIDS, ORGANOPHOSPHATES, CARBAMATES AND DDT IN HOHOE DISTRICT, VOLTA REGION, GHANA

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MALARIA TRANSMISSION AND OCCUPATIONAL RISK FACTORS IN RURAL SOUTH WESTERN VIETNAM

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ESTABLISHMENT OF ROBUST SALIVARY GLAND-SPECIFIC TRANSGENE EXPRESSION SYSTEM IN ANOPHELINE MOSQUITOES

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DENGUE-2 AND YELLOW FEVER VIRUSES INDUCE GENE EXPRESSION CHANGES IN THE MIDGUT OF THE DISEASE VECTOR, *Aedes Aegypti*

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Aedes Aegypti VECTOR COMPETENCE AND GENE FLOW IN THE STATE OF VERACRUZ, MEXICO

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Aedes Aegypti VECTOR COMPETENCE AND GENE FLOW IN THE STATE OF VERACRUZ, MEXICO

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ENHANCED STRESS TOLERANCE IN DIAPAUSING ADULTS OF *Culex pipiens*

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ADVANCES TOWARD THE CONTROL OF *ANOPHELES ARABIENSIS* BY THE STERILE INSECT TECHNIQUE

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CAN PREDATOR AVOIDANCE BEHAVIOR EXPLAIN THE SPATIAL SEGREGATION BETWEEN THE MOLECULAR FORMS OF *A. GAMBIAE*?

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THE ROLE OF REDUCED RECOMBINATION IN THE EVOLUTION OF REPRODUCTIVE ISOLATION BETWEEN THE M AND S MOLECULAR FORMS OF *ANOPHELES GAMBIAE* S.S.

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PARITY LEVELS OF URBAN *AEDES AEGYPTI* AND *AEDES ALBOPICTUS* SAMPLED BY THREE DIFFERENT METHODS: CO₂-BAITED LIGHT TRAP, NASCI ASPIRATOR AND HUMAN-LANDING COLLECTIONS

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THE MOVEMENT OF *AEDES AEGYPTI* FROM THE INSECTICIDE TREATED EXPERIMENTAL HUT IN THAILAND

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INVESTIGATION INTO THE FITNESS COST OF *KDR* INSECTICIDE RESISTANCE IN *ANOPHELES GAMBIAE* MALARIA VECTORS

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A GEOGRAPHIC INFORMATION SYSTEM APPLIED TO A MALARIA FIELD STUDY IN NIONO, MALI

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INTER-EPIDEMIC AEDINE MOSQUITO ECOLOGY STUDIES AT TWO ARBOVIRUS HIGH-INTERFACE AREAS IN KENYA

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LARVAL HABITAT DIVERSITY AND *ANOPHELES* PRODUCTION IN A RICELAND ECOSYSTEM IN MWEA, KENYA

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DENGUE KNOWLEDGE AND PRACTICES AND THEIR IMPACT ON *AEDES AEGYPTI* POPULATIONS IN KAMPHAENG PHET, THAILAND

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SODIUM CHANNEL ALLELE HETEROGENEITY IN *CULEX* VECTORS OF WNV IN THE UNITED STATES

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DISTRIBUTION OF *Aedes Aegypti* IN FOUR DISTRICTS OF LIMA, PERU

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IMPACTS OF HOST ABUNDANCE AND AVAILABILITY ON HOST PREFERENCE OF *Aedes albopictus*

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THE IMPACT OF NON-SYSTEMIC TRANSMISSION ON ARBOVIRUS EPIDEMIOLOGY

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REMOTELY SENSED CORRELATES OF MOSQUITO DISTRIBUTION

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MONITORING LARVAL HABITATS AND MALARIA TRANSMISSION IN AREAS OF SEASONAL TRANSMISSION: SIGNIFICANCE FOR A DRY SEASON VECTOR CONTROL STRATEGY

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INTRA-HOUSEHOLD USE OF MOSQUITO NETS: WHO SLEEPS UNDER THE NET?

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Protozoa — Amoeba/Giardia

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UNDERSTANDING PHAGOCYTOSIS FOLLOWING HOST-CELL KILLING BY *Entamoeba histolytica*

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IDENTIFICATION OF ACTIN-BINDING PROTEINS IN *GIARDIA LAMBLIA*

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EFFECTS OF NITAZOXANIDE AND OTHER THIAZOLIDES ON *GIARDIA LAMBLIA* GROWTH, MORPHOLOGY AND ULTRASTRUCTURE

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GENOTYPIC ANALYSIS BY PCR-RFLP OF *CRYPTOSPORIDIUM* SPECIES FROM DIARRHEAL STOOL SAMPLES IN CHILDREN IN THE COMMUNITY IN SOUTH INDIA

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POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASES OF *CRYPTOSPORIDIUM PARVUM***Najma Bhat**¹, Boguslaw S. Wojczyk², Steven L. Spitalnik³, Honorine D. Ward¹¹Tufts-New England Medical Center, Boston, MA, United States,²Department of Pathology, College of Physicians and Surgeons of³Columbia University, New York, NY, United States, ³Department of Pathology, College of Physicians and Surgeons of Columbia

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CSWD-REPEAT PROTEIN: DEVELOPMENTAL EXPRESSION AND PARTNER PROTEINS OF *CLONORCHIS SINENSIS***Pyo Yun Cho**, Tae Im Kim, Shin-Yong Kang, Sung-Jong Hong

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THE USE OF CEDAR OIL COMPONENTS TO PREVENT INFECTION WITH SCHISTOSOMIASIS**Jean M. Naples**, Clive J. Shiff, Rolf U. Halden

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ENZYME-LINKED IMMUNOSORBENT ASSAY WITH WORM VOMIT AND CERCARIAL SECRETIONS OF *SCHISTOSOMA MANSONI* TO DETECT INFECTIONS IN AN ENDEMIC FOCUS OF BURKINA FASO**Hermann Sorgho**¹, Mahmoud Bahgat², Jean Noel Poda¹, Andreas Ruppel², Jean Bosco Ouedraogo¹¹Institut de Recherche en Sciences de la Santé (IRSS), Bobo-Dioulasso, Burkina Faso, ²University of Heidelberg, Heidelberg, Germany

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THE USE OF MICROSATELLITES FOR SCHISTOSOMA MANSONI POPULATION STUDIES AT ENDEMIC SITES**Nilton B. Rodrigues**¹, Marilene R. Silva¹, Maíra M. Pucci¹, Alvaro J. Romanha¹, Philip T. LoVerde², Robert E. Sorensen³, Dennis J. Minchella⁴, Guilherme C. Oliveira¹¹Centro de Pesquisas René Rachou - FIOCRUZ, Belo Horizonte - MG, Brazil, ²State University of New York, Buffalo, NY, United States, ³Minnesota State University, Mankato, MN, United States,⁴Purdue University, West Lafayette, IN, United States

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CHEMOKINES CONTRIBUTING TO THE ELEVATED IFN- γ LEVEL BY GENE TRANSCRIPTION PROFILE ANALYSIS IN MICE VACCINATED WITH ULTRAVIOLET-ATTENUATED CERCARIAE OF *SCHISTOSOMA JAPONICUM***Xiang Zhu**, Zhao-Song Zhang, Min-Jun Ji, Hai-Wei Wu, Yong Wang, Guan-Ling Wu

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CATIONIC AMINO ACID TRANSPORTER-2 NEGATIVELY REGULATES HEPATIC PATHOLOGY DURING MURINE SCHISTOSOMIASIS**Robert W. Thompson**¹, Allen W. Cheever¹, Lesley G. Ellies², Margaret Mentink-Kane¹, Thomas A. Wynn¹¹National Institutes of Health/National Institute of Allergy and Infectious Diseases/LPD, Bethesda, MD, United States,²Department of Medicine, UCSD Cancer Center, School of Medicine, University of California-San Diego, La Jolla, CA, United States

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SCHISTOSOMA INTERCALATUM* AND SOIL TRANSMITTED HELMINTHIASIS IN ESEKA TOWN IN CAMEROON*Jean Pierre Tchinda**, Louis A. Tchuem Tchuente, Abraham Fomena

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ASSOCIATION BETWEEN ANIMAL AND HUMAN INTENSITY OF INFECTION WITH *SCHISTOSOMA JAPONICUM* IN SAMAR PROVINCE, THE PHILIPPINES**Hélène Carabin**¹, Stephen T. McGarvey², Ernesto Balolong³, Patrick Belise⁴, Tomas Fernandez⁵, Lawrence Joseph⁴, Veronica Tallo³, Ryan Gonzales³, Mushfiqu Tarafder¹, Portia Alday³, Remigio Olveda³¹University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, ²Brown University, Providence, RI, United States, ³Research Institute for Tropical Medicine, Manila,Philippines, ⁴McGill University, Montreal, QC, Canada, ⁵Leyte State University, Baybay, Leyte, Philippines

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HOST GENOME DISTRIBUTION AND PROMOTOR ACTIVITIES OF THE *SCHISTOSOMA MANSONI* LTR RETROTRANSPOSONS, *BOUDICCA* AND *SINBAD***Claudia S. Copeland**, Paul J. Brindley

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CYTOKINE PRODUCTION ASSOCIATED WITH PERIportal FIBROSIS DURING CHRONIC SCHISTOSOMIASIS MANSONI IN HUMANS

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EVALUATION OF A MEASLES OUTBREAK RESPONSE STRATEGY IN NIAMEY, NIGER (2003-2004)

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¹Epicentre, Paris, France, ²EPIET, Solna, Sweden, ³Ministry of Health, Niamey, Niger, ⁴MSF, Paris, France, ⁵CERMES, Niamey, Niger

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ANALYSIS OF SOUTH AMERICAN EASTERN EQUINE ENCEPHALITIS VIRUSES ISOLATED FROM MOSQUITOES COLLECTED IN THE AMAZON BASIN REGION OF PERU

John P. Kondig, Michael J. Turell, John S. Lee, Monica L. O'Guinn, Leonard Wasieleski
USAMRIID, Fort Detrick, MD, United States

504

ARAGUARI VIRUS, A NEW MEMBER OF THE FAMILY ORTHOMYXOVIRIDAE: SEROLOGIC, ULTRASTRUCTURAL, AND MOLECULAR CHARACTERIZATION

Marcio Roberto T. Nunes
Evandro Chagas, Belem-Para, Brazil
(ACMCIP Abstract)

505

ARBOVIRAL IGG ANTIBODY PREVALENCE IN THREE KENYAN DISTRICTS

Rodney L. Coldren¹, Victor O. Ofula², Trish J. Prosser³, Fredrick Ogolla⁴, Ferdinand Adungo⁴, Steven J. Gaydos⁵, Jennifer L. Gehrke⁶, Evan Scullin⁷, Nicholas Adungo⁴

¹Armed Forces Research Institute of Medical Science, Bangkok, Thailand, ²US Army Medical Research Unit - Kenya, Nairobi, Kenya, ³Edith Cowan University, Perth, Australia, ⁴Kenya Medical Research Institute, Busia, Kenya, ⁵Darnell Army Community Hospital, Fort Hood, TX, United States, ⁶University of Wisconsin Medical School, Madison, WI, United States, ⁷Royal College of Surgeons in Ireland, Dublin, Ireland

506

SUPPRESSION OF PROINFLAMMATORY CYTOKINES MAY CONTRIBUTE TO PERSISTENCE AND BEHAVIORAL TRANSMISSION OF SEOUL VIRUS AMONG MALE NORWAY RATS

Judy D. Easterbrook, Gregory E. Glass, Sabra L. Klein
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

507

TAXONOMIC CHARACTERIZATION OF MINAÇU VIRUS AS NEW MEMBER OF FAMILY REOVIRIDAE, GENUS ORBIVIRUS

Livia C. Martins, Raimunda S. Azevedo, Eliana V. da Silva, Vera L. Barros, José A. Diniz, Hamilton A. Monteiro, **Pedro F. Vasconcelos**
Instituto Evandro Chagas, Belém, Brazil

508

LEARNING THE HARD WAY: HEPATITIS A OUTBREAK AMONG SCHOOL FACULTY AND STUDENTS IN PAPUA, INDONESIA AFTER AN OUTDOOR EDUCATION PROGRAM

Dianne S. Mathews¹, Patrick J. Blair², Susan Widjaja², Suwardi Redjo³, **Edith R. Lederman**²
¹Hillcrest International School, Sentani, Indonesia, ²US NAMRU-2, Jakarta, Indonesia, ³Department of Health, Papua Province, Sentani, Indonesia

509

EARLY EVENTS IN THE PATHOGENESIS OF EASTERN EQUINE ENCEPHALITIS VIRUS IN MICE

Peter Vogel, Wayne M. Kell, David L. Fritz, Michael D. Parker, **Randal J. Schoepp**
USAMRIID, Frederick, MD, United States

510

GENETIC CHARACTERIZATION OF GEOGRAPHICALLY DISTINCT STRAINS OF CACHE VALLEY AND MAGUARI VIRUSES**Rebecca C. Langer-Curry**¹, Marcio R. Nunes², Robert B. Tesh¹¹University of Texas Medical Branch, Galveston, TX, United States,²Instituto Evandro Chagas, Ministerio da Saude, Belem, Brazil

511

FILLING THE GAP IN GLOBAL INFLUENZA SURVEILLANCE BY SUPPORTING OR ESTABLISHING NATIONAL INFLUENZA CENTERS**Samuel L. Yingst**¹, Dina E. Salman², Hala M. Esmat², Michael Parker², Kenneth C. Earhart²¹NAMRU-3, FPO, AE, United States, ²NAMRU-3, Cairo, Egypt

512

SARS-COV REPLICATION KINETICS IN B129 MICE**Yong-Kyu Chu**, Lois Allen, Barbara Taggart, Charles Gagliano, Elizabeth Frye, Colleen Jonsson

SRI, Birmingham, AL, United States

513

EVALUATION OF THE DIAGNOSTIC SENSITIVITY AND SPECIFICITY OF THE ADENOPLEX ASSAY IN THE DETECTION OF ADENOVIRUS TYPE 4**Carl A. Coward**

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

(ACMCIP Abstract)

514

UPPER RESPIRATORY TRACT VIRAL PATHOGENS, CUSCO, PERU, 2000-2005**Gloria Chauca**

US NMRC, APO AA, Peru

515

CASE CONTROL STUDY TO EVALUATE RISK FACTORS FOR ACUTE HEPATITIS B VIRUS INFECTION IN EGYPT**Maha Talaat**¹, Iman Khairy¹, Rana Hajjeh², Nasr El-Sayed³, Tharwat Ismail¹, Frank J. Mahoney²¹US Naval Medical Research Unit, No.3, Cairo, Egypt, ²US Naval Medical Research Unit, No. 3 and Centers for Disease Control and Prevention, Cairo, Egypt, ³Ministry of Health and Population, Cairo, Egypt

516

MOSQUITO TRANSMISSION OF VENEZUELAN EQUINE ENCEPHALITIS VIRUS AND ITS EFFECT ON MURINE PATHOGENESIS**Darci R. Smith**, Patricia V. Aguilar, Lark L. Coffey, Gregory D. Gromowski, Eryu Wang, Anne-Sophie Carrara, Scott C. Weaver

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

Bacteria — Systemic Infections

621

ATYPICAL LYMPHOCYTOSIS IN A CASE OF LEPTOSPIROSIS-POSSIBLE RELATIONSHIP TO A GAMMA DELTA T CELL IMMUNOLOGIC RESPONSE**Michele Barry**¹, Adam Wisnewski¹, Sharon Inouye¹, Joseph Vinetz²¹Yale University School of Medicine, New Haven, CT, United States,²University of California at San Diego, San Diego, CA, United States**Clinical Tropical Medicine**

705

BONE MARROW CULTURES TO DETECT ENTERIC FEVER IN CHILDREN IN PAKISTAN**Megan E. Reller**¹, Furqan Hasan²¹Childrens Hospital Boston, Boston, MA, United States, ²National Institute for Child Health, Karachi, Pakistan**ACMCIP Abstracts — Molecular, Cellular and Immunoparasitology**

144, 165, 170, 175, 242, 252, 267, 286, 288, 289, 290, 292, 296, 302, 306, 307, 308, 309, 310, 311, 312, 313, 314, 318, 321, 322, 323, 324, 325, 326, 327, 343, 360, 371, 382, 387, 389, 392, 393, 394, 395, 397, 398, 399, 400, 402, 403, 404, 408, 410, 412, 416, 417, 418, 420, 425, 426, 436, 437, 445, 485, 487, 490, 495, 496, 499, 504, 513

Mid-Day Session Attendees:

We invite you to pick up a box lunch in the exhibit hall to bring to your session.

Mid-Day Session 70**History of Medicine: Kyasanur Forest Disease (Movie)**

Monroe East

Tuesday, December 13

12:05 – 1:20 p.m.

“The Story of Kyasanur Forest Disease,” filmed in 1956-1957 by Telford H. Work, then director of the Virus Research Center in Poona, India. (69 minutes)

In this film, Work uses his camera as others use a notebook, systematically recording step-by-step the investigation of what was to become second after Yellow Fever a new viral hemorrhagic disease affecting both primates and humans. It gives an insight into the different field and laboratory techniques which led to the rapid elucidation of KFD, and ends with different attempts at control and prevention.

Meet the Professors 71

Meet the Professors C: Enigmatic and Teaching Cases

Supported with funding from GlaxoSmithKline

Lincoln East

Tuesday, December 13 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, United States

CHAIR

Elaine Jong

University of Washington, Seattle, WA, United States

PANELISTS

David Hill

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

Joseph M. Vinetz

University of California at San Diego, La Jolla, CA, United States

Mid-Day Session 72

Bioinformatics Resources for Tropical Diseases: NCBI Resource Update

Jefferson East

Tuesday, December 13 12:15 – 1:15 p.m.

The U.S. National Center for Biotechnology Information at the National Institutes of Health is the U.S. national resource for molecular biology information. NCBI develops software and databases to better understand fundamental molecular and genetic processes that control health and diseases. NCBI makes these resources including GenBank, PubMed, BLAST, etc. freely available to the public. This session provides an update of new computational tools including genome analysis and databases available at NCBI for tropical disease research. More detail information is available at: <http://www.ncbi.nlm.nih.gov/>

Chuong Huynh

National Institutes of Health/NLM/NCBI, Bethesda, MD, United States

Mid-Day Session 72A

Bioregulation: Permitting and Shipping of Pathogens and Vectors

Georgetown East

Tuesday, December 13 12:15 – 1:15 p.m.

The recent concerns for the use and shipment of biological specimens (e.g., pathogens and vectors) have resulted in confusion about the permits required for transporting these specimens and methods for obtaining these permits. A panel of experts from various regulatory organizations will discuss the need for these permits, where and when these permits will be required, and how to obtain them.

CHAIR

Edward D. Walker

Michigan State University, East Lansing, MI, United States

Michael J. Turell

USAMRIID, Fort Detrick, MD, United States

BIOREGULATION: PERMITTING AND SHIPPING OF PATHOGENS AND VECTORS

Edward D. Walker

Michigan State University, East Lansing, MI, United States and

Michael Turell, USAMRIID, Fort Detrick, MD, United States

Poster Session A Dismantle

Exhibit Hall

Tuesday, December 13 1:30 – 1:45 p.m.

Scientific Session 73

Flavivirus — Dengue II

Lincoln East

Tuesday, December 13 1:30 – 3:15 p.m.

CHAIR

Kathryn Hanley

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

Anna P. Durbin

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

1:30 p.m.

517

CELLULAR TROPISM OF DENGUE VIRUS INFECTION IN MICE AFTER SUBCUTANEOUS INJECTION

Jennifer L. Kyle, Sujana Shrestha, P. Robert Beatty, Eva Harris

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

1:45 p.m.

518

IN VITRO AND IN VIVO PHENOTYPES OF DENGUE VIRUS SEROTYPE 3, SUBTYPE III LINEAGES ASSOCIATED WITH MILD OR SEVERE DISEASE OUTBREAKS

Kathryn A. Hanley¹, Erin E. Schirtzinger¹, Christopher T. Hanson², Stephen S. Whitehead²

¹New Mexico State University, Las Cruces, NM, United States,

²Laboratory of Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

2 p.m.

519

DENGUE VIRUS ENVELOPE PROTEIN GLYCOSYLATION AND INTERACTIONS WITH DENDRITIC CELLS

Kari E. Hacker, Aravinda DeSilva

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

2:15 p.m.

520

THE ROLE OF PRE-EXISTING DENGUE VIRUS (DV)-SPECIFIC ANTIBODY-DEPENDENT CELLULAR CYTOTOXICITY IN HETEROLOGOUS SECONDARY DENGUE VIRUS INFECTIONS

Kamolwish Laoprasopwattana¹, Daniel H. Libraty², Timothy P. Endy³, Ananda Nisalak⁴, Supamit Chunsuttiwat⁵, David W. Vaughn⁶, Francis A. Ennis², Alan L. Rothman², **Sharone Green**²

¹Songklanagarind Hospital, Songkhla, Thailand, ²University of Massachusetts Medical School, Worcester, MA, United States,

³Walter Reed Army Institute of Research, Washington, DC, United States, ⁴Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, ⁵Ministry of Public Health, Bangkok, Thailand,

⁶U.S. Army Medical Research and Materiel Command, Fort Detrick, MD, United States

2:30 p.m.

521

DENGUE FEVER IN HUMANIZED NOD/SCID MICE

Dennis A. Bente¹, Michael W. Melkus², J. Victor Garcia², Rebeca Rico-Hesse¹

¹Southwest Foundation For Biomedical Research, San Antonio, TX, United States, ²University of Texas Southwestern Medical Center, Dallas, TX, United States

2:45 p.m.

522

DEVELOPMENT OF A RAPID AND QUANTITATIVE ASSAY TO STUDY DENGUE VIRUS ANTIBODY INTERACTIONS USING A DC-SIGN- EXPRESSING HUMAN MONOCYTIC CELL LINE

Annette A. Kraus, Alden K. Casati, Tem Morrison, Mark Heise, Aravinda M. de Silva

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

3 p.m.

523

DENGUE 2 VIRUS FUSION IS INHIBITED WITH MONOCLONAL ANTIBODIES AND SYNTHETIC PEPTIDES SPECIFIC TO THE ENVELOPE GLYCOPROTEIN

Amanda E. Calvert, John T. Roehrig

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

Scientific Session 74

Malaria — Immunology I

Lincoln West

Tuesday, December 13

1:30 – 3:15 p.m.

CHAIR

Stephen Rogerson

University of Melbourne, Parkville, Victoria, Australia

Douglas Perkins

University of Pittsburgh, Pittsburgh, PA, United States

1:30 p.m.

524

ELISPOT DETECTION OF CYTOKINE RESPONSES TO MALARIAL ANTIGENS IN PERIPHERAL AND PLACENTAL BLOOD OF MALARIA AND MALARIA/HIV CO-INFECTED KENYAN WOMEN

Julie M. Moore¹, Simon O. Owino¹, Moses Sichangi¹, David E. Lanar², Sheetij Dutta², Caroline Othoro³, Juliana Otieno⁴, John Vulule⁵, Laurence Slutsker⁶, Venkatachalam Udhayakumar⁷, Ya Ping Shi⁷

¹University of Georgia, Athens, GA, United States, ²Walter Reed Army Institute of Research, Silver Spring, MD, United States, ³New York University, New York, NY, United States, ⁴Ministry of Health, Kisumu, Kenya, ⁵Kenya Medical Research Institute, Kisumu, Kenya, ⁶Centers for Disease Control and Prevention/KEMRI, Kisumu, Kenya, ⁷Centers for Disease Control and Prevention, Chamblee, GA, United States

(ACMCIP Abstract)

1:45 p.m.

525

DOES A LACK OF ANTIBODY TO PREGNANCY-ASSOCIATED MALARIA CONTRIBUTE TO POOR PREGNANCY OUTCOMES OF HIV INFECTED WOMEN?

Stephen Rogerson¹, Francisca Yosaatmadja¹, Richard Pranantyo¹, Dewi Ulfa¹, Adele Mount¹, Malcolm Molyneux², Victor Mwapasa³, Steven Meshnick⁴

¹University of Melbourne, Parkville, Victoria, Australia, ²Malawi-Liverpool-Wellcome Trust Clinical Research Programme, College of Medicine, Blantyre, Malawi, ³College of Medicine, Blantyre, Malawi, ⁴University of North Carolina, Chapel Hill, NC, United States

(ACMCIP Abstract)

2 p.m.

526

PLACENTAL MALARIA IS RELATED TO HYPERTENSION AND INCREASED SERUM SFLT1 LEVELS IN YOUNG NULLIPARAS BUT NOT OTHER WOMEN**Atis Muehlenbachs**¹, Theonest K. Mutabingwa², Sally Edmonds³, Michal Fried⁴, Patrick E. Duffy⁴¹University of Washington, Seattle, WA, United States, ²LSTMH and National Institute for Medical Research, Dar es Salaam, Tanzania, ³Dar es Salaam, United Republic of Tanzania, ⁴Muheza Designated District Hospital, Muheza, United Republic of Tanzania, ⁵MOMS Project, Seattle Biomedical Research Institute, Seattle, WA, United States

(ACMCIP Abstract)

2:15 p.m.

527

SUPPRESSION OF CIRCULATING RANTES IS ASSOCIATED WITH ENHANCED PATHOGENESIS OF MALARIAL ANEMIA IN KENYAN CHILDRENTom Were¹, Collins Ouma¹, Richard O. Otieno¹, Alloys S. Orago², John Michael Ong'echa¹, **Douglas J. Perkins**³¹University of Pittsburgh/KEMRI Laboratories of Parasitic and Viral Diseases, Kisumu, Kenya, ²National AIDS Control Council, Nairobi, Kenya, ³Department of Infectious Diseases and Microbiology, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, United States

(ACMCIP Abstract)

2:30 p.m.

528

EFFECTS OF CONCOMITANT *SCHISTOSOMA HAEMATOBII* INFECTION ON THE SERUM CYTOKINE LEVELS ELICITED BY ACUTE *PLASMODIUM FALCIPARUM* MALARIA INFECTION IN MALIAN CHILDREN**Kirsten E. Lyke**¹, Abdoulaye Dabo², Lansana Sangare², Charles Arama², Modibo Dra², Issa Diarra², Christopher V. Plowe¹, Ogobara K. Doumbo², Marcelo B. Sztein¹¹University of Maryland, Center for Vaccine Development, Baltimore, MD, United States, ²Malaria Research and Training Center, University of Bamako, Bamako, Mali

2:45 p.m.

529

HLA-DRB1*04 ALLELE IS ASSOCIATED WITH SEVERE MALARIA IN NORTHERN GHANA**Awo D. Osafo-Addo**¹, Kwadwo A. Koram¹, Michael Wilson¹, Abraham R. Odure², William O. Rogers³¹Noguchi Memorial Institute For Medical Research, Legon - Accra, Ghana, ²Navrongo Health Research Center, Navrongo, Ghana, ³Naval Medical Research Unit 3, Cairo, Egypt

(ACMCIP Abstract)

3 p.m.

530

CLASS II TETRAMER STAINING OF *PLASMODIUM FALCIPARUM*-SPECIFIC HUMAN CD4+ T CELLS**J. Mauricio Calvo-Calle**¹, Carlos Parra-Lopez², Lawrence J. Stern³, Elizabeth H. Nardin¹¹New York University School of Medicine, Department of Medical Parasitology, New York, NY, United States, ²Fundacion Instituto de Inmunologia de Colombia, Bogota, Colombia, ³University of Massachusetts School of Medicine, Department of Pathology and Biochemistry, Worcester, MA, United States

(ACMCIP Abstract)

Symposium 75**Medical Malpractice of Exclusionary Policies Against Indoor Spraying for Malaria Control**

Jefferson East

Tuesday, December 13

1:30 – 3:15 p.m.

Exclusionary policies and actions that prevent countries from using indoor spraying to control malaria and other diseases will be described. The impact of exclusionary policies on human health, both within and outside Africa, will be presented. Presenters will provide an update on legislation underway in Congress to help alleviate the problems of exclusionary policies of US agencies and to redirect policies governing how public funds are used to support malaria control. The chemical and biological basis for the continuing need for DDT and indoor spraying will be presented. This will be followed by descriptions of chemical actions of DDT and other insecticides that are currently recommended for indoor spraying. This symposium will conclude with a brief update on indoor spraying in malaria control programs in Africa and the barriers that African countries are encountering in their efforts to start or restart house spray programs.

CHAIR**Donald R. Roberts**

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

Amir Attaran

University of Ottawa, Institute of Population Health and Faculty of Law, Ottawa, ON, Canada

1:30 p.m.

IMPACT OF EXCLUSIONARY POLICIES AGAINST INDOOR SPRAYING ON MALARIA CONTROL

Donald R. Roberts

Uniformed Services University of the Health Sciences, Department of Preventive Medicine and Biometrics, Bethesda, MD, United States

2 p.m.**ACTIONS OF SELECTED INSECTICIDES FOR INDOOR RESIDUAL SPRAYING**

John P. Grieco

*Uniformed Services University of the Health Sciences, Bethesda, MD, United States***2:25 p.m.****LEGISLATIVE AND POLICY CONSIDERATIONS IN U.S.-FUNDED MALARIA INITIATIVES**

Katy French

*United States Senate, Subcommittee on Federal Financial Management, Government Information and International Security, Office of the Chairman, Washington, DC, United States***2:50 p.m.****INDOOR RESIDUAL SPRAYING WITH DDT IN AFRICA: RECENT RESULTS AND CHALLENGES**

Richard J. Tren

*Africa Fighting Malaria, Johannesburg, South Africa***Symposium 76****From Aquatic Habitats of Anopheline Mosquitoes to the Disease Burden of Malaria: Larval Interventions from the Habitat Perspective**

Jefferson West

Tuesday, December 13

1:30 – 3:15 p.m.

The renewed interest in the role of larval interventions in combating malaria in Africa has resulted in sprawling of information regarding new control strategies of malaria. This symposium will bring together experimental, observational and theoretical research in relation to larval ecology, habitat characterization and modeling. We emphasize that larval interventions should take into account heterogeneity in adult productivity among a variety of aquatic habitats. Habitat-based larval interventions can have a great potential in alleviating malaria burden in Africa, especially in low and intermediate transmission areas.

CHAIR

Robert Novak*Illinois Natural History Survey, Champaign, IL, United States***Weidong Gu***Illinois Natural History Survey, Champaign, IL, United States***1:30 p.m.****HABITAT-BASED MODELING OF LARVAL INTERVENTIONS ON THE DISEASE BURDEN OF MALARIA**

Weidong Gu

*Illinois Natural History Survey, Champaign, IL, United States***2 p.m.****ANOPHLES LARVAE IN URBAN SETTINGS: ECOLOGY AND HABITATS**

John Beier

*University of Miami, Miami, FL, United States***2:25 p.m.****ANOPHLES LARVAL HABITAT AVAILABILITY, PRODUCTIVITY AND ADULT ABUNDANCE IN WESTERN KENYA HIGHLANDS**

Guiyun Yan

*State University of New York, Buffalo, NY, United States***2:50 p.m.****LARVAL CONTROL IN ACTION: A REVIEW OF CURRENT PROJECTS OF INTERVENTIONS AND A FUTURE PROSPECTIVE**

Robert Novak

*Illinois Natural History Survey, Champaign, IL, United States***Symposium 77****Impact of Pre-existing Immunity on Development of Viral-Vectored Vaccines***Georgetown East*

Tuesday, December 13

1:30 – 3:15 p.m.

Numerous viral vectors are currently being evaluated as vaccine vehicles. One of the potential obstacles facing the eventual use of many viral-vectored vaccines is the prevalence of pre-existing immunity against the vector in many target vaccine populations. This symposium will focus on the problems and potential solutions that pre-existing immunity will have on the development of viral-vectored vaccines.

CHAIR

Keith Limbach*Naval Medical Research Center, Silver Spring, MD, United States***1:30 p.m.****STRATEGIES FOR HIV VACCINE DEVELOPMENT**

John Shiver

*Merck and Company, Inc., West Point, PA, United States***2 p.m.****ADENOVIRUS TYPE 35 VACCINE VECTORS**

Jaap Goudsmit

*Crucell N.V., Leiden, The Netherlands***2:25 p.m.****PRE-EXISTING IMMUNITY TO VACCINIA AND DNA/MVA VACCINES FOR HIV**

Rama Amara

*Emory University, Atlanta, GA, United States***2:50 p.m.****ADENOVIRUS TYPE 5 VACCINE VECTORS**

Jason Gall

GenVec, Gaithersburg, MD, United States

Scientific Session 78

Filariasis I

Georgetown West

Tuesday, December 13

1:30 – 3:15 p.m.

CHAIR

Hanan Helmy*Ain Shams University, Cairo, Egypt***Daniel J. Tisch***Case Western Reserve University, Cleveland, OH, United States*

1:30 p.m.

531

THE STATUS OF FOREST ONCHOCERCIASIS IN THE LOWER CROSS RIVER BASIN NIGERIA: CLINICAL AND PARASITOLOGICAL PROFILES AFTER SIX YEARS OF IVERMECTIN INTERVENTION**Kenneth N. Opara**¹, Olakunle B. Fagbemi², Ukam E. Oyene³, Hilary A. Adie³, Inyang A. Atting⁴, Daniel MN Okenu⁵¹Department of Zoology, University of Uyo, Uyo, Nigeria,²Department of Veterinary Microbiology and Parasitology,University of Ibadan, Ibadan, Nigeria, ³Cross River StateOnchocerciasis Control Program, Ministry of Health, Calabar, Nigeria, ⁴Department of Medical Microbiology, College of HealthSciences, University of Uyo, Uyo, Nigeria, ⁵Division of Infectious Diseases, Department of Medicine, Emory University School of

Medicine, Atlanta, GA, United States

1:45 p.m.

532

OBSERVATIONS ON THE EFFICACY OF IVERMECTIN ON ONCHOCERCA VOLVULUS MICROFILARIAE AFTER 17 YEARS OF TREATMENT IN GHANA**Mike Y. Osei-Atweneboana**¹, Daniel A. Boakye², John Gyapong³, Roger K. Prichard¹¹McGill University, St. Anne-De-Bellevue, PQ, Canada, ²NoguchiMemorial Institute for Medical Research, Accra, Ghana, ³Health

Research Unit, Accra, Ghana

2 p.m.

533

A SEROLOGICAL ASSESSMENT FOR THE CERTIFICATION OF ELIMINATION OF ONCHOCERCA VOLVULUS IN THE SANTA ROSA FOCUS OF GUATEMALA**Kim A. Lindblade**¹, Byron Arana², Guillermo Zea Flores³, Adria Prosser⁴, Nancy Cruz Ortiz², George Punkosdy⁴, Carlos Mendoza², Jane Richards⁵, Miguel Estuardo Barrios Giron², Robert E. Klein¹, Frank Richards⁶¹Centers for Disease Control and Prevention, Guatemala City, Guatemala, ²Medical Epidemiology, Research and Training Unit/Centers for Disease Control and Prevention, Guatemala City, Guatemala, ³Onchocerciasis Elimination Program of the Americas,Guatemala City, Guatemala, ⁴Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁵Tulane University, NewOrleans, LA, United States, ⁶Carter Center, Atlanta, GA, United States

2:15 p.m.

534

IMPACT OF MASS DRUG ADMINISTRATION ON WUCHERERIA BANCROFTI INFECTION RATES IN MOSQUITOES IN PAPUA NEW GUINEA**Sandra J. Laney**¹, Melinda Susapu², Gary J. Weil³, Steven A. Williams¹, Moses J. Bockarie²¹Smith College, Northampton, MA, United States, ²Institute for Medical Research, Madang, Papua New Guinea, ³Washington University School of Medicine, St. Louis, MO, United States

(ACMCIP Abstract)

2:30 p.m.

535

LONGITUDINAL ANALYSIS OF ACUTE LYMPHATIC FILARIASIS IN PAPUA NEW GUINEA: EVALUATION OF ANNUAL MASS DRUG ADMINISTRATION ON DISEASE**Daniel J. Tisch**¹, Neal D. Alexander², Will Kastens¹, Moses J. Bockarie³, James W. Kazura¹¹Case Western Reserve University, Cleveland, OH, United States,²London School of Hygiene and Tropical Medicine, London, United Kingdom, ³PNGIMR, Madang, Papua New Guinea

2:45 p.m.

536

COMPLIANCE AND EFFICACY OF MASS DRUG ADMINISTRATION FOR ELIMINATION OF LYMPHATIC FILARIASIS IN EGYPT**Maged El Setouhy**¹, Khaled Abdel Aziz¹, Ehab S. Ahmed¹, Reda M. Ramzy¹, Gary J. Weil²¹Ain Shams University, Cairo, Egypt, ²Washington University, School of Medicine, St. Louis, MO, United States

3 p.m.

537

ASSESSING FILARIAL INFECTION PREVALENCE AND TRANSMISSION IN A LOW-PREVALENCE AREA OF NORTHERN HAITI AFTER TWO ROUNDS OF ANNUAL MASS TREATMENT**Caroline Grady**¹, Madsen Beau de Rochars², Abdel Direny², Marie Denise Milord³, Els Mathieu¹, Allen Hightower¹, David Addiss¹, Thomas Streit⁴, Patrick Lammie¹¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Filariasis Program, Hopital Sainte Croix, Leogane, Haiti,³National Program to Eliminate Lymphatic Filariasis, Ministry of Public Health and Population, Port-au-Prince, Haiti, ⁴University of Notre Dame, Notre Dame, IN, United States

Symposium 78A

Clinical Group I

Supported with funding from International Association for Medical Assistance to Travelers

International Ballroom East

Tuesday, December 13

1:30 – 3:15 p.m.

This symposium will feature the Marcolongo Lecture and a report on new arthropod repellents and tropical disease vectors.

CHAIR

David Freedman

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

A. Clinton White

Baylor College of Medicine, Houston, TX, United States

1:30 p.m.

VINCENZO MARCOLONGO MEMORIAL LECTURE. CYSTIC ECHINOCOCCOSIS: TO TREAT OR NOT TO TREAT?

Enrico Brunetti

University of Pavia, Pavia, Italy

2:30 p.m.

NEW ARTHROPOD REPELLENTS AND TROPICAL DISEASE VECTORS – 2005 UPDATE

Vernon Ansdell

Kaiser Permanente, Honolulu, HI, United States

Scientific Session 79

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) – Cellular Parasitology I

Supported with funding from the Burroughs Wellcome Fund

International Ballroom West

Tuesday, December 13

1:30 – 3:15 p.m.

CHAIR

David Williams

Illinois State University, Normal, IL, United States

Beth D. Kirkpatrick

University of Vermont College of Medicine, Burlington, VT, United States

1:30 p.m.

1105

FLAGELLAR MOTILITY IS ESSENTIAL FOR CYTOKINESIS IN *TRYPANOSOMA BRUCEI* AND IS MODULATED BY AN EVOLUTIONARILY-CONSERVED DYNEIN REGULATORY SYSTEM

Katherine Ralston, Alana Lerner, Kent Hill

University of California at Los Angeles, Los Angeles, CA

1:45 p.m.

538

ROLE OF CAVEOLAE IN LEISHMANIA CHAGASI PHAGOCYTOSIS AND INTRACELLULAR SURVIVAL IN MACROPHAGES

Nilda E. Rodriguez, Upasna Gaur, Mary E. Wilson

University of Iowa, Iowa City, IA, United States

2 p.m.

539

SCHISTOSOMA MANSONI PRX PROTEINS: ARE THEY A NEW DRUG TARGET?

Ahmed A. Sayed, David L. Williams

Illinois State University, Normal, IL, United States

2:15 p.m.

540

MOUSE STRAIN DEPENDENT SUSCEPTIBILITY TO INTESTINAL AMEBIASIS

Amon Asgharpour, Shinjiro Hamano, Marcia McDuffie,

Eric R. Hout

University of Virginia, Charlottesville, VA, United States

2:30 p.m.

541

PROTEOLYTIC PROCESSING OF *CRYPTOSPORIDIUM PARVUM* GLYCOPROTEIN GP40/15

Jane W. Wanyiri¹, R. O'Connor¹, K. Kim², J. Qiu³, A. Plaut³, H. D. Ward¹

¹Tufts-New England Medical Center, Boston, MA, United States,

²Albert Einstein College of Medicine, New York, NY, United States,

³GRASP Digestive Diseases Center, Tufts-New England Medical Center, Boston, MA, United States

2:45 p.m.

542

INFECTIVE FORMS OF *LEISHMANIA (L.) AMAZONENSIS* AVOID MACROPHAGE SURVEILLANCE BY EXPOSING PHOSPHATIDYL SERINE

João L. Wanderley¹, Lucia H. Pinto-da-Silva¹, Elvira M. Saraiva², Adriana Bonomo¹, Maria E. Moreira¹, Lynn Soong³, Marcello A. Barcinski⁴

¹National Cancer Institute, Rio de Janeiro, Brazil, ²Institute of Microbiology - Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, ³Institute for Human Infections and Immunity, University of Texas Medical Branch, Galveston, TX, United States, ⁴University of São Paulo, Parasitology Department, São Paulo, Brazil

3 p.m.

543

SOLUBLE AND MEMBRANE ASSOCIATED *P. FALCIPARUM* FACTORS INDUCE ICAM-1 EXPRESSION ON HUMAN BRAIN ENDOTHELIUM THROUGH NFκB

Abhai K. Tripathi¹, David J. Sullivan¹, Monique F. Stins²

¹Department of Molecular Microbiology and Immunology, School of Public Health, Johns Hopkins University, Baltimore, MD, United States, ²Department of Pediatric Infectious Disease, School of Medicine, Johns Hopkins University, Baltimore, MD, United States

Poster Session B Setup

Exhibit Hall

Tuesday, December 13 3 – 3:45 p.m.

Exhibit Hall Open

Exhibit Hall

Tuesday, December 13 3 – 4 p.m.

Coffee Break

Exhibit Hall

Tuesday, December 13 3:15 – 3:45 p.m.

Poster Session B Viewing

Exhibit Hall

Tuesday, December 13 3:45 – 7 p.m.

Symposium 80

Parasite and Host Gene Expression in Malaria

Monroe East

Tuesday, December 13 3:45 – 5:30 p.m.

With the advent of genomics and the widespread availability of microarrays to assess gene expression, there are now opportunities to examine parasite and host gene expression that have not existed previously. In this symposium, four investigators will present results which examine: 1] parasite gene expression during treatment with antimalarials, 2] host gene expression in a non-human primate model of human *P. vivax* malaria (*P. cynomolgi* in the rhesus monkey), 3] host gene expression in humans with naturally-acquired *P. falciparum* infection, and 4] host gene expression in non-immune human volunteers challenged with malaria parasites.

CHAIR

Donald J. Krogstad

Tulane University, New Orleans, LA, United States

Wilbur A. Milhous

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

3:45 p.m.

PARASITE GENE EXPRESSION DURING TREATMENT WITH ANTIMALARIALS *IN VITRO*

Karen Kopydlowski

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

4:15 p.m.

NON-HUMAN PRIMATE MODEL OF HUMAN *P. VIVAX* MALARIA: *P. CYNOMOLGI* IN THE RHESUS MONKEY

Frank B. Cogswell

Tulane National Primate Research Center, Covington, LA, United States

4:40 p.m.

HUMAN SUBJECTS IN MALI WITH *P. FALCIPARUM* MALARIA

Ousmane A. Koita

Faculties of Science and Medicine, University of Bamako, Bamako, Mali

5:05 p.m.

HOST RESPONSES TO MALARIA IN CHALLENGED NON-IMMUNE HUMAN VOLUNTEERS

Christian F. Ockenhouse

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

Scientific Session 81

Ectoparasite-Borne Diseases I

Monroe West

Tuesday, December 13 3:45 – 5:30 p.m.

CHAIR

Ivo M. Foppa

University of South Carolina, Columbia, SC, United States

Wei-Mei Ching

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

3:45 p.m.

UPDATE: WHAT'S NEW WITH SCRUB TYPHUS: RECENT ADVANCES IN VACCINES, VECTORS, GENETICS, DIAGNOSTICS AND EPIDEMIOLOGY

Daryl J. Kelly

The Ohio State University, Columbus, OH, United States

4:15 p.m.

544

IDENTIFICATION OF *RICKETTSIA SPP.* IN TICKS COLLECTED IN BAVARIA, SOUTH-GERMANY**Roman Wolfel**¹, Martin Pfeffer¹, Sandra Essbauer¹, Judith Kiessling², Sonja Wilhelm³, Gerhard Dobler¹¹Bundeswehr Institute of Microbiology, Munich, Germany, ²Institute of Medical Microbiology, Epidemic and Infectious Diseases, LMU Munich, Germany, ³Institute of Animal Hygiene and Veterinary Public Health, University of Leipzig, Germany

4:30 p.m.

545

NOVEL *RICKETTSIA*-LIKE AMPLICONS RECOVERED FROM *DERMACENTOR*, *AMBLYOMMA*, AND *IXODES* TICKS IN MARYLAND**Katherine Swanson**¹, Nicole Ammerman², Aimee West¹, Douglas Norris¹¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ²University of Maryland School of Medicine, Baltimore, MD, United States

4:45 p.m.

546

QUESTING DOG TICKS ON MARTHA'S VINEYARD ARE INFECTED WITH MULTIPLE CLONES OF THE AGENT OF TULAREMIA**Heidi Goethert**, Sam Telford

Tufts University School of Veterinary Medicine, N. Grafton, MA, United States

5 p.m.

547

IXODES SCAPULARIS* CAN SUPPRESS HOST CYSTEINE PROTEASE ACTIVITY IN THE SITES OF BLOOD FEEDING*Michail Kotsyfakis**, John F. Andersen, Ivo M. Francischetti, Jose M. Ribeiro

National Institutes of Health, National Institute of Allergy and Infectious Diseases, Rockville, MD, United States

(ACMCIP Abstract)

5:15 p.m.

548

DIVERSITY OF *BORRELIA BURGDORFERI* OSPC IN PERSISTENTLY INFECTED *PEROMYSCUS LEUCOPUS***Katherine Swanson**, Douglas Norris

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

Scientific Session 82**Flavivirus — Vaccines**

Lincoln East

Tuesday, December 13

3:45 – 5:30 p.m.

CHAIR**Scott B. Halstead**

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

David W. Vaughn

U.S. Army Medical Research and Materiel Command, Fort Detrick, MD, United States

3:45 p.m.

549

A DENGUE-VEE REPLICON PARTICLE VACCINE INDUCES THE BEST IMMUNE RESPONSE IN A PRIME-BOOST REGIMEN**Kevin R. Porter**¹, Daewan Kim¹, Lan Chen¹, Hemavathy Subramanian¹, Martha Sedegah¹, Jonathan O. Rayner², Kimberly D. Alterson², Curtis G. Hayes¹, Kanakatte Raviprakash¹¹Naval Medical Research Center, Silver Spring, MD, United States,²AlphaVax Inc., Research Triangle Park, NC, United States

4 p.m.

550

THE LIVE ATTENUATED DENGUE SEROTYPE 1 VACCINE RDE1DELTA30 IS SAFE AND IMMUNOGENIC IN HEALTHY VOLUNTEERSJulie H. McArthur¹, Jennifer A. Marron¹, Bhavin Thumar¹, Kimberli Wanionek¹, Janece Lovchik¹, Ruth A. Karron¹, Brian R. Murphy², Joseph E. Blaney³, Stephen S. Whitehead², **Anna P. Durbin**¹¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ²National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ³National Institute Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ²National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ³National Institute Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

4:15 p.m.

551

PROGRESS ON LIVE-ATTENUATED DENGUE VIRUS VACCINES CONTAINING A TETRAVALENT FORMULATION OF RECOMBINANT VIRUSES**Joseph E. Blaney**¹, Christopher T. Hanson¹, Cai-Yen Firestone¹, Anna P. Durbin², Brian R. Murphy¹, Stephen S. Whitehead¹¹National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ²Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

4:30 p.m.

552

SAFETY, VIREMIA AND IMMUNOGENICITY OF A TETRAVALENT LIVE ATTENUATED CHIMERIVAX DENGUE VACCINE IN HEALTHY US ADULTS

Niranjan Kanesa-thasan¹, Dennis Morrison², Remi Forrat³, Alison Deary⁴, Karen McCarthy⁴, Rick Nichols¹, Sutee Yoksan⁵, Farshad Guirakhoo¹, Jean Lang³, Philip Bedford⁴, Thomas Monath¹

¹Acambis, Inc., Cambridge, MA, United States, ²Bio-kinetic, Springfield, MO, United States, ³sanofi pasteur, Lyon, France,

⁴Acambis, Inc., Cambridge, United Kingdom, ⁵Mahidol University, Salaya, Thailand

4:45 p.m.

553

RANDOMISED, DOUBLE-BLIND, PHASE 2 STUDY OF THE SAFETY, IMMUNOGENICITY AND DURATION OF IMMUNITY OF CHIMERIVAX™-JE LIVE, ATTENUATED VACCINE AGAINST JAPANESE ENCEPHALITIS (JE) IN HEALTHY ADULTS: RESPONSE TO BOOSTER VACCINATION AND ONE YEAR FOLLOW-UP

Niranjan Kanesa-thasan¹, Peter Nasveld², Scott Kitchener³, Matt Dobson⁴, Alison Deary⁴, John Stone⁴, Karen McCarthy⁴, Philip Bedford⁴, Sutee Yoksan⁵, Rick Nichols¹, Thomas Monath¹

¹Acambis, Inc., Cambridge, MA, United States, ²Army Malaria Institute, Brisbane, Australia, ³University of Queensland, Brisbane, Australia, ⁴Acambis, Inc., Cambridge, United Kingdom, ⁵Mahidol University, Bangkok, Thailand

5 p.m.

554

VIRUS REPLICATION OF A WEST NILE VACCINE, CHIMERIVAX™-WNO2 IN NON-HUMAN PRIMATES

J. Jian Liu, Thomas T. Monath, **John Hamberger**, Weiping Chen, Gwen Myers, Svjetlana Pilja, Farshad Guirakhoo
Acambis, Inc., Cambridge, MA, United States

5:15 p.m.

555

A RECOMBINANT SUBUNIT VACCINE FOR WEST NILE VIRUS YIELDS EFFICACIOUS AND DURABLE PROTECTION IN THE GOLDEN HAMSTER MODEL OF LETHAL WEST NILE ENCEPHALITIS

Michael M. Lieberman¹, Douglas Watts², Robert Tesh², David Clements¹, Steven Ogata¹, Teri Wong¹, Gordon Wang¹, James Senda¹, Gloria Corpuz¹, Amelia Travassos da Rosa², Marina Siirin², Beth-Ann Collier¹, Carolyn Weeks-Levy¹

¹Hawaii Biotech, Inc., Aiea, HI, United States, ²University of Texas Medical Branch, Galveston, TX, United States

Scientific Session 83

Malaria — Immunology II

Lincoln West

Tuesday, December 13

3:45 – 5:30 p.m.

CHAIR

James Burns

Drexel University College of Medicine, Philadelphia, PA, United States

Evelina Angov

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

3:45 p.m.

556

PREVALENCE OF MEROZOITE SURFACE PROTEIN-1 19KDA HAPLOTYPES AT A MALARIA VACCINE TESTING SITE IN BANDIAGARA, MALI

Shannon L. Takala¹, Drissa Coulibaly², Mahamadou A. Thera², Alassane Dicko², David L. Smith³, Ando B. Guindo², Abdoulaye K. Kone², Amed Ouattara¹, Abdoulaye Djimde², Paul Sehdev¹, Kirsten Lyke¹, Dapa Diallo², Christopher V. Plowe¹, Ogobara K. Doumbo²

¹University of Maryland School of Medicine, Baltimore, MD, United States, ²University of Bamako, Bamako, Mali, ³Fogarty International Center, National Institutes of Health, Bethesda, MD, United States
(ACMCIP Abstract)

4 p.m.

557

ANALYSIS OF ANTIBODY SPECIFICITIES DETECTED BY AN MSP1-42 FRAGMENT SPECIFIC ELISA FOLLOWING VACCINATION WITH FMP1/AS02A IN THREE DIVERSE POPULATIONS

Evelina Angov¹, Afiya Brent-Kirk¹, Scott A. Bowden¹, Lorraine A. Soisson², Jose A. Stoute³, Christian F. Ockenhouse¹, Joe Cohen⁴, Carter L. Diggs², Donald G. Heppner¹, Jeffrey A. Lyon¹

¹Department Immunology, Walter Reed Army Institute of Research, Silver Spring, MD, United States, ²United States Agency for International Development, Washington, DC, United States, ³Department Cellular Injury, Walter Reed Army Institute of Research, Silver Spring, MD, United States, ⁴GlaxoSmithKline Biologicals, Rixensart, Belgium

4:15 p.m.

558

EBV-SPECIFIC IFN-GAMMA ELISPOT RESPONSES ARE SUPPRESSED WHILE THOSE TO MSP-1 ARE BOOSTED AFTER AN EPISODE OF ACUTE CLINICAL MALARIA

Ann M. Moormann¹, Pauline Sebbby Ogolla², Kiprotich Chelimo², Peter Odada Sumba², Daniel J. Tisch³, Ryan W. Novince¹, Rosemary Rochford⁴, James W. Kazura¹

¹Center for Global Health and Diseases, Case Western Reserve University, Cleveland, OH, United States, ²Center for Vector Biology and Control Research, Kenya Medical Research Institute, Kisumu, Kenya, ³Department of Epidemiology and Biostatistics, Case Western Reserve University, Cleveland, OH, United States, ⁴Department of Microbiology and Immunology, SUNY UpState Medical University, Syracuse, NY, United States

4:30 p.m.

559

DIFFERENTIAL ANTIBODY RESPONSES TO *PLASMODIUM FALCIPARUM* MEROZOITE SURFACE AND INVASION LIGAND PROTEINS IN INDIVIDUALS LIVING IN MALARIA ENDEMIC AREAS IN BRAZIL AND CAMEROON

Louise Ford¹, Cheryl A. Lobo¹, Meagan B. Gallagher¹, Marilis Rodriguez¹, Mariano G. Zalis², Carlos E. Cavasini³, Ricardo L. Machado³, Ross L. Coppel⁴, Peter A. Enyong⁵, Daniel W. Moukatté⁶, Sara Lustigman¹

¹New York Blood Center, New York, NY, United States, ²Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, ³Faculty of Medicine of São José do Rio Preto, São Paulo, Brazil, ⁴Monash University, Clayton, Victoria, Australia, ⁵Tropical Medicine Research Station, Kumba, Cameroon, ⁶District Referral Hospital, Kumba, Cameroon

(ACMCIP Abstract)

4:45 p.m.

560

C3D BINDING TO THE CIRCUMSPOROZOITE PROTEIN CARBOXY-TERMINUS DEVIATES IMMUNITY AGAINST MALARIA

Elke S. Bergmann-Leitner¹, Elizabeth H. Duncan¹, Farhat Khan¹, Jackie L. Williams¹, Wolfgang W. Leitner², Evelina Angov¹, George C. Tsokos¹, Jeffrey A. Lyon¹

¹Walter Reed Army Institute, Silver Spring, MD, United States, ²National Institutes of Health, Bethesda, MD, United States

(ACMCIP Abstract)

5 p.m.

561

ASSESSMENT OF PROTECTIVE IMMUNE MECHANISMS AGAINST MALARIA INDUCED BY POLYMERIC LINEAR PEPTIDE CHIMERAS

Luciana M. Flannery, Ivette Caro-Aguilar, Mary R. Galinski, Alberto Moreno

Emory Vaccine Center, Atlanta, GA, United States

5:15 p.m.

562

ALTERATION IN HOST CELL TROPISM LIMITS THE EFFICACY OF IMMUNIZATION WITH A SURFACE PROTEIN OF MALARIA MEROZOITES

Qifang Shi, Amy Cernetich, Thomas M. Daly, Gina Galvan, Akhil B. Vaidya, Lawrence W. Bergman, James M. Burns, Jr. Drexel University, College of Medicine, Philadelphia, PA, United States

Symposium 84

Biomphalaria and Schistosoma: Research Updates on their Interaction

Jefferson East

Tuesday, December 13

3:45 – 5:30 p.m.

Research in the *B. glabrata*/*S. mansoni* relationship was prompted largely by Dr. C.S. Richards, whose recent death left a void in this field. The speakers will present current snail-parasite research, based on Dr. Richards' pioneering efforts.

CHAIR

Fred A. Lewis

Biomedical Research Institute, Rockville, MD, United States

Philip T. LoVerde

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

3:45 p.m.

STUDIES TOWARDS A MOLECULAR UNDERSTANDING OF THE SCHISTOSOME/SNAIL ENCOUNTER

Matty Knight

Biomedical Research Institute, Rockville, MD, United States

4:15 p.m.

INNATE IMMUNITY IN BIOMPHALARIA TO LARVAL SCHISTOSOMES: PROGRESS AND CHALLENGES

Timothy P. Yoshino

University of Wisconsin, Madison, WI, United States

4:40 p.m.

COEVOLUTIONARY DYNAMICS BETWEEN SCHISTOSOMA MANSONI AND BIOMPHALARIA GLABRATA: A TALE OF RESISTANCE COSTS, INFECTION COSTS AND ENVIRONMENTAL MODULATION

Gregory Sandland

Purdue University, West Lafayette, IN, United States

5:05 p.m.

SCHISTOSOMES AND SNAILS-THE HISTORICAL PERSPECTIVE OF MOLECULAR PHYLOGENETICS

E. S. Loker

University of New Mexico, Albuquerque, NM, United States

Symposium 85

Evolutionarily Conserved Signal Transduction Pathways in Mosquitoes: Physiological Hyperlinks to Vectorial Capacity*Jefferson West*

Tuesday, December 13 3:45 – 5:30 p.m.

Vectorial capacity is a mathematical expression for the risk of pathogen or parasite transmission by an insect vector. While the mathematical formula is deceptively simple, the physiological processes that underlie different parts of the formula are complex and require activation of signaling pathways that integrate both internal and environmental information. In this symposium, we present new findings on signal transduction pathways that affect physiological processes in mosquitoes that are central to vectorial capacity: innate immunity, nutrient metabolism and reproduction, olfaction and diuresis. The relevant signaling pathways include extreme examples of conservation with orthologous pathways in mammalian cells and have significant novel potential for genetic manipulation to alter vectorial capacity.

CHAIR

Shirley Luckhart*University of California at Davis, Davis, CA, United States***Mark R. Brown***University of Georgia, Department of Entomology, Athens, GA, United States*

3:45 p.m.

SIGNAL TRANSDUCTION AND INNATE IMMUNITY IN ANOPHELES

Shirley Luckhart

University of California at Davis, School of Medicine, Dept Medical Microbiology and Immunology, Davis, CA, United States

4:15 p.m.

SIGNAL TRANSDUCTION AND REPRODUCTION IN MOSQUITOES

Mark R. Brown

University of Georgia, Department of Entomology, Athens, GA, United States

4:40 p.m.

SIGNAL TRANSDUCTION AND OLFACTION

Lawrence J. Zwiebel

Vanderbilt University, Department of Biological Sciences, Nashville, TN, United States

5:05 p.m.

SIGNAL TRANSDUCTION AND DIURESIS

Geoffrey M. Coast

University of London, School of Biological and Chemical Sciences, London, United Kingdom

Scientific Session 86

Filariasis II*Georgetown West*

Tuesday, December 13 3:45 – 5:15 p.m.

CHAIR

Tarig B. Higazi*University of Alabama at Birmingham, Birmingham, AL, United States***David Addiss***Centers for Disease Control and Prevention, Buford, GA, United States*

3:45 p.m.

563

BANCROFTIAN FILARIASIS: EFFECT OF ANNUAL TREATMENT WITH DIETHYLCARBAMAZINE AND ALBENDAZOLE ON CIRCULATING FILARIAL ANTIGEN LEVELS AND ANTI-FILARIAL ANTIBODIES**Hanan Helmy**¹, Gary J. Weil², Abou Sree T. Ellethy¹, Ehab S. Ahmed¹, Maged El Setouhy¹, Reda M. Ramzy¹¹Ain Shams University, Cairo, Egypt, ²Washington University, St. Louis, MO, United States

4 p.m.

564

COSTLY ADVERSE REACTIONS TO LYMPHATIC FILARIASIS TREATMENT IN LEOGANE, HAITI, 2004**Natasha Hochberg**¹, Marie Carmel Michel², Patrick J. Lammie¹, Els Mathieu¹, Abdel D. Direny², Madsen B. DeRochars², David G. Addiss¹¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Hopital Ste. Croix, Leogane, Haiti

4:15 p.m.

565

ANALYSIS OF THE POPULATION GENETICS OF CONCURRENT SELECTION WITH ALBENDAZOLE AND IVERMECTIN ON THE POSSIBLE DEVELOPMENT OF ALBENDAZOLE RESISTANCE**Anne E. Schwab**¹, Andreas J. Schwab², Thomas S. Churcher³, Maria-Gloria Basanez³, Roger K. Prichard¹¹McGill University, Ste-Anne-de-Bellevue, PQ, Canada, ²McGill University, Montreal, PQ, Canada, ³Imperial College, London, United Kingdom

4:30 p.m.

566

IDENTIFICATION OF ELEMENTS ESSENTIAL FOR TRANSCRIPTION IN *BRUGIA MALAYI* PROMOTERS**Tarig B. Higazi**, Ana Oliveira, Charles Katholi, Limin Shu, Joseph Barchue, Mark Lisenby, Thomas R. Unnasch*University of Alabama at Birmingham, Birmingham, AL, United States*

(ACMCIP Abstract)

4:45 p.m.

567

IDENTIFICATION OF *BRUGIA* ADULT WORM PROTEINS BY PEPTIDE MASS FINGERPRINTING**Tiffany S. Weinkopf¹**, James Atwood², George Punkosdy³, Brent Weatherly¹, Ronald Orlando², Patrick Lammie³¹Department of Cellular Biology, University of Georgia, Athens, GA, United States, ²Complex Carbohydrate Research Center, University of Georgia, Athens, GA, United States, ³Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States

(ACMCIP Abstract)

5 p.m.

568

STAGE SPECIFIC ANTIGENEMIA STATUS IN BRUGIAN FILARIASIS: PRE AND POST TREATMENT KINETICS**Nancy Malla¹**, P.K. Tripathi¹, R.K. Shenoy², R.C. Mahajan¹¹P.G.I.M.E.R, Chandigarh, India, ²Filariasis Chemotherapy Unit, T.D. Medical College, Alleppy, Kerala, India

(ACMCIP Abstract)

Symposium 87**Clinical Group II***International Ballroom East*

Tuesday, December 13

3:45 – 5:30 p.m.

This symposium will feature updates on malaria chemoprophylaxis and adverse effects of yellow fever vaccine. These scientific talks will be followed by the Clinical Group annual business meeting.

CHAIR

David Freedman*University of Alabama at Birmingham, Birmingham, AL, United States*

3:45 p.m.

CLINICAL UPDATE ON YELLOW FEVER VACCINE ADVERSE EFFECTS

Rachel Barwick Eidex

Centers for Disease Control/National Center for Infectious Diseases/DGMQ, Atlanta, GA, United States

4:10 p.m.

CLINICAL UPDATE ON MALARIA CHEMOPROPHYLAXIS

Monica Parise

Centers for Disease Control/National Center for Infectious Diseases/DPD, Atlanta, GA, United States

4:50 p.m.

CLINICAL GROUP ANNUAL BUSINESS MEETING

David Freedman

*University of Alabama at Birmingham, Birmingham, AL, United States***Scientific Session 88****American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) – Cellular Parasitology II***Supported with funding from the Burroughs Wellcome Fund**International Ballroom West*

Tuesday, December 13

3:45 – 5:30 p.m.

CHAIR

Kim C. Williamson*Loyola University Chicago, Chicago, IL, United States***David J. Sullivan, Jr.***Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*

3:45 p.m.

1106

DEVELOPING A ONE STEP PCR-BASED METHOD FOR GENE DISRUPTION AND *IN VIVO* EPITOPE TAGGING IN *CRITHIDIA FASCICULATA***Yu Sun***University of California at Los Angeles, Los Angeles, CA, United States*

4 p.m.

569

REGULATION OF ERYTHROCYTE INVASION BY HOST SIGNALING PATHWAYS AND MALARIA PARASITE LIGANDS**Sean C. Murphy¹**, Natalia L. Hiller¹, Paul Chung¹, S.N. Prasana Murthy¹, H. Alex Brown², Heidi E. Hamm², Jon W. Lomasney¹, Kasturi Haldar¹¹Northwestern University, Chicago, IL, United States, ²Vanderbilt University, Nashville, TN, United States

4:15 p.m.

570

ERYTHROPOIETIN PROTECTS MICE FROM DEATH DURING CEREBRAL MALARIA**Stephane Picot¹**, Anthony Texier², Josette Ferrandiz², Christine Latour², François Peyron², Kaiser Karine¹¹Hospices Civils de Lyon, University Claude Bernard, Lyon, France, ²University Claude Bernard Lyon, Lyon, France

4:30 p.m.

571

NEUTRAL LIPID MICROSPHERES IN *P. FALCIPARUM* DIGESTIVE VACUOLES MEDIATE HEME CRYSTALLIZATION

John Pisciotta¹, Isabelle Coppens¹, Abhai Tripathi¹, Peter Scholl¹, Joel Shuman², Vladimir Shulaev², **David J. Sullivan¹**

¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ²Virginia Bioinformatics Institute, Blacksburg, VA, United States

4:45 p.m.

572

CYCLOOXYGENASE-2 AND 15-LOX EXPRESSION DURING PLACENTAL MALARIA

Demba Sarr¹, Delphine Aldebert¹, Laurence Marrama¹, Adama Gaye², Makhtar Niang¹, Jean Yves Lehesran³, **Ronan Jambou¹**

¹Institut Pasteur de Dakar, Dakar, Senegal, ²Centre de Santé Roi Baudouin, Dakar, Senegal, ³Unité mère-enfant, IRD, Dakar, Senegal

5 p.m.

ACMCIP BUSINESS MEETING

John H. Adams

Notre Dame University, Notre Dame, IN, United States

Plenary Session III

Commemorative Fund Lecture

International Ballroom Center

Tuesday, December 13 6 – 6:45 p.m.

The ASTMH Commemorative Fund Lecture is presented annually by an invited senior researcher resident in the tropics.

CHAIR

Thomas P. Monath

Acambis Inc., Cambridge, MA

DISEASE IN CONTROL OF AFRICA: THE FOOL AT FORTY?

Oyewale Tomori

Redeemer's University, Lagos State, Nigeria

Wednesday, December 14

Registration

Concourse Foyer

Wednesday, December 14 7 a.m. – 5 p.m.

Poster Session B Viewing

Exhibit Hall

Wednesday, December 14 7 a.m. – 5:30 p.m.

Program Committee Meeting

Caucus

Wednesday, December 14 7 – 8 a.m.

ASTMH Past Presidents Breakfast

State

Wednesday, December 14 7 – 8 a.m.

Cyberspace/Web Site Committee

Edison

Wednesday, December 14 7 – 8 a.m.

Symposium 88A

Rolling Back Malaria in Eritrea — Success from a Comprehensive Program

Lincoln West

Wednesday, December 14 7 – 8 a.m.

Eritrea met or exceeded each of the Abuja targets by the end of 2004 using a combination of proven interventions, including improved case management, insecticide-treated nets, targeted indoor residual spraying, and larval control. Several advisors to Eritrea's malaria control program will present brief summaries of the country's strategies and lessons to be learned from its experiences. Presenters will be available to answer questions following this brief breakfast symposium.

CHAIR

Eugene Brantly

RTI International, Washington, DC, United States

8 a.m.

MEASURING THE EFFECTIVENESS OF MALARIA INTERVENTIONS IN ERITREA

Patricia Graves

EpiVec Consulting, Inc., Atlanta, GA, United States

8:20 a.m.

USING OR 'JUST OWNING' A NET: ROLLING OUT ITNS IN ERITREA

Kate Macintyre

Tulane University, New Orleans, LA, United States

Wednesday, December 14

8:40 a.m.**BUILDING ERITREA'S EARLY WARNING SYSTEM**

Madeleine Thompson

*Columbia University, Palisades, NY, United States***9 a.m.****A COMPARATIVE ANALYSIS OF FACTORS FOR SUCCESS IN MALARIA CONTROL**

Lawrence Barat

*Academy for Educational Development, Washington, DC, United States***Symposium 89****Insect Growth Regulators and Mosquitoes***Hemisphere*

Wednesday, December 14

8 – 9:45 a.m.

This symposium will provide a synopsis of the major classes and current status of insect growth regulators used to prevent the transmission of mosquito-borne diseases. Insect growth regulators represent an excellent opportunity to stop disease transmission while having minimal deleterious effect on the environment and human health. Juvenile hormone analogs, ecdysone agonists, plus a variety of newer compounds, will be surveyed as agents for mosquito control. The advantages and disadvantages of each class of compounds will be assessed.

CHAIR

Nancy E. Beckage*University of California-Riverside, Riverside, CA, United States***8 a.m.****HOW *DROSOPHILA* RESPONDS TO METHOPRENE, AND WHAT THIS MAY TELL US ABOUT THE MOSQUITO RESPONSE**

Thomas Wilson

*Ohio State University, Columbus, OH, United States***8:30 a.m.****MODE OF ACTION OF METHOPRENE IN *AEDES AEGYPTI***

S. R. Palli

*University of Kentucky, Lexington, KY, United States***8:55 a.m.****DISRUPTIVE EFFECTS OF THREE ECDYSONE AGONISTS ON DEVELOPMENT OF *AEDES AEGYPTI*, *CULEX QUINQUEFASCIATUS* AND *ANOPHELES GAMBIAE* LARVAE**

Nancy Beckage

*University of California-Riverside, Riverside, CA, United States***9:20 a.m.****NUTRITIONAL CONTROL OF EGG PRODUCTION IN ANAUTOGENOUS MOSQUITOES PROVIDES A LINK WITH PATHOGEN TRANSMISSION**

Alexander Raikhel

*University of California - Riverside, Riverside, CA, United States***Scientific Session 90****Bacteriology I – Diarrhea***Military*

Wednesday, December 14

8 – 9:45 a.m.

CHAIR

Regina LaRocque*Massachusetts General Hospital, Boston, MA, United States***Jason B. Harris***Massachusetts General Hospital, Boston, MA, United States***8 a.m.****573****DIARRHEAL EPIDEMICS IN DHAKA, BANGLADESH DURING THREE CONSECUTIVE FLOODS – 1988, 1998, AND 2004**

Brian S. Schwartz¹, Jason B. Harris¹, Ashraful I. Khan², Regina C. LaRocque¹, David A. Sack², Stephen P. Luby², Firdausi Qadri², Stephen B. Calderwood¹, Abu S. Faruque², Edward T. Ryan¹

¹Massachusetts General Hospital, Boston, MA, United States,²ICDDR,B: Centre for Health and Population Research, Dhaka, Bangladesh**8:15 a.m.****574****HUMAN-PASSAGED HYPERINFECTIVITY OF *VIBRIO CHOLERA* CAN BE MODELED BY GROWTH IN THE INFANT MOUSE**

Ashfaqu Alam¹, **Regina C. LaRocque**², Jason B. Harris², Cecily Vanderspurt², Edward T. Ryan², Firdausi Qadri², Stephen B. Calderwood²

¹International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, ²Massachusetts General Hospital, Boston, MA, United States

8:30 a.m.

575

PROTECTIVE IMMUNITY INDUCED BY TRANSCUTANEOUS IMMUNIZATION WITH *VIBRIO CHOLERA* TOXIN CO-REGULATED PILUS A (TCPA) ANTIGEN

Julianne Rollenhagen¹, Anuj Kalsy¹, Manohar John¹, Jason Harris¹, Regina LaRocque¹, Firdausi Qadri², Stephen Calderwood¹, Francisca Cerda³, Ronald Taylor³, Edward T. Ryan¹

¹Division of Infectious Diseases, Massachusetts General Hospital, Boston, MA, United States, ²International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, ³Dartmouth Medical School, Hanover, NH, United States

8:45 a.m.

576

INTERNATIONAL INVESTIGATION OF AN OUTBREAK OF *SALMONELLA* ENTERITIDIS INFECTIONS AMONG US TRAVELERS — JAMAICA, 2005

Romulo E. Colindres¹, Deanna Ashley², Lisa Indar³, Nikki Maxwell¹, Ciara O'Reilly¹, Ewelina Lyszkowicz¹, Olga Henao¹, Susan Montgomery¹

¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Jamaican Ministry of Health, Kingston, Jamaica, ³Caribbean Epidemiology Centre, Port of Spain, Trinidad and Tobago

9 a.m.

577

APPLICATION OF *IN VIVO* INDUCED ANTIGEN TECHNOLOGY (IVIAT) TO *SALMONELLA ENTERICA* SEROTYPE TYPHI: IDENTIFICATION OF PAGC AS A MARKER OF *S. TYPHI* INFECTION

Jason B. Harris¹, Andrea Baresch-Bernal¹, Md. Ashfaqul Alam², Regina C. LaRocque¹, Firdausi Qadri², Stephen B. Calderwood¹, Robert F. Breiman³, W. Abdullah Brooks², Martin Handfield⁴, Sean Rollins¹, Edward T. Ryan¹

¹Massachusetts General Hospital, Boston, MA, United States, ²International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, ³Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁴College of Dentistry, University of Florida, Gainesville, FL, United States

9:15 a.m.

578

INVESTIGATING THE MOLECULAR MECHANISMS OF NALIDIXIC ACID RESISTANCE AND REDUCED SUSCEPTIBILITY TO FLUOROQUINOLONES IN *SALMONELLA TYPHI*

Chau T. Tran¹, Christiane Dolecek¹, R. Leon R. Ochiai², James Ian Campbell¹, Yin Yang³, Hoang Minh Nguyen¹, Zulfiqar A. Bhutta⁴, Sujit K. Bhattacharya⁵, Thiem Dinh Vu⁶, Magdarina Agtini⁷, John Wain⁸, Christopher Martin Parry⁹, Diep Song To¹, Chau Vinh Nguyen¹, Ho Anh Vo¹⁰, Bay Be Phan¹⁰, Phuong Thi Le¹⁰, Lanh Ngoc Mai¹⁰, La Phi Tran¹¹, Lorenz von Seidlein⁴, Camilo J. Acosta⁴, Hien Tinh Tran¹, John D. Clemens⁴, Simmaly Phongmany¹², Jeremy Farrar¹

¹The Hospital for Tropical Diseases, Hochiminh, Viet Nam,

²International Vaccine Institute., Seoul, Republic of Korea, ³Guangxi Center for Disease Prevention and Control, Guangxi, China,

⁴Department of Pediatrics, Aga Khan University, Karachi, Pakistan,

⁵National Institute of Cholera and Enteric Diseases, Beliaghata, Kolhata, India, ⁶National Institutes of Health, Hanoi, Viet Nam,

⁷National Institute of Health, Research and Development, Jakarta, Indonesia, ⁸Sanger Institute, Cambridge, United Kingdom,

⁹Liverpool University, Liverpool, United Kingdom, ¹⁰Dong Thap Provincial Hospital, Cao Lanh, Dong Thap, Viet Nam, ¹¹An Giang Provincial Hospital, Long Xuyen, Viet Nam, ¹²Wellcome Trust-

Mahosot Hospital, Oxford Tropical Medicine Research

Collaboration, Vientiane, Lao People's Democratic Republic

9:30 a.m.

579

CHARACTERIZATION OF *CAMPYLOBACTER COLI* FROM CHILDREN AGED FIVE YEARS OR LESS IN EGYPT (1995-2004)

John D. Klena, Dina Fahmy, Mark S. Riddle, David Rockabrand, Marshall R. Monteville, John Sanders
NAMRU-3, FPO, AE, United States

Scientific Session 91

Viruses II

Monroe East

Wednesday, December 14

8 – 9:45 a.m.

CHAIR

James Meegan

Biological Defense Systems, Frederick, MD, United States

Barry Miller

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

8 a.m.

580

DEVELOPMENT OF A NEUTRALIZATION ASSAY FOR RIFT VALLEY FEVER VIRUS UTILIZING PSEUDOVIRIONS

Andrea F. Bertolotti-Ciarlet¹, Shaun M. Stewart¹, Claire Marie Filone¹, Mark Heise², Robert W. Doms¹

¹University of Pennsylvania, Philadelphia, PA, United States,

²University of North Carolina, Chapel Hill, NC, United States

8:15 a.m.

581

TRANSMISSION OF RIFT VALLEY FEVER IN KENYA: RETROSPECTIVE SURVEY

Angelle Desiree LaBeaud¹, Eric Muchiri², Clarence J. Peters³, Charles H. King¹

¹Case Western Reserve University: Center for Global Health and Diseases, Cleveland, OH, United States, ²Ministry of Health; Division of Vector Borne Diseases, Nairobi, Kenya, ³University of Texas Medical Branch, Galveston, TX, United States

8:30 a.m.

582

VENEZUELAN EQUINE ENCEPHALITIS VIRUS EVOLUTION *IN VIVO* IS CONSTRAINED BY HOST ALTERATION

Lark L. Coffey¹, Aaron C. Brault², Nikos Vasilakis¹, Scott C. Weaver¹

¹University of Texas Medical Branch, Galveston, TX, United States,

²University of California, Davis, CA, United States

8:45 a.m.

583

TOWARD A RECOMBINANT VACCINE AGAINST FILOVIRUS INFECTION — EXPRESSION AND IMMUNOGENICITY OF SOLUBLE VIRAL ANTIGENS

Axel T. Lehrer¹, Beth-Ann Collier¹, Carolyn L. Weeks-Levy¹, Alan McClelland¹, David E. Clements¹, Charmaine S. Aniya¹, Michael M. Lieberman¹, Teri-Ann S. Wong¹, Benjamin M. Kriederman¹, Steven A. Ogata¹, David F. Waller¹, Beverly Basilio¹, Eric M. Rohlinger¹, William S. Pratt², Russ Bakken², Mary Kate Hart²

¹Hawaii Biotech, Inc., Aiea, HI, United States, ²US Army Medical Research Institute for Infectious Diseases, Fort Detrick, MD, United States

9 a.m.

584

EFFECTS OF AN OPAL TERMINATION CODON PRECEDING THE NSP4 GENE SEQUENCE IN THE O'NYONG NYONG VIRUS GENOME ON *ANOPHELES GAMBIAE* INFECTIVITY

Kevin M. Myles, Cindy L. Kelly, Jeremy P. Ledermann, Ann M. Powers

Centers for Disease Control and Prevention, Division of Vector Borne Infectious Diseases, Fort Collins, CO, United States

9:15 a.m.

585

ROSS RIVER VIRUS EVASION OF TYPE I INTERFERONS

Reed S. Shabman¹, Thomas E. Morrison¹, Laura White¹, Mehul S. Suthar¹, Kenya Madric¹, Suresh Mahalingam², Brett Lidbury², Christopher Moore¹, Mark T. Heise¹

¹University of North Carolina-Chapel Hill, Chapel Hill, NC, United States, ²University of Canberra, Canberra, Australia

9:30 a.m.

586

HUMAN INFLUENZA SURVEILLANCE DURING A TIME OF H5N1 TRANSMISSION IN POULTRY IN INDONESIA

Agus Suwandowo¹, Andrew Jeremijenko², Herman Kosasih², Joko Yuwono¹, Chairin Ma'roef², Steven Bjorge³, Nancy J. Cox⁴, **Patrick J. Blair**²

¹National Institute of Health Research and Development, Jakarta, Indonesia, ²Naval Medical Research Unit-2, Jakarta, Indonesia, ³World Health Organization, Jakarta, Indonesia, ⁴Centers for Disease Control and Prevention, Atlanta, GA, United States

Scientific Session 92

Mosquitoes Vector Biology — Epidemiology I

Monroe West

Wednesday, December 14

8 – 9:45 a.m.

CHAIR

Frederic Tripet

University of California Davis, Davis, CA, United States

Doug Norris

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

8 a.m.

587

GENETIC EVIDENCE THAT *CULEX PIPIENS MOLESTUS* IS LOCALLY FOUNDED FROM *CULEX PIPIENS* COMPLEX IN NORTH AMERICA

Rebekah J. Kent¹, Laura C. Harrington², Douglas E. Norris¹

¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, ²Cornell University, Ithaca, NY, United States

(ACMCIP Abstract)

8:15 a.m.

588

POPULATION STRUCTURE OF *CULEX PIPIENS* COMPLEX MOSQUITOES IN THE NORTHEASTERN UNITED STATES

Frances E. Edillo, Anthony E. Kiszewski, Andrew Spielman

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

8:30 a.m.

589

ANALYSIS OF SINGLE NUCLEOTIDE POLYMORPHISMS IN GENES LOCATED THROUGHOUT THE *ANOPHELES GAMBIAE* GENOME

Norma Gorrochotegui¹, Adama Sacko¹, Frederic Tripet², Michel Slotman², Greg C. Lanzaro², William C. Black¹

¹Colorado State University, Fort Collins, CO, United States,

²Department of Entomology, University of California Davis, Davis, CA, United States

8:45 a.m.

590

REPRODUCTIVE ISOLATION AMONG THE CRYPTIC TAXA OF *ANOPHELES GAMBIAE*: EVIDENCE FROM THE PATTERNS OF EMERGENCE AND SPREAD OF KNOCK-DOWN RESISTANCE TO PYRETHROIDS IN WEST AFRICA

Frederic Tripet¹, Jennifer Wright¹, Lisa Reimer¹, Michel Slotman¹, Gregory Lanzaro¹, Sekou Traore², Guimogo Dolo², Etienne Fondjo³

¹University of California Davis, Davis, CA, United States, ²Malaria Research Training Center, Faculty of Medicine and Pharmacy, University of Mali, Bamako, Mali, ³Programme National de Lutte contre le Paludisme, Yaounde, Cameroon

9 a.m.

591

CONTRASTING PATTERNS OF DIFFERENTIATION BETWEEN THE M AND S MOLECULAR FORMS OF *ANOPHELES GAMBIAE* IN MALI AND CAMEROON

Michel A. Slotman¹, **Frederic Tripet**¹, Lisa Reimer¹, Tara Thiemann¹, Claudio Meneses¹, Abdrahamane Fofana², Rory McAbee³, Anton Cornel³, Etienne Fondjo⁴, Giumogo Dolo², Sekou Traore², Gregory C. Lanzaro¹

¹University of California at Davis, Davis, CA, United States, ²Malaria Training and Research Center, Bamako, Mali, ³University of California at Davis, Parlier, CA, United States, ⁴Ministere de la Sante Publique, Yaounde, Cameroon

9:15 a.m.

592

MICROSATELLITE ANALYSIS REVEALS GENETIC DIFFERENTIATION BETWEEN ENDOPHILIC AND EXOPHILIC *ANOPHELES ARABIENSIS* FROM BURKINA FASO

Federica Santolamazza¹, Erika Schielke², Melissa Garren², Marco Pombo¹, N'Fale Sagnon³, **Alessandra della Torre**¹, Adalgisa Caccone², Jeffrey R Powell², **Carlo Costantini**⁴

¹University of Rome, Rome, Italy, ²University of Yale, New Haven, CT, United States, ³Centre National de Recherche et Formation sur le Paludisme, Ouagadougou, Burkina Faso, ⁴Institut de Recherche pour le Développement (IRD), Ouagadougou, Burkina Faso

9:30 a.m.

593

POPULATION STRUCTURE OF *ANOPHELES ARABIENSIS* AND *ANOPHELES GAMBIAE* IN NIGERIA USING SEQUENCES OF THE MTDNA COI GENE

Stacy D. Matthews¹, Lisa J. Meehan², David Y. Onyabe³, **Jan E. Conn**²

¹Dept. Biomedical Sciences, SPH, SUNY-Albany, Albany, NY, United States, ²Wadsworth Center, NYSDOH, Slingerlands, NY, United States, ³Aeras Global Tuberculosis Foundation, Rockville, MD, United States

Scientific Session 93**Malaria — Molecular Markers of Drug Resistance**

Lincoln East

Wednesday, December 14

8 – 9:45 a.m.

CHAIR

Chansuda Wongsrichanalai

NIPH/NAMRU-2, Phnom Penh, Cambodia

Michael Ferdig

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

8 a.m.

594

IDENTIFICATION OF NOVEL MICROSATELLITE HAPLOTYPES FOR THE TRIPLE MUTANT *DHFR* ALLELE AND IDENTIFICATION OF HIGHLY RESISTANT *PLASMODIUM FALCIPARUM* IN AN AREA OF INTENSE TRANSMISSION IN AFRICA

Andrea M. McCollum¹, Amanda C. Poe¹, Mary Hamel¹, Curtis Huber¹, Zhiyong Zhou¹, Ya Ping Shi¹, Peter Ouma², John Vulule², Peter Bloland¹, Laurence Slutsker², John Barnwell¹, Venkatachalam Udhayakumar¹, Ananias A. Escalante³

¹Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States, ²Kenya Medical Research Institute, Centre for Vector Biology and Control Research, Kisumu, Kenya, ³Arizona State University, School of Life Sciences, Tempe, AZ, United States

8:15 a.m.

595

CHARACTERIZATION OF SEGMENTAL AMPLIFICATIONS ON CHR 5 ASSOCIATED WITH MULTIDRUG RESISTANCE IN *PLASMODIUM FALCIPARUM*

Shalini Nair¹, Denae Nash¹, Dan Sudimack¹, François Nosten², Tim Anderson¹

¹Southwest Foundation for Biomedical Research, San Antonio, TX, United States, ²Shoklo Malaria Research Unit, Mae Sot, Thailand

8:30 a.m.

596

THE ASSOCIATION BETWEEN PFMDR1 COPY NUMBER AND CLINICAL OUTCOME OF ARTESUNATE-MEFLUQUINE THERAPY FOR *PLASMODIUM FALCIPARUM* MALARIA IN PAILIN, CAMBODIA

Alisa P. Alker¹, Naman Shah¹, Rithy Sem², Poravuth Yi², Sina Nemh³, Pharath Lim⁴, Denis Mey Bouth⁵, Reiko Tsuyuoka⁵, Jason D. Maguire⁶, Frederick Arie⁴, Thierry Fandeur⁴, Chansuda Wongsrichanalai⁷

¹Department of Epidemiology, University of North Carolina, Chapel Hill, NC, United States, ²National Center for Parasitology, Entomology and Malaria Control (CNM), Phnom Penh, Cambodia, ³Pasteur Institute and National Center for Parasitology, Entomology and Malaria Control (CNM), Phnom Penh, Cambodia, ⁴Pasteur Institute, Phnom Penh, Cambodia, ⁵World Health Organization (WHO/Cambodia), Phnom Penh, Cambodia, ⁶U.S. Naval Medical Research Unit No. 2 (NAMRU-2), Jakarta, Indonesia, ⁷NIPH/NAMRU-2 Laboratory, Phnom Penh, Cambodia and U.S. Naval Medical Research Unit No. 2 (NAMRU-2), Jakarta, Indonesia

8:45 a.m.

597

MICROSATELLITE POLYMORPHISM WITHIN PFCRT PROVIDES EVIDENCE OF CONTINUING EVOLUTION OF CHLOROQUINE RESISTANT HAPLOTYPES

Jeana T. DaRe¹, Rajeev K. Mehlotra¹, Moses Bockarie¹, John Reeder², Mark Stoneking³, Peter A. Zimmerman¹

¹Case Western Reserve University, Cleveland, OH, United States,

²Papua New Guinea Institute of Medical Research, Goroka, Papua

New Guinea, ³Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

9 a.m.

598

GENETIC ANALYSIS OF THE *P. FALCIPARUM* SODIUM-PROTON EXCHANGER (PFNHE) AND ITS CONTRIBUTION TO QUININE RESISTANCE

Louis Nkrumah¹, Pedro Moura¹, Min Yu¹, Jigar Patel², Michael T. Ferdig², Thomas E. Wellems³, **David A. Fidock¹**

¹Albert Einstein College of Medicine, Bronx, NY, United States,

²University of Notre Dame, Notre Dame, IN, United States,

³National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

9:15 a.m.

599

PFNHE POLYMORPHISMS ARE ASSOCIATED WITH QUININE USAGE IN MALI

Aminatou Kone¹, Jianbing Mu², Issaka Sagara¹, Christopher V. Plowe³, Ogobara K. Doumbo¹, Thomas E. Wellems², Abdoulaye A. Djimde¹

¹University of Bamako, Mali, Bamako, Mali, ²National Institutes of Health, Rockville, MD, United States, ³University of Maryland, Baltimore, Baltimore, MD, United States

(ACMCIP Abstract)

9:30 a.m.

600

IDENTIFICATION OF A NOVEL MUTATION IN THE L4 PLASTID RIBOSOMAL PROTEIN IN *P. FALCIPARUM* AZITHROMYCIN-RESISTANT LINES

Amar Bir S. Sidhu¹, Michael W. Dunne², Lewis E. Drew², David A. Fidock¹

¹Albert Einstein College of Medicine, Bronx, NY, United States,

²Pfizer Global Research and Development, New London, CT, United States

(ACMCIP Abstract)

Symposium 94

African Trypanosomiasis and Vector Based Disease Control

Lincoln West

Wednesday, December 14

8 – 9:45 a.m.

African trypanosomiasis has remained an orphan disease despite its devastating public health and agricultural/nutritional relevance. The speakers will review the disease epidemiology and update progress in the effort to better understand the role of the tsetse fly vector in parasite transmission with the goal of enhancing insect-based control strategies.

CHAIR

Serap Aksoy

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

Michael J. Lehane

Liverpool School of Tropical Medicine, Liverpool, United Kingdom

8 a.m.

EPIDEMIOLOGY OF HUMAN AFRICAN TRYPANOSOMIASIS: A CASE STUDY FROM UGANDA

Loyce Okedi

LIRI, Tororo, Uganda

8:25 a.m.

THE CURRENT PERSPECTIVE ON VECTORS OF AFRICAN TRYPANOSOMIASIS AND DISEASE CONTROL

Joseph N'dungu

KARI, Kikuyu, Kenya

8:45 a.m.

THE CURRENT STATUS OF AFRICAN TRYPANOSOMIASIS IN TANZANIA

Atway R. Msangi

TTRI, Tanga, Tanzania

9:05 a.m.

ROLE OF TSETSE POPULATION GENETICS IN DISEASE EPIDEMIOLOGY

Phillipe Solano

IRD, Burkina Faso

9:25 a.m.

NEW VECTOR-BASED APPROACHES TO TRYPANOSOMIASIS CONTROL

Serap Aksoy

Yale University, New Haven, CT, United States

Symposium 95

Bridging Pathogenesis and Pathology in Malaria

Supported with funding from the Burroughs Wellcome Fund

Jefferson East

Wednesday, December 14 8 – 9:45 a.m.

Linking functional genomics to disease pathologies remains a frontier in malaria. This has created great need for broad, integrated perspectives to understand the complexities pathogenic mechanisms, as well as acute and chronic disease pathologies. This symposium will bring together the latest developments in parasite molecular genetics, host remodeling as well as correlates of fatal disease and malarial immunity to integrate genomics and endemic disease.

CHAIR

Kasturi Haldar

Northwestern University, Chicago, IL, United States

8 a.m.

COMPLEX CORRELATES OF FATAL CEREBRAL MALARIA

Terrie Taylor

Michigan State University, East Lansing, MI, United States

8:35 a.m.

EMERGENT GENOME-WIDE GENETIC SCREENS FOR VIRULENCE DETERMINANTS IN *P. FALCIPARUM*

John Adams

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

9:10 a.m.

GLOBAL VIRULENCE STRATEGIES IN ERYTHROCYTE REMODELING BY *P. FALCIPARUM*

Kasturi Haldar

Northwestern University, Chicago, IL, United States

Symposium 96

New Horizons in Schistosomiasis: Research

Jefferson West

Wednesday, December 14 8 – 9:45 a.m.

Schistosomiasis continues to plague the developing world. This symposium will feature the latest and most exciting research from four investigators that have made important scientific contributions over the past few years. Some of the topics that will be discussed include: dendritic cells in vaccine induced immunity and type-2 response development, role of regulatory T cells in pathogenesis, and parasite genomics as a platform for novel drug discovery. This symposium is part one of a two part series, which will highlight “where we are” and “where we’re going” in the field of schistosomiasis.

CHAIR

Thomas A. Wynn

National Institutes of Health, Bethesda, MD, United States

W. Evan Secor

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

8 a.m.

INTRODUCTION

Thomas A. Wynn

National Institutes of Health, Bethesda, MD

8:05 a.m.

ACTIVATION AND FUNCTION OF DENDRITIC CELLS IN RESPONSE TO SCHISTOSOME EGG ANTIGENS: UNRAVELLING THE NETWORK

Andrew S. MacDonald

University of Edinburgh, Edinburgh, United Kingdom

8:30 a.m.

THE EGG-INDUCED INFLAMMATORY RESPONSE IN MURINE SCHISTOSOMIASIS IS SUPPRESSED BY NATURALLY- OCCURING REGULATORY T CELLS

Matthias Hesse

Cornell University, Ithaca, NY, United States

8:55 a.m.

MODULATION OF IMMUNE RESPONSES BY EARLY SCHISTOSOME INFECTIONS

Adrian P. Mountford

University of York, York, United Kingdom

9:20 a.m.

DISCOVERY DRIVEN APPROACHES TO STUDY SCHISTOSOME BIOLOGY

Karl F. Hoffmann

University of Cambridge, Cambridge, United Kingdom

Symposium 97

Infection Control in the Tropics: Managing Nosocomial Infection with Very Limited Resources

Georgetown East

Wednesday, December 14 8 – 9:45 a.m.

Providing health care in settings with limited resources and infrastructure poses unique challenges. Infection control joins sanitation and immunization as cost-effective interventions, but knowing where the first dollar should be spent is difficult. Outbreaks of hemorrhagic fever in Africa highlight how vulnerable the health systems are to aggressive pathogens. This symposium will look at what is known, and where to start when so much is unknown.

CHAIR

Mark Shelly

University of Rochester School of Medicine and Dentistry, Rochester, NY, United States

8 a.m.

OVERVIEW: WHAT DO WE KNOW ABOUT WHAT WORKS?

Mark Shelly

University of Rochester School of Medicine and Dentistry, Rochester, United States

8:25 a.m.

INFECTION CONTROL IN OUBREAKS OF HEMORRHAGIC FEVER (EBOLA, MARBURG) IN AFRICA

Mark Shelly

University of Rochester School of Medicine and Dentistry, Rochester, NY, United States

8:50 a.m.

PROGRESS IN SOUTH AMERICA: THE EXPERIENCE WITH INFECTION CONTROL IN BRAZIL

Silvia F. Costa

University of Sao Paulo, Sao Paulo, Brazil

9:15 a.m.

BARRIERS AND OPPORTUNITIES IN PROVIDING QUALITY HEALTH CARE IN AFRICA

Abdel Karim Koumare

National Medical Faculty in Mali, Bamako, Mali

Symposium 98

Host Immunomodulation by Helminth Parasites

Georgetown West

Wednesday, December 14 8 – 9:45 a.m.

Recent advances in the areas of functional genomics and proteomics has made it possible to identify various molecular pathways that the helminth parasites use to evade host immune responses. Thus, the theme of this symposia would be to provide comprehensive new information on the molecular mechanisms of host immunomodulation by helminth parasites, more specifically schistosomes, filarial parasites and hookworm.

CHAIR

Ramaswamy Kalyanasundaram

University of Illinois, Rockford, IL, United States

CO-CHAIR

Stephen J. Davies

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

8 a.m.

MODULATION OF SCHISTOSOME DEVELOPMENT BY CD4+ T CELLS

Stephen J. Davies

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

8:30 a.m.

HELMINTH INDUCED REGULATORY T CELLS: THEIR ROLE IN THE ESTABLISHMENT AND PERSISTENCE OF INFECTION, AND CONTROL OF ALLERGY

Matthew Taylor

Institute of Immunology and Infection Research, Edinburgh, United Kingdom

8:55 a.m.

SCHISTOSOME DERIVED HIGH MOBILITY GROUP BOX (HMGB)-1 PROTEIN AND ITS ROLE IN HOST IMMUNOMODULATION

Ramaswamy Kalyanasundaram

University of Illinois, Rockford, IL, United States

9:20 a.m.

SELECTIVE INTERACTIONS OF HOOKWORM EXCRETORY/SECRETORY PRODUCTS WITH NATURAL KILLER CELLS

Stephinie Constant

George Washington University, Washington, DC, United States

Symposium 99

Emerging Diseases in Asia, Latin America and Africa

Organized by the International Federation of Tropical Medicine

International Ballroom East

Wednesday, December 14

8 – 9:45 a.m.

CHAIR

Eduardo Gotuzzo

IMT 'Alexander Von Humboldt', Lima, Peru

Thomas P. Monath

Acambis, Inc., Cambridge, MA

Claudio Ribeiro

Instituto Oswaldo Cruz, FIOCRUZ, Rio de Janeiro, Brazil

8 a.m.

IMPACT OF EMERGING DISEASES OF ASIA

Sornchai Looareesuwan

Mahidol University, Bangkok, Thailand

8:35 a.m.

MALARIA IN EUROPEAN TRAVELERS

Pierre Ambroise-Thomas

L'Eynardiere, Meylan, France

9:10 a.m.

EMERGING DISEASES OF LATIN AMERICA

Eduardo Gotuzzo

IMT 'Alexander Von Humboldt', Lima, Peru

Scientific Session 100

Malaria — Diagnosis

International Ballroom West

Wednesday, December 14

8 – 9:45 a.m.

CHAIR

David J. Sullivan, Jr.

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

Jean-Paul Chretien

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

8 a.m.

601

OPERATIONAL RESPONSE TO MALARIA EPIDEMICS: A COST EFFECTIVE ANALYSIS OF THE USE OF RAPID DIAGNOSTIC TESTS

Francesco Checchi¹, Estelle Rolland¹, Loretxu Pinoges¹, Suna Balkan², **Jean-Paul Guthmann**¹, Philippe Jean Guérin¹

¹Epicentre, Paris, France, ²Médecins sans Frontières, Paris, France

8:15 a.m.

602

MAPPING OF THE EPITOPES RECOGNIZED BY PFHRPII-SPECIFIC MONOCLONAL ANTIBODIES ONTO THEIR PARASITE PROTEIN TARGET: IMPLICATIONS FOR PFHRPII-BASED MALARIA RAPID DIAGNOSTIC TESTS (RDTs)

Nelson Lee¹, Joanne Baker², Katherine Andrews¹, Michelle Gatton¹, David Bell³, Qin Cheng⁴, James S. McCarthy¹

¹QIMR, University of Queensland, Brisbane, Australia, ²Department of Drug Resistance and Diagnostics, Australian Army Malaria Institute and University of Queensland, Brisbane, Australia, ³West Pacific Regional Office, World Health Organisation, Manila, Philippines, ⁴Department of Drug Resistance and Diagnostics, Australian Army Malaria Institute, Brisbane, Australia

8:30 a.m.

603

EVALUATION OF MALARIA SCREENING IN LIBERIAN REFUGEES BY BLOOD SMEAR AND RAPID ANTIGEN CAPTURE ASSAY (BINAX™). PRELIMINARY RESULTS

William M. Stauffer¹, Ashley Newberry², Charles Cartwright², Jon Rosenblatt³, Kevan Hanson², Lynne Sloan³, Dean Tsukayama⁴, Charlotte Taylor⁵, Billie Juni⁵

¹University of Minnesota, Minneapolis, MN, United States, ²Hennepin County Medical Center, Minneapolis, MN, United States, ³Mayo Clinic, Rochester, MN, United States, ⁴Hennepin Assessment Program, Minneapolis, MN, United States, ⁵Minnesota Department of Health, Minneapolis, MN, United States

8:45 a.m.

604

QUALITY ASSURANCE FOR MALARIA CLINICAL TRIAL MICROSCOPY BASED ON THEORETICAL AND EMPIRICAL EVIDENCE

Jean-Paul Chretien¹, Wendy Prudhomme², Ken Awuondo³, Doug Tang⁴, Shon Remich³, Bernard Ogutu³, Ampon Nanakorn³, Colin Ohrt⁴

¹DoD-Global Emerging Infections Surveillance and Response System, Silver Spring, MD, United States, ²National Institutes of Health, Bethesda, MD, United States, ³US Army Medical Research Unit-Kenya, Kisumu, Kenya, ⁴Walter Reed Army Institute of Research, Silver Spring, MD, United States

9 a.m.

605

DEVELOPMENT OF A RAPID, ACCURATE, LOW-COST MALARIA SCREENING ASSAY FOR EPIDEMIOLOGIC AND CLINICAL APPLICATIONS

Andrew B. Feldman¹, Nirbhay Kumar², Jeff Lin¹, Myaing Nyunt³, John Pisciotto², Peter Scholl², David Sullivan², Phillip Thuma⁴, Plamen Demirev¹

¹Johns Hopkins University, Applied Physics Laboratory, Laurel, MD, United States, ²Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States, ³Johns Hopkins School of Medicine, Baltimore, MD, United States, ⁴Macha Malaria Institute, Choma, Zambia

9:15 a.m.

606

LASER DESORPTION MASS SPECTROMETRIC DETECTION OF MALARIA HEMOZIN IN HUMAN CLINICAL SAMPLES

John M. Pisciotto¹, Andy B. Feldman², Plamen A. Demirev², Jeff S. Lin², Peter F. Scholl¹, Evelyn Kokoskin³, David Sullivan¹

¹Johns Hopkins, Baltimore, MD, United States, ²Johns Hopkins APL, Laurel, MD, United States, ³McGill University, Montreal, PQ, Canada

9:30 a.m.

607

ELEVATED CHOLINE PHOSPHATE — A BIOMARKER FOR IN VIVO MALARIA PARASITE DETECTION BY MASS SPECTROMETRY

Plamen A. Demirev¹, John M. Pisciotto², Peter F. Scholl², David Sullivan², Nirbhay Kumar², Jeff S. Lin¹, Andrew B. Feldman¹

¹Johns Hopkins University, Laurel, MD, United States, ²Johns Hopkins University, Baltimore, MD, United States

(ACMCIP Abstract)

Exhibit Hall Open

Exhibit Hall

Wednesday, December 14

9:30 – 10:30 a.m.

Coffee Break

Exhibit Hall

Wednesday, December 14

9:45 – 10:15 a.m.

Scientific Session 101

Filariasis III

Hemisphere

Wednesday, December 14

10:15 a.m. – Noon

CHAIR

Alan L. Scott

Johns Hopkins University, Baltimore, MD, United States

Yashodhara Dash

University of Connecticut Health Center, Farmington, CT, United States

10:15 a.m.

608

BRUGIA MALAYI L3 LARVAE SECRETE A CHEMOTACTIC FACTOR FOR HUMAN EOSINOPHILS THAT MIMICS A CCR3 LIGAND

Yae-Jean Kim, Melissa Law, Thomas B. Nutman

National Institutes of Health, Bethesda, MD, United States

10:30 a.m.

609

MEMORY RESPONSES TO B.PAHANGI L3 LARVAE IN INTRAPERITONEAL INFECTION MODEL IN MICE

Yashodhara Dash, Thiruchandurai V. Rajan

UCHC, Farmington, CT, United States

(ACMCIP Abstract)

10:45 a.m.

610

PERITONEAL EXUDATE CELLS SUPPORT THE L3-L4 MOLT OF BRUGIAN L3 LARVAE IN CO-CULTURE

Thiruchandurai V. Rajan, Carol McGuinness

University of Connecticut Health Center, Farmington, CT, United States

11 a.m.

611

HELMINTH INFECTION INDUCES PERSISTENT CHANGES IN LUNG DC POPULATIONS

Mark C. Siracusa, Josh J. Reece, Alan L. Scott

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

(ACMCIP Abstract)

11:15 a.m.

612

CD4+ T-CELLS ARE THE PREDOMINANT IL-10 PRODUCING CELLS IN THE CIRCULATION OF FILARIAL-INFECTED PATIENTS**Edward Mitre**, Thomas B. Nutman*National Institutes of Health, Bethesda, MD, United States*

(ACMCIP Abstract)

11:30 a.m.

613

HELMINTH INDUCED REGULATORY T CELLS: THEIR ROLE IN THE ESTABLISHMENT AND PERSISTENCE OF INFECTION, AND CONTROL OF ALLERGY**Matthew D. Taylor**¹, Mark S. Wilson², Constance A. Finney¹, Anjanette Harris¹, Judith E. Allen¹, Rick M. Maizels¹¹University of Edinburgh, Edinburgh, United Kingdom, ²National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

(ACMCIP Abstract)

11:45 a.m.

614

BRUGIA MALAYI MICROFILARIAE INHIBIT MYCOBACTERIUM TUBERCULOSIS-INDUCED IFN γ PRODUCTION BY CD4+ T CELLS IN A HUMAN COINFECTION MODEL**Kawsar R. Talaat**, Thomas B. Nutman*National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States*

(ACMCIP Abstract)

Scientific Session 102**Bacteriology II — Diarrhea — Other***Military*

Wednesday, December 14

10:15 – 11:45 a.m.

CHAIR

Theresa J. Ochoa*Baylor College of Medicine, Houston, TX, United States***Edward T. Ryan***Massachusetts General Hospital, Boston, MA, United States*

10:15 a.m.

615

PREVENTING DIARRHEA FOLLOWING WATER EMERGENCIES: AN EVALUATION OF HOME-BASED CHLORINATION, WEST TIMOR, INDONESIA, 2004**Gavin J. Macgregor-Skinner**¹, Endang Widyastuti², Khrisna Ardiani², Arte Pisceska², Robert Michael Hoekstra¹, Rob Quick¹¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²CARE International Indonesia, Jakarta, Indonesia

10:30 a.m.

1098

LOW RISK OF HEMOLYTIC UREMIC SYNDROME (HUS) FOLLOWING EARLY EFFECTIVE ANTIMICROBIAL THERAPY OF SHIGELLA DYSENTERIAE TYPE 1 INFECTION IN BANGLADESHMichael L. Bennis¹, Wasif A. Khan², Monira Begum², Emily A. Bridges³, Sabeena Ahmed², Debasish Saha², Mohammad A. Salam², David Acheson⁴, Edward T. Ryan³¹Africa Centre for Health and Population Studies, Mtubatuba, South Africa, ²ICDDR,B: International Centre for Health and Population Research, Bangladesh, Dhaka, Bangladesh, ³Massachusetts General Hospital, Tropical and Geographic Medicine Center, Division of Infectious Diseases, Boston, MA, United States, ⁴Tufts-New England Medical Centre, Division of Geographic Medicine and Infectious Diseases, Boston, MA, United States

10:45 a.m.

617

AFTER THE FLOOD: AN EVALUATION OF IN-HOME DRINKING WATER TREATMENT WITH COMBINED FLOCCULENT-DISINFECTANT FOLLOWING TROPICAL STORM JEANNE — GONAIVES, HAITI, 2004**Romulo E. Colindres**¹, Seema Jain¹, Anna Bowen¹, Polyanna Domond², Eric Mintz¹¹Centers for Disease Control and Prevention, Atlanta, GA, United States, ²Population Services International, Port-au-Prince, Haiti

11 a.m.

618

EFFECT OF BOVINE LACTOFERRIN ON BACTERIAL PATHOGENS ASSOCIATED WITH PERSISTENT DIARRHEA**Theresa J. Ochoa**¹, Chase E. Guion², Jane Z. Chen², Robert J. McMahon³, Thomas G. Cleary²¹Universidad Peruana Cayetano Heredia, Lima, Peru, ²University of Texas Health Science Center at Houston, Houston, TX, United States, ³Mead Johnson Nutritionals, Evansville, IN, United States

11:15 a.m.

619

PROTECTION AGAINST BOTULINUM NEUROTOXIN SEROTYPES A, B, AND C USING MIXTURES OF CANDIDATE VACCINES DERIVED FROM VENEZUELAN EQUINE ENCEPHALITIS (VEE) REPLICON VECTOR SYSTEM

Jennifer L. Groebner¹, John S. Lee¹, Kurt I. Kamrud², Leonard A. Smith³, Theresa J. Smith³, Cathleen M. Lind¹, Jeffrey D. Chulay², Jonathan F. Smith²

¹Virology Division, USAMRIID, Frederick, MD, United States,

²AlphaVax, Inc., Research Triangle Park, NC, United States,

³Integrated Toxicology Division, USAMRIID, Frederick, MD, United States

11:30 a.m.

620

ORAL FLUID IGG TETANUS ANTITOXIN: A NOVEL TOOL FOR MEASURING IMMUNIZATION COVERAGE

Milagritos D. Tapia¹, Lilian Cuberos¹, Samba O. Sow², Mama N. Doumbia², Modibo Bagayogo², Marcela F. Pasetti¹, Karen Kotloff¹, Myron M. Levine¹

¹University of Maryland School of Medicine, Baltimore, MD, United States, ²Centre pour le Developpement des Vaccins - Mali, Bamako, Mali

Symposium 103
Prospective Studies of Dengue Transmission and Disease in Kamphaeng Phet, Thailand

Monroe East

Wednesday, December 14

10:15 a.m. – Noon

Since 1998, children of Kamphaeng Phet, a rural province in north-central Thailand, have been the focus of an National Institute of Allergy and Infectious Diseases/MIDRP-funded prospective field study of dengue virus transmission and disease. Earlier this population participated in key field studies of vaccines against Japanese encephalitis and hepatitis A viruses. Dengue studies have yielded insightful new data on the dynamics of virus transmission in humans, immunologic correlates of disease, and entomological correlates to virus transmission. Participating investigators will summarize these data and discuss their relevance to future field studies, including evaluation of dengue vaccines.

CHAIR

Francis A. Ennis

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

Timothy P. Endy

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

10:15 a.m.

BURDEN OF DENGUE INFECTION AND ILLNESS

Supamit Chunsuttiwat

Ministry of Public Health, Nonthaburi, Thailand

10:40 a.m.

DYNAMICS OF DENGUE VIRUS TRANSMISSION WITHIN THAI VILLAGES

Mammen P. Mammen, Jr.

Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

11:05 a.m.

LONGITUDINAL TESTS OF ENTOMOLOGICAL ASSUMPTIONS FOR DENGUE CONTROL

Thomas W. Scott

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

11:30 a.m.

IMMUNOLOGIC CORRELATES OF DENGUE DISEASE

Alan L. Rothman

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

Scientific Session 104
Mosquitoes — Vector Biology — Epidemiology II

Monroe West

Wednesday, December 14

10:15 a.m. – Noon

CHAIR

Hilary Ranson

Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Clare Strode

Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:15 a.m.

622

PROGRESS TOWARDS A SPECIFIC MICROARRAY FOR DETECTING INSECTICIDE RESISTANCE IN FIELD POPULATIONS OF MALARIA VECTORS

Hilary Ranson¹, Jean Philippe David¹, Clare Strode¹, Pie Muller¹, John Vontas²

¹Liverpool School of Tropical Medicine, Liverpool, United Kingdom,

²Agricultural University of Athens, Athens, Greece

10:30 a.m.

623

THE DIFFERENTIAL GENE EXPRESSION OF DETOXIFICATION ENZYMES IN ADULT AND IMMATURE STAGES OF THE MALARIA MOSQUITO *ANOPHELES GAMBIAE*

Clare Strode, Janet Hemingway, Hilary Ranson

Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:45 a.m.

624

TEMPORAL CHANGES IN THE FREQUENCY OF THE KNOCK-DOWN RESISTANCE ALLELE (KDR) IN ANOPHELES GAMBIAE MOLECULAR FORM S FROM CENTRAL BURKINA FASO

Federica Santolamazza¹, Beniamino Caputo¹, Marco Pombi¹, Pamela Avellino¹, Nora J Besansky², N'Fale Sagnon³, Carlo Costantini⁴, **Alessandra della Torre**¹

¹University of Rome, Rome, Italy, ²Notre Dame University, Notre Dame, IN, United States, ³Centre National de Recherche et Formation sur le Paludisme, Ouagadougou, Burkina Faso, ⁴Institut de Recherche pour le Développement (IRD), Ouagadougou, Burkina Faso

11 a.m.

625

A FRESH APPROACH EVALUATING ESTERASE B HETEROGENEITY OF CULEX PIPIENS COMPLEX POPULATIONS IN A TRANSECT FROM THE EASTERN UNITED STATES

Ling Zhou¹, Joseph H. Vineis², William G. Brogdon¹

¹Centers for Disease Control and Prevention, Chamblee, GA, United States, ²New York State Department of Health, Slingerlands, NY, United States

11:15 a.m.

626

INSECTICIDE TREATED MATERIALS FOR THE CONTROL OF DENGUE VECTORS IN LATIN AMERICA

Audrey Lenhart¹, Philip McCall¹, Elci Villegas², Manuel Ochoa³, Neal Alexander⁴, Axel Kroeger⁵

¹Liverpool School of Tropical Medicine, Liverpool, United Kingdom, ²Universidad de los Andes, Trujillo, Venezuela, ³IMSS-Oportunidades, Veracruz, Mexico, ⁴London School of Hygiene and Tropical Medicine, London, United Kingdom, ⁵WHO-TDR, Geneva, Switzerland

11:30 a.m.

627

THE USE OF PYRIPROXYFEN FOR THE CONTROL OF AEDES AEGYPTI IN IQUITOS, PERU

Gregor J. Devine¹, Jeff Stancil², Elvira Zamora³, Wagner Orellana³, Moises Sihuinchu³, Carlos Vidal³, Amy Morrison⁴

¹Rothamstead Research, Harpenden, United Kingdom, ²Naval Medical Research Center, Detachment, APO, AE, United States, ³Dirección de Salud, Laboratorio Referencial, Iquitos, Peru, ⁴University of California, Davis, CA, United States

11:45 a.m.

628

TUBE BIOASSAY FOR QUANTIFYING REPELLENCY, DETERENCY, AND TOXICITY OF INSECTICIDE-TREATED BEDNET MATERIALS PRESENTED TO ANOPHELES GAMBIAE S.S.

James R. Miller¹, Piera Siegert¹, Edward Walker¹, Philip McCall²

¹Michigan State University, E. Lansing, MI, United States, ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Scientific Session 105

Malaria — Clinical Trials and Trial Design

Lincoln East

Wednesday, December 14

10:15 a.m. – Noon

CHAIR

Martha M. Lemnge

Amani Medical Research Centre, National Institute for Medical Research, Tanga, United Republic of Tanzania

Ambrose Talisuna

Med Biotech Labs, Kampala, Uganda

10:15 a.m.

629

GENDER IMBALANCE IN PHASE 1 MALARIA VACCINE TRIALS IN AFRICA

Mahamadou A. Thera¹, Karim Traore¹, Abdoulaye K. Kone¹, Ando B. Guindo¹, Drissa Coulibaly¹, Issaka Sagara¹, Dapa A. Diallo¹, Alassane Dicko¹, Kirsten E. Lyke², Christopher V. Plowe², Ogobara K. Doumbo¹

¹Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, ²University of Maryland, School of Medicine, Baltimore, MD, United States

10:30 a.m.

630

CLINICAL CASE DEFINITIONS AND MALARIA VACCINE EFFICACY

William O. Rogers¹, Frank Atuguba², Abraham R. Oduro², Abraham Hodgson², Kwadwo A. Koram³

¹Naval Medical Research Unit #3, Cairo, Egypt, ²Navrongo Health Research Centre, Navrongo, Ghana, ³Noguchi Memorial Institute for Medical Research, Accra, Ghana

10:45 a.m.

631

THE IMPACT OF DIAGNOSTIC TECHNIQUE ON VACCINE EFFICACY MEASUREMENTS IN CLINICAL TRIALS

Wendy Prudhomme O'Meara, F. Ellis McKenzie

Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

11 a.m.

632

A RANDOMIZED, DOUBLE BLINDED STUDY OF THE EFFICACY AND SAFETY OF TAFENOQUINE MONOTHERAPY FOR THE TREATMENT OF *PLASMODIUM VIVAX* IN ADULTS

Mark M. Fukuda¹, Srivicha Krudsood², Robert S. Miller¹, Krisada Jongsakul¹, Harald Noedl¹, Mali Ittiverakul¹, Nillawan Buathong¹, Sukhuma Warrasak³, Ataya Euswas³, Gobsiri Chalermrut², Noppadon Tangpukdee², Keith C. Deen⁴, Colin Neate⁴, Colin K. Ohrt⁵, Sornchai Looareesuwan²

¹Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, ²Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, ³Ramathibodi Faculty Hospital, Mahidol University, Bangkok, Thailand, ⁴GlaxoSmithKline, Collegeville, PA, United States, ⁵Walter Reed Army Institute of Research, Silver Spring, MD, United States

11:15 a.m.

633

INTERMITTENT PREVENTIVE TREATMENT FOR MALARIA IN PREGNANCY IN A RURAL AREA OF WESTERN KENYA: COMMUNITY-BASED ASSESSMENT TOWARDS IMPROVED COVERAGE

P.O. Ouma¹, A.M. van Eijk², Mary J Hamel², F. Odhiambo¹, E. Sikuku¹, A. Ayisi¹, A. Adazu¹, J. Vulule¹, L. Slutsker²

¹Kenya Medical Research Institute, Centre for Vector Biology and Control, Western Kenya, Kenya ²Centers for Disease Control and Prevention, Atlanta, GA

11:30 a.m.

634

MONITORING EFFICACY OF SULFADOXINE/ PYRIMETHAMINE AND AMODIAQUINE AMONG UNDER-FIVES AT MOBILE CLINICS IN TWO COMMUNITIES IN MUHEZA, NORTHEASTERN TANZANIA

Martha M. Lemnge¹, Bruno Mmbando¹, Daniel Minja¹, Julius K. Mhina¹, Michael Alifrangis², Anita M. Ronn³, Ib C. Bygbjerg⁴

¹National Institute for Medical Research, Tanga, United Republic of Tanzania, ²Centre for Medical Parasitology, Institute of Medical Microbiology and Immunology, University of Copenhagen, Copenhagen, Denmark, ³Centre for Medical Parasitology, Copenhagen University Hospital, University of Copenhagen, Copenhagen, Denmark, ⁴Centre for Medical Parasitology, Institute of Public Health, University of Copenhagen, Copenhagen, Denmark

11:45 a.m.

635

ANTIMALARIAL DRUG POLICY IN THE EASTERN AFRICA SUB-REGION: CHALLENGES FOR CHANGING TO COMBINATION THERAPY AT DIFFERENT LEVELS OF HEALTH CARE DELIVERY

John H. Ouma¹, Ambrose Talisuna²

¹Maseno University, Via Kisumu, Kenya, ²Ministry of Health, Kampala, Uganda

Symposium 106

African Trypanosomiasis: Molecular Aspects of Tsetse and Parasite Transmission

Lincoln West

Wednesday, December 14

10:15 a.m. – Noon

The speakers will present recent work on the interactive biology of trypanosomes within tsetse host, the role of tsetse immune responses during parasite transmission as well as progress made towards tsetse genomics and full genome sequence of *Glossina*.

CHAIR

Serap Aksoy

Yale University, New Haven, CT, United States

Neil Hall

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

10:15 a.m.

ROLE OF TSETSE MIDGUT LECTINS DURING TRYPANOSOME TRANSMISSION

Michael J. Lehané

Liverpool School of Tropical Medicine, Pembroke Place Liverpool, United Kingdom

10:45 a.m.

MIDGUT PROTEINS INVESTIGATED FOR PARASITE TRANSMISSION

Terry Pearson

University of Victoria, Victoria, BC, Canada

11:10 a.m.

TSETSE SALIVARY GLAND PROTEINS

Jan Van den Abbeele

Institute of Tropical Medicine, Antwerp, Belgium

11:35 a.m.

GENOMICS RESOURCES FOR GLOSSINA

Win Hide

South African National Bioinformatics Institute, Bellville, South Africa

Symposium 107

Malaria Vaccine Technology Roadmap: Results of Collaboration and Next Steps

Jefferson East

Wednesday, December 14 10:15 a.m. – Noon

The Malaria Vaccine Technology Roadmap (TRM) uses a novel approach to provide a coherent framework through which to focus resources, facilitate partnerships, and identify multiple research pathways to a viable malaria vaccine. A series of meetings during the past year has brought together a diverse group of over 225 stakeholders, including scientists, donors, and public health leaders representing more than 35 countries and 100 organizations. They discussed the challenges hindering malaria vaccine development and identified activities to address them. The Roadmap features the high-level results from these working meetings and groups the activities proposed into a set of broad initiatives that the community could adopt to accelerate malaria vaccine development. This symposium will present the Roadmap to the ASTMH community, seeking its feedback and soliciting its involvement in this ongoing process.

CHAIR

Sarah Ewart

The PATH Malaria Vaccine Initiative, Seattle, WA, United States

10:15 a.m.

INTRODUCTION TO THE MALARIA VACCINE TECHNOLOGY ROADMAP

Regina Rabinovich

Bill and Melinda Gates Foundation, Seattle, WA, United States

10:40 a.m.

PRESENTATION OF ROADMAP RESULTS

Fred Binka

WHO, Geneva, Switzerland

11:05 a.m.

PRESENTATION OF THE ROADMAP INITIATIVES

Marie-Paule Kieny

WHO, Geneva, Switzerland

11:30 a.m.

PRESENTATION OF CURRENT ROADMAP ACTIVITIES AND NEXT STEPS

Melinda Moree

PATH Malaria Vaccine Initiative, Seattle, WA, United States

Symposium 108

New Horizons in Schistosomiasis: Where Do We Go From Here?

Jefferson West

Wednesday, December 14 10:15 a.m. – Noon

In recent years, researchers who study tuberculosis and filariasis have benefited greatly in terms of available funding by developing a cohesive agenda for their diseases. In contrast, certain avenues for funding in schistosomiasis have been limited by the lack of a consensus among investigators with respect to the questions of greatest significance. This symposium is designed to “start the conversation” about whether developing a more coordinated agenda is desirable, and if so, beginning to define what the elements of that agenda should be. In no way is this meant to limit the wide breadth of interesting research that schistosome researchers pursue, but the goal is to provide general accord that will better secure funding and investigators as we go forward. This symposium is part two of a two part series, which will highlight “where we are” and “where we’re going” in the field of schistosomiasis.

CHAIR

W. Evan Secor

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

Thomas A. Wynn

National Institutes for Health, Bethesda, MD, United States

10:15 a.m.

IT'S WORSE THAN WE THOUGHT: REASSESSING THE HEALTH BURDEN OF SCHISTOSOMIASIS

Charles H. King

Case Western Reserve University, Cleveland, OH, United States

10:45 a.m.

THE SUM OF THE WHOLE IS GREATER THAN THE SUM OF PARTS: EXPERIENCES OF THE GLOBAL ALLIANCE TO ELIMINATE LYMPHATIC FILARIASIS

Eric A. Ottesen

Rollins School of Public Health, Emory University, Atlanta, GA, United States

11:10 a.m.

YOU WANT MONEY FOR WHAT?????: PERSPECTIVES OF THE FUNDING AGENCIES

Stephanie L. James

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

11:35 a.m.

RESEARCH TO CONTROL: SHOULD WE (COULD WE) FORMULATE A PLAN; WHO WILL AGREE TO WHAT; AT WHAT COST?

Daniel G. Colley

University of Georgia, Athens, GA, United States

Symposium 109

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

Georgetown East

Wednesday, December 14 10:15 a.m. – Noon

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

CHAIR

James W. Kazura

Case Western Reserve University, Cleveland, OH, United States

Cathi Siegel

Case Western Reserve University, Cleveland, OH, United States

10:15 a.m.

SELECTION OF THE 'RIGHT' JOURNAL FOR YOUR WORK: WHAT CONSTITUTES A WELL VERSUS POORLY WRITTEN MANUSCRIPT: THE EDITORIAL PROCESS

James W. Kazura

Case Western Reserve University, Cleveland, OH, United States

10:50 a.m.

THE SUBMISSION AND REVIEW PROCESS: ORGANIZATION AND NITTY-GRITTY DETAILS

Cathi Siegel

Case Western Reserve University, Cleveland, OH, United States

11:25 a.m.

THE GOOD, BAD, AND UGLY OF THE REVIEW: EDITORIAL, CORRESPONDING AUTHOR AND REVIEWER PERSPECTIVES

Joe Vinetz

University of California, San Diego, CA, United States

Symposium 110

Impact of Sex and Hormones on Parasitic Infections

Georgetown West

Wednesday, December 14 10:15 a.m. – Noon

The prevalence and intensity of infections caused by protozoa, nematodes, trematodes, cestodes, and arthropods generally is higher in males than females. Immunological differences exist between the sexes that may underlie increased parasitism in males as compared with females. Several field and laboratory studies link sex differences in immune function with circulating steroid hormones; thus, the roles of sex steroids, including testosterone, estradiol and progesterone will be addressed. The primary goal of this symposium is to increase awareness about the prevalence and causes of sex differences in response to parasites.

CHAIR

Sabra L. Klein

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

10:15 a.m.

ROLE OF HOST SEX IN SUSCEPTIBILITY TO FILARIAL INFECTION

T. V. Rajan

University of Connecticut Health Center, Farmington, CT, United States

10:45 a.m.

MECHANISMS OF SEX-DETERMINED RESISTANCE TO LEISHMANIA MEXICANA

Abhay R. Satoskar

Ohio State University, Columbus, OH, United States

11:10 a.m.

THE ROLE OF SEX STEROIDS IN HOST-PARASITE RELATIONSHIPS: THE CASE OF THE LARVAL CESTODE OF *TAENIA CRASSICEPS*

Jorge M. Montor

Universidad Nacional Autonoma de Mexico, Mexico City, Mexico

11:35 a.m.

INFLUENCE OF SEX AND HORMONES ON MALARIA INFECTION

Sabra L. Klein

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

Symposium 111

Burroughs Wellcome Fund Symposium: New Initiatives in Malaria Awards

Supported with funding from the Burroughs Wellcome Fund

International Ballroom East

Wednesday, December 14 10:15 a.m. – Noon

This symposium is designed to review and update progress in basic malaria research, supported through the Burroughs Wellcome Fund's New Initiatives in Malaria program. This year, speakers will be talking when, where, and how the plasmodium and the host come together.

CHAIR

Victoria P. McGovern

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

10:15 a.m.

GENETIC AND FUNCTIONAL DISSECTION OF SUSCEPTIBILITY TO MALARIA

Mary Stevenson

McGill University, Montreal, Quebec, Canada

10:45 a.m.

MATERNAL MALARIA AND CHONDROITIN SULFATE PROTEOGLUCANS

Channe Gowda

Pennsylvania State University, Hershey, PA, United States

11:10 a.m.

GENETIC DISSECTION OF MALARIA MORBIDITY

James W. Kazura

Case Western Reserve University, Cleveland, OH, United States

11:35 a.m.

THE FUNCTION OF SPOROZOITE MEMBRANE PROTEINS IN GENETICALLY ENGINEERED MALARIA PARASITES

Victor Nussenzweig

New York University, New York, NY, United States

Symposium 112

Current Controversies in the Clinical Management of Cystic Echinococcosis

International Ballroom West

Wednesday, December 14 10:15 a.m. – Noon

In recent years there have been significant advances in hydatid chemotherapy and in percutaneous treatment as alternatives to traditional operative surgery. There is however, no widely agreed protocol for the management of this condition. This symposium will discuss the evidence for and relative merits of the available treatment modalities, and discuss the way forward.

CHAIR

Peter L. Chiodini

The Hospital for Tropical Diseases, London, United Kingdom

Enrico Brunetti

University of Pavia, Pavia, Italy

10:15 a.m.

THE STATE OF THE ART OF MANAGING PATIENTS WITH CYSTIC ECHINOCOCCOSIS

Thomas Junghanss

University of Heidelberg, Heidelberg, Germany

10:45 a.m.

PERCUTANEOUS TECHNIQUES FOR DIAGNOSIS AND TREATMENT

Enrico Brunetti

University of Pavia, Pavia, Italy

11:10 a.m.

MEDICAL TREATMENT OF CYSTIC ECHINOCOCCOSIS

John Horton

The Paddock, Hitchin, United Kingdom

11:35 a.m.

IS THIS THE END OF THE ROAD FOR SURGICAL MANAGEMENT?

Antonio Menezes M. da Silva

Hospital Pulido Valente, Lisbon, Portugal

Burroughs Wellcome Fund — ASTMH Fellowship Committee Meeting

Chevy Chase

Wednesday, December 14 Noon – 1:30 p.m.

Exhibit Hall Open/Box Lunches

Exhibit Hall

Wednesday, December 14 Noon – 2:30 p.m.

Poster Session B

Exhibit Hall

Wednesday, December 14 Noon – 1:30 p.m.

Protozoa – Opportunistic Protozoa

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ISOSPORIASIS AND FECAL EOSINOPHILIA

J.C. Petithory, F. Ardoin, L.R. Ash

Qualité en Parasitologie et Biologie, Centre Hospitalier 95500 Gonesse France; Department of Epidemiology, UCLA School of Public Health, Los Angeles, CA

Arthropods/Entomology – Other

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MOLECULAR APPROACHES TO THE ANALYSIS OF EPIDEMIOLOGY, DRUG RESISTANCE AND HOST IMMUNE RESPONSES TO THE SCABIES MITE SARCOPTES SCABIEI

Deborah Holt, Kate Mounsey, Susan Pizzutto, Amy Slender, Shelley Walton

Menzies School of Health Research, Casuarina, Australia

(ACMCIP Abstract)

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A STUDY OF STORAGE CONDITIONS FOR SAND FLY SAMPLES TO BE TESTED BY REAL TIME PCR

Lara Gilmore, Lisa Hochberg, Edgar Rowton, Phillip Lawyer, Russell Coleman

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

(ACMCIP Abstract)

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GENETIC STRUCTURE OF *TRITOMA INFESTANS* POPULATIONS FROM RURAL VILLAGES IN NORTHERN ARGENTINA

Paula L. Marcet¹, LeeAnn Jones², Ricardo E. Gürtler¹, Uriel Kitron³, Ellen M. Dotson²

¹University of Buenos Aires, Buenos Aires, Argentina, ²Centers for Disease Control and Prevention - DPD - Entomology, Atlanta, GA, United States, ³University of Illinois, Urbana, IL, United States

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GENETIC STRUCTURE OF *TRITOMA INFESTANS* POPULATIONS FROM NORTHERN ARGENTINA AND OTHER SOUTH AMERICA COUNTRIES BASED ON MITOCHONDRIAL DNA ANALYSIS

Paula L. Marcet¹, LeeAnn Jones², Romina Piccinali¹, Ricardo E. Gürtler¹, Uriel Kitron³, Ellen M. Dotson⁴

¹University of Buenos Aires, Buenos Aires, Argentina, ²Centers for Disease Control and Prevention - DPD - Entomology, Atlanta, GA, United States, ³University of Illinois, Urbana, IL, United States, ⁴Centers for Disease Control and Prevention - DPD - Entomology, Atlanta, GA, United States

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EFFECTS OF HEALTH SECTOR REFORM AND DECENTRALIZATION ON MALARIA ENDEMIC COLOMBIAN MUNICIPALITIES

Gabriel Carrasquilla¹, Olga L. Gómez², Julio C. Mateus³

¹Fundación Santa Fe de Bogota, Bogotá, Colombia, ²Fundación para la Educación Superior-FES, Cali, Colombia, ³Universidad del Valle, Fundación para la Educación Superior-FES, Cali, Colombia

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ACCEPTANCE OF INSECTICIDE TREATED NETS (ITNS) COMPARED TO ENTOMOLOGICAL DATA

Léa M. Pare Toe¹, A. Diabaté¹, R. Dabiré¹, Ole Skovmand², M. Akogbeto³, T. Baldet³

¹Centre Muraz, Bobo Dioulasso, Burkina Faso, ²Intelligent Insect Control, Montpellier, France, ³CIRAD, Montpellier, France

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SALIVA OF THE TSETSE FLY *GLOSSINA PALPALIS* MODULATES ANTIGEN-STIMULATED IMMUNE EFFECTOR CELL FUNCTIONS IN A MOUSE MODEL

Donald E. Champagne¹, Serap Aksoy²

¹University of Georgia, Athens, GA, United States, ²Yale University School of Medicine, New Haven, CT, United States

(ACMCIP Abstract)

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ANALYSIS OF AN EXPRESSED SEQUENCE TAG COLLECTION FROM THE SAND FLY *LUTZOMYIA LONGIPALPIS* AND ITS CONTRIBUTION TOWARDS UNDERSTANDING THE HOST-PARASITE RELATIONSHIP

Rod J. Dillon¹, Al C. Ivens², Bento Soares³, Paul A. Bates¹, Mike J. Lehane¹

¹Liverpool School of Tropical Medicine, Liverpool, United Kingdom, ²The Sanger Institute, Cambridge, United Kingdom, ³University of Iowa, Iowa City, IA, United States

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LABORATORY DEMONSTRATION OF THE ACQUISITION AND DEVELOPMENT OF *LEISHMANIA MAJOR* IN THE SAND FLY *PHLEBOTOMUS KAZERUNI* (DIPTERA: PSYCHODIDAE)

Hanafi Hanafi, David J. Fryauff, Elizabeth Dykstra, Daniel J. Szumlas

U.S. Naval Medical Research Unit No. 3, FPO AE, Egypt