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*** PUBLICATIONS ***

* Acta Tropica, Volume 102, Issue 1, April 2007, Pages 1-9

Wakgari Deressa, Ahmed Ali and Yemane Berhane

MATERNAL RESPONSES TO CHILDHOOD FEBRILE ILLNESSES IN AN AREA OF SEASONAL MALARIA TRANSMISSION IN RURAL ETHIOPIA

<http://www.sciencedirect.com/> (Subscription required)

Although malaria is the leading cause of illness and death among children less than 5 years of age, there is limited information on mother's response and experience about diagnosis and treatment of the disease in children in rural areas of Ethiopia. The objective of this study was to assess maternal responses and treatment seeking behaviour for children reported to have malaria. A community-based cross-sectional study was conducted

between October and November 2003 in Adami Tulu District, south-central Ethiopia. Mothers/caretakers of children less than 5 years of age were interviewed about history of febrile illness suspected to be malaria for all under-five children and the actions taken in the 2 weeks prior to the survey. Of 3872 children identified in 2372 households, 817 (21.1%) had febrile illness reported to be malaria according to the mothers/caretakers. The main symptoms included fever (99%), shivering/chills (92.2%), vomiting (55.1%), sleeplessness/restlessness (12.9%) and refusal to feed (21.3%). Of the total febrile children, 27.3% sought the first care from a public health facility, 27% visited community health workers (CHWs), 25.7% taken to private clinics, 6.4% received home treatment, and 13.3% did not get any care. Among 710 children who reported to receive any type of anti-malarial treatment, 78.8% got it from one source, 19.4% visited two sources and 1.8% sought three sources. Only 28% of the children received any form of treatment within 24 h of the onset of illness. Public facilities, private clinics and CHWs were the main sources of care sought by febrile children. Strengthening peripheral health services and community-based interventions using CHWs at village levels would improve the early diagnosis and treatment of malaria among children.

* Acta Tropica, Volume 102, Issue 1, April 2007, Pages 20-28

Viviane H.M. Tchinda, Armand D. Tadem, Ernest A. Tako, Gilbert Tene, Josephine Fogako, Philomina Nyonglema, Grace Sama, Ainong Zhou and Rose G.F. Leke

SEVERE MALARIA IN CAMEROONIAN CHILDREN: CORRELATION BETWEEN PLASMA LEVELS OF THREE SOLUBLE INDUCIBLE ADHESION MOLECULES AND TNF- α

<http://www.sciencedirect.com/> (Subscription required)

Plasma levels of three soluble inducible adhesion molecules, namely: intercellular adhesion molecule-1 (sICAM-1), vascular cell adhesion molecule-1 (sVCAM-1) and endothelial leucocyte adhesion molecule-1 (sELAM-1) or sE-selectin and the pro-inflammatory cytokine, tumour necrosis factor-alpha (TNF- α) were measured in well-defined clinical groups of children with severe and uncomplicated malaria. The goal of the study was to investigate the role of these molecules in immunopathogenic processes associated with severe malaria in Cameroonian children. Results showed significantly increased plasma concentrations of sICAM-1, sVCAM-1 and sE-selectin in children with severe malaria compared to those with uncomplicated malaria and healthy children ($P < 0.001$). TNF- α levels increased significantly in children with severe malaria, approximately 2-folds compared to those with uncomplicated malaria and about 3-folds compared to healthy children ($P < 0.001$). More importantly, levels of TNF- α strongly correlated with those of the three adhesion

molecules and were significantly associated with increased risk of death ($P = 0.03$). In addition, children who died from severe malaria showed higher mean levels of all measured factors compared to those who recovered, with significant differences observed with sICAM-1 ($P < 0.001$) and sE-selectin ($P = 0.002$). Furthermore, children with severe malarial anemia relative to those without, showed significantly elevated levels of the three soluble molecules; and sICAM-1 was significantly associated with increased risk of severe anemia. Taken together, these results confirm the role of TNF- α and the three adhesion molecules in pathogenic processes associated with severe malaria in children, and suggest an association between sICAM-1 and severe malarial anemia.

* Acta Tropica, Volume 102, Issue 1, April 2007, Pages 38-46

Patricia D. Santos-Ciminera, Maria das Graças C. Alecrim, Donald R. Roberts and Gerald V. Quinnan Jr.

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

<http://www.sciencedirect.com/> (Subscription required)

Over the past 2 decades, the Amazon region of Brazil has experienced reemergence of Plasmodium vivax malaria, with reported occurrence of severe disease. The frequency and manifestations of this severe disease are unlike previous clinical experience. The hypothesis has been raised that the occurrence of severe disease may relate to the emergence of a variant form of the parasite. To test this hypothesis, we conducted a retrospective cohort study of P. vivax strains in the State of Amazonas. We determined nucleic acid sequences of segments of three genes, the 18S SSUrRNA Type A gene, the circumsporozoite surface protein (CSP) gene and the MSP-1 gene. Sequences were determined for parasites infecting 11 hospitalized (Inpatients) and 21 non-hospitalized (Outpatients) patients. We observed two common polymorphisms in the 18S SSUrRNA Type A gene; a thymidine (T)/adenine (A) polymorphism at residue 117 was significantly more common in the Inpatient group ($p < 0.05$). Types of variation in the CSP gene included the numbers of repeat nonapeptide segments, alanine/aspartic acid polymorphism at position 5 of the nonapeptide repeat, and sporadic mutations. Alanine was more common as the fifth residue of the nonapeptide repeat in Inpatients and in strains causing second infections (both, $p < 0.05$). Synonymous substitutions of the common repeat sequence occurred frequently in codons 1, 2, and 7, while the mutations at codon 5 were always non-synonymous, indicating that variation at codon 5 reflected selective pressure. Among MSP-1 gene sequences, recombination among progenitor strains, related to the Salvador I and Belém strains, was the main source of diversity. Phylogenetic analyses that incorporated sequence data for all three genes

tested did not reveal clustering of sequences from inpatients. Our data do not affirm that the hypothesis that severe *P. vivax* disease in Amazonas is related to emergence of a new variant, but do suggest that variation in the fifth position of the CSP gene nonapeptide repeat may relate to disease manifestations.

* *Acta Tropica*, Volume 102, Issue 1, April 2007, Pages 69-78

R. N'Guessan, P. Boko, A. Odjo, M. Akogbéto, A. Yates and M. Rowland

CHLORFENAPYR: A PYRROLE INSECTICIDE FOR THE CONTROL OF PYRETHROID OR DDT RESISTANT ANOPHELES GAMBIAE (DIPTERA: CULICIDAE) MOSQUITOES

<http://www.sciencedirect.com/> (Subscription required)

Owing to the development and spread of pyrethroid resistance in *Anopheles gambiae* in Africa there is an urgent need to develop alternative insecticides to supplement the pyrethroids. Chlorfenapyr is a pyrrole insecticide first commercialized for the control of agricultural pests and termites. Performance against *An. gambiae* bearing *kdr* (pyrethroid and DDT resistance) or *Ace-1R* insensitive acetylcholinesterase (organophosphate and carbamate resistance) mechanisms was studied using a variety of adult bioassay tests including a simulated-experimental hut system (tunnel tests) that allows uninhibited mosquito behaviour/insecticide interactions. Strains resistant to pyrethroids and organophosphates showed no cross resistance to chlorfenapyr. In cone bioassays on treated netting the mortality of adult mosquitoes showed an unexpected curvilinear response, with highest mortality occurring at intermediate dosages. Adults expressed irritability to chlorfenapyr at higher dosages, which might explain the dosage-mortality trend. Toxic activity of chlorfenapyr was slow compared to conventional neurotoxic insecticides and additional mortality occurred between 24 h and 72 h. In tunnel tests, the dosage-mortality trend showed a more typical sigmoid response and most mortality occurred during the first 24 h. Mosquito penetration through the holed, treated netting showed only limited inhibition and blood-feeding was not inhibited. Mortality rates in the *kdr* strain exposed to chlorfenapyr treated netting in tunnel tests were much higher than with permethrin treated netting over the same 100-500 mg/m² dosage range. Chlorfenapyr has potential for malaria control in treated-net or residual spraying applications in areas where mosquitoes are pyrethroid resistant. For treated-net applications chlorfenapyr might be combined with pyrethroid as a mixture to provide personal protection as well as to give control of resistant mosquitoes.

* *Am. J. Pathol.* 2007 170: 1817-1819

Lars Hviid

ADHESION SPECIFICITIES OF PLASMODIUM FALCIPARUM-INFECTED ERYTHROCYTES INVOLVED IN THE PATHOGENESIS OF PREGNANCY-ASSOCIATED MALARIA

<http://ajp.amjpathol.org/cgi/content/full/170/6/1817> (Subscription required)

No abstract available

* Am. J. Pathol. 2007 170: 1989-2000

Arivalagan Muthusamy, Rajeshwara N. Achur, Manojkumar Valiyaveettil, John J. Botti, Diane W. Taylor, Rose F. Leke, and D. Channe Gowda

CHONDROITIN SULFATE PROTEOGLYCAN BUT NOT HYALURONIC ACID IS THE RECEPTOR FOR THE ADHERENCE OF PLASMODIUM FALCIPARUM-INFECTED ERYTHROCYTES IN HUMAN PLACENTA, AND INFECTED RED BLOOD CELL ADHERENCE UP-REGULATES THE RECEPTOR EXPRESSION

<http://ajp.amjpathol.org/cgi/content/abstract/170/6/1989> (Subscription required)

A low-sulfated chondroitin sulfate proteoglycan (CSPG) has been shown to be the receptor for the adherence of Plasmodium falciparum-infected red blood cells (IRBCs) in human placenta. Recently, hyaluronic acid (HA) has been suggested as an additional receptor even though IRBC binding to HA and the presence of HA at locations where IRBCs adhere in the placenta have not been established. In this study, we investigated whether HA is also a receptor for IRBC binding. IRBCs from infected placentas as well as those from different laboratory strains could bind to CSPG but not to HA. In a cell depletion assay, IRBCs from infected placentas could bind quantitatively to CSPG. Although CSPG is present both in the intervillous space and on the syncytiotrophoblast surface, HA is absent in these locations. These data conclusively demonstrate that CSPG, but not HA, is a receptor for IRBC adherence in the placenta. Our data also show, for the first time, that the IRBC-binding CSPG in the placenta is of fetal origin and that, in P. falciparum-infected placentas, the CSPG level is significantly increased, which could exacerbate IRBC adherence and placental pathogenesis. These results have important implications for the development of anti-IRBC adhesion-based vaccine for pregnancy-associated malaria.

* Biochemical and Biophysical Research Communications, Volume 358, Issue 3, 6 July 2007, Pages 686-691

George Nicola, Colin A. Smith, Edinson Lucumi, Mack R. Kuo, Luchezar Karagyozev, David A. Fidock, James C. Sacchettini and Ruben Abagyan

DISCOVERY OF NOVEL INHIBITORS TARGETING ENOYL-ACYL CARRIER PROTEIN REDUCTASE IN PLASMODIUM FALCIPARUM BY STRUCTURE-BASED VIRTUAL SCREENING

<http://www.sciencedirect.com/> (Subscription required)

There is a dire need for novel therapeutics to treat the virulent malarial parasite, *Plasmodium falciparum*. Recently, the X-ray crystal structure of enoyl-acyl carrier protein reductase (ENR) in complex with triclosan has been determined and provides an opportunity for the rational design of novel inhibitors targeting the active site of ENR. Here, we report the discovery of several compounds by virtual screening and their experimental validation as high potency PfENR inhibitors.

* Biochemical and Biophysical Research Communications, Volume 358, Issue 3, 6 July 2007, Pages 861-866

Alvaro Mongui, Oscar Perez-Leal, Jose Rojas-Caraballo, Diana I. Angel, Jimena Cortes and Manuel A. Patarroyo

IDENTIFYING AND CHARACTERISING THE PLASMODIUM FALCIPARUM RHOPH3 PLASMODIUM VIVAX HOMOLOGUE

<http://www.sciencedirect.com/> (Subscription required)

Four *Plasmodium* species cause malaria in humans, *Plasmodium falciparum* being the most widely studied to date. All *Plasmodium* species have paired club-shaped organelles towards their apical extreme named rhoptries that contain many lipids and proteins which are released during target cell invasion. *P. falciparum* RhopH3 is a rhoptry protein triggering important immune responses in patients from endemic regions. It has also been shown that anti-RhopH3 antibodies inhibit in vitro invasion of erythrocytes. Recent immunisation studies in mice with the *Plasmodium yoelii* and *Plasmodium berghei* RhopH3 *P. falciparum* homologue proteins found that they are able to induce protection in murine models. This study described identifying and characterising RhopH3 protein in *Plasmodium vivax*; it is encoded by a seven exon gene and expressed during the parasite's asexual stage. PvRhopH3 has similar processing to its homologue in *P. falciparum* and presents a cellular immunolocalisation pattern characteristic of rhoptry proteins.

* Current Opinion in Infectious Diseases. 20(3):311-316, June 2007

Bernard N Kanoi; Thomas G Egwang

NEW CONCEPTS IN VACCINE DEVELOPMENT IN MALARIA

<http://www.co-infectiousdiseases.com/pt/re/coinfdis/abstract.00001432-200706000-00013.htm;jsessionid=GflFvdt4p1ljzxbHfqKc21T2wNzCJT4GHZ1Nj9h9kbNxMvyDhc!-712222271!-949856144!8091!-1>

(subscription required)

Purpose of review: To focus on recent novel concepts in the development of malaria vaccines.

Recent findings: There is a renewed interest in whole attenuated sporozoite vaccines, either as irradiated or genetically modified sporozoites, because they consistently elicit solid protection against challenge infections. Enthusiasm about these vaccines is, however, tempered by technical, logistical, safety and even cultural hurdles that might need to be surmounted. Less than a score of *Plasmodium falciparum* proteins are currently in the development pipeline as malaria vaccines. There is an urgent need to ratchet up the process of candidate vaccine discovery, and reverse vaccinology and genome-wide surveys remain promising strategies. The development of malaria vaccines for placental malaria is an active area and chondroitin sulfate A-binding epitopes of the variant PfEMP1 have been identified. Live bacteria and viral vectors hold special promise for vaccine delivery.

Summary: Attenuated sporozoite vaccines have made a resurgence to center stage in malaria vaccine development. There is an urgent need to identify more subunit vaccine candidates that can enter into the development pipeline, identify surrogate markers of immunity and design vaccines which induce long-lasting immunity.

* Emerging Infectious Diseases, Volume 13, Number 6–June 2007

F. Legros et al.

RISK FACTORS FOR IMPORTED FATAL PLASMODIUM FALCIPARUM MALARIA, FRANCE, 1996–2003

<http://www.cdc.gov/eid/content/13/6/883.htm> (Free online access)

Plasmodium falciparum malaria is a serious health hazard for travelers to malaria-endemic areas and is often diagnosed on return to the country of residence. We conducted a retrospective study of imported *falciparum* malaria among travelers returning to France from malaria-endemic areas from 1996 through 2003. Epidemiologic, clinical, and parasitologic data were collected by a network of 120 laboratories. Factors associated with fatal malaria were identified by logistic regression analysis. During the study period, 21,888 *falciparum* malaria cases were reported. There were 96 deaths, for a case-fatality rate of 4.4 per 1,000 cases of *falciparum* malaria. In multivariate analysis, risk factors independently associated with death from imported malaria were older age, European origin, travel to East Africa, and absence of chemoprophylaxis. Fatal imported malaria

remains rare and preventable. Pretravel advice and malaria management should take into account these risk factors, particularly for senior travelers.

* Emerging Infectious Diseases, Volume 13, Number 6–June 2007

J.F. Lindo et al.

PLASMODIUM MALARIAE IN HAITIAN REFUGEES, JAMAICA

<http://www.cdc.gov/eid/content/13/6/931.htm> (Free online access)

Since 1963, reported malaria transmission in Haiti has been restricted to *Plasmodium falciparum*. However, screening of Haitian refugees in Jamaica in 2004, by microscopic examination, identified *P. falciparum*, *P. vivax*, and *P. malariae*. PCR confirmed the *P. malariae* and *P. falciparum* but not *P. vivax* infections. DNA sequencing and rRNA gene sequences showed transmission of *P. malariae*. This report confirms that *P. malariae* is still being transmitted in Haiti.

* European Journal of Medicinal Chemistry, Volume 42, Issue 6, June 2007, Pages 735-742

Caritza León, Juan Rodrigues, Neira Gamboa de Domínguez, Jaime Charris, Jiri Gut, Philip J. Rosenthal and José N. Domínguez

SYNTHESIS AND EVALUATION OF SULFONYLUREA DERIVATIVES AS NOVEL ANTIMALARIALS

<http://www.sciencedirect.com/> (Subscription required)

We have synthesized a series of sulfonylureas and have tested their antimalarial activities, including inhibition of in vitro development of a chloroquine-resistant strain of *Plasmodium falciparum*, in vitro hemoglobin hydrolysis, hemozoin formation, and development of *Plasmodium berghei* in murine malaria. The most active antimalarial compound was (E)-1-[4'-(3-(2,4-difluorophenyl)acryloyl)phenyl]-3-tosylurea (22) with an IC₅₀ of 1.2 μM against cultured *P. falciparum* parasites. Biological results suggest a fairly potent antimalarial activity for this derivative, but also imply that its activity may arise from an unknown mechanism. Indeed, these compounds may act against malaria parasites through multiple mechanisms.

* Fundam Clin Pharmacol. 2007 Jun;21(3):307-316

Asimus S, Elsherbiny D, Hai TN, Jansson B, Huong NV, Petzold MG, Simonsson US, Ashton M.

ARTEMISININ ANTIMALARIALS MODERATELY AFFECT CYTOCHROME P450 ENZYME ACTIVITY IN HEALTHY SUBJECTS

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1472-8206.2007.00471.x> (Subscription required)

The aim of this study was to investigate which principal human cytochrome P450 (CYP450) enzymes are affected by artemisinin and to what degree the artemisinin derivatives differ with respect to their respective induction and inhibition capacity.

These results show that intake of artemisinin antimalarials affect the activities of several principal human drug metabolizing CYP450 enzymes. Even though not significant in all treatment groups, changes in the individual metrics were of the same direction for all the artemisinin drugs, suggesting a class effect that needs to be considered in the development of new artemisinin derivatives and combination treatments of malaria.

* The Journal of Infectious Diseases 2007;196:30-37

Anna M. van Eijk, John G. Ayisi, Feiko O. Ter Kuile, Laurence Slutsker, Ya Ping Shi, Venkatachalam Udhayakumar, Juliana A. Otieno, Piet A. Kager, Renu B. Lal, Richard W. Steketee, and Bernard L. Nahlen

HIV, MALARIA, AND INFANT ANEMIA AS RISK FACTORS FOR POSTNEONATAL INFANT MORTALITY AMONG HIV-SEROPOSITIVE WOMEN IN KISUMU, KENYA

<http://www.journals.uchicago.edu/JID/journal/issues/v196n1/37774/37774.web.pdf> (Free online access)

HIV and malaria in sub-Saharan Africa are associated with poor pregnancy outcome and infant survival. We studied the association of placental malaria, infant malaria and anemia, and infant HIV status with postneonatal infant mortality (PNIM) among infants of HIV-seropositive women.

In this study population, placental malaria and infant parasitemia were not risk factors for PNIM among infants of HIV-seropositive women. The prevention of infant anemia may decrease PNIM among HIV-negative infants of HIV-seropositive women.

* The Journal of Infectious Diseases 2007;196:38-42

Anthony Jaworowski, Deborah D. Kamwendo, Philip Ellery, Secondo Sonza, Victor Mwapasa, Eyob Tadesse, Malcolm E. Molyneux, Stephen J. Rogerson, Steven R. Meshnick, and Suzanne M. Crowe

Brief report: CD16+ MONOCYTE SUBSET PREFERENTIALLY HARBORS HIV-1 AND IS EXPANDED IN PREGNANT MALAWIAN WOMEN WITH PLASMODIUM FALCIPARUM MALARIA AND HIV-1 INFECTION

<http://www.journals.uchicago.edu/JID/journal/issues/v196n1/37931/brief/37931.abstract.html> (Subscription required)

In a cross-sectional study, monocyte subsets in placental, cord, and maternal peripheral blood from pregnant Malawian women with human immunodeficiency virus (HIV)-1 infection and/or malaria were analyzed. HIV-uninfected Malawian women had higher baseline proportions of CD16+ monocytes than those reported for healthy adults in developed countries. Malaria was associated with an increase in the proportion of CD16+ monocytes that was significant in women coinfecting with HIV-1. CD16+ monocytes expressed higher CCR5 levels than did CD14hi/CD16- monocytes and were significantly more likely to harbor HIV-1. These data suggest a role for CD16+ monocytes in the pathogenesis of maternal malaria and HIV-1 infections.

* The Journal of Infectious Diseases 2007;196:145-154

Judith E. Epstein, Suchitra Rao, Frank Williams, Daniel Freilich, Thomas Luke, Martha Sedegah, Patricia de la Vega, John Sacci, Thomas L. Richie, and Stephen L. Hoffman

SAFETY AND CLINICAL OUTCOME OF EXPERIMENTAL CHALLENGE OF HUMAN VOLUNTEERS WITH PLASMODIUM FALCIPARUM-INFECTED MOSQUITOES: AN UPDATE

<http://www.journals.uchicago.edu/JID/journal/issues/v196n1/37592/brief/37592.abstract.html> (Subscription required)

Challenge of volunteers by the bites of membrane-fed anopheline mosquitoes infected with Plasmodium falciparum was reported in 1986. In 1997, an analysis of experience with 118 volunteers indicated that mosquito inoculation of P. falciparum could be a safe, well-tolerated, reproducible, and efficient method of challenge.

In total, data from 532 volunteers demonstrate that experimental challenge is safe and results in predictable incubation and prepatent periods. Our findings support the continued use of this method for testing efficacy of vaccines and drugs against P. falciparum.

* The Journal of Infectious Diseases 2007;196:155-164

Andrew V. Oleinikov, Eddie Rosnagle, Susan Francis, Theonest K. Mutabingwa, Michal Fried, and Patrick E. Duffy

EFFECTS OF SEX, PARITY, AND SEQUENCE VARIATION ON
SEROREACTIVITY TO CANDIDATE PREGNANCY MALARIA VACCINE
ANTIGENS

<http://www.journals.uchicago.edu/JID/journal/issues/v196n1/37882/brief/37882.abstract.html> (Subscription required)

Plasmodium falciparum–infected erythrocytes adhere to chondroitin sulfate A (CSA) to sequester in the human placenta, and pregnancy malaria (PM) is associated with the development of disease in and the death of both mother and child. A PM vaccine appears to be feasible, because women become protected as they develop antibodies against placental infected erythrocytes (IEs). Two IE surface molecules, VAR1CSA and VAR2CSA, bind CSA in vitro and are potential vaccine candidates. Women acquire antibodies to VAR2CSA over successive pregnancies, but they lose reactivity to VAR1CSA. Serum reactivity to VAR2CSA is variant specific, and future studies should examine the degree to which functional antibodies, such as binding-inhibition antibodies, are variant specific.

* The Journal of Infectious Diseases 2007;196:165-172

Oumou Maïga, Abdoulaye A. Djimdé, Véronique Hubert, Emmanuelle Renard, Agnès Aubouy, Fred Kironde, Basile Nsimba, Kwadwo Koram, Ogobara K. Doumbo, Jacques Le Bras, and Jérôme Clain

A SHARED ASIAN ORIGIN OF THE TRIPLE-MUTANT DHFR ALLELE IN
PLASMODIUM FALCIPARUM FROM SITES ACROSS AFRICA

<http://www.journals.uchicago.edu/JID/journal/issues/v196n1/37685/brief/37685.abstract.html> (Subscription required)

Usefulness of sulfadoxine-pyrimethamine as first-line therapy for uncomplicated Plasmodium falciparum malaria and intermittent preventive treatment in pregnancy throughout sub-Saharan Africa is compromised by the spread of dhfr alleles associated with pyrimethamine resistance. A predominant haplotype associated with the N51I+C59R+S108N triple-mutant dhfr allele has been reported recently in 4 African countries. A more comprehensive picture of the evolution of this mutant allele in Africa is lacking.

Migration of parasites carrying an ancestral triple-mutant dhfr allele drives the spread of dhfr alleles associated with pyrimethamine resistance throughout West and Central Africa.

* J Trop Pediatr 2007 53:185-189

Adebola Emmanuel Orimadegun, Olufunmi Fawole, James Okorie Okereke, Felix Olukayode Akinbami, and Olugbemiro Sodeinde

INCREASING BURDEN OF CHILDHOOD SEVERE MALARIA IN A NIGERIAN TERTIARY HOSPITAL: IMPLICATION FOR CONTROL

<http://tropej.oxfordjournals.org/cgi/content/abstract/53/3/185?etoc>

(Subscription required)

Malaria remains an important public health concern in Nigeria because of its impact on child and maternal health, but the contribution of severe malaria to morbidity among Nigerian children was scantily reported. This study was undertaken to document the hospital-burden of severe malaria among children in Ibadan in order to reflect on the impacts and health implications of the current malaria control strategies. A review of 6-year case records of all children admitted to the emergency ward of the University College Hospital Ibadan was carried out. Cases of severe malaria were defined as those children in whom parasitaemia were confirmed with blood film microscopy and any of the WHO case definitions for severe malaria was documented. Severe malaria cases constituted 11.3% of 16 031 admissions (2000–05) with 89.1% being children <5 years old. Cerebral malaria accounted for about one-fifth (19.7%) of all severe malaria cases. The yearly proportional morbidity rate from severe malaria ranged from 8.7% to 13.2% with significant increase from 2000 to 2004 ($X^2 = 48.49$; $df = 5$; $P < 0.001$). Severe malaria accounted for 12.4% of all paediatric deaths with an estimated overall case fatality rate of 9.6%. Deaths from malaria were significantly associated with wasting (Z-score for weight-for-height ≤ 2.0), age <2 years, hypoglycaemia and respiratory distress. Our data demonstrated an increased trend in morbidity from severe malaria over the study period. Severe malarial anaemia was a more common complication of *Plasmodium falciparum* malaria than cerebral malaria in hospitalized Nigerian children and it was associated with a high number of deaths. The consequences of high rate of severe malaria may be beyond health as it also affects the economy and the developmental prospects of the country. There may therefore a need to review the current strategies for malaria control in Nigeria.

* J Trop Pediatr 2007 53:210-212

Dilpreet Kaur, Vani Wasir, Sheffali Gulati, and Arvind Bagga

Case report: UNUSUAL PRESENTATION OF PLASMODIUM VIVAX MALARIA WITH SEVERE THROMBOCYTOPENIA AND ACUTE RENAL FAILURE

<http://tropej.oxfordjournals.org/cgi/content/abstract/53/3/210?etoc>

(Subscription required)

Renal failure and uremic encephalopathy are rare findings in *Plasmodium vivax* malaria. Thrombocytopenia is also an unusual manifestation of *P. vivax* malaria. This report highlights the occurrence of these rare manifestations in an 8-year-old boy who presented to us with fever, rash and progressive deterioration of renal functions.

* The Lancet, Volume 369, Issue 9575, 26 May 2007-1 June 2007, Pages 1807-1813

Steven Radelet and Bilal Siddiqi

GLOBAL FUND GRANT PROGRAMMES: AN ANALYSIS OF EVALUATION SCORES

<http://www.sciencedirect.com/> (Subscription required)

The Global Fund to Fight AIDS, Tuberculosis and Malaria evaluates programme performance after 2 years to help decide whether to continue funding. We aimed to identify the correlation between programme evaluation scores and characteristics of the programme, the health sector, and the recipient country.

Our results show associations, not causality, and they focus on evaluation scores rather than actual performance of the programmes. Yet they provide some early indications of characteristics that can help the Global Fund identify and monitor programmes that might be at risk. The results should not be used to influence the distribution of funding, but rather to allocate resources for oversight and risk management.

* Malaria Journal 2007, 6:72 (29 May 2007)

Abdinasir A Amin, Dejan Zurovac, Beth B Kangwana, Joanne Greenfield, Dorothy N Otieno, Willis S Akhwale, Robert W Snow

THE CHALLENGES OF CHANGING NATIONAL MALARIA DRUG POLICY TO ARTEMISININ-BASED COMBINATIONS IN KENYA

<http://www.malariajournal.com/content/pdf/1475-2875-6-72.pdf> (Free online access)

A narrative description of the process of anti-malarial drug policy change, financing and implementation in Kenya has been structured to capture the timing of events, the difficulties and hurdles faced and the resolutions reached to the final implementation of a new treatment policy. The article examines why it took over 32 months from announcing a drug policy change to completing early implementation.

* Malaria Journal 2007, 6:71 (26 May 2007)

Yazoume Ye, Elizabeth Kimani-Murage, John Kebaso, Frederick Mugisha

ASSESSING THE RISK OF SELF-DIAGNOSIS MALARIA IN URBAN INFORMAL SETTLEMENTS OF NAIROBI USING SELF-REPORTED

MORBIDITY SURVEY

<http://www.malariajournal.com/content/pdf/1475-2875-6-71.pdf> (Free online access)

Nairobi, the capital city of Kenya, is classified as a low risk area and, therefore, malaria is not considered a major public health problem. Despite this, malaria continues to be a common diagnosis made among out-patient attendants to clinics in the city. The evidence from this study suggests that malaria does exist in Nairobi, particularly in the informal settlements and that malariometric investigations are urgently needed.

* The New Scientist, Volume 194, Issue 2605, 26 May 2007, Page 16

Andy Coghlan

SUPER-ANTIBODIES FIGHT OFF MALARIA

<http://www.sciencedirect.com/> (Subscription required)

No abstract available

* Parasitology Research, Volume 101, Number 2 / July, 2007: 343-349

Akintunde Sowunmi, Grace O. Gbotosho, Ahmed A. Adedeji, Babasola A. Fateye, Morenikeji F. Sabitu, Christian T. Happi, Fatai A. Fehintola

EFFECTS OF ACUTE PLASMODIUM FALCIPARUM MALARIA ON BODY WEIGHT IN CHILDREN IN AN ENDEMIC AREA

<http://www.springerlink.com/content/124663j463214428/> (Subscription required)

The impacts of acute falciparum malaria on body weight and the host and parasite factors predictive of change in body weight were characterized in 465 prospectively studied children in an endemic area of southwest Nigeria. Pre-treatment weights were significantly lower than the 14 to 28-day post-treatment weights ($P=0.0001$). In 187 children, fractional fall in body weight (FFBW) exceeded 4.9%. FFBW correlated negatively with age and body weight ($P=0.014$ and 0.0001 , respectively), but not with enrolment parasitaemia. In a multiple regression model, an age ≤ 5 years (AOR = 2.03, 95% CI 1.2–3.2, $P=0.003$), a hematocrit $\leq 29\%$ (AOR = 1.6, 95% CI 1.0–2.3, $P=0.037$), and a body weight ≤ 9.6 kg (AOR = 5.4, 95% CI 1.7–20, $P=0.003$) were independent predictors of FFBW $\geq 5\%$ at presentation. Children who, after initial clearance, had recurrence of their parasitaemia within 28 days had a significantly higher propensity not to gain weight than children who were aparasitaemic after treatment (log-rank statistic 6.76, $df=1$, $P=0.009$). These results indicate that acute

malaria contribute to sub-optimal growth in young children and may have implications for malaria control efforts in sub-Saharan Africa.

* Parasitology Research, Volume 101, Number 2 / July, 2007: 479-483

Yvonne Adams, Reinhard Schwartz-Albiez, James S. McCarthy,
Katherine T. Andrews

EFFECT OF CYTOKINE TREATMENT ON THE IN VITRO EXPRESSION OF THE P. FALCIPARUM ADHESION RECEPTOR CHONDROITIN-4-SULPHATE ON THE SURFACE OF HUMAN CHORIOCARCINOMA (BEWO) CELLS

<http://www.springerlink.com/content/x7h1666728h4nh25/> (Subscription required)

BeWo human choriocarcinoma cells have recently been identified as an in vitro model of adhesion of Plasmodium falciparum-infected erythrocytes to the major placental receptor chondroitin-4-sulphate (CSA). In this study, we show that treatment of BeWo cells with tumour necrosis factor- α and/or interferon- γ , cytokines linked with pregnancy-associated malaria and poor pregnancy outcome, does not alter the expression of cell surface CSA. BeWo cells do not express the common P. falciparum adhesion receptor cluster of differentiation 36 (CD36) on the cell surface, and this was unchanged after treatment with cytokines. These data demonstrate that in vitro cultured BeWo cells mimic the P. falciparum adhesion receptor expression profile of ex vivo placental cytotrophoblast cells.

* PLoS Med 4(5): e181

Jessica Keen, Lena Serghides, Kodjo Ayi, Samir N. Patel, John Ayisi, Anne van Eijk, Richard Steketee, Venkatachalam Udhayakumar, Kevin C. Kain

HIV IMPAIRS OPSONIC PHAGOCYTTIC CLEARANCE OF PREGNANCY-ASSOCIATED MALARIA PARASITES

<http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371/journal.pmed.0040181> (Free online access)

Primigravid (PG) women are at risk for pregnancy-associated malaria (PAM). Multigravid (MG) women acquire protection against PAM; however, HIV infection impairs this protective response. Protection against PAM is associated with the production of IgG specific for variant surface antigens (VSA-PAM) expressed by chondroitin sulfate A (CSA)-adhering parasitized erythrocytes (PEs). We hypothesized that VSA-PAM-specific IgG confers protection by promoting opsonic phagocytosis of PAM isolates and that HIV infection impairs this response.

Opsonic phagocytosis may represent a novel correlate of protection against PAM. HIV infection may increase the susceptibility of multigravid women to PAM by impairing this clearance mechanism.

* PLoS Pathog 3(5): e72

Richard S. McIntosh, Jianguo Shi, Richard M. Jennings, Jonathan C. Chappel, Tania F. de Koning-Ward, Tim Smith, Judith Green, Marjolein van Egmond, Jeanette H. W. Leusen, Maria Lazarou, Jan van de Winkel, Tarran S. Jones, Brendan S. Crabb, Anthony A. Holder, Richard J. Pleass

THE IMPORTANCE OF HUMAN FcγRI IN MEDIATING PROTECTION TO MALARIA

<http://pathogens.plosjournals.org/perlserv/?request=get-document&doi=10.1371/journal.ppat.0030072> (Free online access)

Malaria rivals HIV and tuberculosis as the world's most deadly infection killing a child every 30 seconds. Antibodies and their receptors (Fc-receptors) have been shown to be vital for the development of protective immunity, and as such they act as correlates of protection in studies aimed at defining the best antigens to incorporate into current vaccines. Understanding antibody types and Fc-receptors that optimally induce immunity is therefore vital to developing the best vaccines. Surrogate markers of antibody efficacy currently rely on in vitro assays that are laborious and difficult to reproduce. It remains unclear if such in vitro assays are predictive of functional immunity in humans due to the lack of suitable animal models permissive for *Plasmodium falciparum*. Here, we create a transgenic in vivo mouse model that has significant advantage over the use of new world primates, the only other model for human malaria. We demonstrate that this model defines an Fc-dependent mechanism of parasite destruction that cannot be assessed in current in vitro assays. The model provides both a test for therapeutic antibody efficacy prior to clinical trials in humans and an important tool in malaria vaccine development.

* Rev Inst Med Trop Sao Paulo (2007) 49: 79-85

H Rodulfo, MD Donato, I Quijada, A ña

HIGH PREVALENCE OF MALARIA INFECTION IN AMAZONAS STATE, VENEZUELA

<http://www.scielo.br/pdf/rimtsp/v49n2/03.pdf> (Free online access)

This study was carried out to determine the incidence of malaria in an endemic region of Amazonas State, Venezuela. For this, 200 random samples were collected from symptomatic and asymptomatic individuals

from San Fernando de Atabapo and Santa Barbara. Epidemiological factors were related to malaria infection, which was diagnosed by microscopy observation and amplification of the 18S rDNA sequence by PCR. Malaria prevalence in these populations was 28.5%, whilst *P. vivax* and *P. falciparum* prevalences were 12 and 17%, respectively. No infection by *P. malariae* was found. A mixed infection was found on an asymptomatic individual. Prevalence patterns differed between age groups depending on the Plasmodium species. We found that 34.8% of the *P. vivax* and 15.2% of the *P. falciparum* infections were asymptomatic. The use of nets was helpful to prevent *P. vivax* infection, but did not protect against *P. falciparum* infection. The results suggest the presence of more than one mosquito vector in the area, displaying a differential pattern of infection for each Plasmodium species. There appear to be risk factors associated with malaria infections in some individuals. The population based approach and PCR diagnosis improved the accuracy of the statistical analysis in the study.

*** CONTRIBUTION: PUBLICATION IN FRENCH ***

* L'Observatoire de la genétique

Christophe Boëte

DES MOUSTIQUES TRANSGÉNIQUES POUR COMBATTRE LE PALUDISME: À QUEL PRIX?

http://www.ircm.qc.ca/bioethique/obsgenetique/cadrages/cadr2007/c_no32_07/c_no32_07_02.html (Free online access)

Les médias et les revues scientifiques se font de plus en plus l'écho des promesses de l'utilisation de moustiques transgéniques pour combattre le paludisme. Toutefois, comme nous l'explique l'auteur de cet article, le succès d'une telle utilisation n'est qu'hypothétique et de nombreuses questions restent encore sans réponse. Si la recherche sur les moustiques transgéniques peut fort bien conduire à des découvertes utiles et bénéfiques, il est toutefois capital qu'elle ne s'effectue pas aux dépens du financement et de l'accès des populations touchées aux moyens de prévention et aux traitements qui existent d'ores et déjà. Un plaidoyer en faveur du principe de précaution et d'une orientation démocratique de la science.

*** EVENTS ***

* VIII CENTRAL AMERICAN AND CARIBBEAN CONGRESS OF
PARASITOLOGY AND TROPICAL MEDICINE
VII CUBAN CONGRESS OF MICROBIOLOGY AND PARASITOLOGY
IV NATIONAL CONGRESS OF TROPICAL MEDICINE
IPK'S 70TH ANNIVERSARY CONGRESS

DATE

4-7 December 2007

<http://www.ipk.sld.cu/eventosipk/cong2007/index.htm>

TOPICS

- Emerging and re-emerging diseases
- Diagnosis
- Epidemiology
- Cellular biology
- Immunology
- Pathogenesis
- Genomics and Proteomics
- Chemotherapy
- Mechanisms of action and drug resistance
- Strategic combination against resistance
- New drugs
- Vaccines
- Clinical assays
- Vaccine development
- Animal models
- Community participation
- Health promotion and prevention
- Social investigations
- Control of disease-transmitting vectors
- Genetics of insecticide resistance
- Molecular entomology
- Internacional sanitary control
- Zoonotic diseases
- Biosafety
- Human resources formation
- Integrated quality systems
- Geographic information systems
- Economical evaluations of programs

ABSTRACT SUBMISSION

To submit an abstract, either in Spanish or in English, you should register first. Please, visit the event's website and fill in the registration form with the personal information requested.

Abstracts should include: Title of the paper and the full name of all the authors. Its extension should not be more than 250 words.

You should also state if you want to present your paper as a Free presentation or in the Poster session.

Abstract submission deadline is Monday, 15 November 2007.

Dra. Dora Ginorio - email: dginorio@ipk.sld.cu

Lic. Armando Martinez Cambray - email: armando@ipk.sld.cu

* MOLECULAR APPROACHES TO MALARIA - 2008

DATE

Sunday 3 to Thursday 7 February 2008

<http://www.mamconferences.org/>

The Organising Committee looks forward to welcoming you to Lorne for the 3rd Molecular Approaches to Malaria Meeting which will be held from Sunday 3 to Thursday 7 February 2008. The focus of the meeting will continue to be on the latest developments in malaria research, particularly in the areas of pathogenesis, invasion, immunity, cell biology, drug discovery/resistance and vaccines, with a particular emphasis on molecular aspects. As usual, we are confident that this will be a very worthwhile and memorable event for all. Registration opening soon.

<http://www.mamconferences.org/>

* ANNOUNCING ICOPA XII

The next International Congress of Parasitology (ICOPA XII) will be held in Melbourne, Australia in 2010 (15th-20th August).

This conference will encompass the broad area of parasitology and include

topics such as veterinary and human health, emerging diseases, parasites in a warmer world, genomics and functional biology of parasites.

*** TRAINING OPPORTUNITIES ***

* PHD STUDENTSHIP AVAILABLE: COMPUTER SIMULATION OF MALARIA TRANSMISSION, DRUG RESISTANCE AND ITS IMPACT ON HUMAN HEALTH, Liverpool School of Tropical Medicine

<http://www.liv.ac.uk/lstm/>

Starting summer 2007

Malaria kills an estimated 1 to 3 million people per year and its transmission depends on the interaction of three organisms: the malaria parasites, mosquitoes and humans. The Bill and Melinda Gates Foundation have commissioned the Swiss Tropical Institute (STI) to produce a comprehensive computer simulation of malaria transmission and its impact on human disease. The programme will be made publicly available and will enable researchers to gauge the likely impact of public-health strategies such as provision of bednets, spraying houses to kill mosquitoes, deployment of vaccines and so on. The programme uses distributed computing where volunteers run components as screen-savers. This has attracted considerable media interest from, among others, Nature, the BBC and the Economist, see the following URL for more details: www.Malariacontrol.net

We are looking for someone to investigate how proposed interventions to control malaria may simultaneously affect the spread of drug resistant malaria; for example will periodically treating all children with antimalarial drugs pay a long-term penalty in driving drug resistance? This component will be based at the Liverpool School of Tropical Medicine and is offered as a PhD studentship.

Applicants need to have proven computing skills to extract and analyse the considerable amount of output produced during the STI simulations; these track factors such as the frequency of severe malaria attacks, number of infective bites per person, percentage of infections that are drug resistant, and so on. The applicant should also have an interest in the epidemiology of infectious disease although this is a secondary requirement and may be learnt in-post.

Essential skills:

- Good/excellent programming skills in C/C++
- Familiar with software development on Linux OS

Additional useful skills:

- Mysql
- Scripting languages
- XML

The applicant will probably have a background in quantitative biology, statistics or computer science.

Unfortunately, due to the PhD fee structure they must be UK OR EC CITIZENS

Further details from:

Ian Hastings,

Liverpool School of Tropical Medicine.

Email: hastings@liverpool.ac.uk

*** JOB OPPORTUNITIES ***

* POSTDOCTORAL RESEARCH FELLOW: DEVELOPMENT OF NEW HYBRID MALARIA VACCINES, Institute of Infection and Immunology Research (University of Edinburgh)

CLOSING DATE

30 June 2007

You will join an EC-funded consortium where your research will focus upon the development of new hybrid malaria vaccines. We are now seeking to recruit a scientist to drive the development of a novel vaccination strategy based on the use of a novel and exciting vaccine expression platform. *Tetrahymena thermophila* will be used to express malaria parasite antigens, with the aim of producing new vaccines against *Plasmodium falciparum*. The project will involve cloning of parasite genes into plasmid vectors, episomal and integrated expression of vaccine antigens by transfected cell cultures, followed by biochemical and immunological characterisation of the resulting purified antigens.

Applicants must have a PhD and preferably have experience of immunological assays and/or vaccination strategies, ideally including measurement of both humoral and cellular responses. Previous experience of cell culture, molecular biological, immunological and standard

biochemical antigen characterisation techniques would be useful, but full training will be given where necessary. Applicants should be capable of independent thinking and have the ability to lead the research project on a day to day basis. Good communication skills and the ability to work as part of a team are essential. The position is funded for three years initially.

Fixed Term: 3 years

Salary: £26,666 - £31,840 p.a.

Vacancy Reference: 3007498jw

Closing Date: 30 June 2007

For further particulars <https://www.jobs.ed.ac.uk/jobs/index.cfm?action=jobdet&jobid=3007498> and an application pack visit our website (www.jobs.ed.ac.uk) or telephone the recruitment line on 0131 650 2511.

* EMVDA PRODUCT MANAGER, European Malaria Vaccine Initiative

Position will remain open until a viable candidate is selected.

<http://www.emvi.org/vacancies/emvda+-+product+manager>

The European Malaria Vaccine Initiative, EMVI was established, in order to address identified structural deficiencies in public funded malaria vaccine development. The mission of EMVI is to provide a mechanism through which the development of experimental malaria vaccines can be accelerated within Europe and in developing countries. EMVI is facilitating and contributing financially and technically to nationally and internationally funded malaria vaccine research and development, and provides a mechanism to see candidate molecules through to limited industrial production and early clinical development phase.

EMVI secretariat, hosted by Statens Serum Institut in Copenhagen-Denmark, is co-ordinating an "Integrated Project (IP)" called EMVDA, financed by the European Commission with a budget of €13,500,000 over five years.

Working closely with EMVI's Director of Manufacturing Operations, the Product Manager will develop and implement product management tools and methodologies for a dynamic portfolio of vaccine development

projects, at both strategic programme and project levels. S/he will facilitate the articulation of programme strategies, foster programme collaboration and synergy, and ensure action planning, evaluation, and impact assessment. S/he will report to the Director of Manufacturing Operations.

DUTIES AND RESPONSIBILITIES

- Serve as key member of the Vaccine Manufacturing Operations team, working closely with the Director on strategic, programmatic, and management issues.
- Drive the development and use of project management tools and methodologies for use across all vaccine development projects.
- Work with project leaders to develop frameworks and systems for evaluating and analyzing individual program success, effectiveness, and impact.
- Ensure all EMVDA projects align with EMVI 's vision and strategic commitments by participating to the definition, monitoring and evaluation of key outcomes and by coordinating product planning efforts.
- Work closely with project managers to develop strategic and annual workplans to ensure that development strategies are aligned with EMVDA's strategic goals and EC requirements.
- Manage the integration of all project team activities across EMVI.
- Provide technical assistance and training to internal team members and external project collaborators on vaccine development, with a special emphasis on processes, GMP production, formulation and pre-clinical development.
- Monitor and enhance the quality of EMVDA partner relationships.
- Identify product development challenges and facilitate their resolution.
- Develop contingency/risk integration plans and sound development strategies and oversee their implementation.
- Report on project status and elevate issues to the Director of Manufacturing Operations, as appropriate.
- Apply vaccine production best practices to EMVDA.
- Maintain documentation of project and manage operational aspects of product team meetings.
- Present to EMVDA Steering Committee and EMVI Board members, and represent EMVDA/EMVI externally at international and national forums.

EDUCATION/EXPERIENCE REQUIREMENT

- Requires BS in scientific discipline or relevant work experience, MBA or PhD.
- Minimum of 2-4 years experience in pharmaceutical or related industries.
- Experience in pharmaceutical decision analysis or working with product development teams throughout the product life-cycle in either vaccinology or immunology would be an asset.

COMPETENCIES

- Planning and Organising: Proven ability to be able to plan and manage programs; including ability to develop clear goals that are consistent with agreed strategies; Experience developing and implementing impact systems and processes, including strategic planning. Ability to work within deadlines and frequently shifting priorities; ability to multi-task.
- Client Orientation: Ability to identify clients' needs and propose appropriate solutions as well as establish and maintain effective relationships with outside collaborators and other contacts; Strong interpersonal, negotiation, and communications (written and verbal) skills. Ability to build consensus among different institutional interests towards common goals and priorities.
- Respect for Diversity: Good interpersonal skills; Demonstrated ability to work in a multicultural and multi-ethnic environment and to maintain effective working relations with people of different national and cultural backgrounds.
- Judgement/Decision Making: Proven ability to provide strategic direction, to plan and establish priorities, and to ensure an effective work structure to maximize productivity and achieve goals.
- Teamwork: Work collaboratively with colleagues to achieve organizational goals; Solicit input by genuinely valuing ideas of others and expertise; willing to learn from others; place team agenda before personal agenda; support and act in accordance with final group decision, even when such decisions may not entirely reflect own position; share credit for team accomplishments and accept joint responsibilities for team shortcomings.
- Proficient in Word, Excel, Power Point and Project Management software applications.

Starting annual salary range: Commensurate with experience within current "union/employer" agreements with the opportunity for a qualifications supplement.

If you'd like to join our team, please send your resume and covering letter, which must include salary requirements to:

Dr Odile Leroy oly@ssi.dk

Position will remain open until a viable candidate is selected.

* SCIENTIST, Central Drug Research Institute

ADVERTISEMENT NO. 2/2007

Applications on the prescribed forms are invited from the persons of INDIAN NATIONALITY for the following posts in Central Drug Research Institute, Lucknow, India.

- Scientist Gr. IV(3): One post: (Scale of Pay : Rs. 12,000-375-16,500/-): For Parasitology Division) Essential Qualification : 1st Class M.Sc. or equivalent in any branch of science with Ph.D. in Biochemistry and Molecular Biology of Parasites and at least 4 years research experience in the area of MALARIA BIOCHEMISTRY AND/OR IMMUNOLOGY as evidenced by high quality of publications in high impact national/International journals. This is an independent group leader position where the candidate is required to undertake studies on development of newer drug targets and or novel therapeutic methods in the area of malaria.

- Scientist Gr. IV(2) : Scale of Pay : Rs. 10000-325- 15200/-)
Post No. 4 (for Parasitology in the area of Biochemistry and Molecular Biology of Malaria)

For detailed information Website : <http://www.cdriindia.org/situationv.asp> may be referred to.

Council of Scientific & Industrial Research
Chattar Manzil Palace,
P.O. Box 173,
Lucknow-226 001
India

"Interim queries will not be entertained"

* CLINICAL TRIALS COORDINATOR, Nuffield Department of Clinical Medicine

CLOSING DATE FOR APPLICATIONS
Friday 8 June 2007

Grade 8: Salary £32,795 - £39,160 p.a.

The Department of Clinical Medicine hosts the Oxford Tropical Network including Major Overseas Programmes in Kenya, Thailand and Viet Nam. The Network conducts a wide range of clinical studies including clinical

trials of drugs and vaccines for diseases that have a serious impact in the developing world such as typhoid, avian influenza, malaria and tuberculosis. Each site has extensive knowledge and experience in conducting clinical studies and as the volume of activity increases we are recruiting clinical trials specialists to coordinate these activities at each site. The post advertised will be based at the Unit in Viet Nam. The postholder will update and maintain the Unit's policies on conducting clinical studies; centralise the Unit's processes for preparing protocols, submitting ethics applications and conducting clinical trials; and advise on applicable local and international regulations. The postholder will manage the Unit's Clinical Trials Office in Ho Chi Minh City.

Applicants must have a degree, or equivalent, in a field related to health research, experience working on clinical trials and have experience of conducting clinical research in South East Asia. Excellent organisational skills and a strong sense of diplomacy are essential.

This position is available for up to two years in the first instance. An application form and a job description are available from:

The Personnel Administrator,
Room 5802,

Nuffield Dept of Clinical Medicine,
John Radcliffe Hospital,
Oxford,
OX3 9DU

(tel: 01865 221325, email: personnel@ndm.ox.ac.uk)

or from the web site <http://www.ndm.ox.ac.uk/ndmjr/about/jobvacancies>.

Please quote the reference HB-07-037-PH.

The closing date for applications is Friday 8 June 2007.

* RESEARCH OFFICER/FELLOW, Leeds Institute of Health Sciences
Faculty of Medicine and Health, Nuffield Centre for International Health
and Development

CLOSING DATE
21 June 2007

This full-time post is for a fixed-term of 3 years.

You will provide support to a DFID funded communicable disease research programme consortium, COMDIS. COMDIS researches and develops feasible and affordable interventions for TB, malaria and HIV care.

You will have a postgraduate qualification in public health or a related degree, with at least two years experience in health service delivery development in low income countries, particularly in public health/communicable disease control. Your main responsibilities will be research and development in the fields of communicable diseases programmes/ service delivery.

University Grade 7 (£26,666 - £31,840)

Informal enquires to Professor James Newell tel. +44 (0) 113 343 6950, email j.n.newell@leeds.ac.uk or Professor John Walley tel. +44 (0)113 343 6963, email j.d.walley@leeds.ac.uk

To apply, please visit <http://www.leeds.ac.uk> and click on 'jobs', or application packs are available from Jodie Boyes, Leeds Institute for Health Sciences tel +44 (0) 113 3436975, email j.boyes@leeds.ac.uk

Job ref 314119

Closing date 21 June 2007

* P6 CHIEF OPERATING OFFICER, RBM Partnership Secretariat, World Health Organisation

Deadline for application
18 June 2007

DESCRIPTION OF DUTIES

Cross-cutting collaboration and the implementation of RBM Bylaws and Operating Framework, ensuring information sharing and effective communication within RBM, WHO clusters, departments and programmes involved in malaria issues, WHO/DGO, Regional and Country Offices, as well as partners.

To provide expert leadership for the elaboration of strategies to influence and promote RBM-wide synergies through, inter alia, facilitation and support between RBM staff and partners, building consensus for the implementation of the Board decisions through cross-cutting work plans and objectives, making proposals for innovative activities and

streamlined processes.

To elaborate and critically review proposals and documents, considering the technical and legal aspects/implications vis-à-vis RBM Bylaws and Operating Framework, RBM Board decisions and WHO rules and regulations, as relevant; to facilitate decision-making by RBM Board and the Executive Director through strong linkages between the RBM Secretariat, partners and WHO, formulating and negotiating the implementation of sustainable approaches and evidence-based policies.

To serve as deputy to the Executive Director by supporting him/her and acting on his/her behalf to ensure smooth and effective continuity in RBM activities as related to all technical and managerial issues.

To represent the RBM Secretariat and, as appropriate, to lead collaborative efforts with various partners, donors and external interested parties, negotiating and collaborating with them to encourage interest and attract support as part of global networking activities, resource mobilization and fundraising drives towards increasing political and financial support for RBM, as well as broadening an awareness among governments, potential donors, key partners and audiences.

To oversee the development of RBM work plans and budgets within the boundaries set by the Partnership Board, the MOU and the Executive Director, including advising on strategic planning, budgetary and financial management, with particular attention to administration and risk management, including the optimum use of financial and human resources, and strategies for effective processes and streamlined procedures and practices.

More info: https://erecruit.who.int/public/hrd-cl-vac-view.asp?o_c=1000&jobinfo_uid_c=16777&vaclng=en

*** NEWS ***

* 1 June2007, News@Nature 13, 651 - 651
SLUGGISH APPROVALS BLOCKING AFRICANS' ACCESS TO BED NETS
<http://www.nature.com/news/2007/070528/full/nm0607-651.html>
(Subscription required)
Critics say the World Health Organization's system is too slow.

* 30 May 2007, Reuters

FEATURE-MALARIA, DRUG-RESISTANT TB FLOURISH IN MYANMAR

<http://www.alertnet.org/thenews/newsdesk/BKK249716.htm>

Simmering civil war, fake drugs and a non-existent health service in Myanmar are creating the perfect breeding ground for new, drug-resistant strains of killer diseases such as malaria and tuberculosis.

* 30 May 2007, eNewsChannels

FIRST LARGE-SCALE SPRAYING CAMPAIGN FOR MALARIA IN SENEGAL IN 50 YEARS UNDERWAY

http://enewschannels.com/2007/05/30/enc1365_215001

The U.S. Government, in partnership with the Ministry of Health, launched two new activities under the President's Malaria Initiative (PMI) in Senegal yesterday with the start of the first large-scale community-based spraying campaign in Senegal in the village of Keur Moussa and the delivery of 200,000 bednets in outlying areas of the capital, Dakar.

* 30 May 2007, Angola Press

KWANZA NORTE: OVER 4,000 CASES OF MALARIA RECORDED IN FIRST QUARTER

<http://www.angolapress-angop.ao/noticia-e.asp?ID=535068>

Some 4,992 cases of malaria, from which 117 resulted in deaths, were recorded from January to March this year in the Hospital of Ndalatando city, northern Kwanza Norte province, ANGOP learnt from a medical source.

* 29 May 2007, Biology News Net

HIV AND MALARIA COMBINE TO ADVERSELY AFFECT PREGNANT WOMEN AND THEIR INFANTS

<http://www.biologynews.net/archives/2007/05/29/>

[hiv_and_malaria_combine_to_adversely_affect_pregnant_women_and_their_infants.html](http://www.biologynews.net/archives/2007/05/29/hiv_and_malaria_combine_to_adversely_affect_pregnant_women_and_their_infants.html)

University of Toronto researchers have uncovered the basis by which pregnant women protect themselves against malaria and have also discovered how the HIV virus works to counteract this defence. The research could lead to improved vaccines for pregnant women in malaria-ravished regions.

* 29 May 2007, East African Standard

KENYA: SH60M GRANT TO FIGHT AIDS, MALARIA AND TB

<http://allafrica.com/stories/200705290482.html>

Kenya has received Sh60.4 million (Euros 650,00) grant from the French Government to support the country's fight against HIV/Aids, malaria and tuberculosis.

* 28 May 2007, ReliefWeb (Press Release)

SUDAN: RAINS BRING RISK OF MALARIA AND CHOLERA OUTBREAKS IN DARFUR AND CHAD

<http://www.reliefweb.int/rw/RWB.NSF/db900SID/EKOI-73M2ZX?OpenDocument>

Health needs in Darfur and Chad are greater than ever after four years of conflict and could escalate further if the impending rains lead to cholera and malaria outbreaks, aid agencies warned today.

* 28 May 2007, The Monitor

Uganda: GLOBAL FUND OFFICIALS MEET IN KAMPALA

<http://allafrica.com/stories/200705280069.html>

The Global Fund Geneva is convening a meeting of several East African and Indian Ocean countries to reach a consensus on strategies for maximising the impact of the Fund's investments in HIV/Aids, tuberculosis and malaria programmes.

* 25 May 2007, ScienceDaily

TEAM ID'S CELL MECHANICS OF HALLMARK MALARIA PROTEIN

<http://www.sciencedaily.com/releases/2007/05/070525090316.htm>

During the first 24 hours of invasion by the malaria-inducing parasite Plasmodium falciparum, red blood cells start to lose their ability to deform and squeeze through tiny blood vessels--one of the hallmarks of the deadly disease that infects nearly 400 million people each year. Now, an international team of researchers led by an MIT professor has demonstrated just why that happens.

* 25 may 2007, Cordis News

SCIENTISTS FIND ROLE FOR CARBON MONOXIDE IN TREATING CEREBRAL MALARIA

[http://cordis.europa.eu/fetch?](http://cordis.europa.eu/fetch?CALLER=EN_NEWS&ACTION=D&SESSION=&RCN=27742)

[CALLER=EN_NEWS&ACTION=D&SESSION=&RCN=27742](http://cordis.europa.eu/fetch?CALLER=EN_NEWS&ACTION=D&SESSION=&RCN=27742)

Scientists from Hungary and Portugal have found that inhaling carbon monoxide could be a cheap and simple way of preventing cerebral malaria.
