



MalariaWorld Nr. 153 (3 March 2008)

... From K&S Consulting ...

22 February 2008, NewScientist

Science entrepreneurs need better business skills

MBA Student of the Year 2007, Bart Knols, believes science skills won't deliver a healthier world by themselves...

Despite pioneering a method of controlling mosquitoes using a fungus, which has led to projects in Ghana, Kenya, Tanzania and South Africa and received over £1 million in research funds, Bart Knols says it is his new-found business and management skills that have been essential to his success.

Knols publishes a weekly news bulletin, MalariaWorld, and recently launched his own consultancy firm. "This would have been unthinkable without an MBA," he says. "Every day now I enhance my scientific work with my business skills."

... Publications ...

Applications of Bayesian approach in modelling risk of malaria-related hospital mortality ([Open access](#))

Lawrence N Kazembe, Tobias F Chirwa, Jupiter S Simbeye, and Jimmy J Namangale
BMC Medical Research Methodology 2008, 8:6

The study emphasizes that the methodological framework used provides a useful tool for analysing the data at hand and of similar structure.

Early treatment of imported falciparum malaria in the intermediate and intensive care unit setting: an 8-year single-center retrospective study ([Open access](#))

Lukas Schwake, Judith P Streit, Lutz Edler, Jens Encke, Wolfgang Stremmel and Thomas Junghanss

Critical Care 2008, 12:R22

This retrospective evaluation shows favourable therapeutic results in hospitalized patients with imported falciparum malaria. Both initial treatment in the medical IMC/ICU and close collaboration between intensivists and specialists in tropical medicine may improve disease outcome in affected patients. Prospective studies are needed to confirm these preliminary findings.

Book review: Cold War, Deadly Fevers: Malaria Eradication in Mexico 1955–1975 ([Open access](#))

P. Arguin

EID, Volume 14, Number 3–March 2008

Marcos Cueto is a medical historian who describes the details of malaria eradication efforts in Mexico in the context of the Cold War era authoritarianism. His approach works overall, but occasionally he overreaches.

Using remote sensing to map larval and adult populations of *Anopheles hyrcanus* (Diptera: Culicidae) a potential malaria vector in Southern France ([Open access](#))

Annelise Tran, et al

International Journal of Health Geographics 2008, 7:9



This work shows that it is possible to use high resolution satellite imagery to map malaria vector spatial distribution. It also confirms the potential of remote sensing to help target risk areas, and constitutes a first essential step in assessing the risk of re-emergence of malaria in southern France.

A Primer-Introduced Restriction Analysis-Polymerase Chain Reaction Method to Detect Knockdown Resistance Mutations in *Anopheles gambiae* ([Open access](#))

Janeira, F.; Vicente, J. L.; Kanganje, Y.; Moreno, M.; do Rosário, V. E.; Cravo, P.; Pinto, J. *J. Med. Entomol.* 45(2): 237-241 (2008)

The PIRA-PCR proved to be a reliable, robust, and simpler alternative for the detection of *kdr* mutations in this malaria vector.

Monooxygenase Levels and Knockdown Resistance (*kdr*) Allele Frequencies in *Anopheles gambiae* and *Anopheles arabiensis* in Kenya ([Open access](#))

Chen, Hong; Githeko, Andrew K.; Githure, John I.; Mutunga, James; Zhou, Guofa; Yan, Guiyun

J. Med. Entomol. 45(2): 242-250 (2008)

Information on monooxygenase activity and *kdr* allele frequency reported in this study provided baseline data for monitoring insecticide resistance changes in Kenya during the era when large-scale insecticide-treated bed-net and indoor residual spray campaigns were being implemented.

Relationship Between *kdr* Mutation and Resistance to Pyrethroid and DDT Insecticides in Natural Populations of *Anopheles gambiae* ([Open access](#))

Reimer, Lisa, et al

J. Med. Entomol. 45(2): 260-266 (2008)

In this study, we analyze the frequency and relationship between the *kdr* genotypes and resistance to type I and type II pyrethroids and DDT by using WHO test kits in both the Forest-M and S molecular forms of *An. gambiae* in Cameroon.

An experimental hut evaluation of Olyset(R) nets against anopheline mosquitoes after seven years use in Tanzanian villages ([Open access](#))

Robert C Malima, Stephen M Magesa, Patrick K Tunga, Victor Mwingira, Frank S Magogo, Wema Sudi, Frank W Mosha, Chris F Curtis, Caroline Maxwell, Mark Rowland

Malaria Journal 2008, 7:38 (28 February 2008)

This is the first demonstration of a long lasting net still killing mosquitoes seven years later, which has major public health implications. It also demonstrates that taking LLIN from the field and retesting in experimental huts is a highly informative way of measuring what they can and what they cannot do after this length of time.

Malaria in rural Mozambique. Part II: children admitted to hospital ([Open access](#))

Quique Bassat, Caterina Guinovart, Betuel Sigauque, Pedro Aide, Jahit Sacarlal, Tacilta Nhampossa, Azucena Bardaji, Ariel Nhacolo, Eusebio Macete, Inacio Mandomando, John J Aponte, Clara Menendez, Pedro L Alonso

Malaria Journal 2008, 7:37 (26 February 2008)

Community-derived incidence data of severe malaria are rare for Africa and these estimates will become increasingly important with the increasing efforts to control malaria. This and the companion paper provide valuable background information.

Malaria in rural Mozambique. Part I: Children attending the outpatient clinic ([Open access](#))

Caterina Guinovart, Quique Bassat, Betuel Sigauque, Pedro Aide, Jahit Sacarlal, Tacilta Nhampossa, Azucena Bardaji, Ariel Nhacolo, Eusebio Macete, Inacio Mandomando, John J Aponte, Clara Menendez, Pedro L Alonso



Malaria Journal 2008, 7:36 (26 February 2008)

An analysis of a total of 94,941 outpatient visits in a rural hospital, of which 30.5% had malaria. The study confirms the logic of targeting preventive measures at children below three years of age, as they carry the highest burden of malaria, but it points out that children aged 5-15 years represent around a third of the malaria cases and should also be included in control programmes.

Plasmodium vivax dhfr and dhps mutations in isolates from Madagascar and therapeutic response to sulphadoxine-pyrimethamine ([Open access](#))

Celine Barnadas, Magali Tichit, Christiane Bouchier, Arsene Ratsimbaoa, Laurence Randrianasolo, Rogelin Raherinjafy, Martial Jahevitra, Stephane Picot, Didier Menard
Malaria Journal 2008, 7:35 (26 February 2008)

A comprehensive study of *P. vivax* and pvdhfr/pvdhps polymorphism prevalence in Madagascar, which highlights the neglected importance of *P. vivax* in the African region. Its data emphasizes the widespread and frequent occurrence of pvdhfr mutations in response to a seemingly incidental antifolate pressure.

Quantitative urban classification for malaria epidemiology in sub-Saharan Africa ([Open access](#))

Jose G Siri, Kimberly A Lindblade, Daniel H Rosen, Bernard Onyango, John Vulule, Laurence Slutsker, Mark L Wilson
Malaria Journal 2008, 7:34 (25 February 2008)

Cluster analysis techniques were used to classify Kisumu, Kenya, into levels of urbanization in a repeatable and unbiased manner, an approach that should permit more relevant comparisons among and within urban areas.

Editorial: Time to take control ([Open access](#))

Nature 451, 1030 (28 February 2008)

With money now flowing in, the fight against malaria must shift from advocacy to getting results.

News: Neglected diseases get vaccine research boost ([Open access](#))

Alison Abbott

Nature 451, 1037 (Published online 27 February 2008)

Drug company opens non-profit centre in Italy.

Swiss pharmaceutical giant Novartis has opened a non-profit research institute in northern Italy to develop vaccines for neglected diseases prevalent in the developing world.

News Feature: Malaria: The end of the beginning ([Open access](#))

Brendan Maher, Nature Publishing Group

Nature 451, 1042-1046

After decades of work, a pioneering malaria vaccine may soon reach the final phase of clinical trials. In the first of two features on efforts against malaria, Brendan Maher reports on a vaccine that is far from perfect — but which may provide new direction and save thousands of lives.

News Feature: Malaria: The big push ([Open access](#))

Michael Hopkin

Nature 451, 1047-1049

Zambia, with help from partners around the world, is stepping up its battle against malaria. Michael Hopkin reports from the rural front line.

Commentary: The billion-dollar malaria moment ([Open access](#))



Mark Grabowsky

Nature 451, 1051-1052

For years the global malaria effort has been asking for more resources. Now the field needs to figure out a systematic strategy for spending the money effectively, says Mark Grabowsky.

Severe Anemia in Malawian Children ([Open access](#))

Job C.J. Calis, et al

N Engl J Med 2008; 358 : 888-99

There are multiple causes of severe anemia in Malawian preschool children, but folate and iron deficiencies are not prominent among them. Even in the presence of malaria parasites, additional or alternative causes of severe anemia should be considered.

The Limits and Intensity of Plasmodium falciparum Transmission: Implications for Malaria Control and Elimination Worldwide ([Open access](#))

Carlos A. Guerra, Priscilla W. Gikandi, Andrew J. Tatem, Abdisalan M. Noor, Dave L. Smith, Simon I. Hay, and Robert W. Snow

PLoS Med 5(2): e38

This new map is a plausible representation of the current extent of *P. falciparum* risk and the most contemporary summary of the population at risk of *P. falciparum* malaria within these limits. For 1 billion people at risk of unstable malaria transmission, elimination is epidemiologically feasible, and large areas of Africa are more amenable to control than appreciated previously. The release of this information in the public domain will help focus future resources for *P. falciparum* malaria control and elimination.

CD4+T cells do not mediate within-host competition between genetically diverse malaria parasites ([Open access](#))

Victoria C. Barclay, Lars Råberg, Brian H.K. Chan, Sheila Brown, David Gray, Andrew F. Read

Proc Biol Sci. 2008 Feb 20, Epub ahead of print

Our results suggest that the CD4C-dependent immune response, and mechanisms that act to enhance it such as vaccination, may not have the undesirable affect of exacerbating within-host competition and hence the strength of this source of selection for virulence.

Access and barriers to measures targeted to prevent malaria in pregnancy in rural Kenya ([Open access](#))

Priscilla W. Gikandi, Abdisalan M. Noor, Carol W. Gitonga, Antony A. Ajanga and Robert W. Snow

Tropical Medicine & International Health 13 (2) , 208-217

Although the use of ITN had increased 10-fold and the use of IPT fourfold since last measured in 2001, coverage remains low. Provider practices in the delivery of protective measures against malaria must change, supported by community awareness campaigns on the importance of mothers' use of IPT.

Hyperreactive malarial splenomegaly is associated with low levels of antibodies against red blood cell and Plasmodium falciparum derived glycolipids in Yanomami Amerindians from Venezuela

Livia Vivas, Kieran P. O'Dea, Oscar Noya, Rosalba Pabon, Magda Magris, Carlos Botto, Anthony A. Holder and K. Neil Brown

Acta Tropica, Volume 105, Issue 3, March 2008, Pages 207-214

Overall, these results suggest differential regulation of anti-parasite and autoreactive responses and that these responses may be linked to the development and evolution of HMS in this population exposed to endemic malaria. The high mortality rates associated



with HMS point out that its early diagnosis together with the implementation of malaria control measures in these isolated Amerindian communities are a priority.

Anti-malarial efficacy of pyronaridine and artesunate in combination in vitro and in vivo

Livia Vivas, Lauren Rattray, Lindsay Stewart, Emily Bongard, Brian L. Robinson, Wallace Peters and Simon L. Croft

Acta Tropica, Volume 105, Issue 3, March 2008, Pages 222-228

These results indicate that the combination had an enhanced effect over monotherapy and lower daily doses of artesunate could be used to obtain a curative effect. The data suggest that the combination of pyronaridine and artesunate should have potential in areas of multi-drug resistant malaria.

Population Pharmacokinetics of Piperaquine after Two Different Treatment Regimens with Dihydroartemisinin-Piperaquine in Patients with Plasmodium falciparum Malaria in Thailand

J. Tarning, E. A. Ashley, N. Lindegardh, K. Stepniewska, L. Phaiphun, N. P. J. Day, R. McGready, M. Ashton, F. Nosten, and N. J. White

Antimicrob. Agents Chemother. 2008;52 1052-1061

Our data lend further support to a simplified once-daily treatment regimen to improve treatment adherence and efficacy and indicate that weight-adjusted piperaquine doses in children may need to be higher than in adults.

Determinants of In Vitro Drug Susceptibility Testing of Plasmodium vivax

B. Russell, F. Chalfein, B. Prasetyorini, E. Kenangalem, K. Piera, R. Suwanarusk, A. Brockman, P. Prayoga, P. Sugiarto, Q. Cheng, E. Tjitra, N. M. Anstey, and R. N. Price

Antimicrob. Agents Chemother. 2008;52 1040-1045

The results demonstrate the marked stage-specific activity of chloroquine with *P. vivax* and suggest that susceptibility to chloroquine may be associated with variable growth rates. These findings have important implications for the phenotypic and downstream genetic characterization of *P. vivax*.

Population pharmacokinetics of chloroquine and sulfadoxine and treatment response in children with malaria: suggestions for an improved dose regimen

Celestino Obua, Urban Hellgren, Muhammed Ntale, Lars L. Gustafsson, Jasper W. Ogwal-Okeng, Toufigh Gordi & Markus Jerling

British Journal of Clinical Pharmacology, OnlineEarly Articles

The study results suggest that full-strength combination to all children would improve the cure rate.

Determining Important Parameters in the Spread of Malaria Through the Sensitivity Analysis of a Mathematical Model

Nakul Chitnis, James M. Hyman and Jim M. Cushing

Bulletin of Mathematical Biology, Online first

This suggests strategies that target the mosquito biting rate (such as the use of insecticide-treated bed nets and indoor residual spraying) and those that target the human recovery rate (such as the prompt diagnosis and treatment of infectious individuals) can be successful in controlling malaria.

Review Article: Novel Molecular Targets for Antimalarial Drug Development

Nitendra K. Sahu, Sanjeev Sahu and Dharm Veer Kohli

Chemical Biology & Drug Design, OnlineEarly Articles

This review discusses novel molecular targets of the malaria parasite available to the drug discovery scientist.



Malaria Parasitemia Associated with Febrile Neutropenia in African Patients Undergoing Chemotherapy for Haematological Malignancies

Bernardo L. Rapoport, Almarie Uys

Chemotherapy 2008;54:117-119

It is suggested that malaria should be considered as a possible cause or a complicating factor of febrile neutropenia in patients undergoing cancer chemotherapy in endemic malaria areas.

Short Communication: Elevated serum levels of IL-1ra in children with Plasmodium falciparum malaria are associated with increased severity of disease

Chandy C. Johna, Gregory S. Parka, Nadia Sam-Agudua, Robert O. Opokab, and Michael J. Boivinc

Cytokine, Article in Press, Corrected Proof

Animal models suggest that cytokines and chemokines play a role in cerebral malaria (CM) pathogenesis, but levels of a number of cytokines and chemokines thought to be important in the pathogenesis of other infectious diseases are not well characterized in children with CM.

Monitoring Plasmodium falciparum growth and development by UV flow cytometry using an optimized Hoechst-thiazole orange staining strategy

Brian T. Grimberg, John J. Erickson, R. Michael Sramkoski, James W. Jacobberger, Peter A. Zimmerman

Cytometry Part A, Early View

Investigation of the mechanisms by which anti-malarial drugs and antibodies act against different Pf lifecycle stages will be aided by this cytometric strategy.

Dihydrofolate reductase inhibitors: developments in antiparasitic chemotherapy

David B Bolstad, Erin SD Bolstad, Dennis L Wright & Amy C Anderson

Expert Opinion on Therapeutic Patents, February 2008, Vol. 18, No. 2, Pages 143-157

Over the past several years, there have been a variety of novel, potent and selective inhibitors disclosed in patents, primarily from academic researchers. This review summarizes the recent development of antifolates as specific agents against parasitic protozoa.

New uses for old drugs. Auranofin, a clinically established antiarthritic metallodrug, exhibits potent antimalarial effects in vitro: Mechanistic and pharmacological implications

Anna Rosa Sannella, Angela Casini, Chiara Gabbiani, Luigi Messori, Anna Rita Bilia, Francesco Franco Vincieri, Giancarlo Majori and Carlo Severini

FEBS Letters, In Press, Uncorrected Proof

The above findings and the safe toxicity profile of auranofin warrant rapid evaluation of AF for malaria treatment in animal models.

Review: UvrD helicase of Plasmodium falciparum

Jay Shankar and Renu Tuteja

Gene, Volume 410, Issue 2, 15 March 2008, Pages 223-233

In this manuscript we provide an overview of UvrD family of helicases and bioinformatics analysis of UvrD from P. falciparum.

Predominance of interferon-related responses in the brain during murine malaria as identified by microarray analysis

Jenny Miu, Nicholas H. Hunt, and Helen J. Ball



Infect. Immun. published ahead of print on 25 February 2008,
These data identify a number of novel genes that represent interesting candidates for further investigation in FMCM.

Childhood schistosomiasis and malaria co-infection: hepatosplenomegaly is associated with low regulatory and Th2 responses to schistosome antigens

Wilson S, Jones FM, Mwatha JK, Kimani G, Booth M, Kariuki HC, Vennervald BJ, Ouma JH, Muchiri E, Dunne DW

Infect. Immun. published ahead of print on 19 February 2008

Hepatosplenomegaly amongst Kenyan schoolchildren has been shown to be exacerbated where there is transmission of both *Schistosoma mansoni* and *Plasmodium falciparum*. This highly prevalent and chronic morbidity often occurs in the absence of ultrasound detectable periportal fibrosis and maybe due to immunological inflammation.

Mini review: Cross-Species Immunity in Malaria Vaccine Development: Two, Three, or Even Four for the Price of One?

Bruno Douradina, Maria M. Mota, Adrian J. F. Luty, and Robert W. Sauerwein

Infect. Immun. 2008;76 873-878

No abstract available

Characterization of a Conserved Rhoptry-Associated Leucine Zipper-Like Protein in the Malaria Parasite *Plasmodium falciparum*

Silvia Haase, Ana Cabrera, Christine Langer, Moritz Treeck, Nicole Struck, Susann Herrmann, Pascal W. Jansen, Iris Bruchhaus, Anna Bachmann, Suzana Dias, Alan F. Cowman, Hendrik G. Stunnenberg, Tobias Spielmann, and Tim-Wolf Gilberger

Infect. Immun. 2008;76 879-887

We demonstrate that this *Plasmodium* sp.-specific protein has a high degree of conservation within field isolates and that it is refractory to gene knockout attempts and thus might play an important role in invasion.

Chemical Attenuation of *Plasmodium berghei* Sporozoites Induces Sterile Immunity in Mice

Lisa A. Purcell, Stephanie K. Yanow, Moses Lee, Terry W. Spithill, and Ana Rodriguez

Infect. Immun. 2008;76 1193-1199

Our findings demonstrate that chemically attenuated sporozoites could be a viable alternative for the production of an effective liver stage vaccine for malaria.

Class II-Restricted Protective Immunity Induced by Malaria Sporozoites

Giane A. Oliveira, Kota Arun Kumar, J. Mauricio Calvo-Calle, Caroline Othoro, David Altszuler, Victor Nussenzweig, and Elizabeth H. Nardin

Infect. Immun. 2008;76 1200-1206

We conclude that in the absence of class I-restricted CD8+ T cells, sporozoite-induced protective immunity can be effectively mediated by class II-restricted immune effector mechanisms. These results support efforts to develop subunit vaccines that effectively elicit high levels of antibody and CD4+ T cells to target *Plasmodium* preerythrocytic stages.

Letter to the Editor: Chorea in a 29-year-old Nigerian following antimalarial treatment with artesunate

O.A. Busari and G. Oligbu

International Journal of Infectious Diseases, Volume 12, Issue 2, March 2008, Pages 221-223

No abstract available



Tudor domain proteins in protozoan parasites and characterization of Plasmodium falciparum tudor staphylococcal nuclease

Manzar J. Hossain, Reshma Korde, Shivani Singh, Asif Mohammed, P.V.N. Dasaradhi, V.S. Chauhan and Pawan Malhotra

International Journal for Parasitology, Volume 38, Issue 5, April 2008, Pages 513-526

Altogether, these results suggest that PFTSN is an essential enzyme in the parasite's life cycle.

Isotype expression, post-translational modification and stage-dependent production of tubulins in erythrocytic Plasmodium falciparum

B.J. Fennell, Z.A. Al-shatr and A. Bell

International Journal for Parasitology, Volume 38, Issue 5, April 2008, Pages 527-539

Taken together, these findings form the basis for a better biological appreciation of P. falciparum microtubules and for the correct deployment of purified tubulins in the evaluation of microtubule inhibitors as potential antimalarial drugs.

Role of Ca²⁺/Calmodulin-PfPKB Signaling Pathway in Erythrocyte Invasion by Plasmodium falciparum

Ankush Vaid, Divya C. Thomas, and Pushkar Sharma

J. Biol. Chem. 2008;283 5589-5597

PfPKB inhibitors dramatically reduced the ability of the parasite to invade erythrocytes. Furthermore, we demonstrate that PfPKB associates with actin-myosin motor and phosphorylates PfGAP45 (glideosome-associated protein 45), one of the important components of the motor complex, which may help explain its role in erythrocyte invasion.

Nuclear Non-coding RNAs Are Transcribed from the Centromeres of Plasmodium falciparum and Are Associated with Centromeric Chromatin

Felomena Li, Lakshmi Sonbuchner, Sue A. Kyes, Christian Epp, and Kirk W. Deitsch

J. Biol. Chem. 2008;283 5692-5698

These observations support the hypothesis that ncRNAs play an important role in the proper organizational assembly of chromatin in P. falciparum, perhaps compensating for a lack of both regulatory transcription factors and RNA interference machinery.

Fine Specificity of Neonatal Lymphocytes to an Abundant Malaria Blood-Stage Antigen: Epitope Mapping of Plasmodium falciparum MSP133

Indu Malhotra, Alex N. Wamachi, Peter L. Mungai, Elton Mzungu, Davy Koech, Eric Muchiri, Ann M. Moormann, and Christopher L. King

J Immunol 2008;180 3383-3390

We conclude that the fetal malaria response functions in a fully adaptive manner and that this response may serve to help protect the infant from severe malaria during infancy.

Differential Community Response to Introduction of Zinc for Childhood Diarrhea and Combination Therapy for Malaria in Southern Mali

Peter J. Winch, Seydou Doumbia, Modibo Kanté, Aïssata Diarra Malé, Eric Swedberg, Kate E. Gilroy, Amy A. Ellis, Gassim Cissé, and Boubakar Sidibé

J. Nutr. 2008 138: 642-645

To some extent zinc treatment is the solution to a problem that communities may not recognize at all. Interventions to improve case management of sick children must be integrated across diseases and nutritional problems at both the facility and community levels. Operational research can identify points where integration should occur and how it should be carried out. Programs targeting single diseases or single nutritional problems can have a variety of deleterious effects on health systems, no matter how well they are planned.



Clinical Picture: Not all that is malaria is falciparum

AJ Brent and BJ Angus

The Lancet Infectious Diseases, Volume 8, Issue 3, March 2008, Page 208

No abstract available

Book reviewed: Pest friends in the Cretaceous

Karen Chin

Nature 451, 1053

What Bugged the Dinosaurs? Insects, Disease, and Death in the Cretaceous
Fossils preserved in amber hint at surprising links between dinosaurs and their insect contemporaries.

A photosynthetic alveolate closely related to apicomplexan parasites

Robert B. Moore, et al

Nature 451, 959-963 (21 February 2008)

Many parasitic Apicomplexa, such as Plasmodium falciparum, contain an unpigmented chloroplast remnant termed the apicoplast, which is a target for malaria treatment. However, no close relative of apicomplexans with a functional photosynthetic plastid has yet been described. Here we describe a newly cultured organism that has ultrastructural features typical for alveolates, is phylogenetically related to apicomplexans, and contains a photosynthetic plastid.

The discovery of this organism provides a powerful model with which to study the evolution of parasitism in Apicomplexa.

A test of the chromosomal theory of ecotypic speciation in Anopheles gambiae

Nicholas C. Manoukis, Jeffrey R. Powell, Mahamoudou B. Touré, Adama Sacko, Frances E. Edillo, Mamadou B. Coulibaly, Sekou F. Traoré, Charles E. Taylor, and Nora J. Besansky
PNAS 2008 105: 2940-2945

Both the simulations and field observations support the thesis that speciation by ecotypification is occurring, or has occurred, prompting consideration of Bamako as an independent species.

Short communication: End-user errors in applying two malaria rapid diagnostic tests in a remote area of Sudan

Osama M.E. Seidahmed, Muneir M.N. Mohamedein, Afrah A. Elsir, Fayez T. Ali, El Fatih M. Malik and Eldirdieri S. Ahmed

Tropical Medicine & International Health, OnlineEarly Articles

To improve malaria diagnosis with rapid tests, users require training and better manufacturer's instructions that take into account local conditions.

Changing pattern of malaria in Bissau, Guinea Bissau

Amabelia Rodrigues, Joanna Armstrong Schellenberg, Poul-Erik Kofoed, Peter Aaby and Brian Greenwood

Tropical Medicine & International Health, OnlineEarly Articles

In Bissau, the prevalence of malaria parasitaemia in the community is now low and malaria is over-diagnosed in health facilities. Laboratory support will be essential to avoid unnecessary use of the artemisinin combination therapy which is now being introduced as first-line treatment in Bissau with support from the Global Fund.

Plasmodium falciparum from Pará state (Brazil) shows satisfactory in vitro response to artemisinin derivatives and absence of the S769N mutation in the SERCA-type PfATPase6



Isabel D. Ferreira, Axel Martinelli, Louise A. Rodrigues, Ediclei L. do Carmo, Virgílio E. do Rosário, Marinete M. Póvoa and Pedro Cravo

Tropical Medicine & International Health 13 (2), 199–2

Artemisinin derivatives display satisfactory in vitro activity locally and the pfATPase6 gene is distinct from that reported in French Guiana, suggesting that those haplotypes have not been introduced regionally.

Effectiveness of malaria control during changing climate conditions in Eritrea, 1998-2003

Patricia M. Graves, et al

Tropical Medicine & International Health 13 (2), 218–228

The results support the view that both indoor residual spraying and impregnated nets have been independently effective against malaria, and that larval control was also effective in one area. Thus climate, while significant, is not the only explanation for the recent decline in malaria cases in Eritrea. If appropriate statistical approaches are used, routine surveillance data from cases attending health facilities can be useful for assessing control programme success and providing estimates of the effectiveness of individual control measures. Effectiveness estimates suitable for use in cost-effectiveness analysis have been obtained.

Do antibody responses to malaria vaccine candidates influenced by the level of malaria transmission protect from malaria?

I. Nebie, et al

Tropical Medicine & International Health 13 (2), 229–237

Antibody levels to the four antigens are affected by the intensity of malaria transmission and associated with protection against clinical malaria. It is worthwhile investing in the development of these antigens as potential malaria vaccine candidates.

Short communication: Chloroquine-resistance molecular markers (Pfcr1 T76 and Pfmdr-1 Y86) and amodiaquine resistance in Burkina Faso

Halidou Tinto, Lougué Guekoun, Issaka Zongo, Robert Tinga Guiguemdé, Umberto D'Alessandro and Jean Bosco Ouédraogo

Tropical Medicine & International Health 13 (2), 238–240

We investigated the relationship between the two main molecular markers for chloroquine resistance (Pfcr1 T76 and Pfmdr-1 Y86) and the clinical efficacy of amodiaquine in Burkina Faso. Before treatment, the prevalence of Pfcr1 T76, Pfmdr-1 Y86 or both mutations in the same infection was significantly higher in patients who experienced a recrudescence than in those who successfully responded to the treatment. Therefore, these two molecular markers could be useful in monitoring amodiaquine resistance, particularly in countries where this drug is used in combination with artesunate as first- or second-line treatment.

Longitudinal analyses of immune responses to Plasmodium falciparum derived peptides corresponding to novel blood stage antigens in coastal Kenya

George W. Agaka, Philip Bejon, c, Greg Fegan, d, Nimmo Gicheru, Viviane Villarda, Andrey V. Kajava, Kevin Marshc and Giampietro Corradina

Vaccine, Article in Press, Uncorrected Proof

The current study substantiates further the potential of protein PFB0145c and also identifies protein PF11_0424 as another likely target of protective antibodies against P. falciparum malaria.

Plasmodium berghei merozoite surface protein-9: Immunogenicity and protective efficacy using a homologous challenge model



Tatiana Maria Lopera-Mesa, Ashima Kushwaha, Asif Mohammed and Virander Singh Chauhan

Vaccine, Volume 26, Issue 10, 4 March 2008, Pages 1335-1343

These results suggest for the first time that MSP-9 based immunogens may constitute part of an effective malaria vaccine.

... Jobs ...

Operations Officer - Malaria Consortium South Sudan (Aweil Office)

Application deadline: 9 March 2008

Malaria Consortium (MC) provides support to the Ministry of Health (MoH), Government of South Sudan (GoSS) and the State Ministry of Health in Northern Bahr el Ghazal. This support focuses on the control of malaria in three counties in Northern Bahr el Ghazal State. To support this growing portfolio of programmes we are seeking a dynamic person with a broad range of operational, logistical and distribution experience who can support our growing portfolio of projects in prevention, case management of malaria, and work on Neglected Tropical Diseases. The purpose of the Operations Officer will be to plan, supervise, and implement logistical, financial, administrative, and procurement activities in the Aweil office. A significant proportion of time may need to be spent working in field locations. [More information](#)

Non-Clinical NDM Scientific Leadership Fellow, Nuffield Department of Clinical Medicine, University of Oxford

The closing date for applications: 20 March 2008

The Nuffield Department of Medicine is a large multi-disciplinary department hosting one of the largest groupings of biomedical sciences in the University sector. The Nuffield Department of Medicine invites applications for the current round of Scientific Leadership Fellows in the following field:

MRC Centre for Genomics and Global Health <http://www.cggh.ox.ac.uk/>

In the field of genomic epidemiology, encompassing statistical genetics, bioinformatics and population genetics applied to malaria and other major diseases of the developing world. Enquiries: Prof Dominic Kwiatkowski: dominic@well.ox.ac.uk

[More information](#)

Research Fellow Medical Statistics and Epidemiology, Disease Control & Vector Biology Unit, Department of Infectious and Tropical Diseases, The London School of Hygiene & Tropical Medicine

Closing date for applications is 20th March 2008

Ref: DS4

We have a vacancy for a research fellow in medical statistics and epidemiology to join a collaborative project working to improve malaria and anaemia control in young Tanzanian children. The person will be based in London and will contribute to the design of analytical plans, lead the statistical analysis of results and assist in the preparation of research reports and papers for publication. There will be opportunities to visit field sites and to participate in the planning of new projects. [More information](#)

... Education ...

PhD Studentships (UK/EU students only), University of Nottingham, School of Biology

Closing date for applications: 10 March 2008

The School of Biology is recruiting to the following PhD project:



Functional analysis of signalling pathways modulating malaria parasite development (University funding) Supervisor: Rita.Tewari@Nottingham.ac.uk
More information

... News ...

General

Nature News Malaria Special: Killer Blow

Volume 451 Number 7182

The malaria crisis is starting to yield to new tools and new strategies, made possible by a substantial increase in resources over the past ten years — from less than \$100 million to almost \$1 billion this year. Is it enough to provide the killer blow? In Nature this week find a commentary by Mark Grabowsky of the Global Fund on how these funds should best be spent, alongside news features on the hunt for a malarial vaccine, and a case report from Zambia.

Nature News Malaria Special: Podcast

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Listen to reporter Michael Hopkin talking to researchers and policy makers in Zambia about their fight against malaria.

26 February 2008, Nature News

Malaria map brings good news

Disease transmission is low throughout large areas of malarial risk.

Malaria risk: areas where malaria is endemic, with moderate to high transmission risk (shown in red), or sporadic and unstable, with low transmission risk (shown in pink). See more maps. S. HAY Some 2.4 billion people live in places where they risk catching the deadliest form of malaria. But a new study brings some good news: 1 billion of them live in zones where transmission is so low that the disease should be easy to bring under control, or even eradicate.

25 February 2008, Reuters

Malaria can be beaten in many places, map shows

The first new global malaria map in 40 years shows nearly half the 2.37 billion people at risk from the mosquito-borne killer live in areas where the chance of actually catching the disease is less than 0.01 percent a year.

Simon Hay of the University of Oxford said he was "very surprised" by the finding, which suggests swathes of Latin America and Asia -- and even parts of Africa -- face a significantly lower risk than previously thought.

20 February 2008, Voa News

Scientists, Police Lift Lid on Life-Threatening Fake Malaria Drugs

For decades, doctors and scientists have watched helplessly as first-line medications became ineffective against the disease. That's because malaria parasites have evolved resistance to quinine-based medications such as chloroquine. But, as we hear from reporter Rose Hoban, the latest public health enemy is not so much a mutating microbe as it is human greed.

Africa

28 February 2008, Sudan Tribune

Sudan distributes anti-malaria nets in war affected areas



In order to improve and expand basic health services in four war affected states, Sudanese government with the support of World Bank distributed about 180 thousand anti-malaria bed nets.

28 February 2008, Daily Champion

Nigeria: Nets for Life Distributes 82,500 Mosquito Nets Today

AS part of its malaria prevention programme in Nigeria, a non-governmental organisation, NETSFORLIFE, in partnership with Coca-Cola Foundation, Exxon Mobil and Standard Chartered Bank will today commence the distribution of 82,500 long lasting insecticide-treated nets to communities with high prevalence of reported malaria cases in Abuja.

27 February 2008, SciDev.Net

Kenya 'continues to use old malaria drugs'

Kenyan health workers are continuing to prescribe non-recommended antimalarial drugs that cause drug resistance because new prescribing policies have been poorly implemented, according to a study.

25 February 2008, Trading Markets

ExxonMobil Helps Launch Malaria Prevention Program In Nigeria

Long-lasting insecticide-treated nets will be distributed to Nigerian communities with a high prevalence of reported malaria cases. The expansion of the NetsforLife program in Nigeria comes one year after ExxonMobil helped launch the program in Angola.

25 February 2008, CNN Money

A new approach to an old disease

A public-private partnership tries to take a bite out of malaria by merging two drugs into one. Last fall Kimando became one of the first physicians in Africa to prescribe a new drug made by French pharmaceutical company Sanofi-Aventis (SNY). (Sanofi also makes Arsucam.) The drug, known as ASAQ, melds the two treatments used in Arsucam into one pill; it also marks a new approach to addressing a disease that kills more than a million people a year.

25 February 2008, The East African

Tanzania: Bush Unveils 5.2m-Bednet Plan to Fight Malaria

US President George W Bush last week unveiled a new plan to distribute 5.2 million free bednets in Tanzania. The nationwide programme will provide nets to protect every child between the ages of one and five.

24 February 2008, Angola Press Agency

Angola: Malaria Claims Over 500 Lives in 2007

At least 512 people perished in 2007 due to malaria, amongst 209,000 cases diagnosed, in the south Huíla province, by the provincial department of Public Health and Control of Endemic Diseases.

23 February 2008, The Statesman

Kwaw Kese leads Bush's fight against Malaria

Ghana's Hip-life star Emmanuel Botchway also known as Kwaw Kese (Abodam) in the hip life world has expressed his sincere thanks to President John Agyekum Kufuor and Pamela Bridge Waters, the United States Ambassador to Ghana for recommending him to President George Walker Bush as the malaria idol in Ghana.

23 February 2008, Shabait.com



Eritrea: President Isaias Receives and Holds Talks With Participants of Cross-Country Workshop

President Isaias Afwerki yesterday received and held talks in Massawa with the participants of the cross-country workshop on evaluating the impact of malaria and HIV/AIDS, which took place in Asmara.

22 February 2008, Shabait.com

Eritrea: Cross-Country Workshop On Evaluating Impact of Malaria And HIV/Aids Concludes

The five-day cross-country workshop on the evaluation of the impact of malaria and HIV/AIDS in Asmara concluded today. The workshop focused on the exchange of experience as regards to tackling malaria and HIV/AIDS.

22 February 2008, New Era

Namibia: We Can Cope With High Demand - Mossi-Nets

Namibia's mosquito net manufacturer, Mossi-Nets says there is no need for the Government to procure mosquito nets from outside the country because it has the capacity to produce high quality nets.

22 February 2008, The Analyst

Liberia: Sirleaf Discusses Bush's Visit [interview]

President Ellen Johnson-Sirleaf has visited Washington D.C more than thrice since assuming the mantle of authority two years ago. During two of her visits to the United States of America, she met President George Walker Bush and had heartwarming discussions with him.

22 February 2008, The Post

Cameroon: Corruption Hinders Distribution of Subsidised Malaria Drugs

Corruption has been identified as the main jinx hindering the effective distribution of modern malaria drugs, subsidised by the Global Health Fund for Malaria AIDS and Tuberculosis.

22 February 2008, Angola Press Agency

Angola: U.S. Government Grants Usd 18 Million to Fight Malaria

Lobito/The ambassador of the United States of America, Dan Mozena, Thursday here, said that the government of his country will make available every year from 2008 about USD 18 million in the framework of the programme of fight against malaria in Angola.

21 February 2008, Joy online

Controversy over Bush's \$17m malaria money

While government is telling the whole world that George Bush of USA has given Ghana \$17m to fight malaria, professionals on the ground at the National Malaria Control Programme (NMCP) say, it is not so.

20 February 2008, Yahoo News

Volunteers tackle Zambezi River to fight malaria

A group of international volunteers will confront southern Africa's fierce Zambezi River in small boats to treat malaria and expose its ravages on secluded communities, organisers said Wednesday.

20 February 2008, The Earth Times

First Lady Laura Bush Visits AED/Netmark Malaria-Control Project in Ghana

First Lady Laura Bush today visited the Maamobi Polyclinic in the Greater Accra region of Ghana to see firsthand two interventions being implemented by AED to control malaria.



Asia

27 February 2008, Calcutta Telegraph

90 per cent Indians at malaria risk

Nine out of 10 persons in India are at risk of picking up malaria caused by the potentially deadly Plasmodium falciparum parasite, the first world malaria map in 40 years has shown.

27 February 2008, Mangalorean

Bejai tops list with 200 malaria cases in Mangalore

As many as 19 malarial deaths were registered in Mangalore city till September 2007, according to sources here on Monday.

Oceania

21 February 2008, News-Medical.Net

Coral alga may hold key to malaria prevention

A brown alga discovered in Sydney harbour by Sydney University scientists could provide the key to treating diseases that disable and kill millions each year.

Americas

21 February 2008, The Times

Idol joins malaria fight

"American Idol" winner Jordin Sparks said that Americans should help Africa battle deadly malaria and that Irish rocker turned activist Bob Geldof looks "like a saint" in person.

19 February 2008, Science Blog

Malaria pills pose psychiatric, health threat to 10 percent of deploying soldiers

Malaria is a constant threat to US military personnel operating in Afghanistan, but some troops may face further risk, as epidemiologists have revealed a significant prevalence of contraindications to the safe use of the anti-malarial drug, mefloquine.

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