Malaria Policy Advisory Group (MPAG)

Declaration of Interests report for MPAG virtual meeting held from 1 to 3 October 2024

Fifteen out of fifteen MPAG members participating in the meeting updated their declarations of interest in advance of the meeting, which were assessed by the WHO Secretariat. Twelve members reported interests, which are summarized below. No MPAG members reported specific interests regarding relevant March 2024 agenda topics for decision. It was assessed that all members could fully participate in all sessions.

All the reported interests are summarized below:

1. Professor Evelyn Ansah, University of Health & Allied Sciences, Ghana

• Research Support – Ghana Co-Investigator on funding from PATH for the Health Utilization Study on a qualitative assessment of the pilot implementation of RTS,S. (ongoing) This interest was assessed as non-personal, non-specific and financially significant.*

2. Emeritus Professor Graham Brown, Professor, University of Melbourne, Australia

 Consulting – WHO/Global Malaria Programme contract to write the interim draft of the Executive Summary of Strategic Advisory Group on malaria eradication (SAGme) report (2019). This interest is assessed as personal, non-specific and financially significant.*

3. Professor Umberto d'Alessandro, Director, Medical Research Council Unit the Gambia, London School of Hygiene and Tropical Medicine, UK

- Research support All interests assessed as non-personal, non-specific and financially significant.*
 - (a) Principal investigator in phase 1b multi-stage *p. falciparum* malaria vaccine study to assess the safety and immunogenicity of the blood-stage vaccine candidate RH5.2 virus-like particle (VLP) in Matrix-MTM and the preerythrocytic stage vaccine candidate R21 in Matrix-MTM, both along and in combination, in adults and infants in the Gambia funded by EDCTP (ongoing–March 2025).
 - (b) Principal investigator in seasonal R21 mass vaccination for malaria elimination funded by Applied Global Health Research MRC UKRI (ongoing June 2026).
 - (c) Principal investigator of a multi-centre randomized controlled non-inferiority trial to compare efficacy, safety and tolerability of the Triple Artemisinin-based Combination Therapies versus first-line ACTs + placebo for the treatment of uncomplicated *P. falciparum* malaria in Africa, funded by the University of Oxford (ended June 2023).
 - (d) Principal investigator in a clinical trial on the safety and efficacy of pyronaridineartesunate (Pyramax) in asymptomatic malaria-infected individuals. The Medical Research Council Unit (MRC), The Gambia, received funding from Medicines for Malaria Venture (MMV) (2018–2019).
- Consultant Development of M5717 new antimalarial drug for Merck Health care KGaA (2022 – ongoing). This interest is assessed as personal, non-specific and non-financially significant.*

4. Professor Abdoulaye Djimde, Head, Molecular Epidemiology Drug Resistance Unit, University of Mali, Mali

- Research support All interests assessed as non-personal, non-specific and financially significant.*
 - a) DELTAS Africa Professor Djimde is the Principal Investigator for Developing Exellence in Leadership and Genetics Training for Malaria Elimination (DELGEME) with funding from the Wellcome Trust (2016–2021).
 - PAMGEN study funded by the African Academy of Sciences looking at genetic interactions between human populations and malaria parasites in different environmental settings across Africa (2018–2022).
 - c) WANECAMII Professor Djimde is the Principal Investigator of the West African Network for Clinical Trials of Antimalarial Drugs with funding from EDCTP (2019–2024).
 - d) Clinical evaluation of ASAQ+Atovaquone-Proguanil tri-therapy for malaria treatment in African children funded by EDCTP (2019–2023).
 - e) Funding from the Medical Research Centre, UK for using single-cell RNAseq to deeply investigate human malaria parasite transmission dynamics (2020–2021).
 - f) MalariaGEN Resource Center Software Development Support (2021–2022).
 - g) RTS,S SMC trial sub-investigator on trial which contributed minimal salary support through the London School of Tropical Medicine & Hygiene.
 - h) RIA2017MC-22 Professor Djimde is the Principal Investigator for study with funding from ASAAP (2019–2023).
- Expert advice Providing scientific advice. Honorarium provided. This interest is assessed as personal, non-specific and financially significant.*
 - a) Speaker during Novartis conference providing expert advice (2018)
 - b) Speaker during Shin Poung conference providing expert advice (2018)

5. Professor Chris Drakeley, Immunologist, Department of Infection Biology, London School of Hygiene and Tropical Medicine, UK

- Research support All interests assessed as non-personal, non-specific and financially significant.*
 - (a) Support from BMGF for programme grant Vivax serology partnership (VISPA). Multicomponent grand attempting to provide umbrella for those working on vivax serology. Two components have been funded so far, manage and oversight (including policy) largely delivered by WEHI and a set of biobanking studies which include Brazil, Ethiopia and Pakistan. Professor Drakeley is co-Principal Investigator with Professor Ivo Mueller with key support from Michael White and Leanne Robinson. The grant is held by WEHI. (https://vispa.online/about-vispa/) (ongoing—2025).
 - (b) UK funded component (UKRI) of an EU Horizon 2020 study. Award for a study on P. vivax serology test and treat in Madagascar. Professor Drakeley is co-Principal Investigator and LSHTM is an external recipient. The study centers around a randomised controlled trial with the intervention based on treatment of those serology-positive in the assay developed by WEHI/Pasteur for the identification of the hypnozoite carriers compared to the standard of care alone. Other aspects are social acceptability, digital health related to G6PD testing and capacity building. Partners are AHRI Ethiopia, Pasteur Madagascar, FIND, University of Galway, Medea Italy and WEHI (ongoing 2027).
 - (c) Research support from BMGF to fund study to evaluate the effect of increasing the age range of SMC on malaria transmission (ongoing–2025).
 - (d) Research support from BMGF to fund study on evaluation of new drug combinations on transmission reduction (2023).
 - (e) Research support from BMGF to fund study on impact of malaria infection on COVID (2023).

6. Professor David Fidock, Director, Centre for Malaria Therapeutics and Antimicrobial Resistance, Columbia University, USA

- Research support All interests assessed as non-personal, non-specific and financially significant.*
 - (a) Research support from Medicines for Malaria Venture supporting studies of drug resistance risks in their portfolio of antimalarials in late discover or undergoing development. The research assesses whether compounds are prone to resistance and studies the mechanisms of resistance and modes of action (2024).
 - (b) Research support –from the Bill & Melinda Gates Foundation for work on the Malaria Drug Accelerator Consortium (MalDA) which works to define the 'drug-able genome' of *P. falciparum* parasites to develop new target-based drug screens. Co-investigator with Dr Elizabeth Winzele from UCSD (2021–2025).
 - (c) Research support principal investigator from the Bill & Melinda Gates Foundation on antimalarial drug resistance using genetic crosses and studies to accelerate the throughput of laboratory-based experiments that define the resistance risks of antimalarial compounds in early discovery (2021–2025).

7. Professor Caroline Jones, Senior Social Scientist, KEMRI-Wellcome Trust Research, Kenya

- Research support All interests assessed as non-personal, non-specific and financially significant.*
 - a) Senior social scientist on the project funded by UNITAID called the "Broad One Health Endectocide-based Malaria Intervention in Africa (BOHEMIA)". This clinical trial of ivermectin mass drug administration (MDA), is being conducted in Mozambique and Tanzania. Professor Jones is the lead social scientist and is investigating community and local stakeholder perceptions and responses to ivermectin MDA for malaria control. It aims to understand the local context and possible influences on uptake which runs from (February 2019 – February 2024).
 - b) Research support Senior social scientist on a household-randomized controlled trial which is multi-organization grant with Department for International Development (DFID) UK, MRC, Wellcome Trust Global Health trials grant on "Can improved housing provide additional protection against clinical malaria over current best practice?" (2014–2019).

8. Dr Nilima Kshirsagar, Emeritus Scientist, Indian Council of Medical Research, India

 Consulting – Zydus Lifesiences, company driven by the purpose of delivering care and nuturance for the patients, backed by power of innovation, science and cutting-edge technology. Providing scientific advice (ongoing – 2023). Honorarium provided. This interest is assessed as personal, non-specific and financially significant.*

9. Dr Corine Ngufor, Associate professor, London School of Hygiene and Tropical Medicine, UK

- Research support Principal investigator for research for the evaluation of Insecticide
 Treated Nets (ITNs) and Indoor Residual Spraying (IRS), funded by Vestergaard (closed 2023),
 Shobikaa Impex (closed 2023), AtoZ (Closed 2023), SC Johnson, Tianjin Yorkool, the Global
 Fund to Fight AIDs, Tuberculosis and Malaria (GFATM) (current). This interest is assessed as
 non-personal, non-specific and financially significant.*
- Expert advice Providing scientific advice. No honorarium provided. This interest is assessed
 as personal, non-specific and financially significant.*
 - a) Presenting data and provided expert opinion for ITN and IRS products, for tests undertaken for private sector, WHO/GMP meetings (noninferiority technical consultations) and WHO/RPQ (product assessment feedback) (ongoing 2024).

10. Dr Fredros Okumu, Director of Science, Ifakara Health Institute, Tanzania

- Employment with Ifakara Health Institute (ongoing). This interest is assessed as personal, non-specific and financially significant.*
- Consulting for WHO Vector Control Product Prequalification as a consultant assessor (2020). This interest is assessed as personal, non-specific and financially significant.*
- Research support All interests assessed as non-personal, non-specific and financially significant.*
 - a) Research support grants received from the Bill & Melinda Gates Foundation; WHO-TDR programme; Wellcome Trust; Foundations of the National Institutes of Health, USA; Africa Research Excellence Fund; UKRI/EPSRC, UK; Rudolf Geigy Foundation, Switzerland; Hanako Foundation, Singapore; The Royal Society, London; The British Academy, London, UNITAID, Medical Research Council, UK; Swiss National Science Foundation, USAID, Innovative Vector Control Consortium, Grand Challenges, Canada, Scottish Funding Council and Consortium for Advanced Research Training in Africa (some closed; some ongoing). All grants were awarded to Ifakara Health Institute and are assessed as non-personal, non-specific and financially significant.*
 - b) Patent Applications held by Ifakara Health Institute and assessed as non-personal, non-specific and non-financially significant.*
 - c) World Intellectual Property Organization. Patent number WO 2010/101462-A2: Behavior modifying odorant mixture for malaria mosquitoes (Joint patent by Ifakara Health Institute, TZ and Wageningen University, The Netherlands): https://patents.google.com/patent/WO2010101462A2/en
 - d) World Intellectual Property Organization. Patent number WO 13187690.6-1656: *A complex of structures for delivering pesticidal agents to arthropods.* (Joint patent by Ifakara Health Institute, TZ & In2Care Holding B.V, The Netherlands): https://patents.google.com/patent/EP2859794A1/en
- Expert opinions: contributed to the following assessed as personal, non-specific and non-financially significant.*
 - a) Serves as a member of the Malaria Strategic Advisory Panel for the Bill & Melinda Gates Foundation (ongoing)
 - b) Contributed in Research and Draft team for Africa Union on: African Union High Level Panel on Emerging Technologies (2018): Gene Drives for Malaria Control and Elimination in Africa. https://www.nepad.org/publication/gene-drives-malaria-control-and-elimination-africa
 - c) Contributed as a co-chair of malERA Refresh Consultative Panel on Tools for Malaria Elimination. (2017). malERA: An updated research agenda for diagnostics, drugs, vaccines, and vector control in malaria elimination and eradication. PLoS Med. 2017 Nov 30;14(11):e1002456.doi: 10.1371/journal.pmed.1002456. eCollection 2017 Nov. Review: https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002455
 - d) Contributed as a member of this panel: James S, Collins FH, Welkhoff PA, Emerson C, Godfray HCJ, Gottlieb M, Greenwood B, Lindsay SW, Mbogo CM, Okumu FO, Quemada H, Savadogo M, Singh JA, Tountas KH, Touré YT (2018). Pathway to Deployment of Gene Drive Mosquitoes as a Potential Biocontrol Tool for Elimination of Malaria in Sub-Saharan Africa: Recommendations of a Scientific Working Group†. Am J Trop Med Hyg. 2018 Jun;98(6_Suppl):1-49. doi: 10.4269/ajtmh.18-0083. https://pubmed.ncbi.nlm.nih.gov/29882508/

11. Dr Aranxta Roca Feltrer, Regional Malaria Director, Malaria Consortium, Mozambique

- Employment with the Malaria Consortium (non-profit organization) (closed). This interest is assessed as personal, non-specific and financially significant.*
- Employment with PATH (non-for profit organization) for a grant funded by BMGF aiming to provide technical assistance to malaria endemic countries (ongoing). This interest is assessed as personal, non-specific and financially significant.*
- Research grants from the Bill & Melinda Gates Foundation on surveillance strengthening in Mozambique (closed). This interest is assessed as non-personal, non-specific and financially significant.*
- Advisory roles All interests assessed as personal, non-specific and financially significant.*
 - a) Technical Advisor on RBM Surveillance Monitoring and Evaluation (SME) working group. Providing advice on surveillance strengthening activities across malaria endemic countries (ongoing).

12. Professor Dyann Wirth, Richard Pearson Strong Professor and Chair, Harvard T.H. Chan School of Public Health, USA

- Research support Research grant support to Harvard University received from the following organizations (all current): All interests assessed as non-personal, non-specific and financially significant.*
 - a) National Institute of Health, USA Principal Investigator or Co-PI on four grants on new drug discovery and drug resistance (DHODH/mitochondrial targets, ProRS and targeting parasites in mosquitoes, and ACT resistance).
 - b) Bill & Melinda Gates Foundation
 - Support for Genetic epidemiology of malaria, Rethinking malaria global leaders initiative, and Malaria drug accelerator (MalDA) consortium. MalDA consortium ia a global consortium of researchers and drug developers identifying and sharing compounds deemed to be effective candidates for the drug pipline for malaria treatment and prevention (ongoing).
 - Support for the Malaria Drug Accelerator (MalDA) Consortium, as co-principal investigator on a grant housed at the University of California San Diego (ongoing).
 - Support for Rethinking Malaria Global Leaders Initiative, as co-principal investigator.
 No salary or honorarium received(ongoing).
 - c) PATH Principal Investigator for Mal095 using RTS,S to look at the issue of allele spectific immunity (ongoing).
- Educational support to Harvard University for the Eradication of Malaria Leadership course provided by BMGF, JC Flowers Foundation, Sumitomo Corporation and ExxonMobil. (ongoing). These interests are assessed as non-personal, non-specific and financially significant.*
- Advisory roles All interests assessed as personal, non-specific and financially significant.*
 - a) Medicines for Malaria Venture (MMV) Expert Scientific Advisory Committee (ESAC). Honorarium and travel provided (ongoing).
 - b) Board of Trustees of the Marine Biological Laboratories, Wood Hole, MA. No honorarium or travel expenses received (ongoing).
 - c) Warren Alpert Foundation Scientific Advisory Committee for the annual award. Honorarium received (ongoing).
 - d) PATH/PMI Insights intiative which is a collaborative body of global experts on malaria research and policy to increase access and information to forward the goal of malaria elimination (ongoing).
 - e) Reviewer for National Institutes of Health (NIH) grants. No salary or honorarium received (ongoing).

- f) Reviewer of research and development projects for Global Health Innovative Technology Fund (GHIT). No salary or honorarium received (ongoing).
- g) Serve on the Medicines for Malaria Venture (MMV) ESAG. Nor salary received. Honorarium and travel expenses received (ongoing).

Due diligence (internet search)

Nothing significant was found that was not already declared by MPAG members.

* According to WHO's Guidelines for Declaration of Interests (WHO expert), an interest is considered "personal" if it generates financial or non-financial gain to the expert, such as consulting income or a patent. "Specificity" states whether the declared interest is a subject matter of the meeting or work to be undertaken. An interest has "financial significance" if the honoraria, consultancy fee or other received funding, including those received by expert's organization, from any single vaccine manufacturer or other vaccine-related company exceeds 5000 USD in a calendar year. Likewise, a shareholding in any one vaccine manufacturer or other vaccine-related company in excess of 1000 USD would also constitute a "significant shareholding".