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# INTRODUCTION

# **WELCOME NOTE**



We are very pleased to co-host with the Multilateral Initiative on Malaria the 8th edition of the Pan-African Malaria Conference in Rwanda and look forward to welcoming you all to Rwanda.

The theme of this conference, "Grassroots Mobilization to End Malaria: Invest, Innovate & Integrate" rhymes with many of the efforts and strategies our country is implementing to eliminate malaria and strengthen the health system in general.

In a nutshell, two-thirds of malaria cases in Rwanda are diagnosed and treated by a network of trained community health workers in every village. The country is using new tools to properly implement malaria prevention measures, including the control of mosquito breeding sites through the use of drone-based larviciding. Research is central to guiding our policies and strategies based on the evidence we generate.

Reports from our national malaria programme show a sharp decline in malaria incidence, from 409 per 1000 people in 2017 to 47 in 2023. This has been achieved through a number of strategies, including those applied through a well-coordinated partnership between government and civil society organisations.

As we gather to discuss ending malaria on our continent, let's build on the success stories that Africa has in abundance. Mosquitoes don't respect our borders, and neither should our collective efforts to improve the lives of our people.

Welcome to Kigali

Dr Sabin Nsanzimana

Minister of Health

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# A WORD FROM THE CHAIR MIM SOCIETY



What a journey that started in 1997 when it all began in Dakar, then Durban. 1999, Tanzania, 2002; Yaounde, 2005; Nairobi, 2009; Durban 2013; Dakar, 2018, and Kigali, here we come in 2024 - It has finally happened. On behalf of the Multilateral Initiative in Malaria (MIM), I warmly welcome you all to the 8th edition of the MIM-Pan African Malaria Conference, Since Dakar in 2018, a lot has happen. This edition of the MIM-Pan African Malaria Conference is unique in the new found dynamism among the past, present and future generation of malaria researchers that will ensure a smooth transition and the changing of the guards. Between 2018 and now many things have happened - Shortly after the conference we lost an African founding member of the MIM, Prof Ogobara Doumbo and last year 2023, we lost Dr. Peter Johan de Vries, the cofounder of the MIM Society. May I ask the assembly to observe a minute of silence in their memory. Between 2018 and now we witnessed the coming of another global threat, the COVID-19 pandemic that stalled and made us postpone the dates for our conference.

We have seen the advent of many new technologies in ICT and Biotechnology. The world has witnessed the addition of a new prevention tool with the addition of RTS,S and R21 vaccines recommended by the WHO for routine use and whose combination with Malaria chemoprevention is an additional tool in the fight against malaria.

In Dakar 2018, the MIM Society Constitutive Assembly was held to pave the way to have it registered and recognised as a legal entity. It is my pleasure to announce to you that the MIM Society was registered and recognised by the royal courts of Belgium in 2022 and with a registered secretariat in Cameroon. As we go forward the MIM Society has now evolved into a membership society just like the ASTMH. We view this transformation as a wonderful opportunity to enable MIM to more effectively meet the needs of its members while addressing its longstanding problem of financial instability resulting from the lack of a legal structure.

It is envisaged that the MIM Society will have an elected rotatory Presidency. Hopefully with the numerous member benefits all of you would be registering into the society during this conference. I urge you to register at the secretariate and be part of that general assembly and to cast your votes. We have been working hard to rebrand the MIM and this transformation will also be an opportunity to revamp MIM's multilateral dimension and open up to new partnerships. From inception, MIM has pushed forward the visibility of malaria as a global problem. The effective control and subsequent elimination of malaria as a public health scourge will require a multifaceted and comprehensive approach.

Last March 6th, 2024, something extraordinary happened in Yaounde. The Ministers of the High Burden High Impact countries met and acknowledged with deep concern, that despite the progress made, the sobering accounts presented annually since 2017 in the WHO World Malaria Report revealed an alarming stalling of progress in the WHO African Region. They stressed on the urgency of addressing the root causes of this stagnation, The Ministers thereby committed to a concerted action to end malaria deaths by reinforcing the "High Burden High Impact" (HBHI) approach in order to sustainably and equitably address malaria.

The Yaounde "Declaration for accelerated malaria mortality reduction in Africa: committed that "No one shall die from malaria". We welcome the adoption of the Yaounde Declaration and we emphasize our support in particular of Resolution 6 of the declaration where the Ministers pledged to "Build collaborative partnerships for resource mobilization, research and innovation".

I invite you to the discussion of the endorsement during the general assembly on Tuesday April 23, 2024. We have a burden to effect definitive change and that burden motivated the theme for the 8th Pan African Malaria Conference - Grassroot Mobilisation to End Malaria: Invest, Innovate, Integrate. This theme is a call for all of us in the global community of malaria researchers to take ownership, to look for new ways of doing things and financing our efforts.

I extend my profound gratitude to the Government of Rwanda, the Bill and Melinda Gates Foundation, FOSUN Pharma, Medicines for Malaria Venture, Health for Africa and Rapigen for believing in us and supporting us.

The MIM Society owes immense gratitude to her co-Chairs, late Peter de Vries, Jean Pierre van GeerTruyden and indefatigable Wilfred Mbacham, the members of the International Scientific and MIM Planning committees, who devoted their time and energy though physical presence in Kigali and teleconferences, in reshaping what would subsequently be the modus operandi for her conferences.

I would like to single out and thank the MIMLOC partners the Rwandan Biomedical Centre(RBC) and the Society for Family Health (SFH) for their outstanding support through the many volunteer scientists and non-scientists who worked pro-borno to see this dream come true.

Thank you all and have a wonderful MIM Conference.

Professor Emeritus, Rose GF Leke, PhD

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# LETTER FROM THE CO-CHAIR



# **Dear Esteemed Participants,**

It is with great pleasure that I extend a warm welcome to all of you to the 8th Pan-African Malaria Conference being held at the Kigali Convention Centre in Rwanda. This significant event convenes experts, researchers, policymakers, and advocates from across Africa and beyond to collectively address the pressing issue of Malaria.

The conference serves as a platform for knowledge sharing, networking, and strategic planning in our shared mission to combat Malaria. Discussions will focus on various control and prevention strategies, alongside innovative approaches aimed at accelerating progress towards its elimination.

Rwanda's commitment to health and impressive strides in malaria control underscore the collective dedication of African nations in the fight against Malaria. This conference highlights the importance of regional collaboration in overcoming this formidable challenge, with Rwanda's community health workers playing a pivotal role in driving success at the grassroots level.

While significant progress has been made, there is still much work to be done. We must intensify investments in research and development to discover new tools and strategies. Bridging the gap between cutting-edge research and practical applications within communities is crucial for success, and this conference provides a vital platform for partnership towards this goal.

As we convene on World Malaria Day, let us harness the power of grassroots mobilization, scientific innovation, and integrated action plans to envision a future free from Malaria.

Once again, I extend a warm welcome to Rwanda for the 8th Pan-African Malaria Conference. Let us come together, collaborate, and inspire towards a Malaria-free future.

Warm regards,

# **Prof Claude Mambo Muvunyi**

Chair, 8th Pan-African Malaria Conference

# **PROGRAM**

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# MIM Society 8<sup>th</sup> Pan-African Malaria Conference Programme:

# Sunday, April 21st

Time	Main Auditorium	MH1	MH2	МНЗ	MH4	AD10	AD11	AD12	Mezzanine	AD1
7:00 AM - 8:30 AM				Registration /	Accreditation	Centre Opens	,			
8:30 AM - 10:00 AM										
10:00 AM - 10:30 AM										
10:30 AM - 12:00 AM							Sponsor Special Session			
12:00 AM - 1:30 PM										
1:30 PM - 3:00 PM										
3:00 PM - 3:30 PM										
3:30 PM - 5:00 PM						Press Conference				
5:00 PM - 6:30 PM	Opening Ceremony (Plenary session 1) Welcome Remarks - MIM & RBM Decolonizing Global Health Official Opening - MOH									
6:30 PM - 8:00 PM	Welcome Reception									

# MIM Society 8th Pan-African Malaria Conference Programme

# MONDAY, APRIL 22

Time	Main Auditorium	MH1	MH2	МНЗ	MH4	AD10	AD11	AD12	Mezzanine	AD1	
7:00 AM - 8:30 AM	Registration / Accred	ditation C	Centre Opens								
8:30 AM - 10:00 AM	Plenary Session 2 Endemic Countries Engagements for Malaria Elimination										
10:00 AM - 10:30 AM	Coffee Break / Exhibit Hall - Poster Session (Posters from 1 to 214 Excl. Poster 171)										
	Panel Discussion 1		Symposium 1	Scientific Session 1	Symposium 2	Symposium 3	Symposium 4	Symposium 5	Symposium 6		
10:30 AM - 12:00 AM	Health Systems Strengthening, Community Engagement, and Civil Society		Malaria Epidemiology Modelling for malaria decision making in Africa: Enhanced Technical Support and Capacity Strengthening	Immunology and Vaccines 1 Oral Presentation 1-7	Malaria Epidemiology The interpretation and reporting of malaria rapid diagnostic tests (the MaCRA project): results from a multi- country study	Drug Resistance Facilitating an Integrated Regional Response to Antimalarial Drug resistance in South-East Africa	Control and Elimination Implementing single low dose primaquine for transmission blocking in Sub Saharan Africa: where do we stand & where are we going to counter the new threat of artemisinin partial resistance?	Vector Biology and Control Methods validation: improving the generation of high-quality data to make strong evidence- based decisions in vector control	Capacity Building TDR: 50 years working alongside the LMIC malaria research community		
12:00 AM - 1:30 PM	Lunch / Exhibit Hall					1		1			
1.00 1 141	Symposium 7		Symposium 8	Symposium (Sponsored) 9	Symposium 10	Symposium 11	Symposium 12	Scientific Session 2	Symposium 13		
1:30 PM - 3:00 PM	Implementation and Health Systems Now we have two: Malaria vaccines, from integration to scale-up		Capacity Building African Leadership in the Science of Defeating Malaria	Bill & Melinda Gates Foundation Rethinking Malaria Elimination in Africa - The contribution of BMGF in the delivery space	Control and Elimination Evaluation of the BOHEMIA cluster randomized trials of Mass Drug Administration of Ivermectin in Mopeia district in rural Mozambique and Kwale district in rural Kenya	Immunology and Vaccines R21/Matrix-M: a high impact malaria vaccine	Chemoprevention Advancements in Intermittent Preventive Treatment of Malaria in School- Aged Children (IPTsc): Bridging Gaps In Research and Implementation Knowledge to Achieve Scale	Vector Biology and Control 1 Oral Presentation 8-14	Malaria Genomics Advancing malaria elimination efforts among the Elimination 8 Countries through malaria molecular surveillance: Experience from the GenE8 Initiative		
3:00 PM - 3:30 PM	Coffee Break / Exhib	oit Hall - F	oster Session (Pos	sters from 1 to 21	4 Excl. Poster 171)						
3:30 PM - 5:00 PM	Plenary Session Malaria Drug Resistance: Key Perspectives										
	Scientific Session 3		Scientific Session 4	Scientific Session 5	Scientific Session 6	Scientific Session 7	Symposium 14	Symposium 15	Symposium 16		
5:00 PM - 6:30 PM	Vector Biology and Control 2 Oral Presentation 15-21 (+OP288)		Control and Elimination 1 Oral Presentation 22-28	Social and Health Economics 1 Oral Presentation 29-35	Chemoprevention 1 Oral Presentation 36-42	Diagnosis and Reagent 1 Oral Presentation 43-49	Malaria Genomics Malaria Vector Genomics Surveillance in Africa: a Pan- African-led initiative to deliver an accessible data platform for research and public health	Malaria Epidemiology Optimizing Resource Allocation for Effective Malaria Prevention in High- Burden Settings	Capacity Building Balancing Mass Campaigns and Continuous Malaria Interventions: Strategies for Optimal Resource Allocation and Service Delivery		
6:30 PM - 8:00 PM			Sponsor Special Session								

# MIM Society 8<sup>th</sup> Pan-African Malaria Conference Programme:

# TUESDAY, APRIL 23

Time	Main	MH1	MH2	МНЗ	MH4	AD10	AD11	AD12	Mezzanine	AD1
7:00 AM -	Auditorium		2	IIIII				ADIL	MCZZANINO	AU.
8:30 AM					Registration / Ac	creditation Centre	Opens			
8:30 AM - 10:00 AM	Innovations									
10:00 AM - 10:30 AM	Coffee Break / Exhibit Hall - Poster Session (Posters from 215 to 428)									
	Panel Discussion 2		Scientific Session 8	Symposium (Sponsored ) 17	Symposium 18	Symposium 19	Symposium 20	Symposium 21	Symposium 22	
10:30 AM - 12:00 AM	Capacity Building		Vector Biology and Control 3 Oral Presentation 50-56	Fosun Pharma Improving treatment of severe malaria	Malaria Epidemiology When is routine malaria data good enough for programmatic decision making? Country experiences ranging from control to elimination	Pathogenesis and Co- Morbidities Malaria in Children and Adolescents with Sickle Cell Anaemia	Chemoprevention Partnerships for implementation research to optimise the impact of Seasonal Malaria Chemoprevention in West and Central Africa	Chemoprevention Accelerating malaria drug discovery in Africa: Challenges and opportunities for the discovery of new small molecule antimalarial drugs for use in chemoprevention	Control and Elimination Malaria Elimination Efforts in the Horn of Africa: A Historical Perspective, Progress, Bottlenecks and Future Directions	
12:00 AM - 1:30 PM					Lunch	n / Exhibit Hall				
1:30 FW	Scientific Session 9		Scientific Session 10	Symposium 23	Symposium 24	Symposium 25	Symposium 26	Symposium 27	Symposium 28	
1:30 PM - 3:00 PM	Immunology and Vaccines 2 Oral Presentation 57-63 (+OP383)		Phytomedicines and Pharmacology 1 Oral Presentation 64-70	Parasite and Systems Biology Malaria in Africa: up against the Red Queen, planning for the end-game	Malaria in Pregnancy The Malaria in Mother and Babies (MiMBa) Initiative: innovative R&D tools to better serve pregnant and lactating women at risk of malaria	Malaria Epidemiology Emerging Partial Artemisinin Resistance in the Great Lake Region of Africa: Methods for Application of Broad Molecular Surveillance and Integration into National Programs	Control and Elimination Strategic Bed Net Distribution in Urban Areas: Participatory Approaches for Study Design, Findings and Lessons Learned	Treatment and Case Management Moving towards triple artemisinin combination therapies for multidrug-resistant malaria in Africa and Asia	Chemoprevention Context is everything: adapting national PMC strategies to community realities in Benin, Cameroon, Cote d'Ivoire and Mozambique	
3:00 PM - 3:30 PM				Coffee Bre	ak / Exhibit Hall - P	oster Session (Post	ers from 215 to 428)			
3:30 PM - 5:00 PM	Plenary Session 4 Malaria Vaccines									
	Scientific Session 11		Scientific Session 12	Symposium (Sponsored) 29	Scientific Session 13	Symposium 30	Symposium 31	Symposium 32	Symposium 33	
5:00 PM - 6:30 PM	Malaria in Pregnancy 1 Oral Presentation 71-77		Insecticide Resistance 1 Oral Presentation 78-85	Malaria Consortium Catalysing change: The crucial role of philanthropy in eliminating malaria panel event	Vector Biology and Control 4 Oral Presentation 86-92	Drug Resistance Strategies to mitigate antimalarial drug resistance in Africa: grassroots engagement to next generation drugs	Malaria Epidemiology Mobilization of Partnerships to Integrate Molecular Data into National Malaria Surveillance: Perspectives from Senegal and Beyond	Vector Biology and Control Anopheles stephensi in Africa: What has been done, what must be done, and how it could be done?	Control and Elimination The role of African scientists and communities in the development of genetic technologies for malaria vector control	
6:30 PM - 8:00 PM	MIM Society General Assembly		Sponsor Special Session							

<sup>\*</sup> MIM Society General Assembly Start 7:00PM - 9:00PM

# MIM Society 8<sup>th</sup> Pan-African Malaria Conference Programme:

# WEDNESDAY, APRIL 24

Time	Main Auditorium	MH1	MH2	MH3	MH4	AD10	AD11	AD12	Mezzanine	AD1
7:00 AM -		Accredit	tation Centre Open	s						
8:30 AM	Plenary	Accicuit	lation centre open							
8:30 AM - 10:00 AM	Session 5 Malaria Drug Development and Innovations for Malaria Elimination									
10:00 AM - 10:30 AM		Exhibit	Hall - Poster Sessi	on (Posters from	429 to 641)					
	Panel Discussion 3		Scientific Session 14	Scientific Session 15	Symposium 34	Scientific Session 16	Symposium 35	Symposium 36	Symposium 37	Scientific Session 17
10:30 AM - 12:00 AM	Vaccines: On and Beyond the Horizon.		Drug Resistance 1 Oral Presentation 93-99	Drug Efficacy 1 Oral Presentation 100-105	Malaria Epidemiology Malaria Indicator Survey (MIS) 2023 data: The road towards malaria control in Rwanda	Treatment and Case Management 1 Oral Presentation 106-112	Malaria Genomics Working together to strengthen malaria molecular surveillance in the DRC	Vector Biology and Control Catalyzing multilateral initiatives for the effective control and elimination of Vector-Borne Diseases (VBDs): The Role of PAMCA as a Pan-African- led platform	Chemoprevention Integrating Chemoprevention strategies to End Malaria	Pathogenesis and Co- Morbidities 1 Oral Presentation 113-119
12:00 AM - 1:30 PM	Lunch / Exhibi	t Hall								
	Scientific Session 18		Symposium (Sponsored ) 38	Scientific Session 19	Symposium 39	Symposium 40	Symposium 41	Symposium 42	Symposium 43	Scientific Session 20
1:30 PM - 3:00 PM	Malaria in Pregnancy 2 Oral Presentation 120-126		MARCAD Partnerships for Research and Capacity Development on Malaria & Neglected Tropical Diseases in West and Central Africa	Malaria Epidemiology 1 Oral Presentation 127-133	Drug Resistance African solutions to an African problem: practical approaches to antimalarial resistance mitigation	Malaria Epidemiology Country programme approaches to strengthening malaria surveillance systems	Capacity Building African conversations on gene drives for malaria control and elimination: insights and recommendations of key stakeholders across the continent	Malaria Genomics Fighting malaria with genomics in Africa: current status, achievements and prospects	Control and Elimination The Star Homes Project. Novel house designs to reduce malaria transmission in rural Africa	Capacity Building 1 Oral Presentation 134-140
3:00 PM -	Coffee Break /	Exhibit	Hall - Poster Sessi	on (Posters from	429 to 641)					
3:30 PM 3:30 PM - 5:00 PM	Plenary Session 6 Climate Changes and Its Impact on Malaria Elimination		Criestifi	Colores	Colores			Scientia Coming		Color d'
	Scientific Session 21		Scientific Session 22*	Scientific Session 23	Scientific Session 24	Symposium 44	Symposium 45	Scientific Session 25	Symposium 46	Scientific Session 26
5:00 PM - 6:30 PM	Malaria Epidemiology 2 Oral Presentation 141-147		Vector Biology and Control 5 Oral Presentation 148-152 Symposium (Sponsored) 47 Medicines for Malaria Venture (MMV) Inclusive strategies to meet challenges	Malaria in Pregnancy 3 Oral Presentation 153-159	Control and Elimination 2 Oral Presentation 160-166	Drug Resistance Tackling malaria drug resistance with the next generation of antimalarial treatment strategies	Chemoprevention Path to Malaria Elimination Through Implementation of The Mix Intervention in DRC (Case of Upper Katanga)	Phytomedicines and Pharmacology 2 Oral Presentation 167-173	Capacity Building Genomic Epidemiology for Malaria Elimination: Strengthening engagement between malaria researchers and National Malaria Elimination Programmes in Africa	Insecticide Resistance 2 Oral Presentation 174-181
6:30 PM - 8:00 PM			in malaria: The next 5 years					Sponsor Special Session		

<sup>\* 60</sup> minutes duration per Sessior

# LET'S UNITE & ELEVATE: CELEBRATING THE WORLD MALARIA DAY 2024 WITH THE 8TH PAN-AFRICAN MALARIA CONFERENCE

# THURSDAY, APRIL 25

Time	Main Auditorium	MH1	MH2	мнз	MH4	AD10	AD11	AD12	Mezzanine	AD1	
7:00 AM - 8:30 AM	Registration / Ac	creditation Centre	Opens								
8:30 AM - 10:00 AM	Plenary Session 7 Immunology and Pathogen- esis										
	Scientific Session 27	Scientific Session 28	Symposium (Sponsored) 48	Scientific Session 29	Scientific Session 30	Symposium 49	Symposium 50	Symposium 51	Symposium 52		
10:00 AM 11:30 AM	Drug Resis- tance 2 Oral Presenta- tion 182-188	Malaria Epide- miology 3 Oral Presenta- tion 189-195	Impact Santé Afrique & Quality and Equity Healthcare, supported by Vestergaard World Malaria Day: Celebrating Women in the Malaria Response	Treatment and Case Manage- ment 2 Oral Presenta- tion 196-202	Malaria Ge- nomics 1 Oral Presenta- tion 203-209	Parasite and Systems Biology Reaching the unreached: Grassroot innovations and strategies to reaching the unreached population	Chemopre- vention Ac- celerating the development of cabamiquine- pyronaridine for malaria chemo- prevention in Africa.	Control and Elimination Private Sector - Community Partnership: An Opportunity for Sustainable Grassroot Resource Mobilization for Malaria Elimina- tion to the Last Mile	Vector Biology and Control Building Out Malaria: Hous- ing Modification for Malaria Prevention		
	Scientific Session 31*	Scientific Session 32*	Scientific Session 33*	Scientific Session 34*	Scientific Session 35*	Scientific Session 36*		Scientific Session 37*	Scientific Session 38*		
11:30 AM 12:30 AM	Chemonreven-	Drug Resistance 3 Oral Presentation 215-219	Immunology & Vaccines 3 Oral Presenta- tion 220-224	Malaria in Pregnancy 4 Oral Presenta- tion 225-229	Control and Elimination 3 Oral Presenta- tion 230-234	Vector Biology and Control 6 Oral Presenta- tion 235-239	TBD	Malaria Ge- nomics 2 Oral Presenta- tion 240-244	Diagnosis and Reagent 2 Oral Presenta- tion 245-249		
12:30 AM 1:30 PM	- Lunch / Exhibit H	Hall									
	Scientific Session 39	Scientific Session 40	Scientific Session 41	Scientific Session 42	Scientific Session 43	Scientific Session 44	Symposium 54	Symposium 55	Symposium 56		
1:30 PM - 3:00 PM	Control and Elimination 4 Oral Presenta- tion 250-256	Chemoprevention 3 Oral Presentation 257-263	Malaria Epide- miology 4 Oral Presenta- tion 264-270	Parasite and Systems Biology 1 Oral Presenta- tion 271-277	Implementation Science and Health Sys- tems 1 Oral Presenta- tion 278-284	Vector Biology and Control 7 Oral Presenta- tion 285-291 Excl. 288	Drug Efficacy Leveraging genotyping for therapeutic efficacy studies in malaria endemic coun- tries: towards a standardized approach from next-genera- tion molecular techniques to data analysis	Capacity Building Strengthening the institutional capacity and the enabling environment for public health analytics in Africa	Control and Elimination Evidence for Strategies to Address Challenges to Malaria Elimina- tion in African Settings		
3:00 PM - 3:30 PM	Coffee Break / E	ık / Exhibit Hall									
3:30 PM - 6:30 PM	World Malaria Day Celebration										
6:30 PM - 8:00 PM	WMD Reception										

<sup>\* 60</sup> minutes duration per Session

# MIM Society 8th Pan-African Malaria Conference Programme

# FRIDAY, APRIL 26

Time	Main	MH1	MH2	МНЗ	MH4	AD10	AD11	AD12	Mezzanine	AD1		
7:00 AM -	Auditorium											
8:30 AM		ccredita	tion Centre Opens									
	Plenary Session 8											
8:30 AM -	Data Science											
10:00 AM	for Malaria											
	Elimination											
10:00 AM -	Coffee Break / E	Exhibit H	Iall - Poster Session	(Posters from 642 to	842 + Poster 171)							
10:30 AM	Coffee Break / Exhibit Hall - Poster Session (Posters from 642 to 842 + Poster 171)  Scientific Sci											
	Session 45		Symposium 57	46	Session 47	48	Symposium 58	Symposium 59	Symposium 60	Session 49		
10:30 AM - 12:00 AM	Drug Efficacy 2 Oral Presentation 292-297		Implementation science and health systems Malaria Vaccine Schedules: decision-making and considerations for integration, sub-national tailoring, and seasonal settings	Malaria Epidemiology 5 Oral Presentation 298-304	Vector Biology and Control 8 Oral Presentation 305-311	Chemoprevention 4 Oral Presentation 312-318	Malaria in Pregnancy New Evidence of Protection and Community Delivery of Intermittent Preventive Treatment of Malaria in Pregnancy	Capacity Building Transformative partnerships: investing and innovating in local and gender balanced leadership for next- generation African leaders in Malaria R&D	Control and Elimination Symposium on the current status of biological threats in malaria and the interplay amongst them	Capacity Building 2 Oral Presentation 319-325		
12:00 AM -	Lunch / Exhibit	Hall	seasonal settings									
1:30 PM		Пан	I	I	T.	I	I	Caiantifia Casaian	Caiantifia	Calantifia		
	Scientific Session 50		Symposium 61	Symposium 62	Symposium 63	Symposium 64	Symposium 65	Scientific Session 51	Scientific Session 52	Scientific Session 53		
1:30 PM - 3:00 PM	Drug Resistance 4 Oral Presentation 326-332		Malaria Epidemiology Adaptive malaria control in action: the case of the Bioko Island Malaria Elimination Project (BIMEP)	Capacity Building Building capacity for Institutional Oversight Committees towards supporting decision-making process for GDMMs for malaria control and elimination in the African	Vector Biology and Control Does the improved impact of dual active ingredient nets on malaria control last 3 years? results from randomised controlled trials	Malaria Epidemiology Counteracting pfhrp2/3 deletion threats: From survey and modelling research to forecasting and market shaping	Chemoprevention Evidence to support decision- making across Africa: Development of a decision tool for Perennial Malaria Chemoprevention (PMC)	Control and Elimination 5 Oral Presentation 333-339	Social and Health Economics 2 Oral Presentation 340-346	Bioethics and Diversity 1 Oral Presentation 347-352		
3:00 PM - 3:30 PM	Coffee Break / E	Exhibit H	lall - Poster Session	(Posters from 642 to	842 + Poster 171)							
3.30 T W	Scientific		Scientific	Symposium 66	Scientific	Symposium 67	Symposium 68	Symposium 69	Symposium 70	Scientific		
3:30 PM - 5:00 PM	Vector Biology and Control 9 Oral Presentation 353-359		Drug Efficacy 3 Oral Presentation 360-365	Chemoprevention Seasonal Malaria Chemoprevention Integration at community level and innovation to support intervention sustainability Scientific Session	Drug Resistance 5 Oral Presentation 366-372  Symposium 71*	Malaria in Pregnancy Transforming Pregnant Women and Access to MiP Prevention: Tools & Experiences to Support Scaling c-IPTp Scientific Session	Capacity Building Integrating genetic approaches in the malaria toolkit	Malaria Epidemiology Optimising programmatic decision-making for malaria through quality data integration and use Symposium 72*	Implementation Science and Health Systems Relapsing malaria in Africa, diagnosis and treatment considerations Scientific	Malaria Genomics 3 Oral Presentation 373-379 Scientific		
5:00 PM - 6:00 PM	Discussion 4*  Vector Control Gene Drive		Session 58*  Immunology & Vaccines 4 Oral Presentation 380-384 Excl. 383	Drug Efficacy 4 Oral Presentation 385-388	Treatment and Case Management Grassroots Mobilization to End Malaria: Integrating the care of babies and young infants	Malaria in Pregnancy 5 Oral Presenation 389-393	Vector Biology and Control 10 Oral Presentation 394-398	Chemoprevention Clinical Development of Monoclonal Antibodies to Prevent P. falciparum Malaria	Diagnosis and Reagent 3 Oral Presentation 399-403	Pathogenesis and Co- Morbidities 2 Oral Presentation 404-408		
6:00 PM - 8:00 PM	Closing Ceremony											

<sup>\* 60</sup> minutes duration per Sessior

# MIM Society 8<sup>th</sup> Pan-African Malaria Conference Programme:

# SATURDAY, APRIL 27

Time	Main Auditorium	MH1	MH2	МНЗ	MH4	AD10	AD11	AD12	Mezzanine
7:00 AM - 8:30 AM	Registration / Acc	creditation Centre	Opens						
8:30 AM - 10:00 AM	Malaria Field Trip in Kigali								
12:00 AM - 1:30 PM									
10:30 AM -									
12:00 AM									
12:00 AM - 1:30 PM									
1:30 PM - 3:00 PM									
3:00 PM - 3:30 PM									
3:30 PM - 5:00 PM									
5:00 PM - 6:30 PM									
6:30 PM - 8:00 PM									

# **PLENARIES**

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# **Plenary Session 2**

Date / Time: Monday, April 22 - 8:30 AM - 10:30 AM Room: Main Auditorium

# **Session Topic:**

Endemic Countries Engagements for Malaria Elimination

#### **Session Chairs:**

Prof Rose Leke Dr Linda Amoah

# **Speakers:**

Prof Dyann Wirth Ms Joy Phumaphi Dr Charles Adekunle

#### **Session Overview:**

Globally, in 2022, there were an estimated 249 million malaria cases and 608,000 malaria deaths reported in 85 countries. The WHO African Region bears a disproportionately high share of the global malaria burden. In 2022, the Region was home to a staggering 94% of malaria cases (233 million) and 95% (580,000) of malaria deaths. Disturbingly, children under 5 accounted for approximately 80% of all malaria deaths in the Region, underscoring the urgency of focused interventions in this vulnerable demographic. These alarming figures emphasize the persistent threat that malaria poses to communities worldwide.

The Global Technical Strategy for Malaria 2016–2030 (GTS) of the World Health Organization (WHO) was adopted by the World Health Assembly in 2015. The GTS recognizes that all countries, irrespective of their current malaria burden, can take steps to accelerate efforts towards elimination through an iterative process of analysis and implementation of intervention packages appropriately tailored to the sub-national context. One of the three pillars of the GTS calls for all malaria-endemic countries to "accelerate efforts towards elimination and attainment of malaria-free status" [1]. In settings where transmission is very low, nearing elimination, countries are encouraged to intensify efforts to interrupt onward transmission of new infections: in addition to prevention, diagnosis, and treatment as part of universal health coverage, the last stages before elimination require an intensive caseand focus-based surveillance and response program

and, possibly, use of medicines and other innovative solutions to reduce the reservoir of infections and prevent transmission from imported cases.

#### **Session Objectives:**

- Reviewing Progress: Assess the progress made by malaria-endemic countries towards the goals outlined in GTS 2016-2030.
- Identifying Challenges: Identify the key challenges that have hindered progress or led to setbacks in malaria elimination efforts including funding gaps, cross-border malaria, etc.
- Sharing Best Practices: Share successful strategies and best practices that have contributed to malaria elimination or malaria reduction in some countries including multi-sectoral collaboration/engagement.
- Discussing Solutions: Discuss potential solutions and innovative approaches to address the challenges and accelerate progress toward malaria elimination
- Reaffirming Commitment: Reaffirm the commitment of malaria-endemic countries and stakeholders to the goals of GTS 2016-2030.

#### **Plenary Session 3**

Date / Time: Monday, April 22 - 3:30 PM - 5:00 PM Room: Main Auditorium

# **Session Topic:**

Malaria Drug Resistance: Key Perspectives

# **Session Chairs:**

Prof Anna Rosanas-Urgell Dr Mehul Dhorda

# **Speakers:**

Prof Abdoulaye Djimde Prof Arjen Dondorp

# **Session Overview:**

Resistance to antimalarial medicines is one of the biggest challenges to malaria control and elimination efforts across the malaria-endemic world. Resistance to artemisinin in Plasmodium falciparum, now also detected in East Africa and the Horn of Africa, may presage diminished efficacy of artemisinin-based combination therapies across Africa. Rapid, coordinated, and comprehensive action is required

from all stakeholders and funders to ensure that resistance to antimalarials does not translate into catastrophic increases in the burden of malaria. This session will aim to provide an overview of the problem, the potential consequences of delay or absence of interventions, and discuss solutions most likely to have a decisive impact.

# **Session Objectives:**

- Defining the problem and dynamics of malaria drug resistance
- Overview of the specific challenges posed by drug resistance strains
- Discussion of the most up-to-date data on antimalarial drug efficacy/resistance
- Any evidence and/or projections indicating the potential for spread or emergence of resistance
- Consequences of resistance if not contained/
- Current projections of the impact of drug resistance
- Comparison of trends against malaria control and elimination targets
- Interventions (programs/strategies, diagnostic tools/treatments, with supporting evidence where available) with potential high impact
- Which can be implemented immediately/ everywhere

Which can be implemented in the short-medium term or in selected locations

Potential hurdles: funding requirements, data sharing, sustainability/long-term commitment

# Plenary Session 4

Date / Time: Tuesday, April 23 - 8:30 AM - 10:00 AM Room: Main Auditorium

# **Session Topic:**

**Vector Control Innovations For Malaria Elimination** 

# **Session Chairs:**

Prof Neil Lobo Prof Silas Maiyambere

# Speakers:

Dr Jessy Goupeyou-Youmsi Prof Charles Wondji

# **Session Overview:**

The bednets (ITNs and LLINs) and indoor residual spraying (IRS) are considered core interventions for malaria prevention by reducing human biting rates and survival of the mosquito, respectively. In the past decades, both contributed to the drastic decline of malaria prevalence and mortality moreover, representing more than 60% of global malaria control investments.

However, there is evidence that residual malaria transmission is maintained despite the high coverage of core vector control interventions, thus unable to interrupt malaria transmission. Such residual malaria transmission foci are justified by many factors such as the spread of resistance to insecticides, behavior change of malaria vectors as well as human behaviors.

The resurgence of malaria with some epidemic situations has also been reported after the interruption of vector control intervention due to a lack of funds or weakness of health systems. For these reasons, innovative interventions/ tools and technologies are required to address the above barriers and achieve and sustain interruption of malaria transmission. The development of new vector control tools has to be on targeted bionomic and behavioral characteristics of malaria vectors at both the immature and adult stages but also incorporates options to address human behaviors that may stimulate the implementation of these new tools.

# **Session Objectives:**

Exploring limitations of current malaria control methods, funding gaps, and the need for improved country capacity to achieve elimination goals.

Exploring new tools and technologies for bridging the gaps between progress in malaria control and elimination and discussing the impact of limited innovation while exploring the benefits of scaling up to achieve the global goal.

Showcasing the cutting-edge vector control solutions proven effective in the field and explore promising strategies, tools, and technologies nearing market or evaluation, ultimately identifying gaps for future development.

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**Plenary Session 5** 

Date / Time: Tuesday, April 23 - 3:30 PM - 5:00 PM Room: Main Auditorium

# **Session Topic:**

Malaria Vaccines: The Missing Piece On The Path

To Elimination?

#### **Session Chair:**

Ms Noella Bigirimana

# **Speakers:**

Dr Yvan Butera, Minister of State, Ministry of Health, Rwanda Prof Pedro Alonso Prof Halidou Tinto

#### **Session Overview:**

Considerable progress has been made in malaria control through the successful implementation of effective measures. However, malaria remains a significant global burden, particularly in sub-Saharan Africa. Over the past decade, there has been rapid advancement in the development of malaria vaccines. The WHO has so far approved two vaccines to date—the RTS, S/AS01 vaccine, and the R21/Matrix-M vaccine-for the prevention of malaria in children. Both vaccines have demonstrated a high safety profile and good efficacy in preventing malaria in children, and their widespread implementation is anticipated to have a substantial public health impact. There is also an increasing interest in using monoclonal antibodies for malaria chemoprevention, mainly in highrisk groups such as pregnant women and young children. Monoclonal antibodies targeting the transmissible stage, i.e. gametocytes, are also being currently developed and could be used in combination with other antibodies, or other interventions to reduce transmission in high transmission settings. However, their efficacy in preventing malaria needs to be confirmed in large clinical trials in different settings, and their cost may limit the availability, where they are most needed.

This plenary session will provide an opportunity to gain insights from those who are actively implementing these vaccines, assess their impact, and evaluate ongoing challenges. Additionally, it serves as a forum for discussing the development of new vaccines and monoclonal antibodies with enhanced efficacy

# **Session Objectives:**

The primary objective of this session is to gain a comprehensive overview of the evolution and implementation of these vaccines, drawing insights from the experiences of countries that have already adopted them

# **Specific objectives:**

- Ongoing challenges for vaccine implementation
- Development pipeline for new vaccines and monoclonal antibodies

# **Plenary Session 6**

Date / Time: Wednesday, April 24 - 8:30 AM - 10:00 AM Room: Main Auditorium

# **Session Topic:**

Malaria Drug Development and Innovations for Malaria Elimination

# **Session Chairs:**

Dr Christian Nsanzabana Dr Aline Uwimana

# **Speakers:**

Dr Cristina Donini Dr Ghyslain Mombo-Ngoma

# **Session Overview:**

In an era of increasing evidence of artemisinin drug resistance, the plenary session on malaria drug development and innovation will be an opportunity to review the various phases of malaria case management with the different tools and their history and look at the perspectives available in the research and development pipeline through the lenses of the only malaria drug development partnership organization and their partners.

# **Session Objectives:**

The key objective of the session will be to review the strategy behind the malaria drug development since the beginning of the 21st century and the creation of MMV by the WHO-TDR and review the pipeline of research and development. Specific objectives will include discussing:

- Discovering new medicines: The African experience
- New malaria treatments facing the onset of resistance

**Plenary Session 7** 

Date / Time: Wednesday, April 24 - 3:30 PM - 5:00 PM Room: Main Auditorium

# **Session Topic:**

Climate change and its impact on malaria

#### **Session Chairs:**

Dr Emmanuel Hakizimana Dr Emilie Pothin

# **Speakers:**

Prof Noor Abdisalan
Prof Pete Gething

#### **Session Overview:**

Climate change can have significant implications for the distribution, prevalence, and transmission of infectious diseases, including malaria. Malaria is a mosquito-borne disease, and its transmission is closely linked to environmental factors that influence the life cycle of both the parasites and the mosquitoes. This session will revisit the various influences of climate on malaria epidemiology, the potential consequences of climate change and their impact on malaria management.

# **Session Objectives:**

The session will provide a good understanding of the various climate events influencing the epidemiology of malaria. Temperature Increase, changes in Precipitation Patterns, altitude and Geographical Shifts, Extreme Weather Events, Human Population Movements, etc.

Plenary Session 8

Date / Time: Thursday,
April 25 - 8:30 AM - 10:00 AM
Room: Main Auditorium

# **Session Topic:**

Immunology and Pathogenesis

#### **Session Chair:**

Dr Nicaise Ndam

# **Speakers:**

Lars Hviid Faith Osier

### **Session Overview:**

The incomplete understanding of the mechanisms and targets of immunity as it is acquired following infection remains a roadblock to interventions against the disease, including vaccine development. How these processes contribute to malaria pathogenesis is also not fully understood. This session will aim to provide an overview of new developments, with a main focus on the asexual blood stages, which are associated with all the clinical symptoms of malaria.

# **Session Objectives:**

Summarizing the state-of-the-art regarding the mechanisms and targets of immunity to Plasmodium falciparum malaria blood-stage parasites (merozoites and infected erythrocytes)

Discussing new findings regarding immunity to Plasmodium falciparum malaria blood-stage parasites

Proposing ways to overcome current obstacles to the development of protective immunity against Plasmodium falciparum malaria blood-stage parasites

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# **Plenary Session 9**

Date / Time: Friday, April 26 - 8:30 AM - 10:00 AM Room: Main Auditorium

# **Session Topic:**

Data Science for Malaria Elimination: Unleashing the Power of Surveillance, Data Science, and Modeling for Malaria Elimination Decision Making

#### **Session Chair:**

Dr Semakula Muhammed

# Speakers:

Prof Sam Kiware Prof Marciej F. Boni

#### **Session Overview:**

The session is designed to explore the transformative potential of data-driven approaches in supporting malaria elimination efforts. It will delve into the integration of surveillance, data science, and modeling techniques to inform strategic decision-making processes. By bringing together experts in these fields for discussion with decision/policymakers, the session aims to showcase the power of data-driven initiatives in shaping effective strategies for malaria elimination.

# **Session Objectives:**

- I. Highlighting the Role of Data-Driven Approaches/
  Techniques
- 2. Discussing Innovative Surveillance Technologies
- 3. Examining Data Science Applications in malaria control/elimination
- Exploring Modelling for strategic planning, intervention design, and resource allocation
- Identifying Best Practices in Data-Driven Decision-Making.

# PANEL DISCUSSION

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# **Panel Discussion 1**

Date / Time: Monday, April 22 - 10:30 AM- 12:00 AM Room: Main Auditorium

#### **Panel Discussion Topic:**

Health Systems, Community Engagements and Civil Society

#### **Moderators:**

Dr Albert Tuyishime Dr Ghislaine Ouedraogo

# **Panelists:**

Dr Sabin Nsanzimana, Minister of Health, Rwanda Ms Olivia Ngou Dr Philip Welkhoff

# **Session Overview:**

The interconnections between organisations, institutions and resources dedicated to delivering healthcare services, community engagement, and civil society are critical for achieving public health successes, ensuring equitable access to healthcare, and advancing community resilience.

Communities, although they are the first recipients of health care services, they play a pivotal role in the promotion of health and well-being. Community engagement involves the active participation of individuals or groups from the community in health care decisions, intervention planning and implementation. Effective community engagement fosters trust, collaboration, and empowerment among community members. This approach recognizes the importance of local knowledge, cultural practices, and social networks in shaping health outcomes.

Civil society refers to organizations, and networks of citizens outside of the government and commercial sectors, acting collectively as civil society organizations (CSOs), including non-profits, advocacy groups, and grassroots movements, to critically address health disparities, advocating for policy change, and mobilizing resources. They defend marginalized populations, promote accountability in healthcare delivery, and contribute to shaping health policies and programs.

# **Panel Discussion 2**

**Date / Time:** Tuesday, April 23 - 10:30 AM- 12:00 AM **Room:** Main Auditorium

# **Panel Discussion Topic:**

Capacity Building

#### **Moderator:**

Dr Corine Karema

#### **Panelists:**

Dr Jennifer Gardy Prof Marcel Tanner Prof Oumar Gaye Dr Tom Nyirenda

#### **Session Overview:**

Capacity building is essential in the fight against malaria. It ensures all hands are on deck to achieve the goal of malaria elimination. Public health leaders must focus on building and strengthening the healthcare workforce through training programs and educational initiatives. But the questions that arise are: Who should be responsible for capacity building, what format should it take, and how can we ensure the quality of content and delivery? These points and more will be discussed in the panel.

# **Panel Discussion 3**

Date / Time: Wednesday, April 24 - 10:30 AM- 12:00 AM Room: Main Auditorium

# **Panel Discussion Topic:**

Vaccines: On and Beyond the Horizon

# **Moderator:**

Dr Gerd Pluschke

# Panelists:

Dr Simon Draper Dr Mary Hamel Dr Ally Olotu Prof Leon Mutesa

#### **Session Overview:**

Two malaria vaccines are now licensed and large-scale roll-out in Africa is underway. However, several additional vaccine candidates that use other approaches and target other antigens than current vaccines are at various stages of development. The successful elimination and eradication of malaria is likely to require multiple interventions, including multiple vaccines.

# **Panel Discussion - World Malaria Day**

**Date / Time:** Thursday, April 25 - 03:40 PM- 04:30 PM

Room: Main Auditorium

# **Panel Discussion Topic:**

Moving from Malaria Control to Elimination: Success and Challenges

#### **Moderator:**

Dr Peter Olumese

# **Panelists:**

NMCP Manager (Mali):TBC

NMCP Manager (Uganda): TBC

NMCP Manager (Cape Verde): TBC

NMCP Manager (Mozambique)

NMCP Manager (Rwanda)

# **Session Overview:**

Globally, in 2022, there were an estimated 249 million malaria cases and 608,000 malaria deaths reported in 85 countries. The WHO African Region bears a disproportionately high share of the global malaria burden. In 2022, the Region was home to a staggering 94% of malaria cases (233 million) and 95% (580,000) of malaria deaths. The Global Technical Strategy for Malaria 2016–2030 (GTS) of the World Health Organization (WHO) was adopted by the World Health Assembly in 2015 and recognizes that all countries, irrespective of their current malaria burden, can take steps to accelerate efforts towards elimination through an iterative process of analysis and implementation of intervention packages appropriately tailored to the sub-national context.

In settings where transmission is very low, nearing elimination, countries are encouraged to intensify efforts to interrupt onward transmission of new infections: in addition to prevention, diagnosis, and treatment as part of universal health coverage, the last stages before elimination require an intensive case - and focus-based surveillance and response program and, possibly, use of medicines and other innovative solutions to reduce the reservoir of infections and prevent transmission from imported cases.

# Panel Discussion - World Malaria Day (2)

**Date / Time:** Thursday, April 25 - 4:50 PM - 05:40 PM

Room: Main Auditorium

# **Panel Discussion Topic:**

Grassroots Mobilization, Innovation, and Integration for Malaria Response

#### **Moderators:**

Prof Rose Leke

Prof Claude Mambo Muvunyi

# **Panelists:**

Dr Raij Tajudeen

Dr Daniel Ngamije

Ana Bodipo-Mbuyamba

Dr Kedar Gumaste

Ms Sylvie Fonteilles Drabek

# **Session Overview:**

Globally, in 2022, there were an estimated 249 million malaria cases and 608,000 malaria deaths reported in 85 countries. The WHO African Region bears a disproportionately high share of the global malaria burden. In 2022, the Region was home to a staggering 94% of malaria cases (233 million) and 95% (580,000) of malaria deaths.

The Global Technical Strategy for Malaria 2016-2030 (GTS) of the World Health Organization (WHO) was adopted by the World Health Assembly in 2015 and recognizes that all countries, irrespective of their current malaria burden, can take steps to accelerate

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efforts towards elimination through an iterative process of analysis and implementation of intervention packages appropriately tailored to the sub-national context.

Progress towards malaria elimination has stalled and there are recommendations to intensify efforts to interrupt death from malaria and reduce cases and transmission. While implementing the various tools available to invert the malaria epidemiology, in the current context of drug and insecticide resistance, innovative tools and intensified grassroots mobilization and contribution at all levels are needed to sustain these efforts for a malaria-free world.

This High-level panel discussion has been put together to understand the approach from key institutions involved in the malaria elimination agenda and representing different sectors, from academic institutions, research organisations, policymakers, Product development partnerships, and funding organizations.

High-level representatives from these organizations will be discussing approaches by their institutions related to the mobilization of local resources and collaboration with malaria-affected countries to implement their missions while responding to the need for innovation and integration for malaria elimination.

# **Panel Discussion 4**

**Date / Time:** Friday, April 26 - 5:00 PM - 06:00 PM **Room:** Main Auditorium

**Panel Discussion Topic:** Vector control Gene drive

# **Moderator:**

Dr Willy Kipotrich

# **Panelists:**

Prof Abdoulaye Diabate
Prof Corine Ngufor
Dr Eric Ochomo

#### **Session Overview:**

Malaria, a deadly mosquito-borne disease, remains a significant global health burden, particularly in tropical and subtropical regions. Vector control that targets the vector of malaria parasites (Plasmodium spp.), remains a cornerstone of malaria prevention efforts. While traditional methods like bed nets (ITNs and LLINs) and indoor residual spraying (IRS), have demonstrated efficacy in the control of malaria, they have not achieved elimination of the disease., the emergence of insecticide resistance, change in mosquito/vector and human behaviours and other challenges necessitate the exploration of innovative approaches.

Gene drive technology has emerged as a promising tool for malaria vector control. In the context of malaria vector control, gene drives can be used to modify mosquitoes in various ways to reduce their ability to transmit the malaria parasite (Plasmodium spp.) or to suppress mosquito populations altogether. The potential of gene drives lies in their ability to introduce genetic modifications that can persistently alter mosquito populations, potentially leading to sustained reductions in malaria transmission.

# SYMPOSIUM

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# Symposium 1

Date/Time: Monday, April 22 - 10:30 AM

Room: MH2

#### Title

Modeling for malaria decision making in Africa: Enhanced Technical Support and Capacity Strengthening

#### Chairs

#### Chair:

Ms. Tolu Okitika, Senior Program Manager, MAP

#### Co-chair:

Mr. Sosthenes Ketende, Project Manager, MAP EA Node

#### Speakers

# Speaker 1

Dr Susan Rumisha, Lead, MAP EA

# Speaker 2

Prof Peter Gething, Lead, MAP Perth

#### **Speaker 3**

Prof Samson Kiware, Lead DSMM

### Speaker 4

Pro3 Sheetal Silal - Director, MASHA

# **Panel discussion**

# **Moderators:**

Amratia P - MAP EA Node Maige JS - IHI / UDSM Shirima GSG - IHI / Nelson Mandela / SwissTPH

# **Purpose & Objectives:**

There is a growing interest in the use of mathematical and geospatial modeling techniques to generate evidence and insights to guide malaria decisions including optimizing resources utilization and impact of interventions at various levels. Modeling groups continuously thrive to engage malaria stakeholders including the National Malaria Control Programs (NMCPs), build skills and capacities to facilitate innovation, translation and utilization of modeling products to improve malaria surveillance.

During this symposium, MAP EA Node, DSMM, and

MASHA will provide the following: i) Overview of their vision, scope and objectives; ii) Showcasing success stories on technical support provided to NMCPs, demonstrating how modeling has been a useful tool for malaria decisions; iii) Mechanisms used and progress achieved in strengthening/building modeling and analytical skills to Early and Middle Career Researchers (EMCRs); and iv) The future vision of collaborative joint efforts and strategies to enhance these achievements and expand the scope in Africa. Novel analytical architectures, tools developed and dashboards for malaria will be shared.

# Symposium 2

Date/Time: Monday, April 22 - 10:30 AM

# Title

The interpretation and reporting of malaria rapid diagnostic tests (the MaCRA project): results from a multi-country study in Benin, Côte D'Ivoire, Nigeria, and Uganda

# Chairs

#### Chair:

Dr Corine Ngufor, Centre de Recherche Entomologique de Cotonou, Bénin

# Co chairs:

Dr Kimberly Lindblade, PATH, Geneva Dr Michael Humes, PMI USAID, Washington DC

# Speakers

#### Speaker 1

Dr. Kimberly Lindblade, PMI Insights, PATH, Geneva, Switzerland

**Topic:** An Overview of the Malaria RDT Capturing and Reporting Assessment Project and Summary of Study (MaCRA)

# Speaker 2

Dr. Corine Ngufor, Centre de Recherche Entomologique de Cotonou, Benin and London School of Hygiene and Tropical Medicine, UK

**Topic:** The use and reporting of malaria RDTs in public health facilities in Benin

# Speaker 3

Prof. Yavo William, Centre de Recherche et de Lutte contre le Paludisme, INSP, Côte d'Ivoire and University Félix Houphouët-Boigny.

**Topic:** Discrepancies in Rapid Diagnostic Test Results and test positivity rates between health facility registers and Health Management Information Systems: case of Côte d'Ivoire

# Speaker 4

Dr Evelyn Orya, Sydani Group, Nigeria

**Topic:** Assessment of health care worker characteristics associated with malaria rapid diagnostic test results in Nigeria

# Speaker 5

Dr. Arthur Mpimbaza, Child Health and Development Centre, College of Health Sciences, Makerere University, Uganda

**Topic:** Over and under-treatment of malaria based on inaccurate Malaria RDT results; the case of Uganda

#### Speaker 6:

Dr. Michael Humes, PMI, USAID, USA

**Topic:** Conclusions and recommendations from the MaCRA project

# **Purpose and Objectives**

Despite the accuracy and quality of malaria rapid diagnostic tests (RDTs), there remain persistent concerns over healthcare workers' (HCWs) ability to correctly implement and interpret results, the adherence of prescription practices to the results, and the fidelity of the recording and reporting of results within the health information systems (HMIS). The purpose of this symposium is to present findings from a PMI-funded multi-country study (MaCRA project) performed in four malaria-endemic countries (Benin, Côte D'Ivoire, Nigeria, and Uganda) to investigate HCW adherence to malaria diagnosis and reporting and treatment guidelines using RDTs through a combination of qualitative and quantitative approaches.

# Symposium 3

Date/ Time: Monday, April 22 - 10:30 AM Room: AD10

#### Title

Facilitating an Integrated Regional Response to Antimalarial Drug Resistance in South-East Africa

# Chairs

# Chair:

Dr. Aline Uwimana, Division Manager, Rwanda Biomedical Centre, Rwanda

# Co-chair:

Dr. Charlotte Rasmussen, WHO Global Malaria Programme, Switzerland

# Speakers

#### Speaker 1

Prof Karen I Barnes, University of Cape Town, South Africa **Topic:** Introduction to the Mitigating Antimalarial Resistance

Consortium for SE-Africa (MARC SE-Africa)

# Speaker 2

Dr. Eulambius Mlugu, Muhimbili University of Health and Allied Sciences, Tanzania

**Topic:** East African Community Great Lakes Malaria Initiative partnership with MARC SE-Africa

#### Speaker 3

Dr. Gerald Rukundo (co-presenter), National Malaria Control Division, Ministry of Health, Uganda

**Topic:** Plans for responding to antimalarial resistance in Uganda

## Speaker 4

Dr. Joaniter Nankabirwa (co-presenter), Infectious Diseases Research Collaboration, Makerere University, Uganda

**Topic:** Plans for responding to antimalarial resistance in Uganda

# **Speaker 5**

Dr. Stephanie van Wyk, University of Cape Town, South Africa

#### Topic

Introducing MOXIE-Bot: A ChatBot to help find the right tools and resources to enhance the efficiency and accuracy of assessing and responding to antimalarial drug resistance

#### Speaker 6

Dr. Prashanti Eachempati, MAGIC Evidence Ecosystem Foundation, Norway

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**Topic:** Reaching healthcare workers with mobile app-based dissemination of evidence-based treatment guidelines and decision aids

# **Purpose and Objectives**

The symposium aims to showcase innovative approaches for moving evidence into action for expediting integrated regional efforts in South-East Africa to jointly tackle the threat of antimalarial drug resistance and ensure effective malaria treatment policies and practices.

# Symposium 4

Date/Time: Monday, April 22 - 10:30 AM Room: AD11

#### Title

Implementing single low dose primaquine for transmission blocking in Sub Saharan Africa: where do we stand & where are we going to counter the new threat of artemisinin partial resistance?

# Chairs

**Chair:** Sodiomon B. Sirima, **Co-Chair:** Riana Rakatosaona

# Speakers

# Speaker 1

Dr. Aimable Mbituyumuremyi, Ministry of Health and Rwanda Biomedical Centre

# Speaker 2

Dr. Pierre Sinarinzi

**Topic:** Perspectives on single low dose primaquine (SLDPQ) from the NMCP – what are we worried about and what more evidence we would like to see to deploy and counter ART-R?

#### Speaker 3

Dr. Bob Taylor, University of Oxford

Topic: Do we finally have an evidenced based dose of SLDPQ we can recommend for Africa?

# **Speaker 4**

Dr. Julie Nguyen Ngoc Pouplin, ReMeD, France

**Topic:** Getting flavoured, child-friendly primaquine into those that need it.

# Speaker 5

Dr. Riana Rakatosaona

**Topic**: Implementing SLDPQ in partnership with communities across Africa to build evidence in the real world

# **Purpose and Objectives**

The overarching theme of this symposium is the role of single low dose primaquine (SLDPQ) as a tool within a broader strategy to eliminate artemisinin resistant Plasmodium falciparum in sub-Saharan Africa. We will present evidence and showcase our current activities in order to reassure control programmes of the merits of using SLDPQ.

# **Specific objectives of the symposium are to:**

Allow policy makers, with the backdrop of artemisinin partial resistance (ART-R), to air their concerns regarding SLDPQ and articulating their perceived barriers to its use

Present Africa specific evidence on the safety, efficacy and pharmacokinetics of SLDPQ that translates into novel SLDPQ regimens to match those of the artemisinin based combinations

Inform the malaria community of our activities to prequalify child-friendly primaquine tablets and develop primaquine granules to fill this gap in the therapeutic arsenal

Illustrate our approach in engaging communities in Burkina Faso, Burundi, and Madagascar so we can integrate their views and perceptions on SLDPQ deployment to maximise its community impact.

# Symposium 5

Date/Time: Monday, April 22 - 10:30 AM Room: AD12

#### Title

Methods validation: Improving the Generation of High-Quality Data to make Strong Evidence-Based Decisions in Vector Control.

# Chairs

# **Chair:**

Dr. Rosemary Lees, Innovation to Impact (I2I), Liverpool School of Tropical Medicine, Pembroke Place, L5 3QA

#### Co-chair:

Dr. Kath Gleave, Innovation to Impact (I2I), Liverpool School of Tropical Medicine, Pembroke Place, L5 3QA

# Speakers

# Speaker 1

Dr. Rosemary Lees, Liverpool School of Tropical Medicine (LSTM).

Topic: An overview on the work done at I2I and how we seek to identify and address areas of methodological weakness in the development and evaluation of vector control tools.

# Speaker 2

Dr. Kath Gleave, Liverpool School of Tropical Medicine (LSTM)

**Topic:** The methods landscaping project and the development of novel methods to assess new vector control products.

# Speaker 3

Graham Small, IVCC

**Topic:** Graham will talk about the importance of reliable data in the development and evaluation of malaria vector control products.

# **Speaker 4**

Duncan Kobia Athinya, Vestergaard, based in Kenya.

**Topic:** Duncan will present on methods for the longitudinal, community assessment of insecticide-treated nets in realuse conditions.

# Speaker 5

Kyeba Swai, Ifakara Health Institute (IHI)

**Topic:** Kyeba will discuss their work on methods to test spatial repellents.

# **Purpose and Objectives**

Emerging technologies and chemistries are strengthening the resources available for the control of vector-borne diseases. The decision to implement new vector control tools should be underpinned by strong entomological evidence, derived from data collected through appropriate and validated methods. Given the widespread prevalence of pyrethroid resistance, it is essential to optimise the utilization of new chemical approaches that specifically target resistant mosquitoes, providing implementers with proactive resistance management options. While standard protocols exist for assessing the efficacy of vector control tools, such as insecticide-treated nets (ITNs), these were primarily designed to measure the rapid lethality of pyrethroids and may not be adequately capturing the

diverse insecticidal modes of action (MoA) now available. To enable informed decision making, and correct use and effective monitoring of these new tools, is it critical to validate and widely disseminate appropriate methods capable of accurately, sensitively, and reproducibly measuring endpoints relevant to their active ingredients.

# Symposium 6

Date/Time: Monday, April 22nd - 10:30 AM Room: MZ

# Title

TDR: 50 years working alongside the LMIC malaria research community

#### Chairs

Olumide Ogundahunsi, Co-chair Opokua Ofori-Anyinam, Senior Director, Global Scientific Affairs Lead , Global Health Access, GlaxoSmithKline Biologicals, Co-chair

# Speakers

# Speaker 1

John Reeder, TDR, Geneva, Switzerland

**Topic:** Overview of the evolution of TDR's approach to malaria research over the past 50 years.

# Speaker 2

Jean-Louis Ndiaye, University of Thies, Senegal

**Topic:** Research to support malaria prevention efforts in West Africa, including seasonal malaria chemoprevention and vaccination.

#### Speaker 3

Nafomon Sogoba, Malaria Research and Training Center, Bamako, Mali

**Topic:** Findings from recently conducted research on implementing a multisectoral approach to malaria in Mali.

# Speaker 4

Stephen Vreden, National Malaria Programme, Ministry of Health, Suriname

**Topic:** The implementation of an innovative malaria detection and treatment kit (Malakit) for the prevention and control of malaria in mobile and hard-to-reach populations in Suriname.

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#### **Purpose and Objectives**

Over the last five decades, TDR, the Unicef/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, has been a leader in research to address infectious diseases of poverty, including malaria, and in building the capacity of people, communities and institutions in low- and middle-income countries. This symposium will connect the past, present, and future of TDR's focus on supporting malaria research. We will share personal stories, experiences and testimonials from key research partners to showcase the impact TDR has made on the malaria research community and on efforts to control malaria.

# **Symposium 7**

Date/Time: Monday, April 22 - 1:30 PM Room: Auditorium

#### Title

Now We Have Two: Malaria Vaccines, from Integration to Scale-Up

# Chairs

Dr. Dorothy Achu, Chair Mr. John Bawa, Co-chair

# Speakers

# Speaker 1

Dr. Dorothy Achu, WHO Regional Office for Africa **Topic:** The malaria context and how combining interventions could result in high impact.

#### Speaker 2

Lindsey Wu, PhD, MsC, WHO Global Malaria Programme **Topic:** The WHO recommendation for malaria vaccines, their characteristics, and malaria vaccine research priorities.

# **Speaker 3**

W. Scott Gordon, ScD, MS, Gavi, the Vaccine Alliance **Topic:** Vaccine access and availability, including Gavi's approach to and support for rollout.

# Speaker 4

Dr. Dora Dadzie, National Malaria Elimination Program (NMEP), Ghana

**Topic:** The importance of collaboration between national malaria and immunization programs to effective introduction

and scale-up of malaria vaccines.

# Speake 5

Dr. Shalom Tchokfe, EPI Program, Cameroon

**Topic:** Planning for malaria vaccine introduction, including subnational tailoring and communications.

#### Speaker 6

Dr. Franck Mboussou, WHO IST Central Africa

**Topic:** Towards further scale-up and integration of malaria vaccines for impact in Africa.

# Speaker 7

John Bawa, EMBA, PATH

**Topic:** Wrap-up and summary, including key takeaways from the symposium.

# **Purpose and Objectives**

**Purpose:** To engage malaria program leaders and implementers, scientists, and advocates in dialogue about the challenges, opportunities, and priorities for malaria vaccine introduction and scale-up.

**Objectives:** To share the latest available data on the two WHO-recommended malaria vaccines; lessons learned from the pilot program and newly introducing countries; perspectives on the integration required for successful implementation; and research priorities for the two vaccines.

# **Symposium 8**

Date/ Time: Monday, April 22 - 1:30 PM Room: MH2

#### Title:

African Leadership in the Science of Defeating

# Chairs

# Chair:

Rose Leke

# Co-chair:

Dyann F. Wirth

# Speakers

# Speaker 1

Professor Abdisalan Noor, Harvard Chan

#### Speaker 2

Ms. Zeinabou Idé, Impact Santé Afrique (ISA), a Cameroon-based NGO run by young African women.

#### Speaker 3

Dr. Fitsum Tadesse, Armauer Hansen Research Institute in Addis Ababa (AHRI)

# Speaker 4

Dr. Perpetua Uhomoibhi, Public Health Physician/ Director/ National Coordinator of the National Malaria Elimination Programme (NMEP)/ co-chair of the Seasonal/a member of the PMI Insights/WHO Malaria Vaccine Research Agenda Technical Advisory Committee. Malaria Chemoprevention (SMC) Alliance Technical Working Group

# Speaker 5

Dr. Janice Culpepper, Bill & Melinda Gates Foundation.

# Purpose and objective

The purpose of this symposium is to showcase the evolution and impact of the leadership development course "Science of Defeating Malaria." Initially launched in 2012 as "Science of Eradication: Malaria," this course was intentionally transitioned to African academic partners in 2023.

# **Core objectives:**

Historical Overview: a brief history of the leadership course (insights into its origins, vision, and evolution over the past decade) and the process of leveraging global scientific networks to enable the contribution and exchange of ideas in a multidisciplinary learning environment will be offered. The adaptive curriculum, which combines science, global health policy, and public health practice, and its role in shaping a new generation of leaders equipped to design and implement localized malaria interventions will be presented

Transition to Africa: the significance of relocating the course to Africa, focusing on the first-ever edition held in Dakar, Senegal, in 2023, and implications for the course's relevance and effectiveness in an African context will be presented Future Aspirations and Goals: future objectives and aspirations for the next decade of the leadership course under the stewardship of African university partners will be featured. A discussion of anticipated enhancements and overall vision of its future trajectory, reinforcing its position as a premier leadership development course in the global fight against malaria, will be offered

Alumni Perspectives: testimonials and insights from alumni,

highlighting the course's impact on their careers, personal development, and contributions to scientific advancement in the field of malaria will be shared

Symposium 10

Date/ Time: Monday, April 22 - 1:30 PM MH4

# Title

Evaluation of the BOHEMIA Cluster Randomized Trials of Mass Drug Administration of Ivermectin in Mopeia District in Rural Mozambique and Kwale District in rural Kenya: Results on Safety, Efficacy, Entomology, Social Science, and Economic Assessment.

#### Chairs

#### Chair:

Dr. Francisco Saute, Director General, Manhiça Health Research Centre (CISM)

# Co-chair:

Dr. Joseph Mwangangi, Research Scientist, Kenya Medical Research Institute (KEMRI)

# Speakers

# Speaker 1

Dr. Carlos Chaccour, Barcelona Institute for Global Health (ISGlobal)

**Topic:** The project design and safety results

#### Speaker 2

Dr. Francisco Saute, Manhiça Health Research Centre (CISM))

**Topic:** The efficacy results from the trial s two study sites-Mopeia, Mozambique and Kwale, Kenya.

# Speaker 3

Dr. Marta Maia, KEMRI-Wellcome Trust Programme (KWTRP)

**Topic:** The entomological findings of the study from the two study sites.

#### Speaker 4

Dr. Cassidy Rist, Center for Public and Corporate Veterinary Medicine, Virginia Tech

**Topic:** A trial-based economic assessment of ivermectin mass drug administration for malaria control.

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#### Speaker 5

Dr. Caroline Jones, KEMRI-Wellcome Trust Programme (KWTRP)

**Topic:** Community perceptions and experiences of ivermectin MDA for malaria control.

# **Purpose and Objectives**

The purpose of the symposium is to share and discuss the results of the recently completed BOHEMIA project, two large-scale cluster randomized trials of ivermectin mass drug administration (MDA) for the control of malaria in Mozambique and Kenya. The Mozambican trial took place in the highly endemic, rural district of Mopeia, Zambezia district, where the malaria prevalence in children under 5 years of age was 75% by RDT in 2019 and the dominant vector was Anopheles funestus. The Kenyan trial took place in the moderate endemic rural county of Kwale, where malaria prevalence in children 5-15 years in October 2023 was 30% by RDT and the dominant vector was Anopheles funestus. The BOHEMIA trial delivered three rounds of ivermectin MDA with a single monthly dose of 400 mcg/ kg to non-pregnant eligible individuals in 102 clusters (Moz) and 86 clusters (Kenya), delivered during the rainy season. The clusters were randomly assigned to two arms: ivermectin to all eligible humans; albendazole to eligible humans as a control. In Mozambique only, there was a third arm where ivermectin was given to eligible humans and their livestock, primarily pigs. In each country, alongside the safety and efficacy trial, additional entomological, social science and health economics studies were conducted to assess the effects on malaria vectors, the acceptability of the intervention to communities and the economic effects of the intervention. The data from each trial and associated studies will be presented, contrasted and the implications for malaria control discussed.

# Symposium 11

Date/Time: Monday, April 22 - 1:30 PM Room: AD10

# Title:

R21/Matrix-M: A High Impact Vaccine

# Chairs

Dr. Richard Idro (Makerere University and Mulago Hospital, Kampala, Uganda)

Dr. Kwaku Poku Asante (Director, Kintampo Health Research Centre, Ghana)

# Speakers

#### Speaker 1

Dr. Mehreen Datoo, Jenner Institute, University of Oxford, UK

**Topic:** An introduction to R21/Matrix-M will be described as well as the phase III trial design with key safety, efficacy and immunogenicity data.

# Speaker 2

Emma Beaumont, London School of Hygiene and Tropical Medicine, London, UK

**Topic:** A detailed look at the R21/Matrix-M phase 3 trial results, focusing on vaccine efficacy against all clinical malaria cases across different demographics over the first 18 months of follow up.

# Speaker 3

Professor Hamtandi M. Natama, Unité de Recherche Clinique de Nanoro, Institut de Recherche en Sciences de la Santé, Nanoro, Burkina Faso

**Topic:** The final results of the phase IIb trial of R21/Matrix-M will be presented showing the follow-up and impact of the number of doses on vaccine efficacy.

#### Speaker 4

Dr. Peter Winskill, MRC Centre for Global Infectious Disease Analysis, Imperial College, London, UK

**Topic:** A mathematical transmission model of malaria to estimate malaria cases, deaths and disability-adjusted life years averted, and cost-effectiveness of R21/Matrix-M over 15 years across different transmission settings.

# Speaker 5

Jane Grant, London School of Hygiene and Tropical Medicine, London, UK

**Topic:** Results will be presented of a qualitative study investigating the acceptability of the R21 vaccine alongside existing malaria prevention interventions, according to the communities of participants in the R21 phase III trial site in Mali.

# **Speaker 6**

Dr. Sandesh Bharati, Serum Institute of India Private Limited, Pune. India

**Topic:** R21/Matrix-M: manufacturing capacity, vaccine implementation plans and phase 4 study design.

# Speaker 7

Yahia Dicko, Malaria Research and Training Centre, University of Sciences, Techniques, and Technologies of Bamako, Bamako, Mali

**Topic:** Safety and immunogenicity data from ongoing trials assessing the co-administration of EPI vaccines with R21/ Matrix-M in African children and the use of this vaccine in HIV +ve children.

# Speaker 8

Fernando Ramos Lopez, Jenner Institute, University of Oxford, Oxford, UK

**Topic:** Safety and immunogenicity data from ongoing trials assessing the co-administration of EPI vaccines with R21/ Matrix-M in African children and the use of this vaccine in HIV +ve children.

# **Speaker 9**

Professor Sir Adrian V.S. Hill, Jenner Institute, University of Oxford, Oxford, UK

**Topic:** An overview of next steps and future of R21/Matrix-M

# **Purpose and Objectives**

#### Purpose

R21/Matrix-M is a malaria vaccine demonstrating a good safety profile and high efficacy which was recently given policy recommendation and prequalification by the World Health Organisation (WHO). This vaccine is available at \$3.9 per dose (compared with \$9.3 per dose for RTS,S/AS01) and can be manufactured in the order of 100-200 million doses per year, starting this year. This large-scale supply of this low-cost, high- efficacy vaccine will ensure that the vaccine reaches all the target population of African children.

# **Objectives**

To inform malaria researchers and stakeholders about the R21/Matrix-M malaria vaccine progress, data and plans as well as provide the opportunity for questions to be answered by a multi-disciplinary panel of experts.

Symposium 12

Date/Time: Monday, April 22 - 1:30 PM Room: AD11

# Title

Advancements in Intermittent Preventive
Treatment of Malaria in School-Aged Children
(IPTsc): Bridging Gaps In Research and
Implementation Knowledge to Achieve Scale

# Chairs

# **Chair:**

Lauren Cohee, MD MS, Reader in Paediatrics and Child Health

#### Co-Chair

Joseph Lewinski MPH, Multisectoral Malaria Project (MMP)

# Speakers

#### Speaker 1:

Joseph Lewinski MPH, Catholic Relief Services (CRS)

Topic: Intermittent Preventive Treatment of school-age
children (IPTsc): Review of WHO guidance

#### Speaker 2

Geofrey Makenga, MD, MSc, PhD, NIMR, PSI and the Global Health Institute, University of Antwerp

Topic: Impact of IPTsc on Health - Research findings after the WHO guideline + Perspectives from Tanzania

# Speaker 3:

Joaniter Nankabirwa, MBChB, MSc, PhD, Makerere University College of Health Sciences and Infectious Diseases Research Collaboration

Topic: Impact of IPTsc on Transmission - Research findings after the WHO guideline + Perspectives from Uganda

# Speaker 4:

Lauren Cohee, MD MSc, Liverpool School of Tropical Medicine (LSTM)

Topic: Impact of IPTsc on Education - Research findings after the WHO guideline + Perspectives from Malawi

# **Purpose and Objective**

This symposium will bring together leading experts, researchers, healthcare professionals, and policymakers to explore and discuss the latest advancements in Intermittent Preventive Treatment of Malaria in School-Aged Children (IPTsc). IPTsc has emerged as a promising strategy to mitigate the burden of malaria by providing preventive treatment to school aged children. The symposium aims to foster collaboration, share cutting-edge research findings, and identify key challenges in implementing IPTsc programs on a global scale. By promoting knowledge exchange and interdisciplinary discussions, the symposium seeks to contribute to the development of effective, scalable, and sustainable strategies for malaria prevention in schoolaged children.

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# **Symposium 13**

Date/Time: Monday, April 22 - 1:30 PM Room: MZ

#### Title

Advancing Malaria Elimination Efforts among the Elimination 8 Countries through Malaria Molecular Surveillance: Experience from the GenE8 Initiative

#### Chairs

Dr. John Chimumbwa, SADC Malaria Elimination 8 Secretariat, Windhoek Namibia

Dr. Jaishree Raman, Center for Emerging and Parasitic Diseases, National Institute of Communicable Diseases, South Africa

# **Speakers**

# Speaker 1

Dr. John Chimumbwa, SADC Malaria Elimination 8 Secretariat Windhoek Namibia

**Topic:** An introduction to Regional Molecular Surveillance in the E8 region

#### Speaker 2

Dr. Andres Aranda-Diaz, Malaria Elimination Initiative, University of California San Francisco.

**Topic:** Empowering the E8 with a Malaria Genomics Hub to Generate Actionable Molecular Data for the region

# **Speaker 3**

Prof. Davis Mumbengegwi, Centre for Research Services, University of Namibia.

**Topic:** Building Capacity for Programmatic Molecular Surveillance in the E8

# **Speaker 4**

Mr. Brighton Mangena, SADC Malaria Elimination 8 Secretariat.

**Topic:** The development of a Molecular Data Visualization tool for Evidence-Based Decision-Making

# **Speaker 5**

Mr. Moonga Hawela, National Malaria Elimination Center, Zambia

Topic: Preliminary Regional MMS Results from the GenE8

#### Speaker 6

Dr. Jaishree Raman, Laboratory for Antimalarial Resistance Monitoring and Malaria Operational Research (ARMMOR), Centre for Emerging Zoonotic and Parasitic Diseases, Division of the National Health Laboratory Services South Africa.

**Topic:** Insights and Outlooks for Regional Malaria Molecular Surveillance Efforts in the E8 and Beyond

# **Purpose and Objectives**

#### **Purpose:**

Despite the expansion of genomic surveillance capacity in Africa following COVID-19, the value of malaria molecular surveillance (MMS) and the capacity to generate data has not been realized in many countries. The GenE8 malaria molecular surveillance initiative brought together National Malaria Programs, research institutions, and fellows from the Elimination 8 countries in southern Africa to build consensus and strengthen capacity for generating and using MMS data for programmatic decision-making. This symposium will present, discuss, and reflect on the experiences learned from a unique regional initiative.

# **Objectives:**

Describe the opportunities and challenges of implementing a regional malaria molecular surveillance initiative across southern African countries with varying transmission intensities and genomic surveillance capacities.

Offer insights into the impact of this regional surveillance initiative in terms of evidence-based decision-making and capacity-building within the E8 region, emphasizing use cases for molecular surveillance, such as drug and diagnostic resistance and population structure and dynamics.

Discuss how to ensure genomic surveillance becomes a routine activity that Ministries of Health across Africa implement for effective intervention implementation Highlight the importance of regional coordination and data sharing to meet national and regional elimination goals.

# **Symposium 14**

Date/ Time: Monday, April 22 - 5:00 PM Room: AD11

#### Title

Malaria Vector Genomics Surveillance in Africa: a Pan-African-led initiative to deliver an accessible data platform for research and public health

# Chairs

#### **Chair:**

Elijah Juma, PhD

#### Co-chair:

Luc Djogbenou, PhD

# **Speakers**

# Speaker 1

Rosine Wolie, PhD, Nangui Abrogoua University based in Abidjan Côte d'Ivoire

**Topic:** Strengthening malaria vector control surveillance using genomics analysis of Anopheles gambiae (sensus lacto) in Côte d'Ivoire

# Speaker 2

Ibra Lujumba, Pan-African Mosquito Control Association (PAMCA)

**Topic** (Joint presentation with Rosine Wolie): Strengthening malaria vector control surveillance using genomics analysis of Anopheles gambiae (sensus lacto) in Côte d'Ivoire

# Speaker 3

Joel Odero, University of Glasgow

**Topic:** Discovery of knock-down resistance in the major malaria vector Anopheles funestus reveals the legacy of persistent DDT pollution.

# **Speaker 4**

Luna Kamau, PhD, Kenya Medical Research Institute (KEMRI)

**Topic:** First report of Anopheles coluzzii in Kenya and comparison of genetic structure and insecticide resistance profiles with conspecific populations in West and Central Africa

# **Purpose and Objectives**

The purpose of the symposium is to provide an outline of the PAMCA-led vector genomics surveillance in Africa currently implemented through a multi-stakeholder partnership that includes African scientists and national malaria control partners, research institutions, and implementing partners including the MalariaGEN group at the Wellcome Sanger Institute, UK, and G-AVENIR (Genomics of African Vectors for NMCP Management of Insecticide Resistance) led by KEMRI (Kenya) and TIDRC/UAC (Benin).

# Symposium 15

Date/Time: Monday, April 22 - 5:00 PM Room: AD12

#### Title

Optimizing Resource Allocation for Effective Malaria Prevention in High-Burden Settings

#### Chairs

**Chair:** Munashe Madinga, Clinton Health Access Initiative **Co-Chair:** Emilie Pothin, Swiss Tropical Public Health Institute

# Speakers

# Speaker 1

Kumba Kialanda, National Malaria Control Program Angola **Topic:** Angola applied rigorous analytical methods to prioritize municipalities and identify an optimal package of vector control tools to include in their GC7 submission.

# Speaker 2

Dr. William Houndjo, National Malaria Program Benin

**Topic:** The talk will focus on how Benin used mathematical models to inform their SMC expansion strategy (geographic or age-based) submitted in GC7, considering the impact on severe cases.

# **Speaker 3**

Dr. Baltazar Candrinho, National Malaria Control Program Mozambique

**Topic:** Analytical approaches used in Mozambique to prioritize interventions against malaria (ITNs, IRS, chemoprevention) by assessing their impact and cost-effectiveness, ultimately guiding resource allocation.

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# **Purpose and Objectives**

The symposium provides a unique platform for knowledge exchange, showcasing evidence-based methods employed by successful NMCPs to navigate this complex landscape of emerging threats, new tools, and limited funding necessitating optimal resource allocation decisions. By disseminating these valuable insights, the symposium aims to empower both NMCPs and their partners to effectively advocate for and tailor additional resources and, critically, optimize the utilization of existing funding for maximum impact in the fight against malaria.

# **Symposium 16**

Date/Time: Monday, April 22 - 5:00 PM

Room: MZ

# Title

Balancing Mass Campaigns and Continuous Malaria Interventions: Strategies for Optimal Resource Allocation and Service Delivery

# Chairs

# Chair:

Yazoume, Ye, PhD, MSc

# **Co-Chair:**

Agneta Mbithi, MD, MSc

# Speakers

# Speaker 1

Dr. Sene Doudou, NMCP Director, Senegal

# Speaker 2

Dr. Kibor K. Keitany, NMCP Director, Kenya

# Speaker 3

Dr. Aimable Mbituyumuremyi, NMCP Director, Rwanda

# Speaker 4

Dr. Lumbani Munthali, NMCP Director, Malawi

# **Purpose and Objectives**

The objective of the symposium is to explore the implications of implementing mass campaign activities on the continuity of other malaria interventions. It seeks to identify strategies for maintaining a balance between mass campaigns and ongoing interventions, ensuring effective resource allocation and uninterrupted service delivery.

# **Symposium 17**

Date/Time: Tuesday, April 23 - 10:30 AM Room: MH3

#### Title

Improving antimalarial treatment for severe falciparum malaria

#### Chairs

#### Chair:

Prof. Olugbenga A Mokuolu,

Position: Co-Chair of RBM Case Management Working Group; Strategic Adviser on Malaria Elimination to the Honorable Minister of Health in Nigeria

#### Co-chair:

Prof. Marielle Bouyou Akotet

Head of Parasitology Department at the Université des Sciences de la Santé, Gabon

#### **Speakers**

# Speaker 1

Prof. Arjen M. Dondorp, Mahidol Oxford Tropical Medicine Research Unit, Thailand

Topic: How many lives can be saved with injectable artesunate?

# Speaker 2

Prof. Joel Tarning, Mahidol Oxford Tropical Medicine Research Unit, Thailand

Topic: The pharmacometrics of a new formulation of injectable artesunate with a single step reconstitution

# Speaker 3

Dr. Samwel Gesase, Tanzania National Institute for Medical Research

Topic: A multi-country clinical evaluation of novel 1-step versus conventional 2-step injectable artesunate for the treatment of severe falciparum malaria in African children

# Speaker 4

Prof. Kamija Phiri, Kamuzu University of Health Sciences, Malawi

Topic: Post-discharge Malaria Chemoprevention (PDMC)

# **Purpose and Objectives**

The purpose of the symposium is to present important recent developments in the antimalarial treatment of severe falciparum malaria in African children, including a new formulation of injectable artesunate and the recommendation of malaria chemoprophylaxis in anemic children recovering from severe falciparum malaria. The symposium will highlight important recent developments in the antimalarial treatment of severe falciparum malaria in African children. Injectable artesunate is the first-line treatment for severe malaria. The symposium will discuss the number of young African lives which are saved and can be saved by the deployment of injectable artesunate for the treatment of severe malaria. To prepare injectable artesunate, a 2-step reconstitution process is required, which is time consuming and prone to error. A new formulation has now been developed, requiring a simplified 1-step reconstitution process. This new formulation has been evaluated in clinical studies and the results will be presented. In addition, malaria chemoprophylaxis in anemic children recovering from severe malaria has recently been recommended by the WHO. Background and details of this important new recommendation will be discussed.

# **Symposium 18**

Date/Time: Tuesday, April 23 - 10:30 AM Room: MH4

# Title

When is routine malaria data good enough for programmatic decision making? Country experiences ranging from control to elimination

# Chairs

Chair: Arantxa Roca-Feltrer Co-chair: Busiku Hamainza

# Speakers

# Speaker 1

Dr. Omar Coly, Ministry of Health, Senegal

**Topic:** Experiences from implementing peer-to-peer RDQA approach in Senegal

#### Speaker 2

Dr. Ghislain Kikunda, Ministry of Health, DRC

**Topic:** Experiences from introducing RDQA tools to improve malaria routine data in DRC

# Speaker 3

Smita Das, PATH, Seattle, USA

**Topic:** Measuring the impact of RDQA on aggregated accuracy over time in Zambia

#### Speaker 4

John Painter, CDC, Atlanta, USA

**Topic:** Innovative tools to assess the quality of routine data and automate routine data analyses: MagicGlasses 2.0

# Speaker 5

Arantxa Roca-Feltrer, PATH, Mozambique

**Topic:** What constitutes 'good enough' routine data: the need for defining 'acceptable' levels of data quality for different types of programmatic questions or decision-making needs

#### **Purpose and Objectives**

The purpose of this symposium is to better understand the varying levels of data quality needed to guide programmatic decisions when using routine malaria data.

# **Specific objectives include:**

To describe country-specific approaches and innovations in standardizing and institutionalizing routine data quality audits (RDQAs).

To review methodological approaches to measuring aggregate data reporting accuracy to evaluate impact of RDQAs over time.

To share lessons learned and best practices from countries implementing RDQAs across the transmission continuum.

Symposium 19

Date/Time: Tuesday, April 23 - 10:30 AM Room: AD10

#### Titl

Malaria in Children and Adolescents with Sickle Cell Anaemia

# Chairs

Professor Kamija Phiri, Kamuzu University of Health Sciences, Blantyre, Malawi

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Professor Robert Opoka, Aga Khan University, Nairobi, Kenya

# Speakers

# Speaker 1

Dr. Ruth Namazzi, Makerere University College of Health Sciences, Kampala, Uganda

Topic: Sickle cell Anaemia in Africa; burden, complications, and outcomes. Malaria in children and adolescents with sickle cell anemia in areas with low, moderate, and high malaria transmission intensity; pathogenesis, manifestations, and outcomes

## Speaker 2

Dr. George Passi, Mbale Clinical Research Centre and Makerere University College of Health Sciences, Kampala, Uganda

Topic: Severe malaria and morbidity and mortality in sickle cell anemia

# **Speaker 3**

Ms. Carol Kamya - PhD Student, University of Bergen
Topic: Cost-Effectiveness of weekly DihydroartemisininPiperaquine versus Sulphadoxine-Pyrimethamine for
Malaria Chemoprevention in Children with Sickle Cell
Anemia: A Comparative Analysis in Uganda and Malawi

# Speaker 4

Dr. Richard Idro, Makerere University College of Health Sciences, Kampala, Uganda

Topic: Prevention of malaria in sickle cell anemia; recent and ongoing clinical trials

# Speaker 5

Prof. Kamija Phiri, Kamuzu University of Health Sciences, Blantyre, Malawi

Topic: Discussion on next steps

# **Purpose and Objectives**

This symposium will present an overview of malaria in a special or vulnerable group of patients – children with sickle cell anemia. Specifically, it will discuss the burden, manifestations, complications, and outcomes of malaria in this population, the cost of care and ongoing studies to improve outcomes and prevention.

# Symposium 20

Date/Time: Tuesday, April 23 - 10:30 AM Room: AD11

#### Title

Partnerships for implementation research to optimise the impact of Seasonal Malaria Chemoprevention in West and Central Africa.

#### Chairs

Chair: Prof Jean Louis Ndiaye
Co-chairs: Dr. Corinne Merle

# Speakers

#### Speaker 1

Dr. Innocent Mbulli Ali, Biotechnology Center, University Yaounde 1 / NMCP Cameroon

**Topic:** Strategies to promote adherence, and to improve coverage in hard-to-reach populations. Experiences from Mali, Cameroon, Burkina Faso and Guinea.

#### Speaker 2

Prof Jean Louis Ndiaye, University Iba Der Thiam of Thies, Senegal

**Topic:** Optimizing the impact of SMC in Senegal: choosing the optimal number and timing of cycles, and when to stop SMC.

# **Speaker 3**

Dr Halimatou Diawara, Malaria Research and Training Center, Mali

**Topic:** Cost-effectiveness of SMC and incremental cost effectiveness of a 5th cycle in Niger, Mali and Guinea.

# Speaker 4

Dr. Fatimata Bintou Sall, University Iba Der Thiam of Thies, Senegal

**Topic:** Partnerships for implementation research

# **Purpose and Objectives**

The OPT-SMC partnership was established in response to WHO's call in 2018 that access to proven core malaria interventions should be improved as a matter of urgency, in order to reverse the slow-down in progress in malaria

control that had been observed since 2015. One of the key WHO recommendations was that in Sahelian countries where transmission is highly seasonal, the large-scale implementation of seasonal malaria chemoprevention should be extended to all suitable areas, aiming at full coverage. Between 2018 and 2023, SMC has been scaledup with support from donors and national programmes, with SMC programmes in 17 countries reaching 49 million children in 2022. But SMC is complex to deliver, optimal impact requires the number and timing of cycles to be adapted to the local seasonal pattern to ensure children are protected throughout the periods of greatest malaria risk, and while high levels of SMC coverage are possible with door-to-door delivery, strategies need to be adapted to the local context. The OPT-SMC partnership supports national malaria programmes to identify barriers to full coverage of SMC and to take steps to overcome them, through implementation research, and by strengthening partnerships between implementing countries to share learning. This symposium will discuss experiences of building a regional partnership for implementation research on SMC, we will highlight results from projects in Niger, Cameroon, Burkina Faso, Mali and Senegal, review lessons learned, and discuss priorities for operational research on the control of seasonal malaria.

# Symposium 21

Date/ Time: Tuesday, April 23 - 10:30 AM Room: AD12

# Title

Accelerating malaria drug discovery in Africa: Challenges and opportunities for the discovery of new small molecule antimalarial drugs for use in chemoprevention.

# Chairs

Bernhards Ogutu, KEMRI, Kenya James Duffy, MMV, Switzerland

# Speakers

# Speaker 1

Susan Winks, University of Cape Town, South Africa
Topic: The drug discovery landscape in Africa and the
potential impact the newly formed African Drug Discovery
Accelerator (ADDA) will make on African researcher-led
drug discovery targeted to diseases that disproportionately
affect the African patients.

#### Speaker 2

Richard Amewu, University of Ghana Department of Chemistry, Ghana.

**Topic:** ADDA medicinal chemistry platform and the identification of new antimalarial drug candidates with potential for treatment and chemoprevention.

#### Speaker 3

Mariette van der Watt, University of Pretoria, South Africa. **Topic:** ADDA parasitology platform, including its cuttingedge capabilities and how they are used to identify antimalarial drugs with activity across the parasite lifecycle.

#### Speaker 4

Roslyn Thelingwani, African Institute of Biomedical Science and Technology, Zimbabwe.

**Topic:** ADDA DMPK platform, including state of the art assays to assess the absorption, distribution, metabolism, and excretion (ADME) of an antimalarial hits, leads and candidate. How do scientists at AIBST carry out translational research to deliver on medical products and services that address Africa's healthcare challenges.

# **Purpose and Objectives**

African scientists are acutely aware of the impact new drugs to treat infectious and neglected diseases will make on their continent. As a result of this awareness and despite significant challenges including drug discovery research infrastructure, funding and training opportunities Africa produces a wealth of talented scientists committed to the discovery of new medicines. MMV has been committed to supporting and growing African drug discovery over the last 15 years and building on partnerships developed through this period and the achievements of the Grand Challenges Africa initiative, a network of world-class scientists from across the continent have joined forces to create the African Drug Discovery Accelerator (ADDA). The purpose of this symposium is to introduce the malaria research community to the ADDA. In addition to showcasing the unique model, leading African scientists from within the network will describe their contributions to the project and how they work together building capability and capacity to deliver novel and innovative projects based on compounds with antimalarial activity, including local natural products and the development of assays and screening technology including computer-aided drug discovery. For this reason, it is believed that this symposium is a timely and scientifically important reminder that the goals of malaria eradication need the discovery of new chemical entities and African drug discovery scientists will play a critical role in this.

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# Symposium 23

Date/ Time: Tuesday, April 23 - 1:30 PM Room: MH3

#### Title

Malaria in Africa: up against the Red Queen, planning for the end-game.

#### Chairs

#### **Chairs**

Jo Lines, Professor of Malaria Control & Vector Biology, LSHTM

# Speakers

#### Speaker 1

James Tibenderana, Malaria Consortium

# Speaker 2

Deus Ishengoma, NIMR Tanzania

#### Speaker 3

Corine Ngufor, LSHTM, UK

The general topic for all speakers is the question: "What will make the absence of malaria a stable state in Africa, when intensive interventions (e.g. insecticides) have been withdrawn?

# **Purpose and Objectives**

The idea is that researchers, and conferences like MIM, mostly focus on either basic biological knowledge or practical short-term programmatic decisions. We don't talk enough about long-term practical questions: where are we going? Malaria elimination approaches that have been successful in other continents may not be effective in Africa, etc. So what are the possible end-games that we have to consider?

# Symposium 26

Date/Time: Tuesday, April 23 - 1:30 PM Room: AD11

#### Title

Strategic Bed Net Distribution in Urban Areas: Participatory Approaches for Study Design, Findings and Lessons Learned

# Chairs

**Chair:** Prof. Ikeoluwapo Ajayi, University of Ibadan, Ibadan, Oyo, Nigeria

**Co-chair:** Prof. Monsuru Adeleke, Osun State University, Osogbo, Osun, Nigeria

# **Speakers**

# Speaker 1

Dr. Eniola A Bamgboye, Loyola University, Chicago.

**Topic:** Community-led urban settlement classification for malaria transmission risk assessment.

#### Speaker 2

Dr. Akintayo Ogunwale, Bowen University, Iwo, Osun State, Nigeria

**Topic:** The use of mosquito treated nets for malaria control among residents of urban cities in Nigeria.

# **Speaker 3**

Professor Monsuru Adebayo Adeleke, Osun State University **Topic:** Findings from dry season entomological survey in Ibadan and Kano Cities, Nigeria.

# Speaker 4

Yusuf Jamiu, Loyola University Chicago

**Topic:** The determinants of malaria risk in urban settlements and its implications for strategic bed net distribution in Nigeria.

# Speaker 5

Dr. Ifeoma Ozodiegwu, Loyola University

**Topic:** Mixed-method framework for the deprioritization of communities during insecticide-treated bed net mass campaigns in Kwara Nigeria.

# **Purpose and Objectives**

Purpose: Long-lasting insecticide treated bed nets (LLINs) are the cornerstone of malaria vector control in most malaria endemic countries. These essential tools are traditionally distributed in three-year cycles to align with their estimated biological efficacy, guided by a distribution strategy aimed at achieving universal coverage, defined as providing one bed net for every two individuals within a household. Nevertheless, declines in donor funding to meet the targets for universal coverage necessitates a shift toward a more targeted distribution approach wherein available bed nets are directed to households facing the highest risk. Urban areas serve as ideal locations for prioritization approaches

due to their localized patterns of malaria transmission compared to rural areas. For this symposium, members of the Urban Malaria Project will describe our innovative process for assessing urban malaria risk in two Nigerian cities and designing prioritization approaches for bed net distribution in Nigeria. We will share how these processes were accomplished through participatory methods that incorporate local community and program perspectives in study design, and community mapping. We will share novel findings from these studies on malaria risk distribution and determinants, and how they have been generalized to inform bed net campaigns across African cities.

Our symposium is relevant to national malaria control and prevention as it provides researchers with information on new approaches for assessing urban malaria risk and informing bed net distribution to prioritize high risk communities within the context of limited funding.

#### **Objectives**

Describe the use of multi stakeholder dialogue (MSD) for community mapping, defining settlement types (formal settlements, informal settlements, and slums), data quality assessment and validation of maps of malaria risk. Outputs from MSDs conducted in three Nigerian cities will also be shared.

Describe the application of qualitative research methods such as focus groups, key informant interviews and cognitive interviews to inform understanding of intervention usage, sampling, and questionnaire design.

Share findings from a cross-sectional survey conducted at the household on the burden and determinants of malaria in urban areas according to settlement types.

Share findings from an entomological survey on the types of Anopheles mosquito species found in different settlement types, biting times and larval habitats.

Describe how findings from the cross-sectional and entomological surveys have been generalized to inform deprioritization of communities during bed net mass campaigns in cities.

# Symposium 27

Date/Time: Tuesday, April 23 - 1:30 PM Room: AD12

# **Title of Abstract:**

Moving towards triple artemisinin combination therapies for multidrug-resistant malaria in Africa and Asia

# Chairs

**Chair:** Prof. Arjen Dondorp, Mahidol Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand & Center for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, Oxford, UK.

**Co-chair:** Prof Olugbenga Mokuolu, Centre for Malaria and Other Tropical Diseases Care, University of Ilorin Teaching Hospital, Ilorin, Nigeria & Department of Paediatrics, College of Health Sciences, University of Ilorin, Ilorin, Nigeria.

# Speakers

# Speaker 1

Dr. Dhorda, Development of Triple Artemisinin Combination Therapies (DeTACT) project, Asia Regional Centre of the Infectious Diseases Data Observatory.

**Topic:** Triple artemisinin combination therapies are safe in African children

# Speaker 2

Dr. Amaratunga, DeTACT project, National Institutes of Health, USA.

**Topic:** Artemether-lumefantrine plus amodiaquine is safe and efficacious for treatment of multidrug resistant malaria in Asia – Chanaki Amaratunga

- Many paths to artemisinin resistance: lessons from Cambodia and Rwanda Zbynek Bozdech
- Are antimalarial markets in Asia and Africa ready for TACTs? – Freek de Haan
- A fixed dose combination of artemetherlumefantrine-amodiaquine: development to deployment - Michelle Xiong,
- Prof Bozdech leads a research team investigating translation and posttranslational regulation associated with the progression of P. falciparum and mechanisms associated with virulence and drug resistance.
- Dr de Haan is a senior research at the National Institute of Public Health and Environment in the Netherlands. While at the Utrecht University, he led the market positioning work package of the DeTACT

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project.

- Ms Xiong is the Deputy General Manager of Overseas Business Dept, Established Products Manufacturing and Supply Division, Shanghai Fosun Pharmaceutical (Group) Co. Ltd, with over 15 years of experience.
- Affiliations:
- MD & CA: Mahidol Oxford Tropical Medicine Research Unit, Mahidol University, Thailand & Nuffield Department of Medicine, University of Oxford, UK
- ZB: Nanyang Technological University, Singapore
- FdeH: Coordination Centre for Infectious Diseases, National Institute for Public Health and the Environment, The Netherlands
- MX: Shanghai Fosun Pharmaceutical Industrial Development Co. Ltd, China

# **Purpose and Objectives**

Artemisinin-based Combination Therapies (ACTs) have contributed substantially to reduce global malaria morbidity and mortality. However, further gains are threatened by artemisinin and partner drug resistance in Southeast Asia. Recent reports of artemisinin resistance in Rwanda and Uganda and other countries in Africa are worrisome and call for urgent action to prevent further emergence or spread of artemisinin resistance in Africa. Triple ACTs (TACTs), combining artemisinin with two currently available partner drugs, could provide one of the last remaining safe and effective treatments for malaria that can be deployed rapidly. We present evidence for TACTs and their potential for deployment.

# **Symposium 28**

Date/ Time: Tuesday, April 23 1:30 PM Room: MZ

# **Title of Abstract:**

Context is everything: adapting national PMC strategies to community realities in Benin, Cameroon, Côte d'Ivoire, and Mozambique.

# Chairs

Co-Chair: Dr. Jacques Kouakou, Deputy Project Director, Plus Project, PSI, Côte d'Ivoire, Co-Chair: Dr Ambachew Yohannes, Program Manager, Unitaid, Switzerland,

# **Speakers**

# Speaker 1

Dr. Jacques Kouakou, PSI, Côte d'Ivoire **Topic:** Why Co-design for PMC intervention?

# Speaker 2

Dr. Junior Voundi, NMCP, MoH Cameroon

**Topic:** Designing community engagement activities using a human centered approach to promote PMC adoption.

# Speaker 3

Lilly Claire Ekobika, PSI, Cameroon

**Topic:** How have co-design and community engagement activities informed and supported PMC distribution?

#### Speaker 4

Prof. Wilfred Mbacham, Fobang Institute of Health and Technology, Cameroon:

**Topic:** PMC Evaluation: initial coverage results – Cameroon

# **Speaker 5**

Prof. William YAVO, University HB Abidjan, Côte d'Ivoire **Topic:** PMC Evaluation: initial coverage results – Côte d'Ivoire

# **Speaker 6**

Elsa Nhantumbo, PSI, Mozambique

**Topic:** A different example from Mozambique: using the Healthy Child Consultation as a platform for delivering PMC.

# **Purpose and Objectives**

Perennial Malaria Chemoprevention (PMC) is a WHO-endorsed strategy to provide malaria chemoprevention to children in areas of perennial malaria transmission. The WHO guidance states that PMC strategies should be tailored and integrated into existing health systems and are not prescriptive on: whom PMC is given (no age restriction although < 24 months is suggested); frequency (no limits on the number or timing of doses); drug choice (no restrictions although SP suggested); and delivery channel (EPI suggested). This symposium aims to share our experience using participatory methods for designing and implementing new PMC strategies in Benin, Cameroon, Côte d'Ivoire, and Mozambique.

Symposium 29

Date/Time: Tuesday, April 23 - 5:00 PM

Room: MH3

#### Title

Catalysing change: The crucial role of philanthropy in eliminating malaria

# Chairs

Chair: Dr. Corine Kema, Quality and Equity health care

# **Panelists**

#### Panelist 1

Dr. James Tibenderana, Malaria consortium

#### Panelist 2

Dr. Nafiisah Chotum, Africa Centers for Disease Control and Prevention

# Panelist 3

Olivia Ngou, Impact Sante Afrique

# Panelist 4

Dr. Muhammed Semakula, Rwanda Ministry of health

# Panelist 5

Alicia Weng, Malaria Team Lead, GiveWell

#### Panelist 6

Dr. Jennifer Gardy, Bill & Melinda Gates Foundation

# Panelist 7

Prof Wilfred Mbacham, Founding executive secretary, MIM Society, Chair, Board of Trustees, Malaria Consortium

# Symposium 30

Date/Time: Tuesday, April 23 - 5:00 PM Room: AD10

#### Tit

Strategies to mitigate antimalarial drug resistance in Africa: grassroots engagement to next generation drugs

# Chairs

#### **Chair:**

Prof Arjen Dondorp, Mahidol Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand & Center for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, Oxford, UK.

Co-chair: Dr. Peter Olumese, Global Malaria Program, World Health Organization, Geneva, Switzerland

# Speakers

#### Speaker 1

Dr. Rasmussen, Global Malaria Program, World Health Organization, Geneva, Switzerland

Topic: WHO strategy to respond to antimalarial resistance in Africa

# Speaker 2

Prof. Boni, Institute for Genomics and Evolutionary Medicine, Temple University, Philadelphia, USA

Topic: Modeling policy interventions for slowing the spread of artemisinin resistance in Uganda and Tanzania

# **Speaker 3**

Prof. Barnes, Division of Clinical Pharmacology, University of Cape Town, South Africa

Topic: Considering the potential role of single low dose primaguine to tackle artemisinin resistance in Africa

# Speaker 4

Dr. Leroy Medicines for Malaria Venture, Geneva, Switzerland

Topic: Irresistible compounds for malaria chemotherapy

# Speaker 5

Prof. Mokuolu, Department of Paediatrics, University of Ilorin, Nigeria

Topic: Early and consistent engagement is essential to tackle antimalarial resistance

# **Purpose and Objectives**

An estimated 200 million people in Africa will be infected with malaria this year. Artemisinin-based Combination Therapies (ACTs) will be first line therapy for most of them. Artemisinin partial resistance detected in African countries poses a worrisome threat for the efficacy of ACTs. It is vital that we act now to protect the drugs in ACTs. This will require a multifaceted approach. The "WHO Strategy to respond to antimalarial drug resistance in Africa" provides technical and advocacy support for this cause. We will be presenting some of these strategies and highlight the importance of sustaining grassroots engagement for each strategy.

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# **Symposium 31**

Date/Time: Tuesday, April 23 - 5:00 PM Room: AD11

#### Title

Mobilization of Partnerships to Integrate Molecular Data into National Malaria Surveillance: Perspectives from Senegal and Beyond

# Chairs

Professor Daouda Ndiaye, PharmD, PhD, FASTMH, University Cheikh Anta Diop, Senegal

#### **Moderator:**

Dr. Sarah Volkman, ScD FASTMH, Harvard T.H. Chan School of Public Health

#### **Panelists:**

#### **Medoune Ndiop**

National Coordinator of Monitoring and Evaluation

National Malaria Control Program, Senegal

National malaria program planning, surveillance, epidemiologic analysis, monitoring and evaluation

# **Awa Deme**

Project Coordinator CDC PARMA-Africa

Programmatic molecular monitoring of drug resistance

# **Wes Wong**

Research Scientist

Harvard T.H. Chan School of Public Health

Genomic epidemiology, transmission analysis, and modeling and data use by NMCP

#### **Kate Battle**

Senior Research Scientist
Institute for Disease Modeling, BMGF
Incorporating malaria molecular data into epidemiological models for NMCP use

# Issiaka Soulama

Scientist and Head of the Molecular Biology National Center for Malaria Research and Training, Burkina Faso

Perspectives on building capacity for malaria molecular

surveillance in Burkina Faso

# Deus Ishengoma

Researcher

National Institute for Medical Research, Tanzania Perspectives on building capacity for malaria molecular surveillance in Tanzania

**Purpose:** The purpose of this symposium is to share strategies and experiences between programmatic and research partners to use molecular data toward the shared goal of malaria burden reduction and elimination.

#### **Objectives:**

- Outline the model developed in Senegal where there is close collaboration between research and implementation partners to collect, analyze, and incorporate molecular surveillance data for evidence-based decision making related to malaria burden reduction and elimination.
- Learn about other successful models from partners across Africa to hear about alternative strategies for the use of data for evidence-based decision making related to malaria burden reduction and elimination.
- Identify knowledge and operational gaps and challenges to successful use of molecular data to guide operational decision-making and transform these into opportunities and shared strategies.
- Outline roadmaps from these shared experiences that can inform best practices for generation, analysis, and incorporation of molecular data to inform intervention use and evaluate impact related to malaria burden reduction and elimination.

# Symposium 32

Date/ Time: Tuesday, April 23 - 5:00 PM Room: AD12

# Title

Anopheles Stephensi in Africa: What Has Been Done, What Must Be Done, and How It Could Be Done?

# Chairs

# **Chairs**

Co-Chairs: Roz Taylor Ayman Ahmed

# Speakers

# Speaker 1

Roz Taylor, RAFT (Resilience Against Future Threats Through Vector Control) Consortium, Department of Disease Control, London School of Hygiene and Tropical Medicine; London WC1E 7HT, United Kingdom & Medical Entomology and Zoonoses Ecology, UKHSA, Porton Down, United Kingdom

Topic: Roz's research focuses on emerging threats to vector control, including invasive malaria mosquitoes. She will speak about An. stephensi bionomics in its native range and the implications of this literature for its future in Africa, focusing on aspects that differentiate it from the established malaria vectors.

# Speaker 2

Professor Delenasaw Yewhalaw, Jimma University, Ethiopia Topic: Adult An. stephensi feeding and resting behaviour, and efficacy of candidate larvicides (SumiLarv 2MR and SumiLarv 0.5q) for control of An. stephensi larvae in Ethiopia.

# Speaker 3

Professor Yaw Asare Afrane, University of Ghana Medical School

Topic: Dr. Afrane will speak about larval ecologies of An. stephensi in Ghana.

# **Speaker 4**

Dr. Louisa A. Messenger, London School of Hygiene and Tropical Medicine, UK, School of Public Health, University of Nevada, United States

Topic: Innovations in molecular surveillance of An. stephensi and how improved genetic understanding of An. stephensi population structure can inform control initiatives.

#### Speaker 5

Ayman Ahmed , The Institute of Endemic Diseases, University of Khartoum, Khartoum 11111, Sudan, Swiss Tropical and Public Health Institute, Allschwil, Switzerland; University of Basel, Basel, Switzerland

Topic: Ayman will speak from his recent regional assessment for the Global Fund. He will share highlights about the current gaps and challenges for malaria control programs in Africa to control An. stephensi, and opportunities for successes.

# **Purpose and Objectives**

This symposium aims to provide the multidisciplinary audience at MIM with up-to-date information on crucial aspects of this vector's bionomics, drawing on evidence from Africa and Asia. This knowledge will be important in designing and implementing effective surveillance and control strategies. We will explore:

What we can learn about the future of An. stephensi in Africa from the literature in Asia

New findings from Ethiopia and Ghana

New innovations in molecular surveillance for An. stephensi The current gaps and challenges for national-level malaria control programmes preparing to control An. stephensi

# **Symposium 33**

Date/Time: Tuesday, April 23 - 5:00 PM Room: MZ

#### Title

The Role of African Scientists and Communities in the Development of Genetic Technologies for Malaria Vector Control.

#### Chairs

Joy Phumaphi (ALMA).

# Speakers

# Speaker 1

Diabate Abdoulaye, Institut de Recherche en Science de la Santé (IRSS) /Centre Muraz in Bobo-Dioulasso, Burkina Faso

**Topic:** Is Africa ready for gene drive mosquitoes?

#### Speaker 2

Dickson Wilson, Ifakara Health Institute

**Topic:** Establishing a laboratory for genetic modification of mosquitoes in Tanzania

#### Speaker 3

Naima Sykes, Target Malaria, Imperial College London **Topic:** Co-development of community engagement for genetically modified mosquitoes in Burkina Faso

# Speaker 4

Barbara Glover, African Union Development Agency-NEPAD (AUDA-NEPAD)

**Topic:** Building regulatory frameworks for genetic methods of vector control in Africa

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# **Purpose and Objectives**

The purpose of this symposium is to highlight activities that are taking place in Africa towards developing and evaluating genetic technologies for malaria vector control, and towards building capacity for their eventual implementation. The speakers will mainly focus on innovative gene drive projects. WHO and the African Union amongst others recognise that genetically modified mosquitoes could make an important contribution towards malaria elimination. As for many new tools against malaria, despite the potential beneficiaries residing in sub-Saharan African, scientific development of these technologies has historically been driven by the global north. This is changing; laboratories equipped for carrying out genetic modification have been established in several African countries, and insectaries have been built to the biosafety levels required for rearing and handling genetically modified mosquitoes. Regulatory and risk assessment frameworks are being strengthened in Africa, through many initiatives including the African Union (AU) High-Level Panel on Emerging Technologies (APET). In parallel, local communities who may be the first to experience field trials are being informed and consulted. Speakers in this symposium are drawn from several projects involved in development and capacity building around genetic vector control technologies.

# Symposium 34

Date/Time: Wednesday, April 24 - 10:30 AM Room: MH4

# Title

Malaria Indicator Survey (MIS) 2023 data: The road towards malaria control in Rwanda

# Chairs

# **Presentation:**

Dr. Mangara Jean-Louis Ndikumana

# **Panelists/Moderator**

# **Moderator:**

Dr. Aimable Mbituyumuremyi

# **Panelist 1**

Michée Kabera

# Panelist 2

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Epaphrodite Habanabakize

#### **Panelist 3**

Dr Jean Damascène Nivonzima

#### Panelist 4

PMI (Dr Kaendi Munguti)

#### Panelist 5

ICF-TA (Dr Hong Rathavuth)

#### **Purpose and Objectives**

Participants will be able to understand MIS implementation in Bwanda

Participants will be able to describe the status of malaria prevalence and current control measures in Rwanda.

Participants will be able to consider how to use data as a basis for taking action toward malaria control in their own

# Symposium 35

Date/Time: Wednesday, April 24 - 10:30 AM Room: AD11

#### Title

Working together to strengthen malaria molecular surveillance in the DRC

# Chairs

#### Chair

Eric Sompwe MUKOMENA, MD, PhD (DRC National Malaria Control Program, Kinshasa, DRC)

#### Co-chair:

Jonathan B. PARR, MD, MPH (University of North Carolina, Chapel Hill, NC, USA)

# Speakers

# Speaker 1

Eric Sompwe MUKOMENA, MD, PhD; Director, DRC National Malaria Control Program (PNLP), Kinshasa, DRC. **Topic:** PNLP priorities and the role of new molecular surveillance activities in the DRC.

## Speaker 2

Losimba Joris LIKWELA, MD, PhD; Program Manager, SANRU Asbl, Kinshasa, DRC

Topic: Integrating Malaria Molecular Surveillance into The

DRC Sentinel Site Network

# Speaker 3

Ronald Futila KYONG-SHIN, BS; PhD student, University of North Carolina, Chapel Hill, NC

**Topic:** ENHANCING OUR UNDERSTANDING OF P. FALCIPARUM GENOMICS IN THE DRC, and Institut National de Recherche Biomedicale (INRB), Kinshasa, DRC.

# Speaker 4

Esto Bahizire, MD, PhD; Director, Center for Tropical Diseases and Global Health (CTDGH), Catholic University of Bukavu, Bukavu, DRC

Topic: Implementing Nanopore Sequencing for Malaria In Eastern DRC.

# Speaker 5

David Weetman, PhD; Reader, Liverpool School of Tropical Medicine, Liverpool, UK.

**Topic:** Genetic Investigation of Anopheles Diversity and Insecticide Resistance in The DRC

# Speaker 6

Gauthier Kahunu MESIA, Pharm, PhD, University of Kinshasa

**Topic:** Therapeutic Efficacy Studies: Combining Clinical And Molecular Data to Support The DRC PNLP. Panel Discussion

#### **Moderators:**

Melchior M. KASHAMUKA, MSc, MPH; Kinshasa School of Public Health, University of Kinshasa, DRC, and Kamuzu University of Health Sciences (KUHeS), Blantyre, Malawi.

# **Purpose and Objective**

The objectives of this symposium are to: Improve understanding of the current malaria situation and challenges to control in the DRC. Highlight efforts to deploy new genomic tools to monitor antimalarial resistance in the DRC. Demonstrate the value of cross-cutting partnerships comprising government, NGO, and academic institutions for effective molecular malaria surveillance (MMS) in the DRC. Discuss the DRC mosquito distribution and ongoing genomic investigation.

Symposium 36

Date/Time: Wednesday, April 24 - 10:30 PM Room: AD12

#### Title

Catalyzing multilateral initiatives for the effective control and elimination of Vector-Borne Diseases (VBDs): The Role of PAMCA as a Pan-African-led platform

# Chairs

Chair: El Hadji Amadou Niang (Pan-African Mosquito Control Association (PAMCA), Kenya)

Co-Chair: Emma Orefuwa (Pan-African Mosquito Control Association (PAMCA), Kenya)

# Speakers

# Speaker 1:

Dr. El Hadji Amadou Niang Niang (Pan-African Mosquito Control Association (PAMCA), Kenya)

# Speaker 2:

Mrs. Ghislaine Ouedraogo-Ametchie (Pan-African Mosquito Control Association (PAMCA), Kenya)

# Speaker 3:

Dr. Elijah Juma (Pan-African Mosquito Control Association (PAMCA), Kenya)

# Speaker 4:

Dr. Damaris Matoke-Muhia (Pan-African Mosquito Control Association (PAMCA), Kenya)

# Speaker 5:

Dr. Samson Kiware (Ifakara Health Institute (IHI), Tanzania)

#### Speaker 6:

Professor Abdoulaye Diabaté (Institut de Recherche en Science de la Santé(IRSS) and Centre Muraz, Burkina Faso).

# **Purpose and Objectives**

PAMCA is an African-led collaborative network that brings together key stakeholders in the field of vectors and vector-borne diseases (VBDs) control. It offers a platform for stakeholders to share thoughts, co-create, learn together, share, and adopt best practices to control and eliminate vector-borne diseases in Africa and worldwide. PAMCA's setup is comprised of thematic program portfolios spanning across the organization from the Secretariat to the Regional Centers of Excellence (RCoE) and country chapters that enable the design, implementation, monitoring, evaluation, and learning (M, E&E) of the organization's global strategy

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and cross-cutting thematic areas.

Purpose: The symposium aims to showcase PAMCA's pivotal role in advancing malaria control in Africa through innovative programs and collaborative platforms. We will present PAMCA†s operating model, key progress milestones, initiatives, and practical solutions developed by PAMCA to strengthen vector control, surveillance, and gender inclusivity in the fight against malaria.

# **Objectives:**

- Highlight the significance of PAMCA's thematic programs in the broader context of VBDs research, prevention, surveillance, and control.
- Showcase innovative approaches, novel findings, and practical applications in vector control, genomics, bioinformatics, data management, and gender inclusivity.
- Provide a platform for sharing experiences, lessons learned, and successful outcomes from PAMCA's initiatives.
- Foster collaboration and knowledge exchange among stakeholders to enhance malaria control efforts in Africa.

**Symposium 37** 

Date/Time: Wednesday, April 24 - 10:30 PM Room: MZ

# Title

Integrating Chemoprevention strategies to End Malaria

# Chairs

# **Chair:**

Prof. Clara Menendez (Barcelona Institute for Global Health (ISGlobal)\ and Universitat de Barcelona, Spain)

#### Co-chair:

Dr. Francisco Saúte (Centro de Investigação em Saúde de Manhiça (CISM), Mozambique)

# **Speakers**

Speaker 1: Dr Raquel Gonzalez (Barcelona Institute for Global Health (ISGlobal)\ and Universitat de Barcelona, Spain and Centro de Investigação em Saúde de Manhiça (CISM), Mozambique).

Speaker 2: Dr. Augustin Fombah (Barcelona Institute for Global Health (ISGlobal), Spain and University of Sierra

Leone, Sierra Leone)

Speaker 3: Dr. Pedro Aide (Manhiça Health Research Center, Mozambique)

Speaker 4: Dr Lauren Cohee (Liverpool School of Tropical Medicine, UK)

Speaker 5: Dr. Jean-Bosco Ouedraogo (Burkina Faso)

#### **Purpose and Objectives**

Purpose: Latest World Health Organization (WHO) guidelines of malaria control recommend the combined use of different chemoprevention strategies to prevent malaria infection and its adverse health impact. These strategies include perennial and seasonal malaria chemoprevention (PMC and SMC) for young children and intermittent preventive treatment for pregnant women (IPTp) living in moderate to high transmission areas. More recently recommended strategies are Intermittent preventive treatment in school-aged children (IPTsc) and Post-discharge malaria chemoprevention (PDMC) to children admitted with severe anaemia. Despite some of these interventions being recommended for decades, their implementation and coverage remain a challenge in many sub-Saharan African (SSA) countries.

Objectives: The objectives of the proposed symposium are: To review novel findings on the efficacy and effectiveness of malaria chemoprevention strategies implemented in selected SSA countries.

To discuss implementation opportunities and challenges of the different strategies based on real country examples. To learn and discuss the practical implications of their scale-up combining malaria vaccines roll-out.

Symposium 38

Date/Time: Wednesday, April 24 - 01:30 PM Room: MH2

# Title

Partnerships for Research and Capacity

Development on Malaria & Neglected Tropical

Diseases in West and Central Africa

# Chairs

# Chair:

Prof. Oumar Gaye (Senegal)

#### Co-chair:

Prof Wilfred Mbacham (University of Yaounde I, Cameroon

# Speakers

# Speaker 1:

Prof Oumar Gaye

Speaker 2:

Ali Innocent

Speaker 3:

Oumou K Gueye

Speaker 4:

Prof Mbacham Wilfred

Speaker 5:

Prof Safiatou Niare Doumbo

Speaker 6:

Prof Jean Louis Ndiaye

# **Purpose and Objective**

Malaria transmission in West and Central Africa has become extremely heterogeneous, both within and between countries. In some countries, malaria control efforts have been so successful that malaria elimination appears feasible in a not-too-distant future; other countries are still facing extremely intense transmission. Despite progress in malaria control, challenges still exist such as parasite & vector resistance, climate change, disease outbreaks, and residual transmission. Neglected Tropical Diseases (NTDs) are also extremely common and coexist with malaria. Both malaria and NTDs, particularly hookworms and schistosomiasis, cause anaemia, with consequences on physical growth and school performance in children, higher maternal mortality, and prematurity. In addition, soil-transmitted helminths (STH) and schistosomiasis may influence malaria susceptibility and pathogenesis. These diseases have an impact on SDGs. Therefore, there is the need on the one hand to increase the effectiveness of available malaria control interventions in high-burden countries, and on the other hand to explore new approaches to further decrease or interrupt residual malaria transmission. Moreover, there is a need to further investigate the interaction between malaria and NTDs, and the opportunities offered by tackling both at the same time. The MARCAD-Plus program focused specifically on three complementary approaches for malaria control, namely chemoprevention, vector control, and surveillance, with special attention to potential synergies for NTDs control. Capacity building in social sciences research is embedded in all three approaches with a major role in all the research activities in the 7 countries involved. MARCAD-Plus is on track to increase the critical mass of talented African scientists able to reverse the situation of malaria and NTDs in the continent.

# **Symposium description:**

This symposium will discuss experiences of building a regional partnership with research and academic institutions and national malaria programs for capacity building on Malaria and NTDs supported by Science for Africa (SFA). We will highlight results from projects in Cameroon, Gambia, Ghana, Mali, and Senegal, review lessons learned, and best practices and discuss priorities for the control of malaria and NTDs on the road to elimination.

# **Rationale for topic description:**

This symposium will highlight personal experiences and common challenges of fellows during their training, the gender balance aspects, the link between the research findings and their translation into policies and actions. We will discuss also the impact of the research & training regional partnership on their career perspectives.

#### Symposium 39

Date/Time: Wednesday, April 24 - 01:30 PM Room: MH4

# Title

African solutions to an African problem: practical approaches to antimalarial resistance mitigation

# Chairs

Chair: Prof Gilbert Kokwaro (Strathmore University, Kenya) Co-chair: Dr Keziah Malm (National Malaria Elimination Programme, Ghana)

# Speakers

Speaker 1: Prof Gilbert Kokwaro (Strathmore University, Kenya)

Speaker 2: Dr Keziah Malm (National Malaria Elimination Programme, Ghana)

Speaker 3: Dr Issiaka Soulama (Institut de Recherche en Sciences de la Santé, Burkina Faso) Speaker 4: Dr Andrew Omandi Cole (Strathmore University, Kenya).

Speaker 5: Dr Aimable Mbituyumuremyi (Rwanda Biomedical Center, Rwanda)

Speaker 6: Prof Maciej Boni (Temple University in Pennsylvania, USA)

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#### **Purpose and Objectives**

Markers of resistance to Artemisin-based Combination Therapies (ACTs) together with delayed parasite clearance have been detected in a growing number of African countries. Without proactive mitigation activities, the efficacy of ACTs could be threatened, resulting in a potential public health catastrophe. This symposium aims to share learnings from some practical and proactive approaches to resistance mitigation from experts who have already implemented them, including the experiences of Rwanda, the first African country to confirm the presence of ACT resistance markers. We will also discuss the facilitation of international and cross-border collaborative approaches to resistance mitigation through platforms such as the ALARM consortium, as well as sharing the outcomes from a geographic approach to Multiple First-Line Treatments (MFT) and a cutting-edge example of how genotyping can be used to support real-life decision making.

#### **Symposium 40**

Date/Time: Wednesday, April 24 - 1:30 PM Room: AD10

# Title

Country programme approaches to strengthening malaria surveillance systems

# Chairs

#### Chair:

Arantxa Roca-Feltrer

# Co-chair:

Médoune Ndiop

# Speakers

# Speaker 1

Dr. Balla Gibba, Ministry of Health, Gambia

**Topic:** Experiences from conducting a rapid WHO malaria surveillance assessment to guide surveillance strengthening improvements

# Speaker 2

Sidzabda Christian Bernard, MD, Ministry of Health and Public Hygiene, Burkina Faso

**Topic:** Experiences developing a malaria data repository in Burkina Faso.

# Speaker 3

Dr. Ghislain Kikunda, Ministry of Health, NMCP, DRC

**Topic:** Experiences from introducing RDQA tools to

improve malaria routine data in DRC

# Speaker 4

Dr Moustapha Cisse, PATH, Senegal

**Topic:** Experiences tailoring data visualizations to facilitate programmatic decision making in Senegal

#### **Purpose and Objectives**

NMCPs will have the opportunity to present and discuss their experiences in developing different essential components of a strong malaria routine surveillance system. The aim is to discuss the importance of the different components, lessons in their development and integration, challenges in implementation and opportunities for positive impact on NMCP decision-making.

#### **Objectives:**

To share NMCP experiences in developing different essential components of a malaria routine surveillance system

To discuss challenges and opportunities in building a strong malaria surveillance system

To identify good practices and share these with other NMCPs to foster cross-learning

To highlight the importance of robust and resilient surveillance systems for malaria

# Symposium 41

Date/Time: Wednesday, April 24 - 01:30 PM Room: AD11

# Title

African conversations on gene drives for malaria control and elimination: insights and recommendations of key stakeholders across the continent

# Chairs

# Chair:

Dr. Willy Tonui (African Genetic Biocontrol Consortium, Kenya)

# **Co-Chair:**

Dr. Lina Finda (Ifakara Health Institute, Tanzania)

# **Speakers**

#### Speaker 1:

Prof. Dorington Ogoyi (Technical University of Kenya, Kenya)

# Speaker 2:

Dr. Willy Tonui (EHS Consultancy Ltd, Kenya)

# Speaker 3:

Dr. Marceline (Lina) Finda (Ifakara Health Institute, Tanzania)

#### Speaker 4:

Dr. Sambo Maganga (Ifakara Health Institute, Tanzania)

#### Speaker 5:

Dr. Edward Okonjo (Technical University of Kenya, Kenya)

#### Speaker 6:

Dr. Adedapo Adeogun (Nigerian Institute of Medical Research, Nigeria)

# Speaker 7:

Dr. Blessings Kaunda (Kamuzu University of Health Sciences, Malawi)

# Speaker 8:

Dr. Magellan Tchouakui (Centre for Research in Infectious Diseases, Cameroon).

# **Purpose and Objectives**

The goal of this symposium is to disseminate the outcomes of an extensive research and training that we have conducted over the past five years, on laying the groundwork for prospective field research and implementation of gene drives modified mosquitoes (GDMMs) for malaria control and elimination efforts in Africa. We will bring out voices of key stakeholders across Africa, expressing their insights and recommendations on how research, development and potential deployment of GDMMs could be enhanced to best respond to the malaria control challenges in Africa, and on how countries can proactively prepare for potential implementation of these technologies. We will also highlight ongoing efforts within Africa to build and enhance capacity of African scientists and regulators to implement best practices in research and implementation of GDMMs for malaria control and elimination.

# Symposium 42

Date/Time: Wednesday, April 24 - 01:30 PM Room: AD12

#### Title

Fighting malaria with genomics in Africa: current status, achievements and prospects

# Chairs

#### Chair:

Dr Estee Torok (Bill and Melinda Gates Foundation (BMGF), UK)

#### Co-Chair:

Baltazar Candrinho (National Malaria Control Program, Mozambique)

# Speakers

#### Speaker 1:

Nana Aba Williams (Malaria Eradication Scientific Alliance [MESA], ISGlobal, Spain)

Topic: Who's doing what? Mapping the landscape of ongoing research and investments in fighting malaria with genomics

Victor Osoti (KEMRI-Wellcome Trust Research Program, Kenya)

Topic: Integrating Malaria Molecular Epidemiology into Routine Surveillance in Kenya

Deus Ishengoma (National Institute for Medical Research (NIMR) and Kampala International University, Tanzania)

Topic: Building the capacity Molecular Surveillance of Malaria Tanzania: Progress, challenges and opportunities

Mulenga Mwenda (PATH, Zambia)

Topic: In-country nanopore sequencing using the NOMADS assay to identify drug resistance markers in Zambia

Jon Juliano (University of North Carolina, USA)

Topic: Strengthening malaria molecular capacity in the DRC through the PaluSeq project

Christian Nsanzabana (Swiss Tropical and Public Health Institute & University of Basel, Switzerland)

Topic: Scaling up malaria molecular surveillance in Africa: opportunities and challenges

Simone Boene (National Malaria Control Program, Mozambique)

Topic: The use of malaria molecular surveillance for programmatic decisions in Mozambique

# **Purpose and Objectives**

Purpose: Genomic technologies are driving some of the most ground-breaking research and surveillance approaches happening today. Yet the benefits of these tools will not be fully realized unless they are deployed worldwide (spirit of global solidarity). The gap in application

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and utilization of data and evidence generated by genomic surveillance is even bigger in Africa with a high burden of many infectious diseases including malaria. Malaria, as the paradigm of a disease that mainly affects the Global South, represents a unique opportunity to demonstrate how attention to equity in deploying and utilizing genomics can achieve its immense potential benefit to human health.

Objectives: The objectives of this Symposium are two-fold:

- Discuss recent initiatives, achievements and opportunities for the use of malaria molecular surveillance (MMS) for public health impact: We will discuss how the integration of genomic data into routine surveillance activities has the potential to increase the actionable intelligence for making programmatic decisions on the optimal mix of control and elimination measures in malaria endemic countries.
- Reflect on gaps and needs for an impactful deployment and utilization of MMS programs in Africa: We will discuss the lessons learned in implementing successful malaria genomics projects in Africa to overcome challenges related to setting up technical facilities, building of human capacities, procurement and long-term sustainability of genomic activities.

# **Symposium 43**

Date/Time: 24th 1:30 Room: MZ

# **Title of Abstract:**

The Star Homes Project: Novel house designs to reduce malaria transmission in rural Africa

# Chairs

# Chair:

Salum Mshamu,

P. O.Box 600. Mangowela Street, Off Chuno Road Mtwara - Tanzania

#### Co-chair:

Lorenz von Seidlein

Mahidol-Oxford Tropical Medicine Research Unit (MORU) Mahidol University, 420/6 Rajvithi Road. Bangkok 10400

# Speakers

#### Speaker 1

Name: Salum Mshamu (TZ)

Position: Director

Institution: CSK Research Organization

Topic: The evaluation of health benefits of novel house designs.

# Speaker 2

Name: Jakob Knudsen (DK)

Position: Dean of the Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, Denmark.

Institution: Royal Danish Academy of Fine Arts, Copenhagen,

Topic: Health benefits of novel house designs.

#### Speaker 3

Name: Arnold Mmbando (TZ)

Position: PhD student

Institution: Ifakara Health Institute & Durham University,

UK.

Topic: Data on the effect of novel design housing on indoor vector abundance in southern Tanzania.

#### Speaker 4

Name: Amos Ngozi (TZ)

Position: An entomologist

Institution: Ifakara Health Institute.

Topic: Data on the effect of novel design housing on indoor vector abundance in southern Tanzania

# Speaker 5

Name: Judith Meta (TZ)

Position: Qualitative social science researcher

Institution: She is self-employed - based in Tanzania, East

Africa

Topic: The uptake and acceptance of mosquito proof housing

# Speaker 6

Name: Bipin Adhikari (TH)

Institution: Malaria department of Mahidol Oxford Research

Unit, Bangkok Thailand.

Topic: The uptake and acceptance of mosquito proof housing.

# Speaker 7

Name: Graham Alabaster (UNHABITAT/WHO)

Position: He is developing joint programmes on urban development, health and environment

Institution (s): WHOs Department for Public Health and Environment from UNHABITAT

Topic: Demand and supply of novel house designs in rural Africa

#### **Speaker 8**

Name: Lorenz von Seidlein (TH)

Position: Pediatrician and epidemiologist by training and the Principal Investigator of the star homes project.

Institution: Mahidol Oxford Research Unit, Bangkok Thailand.

**Topic:** Introduce the reasoning behind the Star Homes Project.

# **Purpose and Objectives**

With the rapid growth of the African population and the rapid turn-over of African housing stock, there are opportunities to scale up mosquito-proof, healthier home construction. Novel design homes have a reduced carbon footprint and are adapted to extreme climate events. Improved house design does not depend on insecticides. Novel house designs aim not only to reduce vector entry, but they also maximize cross-ventilation. Plus, improved ventilation allows for more comfortable sleep under a bednet.

The Star Homes\* Project has been in development for more than a decade, exploring ways to develop novel, low-cost, comfortable, and insect-proof housing to enhance the health of people in rural areas of Sub-Saharan Africa. The project consists of 110 identical, single family 'Star Homes' constructed across 60 different villages in rural Mtwara, one of the more underdeveloped regions of Tanzania, with a high incidence of malaria. These houses form the basis of a trial, which aims to provide robust data to show whether improved housing can improve family health. https://www.starhomes.wiki/

# Symposium 44

Date/Time: 24th 5:00 Room: AD10

# **Title of Abstract:**

Tackling Malaria Drug Resistance with the Next Generation of Antimalarial Treatment Strategies

# Chairs

# **Chair:**

Dr. Estee Torok – Bill and Melinda Gates Foundation, United Kingdom

Estee.torok@gatesfoundation.org

#### Co-Chair:

Dr. Rima Shretta – Jhpiego, USA

Email: rima.shretta@jhpiego.org

# Speakers

Dr. Charlotte Rasmussen

Title: Epidemiologist

Affiliation: Global Malaria Programme, World Health

Organization

Address: Avenue Appia 20, Geneva, Switzerland

**Background:** Dr. Rasmussen leads WHO's efforts in responding to antimalarial drug resistance and providing support to countries in studies on drug efficacy and resistance.

resistance

**Topic:** Malaria drug resistance and the WHO strategy

Professor Maciek Boni

Title: Professor

**Affiliation:** Temple University

Address: 1801 N Broad St, Philadelphia, PA 19122

**Background:** Maciej Boni has used mathematical modeling to evaluate different approaches to delaying the emergence of and slowing down the evolution of drugresistant genotypes. His work in slowing and controlling antimalarial drug resistance and deployment of multiple first-line therapies (MFT) is now adopted as official policy in 13 Africa countries.

**Topic:** Approaches to slowing down the currently circulating kelch13 variants in central and eastern Africa: Evidence on the effectiveness of MFTs using modeling.

Dr. Kompaore Sidzabda Christian Bernard

Title: Manager

**Affiliation:** National Malaria Control Program, Burkina Faso Address: Ouagadougou, Burkina Faso

**Background:** Dr. Kompaore is a Burkinabe medical doctor and has worked for 17 years within the Ministry of Health where he has served as a District Medical Officer, Deputy Regional Director, Chief of Planning, Monitoring

and Evaluation, and Regional Health Director. In 2022, he was appointed as the Permanent Secretary for Malaria Elimination.

**Topic:** Lessons learned from the pilot in Burkina Faso

Dr. Aimable Mbituyumuremyi

Title: Program Manager

**Affiliation:** National Malaria, Other Parasitic Diseases and Neglected Tropical Diseases Control Program, Rwanda.

Address: Kigali, Rwanda

**Background:** Dr Mbituyumuremyi is medical doctor with more than ten years of experience working on HIV, AIDS,

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STIs, viral hepatitis and malaria program design, national strategies and guidelines development and implementation. Topic: Scaling up Multiple First-Line Therapies in Rwanda

Dr Kefas Mugittu

Title: TES Advisor for the PMI Shinda Malaria Project

Affiliation: Ifakara Health Institute

Address: 255 Dar es Salaam, Dar es Salaam, Tanzania

**Background:** Dr Mugittu is the head of the Bagamoyo Branch of IHI. He holds a PhD in molecular microbiology with a focus on drug- resistant malaria and has been supporting therapeutic efficacy studies to inform malaria treatment policies in Tanzania.

**Topic:** Best practices from the scale-up of ACTs in Tanzania and lessons learned for the implementation of MFTs

# **Purpose and Objectives**

To share the evidence on the use of multiple first-line therapies (MFT) in which several therapies are made available in both the public and the private sectors as a strategy to slow the evolution of drug resistance in Africa. The symposium will focus on providing the evidence for MFTs and share lessons learned from recent a pilot studies and scale up efforts in Burkina Faso and Rwanda as well as experiences from the adoption of ACTs in Tanzania that can be used to scale up implementation of this strategy in these and other countries.

# Symposium 45

Date/Time: Wednesday, April 24 - 05:00 PM Room: AD11

# Title

PATH TO MALARIA ELIMINATION THROUGH IMPLEMENTATION OF THE MIX INTERVENTION IN THE DEMOCRATIC REPUBLIC OF CONGO (CASE OF UPPER KATANGA)

# Chairs

Chair: Pr. Eric Mukomena Sompwe (University of Lubumbashi, DRC)

Co-chair: Pr. Edouard Swana Kawaya (University of Lubumbashi, DRC)

# Speakers

Speaker 1: Ngombe KASEBA ANDRE (UNIVERSITY OF LUBUMBASHI, DRC)

Speaker 2: MWEMBO ALBERT (UNIVERSITY OF LUBUMBASHI, DRC)

# **Purpose and Objectives**

Contribute to the reduction of malaria morbidity and mortality through the administration of drugs (SPAQ) in campaign mode during the season of high transmission among children aged 3 to 59 months in the DRC, particularly in the province of Haut Katanga in 2024.

# **Symposium 46**

Date/ Room: 24th 5:00 Room: MZ

#### I. Title of Abstract:

Genomic Epidemiology for Malaria Elimination: Strengthening Engagement between Malaria Researchers and National Malaria Elimination Programmes in Africa

# Chairs

Prof. Abdoulaye Djimde and Prof. Paulina Tindana

# Speakers

# Speaker 1 (15 mins)

Name: Abdoulaye Djimde, PhD

Position: Founding President, PDNA, P.O. Box: E3499,

Bamako, Mali (West Africa)

Presentation Title: Overview of the PDNA

# Bio

Prof Abdoulaye Djimdé is a Professor of Microbiology and Immunology in Mali. He works on the genetic epidemiology of antimalarial drug resistance and is a Wellcome Sanger Institute International Fellow. He is Chief of the Molecular Epidemiology and Drug Resistance Unit at the University of Bomako Malaria Research and Training Centre and the President of the Pathogen Genomic Diversity, Network, Africa.

# Speaker 2 (15 mins)

Name: Prof. Paulina Tindana Position: Associate Professor Institution: University of Ghana

Presentation Title: Utilization of genomics data for malaria control and elimination: A Needs Assessment of National Malaria Control Programmes in Africa

# Bio

Prof. Paulina Tindana is a bioethicist and Associate Professor at the University of Ghana School of Public Health. She is also the principal investigator of the PDNA GEME project which seeks to strengthen collaborative partnerships between genomic researchers and National Malaria Elimination Programmes in Africa.

# Speaker 3 (15 mins)

Name: Prof. Lemu Gollasa: PDNA Principal Investigator, Ethiopia

Position: Associate Professor

Institution: Aklilu Lemma Institute of Pathobiology, Addis

Ababa University

Presentation title: Collaborations between malaria researchers and National Malaria Control Programme in Ethiopia: Lessons Learned

#### Bio

Prof. Lemu Gollasa is Associate Professor at the University of Aklilu Lemma Institute of Pathobiology, Addis Ababa University. Ethiopia.

# Speaker 4 (15 mins)

Name: Mr Adugna Abera

Position: Manager: National Malaria Control Pogramme.

Ethiopia

Presentation Title: Collaborations between malaria researchers and National Malaria Control Programme in Ethiopia: Policy perspectives

# Bio

Mr. Adugna Abera is the Manager of the National Malaria Control Programme in Ethiopia

## Speaker 6 (15mins)

Name: Dr Daouda Samake

Manager: National Malaria Control Pogramme. Mali Presentation Title: Collaborations between malaria researchers and National Malaria Control Programme in Mali: Policy perspectives

# **Discussions (30 minutes)**

#### IV. Purpose and Objectives of Symposium

While genomic research revolutionizes our understanding of malaria, effective translation to elimination strategies depends on robust engagement between researchers and National Malaria Elimination Programmes (NMCPs) in Africa. This symposium seeks to bridge this gap, showcasing innovative approaches, novel findings, and practical applications of genomic epidemiology based on GEME project experience to support NMCPs in achieving their elimination goals.

# **Objectives:**

- Researchers will share latest advances in malaria genomics, while NMCP representatives will present on opportunities, specific needs and challenges facing their programs.
- Interactive sessions will facilitate co-development of research priorities and tailored implementation strategies relevant to NMCP contexts.
- Case studies will showcase successful collaborations using genomic data to inform vector control, surveillance, and drug resistance monitoring.
- Strengthen partnerships by identifying opportunities for ongoing collaboration and capacity building to be established, promoting sustained engagement between researchers and NMCPs.

Symposium Description (250 words):

This will be an interactive symposium to ignite meaningful collaboration between malaria researchers and National Malaria Control Programmes (NMCPs) in sub-Saharan Africa.

- Researchers and NMCP representatives from across Africa will share their experiences and aspirations for collaborative research.
- Engage in interactive workshops designed to identify common needs and co-create solutions for capacity building and knowledge translation. This will include sharing any existing examples of collaboration between NMCPs and researchers where genomic data has been successfully integrated into program activities. Also, there will be highlights of the positive impact of these collaborations on malaria control efforts and the key factors that contributed to their success. Identify lessons learned from past experiences and challenges encountered while working with genomic data, encouraging open discussion and learning from each other.
- Presentations from experts on how to bridge the scientific-operational gap and translate research findings into actionable policies that truly reach the communities at risk.
- Participate in collaborative brainstorming sessions to develop concrete partnerships and action plans for sustained engagement between researchers and NMCPs.

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# Symposium 47

Date/Time: Wednesday, April 24 - 06:00 PM Room: MH2

#### Title

Medicines for Malaria Venture (MMV); Ending malaria, rewriting the future

# Chairs

#### Chairs

Chair: Joy Phumaphi (MMV, Switzerland) Co-chair: Andrea Lucard (MMV, Switzerland)

# Speakers

# Speaker 1:

Dr Cristina Donini (MMV, Switzerland)

# Speaker 2:

Dr Wiweka Kaszubska (MMV, Switzerland)

# Speaker 3:

Dr Andre Marie Tchouatieu (MMV, Switzerland)

# Speaker 4:

Dr Didier Leroy (MMV, Switzerland)

# Speaker 5:

Benoit Laleu (MMV, Switzerland)

# **Speaker 6:**

Nekoye Otsyula (Novartis, Kenya)

# Speaker 7:

Prof. Susan Winks; (H3D, University of Cape Town, South Africa)

# **Purpose and Objectives**

Medicines for Malaria Venture (MMV) is a non-profit organization dedicated to reducing the burden of malaria in disease-endemic countries by discovering, developing, and delivering new and effective antimalarial drugs. MMV works to address the significant public health challenge posed by malaria by collaborating with various partners in the global health community. After 25 years of existence, MMV has developed a new strategy with four key pillars and four cross-cutting thematics, responding to urgent needs such as drug resistance, and climate change as well as those of high-risk populations. \nThe MIM Society conference 2024 represents the ultimate opportunity to launch this strategy to the wider malaria community. \nThis symposium will provide a snapshot of the key strategic orientations of MMV with an end-to-end approach, describing the uniqueness of MMV's approach in antimalaria drug development and opening the floor to questions.

# **Symposium 48**

Date/ Time: 25th 10:00 MH2

# I. Title of Abstract:

Celebrating Women in the Malaria Response

# Chairs

#### Co-Chairs

Dr. Corine Karema: Director of Malaria & NTDs, Global Health: Quality and Equity HealthCare

Ms. Olivia Ngou, Executive Director of Impact Santé Afrique

# Speakers Line-up

- Opening Remarks: Dr. Corine Karema will set the tone for the session, providing context on the current malaria landscape and the role of women in this sector.
- Keynote Speaker: Professor Rose Gana Fomban Leke will share her extensive knowledge in immunology and parasitology, with insights from her tenure at the University of Yaoundé and her leadership role at the MIM Secretariat.
- Closing Remarks: Jennifer Gardy will offer a reflective summary and her thoughts on the path forward from her vantage point as the Deputy Director of Surveillance, Data, and Epidemiology on the Global Health: Malaria team at the Bill & Melinda Gates Foundation.

# **Panel Discussion:**

- Moderated by Olivia Ngou, who will guide the discourse, ensuring a focused dialogue on the challenges and successes of women in malaria response.
- Dr. Panelist: Dorothy Achu, Regional Malaria Adviser, WHO Afro
- Panelist: Jennifer Gardy, Interim Director, Institute for Disease Modeling, Bill & Melinda Gates Foundation (BMGF)
- Panelist: Dr. Corine Karema, Director of Malaria & NTDs Global Health—Quality & Equity Healthcare (QHEC)
- Panelist: Dr. Rinki Deb. Lead Scientist.

Public Health, Vestergaard

- Panelist: Professor Sheetal Silal, Director, MASHA (Modeling & Simulation Hub), Africa
- Panelist: Ségolène Moussala, Impact Santé Afrique

# **Purpose and Objectives**

The session, slated for the morning of World Malaria Day (WMD) on April 25th, 2024, from 10:00 to 11:30 GMT, is a multifaceted look at the strides made by women in mitigating malaria's impact. Our discussion aims to highlight women's diverse roles, from grassroots advocacy to global policymaking and innovative research to leadership in health program management. Attendees will leave with a greater appreciation of the unique challenges faced by women in this field and the pioneering strategies they have employed to overcome them. We will explore how these leaders are not just participating in but actively shaping the malaria response landscape. This event is a cornerstone of WMD 2024 and the 8th MIM Conference, held in Kigali, Rwanda, and proudly organised by Quality & Equity Healthcare and Impact Sante Afrique (ISA), with the support of Vestergaard. Our collective focus will be on celebrating the indomitable spirit, expertise, and tireless work of women who are instrumental in driving toward a world free of malaria.

# Symposium 49

Date/Time: Thursday, April 25 - 10:00 AM Room: AD10

# Title

Reaching the unreached: Grassroot innovations and strategies to reaching the unreached population

# Chairs

Chair: Agneta Mbithi (ICF, Kenya) Co-Chair: Yazoume Ye (ICF, USA)

# Speakers

# Speaker 1:

Dr Christian Kompaore (NMCP, Burkina Faso)

# Speaker 2:

Prof. Eric Mukomena (NMCP, Democratic Republic of the Congo)

# Speaker 3:

Samwel Lazaro (NMCP, Tanzania)

#### Speaker 4:

Dr. Abdul Mac Falama (NMCP, Sierra Leone)

#### **Purpose and Objectives**

The objective of this symposium is to explore how countries are innovating to identify the hard-to-reach population to provide them with malaria interventions. Additionally, explore how best to measure progress and impact of the intervention.

# Symposium 50

Date/ Time: 25th 10:00 Room: AD11

#### **Title of Abstract:**

Accelerating the Development of Cabamiquine-Pyronaridine for Malaria Chemoprevention in Africa.

# Chairs

# Chair:

Professor Jean Louis Ndiave

# Co-chair:

Christine Manyando

# Speakers

# Speaker 1

Name: Dr. Claudia Demarta-Gatsi.

Position: Global Health Research Scientist

Institution: Merck Global Health Institute (Merck KGaA) Eysins, Switzerland

Topic: Non clinical studies for supporting accelerated inclusion of pregnant women clinical trials with cabamiquine

# Speaker 2

Name: Prof. Laurent Dembele,

Position: Professor at Malaria Research and Training Center Institution: Université des Sciences, des Techniques et des Technologies de Bamako, Mali.

Topic: Real world parasites studies to evaluate the propensity of selecting mutant parasites and rationalize the partner drug selection for cabamiquine

# Speaker 3

Name: Dr. Perrine Courlet

Position: Health Research Scientist

Institution: Merck Institute for Pharmacometrics (Merck

KGaA) Lausanne, Switzerland

#MIM2024 58 59 #MIM2024 Topic: Model-informed drug development to support registration for cabamiquine-pyronaridine.

# Speaker 4

Name: Dr Joseph Okebe,

Position: Clinical Lead and Medical Responsible, Global Health

Institution: Merck Global Health Institute (Merck KGaA)

Eysins, Switzerland

Topic: The case for adaptive trial designs and the use of synthetic data in clinical development.

#### **Purpose and Objectives**

Progress in malaria control has stalled in the last few years and some regions are seeing a reversal of these gains. Renewed efforts to bring global targets on track has seen changes in global policies with the introduction of vaccines and expansion in the scope for chemoprevention on the continent. Chemoprevention is an important tool for malaria control in children and pregnant women however, few drugs are available for use in this space and even fewer molecules in development for this indication. Drugs for chemoprevention such as sulfadoxine-pyrimethamine face decreasing effectiveness due to drug resistance, poor coverage and adherence.

Cabamiquine, a new antimalarial compound is being developed in combination with pyronaridine, a combination for chemoprevention with single dose potential, reasonably long post-treatment protection and suitable for pregnant women.

The conventional pathways for bringing health intervention to patients have been successfully challenged during the COVID pandemic with fast-track development and approval of vaccines. This precedent offers new opportunities to bring drugs and other therapeutics faster to patients.

Objective: To present new scientific knowledge on innovative approaches for accelerated drug development as well as data de-risking drug resistance and its use in pregnant women. We also highlight models to de-risk clinical development of drugs for use in pregnancy.

# Symposium 51

Date/Time: Thursday, April 25 - 10:00 AM Room: AD12

**Title:** Private Sector - Community Partnership: An Opportunity for Sustainable Grassroot Resource Mobilization for Malaria Elimination to the Last Mile

# Chairs

#### Chair:

Dr Philip Mshelbila (Nigeria LNG Limited, Nigeria)

Andy Odeh (Nigeria LNG Limited, Nigeria)

# Speakers

# Speaker 1:

Mr. Andy Odeh (Nigeria LNG Limited, Nigeria) Topic: How to Engage Non-Health Private Sector Organizations for Health Development

# Speaker 2:

Dr Charles Jumbo (Bonny Chiefs' Council, Nigeria) Topic: Community Participation for Sustainable Community Health System Strengthening

# Speaker 3:

Dr Samuel Gara (Nigeria LNG Limited, Nigeria) Topic: Role of Malaria Control on Improved Productivity in Bonny Island

# Speaker 4:

Dr Anastasia Isodje (Nigeria LNG Limited, Nigeria) Topic: Leave No One Behind: Diversity, Equity & Inclusion in Stakeholders Management

### Speaker 5:

Mr. Charles Epelle (Nigeria LNG Limited, Nigeria) Topic: Building a Better Nigeria through Sustainable Development

# **Purpose and Objectives**

To showcase how private sector and community partnerships at grassroot can help deliver malaria interventions to the last mile and hard to reach areas. Funds for disease programs have shrunk, especially in Africa. Non-health private sector for profit organizations can help bridge this gap by partnering with communities and technical experts to implement impactful corporate social responsibility projects focused on diseases such as malaria. Additionally, companies in host communities

usually have intangible assets such as their core values, good community relations, mutual respect, commitment, transparency, accountability, trust, which are all central to collaboration and partnership.

# Symposium 52

Date/Time: Thursday, April 25 - 10:00 AM Room: MZ

#### Title

**Building Out Malaria: Housing Modification for Malaria Prevention** 

# Chairs

Chair: Dr Samuel Gonahasa (Infectious Diseases Research Collaboration, Uganda)

Co-chair: Dr Nelli Westercamp (Centers for Disease Control and Prevention, USA)

# **Speakers**

- Speaker 1: Dr Samuel Gonahasa (Infectious Diseases Research Collaboration, Uganda)
- Speaker 2: Dr Nelli Westercamp (Centers for Disease Control and Prevention, USA)
- П Speaker 3: Dr Joaniter Nankabirwa (Infectious Diseases Research Collaboration, Uganda)
- Speaker 4: Dr Katie Snyman (LSHTM, Uganda)

# **Purpose and Objectives**

Purpose: to share new evidence on housing modification as an innovative vector control method and to discuss policy implications

To describe the association between housing characteristics and malaria

To share the results of the PMI Uganda Housing Modification cluster-randomized trial, including acceptability, feasibility, cost-effectiveness, equity, and impact of novel housing modifications on malaria burden

To discuss housing modification pathways to scale up, policy implication, and role in the context of changing malaria epidemiology, emergence of new threats, and climate change.

This symposium will be of interest to malaria, vector control, public health, and policy stakeholders.

# **Symposium 54**

Date/ Time: 25th 1:30 Room: AD11

# Title of Abstract:

Leveraging Genotyping for Therapeutic Efficacy Studies in Malaria Endemic Countries: Towards a Standardized Approach from Next-Generation Molecular Techniques to Data Analysis

# Chairs

#### Chair:

Christian Nsanzabana, Group leader, Swiss Tropical and Public Health Institute and University of Basel, Allschwil, Switzerland, christian.nsanzabana@swisstph.ch

#### Co-chair:

Nsobya Samuel Lubwama, Laboratory Director, Molecular Research Laboratory, Makerere University, Kampala, Uganda, samnsobya@yahoo.co.uk

# Speakers

# Speaker 1

Name: Aurel Holzschuh

Position: Postdoctoral Scientific Collaborator

Institution: Swiss Tropical and Public Health Institute (Swiss TPH) and University of Basel

Presentation: Comparing different techniques to distinguish recrudescence from new infection in antimalarial drug efficacy trials

# Speaker 2

Name: Monica Golumbeanu

Position: Senior Scientific Collaborator

Institution: Swiss Tropical and Public Health Institute (Swiss TPH) and University of Basel

Presentation: Data analysis considerations for robust identification of recrudescence and reinfection

# Speaker 3

Name: Sam Jones

Position: Manager, PKPD Modelling

Institution: Medicines For Malaria Venture (MMV)

Presentation: Using mechanistic pharmacokinetic/ pharmacodynamics modelling to evaluate molecular correction in malaria drug clinical trials

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#### Speaker 4

Name: Marko Bajic Position: Bioinformatician

Institution: Centers for Disease Control and Prevention

(CDC), Atlanta, Georgia, USA

Presentation: Laboratory considerations for molecular correction using targeted amplicon deep sequencing

# Speaker 5

Name: Alex Mwesigwa Position: PhD student

Institution: Makerere University, Kampala, Uganda

Presentation: Evaluating different genotyping algorithms and data analysis methods to discriminate P. falciparum recrudescence from reinfection in therapeutic efficacy studies in Uganda

# Speaker 6

Name: Sara Cantoreggi Position: PhD student

Institution: Swiss Tropical and Public Health Institute (Swiss

TPH) and University of Basel

Presentation: Assessing different techniques and markers to distinguish recrudescence from new infection in a therapeutic efficacy study from Rwanda

# **Purpose and Objectives**

This symposium will be a forum to share recent advancements in next-generation molecular methodologies pertinent to drug resistance surveillance and recrudescence versus reinfection determination in malaria therapeutic efficacy studies and clinical trials. Global experts in the field will deliver updates encompassing laboratory, bioinformatics, and statistical methodologies together with examples of their implementation in malaria-endemic regions. The complementary nature of the talks aims to build a holistic perspective towards a novel, standardized approach for molecular correction. A panel discussion will interconnect expertise from each talk, spotlighting existing challenges and opportunities, thereby delineating the trajectory for future advancements in this field.

# Symposium 55

Date/Time: Thursday 25 - 01:30 PM Room: MH4

**Title:** Strengthening the institutional capacity and the enabling environment for public health analytics in Africa

#### Chairs

Chair: Dr Benido Impouma (WHO AFRO, Congo)
Co-chair: Prof Abdisalan Noor (Harvard TH Chan School of Public Health, USA)

#### III. Speakers

Speaker 1:

Dr Lawrence Kazembe (WHO AFRO, Congo)

Speaker 2

Dr Ibrahima Soce-Fall (WHO Headquarters, Switzerland)

Speaker 3

Dr Benido Impouma (WHO AFRO, Congo)

# IV. Purpose and Objectives

Purpose: The main objective of the symposium is to provide a platform to discuss the critical role of public health analytics in the control, elimination, and eradication of diseases in the World Health Organization (WHO) African region. The symposium will also focus on the current challenges facing public health analytics in the continent and potential solutions to strengthen national capacity

Objectives: To discuss the public health analytics ecosystem in Africa and the major institutional and capacity challenges.

- Present the WHO regional strategy for ending diseases in the African Region and the role of data and analytics in achieving the goals of the strategy.
- Present the rationale, strategy, and achievements of the newly established Precision Public Health Metrics Unit at the WHO.
- Discuss the relevant partnerships, initiatives, networks, and relationships needed to strengthen the enabling environment for public health analytics in Africa within the framework of the Paris Declaration on Aid Effectiveness and against the background of the new information revolution triggered by AI.

Symposium 56
Date/ Time: 25th 1:30
Room: MZ

# I. Symposium Title and Theme:

Evidence for Strategies to Address Challenges to Malaria Elimination in African Settings

# Chairs

# II. Chair and co-chair

Co-chair: Chadwick Sikaala, SADC Elimination 8; csikaala@sadce8.org

Co-chair: Japhet Matoba, Macha Research Trust; japhet. matoba@macharesearch.org

# III. Speakers

# Speaker 1

- 1. Name: Japhet Matoba
- 2. Position: Project Coordinator and Data Manager
- 3. Institution: Macha Research Trust
- 4. Topic: Challenges to malaria elimination in an African context

#### Speaker 2

- 1. Name: Prof Davis R. Mumbengegwi
- 2. Position: Director of Research Services
- 3. Institution: University of Namibia
- Topic: The feasibility and effectiveness of targeted reactive malaria interventions at low transmission settings: Use of reactive focal mass drug administration and reactive focal vector control in Namibia

# Speaker 3

- 1. Name: Dr Busiku Hamainza
- 2. Position: Acting Director
- 3. Institution: Zambia National Malaria Elimination Centre
- 4. Topic: Zambia's National Elimination Strategy and evidence for 1-3-7 malaria case investigation

# Speaker 4

- 1. Name Ms. Chishala Lukwesa Siame
- 2. SADC Malaria Elimination 8
- Topic: A Collaborative Approach to Addressing Equity Barriers among Targeted Cross-border Populations in the E8 region.

# Speaker 5

- 1. Name: Safia Mohammed Aliy
- Position: Deputy Program Manager, Zanzibar Malaria Elimination Program
- 3. Topic: Malaria Upsurge in Zanzibar 2023

# **IV. Purpose & Objectives:**

Since 2016, eleven countries have been WHO-certified

as malaria free, but none of these are in central, western, or southern Africa, where elimination challenges are unique. However, there are settings within endemic African countries that are approaching local elimination. The purpose of this symposium is to bring together policymakers and researchers from African countries with these low-transmission or "pre-elimination" regions, in recognition of the different needs of an elimination toolkit in African settings. Thus, we aim to discuss challenges, tools, and approaches specific to these settings, through review of research and programs in the panelist countries. The content of this symposium will be highly relevant to policy makers from endemic countries with elimination agendas, especially those that have high heterogeneity in malaria risk and are working to further reduce transmission and avoid reintroduction in low-transmission areas. The symposium will present new, unpublished findings from several countries.

# **Objectives:**

- Review challenges specific to African country elimination efforts, such as the management of epidemiological risk and resource prioritization when very low transmission areas exist near to and/or within the same country as areas of intense transmission.
- Present research on strategies and interventions used in elimination settings including 1-3-7 case investigation, enhanced surveillance, focal vector control and mass drug administration, new treatment strategies, and outbreak control and imported case management.
- Examine approaches to enhancing access to malaria services and address prevention challenges for populations engaged in cross-border travel, in the Southern African Development Community Malaria Elimination Eight (E8) countries.

# Symposium 57

Date/ Time: 26th 10:30 Room: MH2

# I. Title of Abstract:

Malaria vaccine schedules: decision-making and considerations for integration, sub-national tailoring, and seasonal settings

Chairs

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#### Chair

Dr. Katherine Theiss-Nyland, Technical Director, Malaria Consortium

#### Co-chair

Ida-Marie Ameda, Malaria and NTD Advisor, Child and Community Health Unit, UNICEF

# Speakers

For each speaker, we require the following details:

#### Speaker 1

- 1. Name: Dr. Mary Hamel
- Position: Senior Technical Officer and Team Lead for Malaria Vaccines
- Institution: World Health Organization, Geneva, Switzerland
- Topic: Dr. Mary Hamel will be discussing the WHO
  position and guidance on malaria vaccine schedules
  and integration approaches, from the international
  policy perspective

#### Speaker 2

- 1. Name: Dr. W. Scott Gordon
- 2. Position: Head of Malaria Vaccine Programme
- 3. Institution: GAVI, the Vaccine Alliance
- Topic: Dr. W. Scott Gordon will be discussing the global level policies and guidance from GAVI for malaria vaccine schedules and integrated programming.

# Speaker 3

- 1. Name: Professor Alassane Dicko
- Position: Professor of Epidemiology and Public Health
- Institution: MRTC-University of Bamako, Bamako, Mali
- Topic: Professor Alassane Dicko will be sharing experience and learnings from his research, including: malaria vaccine, SMC, and the integration of the two.

# Speaker 4

- 1. Name: Dr. Olusola Oresanya
- 2. Position: Senior Country Technical Coordinator
- 3. Institution: Malaria Consortium, Nigeria
- Dr Olusola Oresanya will be sharing learnings from the implementation of integrated malaria programming, including PMC, SMC, and integrated community case management.

# Speaker 5

- 1. Name: Hadiza H Jibril
- Position: Assistant Chief Statistician, Secretariat Member of the New Vaccines Strategic Task Team (NVSTT)
- 3. Institution: National Primary Health Care
  Development Agency's Routine Immunization
  Division, Nigeria
- Topic: Hadiza H Jibril will be sharing programmatic experiences of decision-making and national priorities for malaria vaccine introduction in Nigeria.

# Speaker 6

- 1. Name: Dr Ouedraogo K. Ousséni
- Position: Malaria Case Management and Prevention Director
- Institution: National Malaria Elimination Secretary,
   Ministry of Health and Public Hygiene, Burkina Faso
- Topic: Dr. Ouedraogo K. Ousséni will be sharing the malaria vaccine planning and decision-making process, and national priorities for introduction in Burkina Faso

# IV. Purpose and Objectives

This year, many countries will introduce malaria vaccines into routine health programmes for the first time. These vaccines will be delivered alongside a variety of other malaria and non-malaria health programmes and interventions with varying degrees of integration. There is also a unique opportunity to consider seasonal implementation of malaria vaccine in seasonal malaria transmission settings.

This symposium will bring together experts and thought leaders to discuss key considerations for scheduling decisions made in the country for malaria vaccine programming, with local context, and sub-national tailoring in mind.

The symposium will bring together experts in malaria vaccine research, policy, and programming, as well as government decision makers, who will engage with the wider audience of malaria experts. The discussion will consider real opportunities and challenges that exist for various implementation decisions, when planning the roll-out of malaria vaccines, and subsequent booster doses; this includes relevant data, logistics, programmatic constraints, integrated delivery platforms, and pragmatic solutions that all play a role in the decision-making process for designing a robust malaria vaccine programme.

Some topics that will be covered include: routine EPI, and age-specific visits; seasonal implementation and integration

with programmes like SMC; PMC and EPI integration and the role of two malaria products; integration of vaccines into the broader public health programme, sub-national tailoring and identification of different schedule approaches in different regions.

# Symposium 58

Date/Time: 26th 10:30 Room: AD11

# I. Title of Abstract

New Evidence of Protection and Community Delivery of Intermittent Preventive Treatment of Malaria in Pregnancy

# Chairs

# Chair

Dr Matthew Chico, Associate Professor Department of Disease Control, Faculty of Infectious & Tropical Diseases

London School of Hygiene & Tropical Medicine

# **Co-Chair**

Dr Hellen Barsosio, Assistant Principal Clinical Research Scientist

Kenya Medical Research Institute, Kisumu, Kenya Liverpool School of Tropical Medicine, Liverpool, United Kingdom

# Speakers

# Speaker 1

- . Name: Dr. Raquel González
- Position: Researcher at the Maternal, Child and Reproductive Health Initiative
- Institution: Barcelona Institute for Global Health, Barcelona, Spain; Manhiça Health Research Center, Maputo, Mozambique
- Presentation: Effect of community delivery of IPTp-SP on coverage in Democratic Republic of Congo, Nigeria, Madagascar and Mozambique

# Speaker 2

- 1. Name: Dr. Michelle Roh
- . Position: Postdoctoral Scholar
- Institution: Institute for Global Health Sciences, University of San Francisco, CA, United States
- Presentation: More than just an antimalarial?: The

case for SP for IPTp

# Speaker 3

- 1. Name: Dr Mike Chaponda
- 2. Position: Head of Clinical Services
- Institution: Tropical Disease Research Centre, Ndola,
- 4. Presentation: Effects of metronidazole plus intermittent preventive treatment of malaria in pregnancy: a double blinded randomised, partly placebo-controlled trial among women in Zambia without HIV (ASPIRE trial)

# Speaker 4

- 1. Name: Dr. Patricia Hunter
- 2. Position: Senior Research Fellow
- 3. Institution: Institute of Child Health, University College London, London, United Kingdom
- Presentation: Serial detection of chlamydia, gonorrhea, trichomoniasis infections by PCR among women given intermittent preventive treatment of malaria in pregnancy

# Speaker 5

- 1. Name: Dr. Hellen Barsosio
- Position: Assistant Principal Clinical Research Scientist
- Institution: Kenya Medical Research Institute Liverpool School of Tropical Medicine, Liverpool, United Kingdom
- 4. Presentation: Chemoprevention for malaria with monthly intermittent preventive treatment with dihydroartemisinin-piperaquine in pregnant women living with HIV on daily co-trimoxazole in Kenya and Malawi: a randomised, double-blind, placebo-controlled trial (IMPROVE-2 trial)

# **Speaker 6**

- 1. Name: Dr. Tacilta Nhampossa
- Position: Pediatrician and Researcher
- Institution: Manhiça Health Research Center, Manhiça Maputo, Mozambique
- Presentation: Safety and efficacy of dihydroartemisinin-piperaquine for IPTp in HIVinfected pregnant women from Gabon and Mozambique

# V. Purpose and Objectives

The purpose of this symposium is to disseminate some of the most recent evidence from studies to enhance the

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uptake of IPTp-SP, studies that have looked at alternative regimens to replace SP for IPTp in areas of high SP-resistance in HIV-uninfected women, and studies that have investigated the addition of long-acting artemisinin-based combination therapy to daily co-trimoxazole in women living with the AIDS virus.

#### **Symposium 59**

Date/Time: April 26t - 10:30 AM Room: AD12

#### I. Title

Transformative partnerships: investing and innovating in local and gender-balanced leadership for the next generation of African leaders in Malaria R&D

#### Chairs

Chair: Teresa Machai (Manhiça Health Research Center, Mozambique)

Co-chair: Dr. Joseph Okebe (Merck Group, Switzerland)

# III. Speakers

# Speaker 1:

Alice Neequaye (Medicines for Malaria Venture, Switzerland) Topic: Equitable partnerships as a tool for improved malaria control and elimination.

# Speaker 2:

Dr. Helen Demarest (Medicines for Malaria Venture, Switzerland)

Topic: Partnering to enable higher education and further research skills at the grassroots level.

#### Speaker 3:

Dr. Jessica Dalsuco and Dr. Dearie Glory Okwu (CISM, Mozambique and CERMEL, Gabon)

Topic: Including women in the global agenda, career progression in clinical research and addressing gender and opportunity challenges through advanced degree and practical training to enrich the African clinical trial ecosystem.

# IV. Purpose and Objectives

Purpose: In the last two decades, major investments have been made to develop human capacity and infrastructure in sub-Saharan African research. However, independent research centers with a multi-disciplinary focus supporting malaria research, career development and equitable talent retention continue to face challenges.

To address this, a shift in the paradigm of collaboration that fosters equitable partnerships and builds on existing local and grassroots leadership capacities can facilitate new opportunities to end malaria. This requires innovative approaches that go beyond the perspective of a single project. Best research practices and new ways of working must involve women and local communities at every stage of development – including fundamental decision-making processes – to ensure the gender balance, cultural appropriateness, and social responsibility of research programmes.

Professional, technical and leadership skills support high-caliber science and innovation to end malaria and enhance opportunities for equitable scientific leadership from the grassroots to achieve real global influence. Such skills help secure funding through successful grant proposals, enhance leadership and management practices, and promote recognition and exposure through scientific writing and communication directed at a variety of audiences. As such, partnering with early career malaria researchers to specifically develop these skills to complement academic training can facilitate success.

Objective: The objective of this symposium is to examine and discuss how equitable partnerships can support the malaria elimination agenda and how these partnerships enable higher education and further research skills at the field level, using the real-world experiences of two young African female researchers.

# **Symposium 60**

Date/Time: 26th 10:30 Room: MZ

# I. Title of Abstract:

Symposium on the Current Status of Biological Threats in Malaria and the Interplay Amongst Them

# Chairs

# **Chair:**

Deus Ishengoma (National Institute for Medical Research (NIMR - Tanzania)

## Co-Chair:

Khalid B Beshir (London School of Hygiene and Tropical Medicine)

# Speakers

# Speaker 1:

Charlotte Rasmussen (WHO)

Topic: Update on major biological threats to malaria control and elimination

# Speaker 2:

Abebe Fola (Department of Pathology and Lab Medicine, Brown University, USA)

Topic: Emergence of Plasmodium falciparum strains with artemisinin partial resistance in East Africa and the Horn of Africa

# Speaker 3:

Fitsum G Tadesse (Armauer Hansen Research Institute (AHRI), MoH Ethiopia)

Topic: Evidence for a role of Anopheles stephensi in the spread of drug and diagnosis-resistant malaria in Africa

#### Speaker 4:

Selam Mihreteab Uqubay (National Malaria Control Program, Eritrea)

Topic: The spread of a validated molecular marker of artemisinin partial resistance pfkelch13 R622I and association with pfhrp2/3 deletions in Eritrea

# Speaker 5:

Khalid B Beshir (London School of Hygiene and Tropical Medicine)

Topic: Biological threats posed by P. falciparum in Africa: Are we ahead of the threat?

# Speaker 6:

Dorothy Fosah-Achu (World Health Organization Regional Office for Africa)

Topic: Priority strategies to monitor and response to biological threats in Africa

# IV. Purpose and Objectives

Please provide a brief overview of the purpose and objectives of your presentation.

Purpose: The emergence of the invasive malaria vector Anopheles stephensi, the increasing prevalence of Plasmodium falciparum parasites with genetic deletions impeding prompt diagnosis and treatment, the rising partial resistance to artemisinin-based combination therapy (ACT) and widespread insecticide resistance in Africa are

major biological threats that loom over ongoing efforts to control and eliminate the disease. Whereas insecticide resistance has been widely reported in Africa, An. stephensi has recently emerged in the continent and there are increasing reports of this invasive vector species from seven countries; Djibouti (2012), Ethiopia (2016), Sudan (2019), Nigeria (2020), Kenya (2022), Eritrea (2022) and Ghana (April 2023). Although rapid diagnostic tests (RDTs) based on detection of histidine rich protein 2 (HRP2) have significantly improved clinical diagnosis and surveillance of malaria, emergence of parasites with hrp2/3 gene deletions is a major threat to case management. Clinical efficacy of ACTs in Africa remains high but the accruing evidence of artemisinin partial resistance in the Eastern and Horn of African countries is of concern. Moreover, recent and emerging evidence suggests co-occurrence amongst pfhrp2/3-deleted parasites and pfk13 mutant parasites and a role of An. stephensi in the spread of pfhrp2/3-deleted parasites.

# **Objectives:**

- To present the current status of the biological threats of malaria
- To present and discuss the emerging evidence and roles and interplay amongst the biological threats
- To advocate for the strengthening of malaria control strategies
- To advocate for vigilance and efficient sampling for malaria surveillance including deployment and use genomic surveillance to closely monitor the extent of resistance and clinical impact and monitoring of invasive vectors
- To advocate for extra funding to fight the above
- Scope: We will cover the research evidence emerging on the status and relationship amongst the biological threats and the impacts on the already overburdened malaria programs and the priorities that have to be considered for an appropriate response.
- Relevance: Existing control tools are not reaching everyone in need, funding is precarious and with emerging challenges on top of challenges faced by already weak health systems, a concerted and coordinated approach is needed to tackle the converging threats.

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# **Symposium 61**

Date/Time: Friday, April 26 - 1:30 PM Room: MH2

#### Title

Adaptive malaria control in action: the case of the Bioko Island Malaria Elimination Project (BIMEP)

#### Chairs

Chair: Guillermo A Garca, Malaria Elimination Project, MCD Global Health, Equatorial Guinea

Co-chair: David L Smith, Institute for Health Metrics and Evaluation, University of Washington

#### Speakers

# Speaker 1

Wonder Philip Phiri, MCD Global Health, Malabo, Equatorial Guinea

#### Speaker 2

Olivier, London School of Hygiene and Tropical Medicine

# **Speaker 3**

David S Galick, BA, MCD Global Health, Malabo, Equatorial Guinea

#### Speaker 4

Carlos A Guerra, MD, MCD Global Health, Silver Spring, USA

# Speaker 5

Prof Immo Kleinschmidt, PhD, London School of Hygiene and Tropical Medicine, London, UK

# **Speaker 6**

Prof David L Smith, PhD, Institute for Health Metrics and Evaluation, University of Washington

# **Purpose and Objectives**

Purpose: To share the experience of adaptive malaria control on Bioko Island to the wider malaria community as an alternative to current status quo.

Objective: To present specific case studies illustrating adaptive malaria control, with emphasis on vector control implemented as part of the BIMEP, and the lessons learned from them.

# Symposium 62

Date/Time: Friday, April 26 – 01:30 PM Room: MH3

#### Title

Building capacity for Institutional Oversight
Committees (which include Institutional Biosafety,
Animal Care and Use, Ethics Review) towards
supporting decision-making process for GDMMs
for malaria control and elimination in the African
continent

# Chairs

# Speakers:

Speaker 1: Willy Tonui

**Topic:** African Genetic Biocontrol Consortium oversight Committees: Roles and Responsibilities

## Speaker 2: Dorrington Ogoyi

**Topic:** Decision making process on GMOs: Role of IBCs during Application and regulatory approval process.

#### Speaker 3: Simon Langat

**Topic:** Role of Ethical Committees in decision-making process for emerging biotechnologies

# Speaker 4: Lina Finda

Topic: Case studies: Operationalizing oversight committees in selected Institutions and Countries in Tanzania

# Speaker 5: Gloria Okpaki

**Topic:** Case studies: Operationalizing oversight committees in selected Institutions and Countries in Nigeria

# Speaker 6: Andrew Kiggundu

**Topic:** Case studies: Operationalizing oversight committees in selected Institutions and Countries in Uganda

Purpose: Institutional oversight committees which include Institutional Biosafety (IBCs), Animal Care and use (IACUC) and Ethical Review (ERCs) are committees created in an Institution in compliance with the laws, policies or regulations in a Country. These Committees reviews, approve and oversee research involving the use of genetically modified organisms (GMOs), recombinant or synthetic DNA/RNA and other biohazards. The Committees assists the

Principal Investigator, supervisors, funders, and the relevant regulatory agencies with obtaining proper authorization for their studies. The Committees also approves procedures for procurement, use, storage, transportation, and disposal of research and products.

The African Genetic Biocontrol Consortium (The Consortium) is an agreement established by not-forprofit member organizations based in Africa with a vision to build an informed local leadership to support the requirements for development, decision-making and on the utility of genetic biocontrol technologies for animal, public health, and conservation in Africa. To fulfil this vision the Consortium has established a Forum for Institutional Committees in Africa (IBC - Africa Forum) and a Forum for Environmental Practitioners in Africa (FEPA) to provide a platform for interaction among African experts and institutions to enhance opportunities for technical capacity strengthening, knowledge exchange and deliberation about the challenges and opportunities of genetic biocontrol technologies for the public good, which will amplify African influence on their development and provide critical input for decision-making by product developers, policy makers, and other stakeholders.

Scope: The Consortium has been hosting workshops for professionals from Institutions in African countries who are considering the use of genetic biocontrol technologies (which include gene drive/editing or synthetic biology) in their research and regulatory frameworks. Participants have included representatives from Competent regulatory agencies, the Committee Chairs and Principal Investigators (PI) from Institutions that include Institut de Recherche en Sciences de la Santé (IRSS), Burkina Faso; Noguchi Memorial Institute for Medical Research; Malaria Research and training Center, University of Science, Techniques and Technologies of Bamako (USTTB), Mali; Ifakara Health Institute, Tanzania; Uganda Virus Research Institute; Kenya Medical Research Institute (KEMRI), Kenya; International Livestock Research Institute (ILRI) KEMRI-Wellcome Trust Research Programme-Kilifi; Technical University of Kenya and the International Centre for Insect Physiology and Ecology (ICIPE).

Objectives: The specific objective of this Symposium is to promote the professional development of oversight committee to participants from Institutions interested or that are currently involved in genetic biocontrol projects (which include gene drive/editing or synthetic biology) by providing an opportunity to learn about the existing international and national guidelines, best practices, and

the range of responsibilities that oversight Committees have within the decision-making process in regulatory frameworks from the African context. Trainers will share with participants the scientific progress, Institutional frameworks available in their Institutions and countries in Africa and to understand the range of responsibilities that the IBC has within the decision-making process in Countries.

# **Symposium 63**

Date/Time: Friday, April 26 – 01:30 PM Room: MH4

#### I. Title

Does the improved impact of dual active ingredient nets on malaria control last 3 years? Results from randomised controlled trials.

# Chairs

#### Chair:

Dr. Corine Ngufor (Centre de Recherche Entomologique de Cotonou, Benin and London School of Hygiene and Tropical Medicine, UK)

# Co-Chair:

Dr. Jackie Cook ( London School of Hygiene and Tropical Medicine, UK)

# Speakers

# Speaker 1:

Dr.Manfred Accrombessi (Population Services International) **Topic:** Is the enhanced epidemiological impact provided by dual active ingredient nets sustained during the 3rd year post-distribution? Insights from two randomised controlled trials in Benin and Tanzania.

#### Speaker 2:

Dr. Corine Ngufor (Centre de Recherche Entomologique de Cotonou, Benin and London School of Hygiene and Tropical Medicine, UK)

**Topic:** The attrition, fabric integrity and insecticidal efficacy of dual active ingredient nets in Benin: results from a prospective study embedded in a randomised controlled trial.

#### Speaker 3:

Ms Jackline Martin (Kilimanjaro Christian Medical University College, Tanzania)

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Topic: Bio-efficacy, fabric integrity and attrition rate of dualactive ingredient long-lasting insecticidal nets in Tanzania: results from the experimental hut and prospective cohort study.

# Speaker 4:

Mr. Thomas Syme (Centre de Recherche Entomologique de Cotonou, Benin and London School of Hygiene and Tropical Medicine, UK)

Topic: Does washing insecticide-treated nets twenty times for experimental hut evaluations provide a suitable proxy for their end-of-life performance under household conditions?

# **Speaker 5:**

Dr. Andrew Glover (Imperial College London, UK)

Topic: Predicting the malaria cases averted by switching from triennial to biennial mass campaigns for different classes of insecticide-treated nets.

#### IV. Purpose and Objectives

Dual active ingredient nets were recently evaluated in two randomised controlled trials in Benin and Tanzania. Based on results up to 24 months post-distribution showing their improved public health impact over pyrethroid-only ITNs, the World Health Organisation released a strong recommendation for the deployment of pyrethroid-chlorfenapyr ITNs over pyrethroid-only ITNs and a conditional recommendation for the deployment of pyrethroid PBO and pyrethroid-pyriproxyfen nets in over pyrethroid-only net. However, because ITNs are distributed in most endemic countries based on a 3-year campaign cycle, evaluating their efficacy and durability up to 3 years post-distribution is essential. This symposium will present data on the epidemiolocal impact of dual AI nets in the third-year post-distribution in Benin and Tanzania and their durability over three years of use by householders in the RCTs. We will discuss how ITN durability and net retention may have affected the epidemiological impact of the nets in the third year and the implications of these findings for malaria control programmes. We would also present results from studies comparing artificially aged nets for ITN efficacy studies to field-aged nets and how this may affect the ITN evaluation process.

# Symposium 64

Date/ Time: 26th 1:30 AD10

# I. Title of Abstract:

Counteracting pfhrp2/3 Deletion Threats: From Survey and Modelling Research to Forecasting and Market Shaping

# Chairs

#### Chair:

Dr. Dorothy Achu, WHO/AFRO

# Speakers

For each speaker, we require the following details:

- Name: Dr. Agaba Bosco
- Position: National Malaria Diagnostics Coordinator,
   Uganda NMCP & Research Fellow at LSHTM
- Institution: Uganda NMCP, LSHTM
- Dr. Agaba's research focuses on genomic epidemiological surveillance investigating the biological and molecular changes that enable malaria parasites to survive & escape diagnostic detection, the emergence of artemisinin resistance and the transmission dynamics of these parasite populations in Africa.
- Name: Dr. Oliver Watson
- Position: Al in Science Research Fellow
- Institution: Imperial College London
- Oliver has worked with members of the WHO Global Malaria Programme to support the use of modelling for designing surveillance for pfhrp2/3 deletions and has produced research that was part of the evidence basis for the last WHO response plan.
- Name: Salome Muchiri
- Position: Senior Associate, Global Markets
- Institution: Clinton Health Access Initiative
- Salome develops global forecasting models that project annual procurement of malaria commodities (e.g., bed nets insecticides, diagnostics, and treatments). This involves collecting data inputs from global and national partners and collaborators, conducting data analyses and build market forecasting models/tools, creating projections of commodity demand at the regional and global level, revising these models and outputs as necessary, and communicate findings to global stakeholders.
- Name: Spike Nowak

- Position: Senior Officer
- Institution: PATH
- Spike has led 5 teams across Southeast Asia supporting national malaria control programs adopt new tools for P. vivax malaria, and more recently, his efforts focus on market shaping for next generational malaria RDTs and identifying sources of innovative finance to expand access to medical oxygen.

# **Purpose and Objectives**

Please provide a brief overview of the purpose and objectives of your presentation.

This symposium will describe the chain of events starting with the collection of evidence on pfhrp2/3 deletions and ending with the introduction of new malaria diagnostics that can detect infections with pfhrp2/3 deletions. Panelists will present on four links within this chain of events: 1) the collection of grassroots evidence within pfhrp2/3 surveillance studies and study results, 2) modelling research that aggregates these pfhrp2/3 surveillance studies to estimate the spread of pfhrp2/3 deletions, 3) forecasting the need for non-HRP2-only RDTs based on pfhrp2/3 spread modelling, and 4) collecting stakeholder perspectives on the need for non-HRP2-only RDTs and shaping a market for next generation LDH/HRP2-based RDTs.

# Symposium 65

Date/Time: Friday, April 26 – 01:30 PM Room: AD 11

# I. Title

Evidence to support decision-making across Africa: Development of a decision tool for Perennial Malaria Chemoprevention (PMC)

# Chairs

Dr. VOUNDI VOUNDI Junior (National Malaria Control Program, Cameroon)

# Speakers

# 1. Speaker 1:

Dr Akindeh NJI (University of Yaoundé I, Cameroon)
Topic: Overview of Perennial Malaria Chemoprevention
(PMC), the Plus Project, and the rationale for the PMC
Decision Tool.

#### 2. Speaker 2:

Ms. Jane GRANT (London School of Hygiene & Tropical Medicine, UK)

Topic: Findings from Cameroon regarding the PMC delivery model readiness in order to inform modeling of how PMC coverage may be expected to vary across settings.

#### 3. Speaker 3:

Dr Azizath MOUSSILIOU (University of Parakou, Benin, Centre de Recherche Entomologique de Cotonou (CREC), Benin)

Topic: The role of mapping of parasite genotypes across Africa to understand resistance to sulphadoxine-pyremethamine (SP) and the implications for variation in efficacy of SP for PMC.

# 4. Speaker 4:

Ms. Ishana ATKINSON (London School of Hygiene & Tropical Medicine, UK)

Topic: Evidence from mathematical modelling of how the potential impact of PMC may vary across Cameroon with the number of PMC doses, coverage, SP resistance, transmission intensity, and rebound infections, and discuss how this modelling will be extended within the PMC Decision Tool.

# 5. Speaker 5:

Mr Joseph TANKWA (London School of Hygiene & Tropical Medicine, UK)

Topic: Findings on the variation in costs to providers of treating malaria in children under 3 years of age in Benin, Côte d'Ivoire, and Cameroon, and how these findings will support modelling of cost variation across Africa.

# 6. Speaker 6:

Dr Catherine PITT (London School of Hygiene & Tropical Medicine, UK)

Topic: The development of the PMC Decision Tool: evidence on parasite genotypes and SP resistance, efficacy, coverage, and costs to estimate how the costs, effects, and cost-effectiveness of alternative PMC delivery models may vary across the content.

# IV. Purpose and Objectives

The purpose of the session is to share emerging multidisciplinary evidence on perennial malaria chemoprevention (PMC) and to discuss progress and plans for the development of a tool to support PMC decision-making across the continent. Presentations will draw on the Plus Project, a Unitaid-funded, large-scale, four-country pilot of PMC with data collection in 7 African

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countries. We will actively seek feedback and input from session participants to help shape the development and dissemination of the PMC Decision Tool.

# Symposium 66

Date/Time: 26th 3:30 Room: MH3

#### I. Title of Abstract:

Seasonal Malaria Chemoprevention Integration at Community Level – Innovation to Support Intervention Sustainability.

# Chairs

#### **Chair:**

Dr. Kevin Baker

# Co-chair:

Dr. Virgile Gnanguenon

# Speakers

# Speaker 1

- 1. Name: Dr Fantche Awokou
- 2. Position: Country Technical Coordinator
- 3. Institution: Malaria Consortium, Togo

# Speaker 2

- 1. Name: Dr Hindewe Edgard William Houndjo
- Position: Public health physician & Director of Case Management and Intermittent Preventive Treatment for the National Malaria Control Program of Benin, and Focal Point for Seasonal Malaria Chemoprevention (SMC) and Perennial Malaria Chemoprevention (PMC) programs. Dr. Houndjo is also a specialist in Quality Science and Results-Based Development and Management of Public Programs.

# **Speaker 3:**

- 1. Name: Dr Joel ATEBA
- Position: Public health physician, Head of Regional Technical Group for malaria control in two important regions in the country, and Deputy head of Cameroon National Malaria Control Program.

# Speaker 4

- 1. Name: Dr. Olusola Oresanya
- Position: Public Health Specialist & Senior Country Technical Coordinator

3. Institution: Malaria Consortium

# IV. Purpose and Objectives

Seasonal malaria chemoprevention (SMC) has become a critical intervention for malaria prevention and control. There is a growing interest to generate evidence that health campaigns such as SMC can be leveraged for integration or co-administration of other health efforts such as nutritional supplements, immunizations, or vitamin A. Similarly, the integration of SMC into existing health systems could support sustainability and cost effectiveness over time. This symposium will highlight five instances of SMC integration in different settings and contexts.

# Symposium 67

Date/Time: 26th 3:30 Room: AD10

# . Title of Abstract:

Transforming Pregnant Women's Access to MiP Prevention: Tools & Experiences to Support Scaling c-IPTp

# Chairs

# Chair:

Dr. Dorothy Fosah Achu WHO Regional Office for Africa Cité du Djoué, P. O. Box 06 Brazzaville Republic of Congo

# Co-Chair:

Dr. Chonge Kitojo, U.S. President's Malaria Initiative 686 Old Bagamoyo Road Masani, Dar es Salaam, Tanzania

# Speakers

# Speaker 1

- 1. Name: Dr. Ntabangana Spes Caritas
- 2. Position: MEDICAL OFFICER
- 3. Institution: WHO Senegal
- 4. Topic: Introduction to WHO c-IPTp Field Guide

# Speaker 2

Dr. Daniel Ngamije Madandi

- 2. Position: Director, Global Malaria Programme, WHO
- 3. Institutio: WHO
- 4. Topic: Opening Remarks

#### Speaker 3

- 1. Name: Andritahina Razafiarijaona
- 2. Position: Country Director
- 3. Institution: Jhpiego
- Topic: Madagascar's experience in piloting and scaling up c-IPTp:

#### Speaker 4

- 1. Name: Dr. Chonge Kitojo
- 2. Position: Project Management Specialist, US President's Malaria Initiative
- 3. Institution: President's Malaria Initiative (PMI)
- 4. Topic: Looking ahead: What's on the horizon in PMIsupported countries:

#### Speaker 5

- 1. Name: Dr. Kompaore Sidzabda Christian Bernard
- 2. Position: Permanent Secretary for Malaria Elimination
- 3. Institution: Ministry of Health and Public Hygiene
- 4. Topic: One District at a Time: Burkina Faso's efforts to pilot, implement and scale up c-IPTp

# IV. Purpose and Objectives

Malaria infection during pregnancy poses substantial health risks for mother and fetus. In malaria-endemic areas WHO recommends pregnant women of all gravidities to receive at least 3 doses of intermittent preventive treatment (IPTp3). Despite policy level efforts, in 2022, only 42% of eligible women received IPTp3. Among countries which have piloted and/or supported community delivery of IPTp (c-IPTp) implementation, c-IPTp has been shown to significantly increase IPTp3 uptake among eligible pregnant women. This symposium will present the just-released WHO Field Guide for c-IPTp and provide a learning forum for countries interested in implementing c-IPTp.

# Symposium 68

Date/Time: Friday 26 - 03:30 PM Room: AD11

# Title

Integrating genetic approaches in the malaria toolkit

# Chairs

- Chair: Isabelle Coche (Outreach Network for Gene Drive Research)
- Co-chair: Irina Wandera (Outreach Network for Gene Drive Research)

# **Speakers**

#### Speaker 1:

Dr. El Hadji Amadou Niang, PAMCA
Topic: Novel tools for malaria control in Africa

# Speaker 2:

Dr. Lucy Okell, Imperial College London, UK Topic: Modelling: filling in the gaps for malaria elimination

#### Speaker 3:

Dr. Damaris Matoke, KEMRI, Kenya Topic: Genetic vector control: building capacity for African scientists to support implementation

#### Speaker 4:

Ms. Isabelle Coche, Outreach Network for Gene Drive Research

Topic: Looking ahead: challenges in governance and partnerships to move research forward?

# IV. Purpose and Objectives

Scope: Current malaria control tools have achieved significant progress in the past fifteen years. Yet, emerging threats such as climate change, insecticide and drug resistance, and invasive species are threatening to undo decades of progress. Genetic approaches such as gene drives could offer a sustainable, long term and cost-effective solution that could, in the context of integrated approaches to malaria control, contribute to elimination of the disease. How could gene drive technologies be effectively incorporated into the malaria elimination toolkit? The event will explore the integration of gene drive technologies into malaria control strategies and the role that different stakeholders need to play to achieve this integration. The session will highlight the importance of collaborative efforts, effective governance, and strategic planning in harnessing the full potential of innovative genetic tools for a malariafree future.

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#### **Desired outcomes**

Raise awareness of the need and potential collaborations among experts, policymakers, and stakeholders for malaria elimination

Offer actionable insights about the potential benefits and challenges of incorporating gene drive technologies to malaria elimination strategies

Provide concrete examples of collaboration between scientists, institutions, sectors, and policymakers in research and development of gene drive technologies

Respond to the concerns expressed about the research and the potential use of gene drive approaches

# **Symposium 69**

Date/ Time: 26th 3:30 Room: AD12

**Title:** Optimising programmatic decision-making for malaria through quality data integration and use

# Chairs

#### **Chair:**

Dr Olusola Oresanya, Country Technical Coordinator, Malaria Consortium Nigeria

# Co-chair:

Dr. Alfred B. Tiono, Senior Scientist, Groupe de Recherche Action en santé, Burkina Faso

# **Speakers**

# Speaker 1

Name: Dr Sonia Maria Enosse
Position: Country Technical Coordinator
Institution: Malaria Consortium, Mozambique

Topic: The importance of integrating DQA data into decision-making: impact of data quality assessments on

the quality of routine malaria data in Mozambique

## Speaker 2

Name: Dr Courtney Murdock Position: Associate Professor, PhD Institution: Cornell University Topic: Use of climate, lab and field data to forecast urban malaria transmission and An. Stephensi threat

# Speaker 3

Name: Ms Gina Cuomo-Dannenburg

Position: Doctoral researcher
Institution: Imperial College London

Topic: Integration of seasonality and SP resistance data in impact estimates to inform decisions on SMC implementation in new geographies

#### Speaker 4

Name: Prof. Jo Lines Position: Professor

Institution: London School of Hygiene and Tropical Medicine Topic: Extrapolation of RCT data to new geographies and contexts – theory and practice

# Speaker 5

Name: Dr Rek John Cedric

#### **Position:**

Institution: NMCD PHFP Uganda, RAMP Uganda

Topic: Use of programmatic data to identify and respond to the Uganda malaria outbreak and the role of emergency operating centres

# **Purpose and Objectives**

The symposium aims to convene experts across implementers, academia and government to present on the importance of integrating different data types and methods into malaria programmatic decision-making, including quality, entomological, meteorological, resistance and impact data. As well as presenting current data and methods relating to key focus areas in malaria, the symposium will foster a dialogue on approaches to advance data integration, such as data sharing, cross-organisational and departmental collaboration, and understanding of essential programmatic data needs and capacities.

# Symposium 70

Date/Time: Friday, April 26 – 03:30 PM Room: MZ

#### Title

Relapsing malaria in Africa, diagnosis and treatment considerations

# Chairs

# Chair:

Emily Gerth-Guyette (PATH, USA)

# Speakers

# Speaker 1:

Isaac Quaye

Topic: Relapsing malaria in Africa, what we know and do not know about the burden

#### Speaker 2:

Arsène Ratsimbasoa (University of Fianarantsoa, Madagascar, Centre National d'Application de Recherche Pharmaceutique, Ministère de l'Enseignement supérieur et de la Recherche Scientifique, Madagascar)

Topic: P.vivax epidemiology in Madagascar, New approaches to target the submicroscopic resevoir

# Speaker 3:

Daniel Yilma (Jimma University, Ethiopia)

Topic: Radical cure of P. vivax malaria: Considerations for improving the implementation

# Speaker 4:

Dr. Tamiru Shibiru Degaga (Arba Minch University, Arba Minch, Ethiopia)

Topic: Evaluation of novel radical cure treatment regimens, reducing the risk of relapse in Ethiopia.

#### **Purpose and objective**

The purpose of this symposium is bring attention to the challenges facing malaria control and elimination efforts by relapsing malaria due to P.vivax and P.ovale. New diagnostic tools with more sensitive detection limits for lactate dehydrogenase, serological markers, point-of-care tests for Glucose-6-phosphate dehydrogenase (G6PD) deficiency, combined with new drug regimens such as higher dose, but shorter term (7 day) primaquine, and single day tafenoquine enable new approaches towards addressing these challenges.

The objective of this symposium is to highlight these challenges and present recent evidence of how these new tools can be combined towards addressing these challenges and providing patients the best treatment options.

# **Rationale for Topic**

While P.falciparum remains by far the highest cause of malaria disease in Africa, in several countries P.vivax also contributes significantly to the overall malaria burden.

P.ovale is also consistently detected across Africa. Both P.vivax and P.ovale can reside in the liver for prolonged periods of time, re-entering blood circulation multiple times even after schizonticidal treatment resulting in relapsing episodes of clinical malaria. 8-Aminoquinolines such as primaquine and tafenoquine can be used to cure P.vivax and possibly P.ovale, but are harmful to individuals with deficiency in the enzyme Glucose-6-Phopshate Dehydrogenase (G6PD), a condition which can be quite prevalent in populations in Africa.

New diagnostic tools and regimens exist to improve detection, and treatment of P.vivax. These include more sensitive Rapid Diagnostic Tests for P.vivax, serological indicators of recent infection, point-of-care tests for Glucose-6-phosphate dehydrogenase (G6PD) deficiency, as well as new drug regimens such as higher dose, but shorter term (7 day) primaquine, and single day tafenoquine. In countries where P.vivax and/or P.ovale coexist with P.falciparum, a P.falciparum infection is a risk factor for someone later presenting with a relapse infection.

Understanding how to incorporate the new diagnostic and treatment tools into malaria control and elimination strategies is essential towards providing patients the best treatment options and reducing the malaria burden in a comunity. This symposium seeks to describe our understanding of relapsing malaria in Africa, and present ongoing implementation research into the adoption of these novel tools and regimens.

# **Symposium 71**

Date/Time: 26th 17:00 Room: MH4

# Title of Abstract:

Grassroots Mobilization to End Malaria: Integrating the care of babies and young infants

# Chairs

Chair: Dr Christine Manyando (Tropical Diseases

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Research Centre (TDRC), Zambia)

Co-chair: Dr Dr Jessica Dalsuco (Centro de Investigação em Saúde de Manhiça (CISM), Mozambique)

# Speakers

#### **Speaker 1:**

Dr. Christine Manyando (Tropical Diseases Research Centre (TDRC), Zambia)

Topic: Discussing the current factors influencing the management of malaria in the young infant

# Speaker 2:

Dr Dr Jessica Dalsuco (Centro de Investigação em Saúde de Manhiça (CISM), Mozambique)

Topic: Reviewing the current treatment recommendations in young infants and the evidence base for this

#### Speaker 3:

Prof Bernhards Ogutu (Kenya Medical Research Institute (KEMRI) and Centre for Research in Therapeutic Sciences (CREATES), Strathmore University, Kenya)

Topic: Understanding some of the practical implications around treatment, including use of existing formulations

#### Speaker 4:

Dr. Bérenger Kaboré (Institut de Recherche en Sciences de la Santé (CRUN/IRSS), Burkina Faso).

Topic: To review the CALINA study to gain a better understanding of how studies are evolving our use of ACT antimalarials in young infants

# IV. Purpose and Objectives

Purpose: Elimination of malaria worldwide will require appropriate case management of all at-risk patients. Malaria in young infants is often overlooked and is very rarely studied. Despite several peer-reviewed publications highlighting the prevalence of disease in babies, the general awareness remains low among health care practitioners, which is a barrier to effective treatment.

This symposium aims to highlight the scope of the problem through review of prevalence data; to provide practical insights on clinical presentation and to share guideline-based treatment recommendations. It will conclude with a presentation on the latest emerging science in these patients, looking to potential future management.

# **Objectives:**

The intent is to create awareness of malaria prevalence

in young infants and advocate for appropriate treatment. Malaria in young infants is often overlooked because this population is assumed to benefit from maternal protection and is generally excluded from clinical trials.

As a result, there are currently no approved treatments for malaria for infants < 4.5 kg in body weight and available treatment guideline recommendations for patients < 5kg are not evidence-based. The intention is for this symposium to act as a catalyst for a much-needed conversation on malaria in young infants, improving disease detection and prompting appropriate treatment.

Scope: In this symposium, we intend to shine a light on the burden of malaria in young infants, explore current standard of care and limitations thereof and stimulate discussion around appropriate treatment of these vulnerable patients. The first presentation will describe the epidemiology of malaria in young infants, offering insights into what is known of the prevalence and risk factors and describing the clinical presentation and diagnostic challenges.

The second presentation will address the current international and local standard of care for young infants, presenting the challenges, risks and evidence gaps associated with currently available agents. This will largely be based on clinical experience and review of the limited pre-existing published data. In the final presentation, the first results will be presented from a recently concluded PK, safety and efficacy study in young infants with uncomplicated malaria weighing less than 5kg in whom a specially designed formulation of artemether/lumefantrine was evaluated. The three presentations will be followed by a Q&A session with the audience.

# Symposium 72

Date/ Time: Friday, 26 - 5:00 PM Room: AD12

# Title

Clinical Development of Monoclonal Antibodies to Prevent P. falciparum Malaria

# Chairs

#### Chair

Kayla Andrews, Bill & Melinda Gates Medical Research Institute

#### Co-chair:

Aissata Ongoiba MD, MPH MRTC/ICERMALI, MRTC, FMOS/FAPH

# **Speakers**

# Speaker 1

Dr .Kayla Andrews, Bill & Melinda Gates Medical Research Institute in Cambridge, Massachusetts, USA

Topic: An overview of the use of prophylactic monoclonal antibodies for the prevention of P. falciparum malaria, contrasting with use of small molecules and vaccines.

# Speaker 2

- 1. Name: Dr. Aissata Ongoiba
- Position: Investigator at the Malaria Research and Training Center, Mali
- Institution: International Center for Excellence in Research, University of Sciences, Techniques, and Technologies of Bamako, Bamako, Mali.
- Topic: She will present the results of a Phase 2 trial of the anti-CSP monoclonal antibody, L9LS in Malian School-aged children.

# Speaker 3

- I. Name: Dr. Safi Doumbo
- 2. Position: Investigator
- Institution: Malaria Research and Training Center,
  Mali. International Center for Excellence in
  Research, University of Sciences, Techniques, and
  Technologies of Bamako, Bamako, Mali.
- Topic: She will present the results of a secondary analysis of a Phase 2 trial of the anti-malarial monoclonal antibody CIS43LS in Malian adults.

# **Speaker 4**

- 1. Name: Dr. Kassoum Kayentao
- 2. Position: Epidemiologist and an Investigator
- Institution: Malaria Research and Training Center, Mali International Center for Excellence in Research, University of Sciences, Techniques, and Technologies of Bamako, Bamako, Mali.
- Topic: He is also an expert advisor for the WHO local office in Mali and the NMCP. Professor Kayentao will present on the Interim Results of a Phase 2 Trial of the anti-CSP Monoclonal Antibody L9LS in Kenyan

Infants and Children. This presentation can be prerecorded.

# Speaker 5

- . Name: Dr. Hong Liu
- . Position: Biologics Process Development and Manufacturing Leader
- Institution: Bill & Melinda Gates Medical Research
  Institute in Cambridge, Massachusetts, USA.
- Topic: She will discuss the cost of goods considerations for developing a prophylactic antibody for malaria eradication and provide an update on the progress of MAM01, a prophylactic monoclonal antibody to prevent Pf malaria currently in clinical development.

# **Purpose and Objectives**

Please provide a brief overview of the purpose and objectives of your presentation.

Long-acting anti-malarial drugs, including monoclonal antibodies (mAbs) could help reduce malaria morbidity and mortality in the most vulnerable populations. Long-acting mAbs could offer one touchpoint with the healthcare system each year, a longer duration of protection than intermittent chemoprevention and potentially less propensity for resistance. Proof of concept for anti-malarial mAbs has been achieved in early clinical trials and efforts are ongoing to develop these mAbs into impactful tools.

The aim of this symposium is to bring together leaders in the field to present results on candidate mAbs currently in clinical development. The symposium will provide a forum for the community to discuss next steps in the clinical development and registration of anti-malarial mAbs including potential target populations.

Each presenter will provide an overview of successes and challenges in the development of these interventions and will discuss important concepts to explore in future mAb clinical trials. Ample time will be provided at the end of the symposium to promote Q&A and discussion from the audience and/or a panel discussion.

# **Objectives:**

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Participants will be able to discuss what a monoclonal antibody is and how it is different from other prevention tools such as antimalarial drugs and vaccines.

Participants will be able to discuss clinical development opportunities and challenges in the implementation of malaria monoclonal antibodies.

Participants will understand the status of malaria monoclonal antibodies in ongoing clinical trials.

# ABSTRACTS FOR ORAL PRESENTATION

# SCIENTIFIC SESSIONS

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# Scientific Session N° 1

**Date/ Time:** Monday, April 22 - 10:30 AM - 12:00 AM **Room:** MH3

Category: Immunology and Vaccines 1

Safety and reactogenicity of RO.6C and ProC6C, two promising transmission blocking vaccine candidates: a phase 1b clinical trial in adults living in a high burden malaria transmission setting in Burkina Faso

#### **Authors:**

Ben Idriss Soulam, Alphonse Ouedraogo, Jordan L. Plieskatt, Edith C. Bougouma, Jean Baptist B. Yaro, Sem Ezinmegnon, Noelie Henry, Augustin Konkobo, Amidou Diarra, Amidou Z. Ouedraogo, Issa N. Ouedraogo, Issaka Sagara, Sodiomon B. Sirima, Alfred B. Tiono, Michael Theisen.

Malaria Transmission Intensity Likely Modifies RTS, S Efficacy Due to a Rebound Effect in Ghana, Malawi, and Gabon

#### **Authors:**

Griffin J. Bell, Varun Goel, Paulin Essone, David Dosoo, Bright Adu, Benedicta Ayiedu Mensah, Stephaney Gyaase, Kenneth Wiru, Fabrice Mougeni, Musah Osei, Pamela Minsoko, Cyrus Sinai, Karamoko Niar é, Jonathan J. Juliano, Michael Hudgens, Anita Ghansah, Portia Kamthunzi, Tisungane Mvalo, Selidji Todagbe Agnandji, Jeffrey A. Bailey, Kwaku Poku Asante, and Michael Emch

A novel multi-stage malaria vaccine, ProC6C, elicits functional antibodies against two P. falciparum life cycle stages in Burkinabe adults

# **Authors:**

Jordan Plieskatt, Kazutoyo Miura, Nis Borbye-Lorenzen, Mohammad Naghizade, Ebenezer Ofori, Alfred B. Tiono, Kristin Skogstrand, Issaka Sagara, Fidel Zavala, Michael Theisen

The effect of RTS,S/AS01E and SMC alone or combined on antimalarial antibody responses

# **Authors:**

Katie Patterson, Seyi Soremekun, Alassane Dicko, Jean-Bosco Ouedraogo, Issaka Zongo, Issaka Sagara, Paul Snell, Cynthia Lee, Christian Ockenhouse, Opokua Ofori-Anyinam, Halidou Tinto, Daniel Chandramohan, Brian Greenwood, Chris Drakeley

High-throughput isolation of cross-reactive and adhesion-inhibitory VAR2CSA-specific monoclonal antibodies from Plasmodium falciparum-exposed pregnant women

#### **Authors:**

Maria del Pilar Quintana, Nsoh Godwin Anabire, Alexandra Abu-Shmais, Michael Fokuo Ofori, Ivelin S. Georgiev, Lars Hviid

The selective pressure induced by malaria vaccines on Plasmodium falciparum

#### **Authors**

Thiery Masserey, Tamsin Lee, Aur élien Cavelan, Daniel E. Neafsey, Josephine Malinga, Melissa A Penny

Identifying antibody responses to PfEMP1 that protect children from severe malaria

#### Authors

Isobel Walker, Elvin Lufele, Saber Dini, Ali Haghiri, Julie Simpson, Anja Jensen, Yvonne Adams, Michael Duffy, Louise Turner, Thomas Lavstsen, Janavi Rambhatla, Amaya Ortega, Wina Hasang, Laurens Manning, Timothy Davis, Moses Laman, Amy Chung, Elizabeth Aitken, Stephen Rogerson

# Scientific Session N° 2

**Date/ Time:** Monday, April 22 - 1:30 PM - 3:00 PM **Room:** AD12

Category: Vector Biology and Control 1

Community-based biolarviciding for malaria control in Tanga region, Tanzania

#### **Authors**:

Denis Kailembo, Elizabeth Kasagama, Fabrizio Molteni, Noela Kisoka, Christian Lengeler, Tegemeo Gavana, Prosper Chaki, Best Yoram, Stella Kajange, Jubilate Bernard, Samwel Lazaro, Charles Dismas

Species composition and distribution of Anopheles gambiae and Anopheles funestus complexes circulating in Burundi in 2023

# **Authors:**

Prof Joseph NYANDWI, Dr Néhémie NZOYIKORERA, Dr Jean Pierre SINARINZI, Dr Denis NIYOMWUNGERE

Research landscaping review of Anopheles stephensi

#### **Authors:**

Helen Nwanosike, MESA Organisation - MESA, Barcelona Institute for Global Health

SCALING UP COMMUNITY-BASED ENTOMOLOGICAL SURVEILLANCE TO GUIDE IMPLEMENTATION OF THE MALARIA CASE INVESTIGATION USING A 1-3-7 STRATEGY IN SOUTHERN ZAMBIA: SUCCESSES, CHALLENGES AND OPPORTUNITIES

#### **Authors:**

Javan Chanda\*, Christopher Lungu, Reine Rutagwera, Alex Chilabi, Willy Ngulube, Reuben Zulu, Mbanga Litia, Noah Kafuko, John Miller, and Kafula Silumbe.

Entomological Surveillance of Aedes mosquitoes, vectors of arboviruses in a peri-urban area of Yaound é, Centre, Cameroon

#### **Authors**

Theno Djapoum Bertille Carine, Foko Dadji Gisele, Fomena Abraham, Antonio-Nkondiio Christophe

Impact of Microsporidia-Infected Mosquito Releases on Plasmodium Prevalence: A Spatial Agent-Based Modeling Approach

# **Authors:**

Steeven Belvinos Affognon, Henri E.Z. Tonnang, Jeremy K. Herren

Augmenting Malaria Vector Surveillance Shortfall through Geospatial Distribution Analysis and Species Distribution Modeling of Secondary Malaria Vector Distribution in Nigeria

# **Authors:**

Adedapo Adeogun, Ayodele Samuel Babalola, Okefu Oyale Okoko, Tolulope Oyeniyi, Ahmed Omotayo, Romoke Tawakalitu Izekor, Oluwakemi Adetunji, Abiodun Olakiigbe, Olalekan Olagundoye, Monsuru Adeleke, Cynthia Ojianwuna, Dagona Adamu, Abdullahi Daskum, Jibrin Musa, Obadiah Sambo, Oduola Adedayo, Petrus Uchenna Inyama, Lazarus Samdi, Abiodun Obembe, Musa Dogara, Poloma Kennedy, Suleiman Mohammed, Rebecca Samuel, Chioma Amajoh, Musa Adesola, Mohammed Bala, Mary Esema, Mamudu Omo-Eboh, Marianne Sinka, Olufunmilayo Ajoke Idowu, Adeolu Ande, Israel Olayemi, Abdulsalami Yayo, Perpetua Uhomoibhi, Samson Awolola, Babatunde Salako

# **Scientific Session N° 3**

Date/ Time: Monday, April 22 - 5:00 PM - 6:30 PM Room: AUD

Category: Vector Biology and Control 2

First report of natural infection by Wolbachia Anga and Microsporidia MB in Anopheles gambiae and Anopheles coluzzii, the main malaria vectors in Benin: a cross sectional study.

#### **Authors:**

Wilfrid Sewade, Minassou Juv énal Ahouandjinou, Arthur Sovi, Aboubakar Sidick, Come Zinsou Koukpo, Saïd Chitou, Linda Towakinou, Bruno Adjottin, Steve Hougbe, Fil émon Tokponnon, Germain Gil Padonou, Martin Akogb éto, Louisa A. Messenger, Razaki A. Ossì

Mosquitocidal effect of ivermectin-treated nettings and sprayed walls on Anopheles gambiae

Majidah Hamid-Adiamoh\*, Abdul Khalie Muhammad, Benoit Sessinou Assogba, Harouna Massire Soumare, Lamin Jadama, Moussa Diallo, Umberto D'Alessandro, Mamadou Ousmane Ndiath, Annette Erhart and Alfred Amambua-Nawa

Microsporidia MB is found in Anopheles mosquitoes in different agro-ecological zones in Kenya

Oscar Mbare, Joseph Gichuhi, Tullu Bukhari, Ulrike Fillinger, Jeremy Herren

Current observations on shifts in malaria vector biting behavior and changing vulnerability to malaria transmission in contrasting ecosystems in Western Kenya

#### **Authors:**

Irene Nzioki, Maxwell G Machani, Shirley Onyango, Kelvin Kabui, Andrew Githeko, Eric Ochomo, Guiyun Yan, Yaw A Afrane

Pyriproxyfen-based bed net Royal Guard®shows high efficacy in controlling wild pyrethroid-resistant malaria vectors from Cameroon

#### Authors

Emilie S. Ngongang-Yipmo, Magellan Tchouakui, Benjamin D. Menze, Riccado F. Tiomela, Derrick Fofie, Vanessa B. Ngannang-Fezeu, Jean L. Mugenzi, Flobert Njiokou, Charles S. Wondji

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Effect of adult male type on Anopheles gambiae male fitness Fred Aboagye-Antwi; Department of Animal Biology and Conservation Science. University of Ghana.

#### **Authors:**

faboagye-antwi@ug.edu.gh.

Naana Afua Acquaah;

Department of Animal Biology and Conservation Science.

Lyophilisate of phytoplankton Scenedesmus quadricauda for malaria vector Anopheles gambiae larvae control in Benin: preliminary study under laboratory

University of Ghana. naanaafuaacquaah@gmail.com

#### **Authors:**

Yao Lenucthadius Houessou, Armel Djì¬nontin, Mouhamadou Nourou Dine Liady, Aziz Bouraima, Owolabi Camille Tante, Christophe Soares, Mahunan Gr égoire Fassinou, Edmond Sossoukpì¬, Didier Emile Fiogb é and Martin Akogb éto

Developing a community agreement model for genetic control of malaria mosquitoes in Africa

# **Authors:**

Naima Sykes, Jude Bigirwenkya, Isabelle Coche, Mouhammed Drabo, Divine Dzokoto, Samantha O'Loughlin, Lea Pare Toe, Alexandre Quach, Delphine Thizy Scientific

# Scientific Session N° 4

**Date/ Time:** Monday, April 22 - 5:00 PM - 6:30 PM **Room:** MH2

Category: Control and Elimination 1

Impact of two long-lasting insecticidal nets with dualactive ingredients on pregnancy outcomes: A quasiexperimental study in a pyrethroid-resistant vector area in southern Benin

# **Authors:**

Manfred Accrombessi, Landry Assongba, Edouard Dangbenon, Arthur Sovi, Boulais Yovogan, Constantin J. Adoha, Germain Gil Padonou, Martin C. Akogbeto, Natacha Protopopoff, Jackie Cook

Evaluation of the influence of house characteristics on malaria transmission during a larviciding trial in the city of Yaound é

#### **Authors:**

Christophe Antonio-Nkondjio, Carmene Ngadjeu, Abdou Talipouo, Parfait Awono-Ambene

Entomological impact of mass administration of ivermectin and dihydroartemisinin-piperaquine in The Gambia: a cluster-randomized controlled trial

#### **Authors:**

Harouna M. Soumare, Edgard Diniba Dabira, Muhammed M. Camara, Lamin Jadama, Pa Modou Gaye, Sainey Kanteh, Ebrima A. Jawara, Amie Kolleh Njie, Fatou Sanneh, Mamadou Ousman Ndiath, Steven W. Lindsa, Bakary Conteh, Sainey Ceesay, Nuredin Mohammed, Michael Ooko, John Bradley, Chris Drakeley, Annette Erhart, Teun Bousema and Umberto D'Alessandro

Feasibility and safety of integrating mass drug administration for helminth control with seasonal malaria chemoprevention among Senegalese children: a randomized controlled, observer-blind trial

#### **Authors:**

Muhammed O. Afolabi, Doudou Sow, Schadrac Agbla, El Hadji B. Fall, Fatimata B. Sall, Amadou Seck, Isaac A. Manga, Ibrahima Mbaye, Mor A. Loum, Baba Camara, Diatou Niang, Babacar Gueye, Doudou Sene, Nd éye M'back é Kane, Boubacar Diop, Awa Diouf, Nd éye Aida Gaye, Marie Pierre Diouf, Aminata Colle Lo, Brian Greenwood, Jean Louis A. Ndiaye

Construction of an Anopheles arabiensis Y-autosome translocation line and its potential for sterile insect technique-based application

#### Authors:

Yacouba POUMACHU, Thabo MASHATOLA, Timothéon TCHUINKAM, Antonios AUGUSTINOS, Flobert NJIOKOU, Kostas BOURTZIS and Cyrille NDO

Larvicidal activity of Momordica foetida (Cucurbitaceae), Gnidia glauca (Thymelaeaceae) and Vepris soyauxii (Rutaceae) extracts on Anopheles gambiae s.l mosquitoes and their acute toxicity on rats

#### **Authors:**

Chi Tchampo Fru1,3 ,Metoh Theresia Njuabe1,2, Soh Desire4,5, Herman Parfait Awono- Ambene3\*

 The Laboratory of Biochemistry, Faculty of Science, the University of Bamenda (UBa), Bamenda, Cameroon.

- The laboratory of parasitology and vector biology, National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention (NIPD-CDC), Shanghai, 200025, People's Republic of China.
- Research Institute of Yaounde, Organization for the Coordination of the fight against Endemic Diseases in Central Africa (OCEAC), Yaounde, Cameroon.
- Department of Chemistry, Higher Teacher Training College, University of Bamenda, P.O. Box 39 Bambili, Cameroon, TWAS Research Unit (TRU) of The University of Bamenda, Bamenda, Cameroon.
- 5. Laboratory of Medicinal Chemistry & Pharmacognosy, Department of Organic Chemistry, Faculty of Science, University of Yaound é I, P.O. Box 812 Yaounde, Cameroon.

Malaria Classroom Corner: a school-based intervention to promote basic malaria awareness and common control practices among school-age children

#### **Authors:**

Uchechukwu M. Chukwuocha, Gregory N. Iwuoha, Uzochukwu G. Ekeleme

# Scientific Session N° 5

**Date/ Time:** Monday, April 22 - 5:00 PM - 6:30 PM **Room:** MH3

Category: Social and Health Economics 1

Cost - Effectiveness of weekly Dihydroartemisinin - Piperaquine versus Sulphadoxine - Pyrimethamine for Malaria Chemoprevention in Children with Sickle Cell Anemia: A Comparative Analysis in Uganda and Malawi

#### **Authors:**

Carol Kamya, Richard Idro, Robert Opoka, Kalibbala Dennis, Kamija Phiri, Oddvar Kaarboe, Bjarne Robberstad

Potential opportunity costs for households of children who will receive a malaria vaccine through EPI in Burkina Faso and Mali

# **Authors:**

Fadima YAYA BOCOUM, Halimatou DIAWARA, Seydou TRAORE, Rosemonde GUISSOU, Seydou YABRE, Fatoumata KOITA, Alassane DICKO, Ranju BARAL

Reducing health shock and investments in children education: A randomized controlled trial in rural area of Mali, Birga

#### **Authors:**

Hamidou Niangaly, Martine Audibert, Issaka Sagara, Djimd é Abdoulaye

Development of a new wealth index for South Sudan: association between household wealth on seasonal malaria chemoprevention and malaria-prevention outcomes in Northern Bahr el Ghazal

#### **Authors:**

Sikai Huang, Jamshed Khan, Francis Lokang, Abubaker Rom Ayuiel, Kevin Baker, Sol Richardson

Who pays to treat malaria, and how much? Analysis of the cost of illness, equity, and economic burden of malaria in Uganda

#### **Authors:**

Katherine Snyman, MS, Catherine Pitt, PhD, Angelo Aturia, MA, Joyce Aber, BA, Samuel Gonahasa, MBChB, MSc, Jane Frances Namuganga, MD, MPH, Joaniter Nankabirwa, MBChB, PhD, Emmanuel Arinaitwe MD, MPH, Catherine Maiteki-Sebuguzi, MBChB, Henry Katamba, MD, MPH, Jimmy Opigo, MBChB, Fred Matovu, PhD, Grant Dorsey, MD, PhD, Moses R. Kamya, MBChB, PhD, Walter Ochieng, MBChB, PhD, Sarah G. Staedke, MD, PhD

Domestic funding to meet resources gap and its relation towards malaria elimination in Rwanda: lesson learned from 2018/2019 to 2022/2023 fiscal years

# **Authors:**

Ladislas Nshimiyimana, Aimable Mbituyumuremyi, Emmanuel Hakizimana, David Ndayishimiye, Beatus Cyubahiro, Jean Damascene Hagenimana

Malaria - Related Health-Seeking Behaviour among Street children in Yaounde - Cameroon: An Interdisciplinary approach

# **Authors:**

Valerie Makoge, Derick Tchoffo, Dongang Nana RR, Gervais Talla Kamga , Ornella Alactio , Wilfred Mbacham

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# Scientific Session N° 6

**Date/ Time:** Monday, April 22 - 5:00 PM - 6:30 PM **Room:** MH4

Category; Chemoprevention 1

Association between the CYP2C8 variant and the occurrence of adverse events among children 3-59 months receiving the Seasonal Malaria Chemoprevention in 2023 in the village of Samandeni, Burkina Faso

#### **Authors:**

Alassane Haro, Abdoul Aziz Sienou, Rakiswende Serge Yerbanga, W. Jedida Ouedraogo, Bienvenu Armel Yarbanga, Zachari Kabré, Moussa Zongo, Thierry Ramd é, Edith Guigma, Jean-Bosco Ouedraogo

Pfdhfr-dhps Quadruple Mutant Genotype Saturated after 10 years of Seasonal Malaria Chemoprevention with Sulphadoxine-Pyrimethamine and Amodiaquine Implementation in Mali

#### **Authors:**

Hamma Maiga, Sekou Sissoko, Aliou Traore, Antoine Dara, Oumar Coulibaly, Kaliou Mariko, Issaka Sagara and Abdoulaye A. Djimde

Understanding the dimensions of caregiver satisfaction with door-to-door delivery of seasonal malaria chemoprevention in Nigeria and Mozambique: implications for malaria-related outcomes

# **Authors:**

Sol Richardson, Sikai Huang, Taiwo Ibinaiye, Albertino Zunza, Olusola Oresanya, Mercia Sitoe, Kevin Baker

Malaria chemoprevention in Kenyan children with sickle cell anaemia: A randomized trial comparing daily Proguanil, monthly Sulfadoxine-Pyrimethamine/ Amodiaquine, and monthly Dihydroartemisinin-Piperaquine

#### **Authors:**

Steve M Taylor, Sarah Korwa, Cindy Green, Betsy Freedman, Sheila Clapp, Angie Wu, Joseph Kipkoech Kirui, Wendy P O'Meara PhD, Festus M Njuguna

The impact of Intermittent Preventive Treatment with Dihydroartemisinin Piperaquine and Artesunate

Amodiaquine on IgG response against six Plasmodium falciparum antigens

#### **Authors:**

Eric Lyimo, Geofrey Makenga, Louise Turner, Jean-Pierre Van Geertruyden, John P. A. Lusingu, Daniel T. R. Minja, Christian W. Wang, Vito Baraka

Co-designing the Implementation of Post-discharge Malaria Chemoprevention in the Malawi Health System to reduce mortality and morbidity among children with severe malaria

#### **Authors:**

Myness Kasanda Ndambo, Kamija Phiri, Bjarne Robberstad, Oddvar Martin Kaarbìüe, Inger Lise Teig, Jobiba Chinkhumba, Thandi Gondwe, Tinashe Tizifa, Elisabeth Mamani-Mategula, Kristine B., Isabel Kazanga Chiumia, Lucinda Manda-Taylor

Modelling the potential impact of perennial malaria chemoprevention with sulfadoxine pyrimethamine in Cameroon.

#### **Authors:**

Ishana Atkinson, Andria Mousa, Innocent Ali, Pete Winskill, Akindeh Nji, Junior Voundi, Catherine Pitt, Alba McGirr, Rosario Martinez-Vega, R Matthew Chico, Khalid Beshir, Ana Chopo-Pizarro, Emma Filtenborg Hocke, Helle Hansson, Michael Alifrangis, Roly Gosling, Wilfred Mbacham, Cally Roper, Lucy Okell

# Scientific Session N° 7

**Date/ Time:** Monday, April 22 - 5:00 PM - 6:30 PM **Room:** AD10

Category: Diagnosis and Reagent 1

Accuracy of sequential interpretation of malaria combining two-step RDT detecting PfHRP2/pLDH followed by dbPCR-NALFIA for the diagnosis of malaria in febrile patients

## **Authors:**

Diane Y. Some, Antonia W. Bere, Francois Kiemde, Abdoulaye Ouedraogo, Souleymane BANAO, Geremie Djiri, Laetitia KABORE, Nadine A. Kone, Hermann Sorgho, Aly Savadogo, Halidou Tinto and Henk Schallig

Field performance of the highly sensitive rapid diagnostic test for detecting low-density Plasmodium falciparum infections in The Gambia

#### **Authors:**

Edgard Diniba Dabira, Haddy Niang, Amadou Bah, Baboucarr Bittaye, Alhagie Jabbi, Abdouraman Jallow, Lamin Saidy, Jean Pierre Van geertruyden, Umberto D'Alessandro, Annette Erhart

EVALUATION OF THREE RAPIGEN BIOCREDIT POINT-OF-CARE TESTS (POCT) FOR MALARIA CASE MANAGEMENT IN LAGOS, NIGERIA.

#### **Authors:**

Oluwagbemiga O. Aina, Chimere O. Agomo, Olusola Ajibaye, Celestina O. Okoyenta, Nnenna Ogbolafor, Simon Ijieze, Akwaowo B. Orok, Chinedum T. Oparaugo, Samuel K. Akindele, Damilare J. Bamgbose, Susan A. Holdbrooke, Olaide K. Kareem, Yetunde A. Olukosi

Diagnostic performance of a novel RT-PCR method targeting the P.f EXP1 gene of plasmodium parasite for malaria detection

#### **Authors:**

Sylvie kemleu Zebaze ; Esther Otam Ateba ; Marie-florence Kouegni; Gabrielle Ekobo ; Loic Keumo ; Gwladys Cheteug ; Lawrence Ayong

Performance of two-step malaria RDT detecting PfHRP2/pLDH for the diagnosis of malaria in febrile children 6 to 59 months old attending primary health facilities in Burkina Faso.

#### **Authors:**

Antonia W Bere, Diane Y Some, Francois Kiemde, Bagre Kouadjo, Fla Koueta, Athanase M Some, Berenger Kabore, Daniel Valia, Toussaint Rouamba, Seydou Sawadogo, Macaire Nana, Nadine A Kone, Adelaide Compaore, Massa Dit Achille Bonko, Gautier Tougri, Sylvie Yeri Youl, Henk Schallig, Halidou Tinto

Insights into the performance of SD Bioline PfHRP2/ Pan LDH malaria rapid diagnostic test and distribution of Plasmodium falciparum histidine rich protein 2 gene deletion in Emana-Benyada (Cameroon): a pilot study.

# **Authors:**

V. Ongbassomben, Y. Poumachu, Agbor Jean-Pierre, P. F. Suh, Wilfred Mbacham, C. Ndo

Sharing the effect of mobile app assessment on enhancing quality of malaria rapid testing performed by community health workers in Rwanda

#### **Authors:**

Eliab Mwiseneza, Noella Umulisa, Jean Modeste Harerimana, Natalie Maricich, Shawna Cooper, Marcel Manariyo, Aimable Mbituyumuremyi, Jean Damascene Niyonzima, Michee Kabera, Gladys Tetteh

# Scientific Session N° 8

Date/ Time: Monday, April 23 - 10:30 AM - 12:00 AM Room: MH2

Category: Vector Biology and Control 3

Rapid age-grading and species identification of natural mosquitoes for malaria surveillance

#### **Authors:**

Doreen J. Siria, Roger Sanou, Joshua Mitton, Emmanuel P. Mwanga, Abdoulaye Niang, Issiaka Sare, Paul C. D. Johnson, Geraldine M. Foster, Adrien M. G. Belem, Klaas Wynne, Roderick Murray-Smith, Heather M. Ferguson, Mario Gonzaí¬lez-Jimeí¬nez, Simon A. Babayan, Abdoulaye Diabate, Fredros O. Okumu & Francesco Baldini.

Effectiveness of Interceptor G2, Royal Guard and PermaNet 3.0 against pyrethroid-resistant Anopheles gambiae from Za-Kpota, Southern Benin: an experimental hut trial

#### **Authors:**

Pierre Marie Sovegnon, Romaric Akoton, Isaac Stopard, Geraldine M Foster, Luc Salako Djogb énou

First report of Anopheles stephensi from Southern Ethiopia

# **Authors:**

Dawit Hawaria, Solomon Kibret, Daibin Zhong, Ming-Chieh Lee, Kidane Lelisa, Belayneh Bekele, Muntasha Birhanu, Mathe Mengesha, Hiwot Solomon, Delenesaw Yewhalaw, Guiyun Yan

Local community empowerment towards IVM implementation in Rwanda: learning by doing approach for mosquito larval source management.

#### **Authors:**

Phocas Mazimpaka, Dunia Munyakanage, Beatus Cyubahiro, Alphonse Mutabazi, Elias Niyirtuma, Xavier Misago, Gerald Habimana, Primitive Mukanyandwi, Jack Mupfasoni, Epahhrodite Habanabakize, Eric Habimana, Noella Isugi, Jean Damascene Niyomugabo, Erneste Kamanzi, Joseph

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Munyantore, Narcisse Gahamanyi, Illumine Mukarugire, GiseleNiyonsenga, Jean Claude S. Ngabonziza, Aimable Mbituyumuremyi, Emmauel Hakizimana

Effect of Anopheles killing and preservation methods on near-infrared spectroscopy to predict Anopheles gambiae s.l species

#### **Authors:**

Bernard M. Somé, Dari F. Da, Ruth McCabe, Nicaise D. Djegbe, Ines G. Paré, Thomas S. Churcher, Roch K. Dabiré

Fight for Dominance: Tissue localization and tropism of Microsporidia MB in somatic and germline tissues of Anopheles arabiensis

Edward Makhulu, Anne Wairimu, Thomas Onchuru, Lillian Mbaisi, Fidel Gabriel, Rehemah Gwokyalya, Stancy Omboye, Lizette Koekemoer, Jeremy Herren

Effects of indoor residual spraying with Bendiocarb and Pirimiphos-methyl on allelic frequencies of kdr and genotypic and ACE mutations in central Senegal.

# **Authors:**

El Hadji Diouf, Massila Wagué Senghor, Mamadou Demba Sy, Assane Ndiaye, Abdoulaye Konat é, Omar Niang, Ousmane Faye, Ibrahima Dia, El Hadji Amadou Niang and Lassana Konaté

# Scientific Session N° 9

**Date/ Time:** Tuesday, April 23 - 1:30 PM - 3:00 PM **Room:** AUD

Category: Immunology and Vaccines 2

Strategic Implementation and Challenges of the RTS,S/AS01 Malaria Vaccine in Burkina Faso: A Comprehensive Analysis of Planning, Prioritization, and Vaccination Scheduling.

#### **Authors:**

Annick Sidibé, Réné Didace, Issa Ouedraogo, Ines DA

Ex Vivo responses of Plasmodium falciparum clinical isolates to mAbs directed against PfRH5 and PfRipr

# **Authors:**

Mariama N. Pouye, Laty Gaye Thiam, Aboubacar Ba, Noemi Guerra, Kelly Hagadorn, Seynabou D. Sene, Alioune Wade, Alassane Mbengue, Julie Healer, Paul Masendycz, Alan Cowman, Simon J. Draper, Amy K. Bei

How FHR-1 deficiency affects the infection with the malaria pathogen Plasmodium falciparum

#### **Authors:**

Timo Reilu, Andres Gonzalez-Delgado, Jennifer Venrath, Iris Bruchhaus, Anna Bachmann, Rolf Fendel, Christine Skerka, Gabriele Pradel

Evaluation of Plasmodium falciparum blood stage 6 -Cystein protein (Pf41) as a potential malaria vaccine candidate using genetic and immuno-informatic approaches

#### Authors:

Rokhaya Sane, Babacar Souleymane Sambe, Serigne Ousmane Mbacké Diaw, Aissatou Diagne, Ibrahima Sarr, Arona Sabene Diatta, Ataume Mawounge Diatta, Ines Wigan-Womas, Pape Mbacké Sembene, Faith H.A. Osier, Makhtar Niang

Rare but robust: Transmission blocking immunity in a longitudinal cohort of children and adults in Tororo, Uganda

#### Authors

Sara Lynn Blanken, Patience Nayebare, Kjerstin Lanke, Amanda Fabra Garcia, Marga van de Vegte-Bolmer, Geert Jan van Gemert, Rianne Stoter, Johnathan Mandel, Gerine Nijman, Catriona Paterson, Tate Oulton, Grant Dorsey, Brian Greenhouse, John Rek, Jordache Ramjith, Moses Kamya, Emmanuel Arinaitwe, Chris Drakeley, Teun Bousema, Will Stone

Level of protection against parasitemia and clinical malaria caused by West African and Brazilian Plasmodium falciparum sporozoites strains in lifelong malaria-exposed Gabonese adults.

#### **Authors:**

J.F. Zinsou, B.R. Ad égbite, F.R. Lorenz, R. Adamou, H.H. Nzenguele, B. Lell, B.K.L. Sim, L.W.P. Church, T.L. Richie, S.L. Hoffman, P.G. Kremsner, B. Mordmiller, M.B.B. McCall, A.A. Adegnika

RH5.1/Matrix-M® - Results of an efficacy trial against clinical P. falciparum malaria in 5-17 month old infants in a Phase IIb randomised trial in Burkina Faso

#### **Authors:**

Hamtandi Magloire Natama, Jo Salkeld, Athanase Somé, Seyi Soremekun, Ousmane Traoré, Toussaint Rouamba, Florence Ouedraogo, Salou Diallo, Massa Bonko dit Achille, Hermann Sorgho, Carolyn M. Nielsen, Dimitra Pipini, Ababacar Diouf, Umesh Shaligram, Carole A. Long, Kazutoyo Miura, Jee-Sun Cho, Alison M. Lawrie, Katherine Skinner, Rachel Roberts, John Bradley, Sarah E. Silk, Simon J. Draper, Angela M. Minassian, Halidou Tinto

Delayed boosting in 5-17 month old Tanzanian infants with the P. falciparum blood-stage malaria vaccine candidate RH5.1/Matrix-M®induces high-level functional antibodies: a single-centre, age deescalation, Phase 1b trial

#### **Authors:**

Sarah E. Silk, Wilmina F. Kalinga, Jo Salkeld, Ivanny M. Mtaka, Saumu Ahmed, Florence Milando, Neema Balige, Omar Hassan, Catherine G. Mkindi, Stella Rwezaula, Thabit Athumani, Sarah Mswata, Nasoro S. Lilolime, Ababacar Diouf, Beatus Simon, Hania Msami, Mohamed Mohamed, Damiano Mtonga David, Latipha Mohammed, Gloria Nyaulingo, Bakari Mwalimu, Omary Juma, Tunu G. Mwamlima, Ibrahim A. Sasamalo, Rose P. Mkumbange, Janeth J. Kamage, Jordan R. Barrett, Lloyd D. W. King, Mimi M Hou, Cecilia Carnot, Alison M. Lawrie, Fay L. Nugent, Rachel Roberts, , Jee-Sun Cho, Carole A. Long, Carolyn M. Nielsen, Kazutoyo Miura, Simon J. Draper, Ally I. Olotu, and Angela M. Minassian

# Scientific Session N° 10

**Date/ Time:** Tuesday, April 23 - 1:30 PM - 3:00 PM **Room:** MH2

Category; Phytomedicines and Pharmacology

Repeated administration of artemisinin-based combination therapy (ACT) induces oxidative stress and liver damage in mice (BALB/c)

#### **Authors:**

David Audu, Vinood B. Patel, Olufunmilayo A, Idowu, Fakilahyel M, Mshelbwala and Adewumi B. Idowu

Exploration of fungi microbiome from Cameroonian medicinal plants for antimalarial drug discovery

# **Authors:**

Rufin Marie Kouipou Toghueo, Eugenie Aimee M. Kemgne, Dinkar Sahal, Mamta Yadav, Donald Ulrich Kenou Kagho, Bingjie Yang, Iñigo Zabalgogeazcoa, Bill J. Baker, Fabrice Fekam Boyom

# SYSTEMATIC REVIEW: MEDICINAL PLANTS USED FOR THE TREATMENT AND MANAGEMENT OF MALARIA IN ZIMBABWE

#### **Authors:**

Elliot Nyagumbo, Trust Nyirenda, Cephas Mawere, Praise K. Moyo, Donald T. Kapanga, Alfred Mutaramutswa, Godwins Ngorima, Leroy G. Nhari, Michael Bhebhe, William Pote and Lucy Mabaya

In silico analysis of compounds from screened medicinal plants against Plasmodium falciparum Hsp 90®A towards selective antimalarial drug design

#### **Authors:**

Elliot Nyagumbo, Tawanda Chisango, Alfred Mutaramutswa, Praise K. Moyo, Midlands State University, Lucy Mabaya

PDevelopment of RP-HPLC method for simultaneous determination and quantification of artemether and lumefantrine in fixed-dose combination pharmaceutical dosage forms

#### **Authors:**

Mr.Simon Nyarko, Kwame Nkrumah, Kumasi-Ghana, Kwabena Ofori-Kwakye, Kwame Nkrumah, Kumasi-Ghana, Raphael Johnson, Kwame Nkrumah, Kumasi-Ghana, Noble Kuntworbe, Kwame Nkrumah, Kumasi-Ghana, Denis Dekugmen Yar, Akenten Appiah-Menka, Mampong-Ghana

Assessment of Ciprofloxacin Effect on the Pharmacokinetics of Lumefantrine among Healthy Volunteers

#### **Authors:**

Adebanjo Adebanjo, Oluwadetimi Ajayi, Nasrah Lawal, Modupe Diekola and Julius Soyinka

VALIDATION OF THE PLASMODIUM FALCIPARUM 3D7 SYBR GREEN GROWTH INHIBITION ASSAY OF THE DRUG DISCOVERY PROJECT

Acquah, Festus Kojo, Honyo, Enyonam Monia, Onyame, Henry, Mohammed, Shaban, Amewu, Richard, Amoah, Linda Eva, Yeboah-Manu, Dorothy

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# **Scientific Session N° 11**

**Date/ Time:** Tuesday, April 23 - 5:00 PM - 6:30 PM **Room:** AUD

Category: Malaria in Pregnancy 1

Diagnostic Performance Of A Commercial Lamp Assay For Malaria In Pregnancy In Ethiopia - A Pragmatic Clinical Trial

#### **Authors:**

Dylan R. Pillai, Mekonnen Teferi, Delenasaw Yewhalaw, LAMPREG Study TEAM

Community driven approach driving increases in IPTp3 uptake in Madagascar

Hery Harimanitra Andriamanjato, Andritahina Razafiarijaona Finoana Miora, Jean Pierre Rakotovao, Feno Manitra Rakotoarimanana

Does group antenatal care impact intermittent preventive treatment in pregnancy (IPTp) uptake? A cluster randomized controlled trial in Benin

# **Authors:**

Wolf, Katherine, Manzidatou Alao, Marie Adeyemi Idohou, Alexandre Binazon, Faustin Onikpo, Julie Niemczura, Stephanie Suhowatsky, Julie Buekens, Catherine Dentinger, Ahmed Saadani Hassani, Courtney, Emerson, Houetohossou Camille, Aurore Ogouyemi-Hounto, Julie R Gutman

Hyper-procedurality as a cause of major gap in the fight against malaria among pregnant women in Benin, November 2022-August 2023

#### **Authors:**

Stéphanie Mahamé, Armel Djenontin, Marc Fiogbé, Christophe Soares, Aziz Bouraima, Cyriaque Affoukou, Gilles Cottrell

Acceptability of dihydroartemisinin-piperaquine as malaria Intermittent Preventive Treatment for pregnant women living with HIV in Southern Mozambique

# **Authors:**

Tacilta Nhampossa, Neusa Torres, Mariza Chivangue, Celia Chauque, Maura Mazuze, Anete Mendes, Yara Alonso, Cristina Enguita-Fernandez, Raquel Gonzalez, Esperania Sevene, Khatia Munguambe, Clara Menendez Plasmodium infections among pregnant women at first antenatal care contact in northwest Ethiopia: implications for malaria control and elimination

#### Authors

Zemenu Tamir, Abebe Animut, Sisay Dugassa, Mahlet Belachew, Adugna Abera, Aster Tsegaye, Berhanu Erko,

Spatial distribution and determinants of optimal intermittent preventive treatment for malaria in pregnancy: A secondary data analysis of the 2019 Ghana Malaria Indicators Survey

#### **Authors:**

Jean Claude Ndayishimiye, Philip Teg-Nefaah Tabong

# Scientific Session N° 12

Date/ Time: Tuesday, April 23 - 5:00 PM - 6:30 PM

Category: Insecticide Resistance 1

Rapid evolution of insecticide resistance and patterns of pesticides usage in agriculture in the city of Yaound é, Cameroon

#### **Authors:**

Nadege Sonhafouo-Chiana, Leslie Diane Nkahe, Edmond Kopya, Parfait Herman Awono-Ambene, Samuel Wanji, Charles Sinclair Wondji, and Christophe Antonio-Nkondjio

The impact of next-generation dual-active ingredient long-lasting insecticidal net deployment on insecticide resistance in malaria vectors during a three-year cluster-randomized controlled trial in Tanzania.

# **Authors:**

Louisa A. Messenger, Nancy S. Matowo, Chad L. Cross, Mohamed Jumanne, Natalie M. Portwood, Jackline Martin, Eliud Lukole, Elizabeth Mallya, Jacklin F. Mosha, Robert Kaaya, Oliva Moshi, Bethanie Pelloquin, Katherine Fullerton, Alphaxard Manjurano, Franklin W. Mosha, Thomas Walker, Mark Rowland, Manisha A. Kulkarni, Natacha Protopopoff

# Scientific Session N° 12

**Date/ Time:** Tuesday, April 23 - 5:00 PM - 6:30 PM **Room:** MH2

Category: Insecticide Resistance 1

The resistance status of Anopheles gambiae s.l. in Chikwawa district, Southern Malawi

#### **Authors**

Shupikai Kambiring'oma, Judith Sinkanako Banda, Owen Ndalama, Elizabeth Bandason, Themba Mzilahowa

Evidence of intensification of pyrethroid resistance in the major malaria vectors in Kinshasa, Democratic Republic of Congo

#### **Authors**

Daniel Nguiffo-Nguete, Leon M. J. Mugenzi, Emile Zola Manzambi, Magellan Tchouakui, Murielle Wondji, Theofelix Tekoh, Francis Watsenga, Fiacre Agossa, Charles S. Wondji

The duplicated P450s, CYP6P9a and CYP6P9b proficient pyrethroid metabolizers, are reducing neonicotinoid efficacy in Anopheles funestus while exacerbating the potency of Chlorfenapyr

# **Authors:**

Magellan Tchouakui\*, Sulaiman S. Ibrahim1, Mersimine K. Mangoua, Ricardo F. Thiomela, Tatiane Assatse, Sonia L. Ngongang-Yipmo, Abdullahi Muhammad, Leon J. M. Mugenzi, Benjamin D. Menze, Themba Mzilahowa, Charles S. Wondji

MOLECULAR MECHANISMS UNDERLYING THE RESISTANCE OF MALARIA VECTORS TO BENDIOCARB AND MALATHION IN TWO DIFFERENT EPIDEMIOLOGICAL CONTEXTS IN CAMEROON: CASE OF NJOMBÌÄ AND KÌÄKEM

# **Authors:**

Idriss Nasser Ngangue-Siewe, Paulette Ndjeunia-Mbiakop, Jean Arthur Mbida-Mbida, Christophe Antonio-Nkondjio

Low performance of mosquito nets, insecticides resistance and malaria transmission in two localities of the Eastern Region of Cameroon Belabo and Ouami

#### **Authors:**

Ndjeunia Mbiakop Paulette, Ngangue Siewe Idriss Nasser, Talipouo Abdou, Chi Nji Arnold Princewil, Tombi Jeannette and Antonio-Nkondiio Christophe. A single E205D allele of a key P450 CYP6P3 is driving metabolic pyrethroid resistance in the major African malaria vector Anopheles gambiae

#### Authors:

Jonas A. Kengne-Ouafo, Mersimine Kouamo, Abdullahi Muhammad, Arnaud Tepa, Stevia Ntadoun Leon Mugenzi, Theofelix Tekoh, Jack Hearn, Magellan Tchouakui, Murielle Wondji, Sulaiman S. Ibrahim, Charles S. Wondji

# Scientific Session N° 13

**Date/ Time:** Tuesday, April 23 - 5:00 PM - 6:30 PM **Room:** MH4

Category; Vector Biology and Control 4

Can the use of larviciding with biological compounds contribute in increasing Anopheles gambiae s.l. susceptibility to pyrethroid in a population expressing high resistance intensity?

#### **Authors**

Nkahe Diane Leslie, Sonhafouo-Chiana Nadege, Ndjeunia Mbiakop Paulette, Kekeunou S évilor , Mimpfoundi R émy, Awono-Ambene P, Wondji C. S, Antonio-Nkondjio C.

Durability of four brands of Insecticidal Treated Nets after 2020 Mass Distribution campaign in Rwanda: 36 months findings on attrition and survivorship of Nets.

# **Authors:**

Beatus Cyubahiro, Aimable Mbituyumuremyi, Dunia Munyakanage, Alphonse Mutabazi, Phocas Mazimpaka, Epaphrodite Habanabakize, Yvette Muyirukazi, Jean Claude S. Ngabonziza, Elias Niyituma, Xavier Misago, Naomi W Lucchi, Kaendi Munguti, Keith Esch, Stephen Poyer, Raymond Sudoi, Emmanuel Hakizimana

Drone-assisted larval source management for malaria control in Rwanda

# **Authors:**

Kamali Paul, Eric Rutayisire, Ingabire Mamy,Phocas Mazimpaka, Aimable Mbituyumuremyi, Dunia Munyakanage, Beatus Cyubahiro, Kaendi Munguti, Jean Claude S. Ngabonziza, Emmanuel Hakizimana

Entomological longitudinal surveys in two contrasted eco-climatic settings in Cameroon reveal a high malaria transmission from Anopheles funestus associated with GSTe2 metabolic resistance

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Brice Natchema S. Fonkou, Magellan Tchouakui, Benjamin D. Menze, Leon M. J. Mugenzi, Derrick Fofie, Daniel Nguiffo-Nguete, Lucia Nkengazong, Jeannette Tombi, Charles S. Wondji

Effect of Hyptis spicigera and Ocimum americanum essential oils on Anopheles gambiae s.l, malaria vector in Burkina Faso

Ouédraog W. Jedida M., Bayili Koama, Bazoma Bayili, Meda N.T. Roland, Ouédraogo Jean Bosco, Yerbanga R. Serge, Ouédraogo Georges A.

Anopheles coluzzii larval responses to ivermectin exposure and path to resistance

#### **Authors:**

Cheick Oumar W. OUEDRAOGO, Emmanuel SOUGUE, Andr é B. SAGNA, Olive TRAORE, Dieudonné D. SOMA, Sié H. POODA, Mady NDIAYE, El Hadji Mamadou NIANG, Karine MOULINE, Fabrice A. SOME. Roch K. DABIRE

Combating malaria transmission outside homes - outcomes of Project BITE

#### **Authors:**

Neil F Lobo, Elodie Vajda, Dyna Doum, Dave McIver, Allison Tatarsky

# Scientific Session N° 14

**Date/ Time:** Wednesday, April 24, 10:30 AM-12:00 AM **Room:** MH2

# Category

Drug Resistance 1

First appearance of partial artemisinin resistance (pArt-R) in Senegal: tracking pArt-R from translational to fundamental science in African context.

#### **Authors:**

Seynabou Diouf Sene, Mariama Nicole Pouye, Rafael Miyazawa Martins, Fatoumata Diallo, Khadidiatou Mangou, Amy K. Bei, Barry Alioune, Oumar Faye, Oumar Ndiaye, Ousmane Faye, Amadou A Sall, Jose-Juan Lopez-Rubio, Alassane Mbengue

Linkage of a novel intron variant to West African dhps resistance haplotypes in Plasmodium falciparum

#### **Authors:**

Emma Filtenborg Hocke, Helle Hansson, Adebanjo Adegbola, Peter Thelma Ngwa Niba, Innocent Mbulli Ali, Akindeh Nji, Wilfred Mbacham, Gauthier Mesia Kahunu, Hypolite Muhindo Mavoko, Andria Mousa, Ana Chopo Pizarro, Colin Sutherland, Michael Alifrangis, Cally Roper.

Prevalence of antimalarial resistance markers within the context of a therapeutic efficacy study in The Gambia

#### **Authors:**

Balla Gibba, Olimatou Kolley, Momodou Kalleh, Balla Kandeh, Eniyou Cheryll Oriero, Fatoumatta Cham, Benjamin Njie, Musa Jawara, Edgard Dabira, Mamadou Ndiath, Umberto D'Alessandro, Annette Erhart, Alfred Amambua-Ngwa

Geographical emergence of sulfadoxinepyrimethamine drug resistance - associated P. falciparum and P. malariae alleles in co-existing Anopheles mosquito and asymptomatic human populations across Cameroon

#### **Authors:**

Francis N. Nkemngo, Lymen W. Raissa, Daniel N. Nguete, Cyrille Ndo, Charles S. Wondji

Assessment of molecular markers of Plasmodium falciparum resistance to sulphadoxine- pyrimethamine (SP) among pregnant women across different ecological zones in Cameroon

#### **Authors:**

Vincent Ntui Ntui-Njock, Hanesh Fru Chi, Eniyou Cheryll Oriero, Livinus Ngu Tangi, Fatoumata Bojang , Vincent Pryde Kehdingha Titanji, Alfred Amambua-Ngwa and Tobias Obejum Apinjoh

High levels of antifolate resistance in Rwanda

#### **Authors:**

Sara L. Cantoreggi, Aline Uwimana, Jean Damascene Niyonzima, Aimable Mbituyumuremyi, Christian Nsanzabana

Emergence of the DHFR-DHPS quintuple mutation in Plasmodium falciparum isolates from sentinel sites located in rural Gabon

#### Authors

Ndong Ngomo JM, M'Bondoukwé NP, Moutombi Ditombi BS, Koumba Lengongo JV, Batchy Ognagosso FB, Mawili-Mboumba DP, Bouyou-Akotet MK

# Scientific Session N° 15

**Date/ Time:** Wednesday, April 24, 10:30 AM-12:00 AM **Room:** MH3

Category: Drug Efficacy 1

Genetic diversity of PfKelch13 and multiplicity of infections in malaria infected patients from Kedougou, Senegal.

#### **Authors:**

Alioune Wade, Seynabou D. Sene, Fatoumata Diallo, Aboubacar Ba, Mariama N. Pouye, Bacary Djilocalisse Sadio, Ife Desamours, Noemi Guerra, Kelly Hagadorn, Laty Gaye Thiam, Amy K. Bei, Alassane Mbengue

Can incorporating drug resistance genotyping by deep sequencing, and identity by descent (IBD) analysis into therapeutic efficacy studies help to distinguish true recrudescence from new infections?

#### **Authors:**

Abebe A. Fola, Catherine Bakari, Celine I. Mandara, Rebecca DeFeo, Alec Leonetti, Rashid A. Madebe, Misago D. Seth, Marian Warsame, Charlotte Ramussen, Issa Garimo, Samwel Lazaro, Abdallah Lusasi, Sijenunu Aaron, Frank Chacky, Ally Mohamed, Ritha J.A. Njau, Jovin Kitau, Deus S. Ishengoma, Jonathan J. Juliano, Jeffrey A. Bailey

Artemether-lumefantrine-amodiaquine or artesunateamodiaquine combined with single low-dose primaquine to reduce Plasmodium falciparum malaria transmission in Ou éless ébougou, Mali: a five-arm, phase 2, single-blind, randomised clinical trial

#### **Authors:**

Almahamoudou Mahamar, Leen N Vanheer, Merel J Smit, Koualy Sanogo, Youssouf Sinaba, Sidi M. Niambele, Makonon Diallo, Oumar M Dicko, Richard S. Diarra, Seydina O Maguiraga, Ahamadou Youssouf, Adama Sacko, Sekouba Keita, Siaka Samake, Adama Dembele, Karina Teelen, Yahia Dicko, Sekou F. Traore, Arjen Dondorp, Chris Drakeley, William Stone, Alassane Dicko

PLATINUM: a unique platform study to investigate possible single dose cures for patients with uncomplicated malaria

#### **Authors:**

W. Prince, A. Nguyen, V. Venishetty, E. Schmitt, M. Quinlan, D. Mato. M. Robinson

High efficacy of Artemether-Lumefantrine and Artesunate-Pyronaridine in adult patients with Plasmodium falciparum in a setting with high prevalence of markers of partial artemisinin resistance and pfhrp2/3 gene deletion in Ethiopia: a single-blind randomized controlled trial

#### **Authors:**

Migbaru Keffale, Tadesse Misganaw, Stefano Rosillo, Hiwot Teka, Bereket Hailegiorgis, Legesse Alamerie Ejigu, Samuel Girma, Mekonnen Tadesse, Fikregabrail Aberra Kassa, Mikiyas Gebremichael, Desalegn Abeje, Dawit Hailu, Bethlehem Adnew, Wakweya Chali, Sinknesh Wolde, Lina Alemayehu, Jimma Dinsa, Melat Abdo, Getnet Habtamu, Addisu Gizat, Getinet Habtamu, Woyneshet Gelaye Yalew, Tadesse Hailu Jember, Molalegne Bitew, Mateusz M. Plucinski, Cristian Koepfli, Samaly Souza, Dhruviben S. Patel, Mame Niang, Eldin Talundzic, Gudisa Assefa, Teun Bousema, Jon Eric Tongren, Jimee Hwang, Fitsum G. Tadesse

In vivo antiplasmodial effect of the methanolic extract of Aidia genipiflora stem bark

#### Authors

Elvis Asamani, Daniel Anokwah, Ebenezer Gyamfi, Silas Acheampong Osei, Samuel Kyei, Benjamin Adzekey, Elvis Ofori Ameyaw

# Scientific Session N° 16

Date/ Time: Wednesday, April 24, 10:30 AM-12:00 AM Room: AD10

**Category:** Treatment and Case Management 1

Accessing Community Health Services for Malaria amongst Conflict-Affected Communities in Cameroon.

# **Authors:**

Margaret Ebob Besem, Annsophie Stratil, Claude Nkfusai, Helen Hawkings, Elizabeth Berryman, Helen Counihan, Blanka Homolova, Yakouba Zoungrana, Elvis Tanue, Glennis A. Tabe-Ebob, Bibiche Modjenpa Noukeme, Marcus Serna Rius, Alain Metuge, Isabelle Nganmou, Dorothy Achu, Samuel Wanji, LundiAnne Omam

Malaria Case Management by Community Health Workers in the conflict-affected communities of the South West Region of Cameroon

#### **Authors:**

Ayuk Ndip Elizabeth, Agbor Patrick Agbor, Tanue Elvis Asangbeng, Metuge Alain, Omam Esther Njomo

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Assessing the Impact of Community Case

Management of Malaria on Reporting Rates in Kisii

County: A Comparative Study

#### **Authors:**

ROWARTZ KEVIN, Hilary Ngeso, APPOLLONIA OMBIMA, Wayne Otieno

A simple pragmatic tool improved the documentation of severe malaria in a post-Ebola community in northern Sierra Leone

#### **Authors:**

Muhammed Afolabi, Philip Aiyeko, Hammed H. Adetola, Bomposseh Kamara, Bailah Leigh, Brian Greenwood

Empowering Community Health Workers: A Pivotal Role in Early Detection, Treatment, and Referral of Malaria and Febrile Illnesses in Rwanda

#### **Authors:**

Murebwayire Adele, Kabera Michee, Aimable Mbituyumuremyi, Kayonga Eugene, Mugabo Hassan, Eric Remera, Aline Uwimana, Jean Claude S. Ngabonziza

Malaria Admission is not Synonymous with Severe Malaria: Findings from a Cross-sectional Review of Malaria Admissions in Ghana, 2023

# **Authors:**

Paul Boateng, Nana Yaw Peprah, Dora Dadzie, Alex Asamoah, Abdul Gafaru Mohammed, Benjamin Oteng, Grace Adza, Joel Narh Balbaare, Lily Sampong, Wahjib Mohammed, Keziah L. Malm

Impact of Implementation of Community Case
Management of malaria strategy on the facility
workload in Busia County, Kenya

#### **Authors:**

Tonny wambua, Charlotte Pahe, Frankline Okome, Onyango Oluoch

# Scientific Session N° 17

Date/ Time: Wednesday, April 24, 10:30 AM-12:00 AM Room: AD1

Category: Pathogenesis and Co-Morbidities 1

Elevated ferritin, severe malaria, and acute kidney injury

#### **Authors:**

Caroline Kazinga, Ruth Namazzi, Anthony Batte, Robert O. Opoka, Chandy C. John, Andrea L. Conroy

CO-MORBID MALARIA AND HYPERTENSIVE
DISORDERS OF PREGNANCY AMONG PREGNANT
WOMEN IN SOUTH EASTERN NIGERIA

#### **Authors:**

Alexobi Deborah Ifeatu, Ofiah Anulika Jennifer, Chukwuocha Uchechukwu Madukaku, Bosede Ayoola Oluwaseun

Diabetes, metabolic syndrome, and the risk of severe malaria: Results from two hospital settings in Cameroon

#### Authors

George Awungafac, Leila Ingrid Angeline Avezo'o Libon, Michel Nouboum, Caroline Ngunyi Gesu, Anna Fì\_rnert, Simeon Pierre Choukem, Katja Wyss

Increased risk of malaria disease severity associated with Plasmodium vivax among patients living in high malaria incidence regions in Senegal

#### **Authors:**

Aissatou Diagne, Babacar Souleymane Sambe, Helene Ataume Mawounge Diatta, Folly Mawulolo Gaba, Ibrahima Sarr, Arona Sabine Diatta, Serigne Ousmane Mbackei Diaw, Rokhaya Sané, Ousmane Sadio, Ines Vigan-Womas, Babacar Mbengue, Makhtar Niang

Malaria parasitaemia and its impact on some biological parameters among children less than 16 years old attending the Nkwen District Hospital

# **Authors:**

Njewa Bertrand, Ebanga Echi Joan Eyong, Ebai Bissong Calvin, Theresia Nkuo-Akenji

Study of Serum Calcium Level and QTc interval as prognostic maker in Malaria

#### **Authors:**

Singh Veer Bahadur, Singh Saranshi, Tundwal Divyanshi, SinghSaransh

The impact of falciparum malaria infection on the brain: new findings from an Indian cohort

#### **Authors:**

Samuel Wassmer, Sanjib Mohanty, Praveen K. Sahu, Himanshu Gupta, Angelika Hoffmann

# Scientific Session N° 18

Date/ Time: Wednesday, April 24. 1:30 PM - 3:00 PM Room: AUD

Category: Malaria in Pregnancy 2

FACTORS INFLUENCING KNOWLEDGE, ATTITUDES AND PERCEPTIONS OF MALARIA IN PREGNANCY AMONG PREGNANT WOMEN ATTENDING ANTENATAL CLINICS AT HOSPITALS IN OKITIPUPA, ONDO STATE, NIGERIA

#### **Authors:**

Adeyemi O. Omoge

Evaluation of the performances of the Eliminate malaria Pf rapid diagnostic test among pregnant women from Bobo-Dioulasso, Burkina Faso

#### **Authors:**

Cissé M., Sirima C., Drabo H., Soulama A., Anshah F., Aniweh Y., Awandare G.A.

Antibodies to VAR2CSA acquired outside of pregnancy are frequently observed in Ethiopia

#### **Authors**:

Uwa Iyamu, Meshesha Tsigie, Kiran Bhogal, Anthony K. Mbonye, Amanda Maestre, Eliana Arango, Sindew Mekasha Feleke, Stephanie K. Yanow.

An ethnographic study of factors influencing the use of insecticide treated nets and uptake of intermittent preventive treatment with sulfadoxine-pyrimethamine (IPTp-SP) among pregnant women in southern Ghana

#### **Authors:**

Matilda Aberese-Ako, Pascal Magnussen, Gifty D. Ampofo, Harry Tagbor Determinants of low coverage of Sulfadoxine-Pyrimethamine 3rd dose in pregnant women in Haut-Katanga (case of the city of Lubumbashi, Mumbunda Health Zone)

#### **Authors:**

André Ngombe Kaseba, Marie Lydia K. Eric Mukomena

The effect of intermittent preventive treatment of malaria in pregnancy (IPTp) on the maternal intestinal microbiome and downstream impact on fetal growth.

#### **Authors:**

Patricia Hunter, Godwin Tembo, Lily Gates, Crispin Mukerebe, Mwayiwawo Madanitsa, Hellen C Barsosio, Daniel T R Minja, John P A Lusingu, Eric D Onyango, Dagmar Alber, Jenny Hill, James Dodd, Ulla Ashorn, Julie R Gutman, Nigel Klein, Feiko O ter Kuile, R Matthew Chico

Quantifying the impact of malaria in pregnancy on maternal anaemia and its associated burden across Africa

#### **Authors:**

Sequoia I Leuba, Robert Verity, Julie R Gutman, Kassoum Kayentao, Simon Kariuki, Feiko O ter Kuile, Mwayiwawo Madanitsa, James Dodd, Carole Khairallah, Khalifa Bojang, Daniel J Weiss, and Patrick G.T. Walker

# Scientific Session N° 19

**Date/ Time:** Wednesday, April 24. 1:30 PM - 3:00 PM **Room:** MH3

Category: Malaria Epidemiology 1

A gravity model approach to standardized health facility catchment population estimation

#### **Authors:**

Manny Lewis Justin Millar, Adam Bennett, John Miller, Hannah Slater

Bayesian Geostatistical Modeling of Malaria Indicator Survey Data in Nigeria

# **Authors:**

Olakiigbe, Abiodun .Kanmi., Adeogun Adedapo., Ayodele Samuel Babalola, Adeola Yetunde Olukosi

Contributing to mass drug administration delivery for Plasmodium falciparum malaria incidence reduction in

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# southern Senegal: a modelling approach

#### **Authors:**

Khady Ndiaye, El hadji Samba Diop, Mor Absa LOUM

Forecasting volumes of Artemisinin Combination Therapies under various antimalarial resistance scenarios and mitigation strategies based on the innovative use of treatments in sub-Saharan Africa.

#### **Authors:**

Salome Muchiri, Oliver J. Watson, Graziella Scudu, Abby Ward, Tasmin Symons, Punam Amratia, Celine Audibert, Pierre Hugo, Theodoor Visser, Peter W. Gething, Aaron M. Woosley

Increasing case management coverage reduces malaria prevalence across endemic settings

#### Authors:

Flavia Camponovo, Aur élie Jeandron, Laura Skrip, Monica Golumbeanu, Clara Champagne, Theodoor Visser, Arnaud Le Menach, Justin M Cohen, Emilie Pothin

Risk of selection and timelines for the continued spread of artemisinin and partner drug resistance in Africa

# **Authors:**

Oliver J. Watson, Salome Muchiri, Graziella Scudu, Abby Ward, Gina Cuomo-Dannenburg, Tom Brewer, Aaron M. Woolsey, Peter Winskill, Lucy Okell

Two Decades of Malaria Control in Malawi: Geostatistical Analysis Of The Changing Malaria Prevalence from 2000-2022.

#### **Authors:**

Donnie Mategula, Judy Gichuki, Michael Give Chipeta, James Chirombo, Patrick Ken Kalonde, Austin Gumbo, Michael Kayange, Vincent Samuel, Colins Kwizombe, Gracious Hamuza, Alinafe Kalanga, Dina Kamowa, Colins Mitambo, Jacob Kawonga, Benard Banda, Jacob Kafulafula, Akuzike Banda, Halima Twabi, Esloyn Musa, Maclear Masambuka, Tapiwa Ntwere, Chimwemwe Ligomba, Lumbani Munthali, Melody Sakala, Abdoulaye Bangoura, Atupele Kapito-Tembo, Nyanyiwe Masingi Mbeye, Don P Mathanga, Dianne J Terlouw

# Scientific Session N° 20

Date/ Time: Wednesday, April 24. 1:30 PM - 3:00 PM Room: AD1

Category: Capacity Building 1

Forecasting need and demand for critical malaria commodities in sub-Saharan Africa to anticipate potential market disruptions

#### **Authors:**

Jessica Floyd1, Monica Golumbeanu, Tasmin Symons, Punam Amratia, Graziella Scudu, Ioana Ursu, Salome Muchiri, Oliver J. Watson, Abby Ward, Tara Seethaler, Peter W. Gething, Emilie Pothin, Aaron M. Woolsey

#### Title:

Capacity building in application of nanoscience and nanotechnology in research and development for combating malaria and other poverty-related diseases in Africa

# **Authors:**

Hulda Swai

Leadership and management capacity building: Addressing gaps in NMCPs through an integrated training programme to reach elimination targets

### Authors:

Taneshka Kruger, Jaishree Raman, Danielle Meyerowitz, Christiaan de Jager

Assessment of Quality Management Improvement Approach (QMIA): An opportunity to strengthen malaria supply chain management in Rwanda.

# **Authors:**

Jean Claude Kabera, Aline Uwimana, Jeanine Condo

Southern African faith leaders building broad-based and high-level national support for malaria elimination through FLAME (Faith Leader Advocacy for Malaria Elimination)

#### Authors

Amu Mudenda, Lesley-Anne Stehle, Joao Lino Rafael

Leadership capacity building of African women in the control of malaria and vector-borne diseases through

training on effective communication and professional development

## **Authors:**

Rosalia Joseph, Jessy Goupeyou-Youmsi, Christina Sudi, Ghislaine Ouedraogo-Ametchie, El Hadji Amadou Niang, Prosper Chaki, Emma Orefuwa, Damaris Matoke-Muhia

Partial artemisinin resistance in Africa: networking for capacity building and surveillance

#### **Authors:**

Welmoed van Loon, Clement Igiraneza, Felix Habarugira, Christian Ngarambe, Barbara Castelnuovo, Amrei von Braun, Tafese Beyene Tufa, Torsten Feldt, Richard Odame Phillips, Michael Ramharter, Foday Janneh, Stefanie Theuring, Esto Bahizire, Claude Mambo Muvunyi , Frank Mockenhaupt, Jules Minega Ndoli

# Scientific Session N° 21

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:30 PM **Room:** AUD

Category: Malaria Epidemiology 2

Assessing the insecticidal susceptibility status of Anopheles gambiae complex to pyrethroid and organophosphate in Osun State, Nigeria.

# **Authors:**

Lateef .O. Busari, Olabanji .A. Surakat1, Kamilu .A. Fasasi, Adeogun .A. Olufemi, Ganiyu .O. Olatunde, Monsuru .A. Adeleke

Malaria Incidence in an Era of Drug Resistance and Pandemics: A Spatiotemporal Analysis of Antimalarial Resistance in Uganda

# **Authors:**

Stephanie van Wyk, Victor Asua, Gerald Rukundo, Karen Barnes, Innocent Karangwa, Moses R. Kamya, Joaniter Nankabirwa

Malaria Risk Stratification in an Elimination Setting, Ghana, 2022

#### **Authors:**

Wahjib Mohammed, Samuel Oppong, Abdul Gafaru Mohammed, Abraham Nartey, Duvor Ferguson, Paul Boateng, John Tetteh Baah Nana Yaw Peprah, Keziah L. Malm Malaria surveillance at antenatal care to decode local patterns in seasonal transmission trends "Ó Tanzania, 2016-2022

#### **Authors:**

Joseph T. Hicks, Frank Chacky, Sijenunu Aaron, Khalifa Munisi, Samwel L. Nhiga, Julie Gutman, Patrick GT Walker

Malaria vulnerability of children over 5 years compared to children under 5 years in different malaria transmission settings in Burkina Faso

#### Authors

Bance G, Debe S, Tarama C, Tiendrebeogo F, Some H, Kinda R, Siribie M, Valea I, Ouedraogo S, Gansane A

Plasmodium species composition and diversity of P. falciparum isolates in patients with suspected clinical cases of malaria in Nnewi District, Southeast Nigeria-a malaria parasite infection survey.

#### **Authors:**

Moses N. Ikegbunam, Vincent C. Duru, Nnamdi Azikiwe, Obidi O Nwasolu, Ushie S Nkpeh, Ezeagwuna A. Dorothy, Oriero C Eniyou, Alfred Amambua

Strengthening Malaria Surveillance In Rwanda: A tailored assessment in the context of emerging challenges

#### **Authors:**

Noella Bigirimana, Emmanuel Hakizimana, Aline Uwimana, Michee Kabera, Christian Nsanzabana, Emilie Pothin, Manuel Hetzel. Monica Golumbeanu

# Scientific Session N° 22

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:00 PM **Room:** MH2

**Category:** Vector Biology and Control 5

The Effect of Repeated Washing of the Royal guard, Interceptor G1 and G2 Nets on blood feeding behavior and Survival of Anopheles Mosquitoes

#### **Authors:**

Banda, J. S., Ndalama, O., Kambiring'oma, S., Linno, R., Mzilahowa, T and Bandason, E.

Microsporidia MB, a promising vector control tool found in Anopheles coluzzii. in rice cultivation areas in Benin

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Genevieve Tchigossou, Danahé Adanzounon, Harriet Kinga, Marie Gouété, Eric Tossou, Pierre Sovegnon, Romaric Akoton, Godfrey Nattoh, Rousseau Djouaka

Transmission of transgenic mosquito-killing fungi during copulation for Malaria control perspectives

#### **Authors:**

Etienne Bilgo, Brian Lovett, Abel Souro Millogo, Issiaka Sare, Edounou Jacques Gnambani, Raymond St. Leger, Abdoulaye Diabaté

Linking the risk for human of receiving infected bites of Anopheles gambiae (s.l.) to his behaviours in IRS regions of Northern Benin

#### **Authors:**

Albert Sourou Salako,Germain Gil Padonou, Esdras Odjo, Keller Alphonse Konkon,Mahouton David Zougb édji, Arthur Sovi, and Martin Codjo Akogb éto

Combining pyrethroid-piperonyl butoxide nets and indoor residual spraying with clothianidin improves control of pyrethroid-resistant malaria vectors: an experimental hut trial in southern Benin

# **Authors:**

Thomas Syme, Juniace Ahoga, Abel Agbevo, Corine Ngufor

# Scientific Session N° 23

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:30 PM **Room:** MH3

Category: Malaria in Pregnancy 3

Acquisition of anti-adhesion antibodies over successive pregnancies.

# **Authors:**

Almahamoudou Mahamar, Moussa Traore, Bruce Swihart, Oumar Attaher, Bacary Soumana Diarra, Gaoussou Santara, Djibrilla Issiaka, Amadou Barry, Youssoufa Sidibé, Yahia T. Dicko, Sekouba Keita, Oulematou Ndiaye, Alassane Dicko, Patrick E Duffy, Michal Fried

Evaluation of availability and bio-efficacy of Long-Lasting Insecticide-treated mosquito Nets (LLINs) for pregnant women in maternities from Benin

#### **Authors**

Armel DJENONTIN, Aziz BOURAIMA, Christophe SOARES,

Marc FIOGBE, St éphanie MAHAME, Cyriaque AFFOUKOU and Gilles COTTRELL

Non-clinical studies to support the safe and effective use of Cabamiquine during pregnancy

#### **Authors:**

Andreas Gado, Philip Hewitt, Peter Ballard, Tobias Hyun Ho Baeurle, Claude Oeuvray, Thomas Spangenberg, Claudia Demarta-Gatsi

Prevalence of hypoglycaemia among malaria-infected pregnant women attending antenatal clinic in Enugu, Enugu State, Nigeria

#### **Authors:**

Elijah Sunday Okwuonu, Nzubechukwu Promise Ibe, Olanrewaju Abosede Mgboji, Uchenna Athanasius Ubaka, Chinaemerem Precious Ani, Chigozie Godwin Nwosu Ikem Chris Okoye

Increasing uptake of sulfadoxine-pyrimethamine for intermittent preventive treatment of malaria in pregnancy using self-care interventions: Evidence from facility data in Suna West and Kisumu Central sub-counties, Kenya.

# Authors

Oscar Okoth, Dennis J. Matanda, Brenda Otieno, Joshua

Investigating role for non-VAR2CSA antibodies in protection from placental malaria

# **Authors:**

Yvonne Dube

# Scientific Session N° 24

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:30 PM **Room:** MH4

Category: Control and Elimination 2

Transforming landscapes and livelihoods: The impact of the Shire Valley irrigation project on agricultural practices and community health in Chikwawa District, Malawi

#### **Authors:**

Blessings Msango Kapumba, Federica Guglielmo

Demographic and socio-economic factors affecting bed net ownership, usage, and malaria transmission

among adult patients seeking healthcare in two Ghanaian urban cities.

#### **Authors:**

Ellis Kobina Paintsil, Enoch Boadi, Anthony Dwamena, Bless Hayford Addo, Agyei Kumi, Kwasi Obiri Danso and Linda Aurelia Ofori

Bed net use, misuse, and misconception: a community-based cross-sectional study in five regions of mainland Tanzania.

#### **Authors:**

Ruth B. Mbwambo, Filbert Francis, Daniel P. Challe, Gace K. Kanyankole, Misago D. Seth, Rashid A. Madebe, Daniel A. Petro, Rule Budodo, Angelina J. Kisambale, Gervas A. Chacha, Ramadhan Moshi, Salehe S. Mandai, Dativa Pereus, Catherine Bakari, Sijenunu Aaron, Daniel Mbwambo, Abdallah Lusasi, Stella Kajange, Samwel Lazaro, Ntuli Kapologwe, Celine I. Mandara, Deus S. Ishengoma

Did the prolonged residual efficacy of clothianidin products lead to a greater reduction in vector populations and subsequent malaria transmission compared to the shorter residual efficacy of pirimiphos-methyl?

# **Authors:**

Esdras Mahoutin Odjo, Armel Djenontin, Albert Sourou Salako, Gil Germain Padonou, Clement Agbangla, Martin C. Akogbeto

# Scientific Session N° 24

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:30 PM **Room:** MH4

Category: Control and Elimination 2

Pharmacokinetics of single low dose primaquine to support malaria elimination in Ugandan and Congolese children with acute falciparum malaria

#### **Authors:**

Mavuto Mukaka, Marie Onyamboko MA, Peter Olupot-Olupot, Julie Nguyen Pouplin, Thoopmanee Kaendiao, Chiraporn Taya, Caterina Fenallo, Walter R. Taylor

Assessing the effectiveness of dual-active ingredient long-lasting insecticidal nets (LLINs) on major malaria

vectors: a secondary analysis of a three-year clusterrandomized controlled trial in rural Tanzania

#### **Authors:**

Manisha A. Kulkarni, Louisa A. Messenger, Mohamed Jumanne, Jackline Martin, Elizabeth Mallya, Eliud Lukole, Jacklin F. Mosha, Oliva Moshi, Mark Rowland, Alphaxard Manjurano, Franklin W. Mosha, Natacha Protopopoff

OPTIMIZING MALARIA PREVENTION
INTERVENTIONS THROUGH INTEGRATED
CAMPAIGNS: CASE STUDY OF PILOT INTEGRATED
SMC AND ITN CAMPAIGNS IN KWARA STATE,
NIGERIA.

#### Author

Orezi Adhekoyibo, John Ocholi, Christopher Dangana, Bashir Oyetunji, Fatima Ali, Sonachi Ezeiru, Emmanuel Obi, Jean Yves Mukamba, Mary Esema, Issa Kawu, Godwin Ntadom, Yves Cyaka, James Ssekitookeko, Jo-angeline Kalambo

#### **Scientific Session N° 25**

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:30 PM **Room:** AD12

Category: Phytomedicines and Pharmacology 2

Malaria Drug Discovery at Novartis: Enabling disease elimination with novel antimalarial drugs

#### Authors

Michael Robinson, Tom Kirrane, Lauren Holder, Erka Flannery, Armand Guiguemde, Manuel Saldivia, Jonathan Gable, Srinivasa Rao, Manju Ujjini, Thierry Diagana

Isolation, Purification and Identification of Antimalarial Compounds from Mucuna pruriens leaves

#### Authors:

Okafor, Azubuike Ikechukwu, Salami, Ugochi Victory, Utake, Oghenemine Obukowho

Safety and tolerability of dihydroartemisininpiperaquine for seasonal malaria chemoprevention in children aged three to six months in Karamoja region, Uganda

#### Authors

Richard Kajubi, Anthony Nuwa, Craig Bonnington, Kevin Baker, Musa Odongo, Maureen Nakirunda, Tonny Kyagulanyi, Jane Nabakooza, David Salandini, Jimmy Opigo, Godfrey

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Magumba, Jane Achan, Damian Rutazaana, Denis Rubahika, James Tibenderana

Introducing a Phase 3 of KLU156, a non-artemisinin combination, compared to Coartem®(artemether-lumefantrine) for efficacy and safety in uncomplicated P. falciparum malaria

#### **Authors:**

I Sagara, C Risterucci, B. Fofana, G Su, R. Pathan, F Martinelli, V Unterkoefler, M Cousin, Y Brunner, K Csermak, AC Marrast, M El Gaaloul, C Winnips, S Sirima, JB Ouedraogo, R. Manego, G. Mombo-Ngoma, A.A. Djimde, the WANECAM2 consortium

A study on the toxicity and Anti-plasmodial activity of Hymenocardia acida in northern Nigeria

#### **Authors:**

Muhammad, R.H., Datiri, M.I., Okeke, C.C.

Optimization of in vivo antimalarial efficacy of combinations of Artemisia annual., Vernonia amygdalina Del, and Microglossa pyrifolia (Lam.) Kuntze using factorial design

#### **Authors:**

Jimmy R. Angupale, Clement O. Ajayi, Jonans Tusiimire, Ndidi C. Ngwuluka

Pharmacokinetics of ganaplacide and lumefantrine in patients with P. falciparum malaria: analysis of data from a multinational Phase 2 study

#### **Authors:**

R Sangana, Celine Risterucci, Cornelis Winnips, Guoqin Su, Myriam El Gaaloul, Bernhards Ogutu, Adoke Yeka, Sylvia Kusemererwa, Halidou Tinto, Andre Offianan Toure, Chirapong Uthaisin, Amar Verma, Afizi Kibuuka, Moussa Lingani, Carlos Lourenço, Ghyslain Mombo-Ngoma, Videlis Nduba, Tiacoh Landry N'Guessan, Gu étawendé, Job Wilfried Nassa, Mary Nyantaro, Lucas Otieno Tina, Piyoosh K Singh, Bakary Fofana, Martin Peter Grobusch

# Scientific Session N° 26

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:30 PM **Room:** AD1

Category: Insecticide Resistance 2

Evolution of the Vgsc-1014, Ace1 and Gste2 Mutations and Their Potential Impact on the Use of insecticides

in IRS for Controlling Anopheles gambiae s.l. the Major Malaria Mosquito in Senegal

#### **Authors**

Moussa Diallo, Ebrima SM Kolley, Abdoulaye Kane Dia, Fatoumata Seck, Jarra Manneh, Badara Samb, Seynabou Macote Diehdiou, Pape Cheikh Sarr, Ousmane Sy, Oumar Gaye, Ousmane Faye, Lassana Konate, Benoit Sessinou Assogba, El Hadji Amadou Niang

# Scientific Session N° 26

**Date/ Time:** Wednesday, April 24. 5:00 PM - 6:30 PM **Room:** AD1

Category: Insecticide Resistance 2

A single amino acid change G454A of CYP9K1 gene is driving pyrethroid resistance in the major African malaria vector Anopheles funestus reducing bed nets efficacy

#### **Authors:**

Carlos S. Djoko Tagne, Mersimine F. M. Kouamo, Magellan Tchouakui, Abdullahi Muhammad, Leon J.L. Mugenzi, Nelly M.T. Tchatchou, Jack Hearn, Mbouobda H. Desire, Sulaiman S. Ibrahim, Charles S. Wondji

# Scientific Session N° 26

Date/ Time: Wednesday, April 24. 5:00 PM - 6:30 PM Room: AD1

Category: Insecticide Resistance

Identification of insecticide resistance markers in Anopheles arabiensis and Anopheles gambiae from Kenya and Benin using Weighted Gene Correlation Network Analysis.

#### Authors

Cynthia Awuor Odhiambo, Dieunel Derilus, Lucy Mackenzie Impoinvil, Diana Omoke, Helga Saizonou, Stephen Okeyo, Nsa Dada, Nicola Mulder, Dorothy Nyamai, Steven Nyanjom, Audrey Lenhart, Luc S. Djogb énou, Eric Ochomo

Impact of agrochemical pollutant mixtures on the selection of insecticide resistance in the malaria vector Anopheles gambiae. Insights from experimental evolution and transcriptomics

#### **Authors:**

Christabelle G. Sadia, Jean-Marc Bonneville, Marius G. Zoh, Behi K. Fodjo, France-Paraudie A. Kouadio, Sebastien K. Oyou, Koudou G. Benjamin, Adepo-Gourene A. Beatrice, Stephane Reynaud, Jean-Philippe David, Chouaibou S. Mouahamadou

Genomic surveillance of malaria vectors in the Kassena-Nankana districts of Northern Ghana 2016-2018

#### **Authors:**

Lucas N. Amenga-Etego, Enock K. Amoako, Collins M. Morang'a, Chris S. Clarkson, Isaiah Debrah, Joyce M. Ngoi, Kukua Thompson, Victor Asoala, Cristina Ariani, Yaw Aniweh, Dominic P. Kwiatkowski, Keziah Malm, Alistair Miles, Gordon A. Awandare

Mechanism of insecticide resistance derived from the binding mechanism between odorant binding protein (OBPjj7a) and Deltamethrin

#### **Authors:**

Kibaba C. Nabukuye , Mark Wamalwa, Senagi, Kennedy, Salvador D. Atagong, Eric Ibrahim, Grace Aduvukha, Komi M. Agboka, Sheila Wafula, Mitau M. Muithi, Chelsea M. Kilonzo, Franck B. N. Tonle, Namikelwa, D. Nabucha, Lorna Chepkemoi, Karanja P. Gitu, Joseph D. Obukosia , Juliet A. Onditi, Oyoo J. Akinyi , Emily Kimathi, Marianne E. Sinka, Henri E.Z. Tonnang

Non-Coding RNAs Potentially Involved in Pyrethroid Resistance of Anopheles funestus Population in Western Kenya

# **Authors:**

Isaiah Debrah, Daibin Zhong, Maxwell G. Machani, Ming-Chieh Lee, Linda E. Amoah, Andrew K. Githeko, Yaw A. Afrane, Guiyun Yan

Constrasting association of Asaia spp. with pyrethroid resistance escalation in the malaria vectors

Anopheles funestus and Anopheles gambiae

# **Authors:**

Fleuriane Metissa Djondji Kamga, Leon M. J. Mugenzi, Magellan Tchouakui, Maurice Marcel Sandeu, Claudine Grace Tatsinkou Maffo , Maximilienne Ascension Nyegue and Charles S. Wondji

# Scientific Session N° 27

**Date/ Time:** Thursday, April 25. 10:00 AM - 11:30 AM **Room:** AUD

Category: Drug Resistance 2

Diving into Malaria's Mysteries: How Amodiaquine Shapes Genetic Mutations in the 'CorA-like Mg2+ Transporter' of Plasmodium berghei ANKA

#### **Authors:**

Brenda Muriithi, Jean Chepngetich, Beatrice Gachie, Kevin Thiong'o, Jeremiah Gathirwa, Francis Kimani, Peter Mwitari, Daniel Kiboi

Molecular markers of antimalarial resistance, an extension of therapeutic efficacy monitoring in Burkina Faso, 2021

#### **Authors:**

Casimire W TARAMA, Bajic, M, Rosillio S, Tiendrebeogo F, Sombie S, Debe S, Pierre-Louis E, Khan A, Patel DS, Kinda RN, Ganou A, Dianda F, Halidou T, Tougri G, Valea I, Plucinski M, Moriarty LF, Gansane A

Evidence for changes in the efficacy of lumefantrine against African Plasmodium falciparum isolates

#### **Authors:**

Colin J. Sutherland, Sade Pratt, Donelly A. van Schalkwyk

Impact of Parasite Genomic Dynamics on the Sensitivity of Plasmodium falciparum Isolates to Piperaquine and other Antimalarial Drugs

#### **Authors:**

Dancan M. Wakoli, Bartholomew N. Ondigo, Douglas O. Ochora, Joseph G. Amwoma, Winnie Okore, Edwin M. Mwakio, Gladys Chemwor, Jackeline Juma, Raphael Okoth, Charles Okudo, Redemptah Yeda, Benjamin H. Opot, Agnes C. Cheruiyot, Dennis Juma, Amanda Roth, Benhards R. Ogutu, Daniel Boudreaux, Ben Andagalu, Hoseah M. Akala

Phenotypic assessment and genetic validation of molecular markers associated with drug resistance and ongoing selective sweeps in Senegal

#### uthors:

Katelyn Vendrely Brenneman, Mamy Yaye Die Ndiaye, Wesley Wong, Stephen Schaffner, Imran Ullah, Abdoulaye Tine, Mouhammad S, Tolla Ndiaye, Amy Gaye, Mame Fama

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Ndiaye, Mariama Toure, Nogaye Gadiaga, Aita Sene, Awa Bineta Deme, Baba Dieye, Mamadou Samb Yade, Khadim Diongue, Fatou Ba Fall, Doudou Sene, Medoune Ndiop, Ibrahima Diallo, Mame Cheikh Seck, Aida Sadikh Badiane, Jules Franì¤ois Gomis, Mouhamadou Ndiaye, Mamadou Alpha Diallo, Ibrahima Mbaye Ndiaye, Bronwyn Macinnis, Dyann Wirth, Daouda Ndiaye, Sarah Volkman.

# Ex-vivo ring-stage survival assay of Rwandan patient isolates

# **Authors:**

Jenna Zuromski, Neeva Wernsman Young, Gashema Pierre, Welmoed Van Loone, Rafael Oliveira, Tharcisse Munyaneza, Michael Ferdig, Corine Karema, Jean-Baptiste Mazarati, Jonathan J Juliano, Jeffrey A. Bailey

# Changes in ex vivo susceptibility of Plasmodium falciparum to antimalarials in eastern and northern Uganda over time

#### **Authors:**

Stephen Orena, Melissa D. Conrad, Martin Okitwi, Yoweri Taremwa, Patrick Tumwebaze, Oswald Byaruhanga, Thomas Katairo, Innocent Tibagambirwa, Jackson Asiimwe.R, Solmon Opio, Evans Muhanguzi, Gloria Cuu, Marvin Thompson, Damlao Charisse, Jennifer Legac, Shreeya Garg, Frida G. Ceja, Samuel L. Nsobya, Jeffrey A. Bailey, Roland A. Cooper, Philip J. Rosenthal

# Scientific Session N° 28

**Date/ Time:** Thursday, April 25. 10:00 AM - 11:30 AM **Room:** MH1

Category: Malaria Epidemiology 3

Contributory Factors to Malaria Deaths in Ghana, 2023; Findings from Online Death Audit

#### **Authors:**

Paul Boateng, Alexander Asamoah, Dora Dadzie, Abena Naakie Nartey, Benjamin Oteng, Wahjib Mohammed, George Asumah Adu, Ferguson Duvor, Ihsan Abubakari, Nana Yaw Peprah, Keziah Laurencia Malm

Design strategies to maintain power in epidemiological malaria cluster randomised trials with large between-cluster heterogeneity: a meta-analysis

#### Authors:

Joe Biggs, Joe Challenger, Thomas Churcher, Jackie Cook

Half-decade under the malaria microscope: Assessing trends in Rwandan population and Children under 5 from 2018 to 2022

#### **Authors:**

Arlette Umugwaneza, Mathijs Mutsaers, Jean Claude Semuto Ngabonziza, Johanna Helena Kattenberg, Christian Nsanzabaganwa, Aline Uwimana, Hassan Mugabo, Theogene Kubahoniyesu, Michee Kabera, Jeannine Condo, Emmanuel Hakizimana, Anna Rosanas-Urgell Rwanda Biomedical Center, Kigali, Rwanda Centre for Impact Innovation and Capacity Building for Health Information and Nutrition Biomedical Sciences Department, Institute of Tropical Medicine Antwerp, Antwerp, Belgium Correspondence: arletteumu@gmail.com

Impact of Malaria scorecard implementation on LLINs coverage among pregnant women through ANC services in Rwanda

#### **Authors:**

Ndagijimana Deogratias, Kayonga Eugene, Habanabakize Epaphrodite, Nshimiyimana Aaron, Eric Remera

Quantifying the value of entomological data collection for programmatic decision-making on malaria control in sub-Saharan Africa

#### **Authors**

Nora Schmit, Hillary M Topazian, Matteo Pianella, Giovanni D Charles, Peter Winskill, Penelope A Hancock, Ellie Sherrard-Smith, Katharina Hauck, Thomas S Churcher, Azra C Ghani.

# Tracking coverage of malaria control in Africa

# **Authors:**

Tasmin Symons, Adam Saddler, Susan Rumisha, Paulina Dzianach, Amelia Bertozzi-Villa, Jailos Lubinda, Mauricio Van Den Berg, Punam Amratia, Joseph Harris, Camilo Vargas, Daniel Weiss, Peter Gething

Updating malaria risk map of Kenya by pre-service Diagnosis of the Malaria Asymptomatic individuals aged between 18-26 years.

# Authors:

Charles Ekkuttan, John Lugonza, Juliana Munyao, Maurine Mwalo, Edwin Mwakio, Gladys Chemwor, Jackline Juma, Charles Okudo, Raphael Okoth, Benjamin Opot, Dennis Juma, Hoseah Akala, Kirti Tiwari, Elly Ojwang, Eric Garges, Timothy Egbo

# Scientific Session N° 29

**Date/ Time:** Thursday, April 25. 10:00 AM - 11:30 AM **Room:** MH3

Category: Treatment and Case Management 2

Leveraging Village Health Nutrition Day Plus to improve coverage of malaria services amongst children under five in Tanzania: A case study of Kibuye & Kibingo villages.

#### **Authors:**

Benson Mringo, Akinola Shonde, Joshua Gwambegu, Evelyn Johansen, Agapiti Manday, Joseph Lewinski

Assessment of malaria diagnosis and treatment among patent medicine vendors in a Nigerian State: a mixed method study

# **Authors:**

Chinyere .C. Okeke, Nkolika .P. Uguru, Ruqayyah .H. Muhammad

Adherence to Malaria Case Management Guideline in Afar region , Ethiopia, 2023

# **Authors:**

Fentahun Agegnehu, Kasim Mohammed, Aman Yesuf

Malaria testing and treatment in Benin's private sector: results from ACTwatch Lite 2023

# **Authors:**

P Bouanchaud, M Accrombessi, K Woolheater, C Zinsou, G Guedegbe, I Kikissagbe, Y Chabi, C Affoukou

PERCEPTION, PRACTICE AND PREDICTORS OF THE CURRENT MALARIA PROTOCOL AMONG HEALTHCARE WORKERS IN IGBO-ORA

# **Authors:**

Oluwawapelumi Akin-Ajani, Olusola Agbana, Adedapo Adegbite, Oluwadabira Adewara, Goodness Adedigba, Amarachi Anyiam, Peace Adewumi, Abdulqudus Ajibade, Rofiat Adepoju, Benjamin Adekunle, David Akoki, Joshua Alabi

A cluster-randomized trial of client and provider directed financial interventions to align incentives with appropriate case management in private medicine retailers: results of the TESTsmART Trial in Lagos, Nigeria and Western Kenya

#### **Authors:**

T. Visser, J. Laktabai, E. Kimachas, J. Kipkoech, D. Menya, D. Arthur, Y. Zhou, T. Chepkwony, L. Abel, E. Robie, M. Amunga, G. Ambani, P. Uhomoibhi, N. Ogbulafor, B. Oshinowo, M. Woldeghebriel, E. Garber, T. Olaleye, O. Ogunsola, N. Eze, L. Nwidae, P. Mudabai, J.A. Gallis, C. Fashanu, I. Saran, A. Woolsey, E.L. Turner, W. Prudhomme O'Meara

Concordance between reports of ACT consumption and treatment of uncomplicated malaria cases using routinely reported surveillance data in Cuando Cubango, Angola

#### **Authors:**

Valérian Turbé, Jose Franco Martins, Fernanda Guimaraes, Sandra Silva, Manzambi Ferreira, Mario Dumbo Hossi, Dominic Lucero, Julia Montana Lopez, Cristiano Almeida, Rafaela Guedelha Cardao, Abigail Ward

# Scientific Session N° 30

**Date/ Time:** Thursday, April 25. 10:00 AM - 11:30 AM **Room:** MH4

Category: Malaria Genomics 1

Genetic differentiation of Plasmodium vivax Duffy Binding Protein in Ethiopia and comparison with other geographical isolates

#### Authors:

Abnet Abebe, Cheikh Cambel Dieng, Sisay Dugassa, Didier Menard, Eugenia Lo, Lemu Golassa

Combining multiple methods of next generation sequencing enhances understanding of insecticide resistance mechanisms in permethrin resistant An. coluzzii displaying reduced PBO-synergy from Maferinyah, Guinea.

# **Authors:**

Bethanie Pelloquin, Moussa Sylla, Mark Rowland, Thomas Walker, Noboru Minakawa, Louisa Messenger

Geographical distribution of Plasmodium vivax Duffy Binding Protein copy number variation in Ethiopia and its association with parasitemia and Duffy genotype

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Yasin Nasir, Eshetu Molla, Getnet Habtamu, Solomon Sisay, Legesse Alamerie, Alemayehu Godana, Fitsum G Tadesse

Unravelling Plasmodium falciparum genetic diversity using targeted amplicon deep sequencing to guide elimination interventions in South Africa

#### **Authors:**

Andres Aranda-Diaz, Blazenka Letinic, Hazel B. Gwarinda, Gillian Malatje, Gerdalize Kok, Eric Raswiswi, Bryan Greenhouse, and Jaishree Raman

Performance of Molecular Inversion Probes and the MAD4HatTeR Amplicon Sequencing Panel for Detection of Plasmodium falciparum Mutations Associated with Antimalarial Drug Resistance

#### **Authors:**

Thomas Katairo, Victor Asua, Bienvenu Nsengimaana, Stephen Tukwasibwe, Francis Ddumba, Shreeya Garg, Shahiid Kiyaga, Monica Mbabazi, Kisakye D. Kabbale, Innocent Wiringilimaana, Caroline Mwubaha, Jerry Mulondo, Samuel L. Nsobya, Moses R. Kamya, Isaac Sewanyana, Andres, Aranda-Diaz, Philip J. Rosenthal, Bryan Greenhouse, Jeffrey A. Bailey, Jessica Briggs, Melissa D. Conrad

Genetic Variation in P. falciparum Invasion Ligands and Their Cognate Human Receptor Variants in Malaria Cases From The Gambia

# **Authors:**

Nora Nghochuzie Nganyewo, Fatoumata Bojang, Eniyou C. Oriero, Ndey Fatou Drammeh, Mitchel Katsvanga, Gordon A. Awandare, Umberto D'Alessandro, Lucas N. Amenga-Etego, and Alfred Amambua-Ngwa

Genomic surveillance of Anopheles arabiensis in The Gambia reveals evidence of increased insecticide resistance in coastal populations Authors and institutions:

## **Authors:**

Fatoumata Seck, Jane N Mwangi, Chris Clarkson, Saadbouh Faal , Harouna Dit Soumare, Musa Jawara, Ebrima Jatta, Umberto D'Alessandro, Alfred A Ngwa, Alistair Miles, Kevin Opondo, Benoit S Assogba

# Scientific Session N° 31

**Date/ Time:** Thursday, April 25. 11:30 AM - 12:30 AM **Room:** AUD

Category: Chemoprevention 2

Could the utilization of the seasonal malaria chemoprevention channel in children improve coverage of intermittent preventive treatment in pregnant women in Mali and Burkina Faso?

#### **Authors:**

Joel D. BOGNINI, Jean-Baptiste N TAKPE, Biebo BIHOUN, Mahamadou DEMBELE, Kadiatou KOITA, Toussaint ROUAMBA, Sirima TRAORE, Efundem AGBORAW, Dario SCARAMUZZI, Eve WORRALL, Jenny HILL, Valerie BRIAND, Halidou TINTO, Kassoum KAYENTAO

Understanding and maximizing the community impact of Seasonal Malaria Chemoprevention: A randomized controlled trial in a high malaria burden setting

#### **Authors:**

Yaro JB, Serm é, Barry A, Ouedraogo A, Moreno M, Gmeiner MByrne I, Ramjith J, Soulama I, Grignard L, Soremekun S, Koele S, ter Heine R, Ouedraogo AZ, Sawadogo J, Sanogo E, Ouedraogo IN, Hien D, Sirima SB, Bradley J, Bousema T, Drakeley C, Tiono AB Yaro Jean Baptiste, Barry Aissata Ouedraogo Alphonse Byrne IsabelRamjith Jordach Badoum S. Emilie Soulama Issiaka Grignard Lynn Soremekun Seyi Koele S Ter Heine R Ouedraogo Amidou Sawadogo Jean Ouedraogo IssaNebie Hien Denise Bradley John Sirima Sodiomon Bienvenu Bousema Teun Drakeley Chris Tiono Alfred Bewendtaore

Advancing Malaria Elimination with a digitized approach: the case of Seasonal Malaria Chemoprevention 2023 in Benin

Jean de Dieu Gbenoutin Bade; Richard Doussou; William Houndjo; Djawad Ramanou; Madi Ahle; Macoumba Toure; Julien Aïssan; Bradley Didier; Koffi Emmanuel Yovo; Kevin Njiru; Bocar Anne; Lundi-Anne Omam; Didier Agossadou; Olajumoke Adekeye; Cyriaque Afoukou; Achille Batonon

Caregivers Decision to Report Adverse Drug
Reactions among Children Receiving Seasonal
Malaria Chemoprevention in Implementing Regions,
2023

#### **Authors:**

Abdul Gafaru Mohammed, Keziah L Malm, Dora Dadzie, George Asumah, Ihsan Issaka, Paul Boateng, Joel Idun-Acquah, Stephen Appiah, Ashia Abubakari, Hilarius Paul Asiwome Kosi Abiwu, Nana Yaw Peprah

Improving the impact of seasonal malaria chemoprevention

#### **Authors:**

Paul Sondo, Toussaint Rouamba, B érenger Kabor é, Karim Derra, Gauthier Tougri, Florence Ou édraogo, Sabina Dahlstrì¬m Otienoburu, James Watson, Mehul Dhorda, Philippe J Gu érin, Halidou Tinto

#### Scientific Session N° 32

Date/ Time: Thursday, April 25. 11:30 AM - 12:30 AM Room: MH1

Category: Drug Resistance 3

Request for Antimalarial Medicines and Their Dispensing Without a Prescription in Community Pharmacies in Rwanda

#### **Authors:**

Amon Nsengimana, Emmanuel Biracyaza, Joyce Isimbi, Charles Uwambajimana, Jean Claude Hategekimana, V édaste Kagisha, Domina Asingizwe, and Jean Baptiste Nyandwi

Understanding drug pressure as a potential driver of spatiotemporal trends of sulfadoxine-pyrimethamine resistance in sub-Saharan Africa

# **Authors:**

Qinyu Li, Deus Ishengoma, Donal Bisanzio, Robert Verity, Gina Cuomo-Dannenburg, Andria Mousa, Oliver Watson, Cally Roper, Jonathan Juliano, Jeffrey Bailey, Lucy Okell

Evaluating the impact of implementing seasonal malaria chemoprevention on markers associated with drug resistance in Karamoja, northeastern Uganda

# **Authors:**

Richard Kajubi, Anthony Nuwa, Craig Bonnington, Kevin Baker, Musa Odongo, Tonny Kyagulanyi, Victor Asua, Chris Ebong, Jane Nabakooza, David Salandini, Jimmy Opigo, Maureen Nakirunda, Godfrey Magumba, Jane Achan, James Tibenderana Investigation into Two Biological Threats Posed by Plasmodium falciparum in Cameroon

#### **Authors:**

Innocent Ali, Emma Manning, Ana Chopo-Pizarro, Nfor Emmanuel Nfor, Tonshie Walters, Mbeng Bernice Felai, Manka'a Claudi, Andria Mousa, Peter Thelma Ngwa Niba, Emma F Hocke, Helle Hansson, Akindeh Mbuh Nji, Michael Alifrangis, Colin J Sutherland, Wilfred Mbacham, Cally Roper, Khalid B Beshir I

Investigating resistance markers to sulfadoxinepyrimethamine and amodiaquine in the context of seasonal malaria chemoprevention in Burkina Faso.

#### **Authors:**

Cheick Compaore, Craig Bonington, Kevin Baker, Paul Sondo, Sidzabda Kompaore, Gauthier Tougri, Halidou Tinto

# Scientific Session N° 33

**Date/ Time:** Thursday, April 25. 11:30 AM - 12:30 AM **Room:** MH2

Category: Immunology & Vaccines 3

Stage-dependent secretion of the Plasmodium falciparum homolog of T-cell immunomodulatory protein and association of plasma levels with suppression of Th1-type cytokine responses in infected residents of a malaria hyper-endemic area in Cameroon

# **Authors:**

Donkeu Wamen Christiane Josiane, Efange Noella, Atchombat Derrick, Emoh Cynthia, Fogang Balotin, Biabi Marie, Mbianda Chris-Marco, Cheteug Glwadys, Kemleu Sylvie, Eboumbou Carole, Regis Grailhe, Njiokou Flobert, Tracy Lamb, Ayong Lawrence,

Functional activity of the essential Plasmodium falciparum erythrocyte invasion complex protein PfCyRPA

# **Authors:**

Gerd Pluschke, Christopher J. Day, Paola Favuzza, Michael Filarsky, Michael P. Jennings

LIMITED GENETIC VARIATIONS OF THE RH5-CYRPA-RIPR INVASION COMPLEX IN PLASMODIUM FALCIPARUM PARASITE POPULATION IN SELECTED MALARIA-ENDEMIC REGIONS, KENYA.

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Harrison Waweru , Bernard N. Kanoi , Josiah O. Kuja , Mary Maranga , James Kongere, Michael Maina, Johnson Kinyua , Jesse Gitaka

A Pfs48/45-based vaccine to block Plasmodium falciparum transmission: phase 1, open-label, clinical trial

#### **Authors:**

M. Alkema, M.J. Smit, C. Marin-Mogollon, K. Tott é, G.J. van Gemert, M. van de Vegte-Bolmer, B.G. Mordmì¬ller, J.M. Reimer, K.L. Lì¬vgren Bengtsson, R.W. Sauerwein, T. Bousema, J. Plieskatt, M. Theisen, M.M. Jore, M.B.B. McCall

Monocytes and particularly non-classical ones lose their opsonic and non-opsonic phagocytosis capacity during pediatric cerebral malaria

#### **Authors:**

Bertin Vianou, Abomey Calavi, Jade Royo, Sébastien Dechavanne, Gwladys I Bertin, Akadiri Yessoufou, Sandrine Houze, Bichat Hospital, Jean Francois Faucher, Agnes Aubouy

# Scientific Session N° 34

**Date/ Time:** Thursday, April 25. 11:30 AM - 12:30 AM **Room:** MH3

# Category: Malaria in Pregnancy 4

Knowledge and Adherence to the National Malaria Treatment Guidelines for Malaria Diagnosis in Pregnancy among Health-Care Workers in Rangwe Sub County, Homabay County, Kenya

#### **Authors:**

Everlyne Mboga, Hassan Nyawanga

Evaluation of the malaria control strategy in pregnant women: a field study in Benin - STRAPA Project

# **Authors:**

Gilles COTTRELL, Armel DJENONTIN, St éphanie MAHAME, Marc FlOGBE, Christophe SOARES, Aziz BOURAIMA, Cyriaque AFFOUKOU

Factors associated with the occurrence of low birthweight, in Burkina Faso: results from a crosssectional survey in the health district of Yako 2019-2020

#### **Authors:**

Moussa Lingani, Serge H. Zango, Serge Ouoba, Innocent Val éa, Hermann Sorgho and Halidou Tinto

Close monitoring reduces adverse events in pregnancy in selected malaria endemic communities in Ogun State, Southwestern Nigeria

#### **Authors:**

Uyaiabasi GN, Olaleye A, Elikwu CJ, Adepoju A, Akinyede A, Adeyemi OO, Walker O

Malaria increases the cross-reactivity to anti-SARS-CoV-2 antibodies on lateral flow tests using pre-COVID-19 samples of pregnant women in Yaound é.

#### **Authors:**

Seumko'o Reine, Nana Marco, Bitye Bernard, Leke Rose, Esemu Livo, Megnekou Rosette

Systematic review and meta-analysis of a randomized controlled trials on Effectiveness and Efficacy of pyriproxyfen, chlorfenapyr, and piperonyl butoxide long-lasting insecticidal nets (LLINs) with pyrethroid-only LLINs for malaria control in Sub-Saharan Africa countries

# **Authors:**

Dereje Bayissa Demissie, Getahun Fetensa

Malaria prevention in the city of Yaound é: knowledge and practices of urban dwellers

#### **Authors:**

Abdou Talipouo, Carmene S. Ngadjeu, Patricia Doumbe-Belisse, Landre Djamouko-Djonkam, Nadege Sonhafouo-Chiana, Edmond Kopya, Roland Bamou, Parfait Awono-Ambene, Sylvain Woromogo, Sevilor Kekeunou, Charles S. Wondji, Christophe Antonio-Nkondjio

# Scientific Session N° 35

**Date/ Time:** Thursday, April 25. 11:30 AM - 12:30 AM **Room:** MH4

**Category:** Control and Elimination 3

Current trends of malaria burden in Burkina Faso: how far from achieving the 2030 goal

#### **Authors:**

Aissata Barry, Diane Sare, Jean Baptiste Ouedraogo,

Maimouna Bamouni, Eric Besong, Sidzabda Kompaore

IMPACT OF INDOOR RESIDUAL INSECTICIDE SPRAY TOWARDS CONTROL AND ELIMINATION OF MALARIA IN HOMA BAY COUNTY

# **Authors:**

Robert Bonyo, Nelson Ondenge

Community knowledge and attitude towards Gene
Drive as a vector control tool for malaria eradication in
two Ghanaian communities

Thomas Gyimah, Owen Lewis, Talya D. Hacket, Benjamin Y. Ofori, Fred Aboagye-Antwi

# Scientific Session N° 36

**Date/ Time:** Thursday, April 25. 11:30 AM - 12:30 AM **Room:** AD10

Category: Vector Biology and Control 6

Combining house-screening and odour-baited mosquito-traps for sustainable control of malaria transmission in low-income communities dominated by Anopheles funestus and Anopheles arabiensis.

# **Authors:**

Doreen Josen Siria, Halfan Said Ngowo, Arnold Mmbando, Emmanuel Kaindoa, Johnson Kyeba Swai, Rukiyah Mohammed, Gerald Tamayamali, Japhet Kihonda, Frances Hawkes, Alexandra Hiscox, Lucy Tusting, Heather Ferguson and Fredros Okumu.

Characterisation of the putative Anopheles funestus-CYP18A1 ortholog in Anopheles gambiae towards developing alternative malaria vector control strategies.

# **Authors:**

Oswald Y. Djihinto, Adand é M édjigbodo, Luisa Nardini, Luc S. Djogbenou, Lizette L. Koekemoer

OUTDOOR BITING INCREASES HUMAN EXPOSURE TO BOTH PRIMARY AND SECONDARY VECTORS IN A LOW-TRANSMISSION AREA: EVIDENCE FROM SOUTHERN PROVINCE, ZAMBIA

# **Authors:**

Limonty Simubali, Twig Mudenda, Jessica L Schue,

Japhet Matoba, Gift Mwaanga, Mukuma Lubinda, Ben Katowa, Michael Musonda, Harry Hamapumbu, Jennifer C. Stevenson, Kochelani Saili, Mary E. Gebhardt, Edgar Simulundu, William J. Moss, Douglas E. Norris

A multi-country community evaluation of the longterm performance of PermaNet 3.0, a long-lasting pyrethroid-PBO net.

#### **Authors:**

Duncan K. Athinya, Patrick K. Tungu, Samuel K. Dadzie, Raghavendra K., John E. Gimnig, Melinda Hadi

Comparing the efficacy of Interceptor G2 versus
Pyrethroid-only nets using longitudinal entomological
data from high pyrethroid-resistance sites in Burkina
Faso.

#### **Authors:**

Antoine Sanou, Madou Tapsoba, Moussa W. Guelbeogo, Hyacinthe K. Toe, Benoit Sanon, Salimata Ou édraogo, Soumanaba Zongo, N'Fal é Sagnon, Mafalda Viana, Hilary Ranson, Heather Ferguson.

# Scientific Session N° 37

**Date/ Time:** Thursday, April 25. 11:30 AM - 12:30 AM **Room:** AD12

Category: Malaria Genomics 2

Decoding Ethiopia's unique and structurally divergent Plasmodium falciparum populations using genomics

#### **Authors:**

Ashley A. Osborne, Kamala Thriemer, Ashenafi Assefa, Asrat Hailu, Adugna Woyessa, Tamiru Shibru Degaga, Ric N. Price, Sarah Auburn

IL-1ë± and IL-1ë\_ Polymorphisms and Their
Implication in Malaria Susceptibility in Ibadan, Nigeria

#### **Authors:**

Oluwayemi J. Bamikole, Subulade A. Ademola, Olukemi K. Amodu

Molecular surveillance of Plasmodium falciparum histidine-rich protein 2/3 gene deletions in Mozambique, 2023

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Clemente da Silva, Dario Tembisse, Eduard Rovira-Vallbona, Neide Canana, Pau Cistero, Paulino da Costa, Andrés Aranda-Diaz, Simone Boene, Bryan Greenhouse, Sonia Enosse, Francisco Saute, Bernardete Rafael, Baltazar Candrinho, Alfredo Mayor

Measuring changes in Plasmodium falciparum census population size in response to sequential malaria control interventions

# **Authors:**

Karen P. Day, Kathryn E. Tiedje, Qi Zhan, Shazia Ruybal-P ésantez, Gerry Tonkin-Hill, Qixin He, Mun Hua Tan, Dionne C. Argyropoulos, Samantha L. Deed, Anita Ghansah, Abraham R. Oduro, Kwadwo A. Koram, Mercedes Pascual

Reduced genetic diversity of key fertility and vector competency related genes in Anopheles gambiae s.l. across Sub-Saharan Africa

#### **Authors:**

Fatoumata Seck, Mouhamadou Fadel Diop, Karim Mane, Amadou Diallo, Idrissa Dieng, Kevin Opondo, Moussa Namountougou, Abdoulaye Diabate, Umberto D'Alessandro, Alfred Amambua-Ngwa, Alistair Miles, Ibrahima Dia and Benoit Sessinou Assogba

# Scientific Session N° 38

**Date/ Time:** Thursday, April 25. 11:30 AM - 12:30 AM **Room:** MEZ

Category: Diagnosis and Reagent 2

Results of four to five years participation in two External Proficiency Testing (EPT) programs for the evaluation of microscopic malaria and other blood parasites by the Groupe de Recherche Action en Sant é (GRAS) BURKINA Faso (West Africa).

# **Authors:**

A DIARRA, I NEBIE, N HENRY, A OUEDRAOGO, AT KONATE, A TIONO and BS SIRIMA

The utility of qPCR estimation of parasite density in evaluating the effect of sulfadoxine-pyrimethamine as perennial malaria chemoprevention

#### **Authors:**

Ana Chopo-Pizarro, Innocent Mbulli Ali, Herv é Menan, Rosario Martinez Vega, Jonna Mosoff, Michaela Gross, Sham Lal, Gillian Stresman, Emma Filtenborg Hocke, Helle Hansson, Michael Alifrangis, Andria Mousa, Cally Roper, Colin J. Sutherland, Serge-Brice Assi, Abibatou Konaté, Paterne Gnagne, William Yavo, Bigoga Jude, Akindeh Nji, Wilfred Mbacham, R Matthew Chico, Khalid B. Beshir

Prevalence of histidine-rich protein 2/3 gene deletion in Plasmodium falciparum isolates from Burkina Faso

#### **Authors:**

Casimire Wendlamita Tarama, Harouna Soré, Mafama Siribié, Siaka Débé, Réné Kinda, Wendyam Gérard Nonkani, Farida Tiendrebeogo, Winnie Bantango, Kassoum Yira, Esther Yéri Hien, Moussa Wandaogo Guelbéogo, Yves Traoré, Didier Ménard, Adama Gansané

A Countrywide Cross-Sectional Study to evaluate the Co-Occurrence of hrp2/3 Deletions and kelch13 Mutations in Ethiopia

#### **Authors:**

Dylan Pillai, Mekonnen Teferi, Delenasaw Yewhalaw, LAMPREG study team

Widespread pfhrp2/3 deletions and HRP2-based false-negative results in southern Ethiopia

#### **Authors:**

Bacha Mekonen, Sisay Dugassa, Sindew Mekasha Feleke, Boja Dufera, Bedasa Gidisa, Aderaw Adamu, Aynalem Mandefro. Geremew Tassew. Lemu Golassa

# Scientific Session N° 39

**Date/ Time:** Thursday, April 25. 1:30 PM - 3:00 PM **Room:** AUD

Category: Control and Elimination 4

Volatile Pyrethroids Against Mosquitoes: A metaanalysis of the association between mosquito exposure to volatile pyrethroid-based spatial repellents and mosquito bite prevention

#### **Authors:**

Daniel Msellemu, Sarah L. Miller, Kyeba Swai, Arnold Mmbando, Steven Gowelo, Mercy Opiyo, Elodie Vajda, Sheila Ogoma Barasa, Marta Maia, Isabel Elaine Allen, Neil Lobo, Fredros Okumu, Sarah Moore, Ingrid Chen Occurrence of non-falciparum Plasmodium species from different hospitals in Rwanda between 2017 and 2023

#### **Authors:**

Noel Gahamanyi, Tharcisse Munyaneza, Jean Bosco Mucaca, Emmanuel Ruzindana, Twahirwa Maurice, Robert Rutayisire

The process of certifying Cape Verde as a malariafree country: where we are and the prospects for the future

# **Authors:**

Jaelsa Mira Goncalves Moreira

Examining Sociocultural Barriers to the Utilization of Malaria Control and Prevention Services in the South West Region, Cameroon

#### **Authors:**

AGBOR PATRICK AGBOR, EMMANUEL YENSHU VUBO, NSAGHA DICKSON SHEY, ASANGBENG TANUE ELVIS

INCREASE IN MALARIA TRANSMISSION FOLLOWING INDOOR RESIDUAL SPRAYING (IRS) WITHDRAWAL IN ATACORA, BENIN

#### **Authors:**

Rock AIKPON, Cyriaque AFFOUKOU, Razaki OSSE, Virgile GNANGUENON, Gil PADONOU, Martin AKOGBETO

Experimental hut and feld evaluation of a metofuthrinbased spatial repellent against pyrethroid-resistant Anopheles funestus in Siaya County, western Kenya

#### **Authors:**

Silas Agumba, Vincent Moshi, Margaret Muchoki, Seline Omondi, Jackline Kosgei , Edward D. Walker , Bernard Abong'o, Nicole Achee, John Grieco and Eric Ochomo

Level of protection against parasitemia and clinical malaria caused by West African and Brazilian Plasmodium falciparum sporozoites strains in lifelong malaria-exposed Gabonese adults.

# **Authors:**

J.F. Zinsou, B.R. Ad égbitì, F.R. Lorenz, R. Adamou, H.H. Nzenguele, B. Lell, B.K.L. Sim, L.W.P. Church, T.L. Richie, S.L. Hoffman, P.G. Kremsner, B. Mordmì ller, M.B.B. McCall, A.A. Adegnika

Scientific Session N° 40

**Date/ Time:** Thursday, April 25. 1:30 PM - 3:00 PM **Room:** MH1

Category: Chemoprevention 3

Low parasitological efficacy of seasonal malaria chemoprevention with sulfadoxine-pyrimethamine and amodiaguine in Mozambique and Uganda

#### **Authors:**

C Bonnington , M Sitoe, R Kajubi , IAP Tarquino, S Enosse, A Nuwa , C. Piantham , K Suwannasin , S Proux, U Koesukwiwat , J Tarning, M Imwong , FH Nosten, NJ White

Coverage of Perennial Malaria Chemoprevention (PMC) challenged by few vaccination clinic (EPI) visits in the second year of life

#### Authors:

Ben Idriss Sadate Soumahoro, Roland Gosling, William Yavo, Wilfred Fon Mbacham, Corine Ngufor, Herminio Cossa, Charlotte Eddis, William Houndjo, Junior Voundi, Colette Kokrasset, Baltazar Candrinho.

New treatment regimen of seasonal malaria chemoprevention a promising alternative to disrupt Plasmodium of transmission in the field

#### **Authors:**

Dari F. Da , Frédéric Guigma , G. Paré , Issaka ZONGO , Abdoulaye CONGO , Léa D. Paré , Thomas S. Churcher, Roch K. Dabiré .

Lessons Learned from the Implementation of Seasonal Malaria Chemoprevention in Benin: Perspectives for Public Health Improvement

#### **Authors:**

William Houndjo; Djawad Ramanou; Richard DOUSSOU; Lundi-Anne Omam; Madi Ahle; Julien Aïssan; Koffi Emmanuel Yovo, Bocar Anne; Jean de Dieu Gbenoutin Bade; Didier Agossadou; Olajumoke Adekeye; Cyriaque Afoukou; Achille Batonon

Understanding malaria knowledge and prevention practices to prepare for the scale up of perennial malaria chemoprevention in Osun State, Nigeria

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Michael Ekholuenetale, Chinazo Ujuju, Semiu Rahman, Kolawole Maxwell, Mary Adekola, Benjamin Ilesanmi, Adekemi Ajayi, Nnenna Ogbuluafor, Olufemi Oroge, Rufai Ahmed, Olusola Oresanya, James Tibenderana

A systematic review of non-malarial effects of malaria chemoprevention interventions

#### **Authors:**

Michaela Gross, Alba McGirr, Alba.McGirr; R Matthew Chico, Gillian Stresman

The Mozambican Healthy Child Consultation is an extraordinary platform for delivering perennial malaria chemoprevention (PMC)

# **Authors:**

Albertina Chihale, Charlotte Eddis, Luis Mahumane, Maria Machonisse, Marcos Chissan, Marguerite Clougherty, Sadate Soumahoro, Sergio Goman, Elsa Nhantumbo.

#### Scientific Session N° 41

**Date/ Time:** Thursday, April 25. 1:30 PM - 3:00 PM **Room:** MH2

Category: Malaria Epidemiology 4

Combining multi-stage malaria prevention interventions with seasonal malaria chemoprevention: a modelling study

# **Authors:**

Lydia Braunack-Mayer, Josephine Malinga, Narimane Nekkab, Sherrie L Kelly, Melissa A Penny

Modelling the effectiveness of Intermittent Preventive Treatment on the incidence of malaria in Pregnancy in Enugu State, South-East Nigeria

#### **Authors:**

Okorie Oluchukwu C, Lateef Kareem, Okorie Geofrey, Nwoke Ijeoma, Aloysius Gima-Laabel

Potential population-level impact of seasonal malaria chemoprevention in Uganda: a modelling study

#### Authors:

Gina Cuomo-Dannenburg, Anthony Nuwa, Jonathon Magoola Okalangh, John Baptist Bwanika, Maria Suau Sans, Chuks Nnaji, Craig Bonnington, Eoin Cassidy, Richard Kajubi, Jimmy Opigo, Jane Nabakoza, Kevin Baker, Sam Gudoi, Patrick G T Walker, Lucy Okell

Public health impact of catch-up vaccination with the R21/Matrix-M malaria vaccine: a modelling study

#### **Authors:**

Kelly McCain, Hillary Topazian, Pete Winskill; Lucy Okell, PhD; Azra Ghani,

Rebound in the Plasmodium falciparum reservoir following the discontinuation of indoor residual spraying and implementation of seasonal malaria chemoprevention in a high-transmission setting in northern Ghana

#### **Authors:**

Kathryn E. Tiedje, Oscar Bangre, Dionne C. Argyropoulos, Samantha L. Deed, Cecilia Rios Teran, Kwadwo A. Koram, Mercedes Pascual, Patrick Ansah, Abraham R. Oduro, Karen P. Day

Timing of Fourth Dose of RTS,S Malaria Vaccine in Perennial Settings: A Modelling Study

# **Authors:**

Daniella Figueroa-Downing, Sherrie L Kelly, Aurelien Cavelan, Melissa A Penny, Josephine Malinga

Risk of contracting malaria among patients hospitalized at Jinja Regional Referral Hospital, Uganda: a prospective cohort study

# **Authors:**

Arthur Mpimbaza, Nelson Ssewante , Jane Sylvia Nassiwa, Steven Kiwuwa, Joan Kalyango

# Scientific Session N° 42

Date/ Time: Thursday, April 25. 1:30 PM - 3:00 PM Room: MH3

Category: Parasite & Systems Biology 1

Plasmodium falciparum SET10 is a histone H3 lysine K18 methyltransferase regulating intraerythrocytic replication and parasite transmission

#### Authors:

Jean Pierre Musabyimana ,Janice Manti, Sherihan Musa ,

Ute Distler, Stefan Tenzer, Che Julius Ngwa, Gabriele Pradel

Additional blood meals increase sporozoite infection in Anopheles mosquitoes but not Plasmodium falciparum genetic diversity

#### **Authors:**

Lorenz M. Hofer; Prisca A. Kweyamba; Rajabu M. Sayi; Mohamed S. Chabo; Rehema Mwanga; Sonali L. Maitra; Mariam M. Somboka; Annina Schnoz; Monica Golumbeanu; Pierre H. H. Schneeberger; Amanda Ross; Tibebu Habtewold; Christian Nsanzabana; Sarah J. Moore; Mgeni M. Tambwe

Perfusion Index as an Indicator for Mortality in Children with Plasmodium falciparum Severe Malaria

#### **Authors:**

Wes Boland, Dibyadyuti Datta, Ruth Namazzi, Caitlin Bond,, Andrea L. Conroy, Robert O. Opoka, Chandy C. John, Michael Lintner Rivera.

Single cell transcriptional profiling of dry and wet season Plasmodium falciparum

# **Authors:**

Lasse Votborg-Nov él, Martin Kampmann, Manuela Carrasquilla, Hamidou Cisse, Safiatou Duombo, Didier Doumtabe, Gabriela M Guerra4, Kassoum Kayentao, Aissata Ongoiba, Mir-Farzin Mashreghi, Thomas D Otto, Peter D Crompton, Boubacar Traor é, Silvia Portugal

The Plasmodium falciparum CCCH zinc finger proteins MD3 and ZNF4 form complexes to regulate male gametocytogenesis and exflagellation

#### **Authors:**

Afia Farrukh, Borja Hanhsen, Jean Pierre Musabyimana, Ute Distler, Stefan Tenzer, Che Julius Ngwa, and Gabriele Pradel

The Plasmodium falciparum histone methyltransferase SET2 regulates gene expression linked to cytoskeletal organization during gametocyte development

#### **Authors:**

Sherihan Musa, Jean-Pierre Musabyimana, Che Julius Ngwa and Gabriele Pradel

Gametocyte production and infectivity among Ugandan uncomplicated malaria patients infected with P. falciparum parasites with reduced sensitivity to artemisinins

#### **Authors:**

Daniel Ayo, Sara-Lynn Blanken, Douglas Opiyo, Ismail Onyige, Eric Musasizi, Kjerstin Lanke, Nicholas Proellochs, Arjen Dondorp, Moses R. Kamya, Melissa Conrad, Tonny Etwop, Chris Drakeley, Emmanuel Arinaitwe, Maurice Okao, Teun Bousema.

#### Scientific Session N° 43

Date/ Time: Thursday, April 25. 1:30 PM - 3:00 PM Room: MH4

**Category:** Implementation Science and Health Systems 1

The impact of next-generation dual-active ingredient long-lasting insecticidal net deployment on insecticide resistance in malaria vectors: results of a three-year cluster-randomized controlled trial in Benin

#### **Authors:**

Arthur Sovi, Constantin J. Adoha, Boulais Yovogan, Chad L. Cross, Dominic P. Dee, Alphonse Keller Konkon, Aboubakar Sidick, Manfred Accrombessi, Minassou Juvenal Ahouandjinou, Razaki Ossì, Edouard Dangb énon, Linda Towakinou, Cl ément Agbangla, Germain Gil Padonou, Thomas Churcher, Corine Ngufor, Jackie Cook, Natacha Protopopoff, Martin C. Akogb éto, Louisa A. Messenger.

Caregivers' Knowledge, Attitude, Uptake and Willingness to Accept Malaria Vaccine in the Kadjebi District, Oti Region, Ghana, 2023

#### **Authors:**

Baffoe John Sonnyinado Duako, Nlamba Elijah Wamale, Abdul-Latif Joseph, Agyiri Samuel, Dabaloro Vida, Takramah Wisdom Kwame, Takyi Eric

Using Cascade Analysis to Improve Malaria Diagnosis and Treatment in Congolese Children

#### **Authors:**

Kristin Banek, Anjuli D. Wagner, Delphin Mubanga, Melchior M. Kashamuka, Georges Kihuma, Georges E. Mahilu, Manu Atibu, Aime Mpety, Marthe Nkalani, Khar Dieng-Diatta, Samuel J. White, Jonathan J. Juliano, Jonathan B. Parr, Benjamin Chi, Antoinette Tshefu.

Improving community based surveillance and response for malaria. The case of CAST+ approach in Uganda

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Bamuloba Muzamiru, Kyabayinze Daniel, Opigo Jimmy, Turyahabwe Stavia, Mulyazaawo Mathias, Kimuli Ronald

Evaluating the fidelity of seasonal malaria chemoprevention in nomadic pastoralist populations in Karamoja region, Uganda.

#### **Authors:**

David Salandini Odong, Anthony Nuwa, Musa Odongo, James Tibenderana, Kevin Baker, Christian Rassi, Maureen Nakirunda, Tonny Kyagulanyi, Craig Bonnington, Jane Achan, Godfrey Magumba, Jane Nabakooza, Denis Rubahika, Jimmy Opigo.

Evaluation of the quality of malaria case management through an electronic supervision and mentoring tool in Mozambique, January 2022 - March 2023

#### **Authors**:

Mércia Dimene, S. Sibindy, A.R. Chico, A.C. Castel- Branco, J. Cossa, O. Mosikare, C. Chirindza, J.M. Colborn, B. Candrinho.

Evaluating the digitization of a national ITN campaign: experiences and lessons from Mozambique

#### **Authors:**

Mariana da Silva, Gerito Augusto, Julia Montana Lopez, Bernardo Garcia Espinosa, Bradley Didier, Baltazar Candrinho

# Scientific Session N° 44

**Date/ Time:** Thursday, April 25. 1:30 PM - 3:00 PM **Room:** AD10

Category: Vector Biology and Control 7

Metabolic Resistance and Cost-fitness in GenMetabolic Resistance and Cost-fitness in Generations of Anopheles gambiae (Kisumu) Adults Exposed to Sub-Lethal Concentrations of Permethrin erations of Anopheles gambiae (Kisumu) Adults Exposed to Sub-Lethal Concentrations of Permethrin

#### **Authors**

Adegbola O. Adesoye, Adedapo Adeogun, Olalekan E. Olagundoye, Tolulope A. Oyeniyi, Adeolu T. Ande

Factors associated with the use of insecticide-treated

nets before and after mass distribution campaigns in Ondo and Anambra States, Nigeria

#### **Authors:**

Saliu Ogunmola; Azuka Iwegbu; Julianna Smith; Abiola Oluwagbemiga; Nonso Ndibe; Olusola Oresanya; and Tarekegn A. Abeku

MALDI - TOF MS as a multi-detection platform for entomological surveillance

#### **Authors:**

Jonathan Karisa, Mercy Tuwei, Kelly Ominde, Brian Bartilol, Zedekiah Ondieki, Harun Musani, Caroline Wanjiku, Martin Rono, Charles Mbogo, Rist Cassidy, Philip Bejon, Joseph Mwangangi, Marta Maia,

Prevalence of Microsporidia MB and associated microbiota in wild Anophelines from Coastal Kenya and Central Mozambique

#### **Authors:**

Caroline Wanjiku, Mark Tefero, Kelly Ominde, Jonathan Karisa, Haron Musani, Festus Mure, Zedekiah Ondieki, Luis Bogaio, Caroline Kiuru, Simon Muriu, David Mburu, George Githinji, Martin Rono, and Marta Maia.

Better methods, better data: landscaping the priorities for enhanced methodologies in vector control

#### Authors

Rosemary Lees, Katherine Gleave,

Investigating the carry-over effect of larval temperature on the fitness of Anopheles gambiae

## **Authors:**

Jacqueline Aidoo, Jewelna Akorli, Bethel Kwansa-Bentum, Frederic Tripet & Fred Aboagye- Antwi

# Scientific Session N° 45

**Date/ Time:** Friday, April 26. 10:30 AM - 12:00 AM **Room:** AUD

Category: Drug Efficacy 2

Efficacy of Artemether-Lumefantrine, Artesunate-Amodiaquine, Dihydroartemisinin - Piperaquine and Artesunate - Pyronaridine for uncomplicated Plasmodium falciparum malaria in Mozambique, 2022

#### **Authors:**

Abel Nhama, Quique Bassat, LÌ dia Nhamì¼ssua, Nairo Mabote, Clemente da Silva, Paulo Arnaldo, Crizologo Salvador, Annette Cassy, Baltazar Candrinho, Mercia Dimene, Eva Carvalho, Ars énio Nhacolo, Arlindo Chidimatembue, Abuchahama Saifodine, FlìÁvio Wate, Helio Mucavele, Yaritbel Torres-Mendoza, Alfredo Mayor, and Pedro Aide

Ex vivo drug susceptibility and resistance mediating genetic polymorphisms of Plasmodium falciparum in Bobo-Dioulasso, Burkina Faso

#### **Authors:**

A. Fabrice Som é, Melissa D. Conrad, Zachari Kabr é, Aminata Fofana, R. Serge Yerbanga, Thomas Bazi é, Catherine Neya, Myreille Som é, Tegawinde Josue Kagambega Jenny Legac, Shreeya Garg, Jeffrey A. Bailey, Jean-Bosco Ou édraogo, Philip J. Rosenthal and Roland A. Cooper

Persistence of residual submicroscopic P. falciparum parasitemia following treatment of artemether-lumefantrine in Ethio-Sudan border, western Ethiopia

#### **Authors:**

Geletta Tadele, Fatou K. Jaiteh, Mary Oboh, Eniyou Oriero, Sisay Dugassa, Alfred Amambua-Ngwa, Lemu Golassa

Low adherence to the national policy for the treatment of uncomplicated malariaby providers, 10 years after adoption of Amodiaquine-based ACTs: Reasons and challenges.

#### **Authors:**

Eric Mukomena Sompwe, Andr é Ngombe Kaseba, Oscar Luboya, Pascal Lutumba, Mashinda Désiré, Mapatano Mala Ali, Van Geertruyden

Impact of quantitative PCR on assessing antimalarial drug efficacy in a Phase 2 clinical trial

# **Authors:**

C Risterucci , C Carrera-Bravo , F Martinelli , O Bucheli , C Beuret ,Schnoz , GoZhu , G Su , AC Marrast , C Winnips U and C Nsanzabana .

High efficacy of Artemether-Lumefantrine and Artesunate-Pyronaridine in adult patients with Plasmodium falciparum in a setting with high

prevalence of markers of partial artemisinin resistance and pfhrp2/3 gene deletion in Ethiopia: a single-blind randomized controlled trial

#### **Authors:**

Migbaru Keffale, Tadesse Misganaw, Stefano Rosillo, Hiwot Teka, Bereket Hailegiorgis, Legesse Alamerie Ejigu, Samuel Girma, Mekonnen Tadesse, Fikregabrail Aberra Kassa, Mikiyas Gebremichael, Desalegn Abeje, Dawit Hailu, Bethlehem Adnew, Wakweya Chali, Sinknesh Wolde, Lina Alemayehu, Jimma Dinsa, Melat Abdo, Getnet Habtamu, Addisu Gizat, Getinet Habtamu, Woyneshet Gelaye Yalew, Tadesse Hailu Jember, Molalegne Bitew, Mateusz M. Plucinski, Cristian Koepfli, Samaly Souza, Dhruviben S. Patel, Mame Niang, Eldin Talundzic, Gudisa Assefa, Teun Bousema, Jon Eric Tongren, Jimee Hwang, Fitsum G. Tadesse,

Scientific Session N° 46

Date/ Time: Friday, April 26. 10:30 AM - 12:00 AM Room: MH3

Category: Malaria Epidemiology 5

Assessing the Efficacy of the 1-3-7 Malaria Surveillance Strategy in Southern Africa: "A Connectivity Perspective"

# **Authors:**

Caison Sing'anga, Japhet Matoba, Mukuma Lubinda, Xinyue Chen, Harry Hamapumbu, Edgar Simulundu, Andre Hackman, Anne Martin, Bill Moss,

Characterization and management of malaria at the pediatric ward of Amissa Bongo Hospital of Franceville, Gabon.

#### **Authors:**

Imboumy-Limoukou, Karl Roméo, Biteghe-Bi-Essone Jean Claude, Ekogha-Ovono Jean Jordan, Oyegue Lydie Sandrine, Lekana-Douki Jean Bernard

Cohort Profile: Participant Characteristics for Phase II of the Kinshasa Malaria Cohort Study

#### Authors:

Melchior M. Kashamuka, Kristin Banek, Samuel J. White, Joseph L. Atibu, Mvuama M. Nono, Joseph A. Mavungu Bala, Tommy M. Nseka, Georges Kihuma, Marthe Nkalani, Alpha O. Diallo, Georges E. Mahilu, Faustin Manenga, Goel Varun,

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Fabien Vulu, Pitshou N. Mampuya, Rhoel Dinglasan, Thierry Bobanga, Michael Emch, Jonathan J. Juliano, Jonathan B. Parr, Victor Mwapasa, Antoinette K. Tshefu

Community benefits of mass distribution of three types of dual-active-ingredient long-lasting insecticidal nets against malaria prevalence in Tanzania: evidence from a 3-year cluster-randomized controlled trial

#### **Authors:**

Eliud Andrea Lukole, Jackie Cook, Jacklin F Mosha, Nancy S Matowo, Manisha A Kulkarni, Elizabeth Mallya, Tatu Aziz, Jacklin Martin, Mark Rowland, Immo Kleinschmidt, Alphaxard Manjurano, Franklin W Mosha, Natacha Protopopoff

Guarding Progress: Unveiling the Impact of Indoor Residual Spraying Interruptions in Rwanda's Success in a Southern Province District

#### **Authors:**

Dieudonne Hakizimana, Alphonse Mutabazi, Anastase MUHASHYI, Ladislas Nshimiyimana, Epaphrodite HABANABAKIZE, Nooliet KABANYANA, Aimable Mbituyumuremyi.

Reduction in malaria incidence after deployment of IG2 nets in an area with known pyrethroid resistance and marked outdoor biting.

# **Authors:**

Samuel Oppong, Punam Amratia, Nana Yaw Peprah, Peter Gething, Keziah Malm

Seasonal dynamics of clinical and subclinical malaria in co-endemic low transmission settings, south Ethiopia: implication for elimination

#### **Authors:**

Eshetu Molla, Lina Alemayehu, Legesse Alamerie Ejigu, Jimma Dinsa, Mulugeta Demisse, Melat Abdo, Sinknesh Wolde Behaksra, Migbaru Keffale, Sisay Dugassa, Hassen Mamo, Endalamaw Gadisa, and Fitsum G. Tadesse

# Scientific Session N° 47

**Date/ Time:** Friday, April 26. 10:30 AM - 12:00 AM **Room:** MH4

Category: Vector Biology and Control 8

An assessment of the efficacy of different mosquito larvicides used in America vs Africa

#### **Authors:**

Carol Tasiano, Rosheen Mthawanji, Master Chisale

Malaria vector diversity, transmission dynamics and resistance of Anopheles gambiae complex to pyrethroid and carbamates around the slopes of mount Cameroon

#### **Authors:**

KWI PILATE NKINEH, ALISTAIR MILES , JUDE BIGOGA, ALFRED NGWA, APINJOH TOBIAS

The impact of pyrethroid-pyriproxyfen and pyrethroidchlorfenapyr long-lasting insecticidal nets on density of primary malaria vectors Anopheles gambiae s.s. and Anopheles coluzzii in Benin: A secondary analysis of a cluster randomised controlled trial

#### **Authors:**

Boulais Yovogan, Arthur Sovi, Armel Djenontin, Constantin J. Adoha, Manfred Accrombessi, Landry Assongba, Filémon Tokponnon, Clément Agbangla, Germain G. Padonou, Jackie Cook, Martin C. Akogb éto, Natacha Protopopoff

Diversity and ecological niche model of malaria vector and non-vector mosquito species in Covi® Ouinhi, and Zangnanado of Southern Benin, West Africa

#### **Authors:**

Constantin Adoha, Arthur Sovi , Germain G. Padonou , Boulais Yovogan , Manfred Accrombessi , Jackie Cook, Clément Agbangla, Natacha Protopopoff, Manisha A. Kulkarni, Martin C. Akogbéto.

Biological and Novel Control of Mosquito Vectors: Fighting malaria with the mosquito symbiont bacteria and with its secreted bioactive cell-free supernatant

# **Authors:**

Jacques Gnambani, Etienne Bilgo, Franì¤ois D. Hien, Soby Scott, Abdoulaye Diabaté

# Malaria vectors and transmission in the highlands of Western Cameroon

#### **Authors:**

Belinda Claire KIAM, Aline Gaelle BOUOPDA TUEDOM, Ibrahima IBRAHIMA, CI ément Janvier ONGUENE, Luc ABATE, Brigitte TUMAMO, Charlì ne Tina NANSSONG, Jean Arthur MBIDA MBIDA, Zachary Popkin-Hall, Jonathan B. Parr, Jessica T Lin, Samuel J. WHITE, Jonathan J. JULIANO, Innocent Ali MBULLI, Rhoel DINGLASAN, Sandrine Eveline NSANGO

A long-term vector control forecast to foresee market threats, trends and opportunities

#### **Authors:**

Anna Trett, Salome Muchiri, Jess Floyd, Graziella Scudu, Ioana Ursu, Tara Seethaler, Aaron M. Woolsey.

# Scientific Session N° 48

**Date/ Time:** Friday, April 26. 10:30 AM - 12:00 AM **Room:** AD10

Category: Chemoprevention 4

Determinants of access to health facilities among febrile under-five children during seasonal malaria chemoprevention campaigns in Togo, 2020-2022

# **Authors:**

Abebe Endeshaw, Sikai Huang, Fantche Awokou, Kevin Baker, Sol Richardson0

Acceptability and Barriers to Implementation of Vitamin A Supplementation and its Potential role in the Co-delivery of Perennial Malaria Chemoprevention

# **Authors:**

Valerie Makoge, Giulia Scarpa, Fidelia Tarla, Sobngwi-Tambekou Joelle Laure, Nnamdi Dum-Buo, Jayne Webster, Shari Krishnaratne, Wilfred Mbacham.

Cluster randomized controlled trial and quasiexperimental studies to assess the impact of seasonal malaria chemoprevention using sulfadoxinepyrimethamine and amodiaquine in Karamoja region, Uganda.

#### **Authors:**

Anthony Nuwa, K. Baker R. Kajubi, C. Nnaji Nnaji, M. Odongo, T. Kyagulanyi, J. I. Nabakooza, D. S. Odong, D. Rubahika, M. Nakirunda, G. Magumba, J. Achan, Christian Rassi, J.B. Bwanika, J.K. Tibenderana, Damian Rutazaana, J. Opigo

Comparing Sulfadoxine-Pyrimethamine and Amodiaquine with Dihydroartemisinin-Piperaquine for Seasonal Malaria Chemoprevention: A Cluster Randomized Controlled Trial in Karamoja, Uganda

#### **Authors:**

Anthony Nuwa, C. Bonnington, K. Baker, R. Kajubi, C. Nnaji Nnaji, M. Odongo, T. Kyagulanyi, J. I. Nabakooza, D. S. Odong, D. Rubahika, M. Nakirunda, G. Magumba, J. Achan, Christian Rassi, J.B. Bwanika, J.K. Tibenderana, Damian Rutazaana, J. Opigo

Harnessing the power of routine data for decisionmaking and data-driven programme improvement: lessons from delivering seasonal malaria chemoprevention in three countries

# **Authors:**

Chukwudi A. Nnaji, Albertino Zunza, Celio Matusse, Chibuzo Oguoma, David Odong Salandini, Ebenezer Ikechukwu, Tonny Kyagulanyi, Olabisi Ogunmola, Salima El Haj, Joshua Okafor, Monica A. de Cola, Sol Richardson, Hannah Edwards, Christian Rassi

# Evidence-based decisions on Seasonal Malaria Chemoprevention extension in Benin

# **Authors:**

William Houndjo, Jeanne Lemant, Clara Champagne, Julien Aïssan, Rock Aïkpon , Sakariahou Kpanou, Cyriaque Affoukou, Emilie Pothin

SMC suitability in sub-Saharan Africa defined by recent and climate-modelled predicted rainfall

# **Authors:**

Abigail Ward, Monica Golumbeanu, Mark Connell, Tara Seethaler, Tasmin Symons, Emilie Pothin, Arnaud Le Menach, Justin Cohen

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# Scientific Session N° 49

**Date/ Time:** Friday, April 26. 10:30 AM - 12:00 AM **Room:** AD1

Category: Capacity Building 2

Using a mentorship approach to capacity building improves the competence of frontline health workers in the management of malaria and prevention of malaria in pregnancy in Kenya

#### **Authors:**

Donald Apat, Francesca Nzuve, Lolade Oseni, Gladys Tetteh, Edward Kenyi, Regina Kandie

Improving malaria diagnostic capacity of rural health facilities through the development of a regional quality assurance network in Homa Bay County, Kenya.

#### **Authors:**

Gabriel Kotewas, Francis Ngati, Nelson Ondenge, Mark Naygwala

Baseline Assessment of Malaria Case Management Practices in Private Retail Outlets in Select Malaria Endemic Counties

# **Authors:**

Regina Kandie, Francis Onditi, James Kiarie, Fredrick Ouma, Jedidah Kiprop, Omar Ahmedin, Dorothy Memusi

The role of stakeholder engagement in research processes and use: Lessons from a realist evaluation of supportive supervision for malaria case management in Benin

# **Authors:**

Mena K. Agbodjavou, Jean-Paul Dossou, Christelle Boyi-Hounsou, Christian Agossou, Jenna Hoyt, Jayne Webster, Jessie K. Hamon

Enhancing Malaria Control through Integrated Supportive Supervision model in Health Facilities in Rwanda

# **Authors:**

Murebwayire Adele, Kabera Michee, Kayonga Eugene

Malaria Microscopy Quality Control in Rwanda: Data Spanning Seven Years (2017-2023)

#### **Authors:**

Pierre Gashema, Nzungize Lambert, Neeva Wernsman Young, Tharcisse Munyaneza, Jean Bosco Mucaca, Eric Saramba, Jean Modeste Harerimana, Corine Karema, Jean-Baptiste Mazarati, Jeffrey A. Bailey, Jonathan J Juliano

Could China's journey of malaria elimination extend to Africa?

#### **Authors:**

WANG Duo-quan, LV Shan, DING Wei, LU Shen-ning, ZHANG Hong-wei, Kokouvi Kassegne, XIA Shang, DUAN Lei, MA Xue-jiao, HUANG Lu-lu, Roly Gosling, Joshua Levens, Salim Abdulla, Mutinta Mudenda, Moses Okpeku, Kenneth Kamwi Matengu, Potiandi Serge Diagbouga, XIAO Ning, ZHOU Xiaonong

# Scientific Session N° 50

**Date/ Time:** Friday, April 26. 1:30 PM - 3:00 PM **Room:** AUD

Category: Drug Resistance 4

Characterization of the molecular factors associated with the in vitro resistance of Plasmodium falciparum to imidazolopiperazine KAF156 and GNF179 in Mali

# **Authors:**

MAIGA Fatoumata O., DEMBELE Laurent, DIAKITE Ousmaila, SOGORE Fanta, MAIGA Mohamed, SISSOKO Sekou, DARA Antoine, DJIMDE Abdoulaye A.

Imidazolopiperazine (IPZ) - Induced Differential
Transcriptomic Responses on Plasmodium falciparum
Wild - Type and IPZ - Resistant Mutant Parasites

# **Authors:**

Laurent Dembele, Antoine Dara, Mohamed Maiga, Fatoumata O Maiga, Djeneba Cissoko, Abdoulaye A Djimde

Pfcoronin mutations in the Senegalese genetic background of Plasmodium falciparum confer artemisinin resistance by impeding hemoglobin uptake

# **Authors:**

Imran Ullah, Madeline A. Farringer, Anna Y. Burkhard, Erica

Hathaway, Bailey C. Willett, Malhar Khushu, Sara H. Shin, Aabha I. Sharma, Kairon L. Shao, Morgan C. Martin, Jeffrey D. Dvorin, Daniel L. Hartl, Sarah K. Volkman, Selina Bopp, Sabrina Absalon, Dyann F. Wirth

Mapping the genetic landscape of multidrug resistance in Plasmodium falciparum by leveraging genetic crosses in a humanized mouse model

#### **Authors:**

Sachel Mok, Tomas Yeo, Davin Hong, Melanie J. Shears, Leila S. Ross, Kurt E. Ward, Satish K. Dhingra, Mariko Kanai, Jessica L. Bridgford, Abhai K. Tripathi, Godfree Mlambo, Anna Y. Burkhard, Megan R. Ansbro, Kate J. Fairhurst, Eva Gil-Iturbe, Heekuk Park, Felix D. Rozenberg, Jonathan Kim, Filippo Mancia, Rick M. Fairhurst, Matthias Quick, Anne-Catrin Uhlemann, Photini Sinnis, David A. Fidock

YAT2150: an irresistible antimalarial drug with multiple targets in Plasmodium falciparum

#### Authors:

Claudia Camarero - Hoyos, Inés Bouzin - Arnaiz, Mukul Rawat, Rachael Coyle, Elsa M. Arce, Diego Muì oz - Torrero, Samuel Pazicky, Zbynek Bozdech, Marcus Lee, Valentin Iglesias, Salvador Ventura, Yunuen Avalos-Padilla, Xavier Fernandez-Busquets

Prevalence of resistance markers and their impact on clinical outcomes in patients with Plasmodium falciparum malaria treated with ganaplacide plus lumefantrine solid dispersion formulation or artemether-lumefantrine: Analysis of data from a multinational Phase 2 study.

# **Authors:**

C Nsanzabana, F Martinelli, A Destani, M Concu, C Beuret, A Schnoz, AC Marrast, H Chikoto, K Csermak, G Zhu, G Su, C Winnips, C Risterucci

Surveillance of antimalarial resistance markers to inform SP suitability for Perennial Malaria Chemoprevention in  $\hat{Cl}$  «te d'Ivoire.

#### Authors

Hervé Menan, Paterne Gnagne, Abibatou Konaté, Valérie B édia Akoua, Andria Mousa, Emma Filtenborg Hocke, Ana Chopo Pizarro, Helle Hansen, Khalid B Beshir, Michael Alifrangis, Cally Roper, William Yavo

# Scientific Session N° 51

**Date/ Time:** Friday, April 26. 1:30 PM - 3:00 PM **Room:** AD12

Category: Control and Elimination 5

Schoolchildren with asymptomatic malaria are potential hotspot for malaria reservoir in Ethiopia: implications for malaria control and elimination efforts

#### **Authors:**

Abdissa Biruksew, Ashenafi Demeke, Zewdie Birhanu, Lemu Golassa, Masrie Getnet, Delenasaw Yewhalaw

Transitioning from High Burden to Pre-Elimination: The Impact of Successful Indoor Residual Spraying in Ngoma District, Eastern Rwanda

#### **Authors:**

Aimable Mbituyumuremyi, Ayman Ahmed, Dieudonne Hakizimana, Ladislas Nshimiyimana, Emmanuel Hakizimana

Comprehensive Research on Malaria Control, Elimination, and Eradication in East Africa, Specifically Tanzania

# **Authors:**

Elias Onesmo, Gerry Germanus, Elibariki Masanja Raphael

MosquitoDB: A Comprehensive Electronic Surveillance System to Assist in Controlling and Eliminating Mosquito-Borne Diseases in low and middle income countries.

#### **Authors**:

Victor Mero, Dickson Msaky, Gerald Kiwelu, James Michael, Njire Choba, Janice Maige, Henry Lyamuya, Prosper P. Chaki, Silas Majambere, Nicodemus J. Govella, Samson Kiware

Control of pyrethroid-resistant Anopheles gambiae s.l. with SOVRENTA® 15WP, a new isoxazoline insecticide for indoor residual spraying

# **Authors:**

Renaud Govoetchan, Abel Agbevo, Corine Ngufor

Empowering Community Health Promoters in Remote Areas: A Game - Changing Approach to Malaria Control

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Appollonia Ombima, Hilary Ngeso, Kevin Rowartz, Dorah Wafula, Wayne Otieno

Geographic modeling of weighted regression of selfreported malaria cases associated with environmental risk factors in Benin during the rainy season

# **Authors:**

André Sominahouin, Serges Akpodji, Sahabi Bio Bangana, Germain Gil Padonou, Charles Thickstun, Impoinvil Daniel, Christoph Houssou and Martin Akogbéto

# Scientific Session N° 52

**Date/ Time:** Friday, April 26. 1:30 PM - 3:00 PM **Room:** MZ

**Category:** Social and Health Economics 2

Cost of delivering pyrethroid-PBO ITNs to households in Ondo and Anambra States in Nigeria using universal campaigns

#### **Authors:**

Abiola O. Oluwagbemiga, Godstime Eigbiremolen, Divine O. Ndubuisi, Bolade Jimoh, Saliu Ogunmola, Azuka Iwegbu, Nonso Ndibe, Laitan Adeniyi, Maxwell Kolawole, Olusola Oresanya Tarekegn A. Abeku

Foreign Aid and Malaria Control: Assessing the Impact of International Support on Malaria Prevention Programs

# **Authors:**

Mahamane Lawali Atahirou Mahamane; Kamal Tasiu Abdullahi

Economic analysis of Insecticide-Treated Net market dynamics between 2004-2021 and derivation of monetary value of additional ITN longevity

#### **Authors:**

Amanda McCoy, Edward Thomsen, Angus Spiers, Eve Worrall

Impact and cost-effectiveness of school based intervention to improve malaria treatment compliance: A randomized controlled trial study in peri-urban village of Mali, Tienfala

#### **Authors**

Hamidou Niangaly, Souleymane Dama, Moussa Djimdé, Moussa Tienta, Adama Poudiougo **Evaluating the Cost-effectiveness of Malaria Control Strategies in Resource-Limited Settings** 

#### Authors

Kamal Tasiu Abdullahi, Muhammad Abdulaziz Muhammad

Financial Barriers to Malaria Treatment and Its Implications for Health Equity

#### **Authors:**

Muhammad Abdulaziz Muhammad, Kamal Tasiu Abdullahi

Role of CSOs in enhancing SBC implementation and fostering the uptake of malaria interventions in Rwanda

#### **Authors:**

Habanabakize Epaphrodite, Ndagijimana Deogratias, Nshimiyimana Aaron, Condo Jeanine

# Scientific Session N° 53

**Date/ Time:** Friday, April 26. 1:30 PM - 3:00 PM **Room:** AD1

Category: Bioethics and Diversity 1

Researchers' perspectives on integrating Molecular and Genomic Data into Malaria Elimination Programmes in Africa: A qualitative study

#### **Authors:**

Paulina Tindana

"Malaria: Eradicating the Frontiers of Inequity with an Inclusive and Diverse Approach"

#### **Authors:**

**ELIE TSHOMBA** 

Health -Seeking Behaviour for Pneumonia, Diarrhoea and Malaria Among Caregivers of Under-Five Children Aged 24-59 Months in Upper River Region, The Gambia.

#### **Authors:**

Kaddyijatou F. Jallow, J.O. Akinyem, Mobolaji M. Salawu, Baba Ceesay, Amadou Barrow, Samuel S. Gomez, Ebrima Jatta

Increasing visibility of African women in malaria and other vector borne diseases control through PAMCA's Excellence Awards (2021-2023)

#### **Authors:**

Christina Sudi, Rosalia Joseph, Jessy Goupeyou-Youmsi, Ghislaine Ouedraogo-Ametchie, El Hadji Amadou Niang, Prosper Chaki, Emma Orefuwa, Damaris Matoke-Muhia

**Empowering Young Changemakers - The Kenya Malaria Youth Corps and the Fight Against Malaria in Africa** 

#### **Authors:**

John Mwangi, William Dekker

Evaluation of the performance of Rapid Diagnostic Tests (RDTs)-Histidine Rich Protein 2 (HRP2) and prevalence of pfhrp2 gene deletion in the rural municipality of Nanoro, Burkina Faso

# **Authors:**

BAYALA Carenne, Toussaint ROUAMBA, Paul SONDO, Eulalie W COMPAORE, Bérenger KABORE, Sié A. Elisée KAMBOU, Kié Solange MILLOGO, Chantal KOUEVI, Marc Christian TAHITA, Franck HIEN, Karim DERRA, Eli ROUAMBA, Hamidou ILBOUDO, Awa GNEME, Halidou TINTO

#### Scientific Session N° 54

**Date/ Time:** Friday, April 26. 3:30 PM - 5:00 PM **Room:** AUD

Category: Vector Biology and Control 9

HumBug - developing an acoustic sensor to detect and identify mosquito vectors of disease.

# **Authors:**

Sinka, M. E., Kiskin, I., Herreros-Moya, E., Khandelwal, D., Campos, S., Msaky, D., Kihonda, J., Mkandawile, G., Kaindoa, E.W., Zanga, J., Metelo, E., Everett, J., Li, Y., Roberts, S. and Willis, K. J.

First report of Anopheles stephensi from Southern Ethiopia

# **Authors:**

Dawit Hawaria, Solomon Kibret, Daibin Zhong, Ming-Chieh Lee, Kidane Lelisa, Belayneh Bekele, Muntasha Birhanu, Mathe Mengesha, Hiwot Solomon, Delenesaw Yewhalaw, Guiyun Yan

Entomological and epidemiological impact of new generation insecticides (Actellic® 300CS and Fludora®Fusion WP-SB 56.25) used for Indoor Residual Spraying in Rwanda, 2018-2020.

#### **Authors:**

Beatus Cyubahiro, Aimable Mbituyumuremyi, Dunia Munyakanage, Alphonse Mutabazi, Phocas Mazimpaka, Jean Claude S. Ngabonziza, Elias Niyituma, Xavier Misago, Naomi W Lucchi, Kaendi Munguti, Emmanuel Hakizimana

High level of residual biting in an area of high bed net use in Mali

#### **Authors:**

Immo Kleinschmidt, Mahamoudou Toure, Sophie Sarrassat, Mohamed M. Traore, John C. Beier, Seydou Doumbia

Do Anopheles gambiae Larvae Partition Food Resource with their Co-habiting Diptera Fauna?

#### **Authors:**

Afia S. Karikari, Jewelna Akorli, Ignatius C. Ndong, Francis Gbogbo, Rosina Kyerematen, Talya Hackett, Owen Lewis, Charles Godfray, Fred Aboagye-Antwi

Use of gSG6-P1 (Anopheles) and Nterm-34-kDa (Aedes) salivary peptides as biomarkers for the evaluation of human exposure to malaria and arboviral disease vectors according to the use of Long-Lasting Insecticide nets in Some localities of Cameroon.

# **Authors:**

Ngangue-Siewe Idriss Nasser, Ndjeunia-Mbiakop Paulette, Abdoul-Aziz Mamadou Maïga, Sagna Barembaye André, Bamou Roland, Remoue Franck, Tombi Jeannette, Mbida Mbida Jean Arthur, Antonio-Nkondjio Christophe, Badolo Athanase

SYMBIOVECTOR: Harnessing mosquito symbionts for malaria transmission blocking

# **Authors:**

Thomas Onchuru, Jacquline Wahura, Edward Makhulu, Fidel Omondi, Tullu Bukhari, Joseph Gichuhi, Oscar Mbare, Godfred Boanyah, Tracy Maina and Jeremy Herren

# Scientific Session N° 55

Date/ Time: Friday, April 26. 3:30 PM - 5:00 PM Room: MH2

Category: Drug Efficacy 3

Triple artemisinin-based combination therapies (TACTs) toxicity concerns

# Author:

David Audu

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Efficacy of dihydro-artemisinin piperaquine for the treatment of uncomplicated plasmodium falciparum infection in Rwanda, 2023

#### **Authors:**

Aline Uwimana, Noella Umulisa, Celestin Ntirandeka, Jean Modeste Harerimana, Naomi Lucchi, Kaendi Munguti, Beata Mukarugwiro, Jean Damascene Niyonzima, Aimable Mbituyumuremyi

Intermittent preventive treatment with Sulphadoxine-Pyrimethamine (IPTp-SP) is associated with protection against sub-microscopic P. falciparum infection in pregnant women during the low transmission dry season in southwestern Cameroon: A Semi - longitudinal study.

#### **Authors:**

Tobias O. Apinjoh, Vincent N-N. Ntui, Hanesh F. Chi, Marcel N. Moyeh, Cabrel T. Toussi, Joel M. Mayaba, Livinus N. Tangi, Pilate N. Kwi, Judith K. Anchang-Kimbi, Jodie Dionne-Odom, Alan T. N. Tita, Eric A. Achidi, Alfred Amambua-Ngwa, Vincent P.K. Titanji

Chloroquine showed high therapeutic efficacy against uncomplicated Plasmodium vivax malaria in Southern Ethiopia: Eight decades after its introduction.

# **Authors:**

Anteneh Kassahun Mare, Hussein Mohammed, Heven Sime, Henok Hailgiorgis, Kale Gubae, Bekuretsion Gidey, Mebrahtom Haile, Gudissa Assefa, Worku Bekele, Sarah Auburn, Jonathan B. Parr, Jonathan J Juliano, Geremew Tasew, Solomon Mequanente Abay, Ashenafi Assefa

IVERMECTIN IN COMBINATION WITH ARTEMETHER
- LUMEFANTRINE AND CHLOROQUINE ELICIT ANTIINFLAMMATORY AND ANTIOXIDANT ACTIVITIES
BUT LACK IN-VIVO ANTIMALARIAL PROPERTIES IN
PLASMODIUM BERGHEI INFECTED MICE

#### **Authors:**

Prisca O. Ishokare, Abayomi M. Ajayi, Olusegun G. Ademowo

Malaria Drug Discovery at Novartis: Enabling disease elimination with novel antimalarial drugs

# **Authors:**

Michael Robinson, Tom Kirrane, Lauren Holder, Erka Flannery, Armand Guiguemde, Manuel Saldivia, Jonathan Gable, Srinivasa Rao, Manju Ujjini, Thierry Diagana

# Scientific Session N° 56

**Date/ Time:** Friday, April 26. 3:30 PM - 5:00 PM **Room:** MH4

Category: Drug Resistance 5

Characterisation of Plasmodium falciparum antimalarial drug resistance marker profiles in polyclonal/mixed infections by Illumina targeted sequencing

# **Authors:**

Helle Hansson, Mads Pedersen-Ebbe Midtboell, Emma Filtenborg Hocke, R Matthew Chico, Khalid B. Beshir, Ana Chopo-Pizarro, Andria Mousa, Colin J. Sutherland, Cally Roper, Michael Alifrangis

The extended recovery ring-stage survival assay (eRRSA), a scalable assay for artemisinin susceptibility phenotyping of fresh Plasmodium falciparum isolates

#### **Authors:**

Martin Okitwi, Douglas A. Shoue, Lisa A. Checkley, Frida G. Ceja, Stephen Orena, Patrick K. Tumwebaze, Thomas Katairo, Yoweri Taremwa, Oswald Byaruhanga, Mackenzie A.C. Sievert, Sam L. Nsobya, Shreeya Garg, Jeffrey A. Bailey, Melissa D. Conrad, Philip J. Rosenthal, Michael T. Ferdig, Roland A. Cooper

Evaluating the Future Effectiveness of Artemisininresistance Responses in Rwanda, Uganda, and Tanzania

# **Authors:**

Maciej F Boni, J Claude S Ngabonziza, Aline Uwimana, Robert J Zupko, Tran Dang Nguyen, Michee Kabera, Kien Trung Tran, Philip Rosentha, Agaba Bosco, Deus Ishengoma, Aimable Mbituyumuremyi

Identification of the PfK13 mutations R561H and P441L in Democratic Republic of Congo (DRC): and a snapshot of prevalence and diversity at antimalarial drug resistance loci in P. falciparum across the DRC

Mesia Kahunu, Gauthier; Wellmann Thomsen, Sarah; Wellmann Thomsen, Louise; Muhindo Mavoko, Hypolite; Mitashi Mulopo, Patrick; Filtenborg Hocke, Emma; Chico, Matt; Beshir, Khalid; Sutherland, Colin; Chopo-Pizarro, Ana; Mandoko Nkoli, Papy; Baraka, Vito; Minja, Daniel T.R; Mousa, Andria; Mbongi Moke, Destin; Mumba Ngoyi, Dieudonn é; Mukomena Sompwe, Eric; Muyembe Tanfum, Jean Jacques;

Roper, Cally; Hansson, Helle; Alifrangis Michael

Varied prevalence of antimalarial drug resistance markers in different populations of newly arrived refugees in Uganda

#### **Authors:**

Stephen Tukwasibwe, Shreeya Garg, Thomas Katairo, Victor Asua, Asiimwe Brian Kagurutsi, Gerald Mboowa, David Giesbrecht, Gerald Tumusiime, Julius Businge, David Alula, Julius Kasozi, Ibrahim Wadembere, Emmanuel Arinaitwe, Joaniter I. Nankabirwa, Samuel L. Nsobya, Moses R. Kamya, Bryan Greenhouse, Grant Dorsey, Jeffrey A. Bailey, Jessica Briggs, Melissa Conrad, and Philip J. Rosenthal

# Burundi under threat of artemisinin partial resistance

# **Authors:**

Joseph NYANDWI, Pierre SINARINZI, Denis NIYOMWUNGERE, Néhémie NZOYIKORERA, Didier MENARD

Detection of twelve Plasmodium falciparum Kelch 13 gene mutations in clinicals samples from four sites across Kenya reveals intense genomic events

# **Authors:**

Hoseah M. Akala, Benjamin H. Opot, Dennis W. Juma, Raphael O. Okoth, Redemptah Yeda, Edwin W. Mwakio, Gladys C. Chemwor, Jackline A. Juma, Charles O. Okudo, Agnes C. Cheruiyot, Michal M. Ohaga, Doris W. Njoroge, Timothy E. Egbo, Ben Andagalu, Edwin Kamau, Bernhard's R. Ogutu

# Scientific Session N° 57

**Date/ Time:** Friday, April 26. 3:30 PM - 5:00 PM **Room:** AD1

Category: Malaria Genomics 3

Amplicon Sequencing Using High-Throughput Barcoding Identifies Novel Mutations in Insecticide Resistance Genes in Pyrethroid Resistant Anopheles gambiae s.l. from the Democratic Republic of Congo.

# **Authors:**

Bethanie Pelloquin, Rodrigue Fiacre Agossa, Tiffany Clark, Sheila B. Ogoma, Miriam Williams, Narcisse Basosila, Eric Mukomena, Emile Zola Manzambi, Francis Watsenga, Emery Metelo, Richard M. Oxborough, Yibayiri Osee Sanogo, Ferdinand Ntoya, Noboru Minakawa, Thomas Walker, Louisa Messenger Plasmodium falciparum population structure inferred by msp1 amplicon sequencing of parasites collected from febrile patients in Kenya

#### **Authors:**

Brian Andika, Victor Mobegi, Kimita Gathii, Josphat Nyataya, Naomi Maina, George Awinda, Beth Mutai & John Waitumbi

Evolution of Plasmodium falciparum drug resistance molecular markers throughout Gabon

#### **Authors:**

Denise Patricia Mawili-Mboumba, Jacque Mari Ndong Ngomo, Noé Patrick M'Bondoukwé, Bridy Chesly Moutombi Ditombi, Coella Joyce Mihindou, Dimitri Ardin Mabika Moussavou, Ornella Anaïse Mbang Nguema, Marielle Karine Bouyou-Akotet

Genome-wide association studies and Microbial signature analyses identified novel candidates associated with pyrethroid resistance evolution in Anopheles funestus in Cameroon

#### **Authors:**

Mahamat Gadji, Jonas A Kengne-Ouafo, Magellan Tchouakui, Jack Hearn, Boyomo Onana, Charles S Wondji

Widespread and high prevalence of arising biological threats to malaria control and elimination in Ethiopia

#### **Authors:**

Aynalem Mandefro, Bacha Mekonen, Geletta Tadele, Yirgalem Ghiwot, Lemu Golassa

Genetic diversity and allele frequency of Plasmodium falciparum msp1 and msp2 genes in asymptomatic carriers in Nanoro health district, Burkina Faso

# **Authors:**

H. Magloire Natama, D. Florence Ouédraogo, Abdoul-Rahim Ouédraogo, Hermann Sorgho, Toussaint Rouamba, Sarah Benedicte Kaboré, Somé M. Athanase, Aida Millogo, karim Derra, Pieter Guetens, Eline Kattenberg, Aly Savadogo, Halidou Tinto, Anna Rosanas-Urgell

Genomic surveillance of Plasmodium falciparum Drug Resistance Markers and Genetic Diversity in Mozambique, 2021-2022

#### **Authors:**

Simone Boene, Eduard Rovira-Vallbona, Manuel Garcia-

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Ulloa, Clemente da Silva, Andrés Aranda-Diaz, Pau Cisteri, Dario Tembisse, Carla Garcia, José Ingacio, Arlindo Chidimatembue, Gliia Matambisso, Nelo Ndimande, Abel Nhama, Lidia Nhamussua, Brian Palmer, Arnau Pujol, Sinia Enosse, Neide Canana, Paulino da Costa, Bernardete Rafael, Baltazar Candrinho, Bryan Greenhouse, Pedro Aide, Francisco Saute, Alfredo Mayor

#### Scientific Session N° 58

**Date/ Time:** Friday, April 26. 5:00 PM - 6:00 PM **Room:** MH2

Category: Immunology & Vaccines 4

# Introduction of Malaria Vaccine in Burkina Faso: Preparedness and readiness

#### **Authors:**

Ines DA, Réné Didace Bakouan, Annick Sidibé, Soumeya Ouangraoua, Ousmane Badolo, Christelle Neva

# Impact of human genetic polymorphisms on RTSS vaccine efficacy

#### **Authors:**

Karamoko Niare, Varun Goel, David Dosoo, Rebecca Defeo, Griffin J Bell, Benedicta Mensah, Bright Adu, Paulin Essone, Musah Osei, Kenneth Wiru, Tisungane Mvalo, Selidji Todagbe Agnandji, Jonathan J Juliano, Kwaku Poku Asante, Michael Emch, Anita Ghansah, Jeffrey A Bailey

Analysis of the anti-malarial immune response in women during the third trimester of pregnancy and the postpartum period: Study of the specific humoral response to VAR2CSA and cytokine profiles.

# **Authors:**

Ousmane Traore, Toussaint Rouamba, Hermann Sorgho, Innocent Valea, Maminata Traore-Coulibaly, Halidou Tinto

# Duration of protective efficacy of R21/Matrix-M vaccine

# Authors:

Emma Beaumont, Mehreen S Datoo, Alassane Dicko, Halidou Tinto, Jean-Bosco Ou édraogo, Mainga Hamaluba, Ally Olotu, Prasad S Kulkarni, John Bradley, Adrian Hill

# Scientific Session N° 59

Date/ Time: Friday, April 26. 5:00 PM - 6:00 PM Room: MH3

Category: Drug Efficacy 4

Efficacy and safety of Artemether-lumefantrine (AL) and Dihydroartemisinin-piperaquine (DP) for the treatment of uncomplicated Plasmodium falciparum malaria in The Gambia.

#### **Authors:**

Edgard D. Dabira, Eniyou Oriero, Haddy Nyang, Abdoulie Sanyang, Simon Correa, Mamadou Ndiath, Sheriffo Jagne, Momodou Kalleh, Olimatou Kolley, Bokar Loum, Babading Sabally, Alfred Amambua-Ngwa, Umberto D' Alessandro, Balla Kandeh. Annette Erhart, Balla Gibba

Therapeutic Efficacy of Artemether Lumefantrine and Artesunate Amodiaquine in the Treatment of Uncomplicated Malaria in Liberia

## **Authors:**

Victor S. Koko, Jethro W.S. Zawolo, Wahdae-mai Harmon-Gray; Mamadou O. Diallo, Uwem Inyang, Mark Maire, Gaspar Mbita, Odell Kumeh; Julie Gutman, Laura Skrip

#### Γitle:

Artesunate-Pyronaridine plus radical cure with primaquine is a safe and efficacious alternative antimalarial with a strong transmission blocking effect than chloroquine plus primaquine to treat Plasmodium vivax in Ethiopia.

# **Authors:**

Migbaru Keffale, Sinknesh Wolde, Tadesse Misganaw, Hiwot Teka, Bereket Hailegiorgis, Natnael Lemesse, Legesse Alamerie Ejigu, Samuel Girma, Mekonnen Tadesse, Fikregabrail Aberra Kassa, Mikiyas Gebremichael, Wakweya Chali, Lina Alemayehu, Melat Abdo, Addisu Gizat, Getinet Habtamu, Mame Niang, Gudisa Assefa, Jimee Hwang, Teun Bousema. Fitsum G. Tadesse

WWARN Living Systematic Reviews To Assess Antimalarial Treatment Efficacy And Molecular Makers Associated With Resistance

# **Authors:**

Dhol S Ayuen, Robert J Commons, Richard N Price, Farhad Shokraneh, Christevy Vouvoungui, Aboubakar Soma, Sabina Otienoburu, Mehul Dhorda, Caitlin Richmond, Karen I Barnes, Philippe J Guerin

# Scientific Session N° 60

**Date/ Time:** Friday, April 26. 5:00 PM - 6:00 PM **Room:** AD10

Category: Malaria in Pregnancy 5

Malaria and SARS-CoV-2 prevalence among pregnant women in two malaria-endemic settings during the omicron wave

#### **Authors:**

Antì\_a Figueroa-Romero, Anete Mendes, Frédérique Mbang-Abbam, Johannes Mischlinger, Meral Esen, Nuria Botella, Linda Stoeger, Michael Vogler, Rella Zoleko-Manego, Michael Ramharter, Francisco Saute, Ghyslain Mombo-Ngoma, Tacilta Nhampossa, Clara Menéndez, Raquel Gonzalez

Urinalysis and Clinical Symptoms in the Prediction of Malaria Among Pregnant Women in Abia State, Nigeria.

#### **Authors:**

IHEMANMA, KANU AND ETUSIM

Exploring the dynamics of IPTp intervention: a qualitative study on medication practices, perceptions, and experiences among pregnant women in antenatal care in Ghana

# **Authors:**

Wisdom Ebelin, Matilda Aberese-Ako, Harry Tagbor

TIM-3 Expression within ë\_ë« T Cell Memory Subsets and its Implications in Placental Malaria in Women at Delivery

# **Authors:**

Megnekou Rosette, Chris Marco Mbianda Nana, Bodin Darcisse Kwanou Tchakounte, Bernard Marie Zambo Bitye, Balotin Fogang, Reine Ndeumou Medouen Seumko'o, Benderli Christine Nana, Jean Claude Djontu, Lawrence Ayong, Rose Gana Fomban Leke

Immunological Signatures in Placental Malaria: HLA-DR Expression within ë\_ë« T Cell and Impact on Maternal-Fetal Health Outcomes

# **Authors:**

Chris Marco Mbianda Nana, Bodin Darcisse Kwanou Tchakounte, Bernard Marie Zambo Bitye, Balotin Fogang, Reine Ndeumou Medouen Seumko'o, Nana Christine Benderli, Jean Claude Djontu, Rose Gana Fomban Leke, Rafael José Argiello, Lawrence Ayong, Rosette Megnekou

# Scientific Session N° 61

**Date/ Time:** Friday, April 26. 5:00 PM - 6:00 PM **Room:** AD11

Category: Vector Biology and Control 10

Host Preferences of Anopheles gambiae s.l and their Implications for Malaria Transmission in four (4) Indoor Residual Spraying Intervention Districts in Ghana

#### **Authors**

Nicholas Ato Egyir, Kwame Desewu, Gilbert Dossah, Grace Oppong, Francis Amankwah, Joseph Mwinikubu Vulgate, Agyei Kumi, Maxwell Danaah, Matilda Kaabo, Ignatius Williams, Samuel Asiedu

Preliminary findings on anti-mosquito activities from a pharmacokinetics/dynamics-paticipant cohort in the RIMDAMAL II (Repeat Ivermectin Mass Drug Administration for MALaria control) clusterrandomized clinical trial

#### **Authors:**

Emmanuel Sougué, Cheick Oumar W. Ouedraogo; Greg Pugh; Paula Lado; Mady Ndiaye; E. H. Mamadou Niang; A. Fabrice Somé; Roch K. Dabiré; Sunil Parikh; Brian Foy

Evaluation of next generation long lasting insecticidal net against wild resistance malaria vectors in Tanzania; an experimental hut trial

#### **Authors:**

Jackline Martin, Jo Lines, Louisa A. Messenger, Jacklin F Mosha, Edmond Benard, Mark Rowland, Sian E. Clarke, Raphael N'Guessan, Charles.Wondji, Dominic P Dee, Thomas S Churcher, and Alphaxard Manjurano

Using human and vector behavior to identify gaps in protection in a high transmission setting in Nchelenge, Zambia

#### **Authors:**

Mary E. Gebhardt, Brian Chirwa, Mohamed Bayoh, Mbanga Muleba, William J. Moss, and Douglas E. Norris

Vector Control and Biology Resistance in East Africa, with a Focus on Tanzania

# **Authors:**

Elibariki Masanja Raphael, Gerry Germanus and Lisa Richard

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# Scientific Session N° 62

**Date/ Time:** Friday, April 26. 5:00 PM - 6:00 PM **Room:** MEZ

Category: Diagnosis and Reagent 3

Enhancing Access to Malaria Diagnosis in underserved Malaria endemic areas of Sub Saharan Africa with MariTest -a non-invasive bloodless device.

#### **Authors:**

Amuza Dhabuliwo, Hakim Kakooza, Stanley Kinyanjui, Boemo Phirinyange, Delight Asaph, Brian Kayongo

Advancing light microscopic malaria diagnosis with machine learning.

#### **Authors:**

Muganzi David Jolly, Kintu Timothy, Nyaketcho Tryphine, Kassasa Kennedy, Mwavu Rodger

Validation of TrueNat novel malaria Diagnostic Tool for Point-of-Care Testing at Butare University Teaching Hospital

# **Authors:**

Felix Habarugira, Musabyimana jean Pierre, Kennedy Philippe, Nambajimana Abidan, Ndoli Jules, Francois Xavier Ndayambaje

Prevalence of non-falciparum and mixed species infections in malaria endemic areas in Rwanda

# **Authors:**

Jean-Pierre Munyampundu, Eric Saramba, J. Alexandra Rowe, Adeline Ishimwe, Yvonne Nyirangoga, Jean-Bosco Mbonimpa, Nadine Rujeni

Strengthening the laboratory technician's capacity to enhance the knowledge and skills in malaria microscopy diagnosis in Rwanda.

# **Authors:**

Jean Modeste Harerimana, Ruzindana Emmanuel, Jean Damascene Niyonzima, Marcel Manariyo, Eliab Mwiseneza, Tharcisse Munyaneza, Mucaca Jean Bosco, Marie Rose Kayirangwa, Noella Umulisa, Aimable Mbituyumuremyi

# Scientific Session N° 63

Date/ Time: Friday, April 26. 5:00 PM - 6:00 PM Room: AD1

#### Category

Pathogenesis and Co-Morbidities 2

Prevalence of malaria, typhoid fever and study of oxidative stress, disease severity and inflammatory markers in Yaounde-Cameroon

#### **Authors:**

Tchoutang Ange Maxime, MacDonald Bin Eric, Nzuno Christine, Ngum Lesly Ngum, Wilfred Fon Mbacham, Palmer Masumbe Netongo

Immune complexes and G6PD deficiency predict readmissions for blackwater fever and severe anemia in children treated for severe malaria in Eastern Uganda

#### **Authors:**

Ruth Namazzi, Kagan A. Mellencamp, Robert O. Opoka Dibyadyuti Datta, Giselle Lima-Cooper, Claire Liepmann, Julian Sherman, Ana Rodriguez, Caroline Kazinga, Michael G. Goings, Marcus Lacerda, Marco Abreu, Tae-Hwi Schwantes-An, Chandy C. John, and Andrea L. Conroy

Asymptomatic malaria parasitemia among students of the University of Port Harcourt

#### **Authors**:

Oluchukwu Ezechukwu, Florence O. Nduka, Okechukwu Ifeoma

P. falciparum histidine-rich protein 2 (HRP-2) is associated with host biomarkers of severe malaria in Mozambican children: a matched case-control study

# **Authors:**

Rosauro Varo, Antonio Sitoe, An élsio Cossa, Naria Balanza, Valerie M. Crowley, Kevin C. Kain, Alfredo Mayor, Quique Bassat

Differential Ubiquitination Protein Expression in Kenyan Children with Severe Malarial Anemia

#### Authors

Samuel B. Anyona, Sharley A. Wasena, Evans Raballah, Ivy Hurwitz5, Philip D. Seidenberg, Kristan A. Schneider, Christophe G. Lambert, Benjamin H. McMahon, Collins Ouma, Qiuying Cheng and Douglas J. Perkins

# ABSTRACTS FOR POSTERS

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# 01

#### Category

Parasite and Systems Biology

Schoolchildren with asymptomatic malaria are potential hotspot for malaria reservoir in Ethiopia: implications for malaria control and elimination efforts

# **Authors:**

Abdissa Biruksew, Ashenafi Demeke, Zewdie Birhanu, Lemu Golassa, Masrie Getnet, Delenasaw Yewhalaw

# 02

# Category

Parasite and Systems Biology

Seroprevalence of Measles Virus and Plasmodium Among Children Under 12 Years (<12) in Taraba State Nigeria, the Bridge of Co-infection.

#### Authors

Ubandoma Andefiki, Aminu Maryam, Inabo Helen Ileigo, Musa Bolanle Olufunke Priscilla

#### 03

# Category

Parasite and Systems Biology

The changing ecology of malaria vectors in Accra, Ghana.

#### **Authors**

Abdul R. Mohammed, Christopher M. Owusu-Asenso, Daniel K. Halou, Richard D. Tettey, Isaac K. Sraku, Yaw Akuamoah-Boateng, Stephina A. Yanney, Anisa Abdulai, Fred Aboagye-Antwi, Yaw A. Afrane.

#### 04

# Category

Parasite and Systems Biology

Subnational tailoring and targeting of vector-control interventions in Ethiopia

# **Authors:**

Amir Siraj, Gudissa Assefa, Asefaw Getachew, Gezahegn Tesfaye, Achamyelesh Sisay, Kebede Etana, Ayele Tiyou, Belendia Serda, Asnakew Yeshiwondim, Dereje Dillu, Berhane Tesfay, Getachew Abebe, John M. Miller, Arantxa Roca-Feltrer, Adam Bennett, Hannah Slater.

# 05

# Category

Parasite and Systems Biology

Addressing Malaria Diagnosis Challenges in Plateau State: Leveraging Malaria mRDTs for Effective Healthcare Delivery

#### Authors

Attahir Abubakar, Mujahid Aliyu Idris, Comfort Kingsley Randa, Paulinus Amaeze, Victor Pam, Yonwul Dakyen, Justice Adaji, Uchenna Nwokenna, Veronica Momoh Abimbola Olayemi, and Emmanuel Ekwa

# 06

# Category

Parasite and Systems Biology

Dynamics of Malaria Prevalence and Co-infection with Helminthiasis among Children Aged 1 to 12 Years in the Olama Locality in the Forest Zone of Cameroon.

# **Authors:**

Taby Bidzogo, Kaminsi Nenkam, Talipouo, Awono-Ambene, Tombi, Antonio-Nkondjio.

# 07

# Category

Parasite and Systems Biology

Susceptibility Status of Principal Malaria Vectors to Insecticides Commonly Used for Malaria Control in Africa: Meta-analysis and Systemic review.

#### **Authors:**

Awoke Minwuyelet, Delenasaw Yewhalaw, Andrea Sciarretta, Getnet Atenafu.

# 08

# Category

Parasite and Systems Biology

Fitness cost of Pfhrp2/3 Gene Deletion on Parasite Biomass, Transmissibility, & Diagnosis Failure in Northwest Ethiopia

#### **Authors:**

Ayalew Jejaw Zeleke, Amanuel Shimelash , Wakweya Chali,

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Lina Alemayehu, Melat Abdo, Abrham Gashaw, Addisu Gizat, Dessalegn Nibret, Migbaru Keffale, Legesse Alamerie, Fikregabrail Aberra, Asrat Hailu Mekuria, Sinknesh Wolde, Mulugeta Aemero, Fitsum G Tadesse

# 09

# Category

Parasite and Systems Biology

Microbiological, clinical and molecular results of non-typhoidal Salmonella bloodstream infections associated with malaria in the Democratic Republic of Congo (DR Congo)

#### **Authors:**

Aymar AKILIMALI, Jones ONESIME, Excellent RUGENDABANGA, Samson HANGI and Chrispin BIAMBA.

# 10

# Category

Parasite and Systems Biology

Dynamics of Neutrophils Activities According to Malaria Infection Status

# **Authors:**

Berenger Kabore, Marc Christian Tahita, Diallo Salou, Annelies Post, Ousmane Traoré, Lompo Palpougouni, Bognini D. Joel, Quirijn de Mast, Andre van der Ven, Halidou Tinto.

# "

# Category

Parasite and Systems Biology

Sentinel site network for molecular surveillance of *Plasmodium falciparum* and antimalarial drug resistance in Ethiopia

#### **Authors:**

Bokretsion Gidey, Abebe A. Fola, Henok Hailgiorgis, Moges Kassa, Heven Sime, Adugna Abera, Yonas Wuletaw, Getachew Tolera, Geremew Tasew, Jonathan J. Juliano, Jeffrey A. Bailey, Mesay Hailu, Ashenafi Assefa and Jonathan B. Parr.

# 12

# Category

Parasite and Systems Biology

Community acceptability of Attractive Targeted Sugar Baits in a cluster randomized controlled trial in Western Kenya.

#### **Authors:**

Caroline Ogwang, Teresa Bange, Dominic Ouma, Corrie Omollo, Brian Seda, Julia Janssen, Jonathan Schultz, Aaron Samuels, Simon Kariuki, Feiko ter Kuile, Sarah G Staedke, George Okello.

# 13

# Category

Parasite and Systems Biology

Title: Characterization of Plasmodium infections among People living with HIV on anti-retroviral therapy in Brazzaville, Republic of Congo

#### **Authors:**

Jean Claude DJONTU, Marcel Tapsou BAINA, Jacque Dollon MBAMA NTABI, Chastel NFOUTOU MAPANGUY, Christevy Jeannhey VOUVOUNGUI, Belluche Guiverla PANGUINI MOUTSONGO, Armel Landry BATCHI-BOUYOU, Alain Maxime MOUANGA, Raoul AMPA, Francine NTOUMI.

# 14

# Category

Parasite and Systems Biology

Fetal versus Maternal innate immune responses to placental malaria

# Authors

Samuel Chenge, Harrison Ngure, Melvin Mbalitsi, Moses Obimbo, Omu Anzala, Bernard Kanoi, Mourine Kangogo, Jesse Gitaka, Francis Kobia.

# 15

#### Category

Parasite and Systems Biology

High prevalence of submicroscopic *Plasmodium* falciparum infestations in pregnant women in the city of Bobo-Dioulasso, Burkina Faso.

#### **Authors:**

Sirima C, Cissé M, Gomgnimbou KM, Sangaré I, Anshah F, Aniweh Y, Awandare GA.

# 16

# Category

Parasite and Systems Biology

Parasite Prevalence and Density of *Plasmodium* falciparum Infections and Gametocyte Carriage During Malaria Outbreaks in Zambezi region, Namibia

#### **Authors:**

Lydia Eloff, Davis R. Mumbengegwi.

# 17

#### Category

Parasite and Systems Biology

Allelic diversity of merozoite surface protein gene 2 (msp2) and force of infection of *Plasmodium falciparum* in children living in a malaria endemic area of Burkina Faso

#### **Authors:**

Emilie S. BADOUM, Ludovic KOURAOGO, Amidou DIARRA, Daouda OUATTARA, Issa NEBIE, Alfred B. TIONO, Alphonse OUEDRAOGO, Sodiomon B. SIRIMA.

#### 18

# Category

Parasite and Systems Biology

Rapid assessment of the blood-feeding histories of wild-caught malaria mosquitoes using mid-infrared spectroscopy and machine learning

#### Authors:

Emmanuel P. Mwanga, Idrisa S. Mchola, Faraja E. Makala, Issa H. Mshani, Doreen J. Siria, Sophia H. Mwinyi, Said Abbas, Godian Selemani, Jacqueline N. Mgaya, Mario GonzìÁlez-Jiménez, Klaas Wynne, Maggy T. Sikulu-Lord, Prashanth Selvaraj, Fredros O. Okumu, Francesco Baldini, Simon A. Babayan.

# 19

# Category

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

Implication of biochemical markers in the disease severity in malaria and covid-19 co-infected patients in Yaoundé, Cameroon

# **Authors:**

Eric TCHOUPE, Eric MacDonald BIN, Donald Severin KAMDEM , Sylvie Kwedi-Nolna, Palmer MASUMBE NETONGO.

# 20

#### Category

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

High-risk APOL1 variants and long-term survival and kidney function in severe malaria

#### **Authors:**

Claire D. Liepmann, Ruth Namazzi, Anthony Batte, Kagan A. Mellencamp, Paul Bangirana, Robert Opoka, Giselle Lima-Cooper, Marco Abreu, Tae-Hwi Schwantes-An, David S. Hains, Chandy C. John, Andrea L. Conroy.

# 21

# Category

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

Characterization of EBV infection in tonsils of children residing in malaria holoendemic region of western Kenya

# **Authors:**

Koech Emmily, Samayoa-Reyes, Gabriela, Asito Amolo, Waomba, Kevin, Onditi, Ian, Stella Chumbe, Ogolla, Sidney, Rochford, Rosemary.

# 22

#### Category

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

Platelet count and naturally acquired anti-malaria antibody responses during *Plasmodium falciparum* infection Immunity to Parasites

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Eric Kyei-Baafour, Oscar Darko, Belinda Aculley, Mary Tetteh, Kwadwo A, Kusi, Michael F, Ofori,

# 23

# Category

Social and Health Economics

The Role of Religious Leaders in Driving Malaria Control Through Social Behavior Change in Rwanda's Southern Province

#### **Authors:**

Nshimiyimana Aaron, Benimana Billy Evrard ,Habanabakize Epaphrodite, Ndagijimana Deogratias .

# 24

# Category

Social and Health Economics

Community Engagement in the Implementation of Mass Administration of Antimalarial Drugs: A Crucial Approach for Community Acceptance in Chidenguele, Gaza, Mozambique

# **Authors:**

Felisbela Materrula, Rafina Sitoe, AtanìÁsio Matusse, Wilson Simone, Maria Tusell, Laura de La Fuente, Caterina Guinovart, Pedro Aide.

# 25

# Category

Social and Health Economics

Cost and cost-effectiveness of Programmatic Mass Drug Administration and Reactive Focal Drug Administration in low endemic settings of Southern Mozambique

#### **Authors:**

Gimelgo Xirinda, Laura de la Fuente, Maria Tusell, Wilson Simone, Arsénio Nhancolo, Caterina Guinovart, Pedro Aide, Elisa Sicuri.

# 26

# Category

Social and Health Economics

The impact of malaria elimination projects on children's primary school outcomes

#### **Authors:**

Gimelgo Xirinda, Laia Cirera, Francisco Saùte, Elisa Sicuri.

# 27

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Genomic surveillance of malaria vectors in the Kassena-Nankana districts of Northern Ghana 2016-2018

#### **Authors:**

Lucas N. Amenga-Etego, Enock K. Amoako, Collins M. Morang'a, Chris S. Clarkson, Isaiah Debrah, Joyce M. Ngoi, Kukua Thompson, Victor Asoala, Cristina Ariani, Yaw Aniweh, Dominic P. Kwiatkowski, Keziah Malm, Alistair Miles, Gordon A. Awandare

# 28

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Plasmodium falciparum genetic diversity in the blood stage vaccine candidate antigen PfCyRPA in Senegal

#### Authors

Aboubacar Ba, Laty Gaye Thiam, Mariama Nicole Pouye, Yicheng Guo, Zizhang Sheng, Saurabh D. Patel, Seynabou Diouf Sene, Fatoumata Diallo, Rebecca Li, Awa Cisse, Noemi Guerra, Safia Laqqa, Khadidjatou Mangou, Adam J. Moore, Bacary Djilocalisse Sadio, Alassane Mbengue, Amy K. Bei

# 29

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Genetic Diversity of *Plasmodium falciparum* Merozoite Surface Protein 1 and 2 in People Living with HIV In Ogbomoso, Nigeria

#### **Authors:**

Adedolapo B. Olorunfemi, Olawumi Otutu, James A. Oguniran, Adekunle O. Olowe, Oluyinka O. Opaleye, Olusola Ojurongbe

# 30

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Population genetic analysis of *Plasmodium falciparum* erythrocyte binding antigen-175 (PfEBA-175) gene in Ghana.

#### **Authors:**

Kpirikai, Abraham Okai, Josie N. A. Kornu, Victor Moranga'a Collins M. & Awandare, Gordon A. Amenga-Etego, Lucas

# 31

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Genetic Insights into the Merozoite Surface Protein-2 (MSP-2) Diversity within the P. falciparum in the Volta Region, Ghana

#### **Authors:**

Nathaniel Amasah, Belinda Aculley, Eric Baffour

# 32

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Spatial Connectivity, Importation and Transmission Flow of *Plasmodium falciparum* in Mozambique Using Microhaplotype Data

#### **Authors**:

Arnau Pujol, Arlindo Chidimatembue, Clemente da Silva, Simone Boene, Henriques Mbeve, Dario Tembisse, Jose Inacio, Kiba Comiche, Pau Cisterì\_, Carla Garcia-Fernandez, Nanna Brokhattingen, Andrés Aranda-Diaz, Nicholas Hathaway, Glì\_ria Matambisso, Fabiao Luis, Nelo Ndimande, Humberto Munguambe, Lidia Nhamussua, Wilson Simone, Eduard Rovira-Vallbona, Caterina Guinovart, Bryan Greenhouse, Sonia Maria Enosse, Francisco Saùte, Pedro Aide, Baltazar Candrinho, Alfredo Mayor

# 33

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Molecular Surveillance of Malaria in Endemic Regions in Uganda Reveals High Genetic Diversity of *Plasmodium falciparum* and Correlation with Transmission Intensity

#### **Authors:**

Shahiid Kiyaga, Thomas Katairo, Monica Mbabazi, Bienvenu Nsengimaana, Stephen Tukwasibwe, Francis Ddumba, Diana K. Kabbale, Victor Asua, David P. Kateete, Joyce N. Nabende, Samuel L. Nsobya, Moses R. Kamya, Isaac Sewanyana, Andres Aranda-Diaz, Philip J. Rosenthal, Melissa Conrad, Bryan Greenhouse, Jessica Briggs.

# 34

# Category

Malaria Genomics (Human-Anopheles-Plasmodium)

Insecticide Resistance Profiling of Anopheles gambiae Complex around the Slope of Mount Cameroon: A genomic snapshot of the whole genome of Anopheles coluzzii and Anopheles gambiae

#### **Authors:**

Kwi Pilate, Jude Bigoga, Afred Ngwa, Tobias Apinjoh

# 35

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Molecular surveillance of plasmodium malariae parasites causing malaria in the Northern and Savanah Regions of Ghana.

# **Authors:**

Angelica Daakyire, Emelia A. Kpiebaya, Alexandra D. Mwinbong, Cletus Wezena, Francis Addy, Gideon Adu Bonsu

# 36

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Re-defining Asymptomatic Malaria as Chronic Malaria: A Host Factor Differential in Rural and Urban Habitats.

# **Authors:**

AKINOLA Olugbenga, EGBORO Daniel, IYENMOANA Ese, ADEOSUN Adeseun, OLUMO-ABDUL A. Hidayat, OWOLODUN Olubukola, DOKUNMU Titilope, AMUSAN I. Abiodun, GBOTOSHO G. Olusola.

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# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

MODELLING THE BENEFITS OF TESTING BEFORE TREATMENT OF MALARIA AND ITS COMPARISON TO SYNDROMIC MANAGEMENT

#### **Authors:**

Nwadiuto Ojielo, Emmanuel Bakare

# 38

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Malaria as a cause of death in the CHAMPS network

#### **Authors:**

Rosauro Varo, Ikechukwu U. Ogbuanu, Kephas Otieno, Zachary J. Madewell, Dianna M. Blau, Cynthia G. Whitney, Aaron M. Samuels, Quique Bassat

# 39

#### Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Malaria morbidity due to Nutrition deficiency in Endemic Zones Western, Kenya

# **Authors:**

Redemptah Yeda, Charles Okudo, Edwin Mwakio, Agnes C. Cheruiyot, Benjamin Opot, Jackline Juma, Risper Maisiba, Raphael Okoth, Dennis Juma, Timothy Egbo, Hoseah M. Akala.

# 40

#### Category

Malaria Epidemiology, Modelling, Surveillance and Impact

The effect of the COVID-19 pandemic on malaria diagnoses in Gabon

# **Authors:**

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Friederike Roeder, Iris Lopes-Rafegas, Scherif Adegnika, Manuel Huth, Elisa Sicuri

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Establishing Sentinel Surveillance for Black Water Fever in Uganda, March - December 2022

#### **Authors:**

Alice Asio, Alex R. Ario, Julie R. Harris, Francisco Averhoff, Frank Destefano, Daniel Kadobera, Benon Kwesiga, Lilian Bulage, Stephen Balinandi, Nicholas Bbosa, Damian Rutazaana, Jimmy Opigo, Alan L. Landy, Michael G. Berg, Robert Downing, Jennifer Kinslow, Mary Rodgers, Gavin Cloherty

# 42

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

A baseline epidemiological survey for malaria and schistosomiasis reveals an alarming burden in primary schools despite ongoing control in Chikwawa District, southern Malawi

#### **Authors:**

Blessings Chiepa, Rex Mbewe, Michelle C. Stanton, Christopher M. Jones, Themba Mzilahowa, John Chiphwanya, J. Russell Stothard

# 43

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

A digital dashboard platform for analysis and visualization of malaria epidemiological data

#### **Authors:**

Chander Prakash Yadav, Amit Sharma

# 44

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

A quasi-experimental study assessing the acceptability, feasibility and impact of introducing a digital iCCM tool in Buikwe district, Uganda

# Authors:

Emily Goodwin, Anthony Nuwa, John Baptist Bwanika, Anthony Nuwa, Liberty Bunce, Solomon Muhumuza, Paul Mbaka, Godfrey Magumba, Stella Bakeera

# 45

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Adaptation and application of MosquitoDB to support malaria vector entomological surveillance in Rwanda

#### **Authors:**

Elias Niyituma, Dunia Munyakanage, Beatus Cyubahiro, Victor Mero, Gerald Kiwelu, Janice Maige, James Michael, Prosper P. Chaki, Samson Kiware, Emmanuel Hakizimana

#### 46

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Addressing challenges in routine health data reporting in Burkina Faso through Bayesian spatiotemporal prediction of weekly clinical malaria incidence

# **Authors:**

Toussaint Rouamba, Sekou Samadoulougou, Fati Kirakoya-Samadoulougou

# 47

# Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Adherence to Reporting Standards in Publications on Mobile Application Intervention for Malaria Surveillance in Africa

# **Authors:**

I. O. Ekundayo, M. Olawoyin, M. A. Ibrahim, M. O. Ajise.

# 48

#### Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Advancing Active Malaria Case Detection via Contact Testing in Nyamira, Kenya: A Strategic Approach.

#### **Authors:**

Wayne Otieno, Dorah Wafula, Salome Ileli, Hillary Ngeso

# 49

## Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Age-structured malaria transmission modelling accounting for the effects of climate and interventions

#### **Authors:**

Anton Beloconi, Bryan O. Nyawanda, Godfrey Bigogo, Sammy Khagayi, Alexandros Angelakis, Ina Danquah, Simon Kariuki, Stephen Munga, Penelope Vounatsou

# 50

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

An integrative, modelling-based approach for longterm forecasting malaria treatment need and demand in sub-Saharan Africa

# **Authors:**

Monica Golumbeanu, Jessica Floyd, Clara Champagne, Tasmin Symons, Punam Amratia, Graziella Scudu, Salome Muchiri, Anna Trett, Abby Ward, Tara Seethaler, Aaron Woolsey, Arnaud Le Menach, Emilie Pothin

# 51

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

An investigation into the rise in malaria cases in Zambia during the 2022/2023 transmission season

#### **Authors:**

William Sheahan, Hannah Slater, Justin Millar, Adam Bennett, John Miller, Marie-Reine Rutagwera, Chabu Kangale, Kafula Silumbe, Japhet Chiwaula, Busiku Hamainza

# 52

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

An update of the epidemiological parameters of malaria in school age children in Kolle, a rural setting, Mali

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SIDIBE Bouran, SISSOKO A.S., TRAORE O.B., KONE S.B., DARA N., COULIBALY D., DAMA S., KONE A.K., YARO A.S. and DJIMDE A.A.

# 53

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Analysis of Malaria Species Distribution in the Huye district of southern Rwanda

#### **Authors:**

Clement Igiraneza, Welmoed van Loon, Emma Schallenberg, Felix Habarugira, Christian Ngarambe, Claude Mambo Muvunyi, Frank Mockenhaupt FP, Djibril Mbarushimana, Jules Minega Ndoli

# 54

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Anti-circumsporozoite Protein Antibodies as Markers for Malaria Transmission Monitoring

#### **Authors:**

Linda Akuffo, Rawdat Baba-Adam, Bright Asare, Eric Kyei-Baafour, Oscar Dar*ko, Kwadwo Asamoah Kusi* 

# 55

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Anti-gSG6-P1 IgG response as biomarker for the seasonal heterogeneity of human exposure to Anopheles gambiae bites in rural area of Cameroon in Central Africa

# **Authors:**

Glwadys Cheteug Nguetsa, Emmanuel Elanga-Ndille, Estelle Essangui Same, Tatiana Nganso, Stanilas Mandeng, Wolfgang Ekoko, Jérome Binyang, Balotin Fogang, Lynda Nouage, Micheal Piameu, Lawrence Ayong, Josiane Etang, Samuel Wanji and Carole Else Eboumbou Moukoko

# 56

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Assessing the effectiveness of releasing MB-infected mosquitoes for malaria control through synthetic lab experiments.

#### **Authors:**

Charlene N. T. Mfangnia, Matteo Pedercini, Henri Tonnang, Santiago Movilla Blanco, Vadim Nuì ez Pawlowsky, Jeremy He*rren*,

# 57

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Assessing the impact of a malaria control interventions using mathematical modelling to support strategic malaria planning in mainland Tanzania

#### **Authors:**

Billy Bauzile, Sumaiyya Thawer, Flavia Camponovo, Samwel Lazaro, Sijenunu Aaron, Fabrizio Molteni, Emilie Pothin

# 58

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Asymptomatic carriage of Plasmodium spp. among SMC eligible children and frequency of dhps- A437G and -A581G in the Kaele Health District, Far North region of Cameroon.

# **Authors:**

Wanda Grace Yimga, Djerassem Onesime, Noudou Nathan Collette Belinga, Abas Mouliom, Valery Pacome-Kom Tchuenkam, Calvino Fomboh, Voundi Voundi Junior, Tchadjeu Chris-tophe, Ateba Joel, Achu Fosah Dorothy, Jean Louis Ndiaye, Wilfred Mbacham, Innocent Mbulli Ali

# 59

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Attractive Targeted Sugar Baits for malaria control in western Kenya (ATSB-Kenya): cohort study recruitment

#### **Authors:**

Alice Kamau, Kizito Obiet, Caroline Ogwang, Brian Seda, Daniel McDermott, Julia Janssen, Wycliffe Odongo, Julie Gutman, Jonathan Schultz, Frank Aduwo, Mercy Chepkirui, Maia Lesosky, Martin Donnelly, Simon Kariuki, Aaron Samuels, Feiko ter Kuile, Sarah G Staedke

# 60

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Challenges in Data Utilization Across Health System Levels: Insights from the First Malaria Surveillance Assessment in Benin using a Mixed Method Approach

#### **Authors:**

Koffi Emmanuel YOVO, Thibaud de Chevigny, Achille COUAO-ZOTTI, HOUNDJO William, Macoumba Toure, Lundi-Anne Omam Didier Agossadou, Julien AÌ SSAN, Arnaud le Menach, Olajumoke Adekeye, Cyriaque AFOUKOU, Achille Batonon

# 61

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Children hospitalized with severe malaria in Democratic Republic of the Congo (DR Congo); Household characteristics and factors associated with mortality

# **Authors:**

Aymar AKILIMALI, Jones ONESIME, Hardy ELEMBWE, Samson HANGI, Excellent RUGENDABANGA and Chrispin BIAMBA

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Climatological factors associated with malaria incidence in lowland zone of Rwanda: a time-series study, 2012- 2019.

# **Authors:**

Hategekimana J.P., Ndagijimana A., Hakizimana E. , Lucchi NW

# 63

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Clinical findings in sub-Saharan migrants with

# asymptomatic Plasmodium infections

#### **Authors:**

Isabelle Eliasson, Katja Wyss, Rebecca Tafesse Bogale, Irene Nordling, Andreas Wì'ngdahl, Caroline Rönnberg, Olof Hertting, Anna Fì\_rnert

# 64

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Community prevalence, distribution and risk factors for falciparum and relapsing malaria in Dschang, Western Cameroon.

#### **Authors:**

Samuel J. White, Pacôme Tchuenkam, Miriama Mbouh, Zachary Popkin-Hall, Bouopda-Tuedom Aline Gaelle, Yannick Nene Ngomsi, Jacob Sadler, Darlin Bean Kaunda Nguene, Ngum Niba Nchotu Miriam, Kiam Belinda, Ibrahima-Ibrahima, Onguene Clément Janvier, Jessica T Lin, Rhoel Dinglasan, Nsango Sandrine Eveline, Jonathan J. Juliano, Innocent Mbulli Ali

# 65

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Community-driven Mosquito Control: Putting Vector Surveillance Technology In The Hands Of The Community

#### **Authors:**

Wanzi Daka, Chungu Mulenga, Lona Chibale

# 66

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Concordance of DHIS2 malaria data versus source documents and its influencing factors among health facilities in Muyuge district, Eastern Uganda

#### **Authors:**

Shivan Nuwasiima, Arthur Mpimbaza, Emmanuel Arinaitwe, Rek John Cedric, Joan N. Kalyango, Moses R. Kamya, Joaniter I. Nankabirwa

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Contrasting genomic epidemiology between sympatric Plasmodium falciparum and Plasmodium vivax populations

#### **Authors:**

Philipp Schwabl, Flavia Camponovo, Angela Early, Pablo Martinez de Salazar, Ruchit Panchal, Sabrina Gobran, Meg Shieh, Zack Johnson, Margaret Laws, Jean Alexandre, Helen Imhoff, Kashana James, Horace Cox, Caroline Buckee, Daniel Neafsey

# 68

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Correlation between climatic Factors and malaria cases in districts Sentinel Sites in Rwanda Between 2019 to 2023

#### **Authors:**

James Kagame, Ladislas Nshimiyimana, Yves Ishimwe Kirunga, Arlette Umugwaneza, Jean Damascene Hagenimana

# 69

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Coverage and Impact of a Programmatic Mass Drug Administration Campaign for Malaria in Southern Mozambique

# **Authors:**

Maria Tusell, Arsénio Nhacolo, Laura Fuente-Soro, Jacopo Vecchio, Amancio Nhangave, Khalid Bapu, Felimone Amone, Orcidio Chivite, Nteruma Catorze, Valencia Novele, Wilson Simone, Lidia Nhamússua, Ismail Chiposse, Alfa Moiane, Alberto Gomo, Odety Chissico, Donaldo Artur, Dircia Mandlate, Antonio Zacarias Beúla, Danilo Manjares, Mércia Dimene, Samira Sibindy, Baltazar Candrinho, Pedro Aide, Caterina Guinovart

# 70

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Current trends of malaria burden in Burkina Faso: how far from achieving the 2030 goal

#### **Authors:**

Aissata Barry, Diane Sare, Jean Baptiste Ouedraogo, Maimouna Bamouni, Eric Besong, Sidzabda Kompaore

# 71

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Data Abstraction Tool (DAT)

#### **Authors:**

Joseph D. Obukosia, Mark Wamalwa, Sisco Cherono, Salvador D. Atagong, Eric Ibrahim, Franck B. N. Tonle, Grace R. Aduvukha, Namikelwa, D. Nabucha, Lorna Chepkemoi, Juliet A. Onditi, Kibaba C. Nabukuye, Oyoo J. Akinyi, Chelsea M. Kilonzo, Antoinette Wiebe, Marianne E. Sinka, Henri E.Z. Tonnang

# 72

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Designing cluster randomised trials for malaria: insights from mathematical modelling

# **Authors:**

Joseph D. Challenger, Joseph R. Biggs, Jackie Cook, Thomas S. Churcher

# 73

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Development of a data dashboard to merge routine and molecular surveillance data to accelerate malaria elimination in Senegal

#### **Authors:**

Médoune Ndiop, Katherine E. Battle, David Kong, Emily K. Driano, Punam Amratia, Samuel Buxton, Mouhamad Sy, Bassirou Ngom, Caitlin Bever, Dyann F. Wirth, Joshua L. Proctor, Ibrahima Diallo, Sarah K. Volkman, Daouda Ndiaye, Doudou Sène

# 74

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Dry season prevalence of P. falciparum infection among school-aged children in rural Mali - Heterogeneity and risks factors

#### **Authors:**

Mahamoudou Toure, Sophie Sarrassat, Cheick O. Doumbia, Immo Kleinschmidt and Seydou Doumbia

# 75

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Dynamics of asymptomatic Plasmodium falciparum and Plasmodium vivax infections and their infectiousness to mosquitoes in a low transmission setting of Ethiopia: a longitudinal observational study

#### **Authors:**

Elifaged Hailemeskel, Surafel K. Tebeje, Jordache Ramjith, Temesgen Ashine, Kjerstin Lanke, Sinknesh W. Behaksra, Tadele Emiru, Tizita Tsegaye, Abrham Gashaw, Soria Kedir, Wakweya Chali, Endashaw Esayas, Temesgen Tafesse, Haile Abera, Mikiyas Gebremichael Bulto, Girma Shumie, Beyene Petros, Hassen Mamo, Chris Drakeley, Endalamaw Gadisa, Teun Bousema, Fitsum G. Tadesse

# 76

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Dynamics of submicroscopic and microscopic asymptomatic malaria infection and its determinants: a longitudinal study in South Benin

#### **Authors:**

Rodeline Telfils, Akpéyédjé Yannelle Dossou, Armel Djènontin, Elisée Adimi, Romuald Akoho, Justine Bailly, Aziz Bouraïma, Déborah Matondo, Yolande Sissinto-Savi de Tove, Dismand Houinato, Achille Massougbodji, Célia Dechavanne, Gilles Cottrell

# 77

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Effective strategies for malaria burden reduction in southeast Senegal: a mathematical modeling approach

#### **Authors:**

Mor Absa LOUM, Asaiah AGORINYA, Jean-Louis Abdourahim N'diaye, Jaline GERARDIN

# 78

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

EFFECTS OF USAGE AND NON-USE OF INSECTICIDE TREATED NETS ON MALARIA TRANSMISSION DYNAMICS IN LAGOS STATE, NIGERIA

#### **Authors:**

Olasinde Abdulazeez Ayodeji, Muawiyah Sufyan, Debra Okeh, Susan Adie, Charles Emenike

# **79**

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Effects of user fee exemption and the updated 2012 WHO recommendation on Intermittent Preventive Treatment in pregnancy (IPTp-SP3+) in regional hospital settings in Burkina Faso: a trend analysis from 2013-2018.

# **Authors:**

Yves Daniel Compaore, Abou Coulibaly, Issaka Zongo, Kadari Cisse, Sodiomon Bienvenu Sirima, Jean Bosco OuedraogoSeni Kouanda

# 80

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Enhancing malaria service delivery through strengthening the capacity of OTSS supervisors in Ghana

# **Authors:**

Amos Asiedu, Felicia Amoo-Sakyi, Paul Boateng, Joseph Boye-Doe, Charles Agblanya, Keziah Malm, Raphael Ntumy, Lolade Oseni, Gladys Tetteh

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Enhancing Malaria Surveillance and Response Systems Amid Changing Malaria Epidemiology: Experience from Tanzania

# **Authors:**

Goodluck Tesha, Maneno Luponya, Asha Khamis Ussi, Joackim Nyarigo, James Mziray, Anna Mahendeka, Dorice Respic, Pai Chombongo, Khalifa Munisi, Joseph Joseph, Rajabu Mkomwa, Frank Chacky, Sijenunu Aaron, Samwel Lazaro, Edward Kenyi, Lola Oseni, Gladys Tetteh.

# 82

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Enhancing Technical Support to Malaria Control Programs in Decision-Making through Geospatial Modeling in Sub-Saharan Africa: The Malaria Atlas Project East Africa Node

#### **Authors:**

Punam Amratia, Susan Rumisha, Sosthenes Ketende, Tasmin Symons, Peter Gething, Jailos Lubinda, Su Kang, Song Zhang, Mark Connell, Camilo Vargas, Tolu Okitika

# 83

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Entomological survey of malaria vector mosquitoes for correlated morphological and parasitological studies in the Sylhet region of Bangladesh

#### **Authors:**

Tilak Chandra Nath, Nilotpal Dey, Jannatul Nyema, Mandira Mukutmoni, Md. Hasanuzzaman

# 84

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Epidemiology and Surveillance of Malaria from 2013 to 2022 in Bale Zone, Ethiopia

#### **Authors:**

Mohammed Hasen Badeso, Geremu Tsegaye, Feyiso Bati

# 85

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Epidemiology of malaria at the end of the period of high malaria transmission among schoolchildren in the Houndé health district in Burkina Faso

#### **Authors:**

Romaric Oscar Zerbo, Charles Wendkuni Zoungrana, Alassane Haro, Abdoul Aziz Sienou, Yves Daniel Compaoré, Issaka Zongo, Jean Bosco Ouédraogo

# 86

#### Category

Malaria Epidemiology, Modelling, Surveillance and Impact

Evaluating the Malaria Scorecard in Enhancing Community-Driven Home-Based Malaria Management in Rwanda

#### **Authors:**

Nshimiyimana Aaron, Gatete Jean Marie Vianney, Ndagijimana Deogratias, Habanabakize Epaphrodite, Ishimwe Kirunga Yves Maric, Eric Remera

# 87

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Evaluation of Malaria Surveillance System in Homa Bay County, Kenya, January-March 2023

# Authors:

D.Wangari, E. Oyugi, M. Nunga, M. Owiny

# 88

#### Category:

Drug Efficacy

Temporal Dynamics of *Plasmodium falciparum* ex vivo Drug Resistance in The Gambia: A Comparison of Median IC50 Values of parasites collected in 2012 and 2022.

#### **Authors:**

Jawara, A. S., Bojang, F., Drammeh, N. F., Jaiteh, F. K., Manneh, B., Mbye, H., Ceesay, S., Joof, F., Nyang, H., Oriero, E. C., Okebe, J., Amambua-Ngwa, A.

# 89

# Category:

Drug Efficacy

Primaquine combined with artemether-lumenfantrine suppressed parasitemia, and improves hepatic antioxidants defense in *Plasmodium berghei* - infected mice

#### **Authors:**

Jimoh AO, Azeez YO, Ajayi AM, Ademowo OG,

# 90

# Category:

Drug Efficacy

Identification of Potential Inhibitors of PF3D7\_1404900; a novel *Plasmodium falciparum* protein.

#### **Authors:**

Ben-Patterson Albert, Lomotey Jethro, Adafia Ruth, Obeng Albert, Amoh-Boateng David, Taylor Ebenezer, Ibrahim Bashir, Amlabu Emmanuel

# 91

# Category:

Drug Efficacy

N-Acetyltransferase-2 (NAT2) genotype frequency in Cameroon

# **Authors:**

Jean Paul Chedjou, Akindeh M. Nji, Palmer Masumbe Netongo, Olivia Achonduh, Aristid Ekollo, Lesley Ngum Ngum, Wilfred Fon Mbacham

# 92

# Category:

Drug Efficacy

Reduced malaria infection and anemia among children under 5 years in the health district of Koutiala, Mali,

an area experienced ten-year of Seasonal malaria chemoprevention

#### **Authors:**

Mamadou Coulibaly, Hamma Maiga, Mamadou Dolo, Oumar Coulibaly, Ibrehima Guindo, Youssouf Sidibe, Abdoulaye Djimde and Issaka Sagara

# 93

# Category:

Drug Efficacy

In vivo anti inflamatory activity of leaf and stem extracts of prioria msoo.

#### **Authors:**

Dismas Anthony Zone Makungu

# 94

#### Category:

Drug Efficacy

Ethiopian *Plasmodium vivax* hypnozoites formation dynamics and their susceptibility to reference antimalarial drugs

#### **Authors:**

Fanta Sogorea , Ousmaila Diakitea, Soriya Kedirb, FatalmoudouTandinaa, Mohamed Maigaa, Andargie Abatec,d, Lemu Golassac, Abdoulaye A. Djimde, Laurent Dembele

# 95

# Category:

Drug Resistance

Mapping the molecular determinants of SP resistance in Benin to inform the future use of Perennial Malaria Chemoprevention (SP-PMC)

#### **Authors:**

Azizath Moussiliou, Andria Mousa, Ana Chopo Pizarro, Helle Hansen, Emma Filtenborg Hocke, Khalid B Beshir, Cyriaque Affoukou, Martin Akogbeto, Michael Alifrangis, Cally Roper, Corine Ngufor

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# Category:

Drug Resistance

Persistence of residual submicroscopic P. falciparum parasitemia following treatment of artemether-lumefantrine in Ethio-Sudan border, western Ethiopia

#### **Authors:**

Geletta Tadele, Fatou K. Jaiteh, Mary Oboh, Eniyou Oriero, Sisay Dugassa, Alfred Amambua-Ngwa, Lemu Golassa

# 97

# Category:

Drug Resistance

Efficacy of three artemisinin-based combinations for the treatment of uncomplicated malaria in children in Burkina Faso

#### **Authors:**

Debe S, Lingani M, Tarama C, Sombie S, Kinda R, Ganou A, Tiendrebeogo F, Tinto H, Tougri G, Eddis C, Ahmed J, Moriarty LF, Valea I, Gansane A

# 98

# Category:

Drug Resistance

Multidrug resistance against malaria: Review of impact of mass drug administration

#### **Authors:**

Progress Agboola, Boluwatife Aderounmu, Tioluwafifunmi Olaposi Oyetunde Laosebikan

# 99

# Category:

Drug Resistance

Effect of soil-transmitted helminthiasis (STHs) on the genetic diversity of targeted antimalarial resistance genes and vaccine targets in malaria-STHs coinfections in the Centre region of Cameroon

#### **Authors:**

Honore Awanakam, Zeukeng Francis, Keumo Loic, Livo F. Esemu , Romeo Djounda, Hillary Tene, Bekindaka N. Obase, Agnenga Balonga, Nchankou Loic, Ange Kamgmo,, Philomina Gwanmesia, Rose Leke, Jude Bigoga

# 100

# Category:

Drug Resistance

Molecular surveillance of anti-malarial resistance pfcrt and pfmdr1; A case study of febrile patients in Ondo state, South-West Nigeria

#### **Authors:**

Ajayi, K. O, Omoya, F. O. Oladejo, B. O. and Oladunmoye, M. K.

# 101

# Category:

Drug Resistance

Frequency of Artemisinin Resistance Markers and Influence on Treatment Outcomes in Malarious Patients in an Endemic Area of South-western Nigeria

# **Authors:**

Abiodun Amusan, Olugbenga Akinola, Kazeem Akano, Maria Hernandez-Castaïeda, Jenna Dick, Akintunde Sowunmi,Geoffrey Hart,Grace Gbotosho,

# 102

# Category:

Drug Resistance

Characterization of antimalarials drugs resistance and genetic diversity of *P. falciparum* isolates in community and hospital settings, in the south of Brazzaville and Beyond.

#### **Authors:**

Marcel Tapsou BAINA, Jean Claude DJONTU, Jacque DOLLON MBAMA NTAB, Abel LISSOM, Chastel NFOUTOU MAPANGUY, Christevy Jeannhey VOUVOUNGUI, Alain Maxime MOUANGA, Etienne NGUIMBI Francine NTOUMI

# 103

# Category:

Drug Resistance

Ex-vivo susceptibility of *Plasmodium falciparum* to Chloroquine: prevalence of mutation of the pfcrt and pfmdr1 genes in Bobo Dioulasso

# **Authors:**

Thomas Bazié, Zachari Kabré, Aminata Fofana, E Catherine Neya, Pabame Perside, Myreille Bedjulko Somé, R. Serge Yerbanga, A Fabrice Somé, Jean-Bosco Ouédraogo,

#### 104

#### Category:

Drug Resistance

Dynamic trends of selected quinoline and Artemisinin resistance markers in Gambian *Plasmodium falciparum* isolates from regions with differences in malaria transmission intensity.

#### **Authors:**

Blessed Etoketim, Mary Aigbiremo Oboh,

# 105

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

The search for immunodominant T cell peptides from candidate malarial antigens for multi-epitope malaria vaccine design

## **Authors:**

Belmonte M, Ganeshan H, Huang J, Belmonte A, Inoue S, Velasco R, Acheampong N, Ofori EA, Akyea-Mensah K, Frimpong A, Ennuson NA, Frempong AF, Kyei-Baafour E, Amoah LE, Edgel KA, Peters B, Villasante E, Kusi KA, Sedegah M

# 106

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Dynamics of naturally acquired immune responses to Plasmodium falciparum sex and asex stage antigens in

# two different endemic areas of Senegal

# **Authors:**

LAM Aminata, Lo Aminata Colle, Sylla Khadim, Kébé Khadim, Gaye Ndeye, Lelo Souleye, Manga Isaac Akenaton, Fall Cheikh Binetou, Sow Doudou, Tine Roger Clement, Gaye Omar, Faye Babacar

# 107

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Malaria vaccine against *Plasmodium falciparum* in clinical phase; challenges and perspectives.

# **Authors:**

Armstrong Mwepu

# 108

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Assessment of Naturally Acquired Humoral Immunity against malaria protecting against Controlled Human Malaria Infection (CHMI)

# **Authors:**

Nouhoun Barry, Stephanie Sefried, Nicole Peter, Freia-Raphaella Lorenz, Rafiou Adamou, Thomas L. Richie, Stephen L. Hoffman, Peter Kremsner, Jeannot Zinsou, Ayola Akim Adegnika, Benjamin Mordmì\_ller, Matthew McCall, Rolf Fendel

# 109

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Behavioral and social predictors of malaria vaccine uptake and hesitancy among eligible children and their caregivers in bumula subcounty, bungoma county

#### **Authors:**

Ezekiel Chepkiyeng

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# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Prevalence of Naturally Acquired Antibodies against Merozoite Surface Protein 3 in Malaria Symptomatic and Asymptomatic Individuals.

#### **Authors:**

Comfort Kotey, Emmanuel K. Anaabono, Josiah Affum Darko, Vera Appiah-Kubi, Franklin Y. Nuokpem, Yaw Aniweh.

# 111

# **Category:**

Immunology & Vaccines (Children, Pregnant Women and Adults)

Evaluation of efficacy and immunogenicity of a delayed, fractional dose of RTS,S/AS01E malaria vaccine in Plasmodium falciparum-infected and uninfected adults in Kenya

#### **Authors:**

Cynthia K. Lee, Christian F. Ockenhouse, Nathanial K. Copeland and Lucas Otieno, Lucas.Tina.

# 112

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Unlocking Vaccine Potential: Demonstrating the Impact of Awareness in Community-Level Malaria RTS,S/AS01 Vaccine Uptake

#### **Authors:**

William Dekker

# 113

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Estimating the proportion of children who are fully immunized according to the Expanded Program on Immunization in 13 high malaria transmission communities in Malabo District, Equatorial Guinea

#### **Authors:**

Esther Eburi

# 114

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

When it is available, will you pay for it? A Systematic Review of Willingness to Pay (WTP) for Malaria Vaccines in Africa

#### **Authors:**

Fortune Benjamin Effiong, Roseline Dzekem Dine, Moses Asori. Marcia Gumiel

# 115

#### Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Genetic Analysis of *Plasmodium falciparum* Apical membrane Antigen I In Lagos, Nigeria. Background Eniafe Gabriel Opeyemi, Chukwuemeka Somadina, Agatha Nkem Ibekpobaoku, Ajibaye Olusola

# 116

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Pattern of naturally acquired antibody responses against a panel of *P. falciparum* antigens in children living in an area of seasonal malaria transmission of Burkina Faso

#### Authors

Sem Ezinmegnon, Vivien Sawadogo, Amidou Diarra, Amidou Z. Ouédraogo, Alphonse Ouedraogo, Alfred B. Tiono, Issa Nébié, Sodiomon B. Sirima,

# 117

# Category:

Malaria in Pregnancy

Dynamic of prolactin and cortisol levels during pregnancy in malaria endemic area: effects of gestational age

#### **Authors:**

Francois Kiemde, Hermann Sorgho, Serge Henri Zango, Gnohion Fabrice Some, Toussaint Rouamba, Ousmane Traore, Berenger Kabore, H. Magloire Natama, Yeri Esther Hien, Innocent Valea, Henk Schallig and Halidou Tinto

# 118

# Category:

Malaria in Pregnancy

Factors affecting the uptake of optimal doses of Intermittent Preventive Treatment of Malaria in pregnancy using Sulfadoxine/ Pyrimethamine in Ghana: New Evidence from the 2019 Malaria Indicator Survey

# **Authors:**

Desmond Klu, Lily Owusu

# 119

#### Category:

Malaria in Pregnancy

The use of ultrasonography in malaria and typhoid diagnosis: A Proposed Framework for Triaging School-Aged Children and Pregnant Women in Resource-Scarce Settings. A review

# **Authors:**

Adam Muhammad Ali, Geofery Luntsi, Alhamdu Silas Moi, Chigozie Ivor Nwobi.

# 120

# Category:

Malaria in Pregnancy

Incidence of Malaria in Pregnancy (MIP) in Western 2 Health Region, The Gambia 2019 -2023

# **Authors:**

Aminata Bah, Amadou Woury Jallow

# 121

# Category:

Malaria in Pregnancy

Evaluation of availability and bio-efficacy of Long-Lasting Insecticide-treated mosquito Nets (LLINs) for

# pregnant women in maternities from Benin

#### **Authors**

Armel DJENONTIN, Aziz BOURAIMA, Christophe SOARES, Marc FIOGBE, Stéphanie MAHAME, Cyriaque AFFOUKOU and Gilles COTTRELL5

# 122

#### Category:

Malaria in Pregnancy

Evaluating the Impact of Social Media Interventions on Improving Intermittent Preventive Treatment in Pregnancy ( IPTp) data quality in Plateau State, North Central Nigeria

#### **Authors:**

Attahir Abubakar, Yonwul Dakyen, Mujahid Aliyu Idris, Victor C. Pam, Justice Adaji, Comfort Kingsley Randa, Paulinus Amaeze, Abimbola Olayemi, IniAbasi Nglass, Uchenna Nwokenna, Thomas Hall, Olugbenga Mokuolu, Veronica Momoh, Erkwagh Dagba and Cassandra Elagbaje

# 123

# Category:

Malaria in Pregnancy

Plasmodium berghei infection associated with adverse birth outcomes in pregnant Swiss albino mice

# **Authors:**

David Audu , Olufunmilayo Ajoke Idowu, Adewumi Babatunde Idowu

# 124

# Category:

Malaria in Pregnancy

Evaluation of the effectiveness of compliance with malaria prevention strategies among pregnant women in rural areas, five years after the update of the national policy in Burkina Faso.

# **Authors:**

Georges Somé, Moussa Lingani, Serge Henri Zango, Innocent Valéa, Florence Ouédraogo,Berenger Kaboré,Toussaint Rouamba,and Halidou Tinto.

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# Category:

Malaria in Pregnancy

Title: Evaluation of the effectiveness of compliance with malaria prevention strategies among pregnant women in rural areas, five years after the update of the national policy in Burkina Faso.

#### **Authors:**

Georges Somé, Moussa Lingani, Serge Henri Zango, Innocent Valéa, Florence Ouédraogo, Berenger Kaboré, Toussaint Rouamba, and Halidou Tinto.

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# Category:

Malaria in Pregnancy

Title: Evaluation of the effectiveness of compliance with malaria prevention strategies among pregnant women in rural areas, five years after the update of the national policy in Burkina Faso.

#### **Authors:**

Georges Somé, Moussa Lingani ,Serge Henri Zango, Innocent Valéa, Florence Ouédraogo,Berenger Kaboré,Toussaint Rouamba,and Halidou Tinto.

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# Category:

Malaria in Pregnancy

Urinalysis and clinical symptoms in the prediction of malaria among pregnant women in Abia State, Nigeria.

#### Authors:

IHEMANMA, C.A., KANU, A.M. and 3ETUSIM, P.E.

# 128

# Category:

Malaria in Pregnancy

Navigating Malaria Challenges in Pregnancy for Maternal and Fetal Well-being in Nyakach sub -county, Kisumu

#### Authors

Cynthia Moraa Ombati And Travo Omollo Onyango

# 129

# Category:

Malaria in Pregnancy

Community-directed approaches in the revitalization of sulfadoxine-pyrimethamine for intermittent preventive treatment for malaria in pregnancy: Findings from a household midline survey in Kisumu and Migori counties

#### **Authors:**

Dennis J. Matanda, Zoe Nakuya, Stephen Kizito, Oscar Okoth, Brenda Otieno, Joshua Adholla, and Monica Oguttu

# 130

# Category:

Malaria in Pregnancy

Drivers of Malaria in Pregnancy in a highly malaria endemic state of India

#### **Authors:**

Manju Rahi, Poonam Saroha, Sanjeev Kumar Gupta, Chander Prakash Yadav, Jasmita Gill, Prakash Sahoo, Himmat Singh, Vani HC, Sanghamitra Pati, and Amit Sharma

# 131

#### Category:

Treatment and Community Case Management

The Impact of the Mobile Clinic on Malaria Control in the Conflict-affected South West Region of Cameroon.

#### Authors:

Awah K.A., Agbor P.A., Kombe B.N., Eyong V.O., Nkume V.U., Tanue E.A., Metuge A., Esther O.N., Fang E.E.

# 132

# Category:

Treatment and Community Case Management

Prevalence of pediatric malaria in hamisi subcounty. Case study in likindu health centre

# **Authors:**

DIANA OMBOKO ANDEYO

# 133

# Category:

Treatment and Community Case Management

Enhancing Universal Health Coverage for Malaria through Weekly Household Sweeps by Community Health Promoters in Nyamira, Kenya.

#### **Authors:**

Dorah Wafula, Wayne Otieno, Salome Ileli, Hillary Ngeso

# 134

#### Category:

Treatment and Community Case Management

Malaria Case Management and Treatment Failure among Mothers of Under Five Children in Osogbo, Southwest Nigeria.

#### **Authors:**

Nwogu Joseph Nkemakolam, Salami Kabiru Kunle, Nwokocha Ezebunwa Ethelbert, Iheanyi Valentine Ekechukwu, Nnamdi Azikiwe Olawale Ogundiran, Nwogu Esther Chinvere

# 135

# Category:

Treatment and Community Case Management

Improving Healthcare Equity and Access through Sustainable Community Interventions: Insights from Integrated Community Case Management of Childhood illness (iCCM) implementation in Benue State Nigeria

#### **Authors:**

Justice Adaji, Ekpeme Obi, Gloria Sill, Abraham Abutu, Alice Pam-Tok, Dooshima Belabo, Methodius Okouzi, IniAbasi Nglass, Uchenna Nwokenna,Susan Abege, Ashiver Wende, Thomas Hall, Arja Huestis, Sarah Birse, Erkwagh Dagba, Veronica Momoh, Jules Mihigo

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# Category:

Treatment and Community Case Management

Trends of adherence to malaria testing and treatment guidelines by community health volunteers in Kakamega county, Kenya.

#### **Authors:**

Faustina L. Sakari, Alfred Oginga, Edwin Onyango, James Kiarie, Charles Chege, Fredrick Ouma, Kibor Keitany, Robert Mwaganu, Joy Gakenia Murangiri, Ahmeddin Omar, Beatrice Machini, David Gathara, Erolls Sigei, Rose Jepchumba Kosgei, Anne-Beatrice Kihara

# 137

# Category:

Treatment and Community Case Management

Malaria case management by community health workers in the North West and South West regions of Cameroon from May-December 2021: overcoming access to basic healthcare due to conflict

#### **Authors:**

Ful Morine Fuen, Kongnyu Emmanuel Ringnyu, Denis Warri, Pius Tih Muffih.

# 138

#### Category

Diagnosis and Reagents Development

Analytical Performance Experimentation assessment of the miLab™ MAL Malaria system for the detection of *Plasmodium falciparum* in clinical samples in Lagos, Nigeria

# **Authors:**

Wellington Oyibo, ChinoWellington Oyibo, Chinonye Anabike, Oladipo Oladosu, Michael Kusimo

# 139

# Category:

Diagnosis and Reagents Development

Performance Evaluation of SD-Bioline Malaria HRP-2 (PF) and PLDH (Pan) Rapid Diagnostic Tests In Patients With Uncomplicated *Plasmodium Falciparum* Malaria In Lagos, Nigeria.

# **Authors:**

Azuka A. Ike, Wellington A. Oyibo, Sunday Omilabu

# 140

# Category:

Diagnosis and Reagents Development

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Assessing the effectiveness of marine plasma preparations on *P. falciparum* growth in vitro

#### **Authors:**

Cecilia Yankey, Oscar Nii Otto Darko, Dr Eric Kyei-Baafour, Prof Kwadwo Asamoah Kusi

#### 141

#### Category:

Diagnosis and Reagents Development

Histidine Rich Protein 2 based Rapid Diagnostic Tests Remain Sensitive in Uganda

#### **Authors:**

Kisakye D. Kabbale, Brian Assimwe, Kylie Hilton, Bienvenue Nsengimaana Caroline Mwubaha, Innocent Wiringilimaana, Francis D. Semakuba, Thomas Katairo, Shahiid Kiyaga, Monica Mbabazi, Stephen Tukwasibwe, Sam L. Nsobya, Victor Asua, Moses Kamya, Grant Dorsey, Melissa Conrad, Bryan Greenhouse, Isaac Ssewanyana, Jessica Briggs

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# Category:

Capacity Building, Leadership, and Governance

Field and lab platforms developed in Mali for support to antimalarial drug discovery.

#### **Authors:**

Laurent Dembele, Mohamed Maiga, Fanta Sogore, Abdoulaye A. Djimde

# 143

# Category:

Capacity Building, Leadership, and Governance

Establishing Standard In-vitro culture platform in resource limited setting: fostering South-South collaboration -Case study of NIMR/MRCG

## **Authors:**

Ajibaye Olusola, Okanazu Judith, Eniafe O. Gabriel, Idowu Samuel, Ibekpobaoku N. Agatha, Aina O. Oluwagbemiga, Olukosi A.Yetunde and Amambua-Ngwa Alfred.

# 144

#### Category:

Capacity Building, Leadership, and Governance

Creating community resources to make malaria genomic data analysis more accessible by evaluating, improving, and harmonizing software tools

#### Authors

Shazia Ruybal-PesÌÁntez, Aimee Taylor, Alfred Simkin, Jason Hendry, Jody Phelan, Jorge Amaya-Romero, Karamoko Niare, Kathryn Murie, Kirsty McCann, Max Murphy, Mouhamadou Fadel Diop, Nicholas Hathaway, Nick Brazeau, Sophie Berube, Stephen Schaffner, Bryan Greenhouse, Amy Wesolowski, Robert Verity

#### 145

### Category:

Capacity Building, Leadership, and Governance

Discrepancy analysis using Data Quality Audits at the Community level in Rwanda

# **Authors:**

NYABUGANDE Aimable, HABIMANA Faustin, NIKUZE Immaculee, KAYONGA Eugene1, MBITUYUMUREMYI Aimable, UWIMANA Aline, MUGABO Hassan, NZUNGIZE Lambert

# 146

#### Category:

Capacity Building, Leadership, and Governance

Partnership for Antimalarial Resistance Monitoring in Africa (PARMA) hubs: localization and capacity strengthening for African researchers by African researchers

# **Authors:**

Awa B. Deme, Mamadou A. Diallo, Mouhamad Sy, Bassirou Ngom, Amy Gaye, Aita Sene, Djiby Sow, Tolla Ndiaye, Ibrahima M Ndiaye, Daba Zoumarou, Cassandra Webster, Jehan Ahmed, Daouda Ndiaye

# 147

# Category:

Control, Elimination and Eradication

Situational analysis of Malaria in Cabo Verde: from endemic control to elimination and challenges ahead

#### **Authors:**

Adilson DePINA, Jonas Gomes and Antonio Moreira

### 148

# Category:

Control, Elimination and Eradication

Advancing Malaria Elimination in Vhembe Municipal District, Limpopo: Strategies, Innovation, and Collaboration

#### **Authors:**

Ikekhwa Albert Ikhile

# 149

#### Category:

Control, Elimination and Eradication

Understanding local factors contributing to malaria transmission in border communities in Southern Angola to inform policy implementation and community mobilization

#### **Authors:**

Alysse Maglior, Jesse Heitner, Rebecca Vander Meulen, Joao Baptista Nelo, José Franco Martins

### 150

# Category:

Control, Elimination and Eradication

Reach Every At-risk Community and Household with Malaria Elimination Interventions Working with Indigenous Institutions

#### **Authors:**

Anastasia Isodje, Adedamola Akiniola, Sokariba Omoni, Trust Avwenayeri

# 151

# Category:

Control, Elimination and Eradication

Pfhrp2 Gene Deletions are Associated with Cerebral Malaria

#### **Authors:**

Andrews Osei Obese, Elaine A. Boadu, Rhoda Yeboah, Caleb Danso-Coffie, Emmanuel Boafo, Joanita Yeboah, Winnefred Ofei-Kyei, Talent Senanu, Elinam Agbobli, Ben Gyan, Linda Eva Amoah, Daniel Oduro

# 152

# Category:

Control, Elimination and Eradication

Modelling the Impact of Indoor Residual Spraying on Malaria Transmission in Nassarawa State, North-central Nigeria

### **Authors:**

Auwal Suleiman, Lateef Kareem, Muawiyyah Sufiyan Babale, Obi Charles, Ahmad Ayuba Umar

# 153

# Category:

Control, Elimination and Eradication

The road to developing paediatric primaquine for malaria elimination

#### **Authors:**

Alphonse Ouedraogo, Julie Nguyen Pouplin

# 154

#### Category:

Control, Elimination and Eradication

Knowledge Gaps and Challenges in Malaria Management in selected health facilities, Cameroon: A Stakeholder Approach to Improving uptake of Malaria Prevention and Treatment Options for childhood Malaria in Cameroon.

#### Authors

Nfor EN, Ayima CW, Ngin EN, Ngala SL, Teko EM,Warri D, Tanayen GG, Nfor WG, Segha EA, Ngah LD, Ali IA, Mboh KE, Tih PM.

# 155

# Category:

Control, Elimination and Eradication

Community Listening at the Heart of Malaria Campaign Development: Our Experience Developing "Zero Malaria Starts with Me, the Power of EveryONE" Campaign in Kenya.

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#### **Authors:**

Dan Adipo, Sylvia Wamalwa, Emma Roscoe,

# 156

# Category:

Control, Elimination and Eradication

MESA Track - the unique free and open-access database of malaria projects

#### **Authors:**

Elisabet Marti Coma-Cros,

# 157

# Category:

Control, Elimination and Eradication

High Prevalence of Malaria Among Asymptomatic Individuals Sleeping Under Insecticide Treated Nets in Egbedore Local Government Area of Osun State

#### **Authors:**

Gbolabo Odewale , Alhassan Abdullahi Abdulrahman, Bala Hannatu Eleojo Mary, Luka Ilu Mela,

# 158

# Category:

Control, Elimination and Eradication

## **Authors:**

Comparative transcriptome analysis identifies candidate biomarkers for detection of asymptomatic malaria infections and genetic factors implicated in *Plasmodium falciparum* phenotypic plasticity

#### **Authors:**

### **Authors:**

Joseph G. Amwoma, Sarah Kituyi, Dancan M. Wakoli, Douglas O. Ochora, Gladys Chemwor, Risper Maisiba, Winnie Okore, Benjamin Opot, Dennis Juma, Eric M.O. Muok8, Eric C. Garges, Timothy E. Egbo, Franklin N. Nyabuga, Ben Andagalu, Hoseah M. Akala,

#### **Authors:**

# 159

#### Category:

Chemoprevention

#### **Authors:**

Impact of seasonal malaria chemoprevention on prevalence of malaria infection in northern Benin

#### **Authors:**

Azizath MOUSSILIOU, Yaw Aniweh, Charles AHOUANSOU, Gordon AWANDARE, Achille MASSOUGBODJI, Adrian LUTTY, Thierry ADOUKONOU, Nicaise Tuikue NDAM

# 160

#### Category:

Chemoprevention

Prevalence of asymptomatic *P. falciparum* carriage in seasonal malaria chemoprevention age target population in peri-urban area of Ouagadougou, Burkina Faso

#### **Authors:**

Alimatou Héma, Amidou Diarra, Jean W. Sawadogo, Ben Idriss Soulama, Denise Hien, Samuel Sermé, Issa Nébié, Alfred B. Tiono, Alphonse Ouédraogo, Sodiomon B. Sirima

#### 161

# Category:

Chemoprevention

The feasibility and acceptability of seasonal malaria chemoprevention among nomadic pastoralist population in Karamoja region in Uganda.

#### **Authors:**

Anthony Nuwa, Musa Odongo, James K. Tibenderana, Kevin N. Baker, Christian Rassi, David Salandini O. Odong, Maureen Nakirunda, Tonny Kyagulanyi, Stella B. Sali, Hilda Abio, Junior Achia, Godfrey Magumba, Sol Richardson, Damian Rutazaana, Jane I. Nabakooza, Denis Rubahika, Jimmy Opigo

# **Authors:**

# 162

# Category:

Chemoprevention

Coverage of perennial malaria chemoprevention with sulfadoxine-pyrimethamine and prevalence of malaria in young children after four years of implementation in Sierra Leone

#### **Authors:**

Augustin E. Fombah, Haily Chen, Kwabena Owusu-Kyei, Llorenc Quinto, Raquel Gonzalez, Julian Williams, Mireia LLach Berne, Myrte Wassenaar, Abubakarr Jalloh, Joe-Henry C. Sunders, Maximo Ramirez, Cesc Bertran-Cobo, Francisco Saute, Didier K Ekouevi, Valérie Briand, Anitta R.Y. Kamara, Tom Sesay, Mohamed Samai, Clara Menendez

#### **Authors:**

# 163

#### Category:

Chemoprevention

A systematic review and network meta-analysis on the safety and effectiveness of antimalarials in the management of sickle cell disease.

#### **Authors:**

Aymar AKILIMALI, Jones ONESIME, Hardy ELEMBWE, Excellent RUGENDABANGA, Samson HANGI and Chrispin BIAMBA

# 164

# Category:

Chemoprevention

Assessment of the Uptake of Sulphadoxine-Pyrimethamine for Intermittent Preventive Treatment among Pregnant Women in Osun State, Nigeria

# **Authors:**

Adebanjo J. Adegbola, Ruth M. Ogboye, Omotade A. Ijarotimi, Akaninyene E. Ubom, Bukola A. Adesoji, Oluseye O. Bolaji

# 165

# Category:

Chemoprevention

Estimating Seasonal Malaria Chemoprevention Coverage, Four Health Zones, Benin 2021

#### **Authors:**

Camille Bignon Houetohossou, Hindéwé Edgard William Houndjo, Sakariahou Kpanou, Elijah Egwu, Hortense Kossou, Patrick Condo, Ahmed, Saadani Hassani, Cyriaque Dossou Affoukou

# 166

# Category:

Chemoprevention

Role of supervision in improving malaria seasonal chemoprevention coverage and adherence in Nanoro, Burkina Faso

#### **Authors:**

Christèle Fayama, Macaire Nana, Moussa Djimde

### 167

#### Category:

Chemoprevention

Deploying digital tools to optimize seasonal malaria chemoprevention campaigns: Lessons from Federal Capital Territory, Nigeria

#### Authors

Dorcas Essien, Olusola Oresanya, Oluwafunmilayo I, Jerry Rago, Jesujuwonlo F, Jennifer C, Ebenezer I, Olabisi O.

# 168

# Category:

Vector Biology and Control

Malaria Transmission in the Era of Insecticide-Treated Bed Nets: Investigating Behavioral Adaptations of Malaria Vectors in Southeastern Tanzania

#### **Authors:**

Janice S. Maige, Alphonce A. Assenga, Tegemeo Gavana, Gloria S. Shirima, Hajirani M. Msuya, Protas Sayo, Xiao Ning, Xiao-Nong Zhou, Duo-Quan Wang, Salim Abdulla, Samson Kiware, Nicodemus Govelle, Prosper Chaki, Yeromin P. Mlacha

### 169

# Category:

Vector Biology and Control

Assessment of twenty-four hours biting patterns and human exposure risk to bites of Anopheles mosquitoes in South-eastern Tanzania

#### **Authors:**

Muwonge Constantine Mukisa, Fredros O. Okumu, Halfan S. Ngowo,Betwel J. Msugupakulya

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# 170

# Category:

Vector Biology and Control

Malaria Vector Surveillance In Ghana: Empowering District Health Units For Data Collection

#### **Authors:**

Ernest Boampong, Otubea Owusu Akrofi, Christian Atta-Obeng, Dr Keziah Malm, Andy Asafu-Adjaye, Dr Samuel Dadzie

#### 172

#### Category:

Vector Biology and Control

Assessing the Preferred Resting Sites of Anopheles Mosquitoes Inside Houses in Chikwawa District, Malawi

#### **Authors:**

Banda, J.S, Kaunde, N., Kambewa, A. Reimer, L., Jones, C., Themba, M. and Olanga, E.A.

#### 173

#### Category:

Vector Biology and Control

Residual efficacy of Fludora Fusion, SumiShield 50WG and Actellic 300CS for Indoor Residual Spraying in four IRS districts in Malawi

#### **Authors:**

Naomi Kaore, Leonard Dandalo, Nellie Kaunde, Abdoulaye Bangoura, Martin Chiumia, Wangisani Kumalakwaanthu, Don Mathanga, Themba Mzilahowa

# 174

#### Category:

Vector Biology and Control

Influence of Sugarcane Irrigation on Anopheles Mosquito Species Abundance and Diversity in Areas Surrounding Illovo Sugar Estate in Dwangwa, Nkhotakota District, Malawi

#### **Authors:**

Kenneth Ng'ambi

# 175

## Category:

Vector Biology and Control

Methanol and acetone extracts from the leaves of selected aromatic plants affect survival of field collected Anopheles arabiensis (Diptera: Culicidae) from Kisumu, Kenya

#### **Authors:**

Dimitri Wendgida Wangrawa, Félix Yaméogo, Aboubacar Sombie, Edward Esalimba, Eric Ochomo, Dov Borovsky, Athanase Badolo, Antoine Sanon

### 176

#### Category:

Vector Biology and Control

Larvicidal activities and synergistic effects of essential oils against Anopheles funestus and Culex quinquefasciatus (Diptera: Culicidae) from Kisumu, Kenya

#### **Authors:**

Dimitri W. Wangrawa, Jackline Kosgei, Maxwell Machani, James Opala, Silas Agumba, Felix Yaméogo, Dov Borovsky, Eric Ochomo

# 177

# Category:

Vector Biology and Control

The influence of larval habitats characteristics on mosquito larvae population in nkhatabay District: implication on larval source management.

# **Authors:**

Simeon Kaunda, Martin chiumia, Rosheen mthawanji, and yankho chapeta

# 178

# Category:

Vector Biology and Control

Insecticide treated eave nets and window screens control pyrethroid-susceptible and metabolic resistant disease vector mosquitoes: Evidence from a semi field system in Tanzania.

#### **Authors:**

Olukayode G. Odufuwa, John Bradley , Safina Ngonyani, Ahmed Bakari Mpelepele, Agathus Njohole, Dickson Kobe, Joseph B. Muganga, Rune Bosselmann, Ole Skovmand, Sarah Jane Moore

## 179

### Category:

Vector Biology and Control

Residual malaria transmission and the role of Anopheles arabiensis and Anopheles melas in central Senegal

#### **Authors:**

Ousmane Sy, Pape C. Sarr, Benoit S. Assogba, Mouhamed A. Nourdine, Assane Ndiaye, Lassana Konateí, Ousmane Faye, Martin J. Donnelly, Oumar Gaye, David Weetman, Elhadji A. Niang

### 180

#### Category:

Vector Biology and Control

Artificial markers induce natural male Anopheles gambiae and Anopheles coluzzii swarming and mating behavior in semi-field contained facility

# **Authors:**

Charles Nignan, Hamidou Maïga, Abdoulaye Niang, Simon Peguewinde Sawadogo, Olivier Gnankine, Kounbobr Roch Dabiré, Frédéric Tripet, Abdoulaye Diabaté

# 181

#### Category:

Vector Biology and Control

First report of natural infection of *Anopheles gambiae* s.s. and *Anopheles coluzzii* by Wolbachia Anga and Microsporidia MB in Benin: a cross sectional study

#### Authors

Minassou Juvénal Ahouandjinou, Arthur Sovi, Aboubakar Sidick, Wilfried Sewadé, Come Zinsou Koukpo, Saïd Chitou, Linda Towakinou, Bruno Adjottin, Steve Hougbe, Filémon Tokponnon, Germain Gil Padonou, Martin Akogbéto, Louisa A. Messenger, Razaki A. Ossè

# 182

# Category:

Vector Biology and Control

Evaluation of the trophic behaviour of *Aedes aegypti* in the city of cotonou in southern Benin

#### **Authors:**

AGBANRIN Ramziyath ,YADOULETON Anges ,DRAMANE Gado ,AHADJI-Dabla K.M. TCHIBOZO Carine , AGOLINOU Achaz,TOSSOU Roland

# 183

#### Category:

Vector Biology and Control

Late morning biting behaviour of *Anopheles funestus* is a risk factor for transmission in schools in Siaya, western Kenya

#### **Authors:**

Seline Omondi, Jackline Kosgei, George Musula, Margaret Muchoki, Bernard Abong'o, Silas Agumba, Caroline Ogwang, Daniel P. McDermott, Martin J. Donnelly, Sarah G Staedke, Jonathan Schultz, Julie R. Gutman, John E. Gimnig, and Eric Ochomo

# 184

# Category:

Vector Biology and Control

Bionomics of *Anopheles gambiae* complex Populations in a Malaria Pre-elimination Area of Southern Senegal

#### **Authors:**

Moussa Diop, Abdoulaye Kane Dia, Mame Fatou Tall, Mouhamadou Bassir Faye, Lassana Konaté, and El Hadji Amadou Niang

### 185

# Category:

Vector Biology and Control

Uncovering the Mystery of Malaria Vector(s) Avoiding the Indoor-Based Vector Control Tools: Evidence from Vector Resting Behavior, Longevity of Anopheles gambiae s.l. and biting patterns in Wonji Sugar Estate, Oromia, Ethiopia.

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#### **Authors:**

Kidane Lelisa, Lemu Golassa, Yitbarek Woldehawariat, Sisay Dugassa

# 186

#### Category:

Vector Biology and Control

Efficacy of Bacillus Thuringiensis var Israelinsis (Bti) on Culex and Anopheline mosquito larvae in Zomba, Malawi

#### **Authors:**

Martin Chiumia

# 187

#### Category:

Vector Biology and Control

Efficacy of Bacillus Thuringiensis var Israelinsis (Bti) on Culex and Anopheline mosquito larvae in Zomba, Malawi

#### **Authors:**

Martin Chiumia

# 188

### Category:

Vector Biology and Control

The Vector Atlas: providing data and evidence-based maps for malaria vector control

#### Authors:

Slnka, M.E., Tonnang, H. E. Z., Wamalwa, M., Ryan, G., Golding, N., Wiebe, A., Chepkemoi, L., Onditi, J., Kibaba, C. N., Obukosia, D., Namikelwa, D. N., Oyoo, J. A., Cherono, S., Senagi, K., Hancock, P., Kilonzo, C. M., Wafula, S. N., Gitu, P., Atagong, D. S.

# 189

## Category:

Vector Biology and Control

Metabolic Resistance and Cost-fitness in Generations of *Anopheles gambiae* (Kisumu) Adults Exposed to Sub-Lethal Concentrations of Permethrin

#### **Authors:**

Adegbola O. Adesoye, Adedapo Adeogun, Olalekan E. Olagundoye, Tolulope A. Oyeniyi, Adeolu T. Ande

# 190

# Category:

Vector Biology and Control

Temperature, mosquito feeding status and mosquito density influence the measured bio-efficacy of insecticide-treated nets in cone assays

#### **Authors:**

Jilly Jackson Mseti, Masudi Suleiman Maasayi, Aidi Galus Lugenge, Ahmadi B Mpelepele, Ummi Abdul Kibondo, Frank Chelestino Tenywa, Olukayode G. Odufuwa, Mgeni Mohamed Tambwe and Sarah Jane Moore

# 191

# Category:

Vector Biology and Control

A survey of malaria vectors feeding preference, biting site and resting behavior in the malaria elimination settings of Dembiya District, Northwestern Ethiopia

# **Authors:**

Mihretu Tarekegn , Sisay Dugassa , Yohannes Negash , Habte Tekie , Yitbarek Woldehawariat

# 192

# Category:

Vector Biology and Control

Effect of pesticides on the genetic structure of Anopheles coluzzii populations in some agro-ecological zones of Benin

### **Authors:**

FASSINOU Y.H. Arsène Jacques , AGOSSA Rodrigue Fiacre, OSSE A. Razaki , AKOGBETO Martin

# 193

# Category:

Vector Biology and Control

Determinants of consistent use of Long Lasting insecticidal treated mosquito bednets in Karongi District 2022.

#### **Authors:**

Twagirimana G.,Ntakirutimana T., Ndikubwimana A., TWAGIRIMANA Gabriel

# 194

#### Category:

Phytomedicines, Pharmacology and Drug Development

A phase 1b study to characterise the safety and pharmacokinetic/ pharmacodynamic relationship of MMV367 (GSK701) in adult participants experimentally infected with blood stage Plasmodium falciparum

### **Authors:**

BE Barber, R Denhardt Eriksson, E Guirou, J Flynn, N Sahai, C Muller, I Leelasena, I Lim, C Evangelista, S Mathison, S Llewellyn, R Webster, A Potter, MW Marx, FJ Gamo, Rachel A. Gibson, R Sharma, L Sanz, A Cahn, B Bestgen, S Chalon.

# 195

#### Category:

Phytomedicines, Pharmacology and Drug Development

Curative effectiveness of Zanthoxylum chalybeum rootbark aqueous extracts versus Arthemether Lumefantrine in Wistar albino mice infected with Plasmodium berghei NK65

## **Authors:**

Okot Michael, Prof. Paul Alele

# 196

#### Category

Phytomedicines, Pharmacology and Drug Development

Restorative Role Of Solanum Torvum Swartz. (Solanaceae) Leaves' Extract In Plasmodium Berghei Induced Liver And Kidney Damage In Rats.

# **Authors:**

NGWEM L., DJOMDI C., TSAKEM J., DJIENTCHEU J-P , FOKOU R., FIFEN R., TCHEUTCHOUA Y., YIMGANG L., GOUNOUE R., NGUEGUIM F., DIMO T.

# 197

# Category:

Phytomedicines, Pharmacology and Drug Development

Extra And Intra-Erythrocytic Activity Of Molucidin And

MI F52; Novel Tetracyclic Irridoid Compounds Isolated From Morinda Lucida Benth

#### **Authors:**

Botchie Kojo Senyo, Ama Nyame Antwi, Agyapong Jeffrey, Amoa-Bosompem Michael, Azerigyik Faustus, Djameh Isabella Georgina, Ayertey Frederick, Ayi Irene, Anyan William. K, Appiah A, Ofori Michael, Morinaga O, Uto T., Huu Tung N., Shoyama Y., Boakye Daniel A., Ohta N. and Ohashi Mitsuko

# 198

### Category:

Phytomedicines, Pharmacology and Drug Development

Phytomedicines, Pharmacology and Drug Development: Ethnobotanical survey of plants used in the treatment of malaria by traditional healers in markets A and B in the city of Bafoussam (Cameroon).

#### **Authors:**

KOAGNE WEMBE Wilfried,TENE FOTSING Jyres , DZOTAM KAMGUE Joachim

#### 199

#### Category:

Phytomedicines, Pharmacology and Drug Development

Assessment of the antiplasmodial effects and toxicity study of endophytes fungi extract isolated from Alstonia boonei De Wild.

#### Authors

DEMENI EMOH Paola Cynthia

#### 200

#### Category:

Insecticide Resistance

Susceptibility to insecticides in Anopheles gambiae sensu lato in the district of Yaoundé 7, Central Cameroon region

#### **Authors:**

Nchankou Kouotou Loic, Agenga Balonga Annie Frandzine, Zeukeng Francis, Keumo Loic, Awanakam Honoré, Jude Daiga Bigoga.

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# 201

# Category:

Insecticide Resistance

Insecticides resistance across the Sahelian, Humid savanna, Highland, Coastal and Forest ecoepidemiological settings in Cameroon.

### **Authors:**

Nelly Armanda Kala Chouakeu, Roland Bamou, Edmond Kopya,Konstantinos Mavridis, Abdou Talipouo, Parfait Awono-Ambene,Timoléon Tchuinkam, Antonio Nkondjio Christophe

# 202

# Category:

Insecticide Resistance

Constrasting association of Asaia spp. with pyrethroid resistance escalation in the malaria vectors Anopheles funestus and Anopheles gambiae

#### **Authors:**

Fleuriane Metissa, Mugenzi Jean, Magellan Tchouakui, Marcel Sandeu, Claudasaia, Maxy Nyegue, Charles Wondji.

# 203

# Category:

Insecticide Resistance

Two highly selected mutations in the tandemly duplicated CYP6P4a/b P450s drive pyrethroid resistance in Anopheles funestus in West Africa

# **Authors:**

Nelly M.T. Tatchou-Nebangwa, manuela.tchatchoua, Leon M. J. Mugenzi, Abdullahi Muhammad, Neba Derrick Nebangwa, Charles S. Wondji.

# 204

# Category:

Insecticide Resistance

Nationwide assessment of malaria vector susceptibility to chlorfenapyr, pyriproxyfen, and alpha-cypermethrin in preparation for widescale deployment of new generation nets (Interceptor® G2, PermaNet® Dual and Royal Guard® nets) in Benin

#### **Authors:**

Rock Aïkpon, Razak Ossé, Gil Padonou, Cyriaque Affoukou, Virgile Gnaguènon, Martin Akogbéto

# 205

# **Category:**

Insecticide Resistance

Mosquito surveillance in seaport of Cotonou, Benin: Monitoring of species diversity and assessment of mosquito susceptibility to insecticides

#### **Authors:**

Antoine Salomon Lokossou, Rock Aïkpon, Ossè Razaki, Arlette Tchabi, Gualbert Houémenou.

# 206

# Category:

Insecticide Resistance

CYP6Z-pyrethroid resistance genes confers crossresistance to a range of insecticides in the primary African malaria vector Anopheles gambiae reducing the efficacy of vector control tools

#### **Authors:**

Mersimine F. M. Kouamo, Sulaiman S. Ibrahim, Abdullahi Muhammad, Helen Irving, Charles S. Wondji.

# 207

# Category:

Insecticide Resistance

Assessment of Biochemical resistance profile of Aedes aegypti mosquitoes to insecticides in southern Benin

#### **Authors:**

Bernix SOGLOBON, Gil PADONOU, Rock AIKPON, Martin AKOGBETO.

# 208

#### Category:

Implementation Science and Health systems

Malaria Early Warning Systems: Development, Implementation, and Impact - A Scoping Review

# **Authors:**

Donnie Mategula, Judy Gichuki, Karen Barnes, Emmanuele

Giorgi, Dianne Jannete Terlouw.

# 209

# Category:

Implementation Science and Health systems

Real-time surveillance of antimalarial drug use pattern in a public and private establishment: a comparative analysis.

#### **Authors:**

Badejo, J. A., Micheal, O. S. M, Ademowo, O. G.

# 210

#### Category:

Implementation Science and Health systems

Improving SMC uptake using a multi-sectoral community stakeholder approach in Senegal

### **Author:**

Maurice Bonang , Joseph Lewinski, Akinola Shonde.

# 211

# Category:

Implementation Science and Health systems

Knowledge, attitude and practice about malaria in a rural community in Enugu State, South-East Nigeria: A household-based cross-sectional survey

### **Author:**

Okorie Oluchukwu C, Okorie Geofrey O. ,lyiegbu Chinenye Emily, Nwoke Ijeoma,Okafor U.H

## 212

# Category:

Bioethics and Legal Issues

Public involvement and community decision making for contained use laboratory studies

#### **Author:**

Emmanuel Magala, Jude Bigirwenkya, Richard Linga, Solome Mukwaya, Alex Quach, Jonathan Kayondo

# 213

# Category:

Malaria and Diversity (Equity, Gender & Inclusion )

Interleukin-8 and Myeloperoxidase activities among subject co infected with helminth and Plasmodium Falciparum Osun State, Nigeria

### **Author:**

Oyekale Adesola.O, Ayelagbe Olubunmi.G, Ojurongbe Olusola, Akeem Akindele. A, Samuel Adedokun.

# 214

#### Category:

Malaria and Diversity (Equity, Gender & Inclusion )

Diversity, equity, and inclusion (DEI): the case of Magwero School for the Deaf (MSFD)

#### **Author:**

Chilumba Sikombe, Chabu Kangale, Bupe Mulenga Kabamba, Maximillian Musunse, Marie-Reine I. Rutagwera, Webby Phiri, Caroline Phiri-Chibawe, Pauline Wamulume, Japhet Chiwaula, Jennifer Somtore, Busiku Hamainza

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# 215

# Category:

Parasite and Systems Biology

# A Phase I Study to Evaluate the Relative Bioavailability and Food Effect of a New Piperaquine Oral Dispersible Formulation Run at the Phase I Unit in Bagamoyo, Tanzania

Florence A. Milando, Hussein Mbarak, Gloria Nyaulingo, Anneth-Mwasi Tumbo, Tunu Ndazi, Julither Tiago, Beatus Bongole, Kamaka Kassimu, Mohamed Radhid, Bakari mwalimu, Ali Ali, Salim Abdulla, Anne Claire Marrast, Isabelle Borghini-Fuhrer, Denis Gossen, Alice Neequaye, Myriam El-Gaaloul, Hanu Ramachandruni, Said A. Jongo

#### 216

# Category:

Parasite and Systems Biology

# Evaluation of the Clinical Efficacy of Artemether-Lumefantrine and Molecular profiling of PfATPase-6 gene in Plasmodium falciparum isolates from Nigeria

Roland I Funwei, Obaro S Michael , Adebola E.
Orimadegun, Joseph A. Badej, Fiyinfoluwa Olusola,
Aduragbenro D. Adedapo, Oluwafunmibi Enitan Anjorin,
Oyekanmi Nash and Catherine O. Falade

# 217

#### Category:

Parasite and Systems Biology

# Re-defining Asymptomatic Malaria as Chronic Malaria: A Host Factor Differential with Less Parasite Dynamics.

AKINOLA Olugbenga, EGBORO Daniel, IYENMOANA Ese, ADEOSUN Adeseun, OLUMO-ABDUL A. Hidayat, OWOLODUN Olubukola, DOKUNMU Titilope, AMUSAN I. Abiodun, GBOTOSHO G. Olusola

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#### Category:

Parasite and Systems Biology

# Clinical isolates of uncomplicated falciparum malaria from high and low malaria transmission areas show distinct pfcrt and pfmdr1 polymorphisms in western Ethiopia

Geletta Tadele, Aminata Jawara, Mary Oboh, Eniyou Oriero, Sisay Dugassa, Alfred Amambua-Ngwa, Lemu Golassa

# 219

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Parasite and Systems Biology

# Compliance to Evidence based Implementation for Malaria prevention: Umbrella Review of Malaria among pregnant mothers

Getahun Fetensa, Dereje Bayisa Demissie, Fayiso Bati, Darara Girma, Tadasse Tolossa

#### 220

#### Category:

Parasite and Systems Biology

# Exploring the Impact of Schistosoma haematobium Infection on the Expansion of the Human Reservoir for Plasmodium falciparum in Ghana

Henry Hanson, Priscilla Adjei-Kusi, John Asiedu Larbi, Oumou Maiga-Ascofaré

# 221

# Category:

Parasite and Systems Biology

# Malaria vector bionomics and transmission patterns in Olama, an equatorial forest region of south Cameroon

Kaminsi Nenkam H.G., Talipouo A., Awono-Ambene P., Wondji C.S., Akono Ntonga P., Walker T., Grant H., Antonio-Nkondjio C.

# 222

# Category:

Parasite and Systems Biology

# Soil-transmitted helminthiasis (STHs) worsen the genetic diversity of targeted antimalarial resistance genes and vaccine targets in malaria-STHs coinfected patients from the Centre region of Cameroon

Honore Awanakam, Zeukeng Francis, Keumo Loic, Livo Esemu, Romeo Djounda, Bekindaka Obase, Agnenga Balonga, Nchankou Loic, Ange Kamgmo, Hillary Tene, Philomina Gwanmesia, Rose Leke, Wilfred Fon Mbacham, Jude Bigoga

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# Category:

Parasite and Systems Biology

Evaluation of next generation long lasting insecticidal net against wild resistance malaria vectors in Tanzania; an experimental hut trial

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Jackline L Martin, Jo Lines, Louisa A. Messenger, Jacklin F Mosha, Edmond Benard, Mark Rowland, Sian Clark, Raphael N'Guessan, Charles.Wondji, Dominic P Dee, Thomas S. Churcher, Alphaxard Manjurano

### 224

#### Category:

Parasite and Systems Biology

# IN VIVO ANTIPLASMODIAL EFFECTS OF AZADIRACHTA INDICA (A.JUSS) SEEDS ESSENTIAL OIL IN PLASMODIUM BERGHEI (NK65) INFECTED MICE

JEGEDE, Oluwalopeye

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#### Category:

Parasite and Systems Biology

# Experimental Reset of the Expanded Plasmodium SERA Antigen Family

Elyzana Putrianti, David Fechtig, Katja MÌ ller, Kai Matuschewski

### 226

# **Category:**

Parasite and Systems Biology

# Transcriptional and genomic signatures associated with continuous P. falciparum asexual replication and asymptomatic persistence.

Martin Kampmann, Manuela Carrasquilla, Christina
Ntalla, Ina Wagner, Khiara Berkowitz-Sklar, Olivia Lamers,
Hamidou Cisse, Safaitou Doumbo, Didier Doumtabe,
Kassoum Kayentao, Aissata Ongoiba, Moussa Niangaly,
Hans-Joachim Mollenkopf, Boubacar Traore, Benjamin
Mordmì Iler, Peter D Crompton, Silvia Portugal

# 227

# Category:

Parasite and Systems Biology

High prevalence of very-low Plasmodium falciparum and Plasmodium vivax parasitaemia carriers in the Peruvian Amazon: insights into local and occupational mobility-related transmission

Elie KIHANDUKA and Jones ONESIME

# 228

# Category:

Parasite and Systems Biology

# Dissection of the widespread biological threats to malaria control and elimination in Ethiopia

Aynalem Mandefro, Bacha Mekonen, Geletta Tadele, Yirgalem G/hiwot, Lemu Golassa

#### 229

# Category:

Parasite and Systems Biology

# Spatial heterogeneity of the distribution of pfhrp2/3 gene deletion in Ethiopia and current alternatives to exclusive HRP2-based rapid diagnostic tests

Lina Alemayehu, Migbaru Keffale, Ayalew Jejaw, Legesse Alamerie, Melat Abdo, Alayu Bogale, Fikregabrail Aberra Kassa, Cristian Koepfli, Fitsum Girma Tadesse

# 230

# Category:

Parasite and Systems Biology

# Impact of pyrethroid resistance on the salivary gland invasion by sporozoites in Anopheles funestus

Lynda Nouage, Emmanuel Elanga-Ndillel, Achille Binyang, Magellan Tchouakui, Tatiane Atsatse, Cyrille Ndo, Sevilor Kekeunou, Charles S. Wondji

# 231

#### Category:

Parasite and Systems Biology

# Concurrent declines in malaria incidence among children under and over five years of age in Koutiala, Mali: time series analysis of seasonal malaria chemoprevention from 2012-2022

Hamma Maiga, Charles Opondo, Lauren M Cohee Oumar Coulibaly, Maessarath Alao-fari and R. Matthew Chico

# 232

# Category:

Parasite and Systems Biology

# Evaluation of the efficacy of different larvicides on various mousquito breeding sites in the city of yaoundé, cameroon.

Matso yesnick, DJEPAN Thierry, NGADJEU Carmene, NKAHE Leslie, TANKOU Juvénal, FOMENA Abraham and ANTONIO-NKONDJIO Christophe1.

# 233

### Category:

Pathogenesis and Co-morbidities (Including Parasite &

## Systems Biology)

# PREVALENCE OF TRANSFUSION TRANSMISSIBLE INFECTIONS AMONG MALARIA PATIENTS REPORTING TO A HOSPITAL IN SOUTHERN GHANA

Festus Kojo Acquah, Belinda Acculey, Enyonam Monia Hornyo, Jaylyn Akwetea Foli, Prosper Tey, Kwadwo Asamoah Kusi, Linda Eva Amoah

# 234

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

# Risk of malaria in type 2 diabetes with or without metabolic syndrome in Cameroon: Baseline results from a prospective cohort

George Awungafac, Mounpou Mfout Amina Latifa, Rosette Megnekou, Michel Noubom, Anna FÌ rnert, Simeon Pierre Choukem, Katja Wyss

# 235

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

# Cytokine dynamics in Malaria and Typhoid Fever: exploring the influence of standard treatments on stress-mediating inflammatory cytokines and disease progression

Palmer Masumbe Netongo, MacDonald Bin Eric, Severin Donald Kamdem, Nzuno Christine, Tchoutang Ange Maxime, Tchoupe Kamoua Eric Berenger, Bongkiyung Donald Buri, Ngum Leslie NGum, Jean Paul Chedjou, Akindeh M Nji, Wilfred Fon Mbacham

### 236

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

# Deciphering the P. falciparum host response by plasma proteomics

Pinkus Tober-Lau, Clemens Dierks, Markus Ralser, Florian Kurth

# 237

# Category:

Social and Health Economics

#### Cost-effectiveness of extending seasonal malaria

# chemoprevention (SMC) to 5 cycles in Guinea, Mali, and Niger

Halimatou Diawara, David Bath, Seydou Traore, Ibrahim Diarra, Bienvenu Camara, Kovana M Loua, Jonas Loua, Eugene K Lama, Idrissa Cisse, Eric Adehosi, Mahaman Moustapha Lamine, Ibrahim Alkassoum, Hadiza Jackou, Chrestien Yemeni, Suzanne Van Hulle, Germaine Ekoyol, Andre Marie Tchouatchieu, Paul Snell, Catherine Pitt, Issaka Sagara, Alassane Dicko, Paul Milligan

# 238

#### Category:

Social and Health Economics

# A qualitative investigation of Community experiences of Insecticide-Treated Nets (ITNs) use among community members in the Mbalmayo Health District, Cameroon, and their implications for sustainability.

Dum-Buo Nnamdi,Menze Benjamin, Charles Wondji,Martha Chounoya

# 239

# Category:

Social and Health Economics

# Housing modification to prevent malaria in Uganda: An analysis of costs, willingness-to-pay, equity, and potential for scale-up

Katherine Snyman, Sam Gonahasa, Agaba Katureebe, Joyce Aber, Angelo Arturia, Joaniter Nankabirwa, Catherine Maiteki, Moses R. Kamya, Nelli Westercamp, Sarah G. Staedke, Walter Ochieng and Catherine Pitt

# 240

# Category:

Social and Health Economics

# **Economic Impact of Malaria Prevention Strategies on Household Budget**

Kamal Tasiu Abdullahi, Istanbul University, and Muhammad Abdulaziz Muhammad, Bayero University Kano

# 241

#### Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Exploring TLR1, TLR4, TLR6 and TLR9 genetic variations and their Impact on Malaria Outcomes Among Children in Ibadan, Southwest Nigeria Oluwayemi J. Bamikole, Subulade A. Ademola, Olukemi K.

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### Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Investigating The Co-Infection Dynamics of Malaria Prevalence Before and During the Peak of Covid-19 Pandemic in The Gambia

Benjamin Kobna Njie, Micheal Mendy, Fatoumatta Cham, Anthony Correa,

# 243

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Assessing Variance in Allele Frequencies of Confirmed and Candidate Plasmodium falciparum Resistance Genes to artemisinin-based therapies Bekai Njie, Ndey Fatou Drammeh, Eniyou Oriero, Alfred

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# **Category:**

Malaria Genomics (Human-Anopheles-Plasmodium)

# Genetic Association Between HLA-G 14BP Polymorphisms and Malaria Severity Among Iron Fortified Ghanaian Children.

Charlotte Quaye, Adjoa Tuckson, Agyenim Boateng, Benjamin Amoani

# 245

#### Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Genetic diversity of Plasmodium falciparum in asymptomatic individuals from community surveys and their implications for malaria control strategies in Mainland Tanzania

Dativa Pereus, Abebe A. Fola, Misago D. Seth, Rashid A. Madebe, Catherine Bakari, Celine I. Mandara, Beatus M. Lyimo, DeFeo Rebecca, Rule Budodo, Filbert Francis, Zachary R. Popkin-Hall, Ramadhan Moshi, Ruth B. Mbwambo, Doris Mbata, Victor Mobegi, Gerald Juma, Daniel Mbwambo, Sijenunu Aaron, Abdallah Lusasi, Samwel Lazaro, David J. Giesbrecht, Jonathan J. Juliano, Jeffrey A. Bailey, Deus S. Ishengoma.

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# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Distribution of Polymorphisms in Host Genes ARL15, ATP2B4, CD40, G6PD and INPP4B across Selected Malaria Endemic African Populations and their link with Malaria susceptivity and severity

Dominic S. Y. Amuzu, Eniyou C. Oriero, Nora N.
Nganyewo, Victoria Simpson, Paulina Tindana, Milijaona
Randrianarivelojosia, Abdoulaye A Djimde, Antoine Dara,
Umberto D'Alessandro, Gordon A. Awandare, Deus S
Ishengoma, Lemu Golassa, Tobias O. Apinjoh, Lucas N.
Amenga-Etego and Alfred Amambua-Ngwa

# 247

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Establishing a link between the Vel blood antigen and Malaria pathogenesis

Edu Nelson, Ben-Patterson Albert, Conduah Hilda, Owusu Christabel, Yeboah-Kyeremeh Lyzette, Nyarko Prince, Aniweh Yaw

# 248

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Global genome-wide association study provides insights into the evolution of drug resistance in Plasmodium vivax

Gabrielle C. Ngwana-Joseph, Jody Phelan, Emilia Manko, Jamille G. Dombrowski, Claudio Marinho, Debbie Nolder, Colin Sutherland, Susana Campino, Taane Clark.

# 249

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Evaluation of SMS-Based 1-3-7 Surveillance Strategy in a Pre-elimination Setting in Choma District, Zambia: Examining Implementation Outcomes

Japhet Matoba, Anne Martin, Harry Hamapumbu,
Caison Sing'anga, mukuma.lubinda, Sydney Mweetwa,
Ben Katowa, Michael Musonda, Limonty Simubali,Twig
Mudenda, Mary E. Gebhardt, Cara Wychgram, Amy
Wesolowski, Matthe M. Ippolito, Shields, tshields, Edgar
Simulundu, Andre Hackman, Tamaki Kobayashi, Douglas
E. Norris, Bill Moss

# 250

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# **Evaluation of the malaria surveillance and data use** system in Cameroon

Ngwayu Claude Nkfusai

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Evaluation of the malaria surveillance system in Uganda, 2022-2023: A case of West Nile Region

Arnold Taremwa, Sarah. Elayeete, Hilda. Tendo. Nansikombi, Jimmy opigo, Doreen. N. Gonahasa

# 252

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Examination of Plasmodium falciparum genetic metrics (relatedness) to study transmission and distinguish modalities of transmission (superinfection vs cotransmission).

Wesley Wong, Anna Burkhard, Stephen F. Schaffner, Lea Wang, Mame Cheikh Seck, Jules Gomis, Younouss Diedhiou, Ngayo Sy, Medoune Ndiop, Fatou Ba, Ibrahima Diallo, Doudou Sene, Mamadou Alpha Diallo, Yaye Die Ndiaye, Mouhamad Sy, Aita Sene, Djiby Sow, Baba Dieye, Abdoulaye Tine, Jonn Smith, Kiran Garimella, Jessica Ribado, Joshua Suresh, Albert Lee, Katherine E. Battle, Joshua L Proctor, Caitlin A Bever, Bronwyn MacInnis, Daniel L. Hartl, Dyann F Wirth, Daouda Ndiaye, Sarah K Volkman

# 253

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Factors Affecting Health Equity in the Context of Malaria in Ghana: A Malaria Matchbox Assessment, 2022

George Asumah Adu, Nana Ayegua Hagan Seneadza, Phyllis Owusu-Achiau, Sammy Oppong, Wajib Mohammed, Ihsan Abubakari, Fergusson Duvor, Benjamin Oteng, Ivy Forson, Delphine Mensah, Nana Yaw Peprah, Keziah L. Malm

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Factors associated with Malaria positivity in a low transmission setting in South Western Uganda

Brian A. Kagurusi, Epstein Adrienne, Emmanuel Arinaitwe, Stephen Tukwasibwe, Thomas Katairo, Innocent Wiringilimaana, Francis Ddumba, Bienvenu Nsengimaana, Caroline Mwubaha, Moses Kamya, Bryan Greenhouse, Isabel Rodriguez

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#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Factors associated with neurologic deficits in children with cerebral malaria compared to children with other forms of severe malaria

Allen Eva Okullo, Richard Idro, Michael Boele van Hensbroek, Chandy C. John,

# 256

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Factors associated with severe malaria in Kigeme District Hospital catchment area, between July 2021 and June 2022. a case-control study

Gaspard BIZIMUNGU, Aline UMUBYEYI, Hinda Ruton,Theoneste NTAKIRUTIMANA, Sam RWUNGANIRA

# 257

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Forecasting malaria dynamics based on causal relations between control interventions, climatic factors and disease incidence in western Kenya

Bryan O. Nyawanda, Simon Kariuki, Sammy Khagayi, Godfrey Bigogo, Ina Danquah, Stephen Munga, Penelope Vounatsou

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Genetic diversity of Plasmodium falciparum isolate collected from malaria outbreak response in Ambatofinandrahana district, Madagascar

Voahangy ANDRIANARANJAKA, Simoneau CK Riquet TOMBO, Tovonahary Angelo RAKOTOMANGA, Stéphane RABEARIMANANA, Roseline RAMAROSON, Jocelyn RATOVONJATO, Elisabeth RAVAOARISOA, Omega RAOBELA, Arsène RATSIMBASOA

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## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Genomic epidemiology of malaria in Zanzibar: defining the role of importation and local transmission

Sean Connelly, Mohamed Ali, Billy E. Ngasala, Wahida Hassan, Bakari Mohamed, Safia Mohammed, Shija J. Shija, Abdallah Zacharia, Msolo C Dominick, Rebecca Crudale, Varun Goel, Barbara B. Choloi, Anders Bjì rkman, Jeffrey A. Bailey, Jessica T. Lin, Jonathan J. Juliano

# 260

### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Geographical trend of Plasmodium ovale and malariae infections in suspected malaria patients in Ghana.

Elaine Asiwome Boadu, Dorcas Bredu, Mercy Tintaa, Joshua Kofi Adams, Melchizedek Kojo Agudze, Kwame Kumi Asare, George Asumah Adu, Nana Yaw Peprah, Alexander Asamoah, Keziah L. Malm, Linda Eva Amoah.

# 261

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Harboring of multiple Plasmodium Species Triggers Symptomatic Malaria in Endemic Population

Hosea.Akala, Dennis.juma,Benjamin.opot,Raphael. okoth,Edwin.mwakio,Agnes.cheruiyot,redemptah. Yeda,Charlse.Okelo,Timothy.egbo

# 262

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Harnessing data science (DS) and machine learning (ML) to establish the malaria vectors data platform: Introducing the Vector Atlas

Sheila Wafula, Mark Wamalwa, Senagi, Kennedy, Salvador D. Atagong, Eric Ibrahim, Grace Aduvukha, Komi M. Agboka, Mitau M. Muithi, Chelsea M. Kilonzo, Franck B. N. Tonle, Namikelwa, D. Nabucha, Lorna Chepkemoi, Karanja P. Gitu, Joseph D. Obukosia, Juliet A. Onditi, Kibaba C. Nabukuye, Oyoo J. Akinyi, Emily Kimathi, Marianne E. Sinka, Henri E.Z. Tonnang

# 263

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# High anaemia and low polyparasitism in preschoolaged febrile children: a health centre survey

Jomo H.C Banda, Alinune N. Kabaghe, Mayeso Gwedela, Pauline Katundu

### 264

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# High prevalence and risk of malaria among asymptomatic individuals from villages in Kyerwa district, northwestern Tanzania, where artemisinin partial resistance has emerged.

Salehe S. Mandai , Filbert Francis, Daniel P. Challe, Misago D. Seth, Rashid A. Madebe, Daniel A. Petro, Rule Budodo, Angelina J. Kisambale, Gervas A. Chacha , Ramadhan Moshi, Ruth B. Mbwambo, Dativa Pereus, Catherine Bakari, Sijenunu Aaron, Daniel Mbwambo, Abdallah Lusasi, Stella Kajange, Samuel Lazaro, Ntuli Kapologwe, Celine I. Mandara, Deus S. Ishengoma

#### 265

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# How to Optimise the Distribution of Pyrethroid-Pyrrole Nets Sub-Nationally Without Increasing Budgets

Andrew Glover, Hannah Koenker, Kate Kolaczinski, Thomas Churcher

# 266

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Identifying populations at high risk of malaria: a mixed-methods case control study to inform targeted interventions in Senegal

Tidiane Thiam, Demba Kande, Henry Ntuku, Caterina Guinovart, Natalie Galles, Laura Merriman, Moustapha Cissé, Abiboulaye Sall, Ndack Diop, Aichatou Barry Diouf, Mama Moussa Diaw, Mamadou Diop, Baba Camara, Niene Seck, Aliou Ndour, Yakou Dieye, Jennifer Smith, Adam Bennett

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Impact after five years of scale-up of seasonal malaria chemoprevention in children under 10 in southern

#### Senegal

Isaac Akhenaton Manga, Fassiatou Tairou, Amadou Seck, Ekoue Kouevidjin, Khadime Sylla, Doudou Sow, Alioune Badara Gueye, Mady Ba, Magatte Ndiaye, Roger Clément Kouly Tine, Omar Gaye, Babacar Faye, Jean Louis Abdourahim Ndiaye.

#### 268

### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Impact analysis of strategies for expanding seasonal malaria chemoprevention in sub-Saharan Africa

Monica Golumbeanu, Abby Ward, Mark Connell, Tasmin Symons, Tara Seethaler, Aaron Woolsey, Justin Cohen, Arnaud Le Menach, Emilie Pothin

# 269

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Impact of malaria mass drug administration on asymptomatic parasitaemia in endemic communities in the Pokrom Eastern Region of Ghana

Ndong Ignatius Cheng, Chuo Ennestine Chu, Collins Ahorlu, Alfred Amambua-Ngwa

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#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Impact of pre-exposure to a sublethal dose of chlorfenapyr on the tolerance to the Interceptor G2 net in Anopheles gambiae s. I

Belmine N. Acakpo, Adandé A. Medjigbodo, Pierre Marie Sovegnon, Oswald Y. Djihinto and Luc S. Djogbénou

# 271

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Impact of prevention, diagnostic and treatment of simple malaria cases by community health workers supervised by mobile nurses in rural communities in Burkina Faso

Mahamadou BARRO, Frédéric NIKIEMA, Fabrice A SOME, Serge M.A SOMDA, Florence FOURNET, Alphonsine KOFFI, Jean GAUDART, Cédric PENNETIER, Roch DABIRE

# 272

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Impact of routine training in sample collection on the quality of dried blood spot samples for malaria molecular surveillance.

Innocent Wiringilimaana, Stephen Tukwasibwe, Tomas Katiaro, Brian A. Kagurusi, Caroline Mwubaha, Allen Namirembe, Bienvenu Nsengimaana, Francis Ddumba, Patrick Ssemanda, Conceptor Mirembe, Patience Nayebare, Cuu Gloria, Isaac Ssewanyana, Jerry Mulondo, Moses R. Kamya, Phillip J. Rosenthal, Melisa Conrad, Bryan Greenhouse, Jessica Briggs

### 273

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Impacts of climatic factors on malaria in Rwanda between 2012 and 2021: A time-series analysis

Rubuga F. Kitema, Ayman Ahmed, Emmanuel Siddig, Francesco Serra, Giovenale Moirano, Mbituyumuremyi Aimable, Tuyishime Albert, Nshogoza R. Gallican, Eric Nebié, Gatera F. Kitema, Penelope Vounatsou, Jurg Utzinger, Guéladio Cissé

#### 274

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Implementation challenges of malaria cross border interventions: Case study of Kibilizi sub-district, Southern province, Rwanda,2024

Alice Musabyeyezu, Jean. Claude Niyoyita, Vincent Mutabazi, Esperance Niragire, Vedaste Mbayire

#### 275

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Implementation of Seasonal Malaria Chemoprevention by community platforms in Mali

Mady Cissoko, Daouda Samake, Amadou Diarra, Aissata Koné.

# 276

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Improved routine surveillance data for retrospective impact evaluation of vector control in Côte d'Ivoire

Christian Selinger, Juliette Lepère, Emily Hilton, Appeti Kouakou, Serge A Aïmain, Serge Assi, Sarah Burnett,

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Emilie Pothin, Antoine M Tanoh

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Improving generalisation of mosquito age predictions using infrared spectroscopy

Mauro Pazmiño Betancourth, Jacqueline N Mgaya, Doreen J. Siria, Mario Gonzales-Jimenez, Maggy T. Sikulu, Fredros O. Okumu, Francesco Baldini

# 278

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Increasing certainty of SMC impact: A mathematical model using routine data in Burkina Faso

Monica A. de Cola, Benoit Sawadogo, Cheick Campaore, Chuks Nnaji, Sidzabda Kompaore, Arantxa Roca-Feltrer, Sol Richardson, Christian Rassi, Patrick Walker, Lucy Okell

# 279

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Inequities in the usage of long-lasting insecticide treated bed nets and association with malaria prevalence in an area of pyrethroid-resistant vectors in Central Côte d'Ivoire

Colette Sih, Serge B. Assi, Edouard Dangbenon, Joseph Biggs, Benoit Talbot, Manisha A. Kulkarni, Alphonsine A. Koffi, Ludovic P. Ahoua Alou, Louisa A. Messenger, Marius G. Zoh, Soromane Camara, Natacha Protopopoff, Raphael N'Guessan, Jackie Cook

# 280

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Influence of Climatic Variability on Incidence of Malaria, Sunyani West Municipality, Ghana, 2018-2022

Agbazo G. Jamin , Adu Asumah George, Bandoh Delia, Lwanga Noora Charlse , Ameme Donne, Kesia Malm, Kenu Ernest , Afari Edwin Andrew

# 281

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Investigating the impact of environmental factors

# on species composition, and biting patterns for understanding of mosquito-borne disease transmission in Tanzania.

Selemani Mmbaga, Tajiri Laizer, Hajirani Msuya, Brian Masanja, Maneno Baravuga, Praise J. Michael, Victoria Githu, Ibrahim Msuya, Yeromin P. Mlacha, Samson Kiware1, and Nicodemus Govella

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#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Investigation into the Threat of Diagnostic Resistance Posed by Plasmodium falciparum Lacking Histidinerich Proteins in Northern Nigeria

Ifeyinwa Aniebo, Vera Mitesser, John Openibo, Kelechi Ohiri, Perpetua Uhomoibi, Festus Obiajulum, Chukwu Okoronkwo, Khalid Beshir, Christion Happi

# 283

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Knowledge on Malaria and Care-seeking Behaviour among Caregivers of Children Under Five Years in Tamale Metropolis, Northern Region, Ghana, 2020

Ihsan I. Abubakari, Nana Y. Peprah, Samuel Oppong, Wahjib Mohammed, George A. Adu, Dora Dadzie, Stephen Appiah, Ashia Abubakari, J.B. Ziem, Keziah L. Malm

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Knowledge, Attitude and Practice toward Malaria among the Adults in Algazira State, Sudan 2021 Elsafia Bashir Mohamed Abbas

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### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# land use change and malaria risk around the dam of Soum in the health district of Nanoro, Burkina Faso.

ROUAMBA Eli, ROUAMBA Toussaint, MILLOGO Aziz, TINTO Halidou

# 286

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

#### Longitudinal assessment of Plasmodium parasite

# carriage in a cohort of school children in the Central region of Ghana

Abban, Bernice, Acquah, Festus, Obboh, Evans, Prajapati, Surendra, Williamson, Kim, Amoah, Linda

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#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Malaria and soil transmitted helminth co-infections in children 4-17 years, in a rural area of North West region Cameroon

Ebanga Echi Joan Eyong, Linda Luma Tanjong, Helen K. Kimbi

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#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Malaria epidemiology in low-endemicity areas of the northern coast of Ecuador: high prevalence of asymptomatic infections

Elie KIHANDUKA and Jones ONESIME

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# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Malaria frequency in a population of febrile children and adults living in semi-urban area at Gabon

Mihindou Coella Joyce, Moutombi Ditombi Bridy Chesly,

# 290

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Malaria infections in villages around the Soum dam in Burkina Faso: impact on the distribution of P. falciparum genetic variants.

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# Malaria modeling to support early R&D funding decisions of novel tools

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# Malaria Surveillance System Evaluation in Gatonde hospital catchment area, Gakenke District, Rwanda, 2021-2023.

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# Malaria surveillance system evaluation in Kibilizi District Hospital, Southern province, Rwanda,2023

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# Malawi Malaria Burden Stratification to inform the 2023 - 2030 Malaria Strategic Plan

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# Mapping malaria hotspots among high-risk groups in Rwanda: An opportunity for targeted interventions Ndagijimana Deogratias, Habanabakize Epaphrodite,

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Mapping of malaria hotspots among easy-to-reach high risk groups in Rwanda: An opportunity for differentiated and targeted interventions

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# Mathematical Model of Malaria transmission dynamics in Internal Displaced Persons (IDP) Camps

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# Mathematical modelling of the effect of bed net coverage on malaria transmission dynamics in Ogun State, Nigeria

Samuel Abidemi Osikoya and Emmanuel Afolabi Bakare

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# Modeling ivermectin's impact on malaria transmission: Mathematical analysis, bifurcation, and intervention strategies

Franck J. Dongmo, Charles S. Wondji, Berge Tsanou, and Ramsès Djidjou-Demasse

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# Modeling the effectiveness of Intermittent Preventive Treatment on the incidence of malaria amongst Pregnant women in Enugu State, South-East Nigeria Okorie Oluchukwu C, Lateef Kareem, Okorie Geofrey Okike, Nwoke Ijeoma, Aloysius Gima-Laabel

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# Modeling the health impact of introducing novel malaria tools into existing intervention frameworks

Epke Le Rutte, Andrew Shattock, Melissa Penny

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# ASSESSING THE EFFICACY OF ANTIMALARIAL DRUGS FOR CURRENT INSIGHTS AND FUTURE PROSPECTS

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# A Systematic Review and Meta-analysis on Antimalarial drugs treatment responses in Ethiopia. Bedaso Kebede

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# Associated Factors with Late Treatment Failure in Antimalarial Drug Efficacy Trial in Mozambique

Lidia Nhamussua, Arsenio Nhacolo, Abel Nhama, Wilson Simone and Pedro Aide

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# First line antimalarials are effective for the treatment of Plasmodium falciparum and vivax infections in a TES study in a co-endemic setting, Arbaminch, Ethiopia

Daniel Abebe Mekonnen, Endalamaw Gadisa and Fitsum G. Tadesse, Armauer Hansen

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# First line antimalarials are effective for the treatment of Plasmodium falciparum and vivax infections in a TES study in a co-endemic setting, Arbaminch, Ethiopia

Daniel Abebe Mekonnen, Endalamaw Gadisa and Fitsum G. Tadesse, Armauer Hansen .

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# Therapeutic drug efficacy of artemether lumefantrine (AL) for the treatment of uncomplicated Plasmodium

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Tesfaye Mahelet, Hassen Mamo, Ashenafi Assefa

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# Drug susceptibility of Gambian Plasmodium falciparum field isolates across three sites Baboucarr Manneh

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# Presence of the emerging Pfdhps I431V mutation in Plasmodium falciparum isolates from children in Nanoro, Burkina Faso.

Francis Bohissou, Paul Sondo, Juliana Inou, Toussaint Rouamba, Guétawendé Job Wilfried Nassa, Bérenger Kaboré, Jana Held, Halidou Tinto.

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# Efficacy and safety of artemether-lumefantrine and artesunate-amodiaquine for the treatment of uncomplicated Plasmodium falciparum malaria among children under five years in the Democratic Republic of the Congo, 2020-2021

Papy Mandoko Nkoli, Destin Mbongi Moke, Eric Mukomena, Hypolite Muhindo, Patrick Mitashi, Albert Kutekemeni, Irene Cavros, Mouhamad Sy, Mamadou Alpha Diallo, Aita Sene, Ibrahima M. Ndiaye, Dieudonné Mumba Ngoyi, Ange Landela, Jehan Ahmed, Jean-Jacques Muyembe Tamfum, Awa B Deme, Daouda Ndiay, Gauthier Mesia Kahunu

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# Ex vivo antimalarial drug responses of Plasmodium falciparum clinical isolates in Accra, Ghana

Edem Adika , Samirah Saiid, Nana Amoako , Collins Morang'a, Daniel Dosoo , Jersley Chirawurah , Gordon Awandare , Alfred Amambua-Ngwa, Yaw Aniweh and Lucas Amenga-Etego

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# Assessment of quantitative PCR for determination of drug response of Plasmodium falciparum in the absence of DNA purification.

Fatoumata Bojang, Eniyou Cheryll Oriero, Ndey Fatou Drammeh Nganyewo Nghochuzie Nora, Alfred Amambua Ngwa

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# Assessing drug resistance profile and associated markers in Gambian P. falciparum clinical isolates

Drammeh, N. F., Bojang, F., Nganyewo, N. N., Jawara, A. S., Manneh, B., Correa, S., Oriero, E., Amambua-Ngwa, A.

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# THE CURRENT STATUS OF PLASMODIUM FALCIPARUM CHLOROQUINE RESISTANCE TRANSPORTER GENE (K76T) AND PLASMODIUM FALCIPARUM MULTI-DRUG RESISTANCE GENE 1 (N86Y) IN CAMEROON

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# Assessment of Plasmodium Drug Resistance Markers in Anopheles Populations

Awa Gnémé, Moustapha Nikiema, Justine Kaboré, Ali. Sié, Boubacar Coulibaly and Athanase Badolo.

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# Prevalence of Plasmodium falciparum molecular markers of resistance to sulfadoxine- pyrimethamine four years into perennial malaria chemoprevention implementation in Sierra Leone

Haily Chen, Kwabena Owusu-kyei, Augustin E. Fombah, Pau Cisterl, Carla Garcl, a, Eduardo Rovira-Vallbona, Mohamed Samai, Alfredo Mayor, Clara Menéndez.

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Malaria prevalence and plasmodium falciparum dhfr polymorphisms in pregnant women from the forest ecological zone of Cameroon

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Assessment of the polymorphic levels of Plasmodium falciparum chloroquine resistance transporter gene(K76T)and Plasmodium falciparum multidrug resistance gene 1(N86Y) in Buea, Cameroon Magdany Fru

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# Profiling the Sequence, Structure and Specific Antibodies for Circumsporozoite Protein from three Plasmodium species

Franklin Yengdem Nuokpem, Comfort Kotey, Josiah Affum Darko, Daniel Dosoo, Gordon Awandare, Kwadwo Asamoah Kusi, Yaw Aniweh.

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# Unveiling Immunodominant Regions of PfCERLI1: Insights for Malaria Vaccine Development

Franklin Yengdem Nuokpem, Comfort Kotey, Josiah Affum Darko, Clement Asante, Vera Appiah-Kubi, Daniel Doso, Gordon Awandare, Kwadwo Asamoah Kusi, Yaw Aniwe).

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# Identification of Immunodominant T cell epitopes within Plasmodium Falciparum Merozoite Surface Protein-11 (PFMSP-11)

Ebenezer Addo Ofori, Augustina Frimpong , Oscar Darko, Kwadwo Asamoah Kusi.

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Immunology & Vaccines (Children, Pregnant Women and Adults)

Anti-SE36 antibody titres induced by the malaria vaccine candidate BK-SE36/CpG: 3 years follow-up in 5-10 years old children naturally exposed to malaria in a hyperendemic and seasonal transmission area of Burkina Faso

Issa Nebie, Nirianne Marie Q. Palacpac, Edith Christiane Bougouma, Amidou Diarra, Alphonse Ouédraogo, Flavia D'Alessio, Sophie Houard, Alfred B. Tiono, Simon Cousens, Toshihiro Horii, and Sodiomon B. Sirima

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# Immune deviation in co-infections with helminthiasis and malaria in Africa

Inocencia Cuamba, Rebeca Santano, Berta Grau-Pujol, Marta Vidal, Ruth Aguilar, Chenjerai Jairoce, Augusto Nhabomba, Rojelio Mejia, Bin Zhan, Jose Mul oz, Gemma Moncunill, Carlota Dobal oz

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Computational Design, Expression and
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Plasmodium falciparum vaccine candidate (PfCTMAG)
Joan A. Chick, Nadege N. Abongdia, Robert A. Shey,
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Comparative Analysis of AMA1 Proteins from P. falciparum, P. malariae, and P. ovale: Sequence, Structure, and Immune Response.

Josiah Affum Darko, Franklin Yengdem Nuokpem, Comfort Kotey, Gordon Awandare, Kwadwo Asamoah Kusi Yaw Aniweh.

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# Defining target product profile criteria for nextgeneration malaria vaccines to accelerate elimination efforts: a modelling study

Josephine Malinga, Lydia Braunack-Mayer, Thiery Masserey, Sherrie L Kelly, Narimane Nekkab, Melissa A Penny

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# Meta-analysis of clinical studies on malaria vaccination strategies in Sub-Saharan Africa

Alexander Bergmì ller, Kai Matuschewski

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# A passive cases detection method to assess the risk of malaria in children who are no longer eligible for seasonal malaria chemoprevention or seasonal vaccination in Burkina Faso and Mali

Issaka Zongo, Djibrilla Issiaka, Jean-Bosco Ouedraogo, Issaka Sagara, Sanni Ali, Matthew Cairns, Charles Zoungrana, Romaric Oscar Zerbo, Youssoufa Sidibe, Amadou Tapily, , Koualy Sanogo, Mahamadou Kaya, Hama Yalcouye, Oumar M Dicko, Youssouf Kone, Ismaila Thera, Alassane Haro, Rakiswendé Serge Yerbanga, Seydou Traore, Almahamoudou Mahamar, Oumar Attaher Irene Kuepfer, Paul Snell, Jane Grant, Jayne Webster, Paul Milligan, Cynthia Lee, Christian Ockenhouse, Opokua Ofori-Anyinam, Halidou Tinto, Abdoulaye Djimde, Alassane Dicko, Daniel Chandramohan, Brian Greenwood.

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# Clinical presentation of severe malaria in children who received RTS,S vaccine with and without seasonal malaria chemoprevention in Mali and Burkina Faso.

Djibrilla Issiaka, Issaka Zongo, Youssoufa Sidibe, Rakiswendé Serge Yerbanga, Mahamadou Kaya, Charles Zoungrana, Romaric Oscar Zerbo, Oumar M Dicko, Youssouf Kone, Amadou Tapily, Seydou Traore, Koualy Sanogo, Modibo Diarra, Almahamoudou Mahamar, Alassane Haro, Ismail Thera, Sanni Ali, Paul Snell, Jane Grant, Irene Kuepfer, Cynthia Lee, Christian Ockenhouse, Opokua Ofori-Anyinam, Paul Milligan, Issaka Sagara, Halidou Tinto, Jean Bosco Ouedraogo, Alassane Dicko, Daniel Chandramohan, Brian Greenwood.

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# The Anti-Circumsporozoite Antibody Response of Children to Seasonal Vaccination With the RTS,S/ AS01E Malaria Vaccine over five years of follow-up (4 booster doses)

M Sanni Ali, Lisa Stockdale, Issaka Sagara, Issaka Zongo, Rakiswendé Serge Yerbanga, Almahamoudou Mahamar, Frédéric Nikièma, Amadou Tapily, Frédéric Sompougdou, Modibo Diarra, Duncan Bellamy, Katie Ewer, Charles Zoungrana, Djibrilla Issiaka, Alassane Haro, Koualy Sanogo, Abdoul Aziz Sienou, Mahamadou Kaya, Seydou Traore, Ismaila Thera, Kalifa Diarra, Amagana Dolo, Sam Provstgaard-Morys, Danielle Woods, Katerina Rapi, Paul Snell, Opokua Ofori-Anyinam, Chris Ockenhouse, Cynthia Lee, Halidou Tinto, Abdoulaye Djimde, Jean-Bosco Ouedraogo, Alassane Dicko, Daniel Chandramohan, Brian Greenwood.

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MALARIA BURDEN IN PREGNANT WOMEN AND
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BENADIR REGION, MOGADISHU, SOMALIA, IN 2023
Mohamed Abdirahman Omar

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# Compliance to Evidence based Implementation for Malaria prevention: Umbrella Review of Malaria among pregnant mothers

Getahun Fetensa, Dereje Bayisa Demissie, Fayiso Bati, Darara Girma, Tadasse Tolossa

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# PREVALENCE OF MALARIA INFECTION AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE AT ANINIWAH MEDICAL CENTER

Godfred Yawson Scott

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Factors Associated with the Utilisation of Malaria Preventive Services during Pregnancy in Primary Healthcare Facilities in Ile-Ife, Nigeria: Insights from a mixed method study

Inyangudo Gideon, Ojo T. O , L. A. Akinola and Folorunso O. E, Inyangudo Gideon , Ojo T. O , L. A. Akinola Lateef , and Folorunso O. E

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# Antibodies to VAR2CSA acquired outside of pregnancy are frequently observed in Ethiopia

Uwa Iyamu , Meshesha Tsigie , Kiran Bhogal , Anthony K. Mbonye, Amanda Maestre , Eliana Arango , Sindew Mekasha Feleke , Stephanie K. Yanow .

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# Defining epitopes of a polyreactive PvDBP antibody with machine learning

Uwa Iyamu, Simranjit Grewal, Daniel Ferrer Vinals, Bart Hazes, Nidhi Hedge, Stephanie K. Yanow.

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# Malaria Preventive Practices Among Pregnant Women Attending Antenatal Clinic in Federal Medical Centre, Abuja, Nigeria

Johnson Adeyemi Ojo, Ikechukwu Nnaji, Aderonke Oyelola Ojo, Adedeji Adebayo

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Intermittent screening (using ultra-sensitive malaria rapid diagnostic test) and treatment (using Pyronaridine-Artesunate) compared to standard intermittent preventive treatment with Sulfadoxine-Pyrimethamine for the prevention of malaria in pregnant women living in endemic areas

Japhet Kabalu Tshiongo, Flory Luzolo, Melissa Kabena, Hypolite Muhindo Mavoko, Thierry Kalonji, Henk D. F. H. Schallig, Kassoum Kayentao, Petra F. Mens, Pascal Lutumba, Halidou Tinto, Vivi Maketa.

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Community-based strategies to increase uptake of Intermittent Preventive Treatment in Pregnancy with Sulfadoxine-Pyrimethamine in sub-Saharan Africa: A systematic review, meta-analysis, meta-ethnography, and economic assessment

Kadiatou Koita, Kassoum Kayentao, Eve Worrall, Anna Maria Van Eij and Jenny Hill.

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# Antenatal care attendance, but not Intermittent Preventive Treatment uptake, was increased through enhanced antenatal clinic service delivery to improve maternal and child health in Mali

Sory I. Diawara, Julie R. Gutman, Samba Diarra, Celia Woodfill, Aliou Diallo, Philippe Mutwa, Lansana Sangare, Renion Saye, Beh Kamate, Fatoumata Sidibe, Erin Eckert, Moussa Niangaly, Moussa Djimde1, Mohamed Keita, Almamy Traore, Aissata Ongoiba, Safiatou Niare, Fady Toure, Abdoulaye Djimde, Boubacar Traore, Kassoum Kayentao.

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# Prevalence of gestational malaria in Ecuador Elie KIHANDUKA and Jones ONESIME

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# Assessing the effects of dihydroartemisinin-

# piperaquine as malaria intermittent preventive treatment on antiretroviral drug levels in pregnant women living with HIV

Linda Stuger, Tacilta Nhampossa, Ghyslain Mombo-Ngoma, Johannes Mischlinger, Meral Esen ,André-Marie Tchouatieu, Antì a Figueroa-Romero,Lia Betty Dimessa,Bertrand Lell, Heimo Lagler , Rella Zoleko-Manego , Myriam El Gaaloul , Susana Méndez , Sergi Sanz , Mireia Piqueras, Esperanca Sevene, Michael Ramharte, Francisco Saì¼te, Clara Menendez , Raquel GonzìÁlez

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# Effect of mefloquine delivered as malaria intermittent preventive treatment in pregnancy on antiretroviral drug levels in women living with HIV from Mozambique and Kenya

Linda StÌ ger; Anifa Vala, Esperanca Sevene, Mercè Brunet Arsénio Nhacolo, Eusébio Macete, Clara Menéndez Raquel Gonzalez

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# Effect of mefloquine delivered as malaria intermittent preventive treatment in pregnancy on antiretroviral drug levels in women living with HIV in Mozambique and Kenya

Linda Stuger, Richard E. Haaland, Anifa Vala, Meghna Desai, Esperanca Sevene, Mercè Brunet, Arsénio Nhacol, Laurence Slutsker, Eusébio Macete, Clara Menéndez, Raquel Gonzalez

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# EVALUATION OF COMMUNITY HEALTH WORKER KNOWLEDGE AND PRACTICE ON MALARIA HOME-BASED MANAGEMENT FROM APRIL TO JUNE 2018 AT RILIMA HEALTH CENTER

Faustin HABIMANA, Aimable NYABUGANDE, Aline UWIMANA, MBITUYUMUREMYI Aimable, Immaculee NIKUZE.

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# Young children with severe malaria in remote areas of the DRC: a contextual analysis of the perceptions, attitudes, and health-seeking behaviors of their parents

Deborah Kanyamukenge, Tafadzwa Maseko, Geofrey Makenga, JP Van Geertruyden, Eric Mukomrna, Aimé Kakudji, Hilde Bastiaens, on behalf of SEMA-REACT consortium (Christine Manyando, Michael Nambozi, Sebastian Hachizovu, Hypolite Muhindo, Augustin Luboya, Vito Baraka)

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# Empowering Community Health Promoters in Remote Areas: A Game-Changing Approach to Malaria Control Appollonia Ombima, Hilary Ngeso, Kevin Rowartz, Dorah Wafula, Wayne Otieno

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# Self-medication with ACTs and/or medicinal plants in rural areas of the northern Gabon

Luccheri Ndong Akomezoghe , Noé Patrick M'Bondoukwé, Jacques Mari Ndong Ngomo, Ibala Aubin, Denise Patricia Mawili and Marielle Karine Bouyou Akotet

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# Vital Sign Alterations within 24 hours Prior to Death in Children with Retinopathy-positive Cerebral Malaria at Queen Elizabeth Central Hospital Malawi.

Milcent Chintsanya, Charlotte Talham, Bo Zhang, Terrie E. Taylor, and Karl B. Seydel.

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# **Community Perception of Antimalarial Associated Weakness**

Obaro S. Michael [Presenter], Ademola Adetula, Joseph Badejo, Cynthia Ifejika, Grace Egunyomire, Adebola Orimadegun, Catherine O. Falade

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# **Expanding Community Case Management through the Private Informal Sector in Lagos, Nigeria**

Tosin Ogunsola, Ezinne Aso, Pamela Mudabai, Tayo Olaleye, Lekia Nwidae, Chizoba Fashanu, Owens Wiwa, Oshinowo Bimbo, Nwamaka Eze

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Diagnosis and Reagents Development

# Establishing a dynamic Community of Practice to respond to the threat of pfhrp2/3 gene deletions

Elisa Serra-Casas , Sinia Tomies-Falca , Nana Aba Williams , Deus S. Ishengoma

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# Plasmodium falciparum hrp2 and hrp3 Genes Deletion Typing by Digital PCR to Monitor Malaria Rapid Diagnostic Test Efficacy in Benin

Hamirath Odée Lagnika, Claudia A Vera-Arias, Oswald Djihinto, Cristian Koefli, Luc Salako Djogbénou

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# Improving the competence of laboratory technicians on the microscopic diagnosis of malaria through onsite capacity building from 2021 to 2022 in Benin

Augustin kpemasse, Ramani Saliou, Sacca Alexis Yarou Maye, Julien Aïssan, Virgile Gnaguenon, Alain Migan, Cyriaque Dossou Affoukou

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# Category:

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# AQ Malaria, a saliva-based method for malaria diagnosis

Linda E Amoah, Elizabeth Cudjoe, Sebastian S Kwapong, Prosper Tey, Jasmine Dowouna, Vilhelmiina Juusti, Janne Kulpakko, Pekka E. Hì nninen

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# Accelerating Nigeria towards malaria elimination: Insights from a political economy analysis

Elisabeth Chestnutt, Stefanie Meredith, Babatunde Ipaye, Dawit Getachew, James Tibenderana, Ebere Anyachukwu, Timothy Obot, Kolawole Maxwell

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# Strengthening Local Capacity for Mathematical Modelling in Public Health Professionals in LMICs: Lessons learnt

Kaduru C., Eshikhena G., Aladeshawe S., Eche-George A., Ibe U., Aadum D., Okon B., Iorkase E., Leghemo K., Ogunbode O., Okoronkwo C., Okoro O., Igumborgg E., Oyeyemi A., Uhomoibi P., Babatunde O.

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# Enhancing equitable and sustainable research in Africa - SINDOFO, a case study of delivering an innovative clinical trial

Ghyslain Mombo-Ngoma, Quique Bassat, Dearie Glory Okwu, Wenceslas Lendamba, Innocent Valea, Moussa Lingani, Jessica Dalsuco, Carole Amroune, Bernhards Ogutu, Consolata Nganga, Helen Demarest, Yveline Angevelle, Vanesa Nkwouano, Jana Held.

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# Addressing the global shortfall in public health entomology

Shobiechah A Wulandhari, Leo Braack, Tarekegn A. Abeku, Isaac Kimera, Chukwuebuka Ezihe

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# The Paired-Learning by Doing Approach for Capacity Building Derived from the China-UK-Tanzania Pilot Project on Malaria Control During 2015-2018

Shenning Lu, Xuejiao Ma, Wei Ding, Duoquan Wang, Zhengbin Zhou, Kangming Lin, Fei Luo, Shan Lyu, Ning Xiao, Xiao-nong Zhou

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# Category:

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# Assessment of the durability of long-lasting insecticidal nets from the 2017 ITN mass campaign in Benin, West Africa

Idelphonse B. Ahogni, Germain G. Padonou, Jean F. Dagnon, Patrick. Condo, Bruno Akinro, Janyce Gnanvi, Martin C. Akogbeto.

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#### Category:

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# Comparing the durability of synergist long-lasting insecticidal nets (LLINs) PermaNet®.0 and conventional LLINs York®in southeast Benin Republic after national mass campaign in 2020

Idelphonse B. Ahogni, Germain G. Padonou, Virgile Gnanguenon, Rock Aikpon, Patrick. Condo, Albert Salako, Janyce Gnanvi, Horacio Nani, Arthur Sovi and Martin C. Akogbeto

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# Performance and longevity of seven brands of longlasting insecticidal nets (LLINs) under various field conditions in Africa, example of Benin after three years of monitoring

Idelphonse B. Ahogni, Jean F. Dagnon, Patrick Condo, Germain G. Padonou, Martin C. Akogbeto

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Comparison of Rapid Diagnostic Test (RDT) and Blood Film Techniques (BFT) for Malaria Diagnosis at The Edward Francis Teaching Hospital, The Gambia.

Isatou Jaiteh, Prof Ado-Baba Ahmed

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#### Category:

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financial investments contribute to the reduction

of malaria case fatality in children under 5: a retrospective study from 2011 to 2022 in Burkina Faso AKOTIONGA E. A., YARO J.B, OUEDRAOGO T , KOTE B, BAKIONO F, NASSA S, NITIEMA A.P, BASSOLE A, KOUYATE B, NEBIE P, YONABA S, LAOKRI S, SIRIMA S.B,

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# Bio-efficacy and durability (insecticidal and physical) of next generation insecticide-treated bed nets against pyrethroid resistant malaria vectors in Tanzania

Jackline L Martin, Louisa A. Messenge, Franklin W Mosha, Nancy Matowo ,Eliud Lukole, Jacklin F Mosha, Manisha Kulkarni, Alphaxard Manjurano, Mark Rowland, Natacha Protopopoff

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# Contrasting Malaria Control Responses in The Gambia - Unpacking Success and Failure for Improved Strategies

Lamin Jadama, Fatoumatta Bojang, Sainabou Drammeh

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# Operational and Technical Readiness to Establish Systems for Sub National Malaria Elimination in Four Low Risk Counties in Kenya

Jane Githuku, Joy Gakenia, James Kiarie, Hellen Gatakaa, Beatrice Machini

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Control, Elimination and Eradication

Climate-Driven Early Warning Systems for Malaria Outbreak Prediction and Mitigation: A Proactive Approach Using Climate Data

Jane MERINYO, Wendy KINARA,

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#### Category:

Control, Elimination and Eradication

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# Direct mosquito skin feeding assays provide a portrait of the asymptomatic infectious reservoir for malaria transmission in Bagamoyo, Tanzania

Jessica T. Lin, Derrick Mathias, Guozheng Yang, Mwajabu Loya, Kano Amagai, Meredith S. Muller, Christopher Basham, Vincent Nyasembe, Isaack Rutha, Mwanaidi Nyange, Claudia Gaither, Neeva Wernsman Young, Hamza Said, Srijana B. Chhetri, Brian Swinehart, Alfred Smikin, Jeffrey Bailey, Rhoel Dinglasan, Feng-Chang Lin, Jonathan J. Juliano, Brian Tarimo, Billy Ngasala

# 371

# Category:

Control, Elimination and Eradication

# Malaria Test Positivity Rates Among Children Under Five Years at Two Health Centers in Liberia

Jethro W.S. Zawolo, Victor S. Koko, Wahdae-mai Harmon-Gray; Mamadou O. Diallo, Uwem Inyang, Mark Maire, Gaspar Mbita, Odell Kumeh; Julie Gutman, Laura Skrip

## 372

# Category:

Control, Elimination and Eradication

# A new primaquine tablet for malaria elimination

Julie Nguyen Ngoc Pouplin, Thoopmanee Kaendiao, Bilal Ahmad Rahimi, BE-PRIM operations and analysis team, Mavuto Mukaka, Walter R Taylor.

# 373

# Category:

Chemoprevention

# Estimation of the Community Effect of Seasonal Malaria Chemoprevention in Borno, Nigeria: a Modelling Analysis

Debra Ukamaka Okeh, Abdulazeez Ayodeji Olasinde, Bashir Adebare Oyetunji, Victor Omachako Ameh, Afeez Abidemi.

# 374

# Category:

Chemoprevention

Delivering seasonal malaria chemoprevention in a complex operating environment: Lessons from Wedwil refugee camp, Aweil West, South Sudan

Francis Okot, Norman Aweno, Jamshed Khan, Denis Mubiru.

# 375

### Category:

Chemoprevention

An assessment of factors predicting spitting and vomiting among children receiving seasonal malaria chemoprevention medicines in four Sahelian countries

Authors: Sikai Huang, Chen Gao, Duoquan Wang, Shenning Lu, Kevin Baker, Chuks Nnaji, Sol Richardson.

# 376

# Category:

Chemoprevention

Maximizing Malaria Prevention: Effectiveness of Seasonal Malaria Chemoprevention in Mozambican Children - a Cluster-Randomized Controlled Trial Analysis.

Ivan Alejandro Pulido Tarquino,Sol Richardson, Kevin Baker,Chuks Nnaji,Sonia Maria Enosse, Baltazar Candrinho.

# 377

# Category:

Chemoprevention

Identifying medium-term future research priorities for Seasonal Malaria Chemoprevention in Africa: an eDELPHI study

Kevin Baker; Ani Steele; Fangfang Lee; Susana Scott; Jean Louis Ndiaye, Sol Richardson.

# 378

# Category:

Chemoprevention

Assessment of Intermittent Preventive Treatment with Sulfadoxine Pyrimethamine coverage and the Relationship between Anaemia and Malaria Infections among Young Children in Northern Sierra Leone: A Prospective Cohort Study

Kwabena Owusu-kyei, Maya Sibley, Llorenc Quintì, Julian Williams, Andreu Bofill, Mohamed Samai, Clara Menéndez

# 379

### Category:

Chemoprevention

Impact of Oral Azithromycin and Extended Perennial Malaria Chemoprevention Regimen on Child Mortality

# in Sierra Leone: A Randomized Double-Blind, Placebo-Controlled Study Protocol (ICARIA PROJECT)

Kwabena Owusu-kyei, Haily Chen, Mireia Llach, Maureen Chileshe, Maya Sibley, Mohamed Samai, Clara Menéndez

# 380

#### Category:

Chemoprevention

Investigating the factors affecting coverage and acceptability of perennial malaria chemoprevention with sulphadoxine-pyrimethamine in Osun State, Nigeria: Evidence from a qualitative process evaluation

Michael Ekholuenetale, Chinazo Ujuju, Semiu Rahman, Mary Adekola, Benjamin Ilesanmi, Kolawole Maxwell, Adekemi Ajayi, Nnenna Ogbuluafor, Olufemi Oroge, Rufai Ahmed, Olusola Oresanya, James Tibenderana

# 381

# Category:

Chemoprevention

# Adverse events and reporting mechanisms in seasonal malaria chemoprevention programs: Insights from a survey in Karamoja region, Uganda

Musa Odongo, Richard Kajubi, Anthony Nuwa, Craig Bonnington, Kevin Baker, Musa Odongo, Maureen Nakirunda, Tonny Kyagulanyi, Jane Nabakooza, David Salandini, Jimmy Opigo, Godfrey Magumba, Christian Rassi, Jane Achan, Damian Rutazaana, Denis Rubahika, James Tibenderana

# 382

# Category:

Vector Biology and Control

# Effects of larval diet on phenotypic expression of knockdown resistance in the malaria vector Anopheles gambiae s.s.

Marie Joelle Fanou, Pierre Marie Sovegnon, Romaric Akoton, Oswald Y. Djihinto, Hamirath Odée Lagnika, Helga Saizonou, Romuald Agonhossou, Luc Salako Djogbénou

# 383

# Category:

Vector Biology and Control

# An Influential Insider: Microsporidia MB Influences the Host Gut Microbiota Profile

Jacqueline Wahura Waweru, Cynthia King'ori, Lydia Siele,

Anne Wairimu, Fidel Gabriel Otieno, Nicola Mulder, Daniel Masiga, Jeremy Herren

# 384

# Category:

Vector Biology and Control

The first ever transgenic Anopheles gambiae mosquito that blocks Plasmodium transmission generated in Africa for gene-drive use

Tibebu Habtewold

# 385

# Category:

Vector Biology and Control

# Effects of environmental factors on mosquito larval abundance in some selected larval sites in the Kintampo area of Ghana

Yussif Tawfiq, Stephen Omari, Kwaku Poku Asante

#### 386

# Category:

Vector Biology and Control

Species composition and insecticide resistance in malaria vectors in Ellibou, southern Côte d'Ivoire and first finding of Anopheles arabiensis in Côte d'Ivoire Bédjou P. N'Dri , Nadja C. Wipf , Jasmina Saric , Behi K. Fodjo , Giovanna Raso , Jì rg Utzinger , Pie Mì ller , Chouaïbou S. Mouhamadou .

# 387

#### Category:

Vector Biology and Control

# House Screening Reduces Exposure to Indoor Host-Seeking and Biting Malaria Vectors: Evidence from Rural South-East Zambia

Kochelani Saili, Christiaan de Jager, Freddie Masaninga, Onyango P. Sangoro, Theresia E. Nkya, Likulunga Emmanuel Likulunga, Jacob Chirwa, Busiku Hamainza, Emmanuel Chanda, Ulrike Fillinger and Clifford Maina Mutero

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#### Category:

Vector Biology and Control

Community perceptions, acceptability, and the durability of house screening interventions against

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# exposure to malaria vectors in Nyimba district, Zambia

Kochelani Saili, Christiaan de Jager, Freddie Masaninga, Brian Chisanga, Andy Sinyolo, Japhet Chiwaula, Jacob Chirwa, Busiku Hamainza, Emmanuel Chanda, Nathan N. Bakyaita and Clifford M. Mutero

#### 389

# Category:

Vector Biology and Control

# Efficacy of the PermaNet®Dual compared to the Interceptor®G2 and the PermaNet®3.0 in experimental huts in Siaya County, western Kenya

Nashon Ogutu, Silas Agumba, Vincent Moshi3, Collins Ouma, Edith Ramaita, Lenson Kariuki, John E. Gimnig, Bernard Abong'o, and Eric Ochomo

# 390

# Category:

Vector Biology and Control

# Colocation Observed among Mosquito Species across Isoko Communities of Delta State, Nigeria

Opoggen Love, Noutcha Mekue Aline Edith, Lawal Olanrewaju, Ibrahim Sulaiman Sadi

# 391

#### Category:

Vector Biology and Control

# ENTOMOLOGY STUDIES AND IDENTIFICATION OF DELTAMETHRIN RESISTANCE IN Anopheles gambiae WITHIN OTA, OGUN STATE NIGERIA

Tebamifor E. Mercy, Mamudu O. Collins, Suleiman Zakari, Eunice Adedeji, Wisdom O. Joel, Ogunlana Olubanke

# 392

# Category:

Vector Biology and Control

# Post insecticide Efficacy on Sprayed Walls in Central River Region and Upper River Region.

Authors: Samuel S. Gomez, Ebrima Jatta, Musa Jawara, Benoit Sessinou Assogb, Amadou Woury Jallow

# 393

#### Category:

Vector Biology and Control

# Contribution of Anopheles gambiae sensu lato

# mosquitoes to malaria transmission during the dry season in Djoumouna and Ntoula villages in the Republic of Congo

Jacques Dollon Mbama Ntabi, Espoir Divin Malda Bali,
Abel Lissom, Romaric Akoton, Jean Claude Djontu,
Georges Missontsa, Freisnel Hermeland Mouzinga,
Marcel Tapsou Baina, Luc Djogbenou, Cyrille Ndo, Charles
Wondji, Ayola Akim Adegnika, Arsène Lenga, Steffen
Borrmann, Francine Ntoumi

# 394

# Category:

Vector Biology and Control

# Enhancing malaria vector abatement: the advantages of drone-based larviciding with Bacillus thuringiensis israelensis (Bti) spraying

Paul Kamali, Ingabire Muziga, Eric Rutayisire, Phocas Mazimpaka, Emmanuel Hakizimana, Aimable Mbituyumuremyi, Jean Claude Semuto Ngabonziza, Charis

# 395

#### Category:

Vector Biology and Control

# Malaria vectors and transmission dynamics in Goulmoun, a rural town in southwestern Chad

Chrispin BIAMBA

# 396

## Category:

Vector Biology and Control

# Bacillus thuringiensis subsp. israelensis (Bti): a promising solution for malaria control in peri-urban anopheles breeding sites: a case study of Rugende and Kabuye rice marshlands in Gasabo District, Kigali, Rwanda.

Phocas Mazimpaka, Dunia Munyakanage, Beatus Cyubahiro, Alphonse Mutabazi, Elias Niyirtuma, Xavier Misago, Gerald Habimana, Eric Rutayisire, Primitive Mukanyandwi, Jack Mupfasoni, Ingabire Mamy, Kamali Paul, Jean Claude S. Ngabonziza, Aimable Mbituyumuremyi, Emmauel Hakizimana

# 397

# Category:

Vector Biology and Control

# **SECONDARY MALARIA VECTORS IN WESTERN**

# KENYA INCLUDE NOVEL SPECIES WITH UNEXPECTEDLY HIGH DENSITIES AND PARASITE INFECTION RATES

Amine M. Mustapha, Susan Musembi, Anthony K. Nyamache, Maxwell G. Machani, Jackline Kosgei, Lucy Wamuyu, Eric Ochomo, Neil F. Lobo

#### 398

### Category:

Vector Biology and Control

# Exploring factors influencing Malaria Transmission Dynamics; Biology, Behavior, and Ecology of Malaria Vectors in Kisumu, Kenya

Owino Samwel

### 399

# Category:

Vector Biology and Control

# Exploring the interaction between the mass use of endectocides and existing vector control tools against

Nilani Chandradeva, Joseph Challenger, Ellie Sherrard-Smith, Hannah Slater & Thomas Churcher

#### 400

#### Category:

Vector Biology and Control

# Genes introgression and reproductive isolation between An. coluzzii and An. gambiae populations from a hybrid zone of Senegal

Oumou K Gueye, Mouhamed B Faye, Abdoulaye Niang, Charles S Wondji, Abdoulaye Diabaté, Ibrahima Dia, Lassana Konaté, Oumar Gaye, Ousmane Faye, El Hadji Amadou Niang, Frederic Tripet

# 401

# Category:

Vector Biology and Control

# Assessment of population dynamics and biting trends of Aedes aegypti in northern Benin: Public health implications

Emmanuel TODO, Rock Aïkpon, Antoine Lokossou, Murielle Dossou

# 402

#### Category:

Vector Biology and Control

# Seasonal variation of microbiota composition in Anopheles gambiae and Anopheles coluzzii in two different eco-geographical localities in Cameroon Maurice Marcel Sandeu, Claudine Gr̢ce Tatsinkou Maffo, Nsa Dada, Flobert Njiokou, Grant L. Hughes, Charles S.

# 403

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Wondji

Vector Biology and Control

# Potential association between differential susceptibility of Anopheles gambiae to Plasmodium species and their distribution in Gabon

Stravensky Térence Boussougou-Sambe, Barclaye Ngossanga, Ange Gatien Doumba-Ndalembouly, Maminirina Fidélis Ambinintsoa, Mahmoudou Saidou, Lynda Nouage Boussougou, Ronald Edoa, Ynous Djida, Francine Ntoumi, Benjamin Mordmì Iler, Peter G. Kremsner, Charles S. Wondji, Ayôla A. Adegnika and Steffen Borrmann

# 404

# Category:

Vector Biology and Control

# Spatial distribution of pyrethroid insecticide resistance in Anopheles gambiae s.l population, Rwanda

Dunia Munyakanage, Lambert Nzungize, Torbert Migambi, Pascal Mosengo, Gerald Habimana, Aimable Mbituyumuremyi, Emmanuel Hakizimana

#### 405

# Category:

Vector Biology and Control

# Adults and school-age children are disproportionally bitten by Anopheles mosquitoes in Ugandan communities exposed to different levels of malaria transmission intensity

Sara Lynn Blanken, Maxwell Kilama, Alex K. Musiime, Kjerstin Lanke, Kristiaan Huijbers, Tom Hofste, Melissa Conrad, Paul Krezanoski, Grant Dorsey, Moses R. Kamya, Emmanuel Arinaitwe, Teun Bousema

# 406

# Category:

Vector Biology and Control

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The potential use of revisiting historical collection of mosquitoes to monitor the emergence and dynamics invasive vectors of malaria and arboviruses in Africa Bashir Salim, Faisal Almathen, Ayman Ahmed

# 407

# Category:

Vector Biology and Control

# Xenomonitoring of Lymphatic filariasis and risk factors for transmission on the Kenyan coast

Brian Bartilol, Lawrence Babu, Karisa Garama, Jonathan Karisa, Alice Kamau, Charles Mwandawiro, Caroline Wanjiku, Charles Mbogo, Marta Maia, Joseph Mwangangi and Martin Rono

# 408

# Category:

Phytomedicines, Pharmacology and Drug Development

Plasmodium falciparum Merozoite Surface Protein 2 (MSP2) identified as a potential target for antimalarial phytochemicals from Cassia abbreviata Oliv.

Sithulisiwe Ngwenya, Grace Mugumbate, Upenyu Guyo

### 409

# Category:

Phytomedicines, Pharmacology and Drug Development

Integrating Molecular Docking and Machine Learning: Enhancing Molecular Optimisation of P. falciparum Heat Shock Protein 70-1 Inhibitors.

Brilliant Nyathi, Grace Mugumbate, Jonathan Bvunzawabaya, Douglas Ruhwaya

# 410

#### Category:

Phytomedicines, Pharmacology and Drug Development

Plasmodium falciparum Heat Shock Proteins 70-z inhibitors identified as potential anti-malarial compounds using structure-based virtual screening. Manyadza Tsungai Faith, Mugumbate Grace, Guyo Upenyu, Midlands State University

# 411

#### Category:

Phytomedicines, Pharmacology and Drug Development

Plasmodium falciparum Merozoite Surface Protein 2 indentified as a potential target for antimalarial

## phytochemicals from Cassia abbreviata Oliv.

Ngwenya Sithulisiwe, Mugumbate Grace, Guyo Upenyu

#### 412

# Category:

Phytomedicines, Pharmacology and Drug Development

n-Hexane Root Extract of Napoleona reptans Displayed In Vitro and In Vivo Antimalarial Efficacy

Uchenna B. Alozieuwa, F.S. Ameh, A. Ubandoma

# 413

# Category:

Phytomedicines, Pharmacology and Drug Development

Using dried blood spot sampling for ivermectin population pharmacokinetics modeling during a mass drug administration campaign in Mozambique

Charlotte Kern, Almudena Sanz, Patricia Nicolas

# 414

### Category:

Insecticide Resistance

Fine scale spatial investigation of multiple insecticide resistance and underlying target-site and metabolic mechanisms in Anopheles gambiae in central Côte d'Ivoire

Welbeck A. Oumbouke, Patricia Pignatelli, Antoine M.G. Barreaux, Alphonsine A. Kof, Ludovic P.Ahoua Alou, Eleanore D. Sternberg, Matthew B.Thomas, David Weetman, Raphael N'Guessan

# 415

# Category:

Insecticide Resistance

Insecticide-Treated screening (ITS) of windows for household protection against insecticide resistant Anopheles gambiae s.l.: experimental house trial in Kolongonouan village, central Bouaké, Côte d'Ivoire. Marius G. Zoh; Antoine Barreaux; Alphonsine A. Koffi; Ludovic P. Ahoua Alou; Soromane Camara; N'guessan Brou; Serge Y. Koffi; Innocent Z. Tia; Rosine Z. Wolie; Raphael N'Guessan and Matthew B. Thomas

#### 416

#### Category:

Insecticide Resistance

Detection of kdr and ace-1 mutations in wild

# populations of Anopheles arabiensis and An. melas in a residual malaria transmission area of Senegal

P. C. Sarra, M.A. Nourdinea, B. S. Assogbab, M. Ndiaye c, A. K. Diaa, A. Ndiaye a, O. K. Gueyea, L. Konatea, O. Gayec, O. Fayea, E. A. Nianga, O. Sya

# 417

# Category:

Insecticide Resistance

Monitoring of Aedes populations from Benin for arboviruses, Wolbachia, insecticide resistance status, and mechanisms, in different Agroecosystems.

Ateutchia Ngouanet Sandra, Nanfack-Minkeu Ferdinand, Mavridis Konstantinos, Wanji Samuel, Demanou Maurice, Vontas John, Djouaka Rousseau e, Djouaka Ra

# 418

#### Category:

Insecticide Resistance

# Insecticide Resistance Profiles of Anopheles gambiae (s.l.) in the Coastal Epidemiological Zone in Ghana

Isaiah Debrah, Collins M. Morang'a, Samuel Mensah, Bismark Minnah, Mona-Liza Ebiere Sakyi, Ahmed Osumanu, Fred Aboagye-Antwi, Yaw Aniweh, Gordon Awandare and Lucas Amenga-Etego

# 419

### Category:

Insecticide Resistance

# Spatio-temporal characterization of phenotypic resistance in malaria vector species

Eric Ali Ibrahim, Mark Wamalwa, John Odindi; Henri E. Z. Tonnang

### 420

# Category:

Insecticide Resistance

Quantification of phenotypic resistance of An. gambiae s.l. in two distinct regions of the Republic of Benin, West Africa, by WHO susceptibility testing and CDC bioassays, and mechanisms of resistance involved.

Casimir Dossou Kpanou, Hermann W. Sagbohan, Arthur Sovi, Razaki Osse, Gil G. Padonou, Albert Salako, Filémon Tokponnon, Arsène Jacques Fassinou, Boulais Yovogan, Udoka C. Nwangwu, Constantin J. Adoha, Esdras Mahoutin Odjo, Aboubakar Sidick, Lamine Saïd Baba-Moussa, Martin Akogbéto

# 421

# Category:

Insecticide Resistance

# Nation-wide susceptibility profile of Anopheles and target site resistance mechanism against organophosphate in Cameroon.

Dandi Labou Judith, Kengne Ouafo Jonas, Tchouakui Magellan, Wondji Charles

# 422

#### Category:

Implementation Science and Health systems

# KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTH WORKERS IN TREATING SIMPLE MALARIA IN GOMA

Stan Hangi, Felicien Maisha, Jeff Bailey

# 423

#### Category:

Implementation Science and Health systems

# Knowledge, attitudes, and practices regarding malaria control and prevelance of plasmodium among communities living in Emana, a rural area in the Centre Cameroon forest region

Steve Joko Tamoufé, Yacouba Poumachu, Emanuel Elanga Djille, Rehema Oukouo, Antonio-Nkondjio Crhistophe, Awono Ambene ParfaitTimoleon Tchuinkam

# 424

# Category:

Implementation Science and Health systems

# Investigation of a malaria upsurge soon after Indoor Residual Spraying (IRS) in four districts in Eastern Uganda, 2016-2021

Alice Asio, Lawrence Oonyu, Daniel Kadobera, Benon Kwesiga, Lillian Bulage, Alex R. Ario, Damian Rutazaana

#### 425

# Category:

Implementation Science and Health systems

Factors associated with retention of health workers in remote public health centers in Northern Uganda: a cross-sectional study

Andrew Twineamatsiko, Nathan Mugenyi, Yvonne

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Nabachwa Kuteesa, Ejalu David Livingstone

# 426

# Category:

Bioethics and Legal Issues

Practice of benefit-sharing across human and pathogen genomic research in Africa: An analysis of key stakeholders' perspectives

Pamela Selormey, Irene Tsey, John Ganle, Paulina Tindana

# 427

# Category:

Malaria and Diversity (Equity, Gender & Inclusion )

Assessing the economic consequences of Antimalarial drug resistance in Northern Nigeria Bashir Dan-inna, Kamal Abdullahi Tasiu

# 428

# Category:

Malaria and Diversity (Equity, Gender & Inclusion )

Advancing Malaria Control through a Lens of Diversity, Equity, Gender, and Inclusion: Insights from BRICS+ Countries and South Africa

# **Authors:**

Ikekhwa Albert Ikhile

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# 429

# Category:

Parasite and Systems Biology

# Experimental studies of drug, vaccine and gene variant impact on Plasmodium spp. infections in mosquitoes

Harry Pollard, Mojca Kristan, Maria Luisa Simì es, Lindsay Stewart, Luke Brandner-Garrod, Mufuliat Toyin Famodimu, Penny Sparkes, Eduardo Alves, Gisela Henriques, Chris J. Drakeley, Christiaan van Ooij, Michael Delves, Colin J. Sutherland

# 430

# Category:

Parasite and Systems Biology

# Mosquito larval density study at Wovwe and Mphinga rice irrigation schemes in Karonga District

Muwoli Dokowe, Constance Hauya, Akinola Shonde and Joseph Lewinsky

# 431

# Category:

Parasite and Systems Biology

# Paradoxical findings from the study on malaria and rice irrigation agricultural farming in Northern Malawi Muwoli Dokowe, Constance Hauya, Shonde Akinola and

Joseph Lewinski

# 432

#### Category:

Parasite and Systems Biology

# Antimalarial Drug Resistance Surveillance in Ghana using Molecular Inversion Probes

Nukunu E. Akyea-Bobi, Karamoko Niaré, Rita Afriyie Boateng, Prince Horlortu, Michaela Ahorbo, Henrietta Sasu, Benedicta A Mensah, Eunice Obeng, Benjamin Abuaku, Jeffrey Bailey, Anita Ghansah

#### 433

## Category:

Parasite and Systems Biology

# Genetic Variation in P. falciparum Invasion Ligands and Their Cognate Human Receptor Variants in Malaria Cases From The Gambia

Nora Nghochuzie Nganyewo , Fatoumata Bojang , Eniyou C. Oriero , Ndey Fatou Drammeh , Mitchel Katsvanga , Gordon A. Awandare , Umberto D'Alessandro , Lucas N. Amenga-Etego , and Alfred Amambua-Ngwa .

#### 434

#### Category:

Parasite and Systems Biology

# RNA seq data reveals distincts response signatures in febrile patients for malaria and COVID-19: A potential markers towards earliest detection of coinfection

Nzungize Lambert, Umuhoza Diane, Jonas A Kengne-Ouafo

# 435

# Category:

Parasite and Systems Biology

# The role of insecticide treated nets in malaria transmission dynamics and control among under-five children in Oyo State.

Aderounmu T, Yusuf TT

# 436

#### Category:

Parasite and Systems Biology

# Elucidating interseason residual Plasmodium infection in humans and wild mosquitoes to guide the successful implementation of interventions for malaria elimination

Inès G.L. Paré, Bernard M. Somé, Nicaise Djègbè, Thomas S. Churcher, Anna Cohuet, Roch K. Dabiré, Dari F. Da

# 437

#### Category:

Parasite and Systems Biology

# Characterization of Plasmodium malaria reticulocyte binding protein 1a (PmRBP1a) and determination of its potentials as a vaccine candidate

Harry Danwonno, Richmond Boateng, Yaw Aniweh, Gordon Awandare

#### 438

# Category:

Parasite and Systems Biology

# Malaria vector nutrition predicts rate of Plasmodium falciparum development and infectivity

Philipp Schwabl, W. Robert Shaw, Shriya Anandjee, Maurice Itoe, Duo Peng, Angela Early, Flaminia

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Catteruccia, Dan Neafsey

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#### Category:

Parasite and Systems Biology

# Quantifying predictors of human-to-mosquito malaria parasite transmission in southern Malawi

Patience C. Simbi, Nellie Kaunde, Joyce Nyirongo, Wangisani Kumalakwaanthu, Jessy Goupeyou-Youmsi, Miriam K. Laufer, Clarissa Valim, Don P. Mathanga, Themba Mzilahowa, Lauren M. Cohee, Robert McCann

# 440

#### Category:

Parasite and Systems Biology

# Report of a case of serious imported malaria, city of Praia, Cabo Verde, June 2023 and its threat to the certification of the country free of malaria

Admilson Ramos de Oliveira

# 441

# Category:

Parasite and Systems Biology

# Prevalence of malaria and anemia and coverage of basic interventions before mass distributions of mosquito nets

Malik Olatunde, Aymar AKILIMALI, Jones ONESIME, Excellent RUGENDABANGA, Samson HANGI, Chrispin BIAMBA

# 442

#### Category:

Parasite and Systems Biology

# The role of putative mTORC-related kinases in translational regulation during Plasmodium falciparum transmission

Sandra Bennink, Felix Miller, Julius Miller, Michelle Wesselbaum, Christian Kihne, Abdullatif Rnjbal, Gabriele Pradel

# 443

# Category:

Parasite and Systems Biology

Asymptomatic placental cord blood malaria and the risks factors associated with it at the Regional Hospital Bamenda.

Mungwi Synthia Njiwale, Ebanga Echi Joan Eyong, Ebai Bissong Calvin, Seino Richard Akwanjoh

#### 444

#### Category:

Parasite and Systems Biology

Impact of knowledge, attitudes, and practices towards long-acting insecticide-treated mosquito nets on the prevalence of malaria infection in children under 5 years of age in the Dodji-Bata district in southern Benin

Benjamine Tchéhoundjè, Akpéyédjé Yannelle Dossou, Aurore Hounto, Manfred Accrombessi, Achille Massougbodji

#### 445

# Category:

Parasite and Systems Biology

# **Anti Malaria Drugs Resistance in Africa**

Teresa Sindique

#### 446

#### Category:

Parasite and Systems Biology

# Kinetics of transmissibility to mosquitoes from clinical P. vivax infections in Ethiopia: comparison between primary and recurrent infections

Wakweya Chali, Legesse Alamirie Ejigu, Migbaru Keffale, Lina Alemayehu, Melat Abdo, Getnet Habtamu, Amanuel Shimelas, Desalegn Nibret, Zewdu Solomon, Abrham Gashew, Temesgen Ashine, Fikregabriel Abera, Teun Bousema, Chris Drakeley, Fitsum G. Tadesse

#### 447

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

# Contribution of Pathogenic Bacteria to the Pathogenesis of Cerebral Malaria

Rhoda Yeboah, Winnifred Ofei-Kyei, Andrews Obese, Caleb Danso-Coffie, Emmanuel Boafo, Joanita Yeboah, Elinam Abgobli, Talent Senanu, Ben Gyan, Gloria Ivy Mensah, Daniel Oduro

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#### Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

# The effect of sickle cell trait on expression and naturally acquired antibodies to PfEMP1 variants associated with rosette-formation

Zakaria Seidu, Helena Lamptey, George Obeng Adjei, Michael F. Ofori, Lars Hviid & Mary Lopez-Perez

# 449

#### Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

# Malaria and Staphylococcus aureus Infections among Febrile Children in Selected Health Facilities in Ogun State, Nigeria

OR Oyerinde, ED Olaleye, UA Kalu, EO Zaccheaus, O Durotoye, OO Abolurin, AO Adekoya, GH Amah, KM Oyebola

# 450

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

# **Elevated Renin Predicts Mortality in Children with Severe Malaria**

Daniel Adan Jr, Ruth Namazzi, Caroline Kazinga, Anthony Batte, Kagan A. Mellencamp, Caitlin Bond, Natalja N Stanski, Robert O. Opoka, Chandy C. John, Andrea L. Conroy

# 451

# Category:

Social and Health Economics

# Exploring the Interplay between Social Safety Nets and Community Well-being in Malaria-Endemic Regions: The Nigerian Perspective

Oluwaseun Adeoye Oyebamiji, Ege University, Izmir, Turkiye and Kamal Tasiu Abdullahi, Istanbul University, Turkiye

# 452

# Category:

Social and Health Economics

# School-based malaria chemoprevention as a cost-effective approach to improve cognitive and educational outcomes: a meta-analysis

Noam Angrist, Matthew C. H. Jukes, Sian Clarke, R. Matthew Chico, Charles Opondo, Donald Bundy, Lauren

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# 453

#### Category:

Social and Health Economics

# Health issues related to Dams: Socio-anthropological analysis of the effects of Malaria around Soum dam

Martin Moyenga, Zakaria Soré, Helle Samuelsen, Adélaide Compaoré

# 454

# Category:

Social and Health Economics

# Why investing in Indoor Residual Spraying (IRS) for malaria control would provide high economic returns in Rwanda, case of Kayonza District

Michee Kabera, Dunia Munyakanage, Kaendi Munguti, Aimable Mbituyumuremyi, Emmanuel Hakizimana

# 455

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Surveilling Plasmodium falciparum at first antenatal care visits through genomics in Mozambique

Glì ria Matambisso, Clemente Silva, DìÁrio Tembisse, Simone Boene, Paulino da Costa, Henriques Mbeve, Nelo Ndimande, Eduard Rovira-Vallbona, Manuel Gracì a-Ulloa, Nanna Brokhattingen, Andrés Aranda-Dì az, Bryan Greenhouse, Neide Canana, Bernadete Rafael, Sì nia Enosse, Maria Rodriques, Baltazar Candrinho, Francisco Sal¼te, Alfredo Mayor

# 456

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Malaria Molecular Surveillance in Burkina Faso: Pilot Study for Use of Sentinel Site Data to Guide Intervention Selection for Malaria Burden Reduction.

Issiaka Soulama, Emilie Badoum, Daouda Ouattara, Amidou Diarra, Kairon Shao, Anna Burkhard, Maurice Ouattara, Wesley Wong, Amidou Ouédraogo, Jean Sawadogo, Issa Nebié Ouédraogo, Alphonse Ouédraogo, Daouda Ndiaye, Sarah K Volkman, Alfred B. Tiono, Dyann F Wirth, Sodiomon B. Sirima

# 457

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

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# PROFILE OF PFCRT, PFMDR-1 AND K13 GENES IN MALARIA PATIENTS IN BOUAFLÌÄ, BONDOUKOU AND SÌÄGUÌÄLA (CÌÓTE D'IVOIRE)

KOUAKOU A. Jérôme, BLA K. Brice, KONATE-TOURE Abibatou, GNAGNE A. Paterne, BEDIA A. Valérie, YAVO William.

### 458

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Genotyping of Plasmodium falciparum Merozoite Surface Protein 2 (Pfmasp-2) revealed different allelic profiles in blood and saliva samples from Mfou Health district in Cameroon.

Loïc T. J. Keumo, Hillary M. S. Tene, Francis Zeukeng, Livo F. Esemu, Honore A. Awanakam, Rose G.F. Leke, Jude D. Bigoga, Loïc T. J. Keumo

# 459

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Unravelling the genomic and phenotypic divergence within sub-populations of two major malaria vectors: Anopheles gambiae and Anopheles coluzzii

Marilene M. Ambadiang, Caroline Fouet, Ayukarah F. Ashu, Aditi Kulkarni, Penlap V. Beng, Sourav Roy, Colince Kamdem

# 460

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# Active surveillance of antimalarial drug resistance and genetic diversity of Plasmodium falciparum in the forest ecological zone of Ghana

Kwadwo Sarfo Marfo, James Osei-Mensa, Henry Hanson, Welbeck Odame Dzadey, Francisca Walden, Oumou Maïga-Ascofaré

# 461

#### Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# New reference genomes for neglected Plasmodium ovale curtisi and Plasmodium ovale wallikeri

Matthew Higgins, Emilia Manko, Daniel Ward, Jody E. Phelan, Colin Sutherland, Taane Clark, Susana Campino

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## Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

# ASSESSMENT OF GENETIC DIVERSITY OF PLASMODIUM FALCIPARUM Pf230 GENE AS A POTENTIAL CANDIDATE FOR MALARIA VACCINE DEVELOPMENT

Ramadhan Moshi, Collins M Morong'a, Beatus M. Lyimo, Dativa Pereus, Catherine Bakari, Rashid A. Madebe, Misago D. Seth,Celine I. Mandara, Ruth B. Mbwambo, Filbert Francis, Daniel Mbwambo, Frank Chacky, Sijenunu Aaron, Abdallah Lusasi, Samwel Lazaro, Ally Mohamed, Jeffrey A. Bailey, Deus S. Ishengoma

# 463

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Modeling the Impact of Expanding Seasonal Malaria Chemoprevention to older Age Group and five cycles on malaria incidence in Northern Region of Ghana Abdulzeid Yen Anafo, Aheto Justice, Yaw Asare Afrane, Jaline Gerardin

# 464

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Modelling the basic reproduction number (R0) of malaria in different regions of Nigeria

Azuka Stephen Adeke, Lateef Adewale Kareem

# 465

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Modelling the control of malaria transmission dynamics using Wolbachia and long lasting insecticidal nets (LLINs) in Nigeria

Kosoko S. and Bakare E.A.

#### 466

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Modelling the dynamics of Plasmodium falciparum malaria with the effects of LLINs and drug treatment in Nigeria

Afeez Abidemi and Emmanuel Afolabi Bakare

#### 467

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Modelling the effect of mosquito heterogeneous biting pattern on vector control intervention for Plasmodium falciparum malaria in Nigeria

Olasupo Idowu Isaac, Emmanuel Afolabi Bakare

# 468

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# MODELLING THE EFFECT OF PERENNIAL MALARIA CHEMOPREVENTION (PMC) INTERVENTION ON MALARIA TRANSMISSION IN NIGERIA

Chinazom N. Ekwueme, Tijani T. Yusuf

# 469

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Modelling the effect of seasonal malaria chemoprevention on the transmission dynamics of malaria in Kwara State, Nigeria.

Oluwaseun Akinlo Mogbojuri, Emmanuel Afolabi Bakare .

### 470

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Modelling the effect of the current level of ACT treatment on malaria outcome in Ekiti state, South-West Nigeria

Aaron Onyebuchi Nwana, Emmanuel Afolabi Bakare, Isaac Segun Oyedeji

# 471

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# MODELLING THE EFFECT OF VECTOR CONTROL STRATEGIES ON MALARIA INCIDENCE IN NIGERIA

Susan Agiounim Adie

# 472

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# MODELLING THE EFFECTS OF CONFLICT AND DISPLACEMENT ON MALARIA BURDEN IN NIGERIA

Basa Fahad Umar, Kareem Lateef, Mohammed Musa

# 473

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Modelling the effects of Long-Lasting Insect-treated Nets (LLINs) usage during pregnancy-a mathematical modelling approach

Wezzie Banda, Nicholas Adam, Wongani Nyondo

#### 474

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Modelling the impact of RTS,S and R21 vaccination on endemic settings in Sub-Saharan Africa

Lydia Haile, Nora Schmit, Kelly McCain, Hillary M. Topazian, Giovanni D. Charles, Katherina Hauck, Azra Ghani, Peter Winskill, Lucy Okell

# 475

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Molecular surveillance of Plasmodium falciparum drug resistance associated genes in Ghana

Mona-Liza E. Sakyi, Osumanu Ahmed, Joyce M. Ngoi, Kukua Thompson, Samirah Saiid, Solomon Atampa, Enock K. Amoako, Collins M. Morang'a, Sonia Goncalve, Yaw Aniweh, Gordon A. Awandare, Dominic P. Kwiatkowski, Lucas N. Amenga-Etego.

# 476

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Monitoring malaria incidence rates and hotspots for prioritization of targeted control interventions in Rwanda

Ndagijimana Deogratias, Habanabakize Epaphrodite, Nshimiyimana Radislas, Hagenimana Jean Damascene

# 477

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

National malaria molecular surveillance (MMS) reveals increasing prevalence of artemisinin partial resistance and high level antifolate resistance in Northwest Tanzania from 2021 to 2023

Alfred Simkin, Abebe A Fola, Beatus M Lyimo, Dativa Pereus, Catherine Bakari, Rashid A Madebe, Misago D

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Seth, Celine I Mandara, Zachary R Popkin-Hall, Ramadhan Moshi, Ruth B Mbwambo, Karamoko Niare, Bronwyn MacInnis, Filbert Francis, Daviel Mbwambo, Issa Garimo, Frank Chacky, Sijenunu Aaron, Abdallah Lusasi, Fabrizio Molteni, Ritha J A Njau, Samwel Lazaro, Ally Mohamed, Jonathan J. Juliano, Jeffrey A. Bailey, Deus S Ishengoma

## 478

### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Nosocomial malaria: Risk of malaria after hospitalization at Jinja regional referral hospital, Uganda: a cohort study

Arthur Mpimbaza, Nelson Ssewante, Jane Sylvia Nassiwa, Steven Kiwuwa, Phil Rosenthal, Joan Kalyango

# 479

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Novel liquid blood drop pooled sequencing method shows spread of Plasmodium falciparum Kelch13 R561H and other mutants of concern in Rwanda and across neighboring countries.

Neeva Wernsman Young, Pierre Gashema, David Giesbrecht, Alec Leonetti, Rebecca Crudale, Vincent Iradukunda, Ntwari Jean Bosco, Fred Mwebembezi, Stan Hangi, Felicien Maisha, Misago D. Seth, Celine I. Mandara, Rule Budodo, Rashid A. Madebe, Catherine Bakari, Dativa Pereus, Grace K. Kanyankole, Tharcisse Munyaneza, Deus S. Ishengoma, Corine Karema, Jean-Baptiste Mazarati, Jonathan J Juliano, Jeffrey A. Bailey

# 480

# **Category:**

Malaria Epidemiology, Modelling, Surveillance and Impact

Optimal Mathematical Modeling of Malaria Dynamics: Integrating Indoor Residual Spray (IRS), Long Lasting Insecticide Treated Nets (LLINs), and Attractive Toxic Sugar Baits (ATSBs) for Sustainable Control Strategies in Sub-Saharan Africa

Vusi Magagula

# 481

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Optimization Models for Malaria Programming: A Systematic Review

Randolph Ngwafor , Sunil Pokharel , Ricardo Aguas , Lisa White , Rima Shretta

# 482

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# P. falciparum hrp2 exon 2 gene deletion surveillance amongst symptomatic malaria patients with false negative PfHRP2-RDT results in Ghana in 2023

Akosua Aya Essuman, Elaine Boadu, Bernice Cubbson Abban, Mercy Tintaa, Razak Habibu, Nana Yaw Peprah, Alexander Asamoah, George Asumah Adu, Benjamin Abuaku, Keziah L. Malm, Linda Eva Amoah

#### 483

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Parasite-vector interactions that define Plasmodium malariae transmission in Human-Vectors in south of Brazzaville and its surroundings, Republic of Congo

Jacques Dollon Mbama Ntabi, Abel Lissom, Jean Claude Djontu, Romac Akoton Francis N. Nkemngo, Steve Diafouka Kietela, Jolivet Mayela, Georges Missontsa, Luc Djogbenou, Cyrille Ndo, Charles Wondji, Ayola Akim Adegnika, Arsène Lenga, Steffen Borrmann, Francine Ntoumi

# 484

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Perceptions of Care givers of Uncomplicated Malaria and their Health care Seeking Behavior for children below 5-years in Cameroon

Ayima CW, Nfor EN, Mboh KE, Ngin EN Ngala SL, Teko EM, Warri D, Tanayen GG, Nfor WG, Segha EA, Ngah LD, Tih PM

# 485

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Performance of malaria rapid diagnostic tests, microscopy and qPCR for detection of malaria parasites among asymptomatic individuals in villages with high levels of artemisinin partial resistance in North-western Tanzania

Rule Budodo, Filbert Francis, Salehe S. Mandai, Daniel Challe, Misago D. Seth, Rashid Madebe, Daniel Petro,

Angelina J. Kisambale ,Gervas A. Chacha , Ramadhani Moshi ,Ruth Boniface ,Dativa Pereus ,Catherine Bakari ,Sijenunu Aaron,Daniel Mbwambo , Abdallah Lusasi , Stella Kajange , Samwel Lazaro,Ntuli Kapologwe ,Celine I. Mandara ,Deus S. Ishengoma.

#### 486

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Performances of malaria PfHRP2 and the combined PfHRP2/pLDH-based rapid diagnostic tests among children under five years of age in a high and seasonal malaria transmission area in Burkina Faso

Delwendé Florence Ouédraogo, Hamtandi Magloire Natama, Hermann Sorgho, Sarah Benedicte Kaboré, Toussaint Rouamba, Somé M. Athanase, Aida Millogo, Abdoul-Rahim Ouédraogo, Pieter Guetens, Eline Kattenberg, Aly Savadogo, Halidou Tinto & Anna Rosanas-Urgell

# 487

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# PERSISTENCE OF MALARIA TRANSMISSION AND GAMETOCYTE CARRIAGE IN DRY SEASON IN BOUGOULA-HAMEAU, MALI.

ML. AHLHOUSSEINI, B. FOFANA, A. NIANGALY, K. KONE, B. TOGO, B. TRAORE, K. SANOGO, S. TOURE & A. DJIMDE.

# 488

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Plasmodium falciparum gametocyte production correlates with genetic markers of parasite replication but is not driven by exposure to mosquito biting

Sara Lynn Blanken, Aissata Barry, Kjerstin Lanke, Moussa Guelbeogo, Alphonse Ouedraogo, Issiaka Soulama, Sam Aboubacar Coulibaly, Karina Teelen, Will Stone, Matthias Marti, Carolina Andrade, Chris Drakeley, Katharine Collins, Alfred Tiono, Teun Bousema

# 489

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Plasmodium falciparum histidine-rich protein 2 and 3 gene deletions in low seasonal and intense perennial

#### transmission zones in Cameroon

Tobias O Apinjoh, Livinus N Tangi, Eniyou C Oriero, Sainabou Drammeh, Vincent N Ntui, Blessed N. Etoketim, Hanesh F Chi, Pilate N Kwi, Mary A. Oboh, Eric A Achidi, Alfred Amambua-Ngwa

# 490

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Plasmodium falciparum infection and malaria prevalence in community and hospital in central region of Gabon.

Rella Zoleko-Manego, Alex HOUNMENOU ZINSOU, Roméo Wenceslas LENDAMBA, Wilfrid NDZEBE NDOUMBA, Dearie Glory OKWU, Géradine NGAGOUM, Flamand Cany MUCANI NSIENGUI, Ghyslain MOMBO-NGOMA

# 491

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Plasmodium malariae among the asymptomatic study participants from Southern Benin

Romuald Agonhossou, Romaric Akoton, Simon Rothbauer, Francine Ntoumi, Charles S. Wondji, Steffen Borrmann, Ayola A. Adegnika, Thirumalaisamy P. Velavan

# 492

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Prevalence and factors associated with malaria among children aged 6 months to 10 years in the Greater Accra Region of Ghana: A community-based cross-sectional survey

David Kwame Dosoo, George Adu Asumah, Kayan Kingsley, Eliezer Odei-Lartey, Kofi Adomako, Frank Atuguba, Stephaney Gyaase, Abdul Razak Nuhu, Nana Yaw Peprah, Love Ankrah, Dennis Adu-Gyasi, Dorcas Atibilla, John Williams, Keziah Malm, Kwaku Poku Asante

# 493

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Prevalence and risk of malaria infections among asymptomatic individuals from community cross-sectional surveys in five regions of Tanzania with different transmission intensities.

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Gervas A. Chacha, Francis Filbert, Salehe S. Mandai, Daniel P. Challe, Misago D. Seth, Rashid A. Madebe, Daniel A. Petro, Rule Budodo, Angelina J. Kisambale, Ramadhan Moshi, Ruth B. Mbwambo, Dativa Pereus, Catherine Bakari, Sijenunu Aaron, Daniel Mbwambo, Samwel Lazaro, Ntuli Kapologwe, Celine I. Mandara, Deus S. Ishengoma.

## 494

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Prevalence and trends in Plasmodium malariae infections in sub-Saharan Africa: a meta-analysis Lara Markus, Kai Matuschewski

#### 495

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Prevalence of malaria infection in children aged 10 to 23 months: a community-based multi-stage household survey in Massinga District, Mozambique

Edgar Jamisse, Antì a Figueroa-Romero, Fabiao Luis, Llorenc Quintì, Abel Nhama, Wilson Simone, Marc Baì uls, Charfudin Sacoor, Valérie Briand, Mohamed Samai, Didier Koumavi Ekouevi4, Raquel GonzìÁlez, Clara Menéndez, and Francisco Saì

## 496

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Prevalence of non-falciparum malaria parasites among symptomatic individuals from the Eastern Region of Ghana

Vera Appiah-Kubi, Reinhard Kobbie Danku, Felix Ansah, Gordon A. Awandare, and Yaw Aniweh

# 497

Malaria Epidemiology, Modelling, Surveillance and Impact

Prevalence of Plasmodium falciparum parasites with Pfhrp2 exon 2 gene deletion in symptomatic malaria patients across Ghana, during the peak season in 2021

Dorcas G. Bredu, Bernice C. Abban ,Sherik-fa Anang ,Nana Y. Peprah , Alexander Asamoah , George A. Asumah ,Eunice O. Amoako , Benjamin Abuaku ,Linda E. Amoah ,Keziah L. Malm Asumah.

# 498

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Prevalence, trends and associated factors of malaria in the Shai-Osudoku District Hospital, Ghana

Jessica Ashiakie Tetteh, Patrick Elorm Djissem and Alfred Kwesi Manyeh

# 499

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Proportion and individual determinants of appropriate health-seeking behavior for febrile illness among caregivers of children under five years in Butula subcounty, Busia County, Kenya.

Jean Louis KANANURA

#### 500

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Real-time surveillance of antimalarial drug use pattern in public and private establishments: a comparative analysis.

Badejo, J. A., Michael, O. S., Ademowo, O. G.

### 501

#### Category

Malaria Epidemiology, Modelling, Surveillance and Impact

# Retrospective analysis of malaria incidence in Guinea, 2018 - 2022

Abdourahamane Diallo, Oumar Billa, Ousmane Diallo, Mohamed Dioubate, Lazare Loua, Galatas Beatriz, Jaline Gerardin, Alioune Camara

# 502

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Rwanda profile on Malaria Control: trend analysis of surveillance data, success and challenges

Kabera M, Muhashyi A, Kaendi M

# 503

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Severe malaria in children under 5 years old at Panda Hospital in Democratic Republic of Congo

Samson HANGI, Jones ONESIME, Hardy ELEMBWE, Excellent RUGENDABANGA, Aymar AKILIMALI and

## Chrispin BIAMBA

#### 504

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Severe malaria mortality and associated factors among children under five years in Eastern Province Rwanda hospitals: A cross-sectional study.

Jean Paul HATEGEKIMANA, Clarisse Marie Claudine SIMBI, Theoneste Ntakirutimana, Laetitia NYIRAZINYOYE

### 505

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Shifting the vector surveillance paradigm: Human behavior adjusted exposure to malaria vectors in four districts in Zambezia and Niassa provinces, Mozambique.

Mercy Opiyo, Dulcisì Ária Morrenjo, Ines Mugawanaya, Domingo Biossone, Elodie Vajda, Steve Gowelo, Luis Jamu, Nelson Cuamba, Abdollah Jalilian, Luigi Sedda, Allison Tatarsky, Edward Thomsen, Neil F. Lobo, Baltazar Candrinho

# 506

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# SIMPLEGEN: a modeling approach (de)coupling epidemiology and genomics to inform malaria surveillance

Shazia Ruybal-PesìÁntez and Robert Verity

# 507

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Simulating seasonal malaria interventions through integrated modelling: A VECTRI and OpenMalaria collaboration

Alexis Martin, Adrian Tompkins , Cyril Caminade, Nakul Chitnis

# 508

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Spatial analysis of clinical samples in preparation for nationwide malaria genomic surveillance in The

#### Gambia

Eniyou Cheryll Oriero, Katty Wadda, Haddy Bittaye, Binta Saidy, Mary Oboh, Majidah Adiamoh, Hadiza Umar, Dominic Amuzu, Fatoumatta Cham, Benjamin Njie, Michael Mendy, Shavanthi Rajatileka, Sonia Concavales, Dominic Kwiatowski, Musa Jawara, Umberto D'Alessandro, Olimatou Kolley, Ballah Kandeh, Ballah Gibba, Alfred Amambua-Ngwa

# 509

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Spatial Distribution of Malaria Hotspots in a Low Transmission Setting, Ghana - 2020

Dora Dadzie, Keziah L. Malm, George Adu-Asumah, Samuel Oppong, Nana Yaw Peprah, Ivy Forson, Joel Narh Balbaare, David Dosoo, Kwaku Poku Asante

# 510

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# **Spatial Dynamics of Malaria Transmission**

Sean L. Wu, John M. Henry, Daniel T. Citron, Doreen Mbabazi Ssebuliba, Juliet Nakakawa Nsumba, Héctor M., Sanchez C., Oliver J. Brady, Carlos A. Guerra, Guillermo A. Garcia, Austin R. Carter, Heather M. Ferguson, Bakare Emmanuel Afolabi, Simon I. Hay, Robert C. Reiner Jr., Samson Kiware, David L. Smith

# 511

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Spatio-temporal characterization of phenotypic resistance in malaria vector species

Henri E.Z. Tonnang, Wambui Wangu Harriet, Juddy Akinyi Oyoo, Eric Ali Ibrahim

# 512

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Spatiotemporal Correlation of Malaria and Mosquito Breeding Hotspots in a Pre-elimination Setting of Choma District, Southern Zambia

Mukuma Lubinda,Macha, Anne Martin, Japhet Matoba, Caison Sing'anga,Harry Hamapumbu, Ben Katowa,Michael Musonda,Limonty Simubali,Twig Mudenda,Kochelani Saili,Mary Gebhardt,Edgar Simulundu, Timothy Shields,Bill

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# 513

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Spatio-temporal modelling and interactive web-based mapping of malaria under Integrated Nested Laplace Approximation to support preventive and control efforts in Ghana

Justice Moses K. Aheto ,Lynette J. Menezes, Wisdom Takramah, Liwang Cui

# 514

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

Spatiotemporal patterns of malaria transmission among children aged 6-59 months in Ghana: Application of Bayesian hierarchical models

Wisdom Kwami Takramah, Justice Moses K. Aheto, Yaw Asare Afrane

#### 515

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# Strategic malaria planning in Angola: the impact of implementing new tools

Mar Velarde,Emilie Pothin,Rafaela Guedelha Cardao,Julia Montana Lopez,Joseph Zvoushoma, Eléonore van Tulder,Anthony Yuen,Dominic Lucero, Emilie Pothin,Jose Franco Martins,Fernanda Guimaraes, Kumba Kialanda,Cani Pedro, Luzala Garcia

# 516

# Category:

Drug Efficacy

P. falciparum field isolates to guide clinically relevant dose ratios for the Cabamiquine: Pyronaridine combination using translational modeling

Mohamed Maiga, Sebastian G. Wicha, Perrine Courlet, Abdoulaye Djimdé, Thomas Spangenberg, Laurent Dembélé, Claudia Demarta-Gatsi

# 517

# Category:

Drug Efficacy

### Problematic of phase III antimalarial drugs

# clinical trials in a setting of Seasonal Malaria Chemoprevention: Case of ASAAP study in Faladie Mali

Mamadou M TEKETE, Siaka GOITA, Francois DAO,Nani Yacouba BARRE, Aboubacrin S HAIDARA, Cheick Papa Omar SANGARE, Karim SAWADOGO, Ramata MARIKO, Ramata POUDIOUGO,Fatalmoudou TANDINA,Fatoumata BALLO,Oumou MAIGA ASCOFARE

#### 518

## Category:

Drug Efficacy

# The efficacy of Triple artemisinin-based combination therapy on Plasmodium berghei.

Oropo Abdulhammed 0., David Audu., Ademolu Kehinde, Idowu Oluwafunmilayo

### 519

#### Category:

Drug Efficacy

# Investigating Plasmodium falciparum Molecular Markers that Modulate the Efficacy of ArtemisininBased Combination Therapies (ACTs) Partner Drugs in Ghana

Samirah Saiid, Edem Adika, Jersley Chirawurah, Collins Morang'a, Dominic S. Y. Amuzu, Gordon A. Awandare, Alfred Amambua-Ngwa, Yaw Aniweh, Lucas Amenga-Etego

# 520

# Category:

Drug Efficacy

# The transmission reducing activity of artemisinincombination, non-artemisinin, and 8-aminoquinoline antimalarial therapies: a synthesis of novel trials from 2019-2023

Almahamoudou Mahamar, Merel Smit, een N Vanheer,
Koualy Sanogo, Youssouf Sinaba, Sidi M. Niambele,
Adama Sacko, Oumar M Dicko, Makonon Diallo, Seydina
O Maguiraga, Yaya Sankaré, Sekouba Keita, Siaka
Samake, Adama Dembele, Ahamadou Youssouf, Harouna
M. Soumare, Halimatou Diawara, Rob ter Heine, Matthew
McCall, Kjerstin Lanke, P, John Bradley, Yahia Dicko, Sekou
F. Traore, Djibrilla Issiaka, Prof Chris Drakeley, Prof Teun
Bousema, Prof Alassane Dicko, Will Stone

# 521

# Category:

Drug Efficacy

# Effect of combination with amodiaquine as partner drug in Triple Artemisinin-Based Combination Therapy (TACT) in Treatment of Plasmodium berghei (NK65)-infected mice

Ajayi AM, Oyeneye SO, Ademowo OG

# 522

# Category:

Drug Efficacy

# Monitoring of Plasmodium falciparum artemisinin resistance in Kedougou 2019: kelch13 molecular marker surveillance and in vivo therapeutic efficacy

Seynabou D. Sene, Mariama N. Pouye, Fatoumata Diallo, Rokhaya Magal Fall, Khadidjatou Mangou, Adam J. Moore, Bacary Djilocalisse Sadio, Alioune Wade, Aboubacar Ba, Ife Desamours, Noemi Guerra, Kelly Hagadorn, Oumar Faye, Ousmane Faye, Laty Gaye Thiam, Amy K. Bei, Alassane Mbengue

# 523

# Category:

Drug Resistance

# Assessment of ex vivo antimalarial drug susceptibility and molecular signatures in Senegal

Mamadou Samb Yade, Awa Fall, Romain Coppée, Aminata Mbaye, Lucie Adoux, Mamadou Alpha Diallo, Khadim Diongue, Abdoulaye Tine, Atikatou Mama, Alphonse Birane Thiaw, Justine Bailly, Ibrahima Mbaye Ndiaye, Ousmane Kébé, Djiby Sow, Tolla Ndiaye, Younouss Diédhiou, Amy Gaye, Cécile Doderer-Lang, Denis Niyomwungere, Casimire Wendlamita Tarama, Mamane Nassirou Garba, Amy Kristine Bei, Baba Dièye, Didier Ménard, and Daouda Ndiaye

# 524

# Category:

Drug Resistance

# Pfkelch-13 Sequencing Strategy on Identifying Artemisinin Resistance in Busia County, Kenya

Mark Makau, Bernard Kanoi, Michael Maina, Calvin Mgawe, Osamu Kaneko, Jesse Gitaka

# 525

# Category:

Drug Resistance

# Extension of molecular markers resistance to

# sulfadoxine/pyrimethamine plus Amodiaquine to adults after a decade of seasonal malaria chemoprevention implementation in Mali.

Kalilou Mariko, Hamma Maiga, Sekou Sissoko, Aliou Traore, Antoine Dara, Oumar Coulibaly, Mamadou Dolo, Ibrahima Guindo, Issaka Sagara and Abdoulaye A. Djimde

# 526

# Category:

Drug Resistance

# Monitoring antimalarial drug resistance markers using Anopheles mosquitoes in Burkina Faso

Moustapha Nikiema, Awa Gnémé, Justine Kaboré, Ali. Sié, Boubacar Coulibaly and Athanase Badolo

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# Category:

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# Anticipating the Storm: Assessing the Potential Threat of Artemisinin Resistance in Limpopo Province's Malaria Landscape

Lovemore Mapahla, Sheetal Sila

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# Profiling resistance molecular markers to sulfadoxinepyrimethamine among Plasmodium falciparum asymptomatic infected children

Rodrigue Roman Dongang Nana, Suzanne Sandrine Beack Bayengue, Martin Luther Koanga Mogtomo, Anne Rosalie Ngono Ngane, Vineeta Singh

#### 529

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# Antimalarial Drug Resistance Surveillance in Ghana using Molecular Inversion Probes

Nukunu E. Akyea-Bobi, Karamoko Niaré, Rita Afriyie Boateng, Prince Horlortu, Michaela Ahorbo, Henrietta Sasu, Benedicta A Mensah, Eunice Obeng, Benjamin Abuaku, Jeffrey Bailey, Anita Ghansah

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High Prevalence of Pfdhps 436A and Pfdhfr Triple Mutant Alleles Resistant to Sulphadoxine-Pyrimethamine (SP) in Plasmodium falciparum Isolates from Pregnant Women Across Different Ecological Zones in Cameroon.

Vincent Ntui Ntui-Njock, Hanesh Fru Chi, Eniyou Cheryll Oriero, Livinus Ngu Tangi, Fatoumata Bojang, Vincent Pryde Kehdingha Titanji, Alfred Amambua-Ngwa and Tobias Obejum Apinjoh Fajara, Banjul,

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# Spatial distribution of artemisinin partial resistant Plasmodium falciparum K13 mutations in Rwanda

Nzungize Lambert, Neeva Wernsman Young, Gashema Pierre, Abebe A. Fola, Alfred Simkin, Munyaneza Tharcisse, Iradukunda Vincent, Ntwari Jean Bosco, Karema Corine, Mazarati Jean-Baptiste, Jonathan J Juliano, Jeffrey A. Bailey

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# Increasing lumefantrine resistance markers in a malaria longitudinal study in Kinshasa Province, Democratic Republic of Congo

Ruthly Francois-Zafka, Abebe Fola, Rebecca Crudale, Melchior K. Mwandagalirwa, Kristin Banek, Joseph A. Bala, Marthe Nkalani, Georges Kihuma, Joseph Atibu, Georges E. Mahilu, KL Thwai, Ashenafi Assefa, Jonathan J. Juliano, Antoinette Tshefu, Jeffrey A. Bailey, Jonathan B. Parr

# 533

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# Epitope mapping and functionality of monoclonal antibodies against PfMAAP aimed at a structurally guided malaria vaccine design

Kayode Shadrach, Jonathan Suurbaar, Franklin Yengdem Nuokpem, Nana Akua Boadu, Daniel Dosoo, Harry Danwonno and Yaw Aniweh

# 534

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# Fc-afucosylation of VAR2CSA-specific IgG and clinical protection against placental Plasmodium falciparum malaria

Lopez-Perez M, Viwami F, Larsen , Sustic T, Vidarsson G, Tuikue Ndam N and Hviid L

#### 535

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# IDENTIFICATION OF KEY PLASMODIUM FALCIPARUM ANTIGENS ASSOCIATED WITH PREGNANCY-SPECIFIC MALARIAL IMMUNITY

Lucy Mwai , Jesse Gitaka , Hikaru Nagaoka, Sebastian Musundi, Takafumi Tsuboi , Eizo Takashima , Bernard Kanoi

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# Identification of conserved cross-species B-cell linear epitopes in human malaria: A subtractive proteomics and immuno-informatics approach targeting merozoite stage proteins

Sebastian Musundi, Jesse Gitaka, Bernard Kanoi

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# Structure-Based Dynamics of Malaria Antigen T-Cell Epitopes of the Circumsporozoite Surface Protein Against Two Classes of HLAs: A Computational Insight Into Vaccine Development

Nigel N.O. Dolling, Courage Adobor, Rita Afriyie Boateng, and Anita Ghansah

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# Structure-Based Dynamics of Malaria Antigen T-cell Epitopes of the Circumsporozoite Surface Protein against Two Classes of HLAs: A Computational Insight into Vaccine Development

Nigel N.O. Dolling , Courage Adobor , Rita Afriyie Boateng

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# Investigating Cross-Strain and Cross-Species Neutralization of Anti-CyRPA Antibodies in Clinical Isolates and Chimeras

Noemi Guerra, Aboubacar Ba, Mariama N. Pouye, Laty Gaye Thiam, Kelly Hagadorn, Megha Nair, Kirsty McHugh, Dimitra Pipini, Seynabou D. Sene, Alioune Wade, Alassane Mbengue, Simon J. Draper, Amy K. Bei

### 540

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Immunology & Vaccines (Children, Pregnant Women and Adults)

# Influence Of Cytokine Ratio (IL-10:TNF- ë®) On Anemia Status Of Malarious Children In South Eastern Nigeria

Okoro Oluchi I., Okoro Chinyere I, Dunga Kingsley E., Akanazu C.O, Okoro C.O

# 541

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# POTENTIALS OF NOVEL R21/MATRIX-M MALARIA VACCINES IN ACHIEVING HERD IMMUNITY IN SUB-SAHARAN AFRICA: A REVIEW OF CURRENT EVIDENCE, CHALLENGES, AND FUTURE PROSPECTS

Peter Olaniyi, Folorunsho Abiodun

# 542

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

# How FHR-1 deficiency affects the infection with the malaria pathogen Plasmodium falciparum

Timo ReilÙ, Andres Gonzalez-Delgado, Jennifer Venrath, Iris Bruchhaus, Anna Bachmann, Rolf Fendel, Christine Skerka, Gabriele Pradel

# 543

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# Practical implications for national scale-up and deployment of RTS,S malaria vaccine: findings from the health sector

Phidelia Theresa Doegah, Evelyn Acquah, Samuel Gyasi, Paul Okyere, Arti Singh, Ellis Dabo, Eugene Kofuor Maafo Darteh, Akwasi Kumi-Kyereme, Kofi Awusabo-Asare, Seth Owusu-Agyei, Evelyn Ansah, Margaret Gyapong

#### 544

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

# Safety and immunogenicity of the R21/Matrix-MTM malaria vaccine when co-administered with EPI vaccines at 6, 10 and 14 weeks of age in Malian children

Yahia Dicko, Fernando Ramos Lopez, Lisa Stockdale, Abasse Diaby, Mahamadou A Sidibe, Mehreen Datoo, Sophie Weston, Mahamadou Samassekou, Yaya Sankare, Cheick B Sagara, Alison Lawrie, Kalifa Diarra, Ahmadou Youssouf, Amelia Bajer, Oumar Attaher, Mahamadou Kaya, Patrick Wilikpan Okedy, Almahamoudou Mahamar, Djibrilla Issiaka, Youssoufa Sidibe, Alassane Dicko, Adrian V. S. Hill

# 545

# Category:

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# Specific antibody responses to recombinant UB05 and MSP3 proteins displayed on the surface of Coliphage Që®in mother-neonate couples.

Abel Lissom, Rosette Megnekou, Carrie A. Sanders, Thibau Flaurant Tchouangueu, Jean Claude Djontu, Loveline Ngu, Jules Colince Tchadji, Carole Stephanie Sake Ngane, Rose FG Leke, Chae Gyu Park, Alain Bopda Waffo, Nchinda W. Godwin

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# Policies, knowledge, attitudes and practices related to malaria, helminths and schistosomiasis among pregnant women in Ghana: An ethnographic study in two Ghanaian regions

Matilda Aberese-Ako, Pascal Magnussen, Gifty D. Ampofo, Harry Tagbor

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Enhancing Malaria prevention in pregnancy: Strengthening ANC services and Skilled deliveries in highland epidemic counties

Mary Chichole, Wayne Otieno, Hilary Ngeso.

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Malaria in Pregnancy

Neutropenia and its possible effect on the effectiveness of artemisinin-based combination therapy in pregnant women in Mali

Moussa Djimde, Charles Arama, Japhet Kabalu Tshiongo, Alassane Dicko, Michel Vaillant, Petra F. Mens, Henk D. F. H. Schallig and Kassoum Kayentao

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# ASSESSMENT OF THE PERFORMANCE OF MALARIA DIAGNOSTIC TOOLS IN DIAGNOSING MALARIA IN PREGNANCY AND PLACENTAL MALARIA

Melvin Mbalitsi, Samuel Chenge, Harrison Ngure, Paul Angienda, Jesse Gitaka, Francis Kobia

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Assessment of the effect of malaria social behavior change and communication on the uptake of the intermittent preventive treatment (IPTp-SP 3) among pregnant women in Hamisi Sub County, Kenya.

Mercy Nanjala

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An assessment of the gap between ANC attendance and the uptake of intermittent preventive treatment for malaria in pregnancy in Zambia, 2018-2022

Chipo Kachali, Bupe Mulenga Kabamba, Enock Banda, Webby Phiri, Mulakwa Kamuliwo, Marie-Reine I. Rutagwera, Chabu Kangale, Caroline Phiri-Chibawe, Jennifer Somtore. Busiku Hamainza

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Determinants of Adherence to Malaria Preventive Services Among HIV Positive Antenatal Clinic Attendees in Abuja Municipal Area Council (AMAC) -FCT, Abuja, Nigeria

Gani Muhammad

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Malaria in Pregnancy

Plasmodium falciparum genetic diversity and persistent clones among Ghanaian women in the early puerperium

Nsoh Godwin Anabire, Ofori, Michael Fokuo Ofori

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Prevalence and Determinants of uptake of three or more doses of Sulphadoxine Pyrimethamine for Intermittent Preventive Treatment of malaria in pregnancy in Busia County, Kenya.

Anne N. Miatu , Kamija S. Phiri- ,Betsy C. Cheriro

#### 555

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The effect of co-morbidity of malaria and HIV infections on IL-10 and TNF-ë®cytokine response among pregnant women in the Kumba health district area located in the South West Region of Cameroon

Bekindakaka Obase, Oumatou Goni Hamadama, Awanakam Honore Awanakam, Esemu Livo Forgu, Jude Daiga Bigoga, Dickson Shey Nsagha

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Malaria in Pregnancy

Malaria Treatment Seeking Behaviour Among Pregnant Women in Ondo

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## Malaria in Pregnancy

# Predictors of malaria infection among pregnant mothers attending antenatal care at Gulu Regional Referral Hospital in northern Uganda

Raymond Otim, Solomon Oguta, Brian Serumaga, Lameck Odongo, Jackline Ayikoru, Jonathan Lokeris Butemba, Jimmy Opee, Baifa Arwinyo, Francis Pebolo Pebalo, Vincentina Achora, Sande Ojara, Benard Abola, Silvia Awor

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Malaria in Pregnancy

# UTILIZATION OF INSECTICIDE TREATED NET AMONG PREGNANT WOMEN IN TAMALE CENTRAL, NORTHERN REGION, GHANA

Paulina S. Otu, Festus Frank Konadu Darkwah, Veronica Eduako, Sarah Tutuwaa, Berfi Rhoda

# 559

#### Category:

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Trends in P. falciparum Infections Amongst Pregnant Women and Children below 5 years in Cameroon Baptist Convention Health Services (CBCHS): A Four-Year Retrospective Study

Nfor EN,Ayima CW, Ngin ED,Mboh KE, Warri D, Tanayen GG, Nfor WG, Bambo DN, Ngah LD

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#### Category:

Treatment and Community Case Management

Strengthening External Quality Assurance (EQA) for Malaria Microscopy and Malaria Rapid Diagnostic Tests (mRDT) in Sokoto State.

Ogboi Johnbull Sonny, Ume Ifeanyi, Mohammed Zainab,Usman Al-Rashid, Chinyere Okoro, Lawal Lawal

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# MODELLING THE BENEFITS OF TESTING BEFORE TREATMENT OF MALARIA AND ITS COMPARISON TO SYNDROMIC MANAGEMENT

Nwadiuto Oiielo, Bakare

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Field Performance of Rapid Diagnostic Tests and Microscopy in Asymptomatic Malaria Diagnosis and the Challenges of Malaria Elimination in Southwest Nigeria

Chika. C. OKANGBA, Roland I. FUNWEI, Wasiu A. HAMMED, Ugochi. U. OKANGBA.

# 563

#### Category:

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Factors contributing to anemia after uncomplicated Plasmodium falciparum malaria in children under five years ten years after adoption of artemisinin combination therapies as first-line antimalarials Akintunde SOWUNMI, Aymar AKILIMALI, Jones ONESIME, Hardy ELEMBWE, Excellent RUGENDABANGA, Samson HANGI, Chrispin BIAMBA

# 564

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Enhancing Early Community Malaria Detection in Under-Five Children: Evaluating the Impact of the NYATOE Model in Nyamira, Kenya.

Dorah Wafula, Appollonia Ombima, Salome Ileli, Wayne Otieno, Hillary Ngeso

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Investigation into two biological threats posed by Plasmodium falciparum in Nigeria

Emma Manning, Joshua Rey, Olusola Ajibaye, Adeola Olukosi, Ana Chopo-Pizarro, Chinazo ujuju, Olusola Oresanya, James Tibenderana, Khalid B Beshir

# 566

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QUALITY ASSURANCE FOR BIOLOGICAL DIAGNOSIS OF MALARIA IN THE LABORATORIES OF FOUR HEALTH FACILITIES IN THE CITY OF YAOUNDE

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ASSESMENT OF THE DIAGNOSTIC PERFORMANCE OF THE SD BIOLINE MALARIA ANTIGEN P.F TEST FOR THE DIAGNOSIS OF MALARIA IN THE TOMBEL HEALTH AREA (THA), CAMEROON

Ngalame Abigail Lumateh, Watching Djakissam, Kibu Odette, Nsagha Dickson Shey

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# Diagnostic and Epidemiological Implications of Mixed Plasmodium Infections in Southern Ghana

Benedict Ofori, Amos Amoliga Anon-Eta, Lois Bansah, Edna Naa Adukwei Armah, and Kwabena Amofa Nketia Sarpong

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#### Category:

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Evaluation of real time PCR on urine, plasma, serum and Dried Blood Spots to detect P. falciparum infection among Febrile patients in Lagos, Nigeria Okangba, C.C., Ajani, T.A., Okangba, G. C., Makanjuola, O. B., Anaedobe C, Oluwole T.O, Otaigbe I.I., Osinowo, A.O., Taiwo, A.A.

# 570

### Category:

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Documenting the roles of local actors towards enrichment of Seasonal Malaria Chemoprevention in Northern Bahr el Ghazal, South Sudan.

Aweno Norman, Bakhita Ahok Akook, Abubaker Rom Ayuiel, Francis Okot, Denis Dr Jamshed Khan, Denis Mubiru

#### 571

#### Category:

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Baseline Health Facility Assessment on Malaria
External Quality Assurance on Existing Government
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Malaria Vector Surveillance in Ghana: Empowering District Health Units for Data Collection, 2023

Otubea Owusu Akrofi, Christian Atta-Obeng, Ernest Boampong, Andy Asafu-Adjaye, Sylvester Coleman, Delphine Mensah, Deborah Akwetey, Samuel K. Dadzie, Keziah L. Malm

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Strengthening Geospatial Modelling Skills and Capacities for Enhanced Malaria Decision Support in Africa: The Establishment of the Malaria Atlas Project East Africa Node

Susan Rumisha, Punam Amratia, Sosthense Ketende, Peter Gething, Tasmin Symons, Jailos Lubinda, Adam Saddler, Camilo Vargas, Tolu Okitika

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Capacity Building, Leadership, and Governance

An assessment into Government response and community sensitization on Malaria in Female-Led Households Malawi

Rachael E Kamphale, Rosheen S Mthawanji

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Control, Elimination and Eradication

# Implementing Single Low Dose Primaquine in Africa (IMPRIMA)

Rianasoambolanoro Rakotosaona, Mamy J.J.
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Fanambinantsoa, Arsène Ratsimbasoa, Omega Raobela,
Denis Niyomwungere, Remy Nimubona, Joseph Nyandwi,
Pierre Sinarinzi, Alphonse Ouedraogo, Denise Hien,
Sodiomon B. Sirima, Philex T.L. Ye, Sheila Varadan,
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# Category:

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Factors predicting insecticide-treated bednet use among children under age five in female-headed households in Ghana: An analysis of the 2019 Malaria Indicator Survey

Desmond Klu, Grace Frempong Afrifa-Anane, Michael Larbi Odame

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The War Against Malaria Will be Planned, Fought and Won at the Community Level

Lidoros Lordlaro M, Pauline Omutere, Fanuel Khainga

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#### Category:

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Evaluating household ownership of long-lasting Insecticidal Nets, physical integrity and use among under-five children in Osun Sate Nigeria

Oroge O. Ojo TO Akanji BO, Afolabi BM, Bello A.

# 579

# Category:

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Forecasting Incidence of Malaria Prevalence Burden in Ibadan City, Nigeria: Utilizing Malaria Clinical Data from 1996 to 2014

Amos Kipkorir Langat, Debra Okeh, Michelle Chantelle,

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The non-inferiority efficacy of Piperonyl-butoxide Yorkool G3 insecticide treated nets in the experimental huts in Tanzania

Olukayode G. Odufuwa, Masudi Suleiman Maasayi, Emmanuel Mbuba, Watson Ntabaliba, Rose Philipo, Safina Ngonyani, Ahmed Bakari Mpelepele, Isaya Matanila, Hassan Ngonyani, Godfrey Ligema, Jason Moore, Yeromin P Mlacha, Jenny Stevenson, Sarah Jane Moore

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Malaria Elimination program in Ethiopia: Achievements, Gaps, and Emerging Challenges

Mohammed Hasen Badeso, Geremew Tsagaye, Ebise Abose, Feyiso Wariyo,

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# Malaria Outbreak response Risk Communication and Community Engagement lessons learned in Ethiopia, November, 2023. Qualitative study

Mohammed Hasen Badeso, Aemro Yibeltal, Dereje Marie, Tesfahun Abye

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Long-Lasting Insecticidal Net Use in Mogode Health District, Far North Region, Cameroon

Collins Buh Nkum, Jerome Ateudjieu, Aude Nanfak, Ketina Hirma Tchio-Nighie, Sonia Imelda Mbiaketcha Nzinnou, Guenou Etienne Landry Beyala Bita'a, Willy Armand Nguemnang Nguemnang, Charlette Nangue, Georges Nguefack-Tsague

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Socio-behavioural study of the population's sleeping habits in relation to vector control tools in northern Benin to inform malaria control

L. K. N'Tcha, R. Aïkpon, A. S. Salako, B. A. Akinro, F. Dagnon, G. G. Padonou, M. C. Akogbeto

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"Significant or not Significant": Assessing the Impact of End Malaria Council in some African countries Omojuyigbe Jeremiah Oluwamayowa, Oluyedun Abdmateen Temitope

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# KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS MALARIA PREVENTION AND CONTROL AMONG RESIDENTS OF THE IGBO-ORA COMMUNITY

Ridwanullah Olamide Abdullateef, Faith Enioluwa Adeyemi, Teslim Olasubomi Adepoju, Adekunle Titus Adefila, Oluwatoni Adedigba Adekunle, Harirat Ajuma Abdul, Blessing Ayodele Ajetomobi, Samuel Adedeji Adelola, Oyewale Johnson Akande, Feziechi Chikelundu Anele, Yeshua Ayokun Adedeji, and Adeniyi Abraham Adesola

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Impact of mass drug administration with dihydroartemisinin piperaquine during Ebola virus disease outbreak on malaria morbidity and mortality

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### in Uganda

Musa Odongo, Anthony Nuwa, Jane Irene Nabakooza, Flavia Mpanga, Fred Kagwire Tonny Kyagulanyi, David Salandini Odong, Richard Kajubi, Denis Rubahika, Maureen Nakirunda, Godfrey Magumba, Jimmy Opigo: Malaria Consortium Uganda, Kampala, Uganda, National Malaria Control Division, Ministry of Health, Uganda, Unicef county office, Uganda

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Effect of drug policy change on the evolution of pfcrt and pfmdr1 markers in a seasonal malaria chemoprevention setting in Cameroon

Ngum Lesley Ngum, Innocent M Ali, Palmer Masumbe Netongo, Akindeh M Nji, Jean Paul Kengne Chedjou, Randolph Ngwafor, Pacome Valery Tchuenkam kom, Aristid M Ekollo, Peter Thelma Ngwa Niba, Calvino Tah Fomboh, Nana William Dorian, Wilfred F Mbacham.

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Community informed approach to Seasonal Malaria Chemoprevention (SMC) delivery in semi-nomadic population in Turkana, Kenya: Results from baseline mixed methods study

Natalya Kostandova, Joseph Kipkoech, Tabitha Chepkwony, Emmah Kimachas, George Ambani , Lucy Abel , Catherine Kafu ,Emily Robie , Amy Wesolowski ,David Ekai , Suzanne Van Hulle, Omalo Orinda, Wendy O'Meara ,Diana Menya

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A cost analysis comparing a seasonal malaria chemoprevention campaign with and without Vitamin A supplementation among children under five in Nigeria

Olusola Oresanya, Babajide Arije, Abimbola Philips, Ebenezer Ihechukwu, Jesujuwonlo Fadipe,Emmanuel Shekarau, Jane Achan

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Modelling the effect of SMC on Malaria Incidence in Supported areas in Kwara State

Oyetunji Bashir A., Obi Charles, Lateef Kareem, Bakare Emmanuel A.

# 592

# Category:

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Mortality, morbidity and development outcomes of infants born to African HIV-infected pregnant women who received malaria intermittent preventive treatment with dihydroartemisinin-piperaquine (MAMAH project)

Raquel Gonzalez, Tacilta Nhampossa, Ghyslain Mombo-Ngoma, Johannes Mischlinger, Meral Esen, André-Marie Tchouatieu, Anete Mendes, Antl a Figueroa-Romero, Lia Betty Dimessa, Bertrand Lell, Heimo Lagler, Rella Zoleko-Manego, Myriam El Gaaloul, Sergi Sanz, Linda Stoger, Mireia Piqueras, Esperanca Sevene, Michael Ramharter, Francisco Saute, Clara Menendez

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Dihydroartemisinin-Piperaquine (DP) or Sulphadoxine-Pyrimethamine (SP) for the Chemoprevention of Malaria in Children with Sickle Cell Anaemia in Eastern and Southern Africa: Preliminary findings

Richard Idro, Thandile Gondwe, Robert Opoka, J, Ssenkusu J, Kalibala D, Pamela Akun, Tsirizani GL, Joseph Rujumba, Namabatya W, Kamya C, Kawaza K, Feiko Ter Kuile, Bjarne Robberstad, Kamija Phiri,

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An overview of active research on seasonal malaria chemoprevention

Sandesh Bhandari

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The prevalence of CYP2C8 variants in children under 5 years old eligible for the Seasonal Malaria Chemoprevention in 2023 in the village of Samandeni, Burkina Faso

Abdoul Aziz Sienou, Alassane Haro, Rakiswende Serge Yerbanga, Jedida Ouedraogo, Armel Yarbanga, Zachari Kabré, Moussa Zongo, Franc Yao, Thierry Ramdé, Edith Guigma, Jean-Bosco Ouedraogo

#### 596

#### Category:

Vector Biology and Control

Species composition and insecticide resistance in malaria vectors in Ellibou, southern Côte d'Ivoire and first finding of Anopheles arabiensis in Côte d'Ivoire

Bedjou P. N'Dri, Nadja C. Wipf, Jasmina. Saric, Behi K. Fodjo, Giovanna Raso, Jurg Utzinger, Pie Miller, Chouaibou S. Mouhamadou

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# Category:

Vector Biology and Control

Vector control strategy during the dry season in a context of vector resistance to pyrethroids along the Niger River in Mali

Alassane dit Assitoun, Moussa Keita, Daouda Ouologuem , Ibrahim Sissoko , Nafomon Sogoba,

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#### Category:

Vector Biology and Control

Susceptibility of Anopheles gambiae sensu lato populations to toxic sugar juice baits and their durability

Younoussa Ziguime, Aboubakr S Kone, Mamadou Goita, Penda Sangare, Rabiatou A Diarra, Assan Traore, Amadou S Traore, Mohamed M Traore

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Vector Biology and Control

Durability of pyrethroid plus piperonyl-butoxide insecticide-treated nets in comparison to the pyrethroid only nets under operational settings in Tanzania, Ivory Coast and India: Preliminary study findings

Emmanuel Mbuba, Olukayode G. Odufuwa, Jason Moore, Selemani Mmbaga, Emile Tchicaya, Constant Edi, Vani Chalageri, Sreehari Uragayala, Amit Sharma, Manju Rahi, Kamaraju Raghavendra, Alex Eapen, Hannah Koenker, Amanda Ross, Sarah J. Moore

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Vector Biology and Control

Thermal profiles of Anopheles vectors: unifying research to characterize malaria mosquito ecology Chelsea M. Kilonzo, John Odindi, Henri E.Z Tonnang,

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Consumption of ethyl Ethanol by Anopheles coluzzii to fight malaria transmission

Domonbabele F. d. S. Hien, Mariam Youba, Etienne M. Bilgo, Prisca S. L. Paré, Davy A. R. K. Sambo, Rakiswende S. Yerbanga, Anna Cohuet, Bienvenue K. Yameogo, Frédéric Simard, Roch K. Dabiré, Rickard Ignell, Olivier Gnankiné, Abdoulaye Diabaté, Thierry Lefevre

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Understanding The Feeding Impact on Anopheles Microbiota and Plasmodium Falciparum Infection Rates

Fatalmoudou Tandina, Laurent Dembele, Antoine Dara, Dinkorma Ouologuem, Cameron Ferguson, Alex Makunin, Sekou Sissoko, Mohamed Maiga, Mohamed Touré, Sekou Koumaré, Francois Dao, Nouhoum Diallo, Fanta Sogoré, Boubacar Tembely, Daman Sylla, Mamadou B Coulibaly, Mamadou Tekete, Arthur Talman, Mara Lawniczak, Abdoulaye A Djimdé

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Anopheles gambiae CYP6Z3 simultaneously metabolises permethrin and pyriproxyfen: Food for thought for the deployment of pyrethroid-pyriproxyfen nets in sub-Sahara Africa

Michael O. Kusimo, Hanafy M. Ismail, Sulayman Saadi, David P. Hornby, Mark J.I Paine

### 604

#### Category:

Vector Biology and Control

Engaging with stakeholders to identify needs for Insecticide Treated Nets (ITNs) post-market data collection.

Anna Trett , Caroline Barwa , Tara Seethaler, Rosemary Lees , Angus Spiers

# 605

# Category:

Vector Biology and Control

Physicochemical and environmental assessment of malaria vector aquatic habitats found in a sugar irrigation scheme in Chikwawa, Malawi

Kambewa, E.A., Mbewe, R., Jones, C., Boelee, E. and Wilson, A.

# 606

# Category:

Vector Biology and Control

"AFTER A LONG DAY OF PLAY, I GET TIRED AND FORGET TO UNFURL MY BEDNET": EXPLORING BARRIERS AND FACILITATORS OF CHILDREN'S BEDNET USE IN EASTERN UGANDA

Deborah Ekutsai ,Paul J. Krezanoski

# 607

# Category:

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Vector Biology and Control

Susceptibility of pyrethroids resistant An. gambiae s.l using multiple diagnostic doses of insecticides combined with piperonyl butoxide (PBO) in southern Benin.

SAGBOHAN Watson Hermann

#### 608

# Category:

Vector Biology and Control

Quantification of Anopheles daily sugar feeding rates in Siaya county, western Kenya using Attractive Sugar Baits

Jackline Kosgei, Seline Omondi, Vincent Moshi, Martin J.
Donnelly, Collins Ouma, Angela F Harris, Julian Entwistle,
Feiko O Ter Kuile, John Gimnig, Keith Fraser, Lazaro
Mwandigha, Bernard Abong'o, Daniel McDermott, and
Eric Ochomo

#### 609

# Category:

Vector Biology and Control

Three-years longitudinal monitoring of malaria transmission intensity in three health districts of Burkina Faso with standards and dual-active-ingredients nets deployment.

Madou Tapsoba, Antoine Sanou, Moussa W. Guelbeogo, Joseph Wagman, Soumanaba Zongo, Hyacinthe K.Toe , Gauthier Tougri , Christelle Gogue, Adama Gansané, N'Falé Sagnon, Olivier Gnankiné

# 610

# Category:

Vector Biology and Control

Changing vectorial drivers of malaria transmission: call to appraise the role of cryptic malaria vectors David P. Tchouassi, Aklilu Belay, Fiona Kinya, Abebe Asale, Clifford Mutero

# 611

## Category:

Vector Biology and Control

ENTOMOLOGICAL AND EPIDEMIOLOGICAL IMPACT OF DRONE-BASED LARVAL SOURCE MANAGEMENT (LSM) FOR MALARIA CONTROL IN RWANDA

Dunia Munyakanage, Alphonse Mutabazi, Elias Niyituma, Xavier Misago, Phocas Mazimpaka, Clarisse Musanabaganwa, Eric Remera, Eric Rutayisireå, Ingabire Muziga Mamyå, Silas Majambere, Aimable Mbituyumuremyi, Mathew Piero Ngugi4, Elizabeth Kokwaro, Emmanuel Hakiziman, Claude Mambo Muvunyi.

# 612

# Category:

Vector Biology and Control

The use of mosquito thermal dependence experiments to predict the extrinsic incubation period and human-to-mosquito transmission probability of malaria in wild mosquitoes

Isaac J. Stopard, Eunho Suh, Antoine Sanou, Matthew B. Thomas. Ben Lambert & Thomas S. Churcher

#### 613

### Category:

Vector Biology and Control

Use of environmental DNA (eDNA) for monitoring the presence of Anopheles stephensi and associated insecticide resistance mechanisms in laboratory and field conditions

Kristan M, Acford-Palmer H, Oliveira Campos M, Collins E, Phelan J, Portwood NM, Clark TG, Walker T, Akuamoah-Boateng Y, Mohammed AR, Clarke SE, Lines J, Afrane YA, Campino S, Messenger LA

#### 614

# Category:

Vector Biology and Control

Larvicidal Efficacy of the Combination of Citrus aurantiifolia (Rutaceae) and Lippia chevalieri (Verbenaceae) Methanolic Extracts against Anopheles gambiae Giles (Diptera Culicidae), Malaria Vector.

Gisele Aurelie Foko Dadji, Antonio Nkondjio, ,Abraham Fomena .

# 615

# Category:

Vector Biology and Control

Unveiling malaria vector phenology: lifetable reconstruction from published literature

Chelsea M. Kilonzo, John Odindi, Henri E.Z Tonnang.

# 616

#### Category:

Vector Biology and Control

Diurnal and outdoor biting by Anopheles gambiae complex malaria vectors reveals residual transmission along an urbanisation gradient in Burkina Faso

Badolo Athanase, Sombié Aboubacar, Toé K. Hyacinthe, Gnémé Awa, Ouédraogo W. Mathias, Tiono Alfred, Remoué Fanck, Costantini Carlo

# 617

# Category:

Vector Biology and Control

Building capacity for new tools for risk assessment and their application in decision-making process for testing and deployment of new and emerging genetic

## biocontrol technologies in Africa.

Tareh Cyrus and Willy Tonui

#### 618

#### Category:

Vector Biology and Control

Supporting Resilience Against Future Threats (RAFT). Addressing insecticide resistance in Africa and other emerging mosquito-borne disease threats

Alphaxard Manjurano, Charles Wondji , Raphael NGuessan, Patchara Sriwichai, Tom Churcher, James Tibendarana, Louisa Messenger, Rosine Wolie, Basile Kamgang, Leo Braack, Jo Honeybone, Jo Lines, and Sian Clarke.

# 619

# Category:

Vector Biology and Control

Frequency of 2Rb and 2La chromosomal inversion polymorphism in Ghana

Yaw Akuamoah-Boateng , Isaac K. Sraku, Anisa Abdulai, Abdul R. Mohammed, Christopher M. Owusu-Asenso, Abena A. Ebuako, Yaw A. Afrane.

# 620

#### Category:

Vector Biology and Control

Anopheles' development kinetic through different seasons in Burkina Faso

Anopheles' development kinetic through different seasons in Burkina Faso

# 621

# Category:

Vector Biology and Control

Contribution of communities to the response to the dengue epidemic in Burkina Faso

Alphonse Traore, Tiécoura Camara, Ardjouma Pagbelem, Moussa W Guelbeogo, Charles Nignan, Sidzabda Bernard Kompaore.

# 622

#### Category:

Phytomedicines, Pharmacology and Drug Development

Designing field trial sampling schedules for the
pharmacometric analysis of ivermectin in human
volunteers using simulation

Urs Duthaler , Almudena Sanz , Paula Ruiz-Castillo , Charlotte Kern , Regina Rabinovich , Marta Maia , Carlos Chaccour and Felix Hammann .

# 623

# Category:

Phytomedicines, Pharmacology and Drug Development

# IN VIVO EFFICACY OF TWO ANTIPLASMODIAL EXTRACTS FROM THE IVORIAN PHARMACOPOEIA RASMANE N.A.K, TANO K.D, KOFFI A.J, KOFFI A.F, YAVO

# 624

# Category:

Phytomedicines, Pharmacology and Drug Development QT correction factors in adult and pediatric patients with acute malaria

Katalin R. Csermak , Guoqin Su , Rashidkan Pathan , Anne Claire Marrast

# 625

#### Category:

Phytomedicines, Pharmacology and Drug Development Ethyl acetate bioactive fraction of Psidium guajava leaves modulates inflammatory changes in Plasmodium berghei-induced malaria infection in mice.

Mutiu Y. Ajaoa, Abayomi M. Ajayia , Adewale G. Bakrea, Olusegun G. Ademowoa b

# 626

#### Category:

Phytomedicines, Pharmacology and Drug Development
Anti-malarial effect of Ethanol leaf extract of
Combretum glutinosum perr.exdc (combretaceae):
evidence for its folkloric application in ethno-

therapeutic management of malaria

Fidelis Ameh Solomon, Ahmadu Peter , Uchenna Blessing Alozieuwa, Ismail-Olalere Maryam

# 627

# Category:

Phytomedicines, Pharmacology and Drug Development Introduction and Objectives Inflammation during malaria is a determinant for the progression of plasmodial infection that causes health burdens in humans. This study was therefore designed to investigate the anti-inflammatory and immune modulatory activities of Psidium guajava leaves in mice.

Mutiu Y. Ajaoa, Abayomi M. Ajayia , Adewale G. Bakrea, Olusegun G. Ademowoa

#### 628

# Category:

Insecticide Resistance

The impact of insecticide decay on the evolution of insecticide resistance considering monotherapy and mixture deployments

Neil Hobbs

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# 629

# Category:

Insecticide Resistance

Spatial distribution of pyrethroid insecticide resistance in Anopheles gambiae s.l population, Rwanda

Dunia Munyakanage, Lambert Nzungize , Torbert Migambi, Pascal Mosengo, Gerald Habimana, Aimable Mbituyumuremyi, Emmanuel Hakizimana. ,

# 630

## Category:

Insecticide Resistance

Insecticide resistance in Anopheles gambiae complex in Ondo and Anambra States of Nigeria

Ezihe Chukwuebuka, Jafar Braimah, Nwele David, Nwangwu Udoka, Nwosu Emmanuel, Ibrahim Suleiman, Adu Samuel, Azuka Iwegbu, Saliu Ogunmola, Abiola Oluwagbemiga, Olusola Oresanya, Tarekegn A. Abeku.

# 631

# Category:

Insecticide Resistance

Contrasting pattern of bionomics and resistance mechanisms in the malaria vector populations from Equatorial monsoon and Guinean sub-equatorial area of Cameroon

Yvan G. Fotso-Toguem, Benjamin Menze, Ines M. Watsop, Louisa A. Messenger, Sian E. Clarke, Jo Lines, Charles S. Wondji

# 632

# Category:

Insecticide Resistance

The Genetic Landscape of Insecticide Resistance in Anopheles Species: Unravelling Novel Genes and Pathways involved in Insecticide Resistance

Dorcus N. Namikelwa, Mark Wamalwa, Fredrick Kebaso, Henri E.Z. Tonnang

# 633

# Category:

Insecticide Resistance

Insecticides susceptibility of An. melas and its morphological discrimination with its sympatric siblings using the biometric palps technique

M. A. Nourdine & M. Ndiaye & A. K. Dia & B. Samb & A. Ndiaye & P. C. Sarr & O. K. Guèye & L. Konaté & O. Gaye & O. Faye & E. A. Niang & Ousmane Sy

# 634

### Category:

Insecticide Resistance

The escalating biological threat: Observations from over ten years of mapping insecticide resistance in malaria vectors

Stephen Okeyo, Duncan K. Athinya, Seline A. Omondi, Eric O. Ochomo and Melinda Hadi

#### 635

# Category:

Insecticide Resistance

High insecticide resistance and physical damage to mosquito nets challenge vector control in the city of Yaoundé, Cameroon.

Nadège Sonhafouo-Chiana, Samuel Wanji , Bamou Roland , Foko Dadji Gisele Aurelie, Parfait Herman Awono-Ambene, Charles Sinclair Wondji , and Christophe Antonio-Nkondjio.

# 636

# Category:

Implementation Science and Health systems

PREVALENCE AND RISK FACTORS OF URINARY SCHISTOSOMIASIS IN , KARONGA DISTRICT, MALAWI

Christopher S. Nyondo, Rosheen S. Mthawanji,Twalibu N. Tandwe, Michael Nkosi, Saul E. Mwale and Master R.O. Chisale.

#### 637

# Category:

Implementation Science and Health systems

DETERMINANTS OF UPTAKE OF THE FOURTH DOSE OF MALARIA VACCINE AMONG CHILDREN AGED 22 - 60 MONTHS IN MACHINGA DISTRICT, MALAWI: A CROSS- SECTIONAL STUDY

Beatrice Chisoni Kasambwe, Patrick Kaonga , Alinane Linda Mipando, Choolwe Jacobs

# 638

#### Category:

Implementation Science and Health systems

Optimizing Health Data Integrity: A Comprehensive Approach to Monthly Data Reviews by Community Health Promoters (CHPs)"

Appollonia Ombima, Hilary Ngeso, Kevin Rowartz, Dorah Wafula, Wayne Otieno

# 639

# Category:

Implementation Science and Health systems

Implementation of Malaria diagnosis external quality assurance in Bauchi State, Nigeria: Lessons learnt Okoro chinyere I., Onovo Emmanuel., Ogboi Johnbull.

#### 640

## Category:

Malaria and Diversity (Equity, Gender & Inclusion )

Social determinants of malaria chemoprevention among children in sub-Saharan Africa: a systematic review

Jonna Messina Mosoff, R. Matthew Chico, Sham Lal

### 641

#### Category:

Malaria and Diversity (Equity, Gender & Inclusion )

Behind bars, not beyond parasite: tackling malaria in the Nigerian prison system - an analysis of published reports and databases

Mfonobong Umoh, Martin Mwofia

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# 642

## Category:

Parasite and Systems Biology

Efficacy and Safety of Artemether-Lumefantrine (AL) and Dihydroartemisinin-Piperaquine (DHA-PPQ) for the treatment of uncomplicated Plasmodium falciparum malaria among children under 10years in the North Region of Cameroon.

Akindeh Mbuh Nji, Peter Thelma Ngwa Niba, Fritz Mbuh Tatah, Jean Yves Mukamba, Abas Mouliom, Jean Paul Kengne Chedjou, Audrey Gaelle Tchoffo Daha, Lawrence Fonyonga Akam, Calvino Tah Fomboh, Jude D. Bigoga, Wilfred F. Mbacham.

# 643

# Category:

Parasite and Systems Biology

Comparative Susceptibility of Plasmodium ovale, Plasmodium malariae and Plasmodium falciparum Field Isolates to Reference and Lead Candidate Antimalarial Drugs in Ghana

Yaw Aniweh, Alamissa Soulama, Jersley Chirawurah, Felix Ansah, Harry A Danwonno, Fanta Sogore, Melanie Rouillier, Brice Campo, Lucas Amenga-Etego, Abdoulaye A Djimde, Gordon A Awandare, Laurent Dembele

#### 644

# Category:

Parasite and Systems Biology

The current distribution and characterization of the L1014F resistance allele of the kdr gene in three malaria vectors (Anopheles gambiae, Anopheles coluzzii, Anopheles arabiensis) in Benin (West Africa)

Come Z. Koukpo, Arsène Jacques Y. H. Fassinou, Razaki A. Ossè, Fiacre R. Agossa, Arthur Sovi, Wilfrid T. Sewadé, Sidick Aboubakar, Bénoì t S. Assogba, Martin C. Akogbeto and Michel Sezonlin.

#### 645

#### Category:

Parasite and Systems Biology

Single-Cell transcriptomics reveals signals of increased protein export response and elevated GARP after dihydroartemisinin exposure in isogenic wild-type and K13C580Y mutant Plasmodium falciparum.

Cliff I. Oduor, Clark Cunningham, Nazrin Rustamzade, Jenna Zuromski, Deborah M. Chin, Chris Nixon, Jonathan Kurtis, Jonathan J. Juliano, Jeffrey A Bailey

# 646

#### Category:

Parasite and Systems Biology

Infectivity to Anopheles gambiae of fresh-produced

# and cryopreserved gametocytes of a new Plasmodium falciparum field isolates from Benin

Adandé A. Medjigbodo, Helga Saïzonou, Festus K. Acquah, Laurette Djossou, Oswald Y. Djihinto, Linda E. Amoah, David Weetman, Martin J. Donnelly and Luc S. Djogbénou

#### 647

# Category:

Parasite and Systems Biology

Transcriptomic Signatures Reveal Enhanced Protein Processing In The Endoplasmic Reticulum In Children With Severe Malaria Anemia

Sharley A. Wasena, Qiuying Cheng, Yan Guo, Evans Raballah, Ivy Hurwitz, Clinton O. Onyango, Philip D. Seidenberg, Kristan A. Schneider, Christophe G. Lambert, Benjamin H. McMahon, Collins Ouma, Samuel B. Anyona, Douglas J. Perkins.

#### 648

#### Category:

Parasite and Systems Biology

# Establishment of the Blood-stage CHMI Model with Plasmodium falciparum in Tanzania

Omary Hassan, Aina-ekisha Kahatano, Sarah E. Silk, Jordan R. Barrett, Florence Milando, Saumu Ahmed, Enock Kessy, Prisca Kweyamba, Neema Balige, Omary Juma, Bakari Mwalimu, Mohamed Mohamed, Brian Tarimo, Hania Msami, Tunu Mwalima, Wilmina Kalinga, Ivan Mtaka, Nassoro Lilomwe, Sarah Mswata, Latipha Mohamed, Mabula Kasubi, Jo Salkeld, Doris Quinkert, Alison M. Lawrie, Jee-Sun Cho, Simon J. Draper, Angela M. Minassian, Ally Olotu.

# 649

#### Category:

Parasite and Systems Biology

Method for creating health areas using the Voroni polygon: use in the fight against malaria in Mali.

A M. Dolo A, M. Cissoko, A Katilé, M. Maiga, Jean Gaudart, I. Sagara

# 650

# Category:

Parasite and Systems Biology

Method for creating health areas using the Voroni polygon: use in the fight against malaria in Mali.

A M. Dolo A, M. Cissoko, A Katilé, M. Maiga, Jean Gaudart, I. Sagara

# 651

#### Category:

Parasite and Systems Biology

A gene drive that reduces Plasmodium fertility & could end malaria

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Dean Goodman, Anton Cozijnsen, Sophie Collier, Benjamin Cam, Mary-Lou Wilde, Geoffrey McFadden

### 652

# **Category:**

Parasite and Systems Biology

PATHOPHYSIOLOGY OF MALARIA AND ITS COMOBIDITIES

Joshua JOHN

# 653

#### Category:

Parasite and Systems Biology

Insufficient durability of Yahe insecticide-treated nets in Papua New Guinea

Nakei Bubun , Evodia Anetul , Melanie Koinari , Petrina Johnson , Leo Makita , Timothy W Freeman , Leanne Robinson , Moses Laman , Stephan Karl .

### 654

#### Category:

Parasite and Systems Biology

Deciphering antimalaria drugs' modes of action by Protein Thermal Profiling (PTP).

Zbynek Bozdech, Kadiam Go, Samuel Pazicky, Grennady Wirjanata, Seth Tija

# 655

#### Category:

Parasite and Systems Biology

Profile of antibody production to plasmodium vivax reticulocyte and erythrocyte binding protein antigens among primary school children in a malaria endemic transmission region in Senegal

Aminata Colle Lo, Aminata Lam ,Katie Patterson, Babacar Faye, Jean L. A. Ndiaye,Oumar Gaye, Christopher Drakeley.

# 656

## Category:

Parasite and Systems Biology

Human blood neutrophils generate ROS through Fc®R signaling to mediate protection against febrile P. falciparum malaria.

Ebenezer Addo Ofori, Asier Garcia-Senosiain, Mohammad Naghizadeh, Ikhlaq Hussain Kana, Morten Hanefeld Dziegiel, Bright Adu, Subhash Singh, Michael Theisen

# 657

# Category:

Parasite and Systems Biology

Generating NF54 reporter line expressing luciferase in sporozoites stages of malaria transgenic mosquitoes

Prisca Kweyamba, Nicolas Brancucci, Armin Passecker, Sarah Moore, Lorenz Hofer

# 658

# Category:

Parasite and Systems Biology

Variation of Plasmodium falciparum sporozoite load in thorax heads of Anopheles gambiae and Anopheles coluzzii on the North-South transect of Benin, West Africa

Serge AKPODJI, Martin AKOGBETO

#### 659

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

Biomarkers of oxidative stress, disease severity and inflammation during malaria and typhoid fever co-infection.

TCHOUTANG Ange Maxime, MacDonald Bin Eric, NZUNO Marie Christine,Palmer MASUMBE NETONGO

#### 660

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

Investigating the Implications for Treatment and Control in Interactions between Malaria and HIV.

Owino Samwel

# 661

# Category:

Pathogenesis and Co-morbidities (Including Parasite & Systems Biology)

High prevalence of malaria in spite of high adherence to IPT-sp among pregnant women with and without HIV in CASS Nkolndongo, Yaounde Cameroon

Esemu Livo, Romuald Ngamaleu, Martial Tsague, Kevine Tchamda, Romeo Djounda, Honore Awanakam, Krystelle Nganou Makamdop, Micheal Besong, Jude Bigoga, Rose Leke

# 662

# Category:

Social and Health Economics

Risk factors associated with anemia among schoolage pupils in Tanzania; A Case Study of Pwani, Geita and Arusha regions

Oliva Kimaro , Frank Chacky, Erick Killel , Aaron Wiggins Kyatikila , Geoffrey Mchau, Francis Sichona

# 663

### Category:

Social and Health Economics

Through the eyes of the participant: Using photovoice to understand the experiences and effects of ivermec-

# tin MDA in the context of the BOHEMIA clinical trial in Kenya

Truphena Onyango, Winnie Wangari, Khadija Nuru, Karisa Kahindi Kazungu, Caroline Jones

### 664

#### Category:

Social and Health Economics

Insights from the Field: A Community Engagement Approach to Optimize Child Malaria Prevention in Sierra Leone

Abubakarr Jalloh ,Cristina Enguita-FernÌÊndez , Augustin E. Fombah ,Mohamed Samai , Clara Menendez

### 665

### Category:

Social and Health Economics

Management of severe malaria in health facilities in Lubumbashi: Socio-economic profile determining factors in billing

André Ngombe Kaseba, , Kabongo Micke, Eric Mukomena.

# 666

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Establishing a quality-assured sample collection system for malaria molecular surveillance at health facility level in Mozambique

Neide Canana , Clemente da Silva, Bernardete Rafael , Arsenio Sergio, Aider Sitoe, Wilie Zeferino, Paulino da Costa, Henriques Mbeve, Arlindo Chidimatembue, Kiba Comiche, Maria Rodrigues, José InìÁcio, Baltazar Candrinho, Eduard Rovira-Vallbona, Alfredo Mayor, Sonia Enosse.

#### 66

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Genetic variation in histidine-rich protein and lactate dehydrogenase gene among Cameroonian Plasmodium falciparum and Plasmodium ovale spp. malaria isolates.

Roman Rodrigue Nana Dongang, Valerie Makoge, Ngum Lesly Ngum, Nathalie Adja Amvongo, Joseph Hawadak, Vineeta Singh.

# 668

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

A complex Plasmodium falciparum cryptotype circulating at low frequency across the African continent

Olivo Miotto, Alfred Amambua-Ngwa, Lucas Amenga-Etego, Muzamil M Abdel Hamid, Ishag Adam, Enoch Aninagyei, Tobias Apinjoh, Gordon A Awandare, Philip Bejon, Gwladys I Bertin, Marielle Bouyou-Akotet, Antoine Claessens, David J Conway, Umberto D'Alessandro, Mahamadou Diakite, Abdoulaye Djimdé, Arjen M Dondorp, Patrick Duffy, Rick M Fairhurst, Caterina I Fanello, Anita Ghansah, Deus Ishengoma, Mara Lawniczak, Oumou Maïga-Ascofaré, Sarah Auburn, Anna Rosanas-Urgell, Varanya Wasakul, Nina FD White, Jacob Almagro-Garcia, Richard D Pearson, Sonia Goncalves, Cristina Ariani, Zbynek Bozdech, William Hamilton, Victoria Simpson, Dominic P Kwiatkowski

#### 669

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Analysis of P. falciparum genetic population structure and demographic history in the DRC using whole-genome sequencing

Kyong-shin RF, Kashamuka MM, Hendry J, Tshefu AK, Niare K, Bailey JA, Likwela J, Kalonji A, Mumba D, Juliano JJ, Schrider D, Parr JB

# 670

# Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Comprehensive surveillance of complex landscape of insecticide resistance mechanisms in Anopheles gambiae s.l. populations from The Gambia: Insights from High-Throughput Sequencing

Ebrima SM Kolley, Moussa Diallo, Saadbouh Faal, Fatou Faal, Martha Anita Demba, Mouhamadou Fadel Diop, Fatoumata Seck, Hamid-Adiamoh Majidah, Mary Aigbiremo Oboh, Constantin J Adoha, Jarra Manneh, Dabiri Damilare Kolawole, Abdul Karim Sesay, Musa Jawara, Ebrima Jatta, Balla Kandeh, Harouna Dit Soumare, Mamadou Ousmane Ndiath, Kevin Opondo, Umberto D'Alessandro, Alfred A Ngwa, Benoit Sessinou Assogba

# 671

#### Category:

Malaria Genomics (Human-Anopheles-Plasmodium)

Plasmodium vivax severe malaria case in a children patient in Saint-Louis, Senegal.

Doudou Sow, Aminata Sall, Aminata Lo, Demba Makalou, Sara Lodholz, Markus Esser, Claudia Demarta-Gatsi, Jean Louis Ndiaye.

# 672

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Strengthening Malaria Surveillance for informed decision-making through introduction of a Composite Management Information System in Mainland Tanzania Khalifa Munisi, Elizabeth Kasagama, Sumaiyya G. Thawer, Frank Chacky, Sijenunu Aron, Rajabu Mkomwa, Bernard Mussa, Noela Kisoka, Christian Lengeler, Fabrizio Molteni,

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Samwel Lazaro

# 673

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Study of Serum Calcium Level and QTc interval as prognostic maker in Malaria

Singh Veer Bahadur, Singh Saranshi, Tundwal Divyanshi, Singh Saransh

# 674

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Supporting evidence of the contribution of the human asymptomatic reservoir of P. falciparum infections to sustaining residual malaria transmission in a low endemic area in Dielmo, Senegal

Babacar Souleymane Sambe Ibrahima Sarr, Arona Sabène Diatta, Cheikh Talla, Aissatou Diagne, Joseph Faye, Fatoumata Diène Sarr, Adja Fatou Mbodji, Rokhaya Sané, Hubert Bassène, Nafissatou Diagne, Arfang Diamanka, Inès Vigan-Womas, Pape Mbacké Sembène, Cheikh Sokhna, Makhtar Niang.

# 675

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Supporting Evidence-Based Decision-Making for Malaria Elimination: Applying a Risk-Based Freedom from Infection Framework in Cabo Verde

Adilson DePina, Luca Nelli, Isabel Byrne, Aderitow Augusto Lopes Goncalves, Davidson D. S. Monteiro, Antì nio Lima Moreira, Silvì¢nia da Veiga Leal, Chris Drakeley, Gillian Stresman.

# 676

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Surveillance of malaria slide positivity rates in 30 sentinel sites across Ghana

Benjamin Abuaku ,George Asumah Adu ,Collins Ahorlu ,Alexander Asamoah , Eunice Obeng Amoako , Paul Boateng , Christabel Addo , Nana Yaw Peprah, Nancy Odurowah Duah-Quashie, Wahjib Mohammed , Neils Ben Quashie, Keziah Laurencia Malm , Kwadwo Ansah Koram

#### 677

# Category:

Malaria Epzidemiology, Modelling, Surveillance and Impact Surveilling Plasmodium falciparum at first antenatal care visits through genomics in Mozambique

Glì ria Matambisso, Clemente Silva, DìÁrio Tembisse, Simone Boene, Paulino da Costa, Henriques Mbeve, Nelo Ndimande, Eduard Rovira-Vallbona, Manuel Gracì a-Ulloa, Nanna Brokhattingen, Andrés Aranda-DÌ az, Bryan Greenhouse, Neide Canana, Bernadete Rafael, SÌ nia Enosse, Maria Rodriques, Baltazar Candrinho, Francisco Sal¼te, Alfredo Mayor

# 678

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Targeting malaria control interventions according to transmission risk stratification in a context of insecurity in Burkina Faso

Aissata Barry, Ambroise Ouédraogo, Jean Pascal Sandwidi, Sidzabda Christian Bernard Kompaore, Aimeric Arnold Zoungrana, Roseline Maimouna Bamouni, René Kaboré, Eric Besong, Celestin Danwang, Inessa Ba, Julia Dunn, Arnaud Le Menach.

# 679

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Targeting malaria interventions in remote communities in Madagascar: a cohort study in Mananjary District Mahery Rebaliha, Joseph Lewinski, Shonde Akinola, James Hazen, Andrainarivo Toky, Razafindrainibe Ismaela, Andrianoelivololona Elanirina

# 680

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Temporal dynamics of Plasmodium species across regions of differing transmission intensities in Mainland Tanzania

Misago D. Seth; Rashid Madebe; Rule Budodo; Catherine Bakari; Beatus M. Lyimo; Zachary R. Popkin-Hall; David Giesbrecht; Salehe S. Mandai; Angelina J. Kisambale; Gervas A. Chacha; Ramadhani Moshi; Ruth Boniface, Filbert Francis; Celine I. Mandara1; Dativa Pereus; Jonathan J. Juliano5, Jeffrey A. Bailey and Deus S. Ishengoma.

#### 681

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact
The anti-gSG6-P1 IgG response as biomarker for the

The anti-gSG6-P1 IgG response as biomarker for the seasonal heterogeneity of human exposure to Anopheles gambiae bites in rural area of Cameroon in Central Africa

Glwadys Cheteug Nguetsa, Emmanuel Elanga-Ndille, Estelle Géraldine Essangui Same, Tatiana Nganso Keptchouang, Stanilas Elysée Mandeng, Wolfgang Ekoko Eyisap, Jérome Achille Binyang, Balotin Fogang, Lynda Nouage, Micheal Piameu, Lawrence Ayong, Josiane Etang, Samuel Wanji, Carole Else Eboumbou Moukoko

# 682

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact The burden of severe malaria on children from a tertiary care hospital, a cross-sectional study

Aymar AKILIMALI, Jones ONESIME, Hardy ELEMBWE, Excellent RUGENDABANGA, Samson HANGI and Chrispin BIAMBA

# 683

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

The differential impact of malaria interventions on P

The differential impact of malaria interventions on P. falciparum and P. vivax

Richard Sheppard, Peter Winskill

# 684

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact
The Dynamic of the Malaria Epidemics in Ethiopia and
Djibouti: Implications for Cross-Border Collaboration
Feviso Bati Wariso, Mohammed Hassen Badeso, Birra Ba-

Feyiso Bati Wariso, Mohammed Hassen Badeso, Birra Bajiga Badesa, Hussen Mohammed, Getahun Fatensa Hirko, Mohammed Nasir, Ebise Abote, Derara Girma Tufa

# 685

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact The Effects of IL-2 and Anti-CD28 Co-Stimulation on Malaria-Specific T-Cell Responses

Rafiatu Abdul-Mumin, Erica Arthur, Georgina Agyekum,Eric Kyei-Baafour,Kwadwo Asamoah Kusi.

# 686

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact The exigent threat of the alien invasive Anopheles stephensi in Africa

Wamalwa, M., Kilonzo, C. M., Agboka, K.M., Tonnang, H. E. Z.

# 687

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact The impact of indoor residual spraying on malaria incidence in Rangwe sub county.

**EVERLYNE MBOGA** 

# 688

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact The importance of integrating DQA data into decision-making: Impact of data quality assessments on the quality of routine malaria data

Sonia Enosse, Neide Canana, Joaquim Chau, Jossias Machava, Baltazar Candrinho, Maria Rodrigues, Ruth Kigozi,

#### Hannah Edwards

#### 689

### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# The nexus of disease and food production in irrigation schemes, the Shire valley transformation in Malawi

Rex B. Mbewe, Steve Gowero, James Chirombo, Blessings Chiepa, Blessings Kapumba, Clinton Nkolokosa, Themba Mzilahowa, Sylvester Coleman, Olivia Wetherill, Russell Stothard, Christopher Jones

# 690

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

# THE ROLE OF DIGITIZATION IN IMPROVING DATA QUALITY FOR ITN DISTRIBUTION CAMPAIGNS IN MALI

Boubacar Maiga, Chrestien Yameni, Jean Yves Mukamba, Mariam Tall, Jean Baptise Kamate, Dr Mady Cissoko, Dr Mahamadou H. Magassa, Dr Aissata Kone

#### 691

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

The use of surveillance test-and-treat posts to reduce malaria in border regions in sub-Saharan Africa

Hillary M. Topazian, Giovanni D. Charles, Nora Schmit, Matteo Pianella, John M. Marshall, Immo Kleinschmidt, Katharina Hauck, Azra C. Ghani

# 692

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Thirteen years of malaria trends in Gabon between 2010 and 2022 in the sentinel site of the Hôpital Régional Estuaire Melen: a prospective analysis using REDCap data management software

Noé Patrick M'Bondoukwé, Ndong Ngomo Jacques Mari, Luice Aurtin Joel James, CREIPA team, Denise Patricia Mawili-Mboumba, Marielle Karine Bouyou Akotet

# 693

# Category:

Areas in Gabon

Malaria Epidemiology, Modelling, Surveillance and Impact Title: Prevalence and Factors Associated with the Distribution of Gametocyte Carriage in Rural and Urban

Alex HOUNMENOU ZINSOU, Roméo Wenceslas LENDAM-BA, Wilfrid NDZEBE NDOUMBA, Dearie Glory OKWU, Frédérique Marie Germaine MBANG ABBA, Géradine NGAGOUM, Flamand Cany MUCANI NSIENGUI, Rella ZOLEKO MANEGO, Ghyslain MOMBO-NGOMA

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# 694

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Trends of asymptomatic malaria infections among individuals from rural communities with varying transmission intensity in Mainland Tanzania (2021-2023).

Angelina J. Kisambale, Daniel P. Challe, Salehe S. Mandai, Filbert Francis, Rashid A. Madebe, Misago D. Seth, Rule Budodo, Gervas A. Chacha, Daniel A. Petro, Ramadhan Moshi, Ruth B. Mbwambo, Grace K. Kanyankole, Dativa Pereus, Catherine Bakari, Sijenunu Aaron, Daniel Mbwambo, Abdallah Lusasi, Stella Kajange, Samwel Lazaro, Ntuli Kapologwe, Celine I. Mandara, Deus S. Ishengoma

#### 695

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Ultrasound as a triaging tool for the diagnosis of Malaria and Typhoid in a Resource Constrained Setting: A Proposed Frame-work.

Adam Muhammad Ali, Geofery Luntsi, Flavious Bobuin Nkubli, Alhamdu Silas Moi, Chigozie Ivor Nwobi

### 696

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Understanding the burden of malaria in older children and adolescents in Bousse health district, Burkina Faso.

Cheick Compaore, Serge Henri Zango, Asadu Sserwanga, Sidzabda Kompaore, Innocent Valea, Jane Achan

### 697

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Understanding the Epidemiology of Malaria in Zanzibar through Molecular and Serological Analysis of Reactive Case Detection

Varun Goel, Wahida Hassan, Caroline Murphy, Barbara B. Choloi, Mohamed Ali, Bakari Mohamed, Abdallah Zacharia, Msolo C Dominick, Safia Mohammed, Shija J. Shija, Jeffrey A. Bailey, Anders Bjl rkman, Billy E. Ngasala, Eric Rogier, Jonathan J. Juliano, Jessica T. Lin

#### 698

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Understanding the fine-scale heterogeneity and spatial drivers of malaria transmission in Kenya using model-based geostatistical methods

Judy Gichuki, Donnie Mategula

# 699

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Unraveling the Genetic Diversity and Transmission Networks of P.falciparum in Southwestern Uganda: A Low Transmission Setting

Monica M Mbabazi, Thomas Katairo, Diana Kisakye, Shahiid Kiyaga, Victor Asua, Jerry Mulondo, Stephen Tukwasibwe, Samuel L.Nsobya, Mellisa Conrad, Isabel Rodrì guez-Barraquer, Moses R.Kamya, Bryan Greenhouse, Isaac Sssewanyana, Jessica Briggs

# 700

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Unveiling similarity and divergence patterns of mosquito larval breeding sites for malaria surveillance under data scarcity

Grace R. Aduvukha, Bester Tawona Mudereri, John Odindi, Elfatih M. Abdel-Rahman, Onisimo Mutanga, Mark Wamalwa and Henri E.Z. Tonnang

#### 701

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Using cluster-randomised controlled trials data to validate MINT, an online tool to support decisions on vector control against malaria

Dominic P. Dee, Isaac J. Stopard, Antoine Sanou, Moussa W. Guelbeogo, Jacklin F. Mosha, Jackie Cook, Joseph D. Challenger, Joseph R. Biggs, Natacha Protopopoff, Ellie Sherrard-Smith, Thomas S. Churcher

# 702

### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Utility of Ex vivo malaria SYBR Green I assay in susceptibility profiles of Plasmodium falciparum and non-falciparum co-infections in Western Kenya

Agnes Cheruiyot, Farid Abdi, Dennis Juma, Benjamin Opot, Gladys Chemwor, Raphael Okoth1, Catherine Muriuki, Fredrick Odindo, Gladys Biwot, Charles Adega, Edwin Mwakio, Redemptah Yeda, Charles Okello, Jackline Juma, Risper Maisiba, Maurine Mwalo, Timothy Egbo, Hoseah M. Akala

#### 703

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Quantifying the impact of Anopheles stephensi invasion and establishment on malaria burden and control across sub-Saharan Africa

Charles Whittaker, Arran Hamlet, Gerry Ryan, Thomas Brewer, Cosmo Santoni, Legesse Alamerie, Marianne Sinka, the CEASE Consortium, Alison Reynolds, Anne Wilson, Nick Golding, Fitsum Tadesse, Thomas Churcher

#### 704

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Humidity - the overlooked variable in predicting the environmental suitability of malaria transmission

C. C. Murdock, J. Brown, B. Hollingsworth, P. Huxley, B. Johnson, B. St Laurent, L.R. Johnson, M.C. Wimberly, M.M. Pascual

# 705

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Child health and infection with low density (CHILD) malaria, a randomized controlled trial to assess the long-term health and socioeconomic impacts of testing and treating low-density malaria infection (LMI) among children in Tanzania

Deborah Sumari, Nicolaus Gutapaka, Sylvia Jebiwott, Maxmillian Mpina, Sarah Mswata, Wilmina Kalinga, Reward Lyimo, Thabit Athuman, Mwajuma Chemba, Jane Nyandele, Sylvester Simando, Georg Loss, Hannah Sans, Jade Benjamin-Chung, Pamela Ganger, Xue Wu, Ingrid Chen, Bryan Greenhouse, Grant Dorsey, Guenther Fink, Michelle Hsiang, Ally Olotu

#### 706

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Enhancing the Malaria Surveillance System Algorithm Amid Changing Malaria Epidemiology in Tanzania

Goodluck Tesha, Maneno Luponya, Asha Khamis Ussi, Joackim Nyarigo, James Mziray, Anna Mahendeka, Dorice Respic, Pai Chombongo, Khalifa Munisi, Joseph Joseph, Rajabu Mkomwa, Frank Chacky, Sijenunu Aaron, Samwel Lazaro, Edward Kenyi, Lolade Oseni, Gladys Tetteh, Albert Ikonje, Chonge Kitojo, Naomi Serbantez, Erik J. Reaves, Carrie Eggers, Sarah-Blythe Ballard

# 707

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact **Modelling RTS,S delivery strategies in seasonal transmission settings** 

Hayley A Thompson, John Bawa, Scott Gordon, Hannah Slater

# 708

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Detection of Low Polymerase chain Rection Point Prevalence in Jazan Provence during Elimination Program Ibrahim M Elhassan, Ahmed Sahly. Aymen Awad, Mohamed

Elfaki, Seha, Elamin, Robert Snow

# 709

### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Climate change, malaria and neglected tropical diseases: a scoping review Isabel Byrne

# 710

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact
The Role of Social and Behavior Change Communication through Community Health Workers and Local
Leaders in Reducing Malaria Incidence: - The case
of SBCC Project implemented by SFH Rwanda in the
Eastern Province - Rwanda

HAKIZIMANA Jean Bosco, GAHIGANA Seraphina, Manasseh Wandera Gihana

# 711

#### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Modeling Microclimate Effects on Urban Malaria Transmission by Anopheles stephensi

Michael C. Wimberly, Yusuf Jamal, Rajendra Baharia, Vikas Desai, Vijay Kohli, Ajit Mohanti, Mercedes Pascual, Rajesh Sharma, Sachin Sharma, Keshav Vaishnav, Courtney C Murdock

# 712

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Child health and infection with low density (CHILD) malaria, a randomized controlled trial to assess the long-term health and socioeconomic impacts of testing and treating low-density malaria infection (LMI) among children in Tanzania.

Nicolaus Gutapaka, Deborah Sumari, Sylvia Jebiwott, Maxmillian Mpina, Sarah Mswata, Wilmina Kalinga, Reward Lyimo, Thabit Athuman, Mwajuma Chemba, Jane Nyandele, Sylvester Simando, Georg Loss, Hannah Sans, Jade Benjamin-Chung, Pamela Ganger, Xue Wu, Ingrid Chen, Bryan Greenhouse, Grant Dorsey, Guenther Fink, Michelle Hsiang, Ally Olotu

#### 713

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Bayesian Spatial and Spatiotemporal Modelling of Malaria Risk Using Local Health System Data in Nigeria Chijioke Kaduru, Olamide Akeboi, Idim Godwin, Karinate Cyril-Egware, Sharon Ekwe, Maduekwe Vivian, Ganiyat Eshikhena, Koko Aadum, Chukwu Okoronkwo, Onyebuchi

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Okoro

# 714

### Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Evaluation of a Digital Entomological Surveillance Planning Tool for Malaria Vector Control: Three Country Mixed Methods Pilot Study

Steven Gowelo, Charlotte Hemingway, Mercy Opiyo, Elodie Vaida, Baltazar Candrinho, Themba Mzilahowa, Endalamaw Gadisa, Bobby Farmer, Allison Tartasky, Edward Thomsen, Michael Coleman, Neil F. Lobo

### 715

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Analysis of the impact of the covid-19 pandemic on the implementation of malaria control program activities in

André Ngombe Kaseba, Firmin Nsele, Eric Mukomena

# 716

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact A Cross-sectional survey assessing malaria preva-

lence among children under 13 years in Karamoja region, Uganda. Which age group is more affected?

Anthony Nuwa, M. Odongo, K. Baker, R. Kajubi, C. Nnaji, T. Kyagulanyi, J. I. Nabakooza, D. S. Odong, D. Rubahika, M. Nakirunda, G. Magumba, J. Achan, Christian Rassi, J.B. Bwanika, J.K. Tibenderana, Damian Rutazaana, J. Opigo

# 717

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact

A Research Methodology on the role community health workers and volunteers in scaling Integrated delivery of community case management implementation for the Elimination of Malaria in sub Saharan Africa- Case study of Nigeria, Epidemic Control Programme MOH/ Fhi360/USAID/ SIDHAS/PEPFAR

Benjamin Bob

# 718

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Epidemiological overlaps in COVID-19 and malaria within healthcare and community settings of Southern

Charles A. Narh, Gloria Amegatcher, Maame E. Acquah, Deborah K. Tetteh, Rachael Obeng, Ethel Debrah, Bridget Quist, Priscilla Acquah-Jackson, Kyerewaa A. Boateng, Gideon Twieku, Samuel Armoo, Lydia Mosi, Gordon A. Awandare

# 719

## Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Prevalence of Falciparum and non-Falciparum Malaria in the 2014-15 Rwanda Demographic Health Survey

Claudia Gaither, Camille Morgan, Rebecca Kirby, Corine Karema, Pierre Gashema, Samuel J. White, Hillary M. Topazian, David Geibrecht, Kyaw Thwai1, Koby Boyter, Tharcisse Munyaneza, Claude Mambo Muvunyi, Jean De Dieu Butera, Jeffrey A. Bailey, Jean-Baptiste Mazarati, Jonathan J. Juliano

# 720

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Mapping analysis of cross borders malaria high risk groups: A case study of Truck drivers and cross-borders population in Rwanda

Habanabakize Epaphrodite, Ndagijimana Deogratias, Ndagijimana Bernard, Kamali Fuldgence

# 721

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Investigation into Two Biological Threats Posed by Plasmodium falciparum in Cameroon

Innocent Ali, Emma Manning, Ana Chopo-Pizarro, Nfor Emmanuel Nfor, Tonshie Walters, Mbeng Bernice Felai, Manka'a Claudi, Andria Mousa, Peter Thelma Ngwa Niba, Emma F Hocke, Helle Hansson, Akindeh Mbuh Nji, Michael Alifrangis, Colin J Sutherland, Wilfred Mbacham, Cally Roper, Khalid B Beshir

# 722

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Comprehensive Epidemiological Modeling and Surveillance for Assessing Public Health Impact

Boureima Sangaré, Arsenio Nhacolo, Felix James

# 723

# Category:

Malaria Epidemiology, Modelling, Surveillance and Impact Using routine health facility data to evaluate the retrospective impact of long-lasting insecticidal nets in mainland Tanzania

Sumaiyya Thawer, Monica Golumbeanu, Mponeja Gitanya, Samwel Lazaro, Fabrizio Molteni, Christian Lengeler, Emilie

# Category:

Drug Efficacy

suppressed parasitemia, and improves hepatic an-

# ti-oxidants defense in Plasmodium berghei-infected mice

Jimoh Aliu Oriyomi, Azeez Yussuf Olanrewaju, Ajayi Abayomi Mayowa, Ademowo Olusegun George

### 725

# Category:

Drug Efficacy

Therapeutic Efficacy of Artemether- Lumefantrine with single-Dose of Primaguine for the treatment of uncomplicated Plasmodium falciparum malaria in irrigated agro-industrial Metahara sugar factory in Central Ethiopia.

Henok Hailgiorgis, Nega Berhe, Hussein Mohammed, Moges Kassa, Gemechu Leta, Legesse Negash, Geremew Tasew, Ashenafi Assefa, Gudissa Assefa, Bokretsion Gidev

# 726

# Category:

Drug Efficacy

Transmission Blocking Activity of IRAB, (a Nigerian a neem leaf extract), against Plasmodium yoelii infection in the murine model.

Ogboi Johnbull Sonny, Onyemelukwe Ngozi, Chinyere, Akor Egbunu Shedrack, Iroka Udeinya.

# 727

# Category:

Drug Efficacy

Development of nano-based antimalarial drugs as additional tool for malaria elimination

Hulda Shaidi Swai

### 728

# Category:

Drug Efficacy

Artesunate-Pyronaridine plus radical cure with primaquine is a safe and efficacious alternative antimalarial with a strong transmission blocking effect than chloroquine plus primaquine to treat Plasmodium vivax in Ethiopia.

Migbaru Keffale, Sinknesh Wolde, Tadesse Misganaw, Hiwot Teka, Bereket Hailegiorgis, Natnael Lemessa, Legesse Alamerie Ejigu, Samuel Girma, Mekonnen Tadesse, Fikregabra, Aberra Kassa, Mikiyas Gebremichael, Wakweya Chali, Lina Alemayehu, Melat Abdo, Addisu Gizat, Getinet Habtamu, Mame Niang, Gudisa Assefa, Jimee Hwang, Teun Bousema, Fitsum G. Tadesse

# 729

#### Category:

Drug Resistance

Plasmodium falciparum K13 gene polymorphisms screening across urban and rural settings in Cameroon

Milong Melong Charlotte Sabine, Amvongo-Adjia Nathalie, Nkemgno Francis, Russo Gianluca, Tamgue Ousman, Tchoumbougnang Francois, Ndo Cyrille, Morse Daniel, and Paganotti Giacomo Maria.

# 730

# Category:

Drug Resistance

# Evolution of Plasmodium falciparum resistance to antifolates in Uganda

Victor Asua, Shreeya Garg, Sawyer Smith, David Giesbrecht, Thomas Katairo, Jennifer Legac, Grant Dorsey, Moses R. Kamya, Adoke Yeka, Samuel L. Nsobya, Jeffrey A. Bailey, Steffen Borrmann, Philip J. Rosenthal, Melissa D. Conrad

# 731

# Category:

Drug Resistance

Persisting chloroquine resistance markers in Plasmodium falciparum isolates from Huye, Rwanda: a preliminary analysis of PfCRT and PfAAT1 marker prevalence in 2010 and 2023

Emma Schallenberg, Welmoed van Loon, Clement Igiraneza, Felix Habarugira, Lajjio Montengo, Christian Ngarambe, Claude Mambo Muvunyi, Frank Mockenhaupt, Jules Minega Ndoli

# 732

# Category:

Drug Resistance

A novel multi-targeting approach to design the compounds against Plasmodium falciparum kinases to effectively combat the drug resistance

Priya Godara and Dhaneswar Prusty

# 733

#### Category:

Drug Resistance

Erythrocytic surface and exported Plasmodium falciparum antigens dominate common signatures of balancing selection in populations across malaria endemic regions in sub-Saharan Africa

Mouhamadou Fadel Diop, Lucas Amenga-Etego, Karim Mane, Edwin Kamau, Deus Ishengoma, Oumou Maiga, Anita Ghansa, Lemu Golassa, Tobias Apinjo, Archibald Worwui, Ambroise Ahouidi, Dominic Kwiatkowski, David Jeffries, David Conway, Umberto D'Alessandro, Diimde Abdoulaye, Alfred Amambua-Ngwa

# 734

# Category:

Drug Resistance

The Development of a Single Exposure Radical Cure

Primaquine combined with artemether-lumenfantrine

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# Antimalarial Agent Against Resistant Malaria: The Artemether + WOG 19 Sting

Kenneth Egwu, Samuel Uzondu, Joel Asogwa, Andrew Agada, Emmanuel Egboko

### 735

#### Category:

Drug Resistance

Antimalarial drug resistance profile and in vivo studies of 7-[(7-methoxy-4,5-dihydro-1H-benzo[g]indazol-3-yl) carbonyl]-2-phenyl-5,6,7,8-tetrahydropyrazolo[1,5-a] pyrido[4,3-d]pyrimidin-9(1H)-one against Plasmodium berghei-infected Albino mice

David O Oladejo, Titilope M Dokunmu, Mercy E Tebamifor, Mercy B Omunagbe, Emeka EJ Iweala

# 736

# Category:

Drug Resistance

Simple alternative to IC50 in vitro drug survival assay for monitoring antimalarial drug sensitivity in malaria-endemic regions

Chinedu O. Egwu, Fatoumata Bojang, Ndey Fatou Drammeh, Aminata Seedy Jawara, Fatou K. Jaiteh, Eniyou Oriero, Alfred Amambua-Ngwa

# 737

### Category:

Drug Resistance

Non-hemolytic activity, acute toxicity and study of the cytotoxicity of methanol and aqueous extracts of three lvorian plants with gametocytocidal activity

Koffi Akissi Jeanne, Tano Konan Dominique, Dablé Marius Tresor, Tuo Karim, Adjogoua Edgard Valérie, Silué Kigbafori Dieudonné, and Yavo William

# 738

#### Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Antibody responses to multiple Plasmodium falciparum antigens in School children naturally exposed to malaria in Central Region, Ghana.

Zakaria Abukari, Festus K. Acquah, Sabastian Shine Kwapong, Surendra K. Prajapati, Kim C. Williamson, and Linda E. Amoah

#### 739

### Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Atypical memory B cell frequency correlates with antibody breadth and function in malaria immune adults.

Frederica Dedo Partey, Jasmine Naa Norkor Dowuona, Abi-

gail Naa Adjorkor Pobee, Melanie Rose Walker, Belinda Aculley, Diana Ahu Prah, Michael Fokuo Ofori and Lea Barfod

#### 740

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Atypical memory B cell frequency correlates with antibody breadth and function in malaria immune adults.

Jasmine Naa Norkor Dowuona, Frederica Dedo Partey, Abigail Naa Adjorkor Pobee, Melanie Rose Walker, Belinda Aculley, Diana Ahu Prah, Michael Fokuo Ofori, Lea Barfod

# 741

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Declining malaria transmission affects antibody-dependent respiratory burst against Plasmodium falciparum in children and adults

Doreen D. Mutemi, James Tuju, Rodney Ogwang, Lydia Nyamako, Kennedy M. Wambui, Ivette R. Cruz, Pì r Villner, Victor Yman, Samson M. Kinyanjui, Ingegerd Rooth, Billy Ngasala, Anna Fì rnert, Faith H. A. Osier

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### Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Impact of Mass Testing and Treatment on Anti-PfE-BA-175 Antibody Levels in a High Malaria Transmission Setting in Ghana

Prosper Kofi Tey, Dorcas Obiri-Yeboah, Linda Eva Amoah

# 743

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Role of human Pegivirus infections in whole Plasmodium falciparum sporozoite vaccination and controlled human malaria infection in African volunteers

Anneth-Mwasi Tumbo, Tobias Schindler, Jean-Pierre Dangy, Nina Orlova-Fink, Jose Raso Bieri, Maximillian Mpina, Florence Alphinda Milando,Omar Juma, Ali Hamad, Elizabeth Nyakarungu, Mwajuma Chemba, Ali Mtoro, Kamaka Ramadhan, Ally Olotu, Damas Makweba, Stephen Mgaya, Kenneth Stuart, Matthieu Perreau, Jack Thomas Stapleton, Said Jongo, Stephen Lev Hoffman8, Marcel Tanner, Salim Abdulla, Claudia Daubenberger

# 744

#### Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

# Humoral immune response induced by helminth and malaria parasite co-infection in central Ghana

Dennis Adu-Gyasi, Kaali Seyram, Seth Owusu-Agyei, Margaret T. Frempong, Dennis Konadu Gyasi, David Dosoo, Jones Opoku-Mensah, Ben Gyan, Kwaku Poku Asante

#### 745

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

# Adaptation of blood-stage Controlled Human Malaria Infection for evaluation of transmission-blocking malaria interventions in endemic countries

Enock Kessy, Florence Milando, Charles Mulamba, Omary Hassan, Omary Juma, Mohamed Rashid, Aina-ekisha Kahatano, Hania Msami, Mohamed Mohamed, Egbert Stanslaus, Tunu Mwamlima, Wilmina Kalinga, Sarah Mswata, Latipha Mohamed, Mgeni Mohamed, Simon J. Draper, Angela M. Minassian, and Ally Olotu

# 746

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

# Identifying Functions and Targets of Antibodies in Protection from Clinical Malaria

Linda Reiling, Gaoqian Feng, Tim Spelman, Kaitlin Pekin, Herbert Opi, Eizo Takashima, Ehime, Ivo Mueller, Takafumi Tsuboi, James G Beeson

# 747

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

# Characterization of cell phenotypes involved in asymptomatic hookworm and malaria parasite co-infections in endemic Ghana

Musah Osei, Dennis Adu-Gyasi, Kaali Seyram, Seth Owusu-Agyei, Margaret T. Frempong, Dennis Konadu Gyasi, David Dosoo, Jones Opoku-Mensah, Ben Gyan, Kwaku Poku Asante

# 748

# Category:

Immunology & Vaccines (Children, Pregnant Women and Adults)

Natural Killer cell antibody-dependent cellular cytotoxicity is impacted by cellular phenotypes, erythrocyte polymorphisms, Plasmodium falciparum diversity, and intensity of transmission

Namirimu Nankya Felistas, Stephen Tukwasibwe, Savannah Nicole Lewis, Yoweri Taremwa, Kathleen D. Press, Kattria van der Ploeg, Maureen Ty, Kenneth Musinguzi, Evelyn Nansubuga, Florian Bach, Martin Chamai, Martin Okitwi, Gerald Tumusiime, Annettee Nakimuli, Francesco Colucci, Moses R Kamya, Joaniter I Nankabirwa, Emmanuel Arinaitwe, Bryan Greenhouse, Grant Dorsey, Philip J Rosenthal, Isaac Ssewanyana, and Prasanna Jagannathan

#### 749

# Category:

Malaria in Pregnancy

Mitigating the Impact of Malaria in Pregnancy: Strategies for Improved Maternal and Child Health

Prosper Gaudence Kayanda

# **750**

# Category:

Malaria in Pregnancy

Determinants Affecting the Uptake of Intermittent Preventive Treatment for Malaria among Pregnant Women in Kano State, Nigeria

Rabiu Abba Hussain, Kamal Tasiu Abdullahi

# **751**

# Category:

Malaria in Pregnancy

Malaria increases the cross-reactivity to anti-SARS-CoV-2 antibodies on lateral flow tests using pre-COVID-19 samples of pregnant women in Yaoundé.

Seumko'o Ndeumou Medouen Reine, Fogang Balotin, Lissom Abel, Leke FG Rose, Esemu Livo Forgu and Megnekou Rosette

# 752

# Category:

Malaria in Pregnancy

Characterization of regulatory T cells profile associated with risk of early-onset sepsis of neonate in a malaria-endemic area in Benin

Darius Sossou, Sem Ezinmegnon, Gino Agbota, Komi Gbédandé, Manfred Accrombessi, Achille Massougbodji, Marceline d'Almeida, Jules M Alao, Ida Dossou-Dagba, Alexandre Pachot, Laurence Ganee, Karen Brengel-Pesce, Gilles Cottrell1, Akadiri Yessoufou, Valérie Briand, Pierre Tissières, Nadine Fievet

### **753**

# Category:

Malaria in Pregnancy

Effects of malaria exposure during pregnancy on the levels of EBV anti-gp350 IgA and anti-gp350 IgG among infants in Western Kenya.

Stella.A. Chumbe, Ayieko Cyrus, Ogolla, Sidney, Koech Emmily, Waomba Kevin, Boniface Ariera, Onditi Ian, Rochford Rosemary

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# 754

# Category:

Malaria in Pregnancy

Effects of Malaria Exposure During Pregnancy on the Levels of EBV anti-gp350 IgA and anti-gp350 IgG Among Infants in Western Kenya.

Stella.A. Chumbe, Ayieko Cyrus, Ogolla, Sidney, Koech Emmily, Waomba Kevin, Boniface Ariera, Onditi Ian, Rochford Rosemary

# 755

## Category:

Malaria in Pregnancy

Impact of first-trimester screening with a high-sensitivity malaria RDT followed by treatment with Artemether-Lumefantrine on pregnancy outcome: A protocol for a randomized trial in Kenya and the DR Congo Jean Okitawutshu, Melissa S Bauserman, Fabian Esamai,

Antoinette K Tshefu, Jeremiah Laktabai, Steve M Taylor

# 756

# Category:

Malaria in Pregnancy

Effect of intermittent preventive treatment of malaria in pregnancy on vaginal microbiota, host immune response, and pregnancy outcomes

Tanweer Beleil, Marwah Bagabas, Patricia Hunter, Sherrianne Ng, Jemima Hair, Goncalo Correia, Yun S Lee, Enesia B Chaponda, Ephraim Chikwanda4, Mike Chaponda, Nigel Klein, Lynne Sykes, Jane Bruce, Ludovica Ghilardi, Philippe Mayaud, Daniel Chandramohan, Phillip R Bennett, R Matthew Chico, David A MacIntyre

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# Category:

Malaria in Pregnancy

CURRENT STATUS OF MALARIA IN PREGNANCY IN BERTOUA AND MUTENGENE: DIAGNOSTIC COMPARISON, RISK FACTORS AND PREVALENCE OF dhfr S108N POLYMORPHISM IN WOMEN ATTENDING SELECTED ANTENATAL CLINICS

Toussi Tchumela Eric Cabrel and Dr. Tobias O. Apinjoh

### 758

# Category:

Malaria in Pregnancy

Complicated malaria and other serious febrile illnesses in a pediatric department in Libreville, Gabon Chrispin Biamba

# 759

#### Category:

Malaria in Pregnancy

Characteristics of malaria among pregnant women in a rural hospital in the Democratic Republic of the Congo (DR Congo)

Aymar Akilimali, Jones Onesime, Hardy Elembwe, Chris Kitumaini, Excellent Rugendabanga, Samson Hangi, Chrispin Biamba

# 760

# Category:

Malaria in Pregnancy

CHALLENGES IN IMPLEMENTING MALARIA CONTROL PROGRAMS FOR PREGNANT WOMEN IN EAST AFRICA.

Elibariki Masanja Raphael, Gerry Germanus Yotham, Lisa Richard

# 761

# Category:

Malaria in Pregnancy

Polarized cTfh-1 cells Associated with Placental Malaria and Neonatal Protection in Pregnant Women at Delivery

Bernard Marie Zambo Bitye, Chris Marco Mbianda Nana, Bodin Darcis Kwanou Tchakounte, Marc Pepin Ekango, Balotin Fongang, Reine Seumko'o Medouen Ndeumou, Christine Benderli Nana, Berenice Tekougang Kenfack Zangue, Jean Claude Djontu, Rose Gana Fomban Leke, Lawrence Ayong, Rosette Megnekou

# 762

# Category:

Malaria in Pregnancy

The effect of intermittent preventive treatment of malaria in pregnancy (IPTp) on the maternal intestinal microbiome and downstream impact on fetal growth.

Patricia Hunter, Godwin Tembo, Lily Gates, Crispin Mukerebe, Mwayiwawo Madanitsa, Hellen C Barsosio, Daniel T R Minja, John P A Lusingu, Eric D Onyango, Dagmar Alber, Jenny Hill, James Dodd, Ulla Ashorn, Julie R Gutman, Nigel Klein, Feiko O ter Kuile, R Matthew Chico

# 763

# Category:

Treatment and Community Case Management

Healthcare Providers' Perspectives on Malaria Treatment: Challenges and Opportunities for Control and Elimination in Rwanda.

Pierre Gashema, Aileen Jordan, Eric Saramba, Lambert Nzungize, Neeva Wernsman Young, Corine Karema, Jean Baptiste Mazarati, Jonathan J Juliano, Jeffrey A. Bailey, Kristin Banek

# 764

# Category:

Treatment and Community Case Management

Roles, System Support, and Motivation Among Malawi's Health Surveillance Assistants: A National Profile of CHWs in Hard-to-Reach Areas

Nyanyiwe Masingi Mbeye, Travis Porter, Lumbani Munthali, Humphreys Nsona, John M. Miller, Arantxa Roca-Feltrer

# 765

# Category:

Treatment and Community Case Management

Modelling New Approach to optimize treatment medication adherence and effective case management Initiatives through evidence based community intervention for the Elimination of HIV /AIDS and Malaria in Sub-Saharan Africa (A Field Experience in an Epidemic Control programme funded by MOH/Fhi360/USAID SIDHAS /PEPFAR in Nigeria.

Benjamin Bob

# 766

# Category:

Treatment and Community Case Management

A Research Methodology on the role community health workers and volunteers in scaling Integrated delivery of community case management implementation for the Elimination of Malaria in sub Saharan Africa Source: A Field Experience in an Epidemic Control Program in Nigeria funded in collaboration MOH/Fhi360/USAID/ SIDHAS/PEPFAR and International Centre for Disaster

Benjamin Bob

# 767

### Category:

Treatment and Community Case Management

ACTwatch Lite toolkit for private sector antimalarial and RDT market measurement

P. Bouanchaud, M. Accrombessi, K. Woolheater, E. Wang, C. Hurley, C. Lourenco

# 768

#### Category:

Treatment and Community Case Management

The role of malaria vectors in 2022 Rift Valley Fever (RVF) outbreak in Rwanda: evidence for the need of multi-sectoral management approach for both diseases

Isidore Nsengimana, Emmanuel Hakizimana, Jackie Mupfasoni, Edson Rwagasore, Misbah Gashegu; Claude M. Muvunyi, Pacific Ndishimye, David Kelvin, Method N. Gasana, Fabrice Ndayisenga, Solange Uwituze, Augustino Chengula, Christopher J. Kasanga, Gillian Eastwood

# 769

## Category:

Diagnosis and Reagents Development

Characterization of Point-of-Care Biomarkers to Further Distinguish Malaria Infections Undetectable on Rapid Diagnostic Tests: Machinga and Balaka Districts, Malawi.

Solomon Ngwira, Lauren Cohee, Karl Seydel

### 770

#### Category:

Diagnosis and Reagents Development

Development of a low-cost, non-invasive malaria diagnostic system for use in resource-limited settings.

Steven Ikediashi, Emmanuel Bakare

# 771

#### Category:

Diagnosis and Reagents Development

Scalable and cost-effective DNA extraction and PCR for xenomonitoring of P. falciparum and antimalarial drug resistance genes

Dario Anvari, Janvier Bandibabone, Andreas Kudom, Andreas Wieser, Esto Bahizire, Frank Mockenhaupt, Welmoed van Loon

# 772

### Category:

Diagnosis and Reagents Development

Implications of Plasmodium parasites with HRP2 gene deletion on the performance of HRP2 based Rapid Diagnostic Tests in middle Ghana, Africa

Dennis Adu-Gyasi, Linda E. Amoah, Abagna Hamza Bukari, Musah Osei, Prince Agyapong Darko, Kaali Seyram, Felix B. Oppong, David Dosoo, Oscar Agyei, Seeba Amenga-Etego, Kwaku Poku Asante

# 773

#### Category:

Diagnosis and Reagents Development

A digital microscope for the diagnosis of Plasmodium falciparum and Plasmodium vivax, including P. falciparum with hrp2/hrp3 deletion

Yalemwork Ewnetu, Kingsley Badu, Lise Carlier, Claudia A. Vera-Arias, Emma V Troth, Abdul-Hakim Mutala, Stephen Opoku Afriyie, Thomas Kwame Addison, Nega Berhane, Hans-Peter Beck, Wossenseged Lemma, Cristian Koepfli

# 774

### Category:

Capacity Building, Leadership, and Governance

Communicating the uncertainties associated with genetic biocontrol approaches: insights from communicators, science journalists and scientists in Africa.

Thuo Caroline, Willy Kiprotich Tonui, Dorrington Ogoyi,

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Cyrus Tareh and Andrew Kiggundu

#### 775

#### Category:

Capacity Building, Leadership, and Governance

Mentorship Program and its Impact on Women's Leadership in the Control of Malaria and other Vector-Borne Diseases in Africa

Jessy Goupeyou-Youmsi, Rosalia Joseph, Christina Sudi, Jacinta Muli, El Hadji Amadou Niang, Prosper Chaki, Emma Orefuwa, Damaris Matoke-Muhia

# 776

# Category:

Capacity Building, Leadership, and Governance

Capacity building in application of nanoscience and nanotechnology in research and development for combating malaria and other poverty-related diseases in Africa

Hulda Swai

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### Category:

Capacity Building, Leadership, and Governance

Lessons learned from institutionalizing a systematic quarterly implementation review process of the Malaria Annual Operational Plans (AOPs) to enhance achievement of Malaria Elimination goals - a case of Zamfara State in Northern Nigeria

Hyeladzira Garnvwa-Pam, Ufon Udofia, Ritu Kumar, Meaghan Koudelka, Sherifah Ibrahim, Aliyu Muhammed

# 778

# **Category:**

Capacity Building, Leadership, and Governance

Leadership and management capacity building: Addressing gaps in NMCPs through an integrated training programme to reach elimination targets

Taneshka Kruger, Jaishree Raman, Danielle Meyerowitz, Christiaan de Jager

# 779

# Category:

Capacity Building, Leadership, and Governance

CLOSING THE GAPS IN THE DEPLOYMENT OF MA-LARIA COUNTERMEASURES: THE CASE FOR NEW VACCINES

Mat Allen, JP Barretto, Mathias Bonde, Francis Burke, Oscar Delaney, Ryan Duncombe, Jake Eberts, Sandy Hickson, Jacob Hopkins, Josh Morrison, Claire Nyquist, Ming Ong, William Putnam, Adrian Sperling, Remi Turqier, Alex Zhu

# **780**

### Category:

Control, Elimination and Eradication

Malaria Epidemiology in Nepal: A Comprehensive Analysis Spanning Six Decades (1963-2023)

Komal Raj Rijal, Sanjib Adhikari, Rudra Marasini, Prakash Ghimire

### 781

# Category:

Control, Elimination and Eradication

Assessing the additional effects of piperonyl butoxide (PBO) exposure on Anopheles mosquitoes

Rosheen Mthawanji, Polius Gerazi Pinda, Steven Gowelo, Themba Mzilahowa, Hilary Ranson, Christopher M. Jones

# 782

# Category:

Control, Elimination and Eradication

Assessment of added protection conferred by combined use of indoor residual spraying (IRS) and seasonal malaria chemoprevention (SMC) for malaria prevention in Benin

Rock Yves Aïkpon, Cyriaque Affoukou, Georgia Damien, Sakariaou Kpanou, Houndjo William, Camille Houétohossou

#### 783

#### Category:

Control, Elimination and Eradication

Anopheles funestus Populations across Africa Are Broadly Susceptible to Neonicotinoids but with Signals of Possible Cross-Resistance from the GSTe2 Gene

Tatiane Assatse, Magellan Tchouakui, Leon Mugenzi, Benjamin Menze, Daniel Nguiffo-Nguete, Williams Tchapga, Sevilor Kekeunou and Charles S. Wondji

# 784

# Category:

Control, Elimination and Eradication

The Integrative Role of Artificial Intelligence in Malaria Control across Sub-Saharan Africa: Current Prospects and Constraints

Wendy Kinara, Ashtone Omondi

# 785

# Category:

Control, Elimination and Eradication

Towards zero malaria: A comprehensive review of the progress, challenges and recommendations for Malaria control in Kenya

Wendy Kinara, Jane Merinyo, Daniel Wanyonyi, Kelvin Thiga

# 786

#### Category:

Control, Elimination and Eradication

Characterization the breeding sites of anopheles gam-

## biae s.s. in an urban environment in Lambaréné, Gabon

Ynous Djida, Stravensky Terence Boussougou-Sambe, Ange Gatien Ndoumba, Barclaye Ngossanga, Nadine Iyangui ndoghan, Ayôla Akim Adegnika, Jules Djeki

# 787

# Category:

Control, Elimination and Eradication

Effectiveness of Community-based Social Behaviour Change Communication on Caregiver's health seeking behaviour and knowledge and practices towards malaria in conflict-affected communities of Cameroon

Elvis Asangbeng Tanue, Lundi-Anne Omam, Bibiche Modjenpa Noukeme, Alain Metuge, Isabelle Nganmou, Margaret Besem Ebob, Laura Donovan, Ann-Sophie Stratil, Helen Counihan, Helen Hawkings, Elizabeth Berryman, Maxwell Kolawole, Yakouba Zoungrana, Samuel Wanji, Esther Njomo Omam

# 788

# Category:

Control, Elimination and Eradication

First reports of urogenital schistosomiasis in the Ndikiniméki health district, Centre-Cameroon

Balifeli Bienvenu, Kengne-Fokam Alvine Christelle, Djieukap Laurelle, Fru Chi Tchampo, Chinyere Ukaga, Awono Ambene Herman Parfait. Tombi Jeannette

# 789

# Category:

Control, Elimination and Eradication

Navigating the evidence landscape: Conducting Systematic Reviews Guiding WHO Recommendations in Malaria Elimination and Prevention - Process, challenges and lessons learnt

Beena Bhamani

# 790

# Category:

Control, Elimination and Eradication

A simple, cheap way to kill malaria parasites in mosquitoes

Sarah Farrell, Anton Cozijnsen, Vanessa Mollard, Papireddy Kancharla, Rozalia A. Dodean, Jane X. Kelly, Geoffrey I. Mc-Fadden, Christopher D. Goodman

#### 791

# Category:

Control, Elimination and Eradication

Comparative susceptibility of wild-derived and laboratory-reared Aedes and Anopheles larvae to Ivermectin: a preliminary study toward experimental selection of larval ivermectin resistance mechanisms

Cheick Oumar W. Ouedraogo, Emmanuel Daouda Sougue,

André B. Sagna, Olive Traore, Sié H. Pooda, Mady Ndiaye, E.H. Mamadou Niang, Karine Mouline, Fabrice A. Some, Roch K. Dabire

# 792

# Category:

Control, Elimination and Eradication

Optimization Models for Malaria Programming: A Systematic Review

Randolph Ngwafor, Sunil Pokharel, Ricardo Aguas, Lisa White, Rima Shretta

# 793

#### Category:

Chemoprevention

A hybrid malaria chemoprevention approach for children in sub-perennial settings expanding perennial malaria chemoprevention with additional seasonally-targeted dosing: a modelling study

Swapnoleena Sen, David Schellenberg, Melissa A Penny

# 794

# Category:

Chemoprevention

MODELLING THE IMPACT OF SMC DRUG DOSAGE AD-HERENCE OF MALARIA SPREAD AMONG 3 MONTHS TO LESS THAN 60 MONTHS IN KWARA STATE.

Victor Ameh, Adamu Saidu Saleh, Lateef Kareem, Bakare Emmanuel, Chijioke Kaduru, Cyril Ademu, Chukwu okoronkwo, Onyebuchi Okoro

#### 795

# Category:

Chemoprevention

Acceptability of Vitamin A Supplementation and its potential role in the co-delivery of Perennial Malaria Chemoprevention.

Valerie Makoge, Jenna Hoyt, Nnamdi Dum-Buo, Fidelia Tarla, Sobngwi-Tambekou JoìÇlle Laure, Giulia Scarpa, Jane Grant, Ludovica Ghilardi, Jayne Webster, Shari Krishnaratne, Wilfred Mbacham

# 796

# Category:

Chemoprevention

Driving factors of the compliance and effectiveness of seasonal malaria chemoprevention in the Saponé health district of Burkina Faso

Hien Denise, Yaro Jean Baptiste, Sawadogo Jean, Moreno Marta, Gmeiner M, Byrne, Ramjith J, Grignard L, Soremekun S, Koele S, ter Heine R, Ouedraogo Amidou Z, Ouedraogo Alphonse, Sirima Sodiomon Bienvenu, Bradley J, Bousema T, Drakeley C, Tiono Alfred Bewendtaoré

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# 797

# Category:

Chemoprevention

Costs to healthcare providers of treating malaria in children under three years of age: a comparative analysis in four African countries.

Joseph Maabo Tankwa, Silke Fernandes, Kinga Bertila Mayin, Oga Agbaya Stephane, Prince Comlan Eugène Adjovi, Gimelgo Xirinda, Attia-Konan Akissi Régine, Kangah Orphée Kouakou, Amadou Touré, Promise Aseh Munteh, Chenjoh Joseph Nde, Manfred Accrombessi, N'Tcha Ludovic, Estevao Mucavele, Herminio Cossa, Martin Akogbeto, William Yavo, Corine Ngufor, Wilfred Mbacham, Lucy Paintain. Catherine Pitt

# 798

# Category:

Chemoprevention

Economic evaluation of Chemoprevention of perennial malaria in Côte d'Ivoire: organizing the work of health workers with a view to CPP/PEV co-delivery

Kangah Orphée, Attia Konan Régine, Lucy Paintain, Catherine Pitt, Touré Amadou, Oga Agbaya Serge, Yavo William

### 799

# Category:

Chemoprevention

THE CHALLENGES OF INFANT-BASED PREVENTIVE CHEMOTHERAPY STRATEGIES FOR CONTROL OF MALARIA IN CHILDREN UNDER 5 YEARS OLD: A PhD research protocol

Michèle Loirette Simo Simo, Yaoundé-Cameroon

#### 800

# Category:

Vector Biology and Control

Shifting the paradigm on entomological surveillance

Edward Thomsen, Mercy Opiyo, Steven Gowelo, Elodie Vajda, Allison Tatarsky, Neil Lobo

# 801

# Category:

Vector Biology and Control

Digitization of the 2023 mass distribution of Long Lasting Treated Nets (LLINs) "A Pilot Study of six Districts in Zambia"

Japhet Chiwaula, Ketty Ndhlovu, Reuben, Edwin Mteba, Dingani Chinula, Chris Lungu, Belendia Serda, Mercy Ingwe, Ignatius Banda, Isaac Mwase, Busiku Hamainza

# 802

#### Category:

Vector Biology and Control

# Detangling the interaction between Microsporidia MBinfected mosquitoes and its global microbiome

Anne Wairimu, Edward Makhulu, Fidel Gabriel, Rehemah Gwokyalya, Steven Sinkins and Jeremy Herren

# 803

# Category:

Vector Biology and Control

Field investigation of the implications of insecticide resistance on malaria control and transmission

Nzuemi Auriane, Pierre F. Suh, Fomena Abraham, Wondji Charles, Ndo Cyrille

# 804

# Category:

Vector Biology and Control

Comparative evaluation of indoor and outdoor malaria transmission by Anopheles gambiae s.l in Porto-Novo district: What are the implications for vector control?

Keller Alphonse Konkon, Germain Gil Padonou, Mahouton David Zoungbédji, Albert Sourou Salako, Lamine Baba-Moussa, Martin Codjo Akogbéto

# 805

# Category:

Vector Biology and Control

Investigating the role of insect-specific flaviviruses (IS-FVs) in arbovirus transmission blocking in mosquitoes
Dickens Ondifu, Joseph Njuguna, Jandouwe Villinger

# 806

# Category:

Vector Biology and Control

INCREASING CAPACITY FOR EVALUATING TRANS-GENIC MOSQUITOES AS A POPULATION REPLACE-MENT STRATEGY IN MALARIA-ENDEMIC SETTINGS

Fatuma Juma Matwewe

# 807

# Category:

Vector Biology and Control

Field investigation of the implications of insecticide resistance on malaria control and transmission

Nzuemi Auriane, Pierre F. Suh, Fomena Abraham, Wondji Charles, Ndo Cyrille

# 808

# Category:

Vector Biology and Control

Acoustically induced swarming in natural Anopheles coluzzii using mobile phones

Charles Nignan, William Tse, Simon Peguewinde Sawadogo, Olivier Gnankine, Roch Kounbobr Dabiré, Quentin Mark Benedict, Frédéric Tripet, Zsuzsa Marka, Abdoulaye Diabaté, Szabolcs Marka

### 809

# Category:

Vector Biology and Control

Local adaptation and colonization are potential factors affecting sexual competitiveness and mating choice in Anopheles coluzzii populations

Charles Nignan, Bèwadéyir Serge Poda, Simon Péguédwindé Sawadogo, Hamidou Maïga, Kounbobr Roch Dabiré, Olivier Gnankine, Frédéric Tripet, Olivier Roux, Abdoulaye Diabaté

# 810

# Category:

Vector Biology and Control

Distribution of secondary malaria vectors and transmission dynamics of Plasmodium spp. in South-West region, Burkina Faso

Ngaffo K. Lionelle; Soma D. Dieudonné; Hien S. Aristide; Maiga Samina; Karama O. Delphine; Namountougou Moussa; Etang D. Josiane; Dabirìä K. Roch

# 811

# Category:

Vector Biology and Control

Barriers and Facilitators of Insecticide Treated Nets in Ghana: A Systematic Review of Available Evidence, 2022

Christian Atta Obeng, Otubea Akrofi, George Asumah, Delphine Mensah, Stephen Appiah, Joel Narh, Nana Yaw Peprah, Chris Guure, Keziah Laurencia Malm

# 812

# Category:

Vector Biology and Control

Grande efficacité du larvicide Vectomax®G contre les larves d'Aedes aegypti et d'Aedes albopictus en conditions semi-naturelles à Yaoundé, Cameroun.

Fongang-Tankou Juvenal Cruz, Djiappi-Tchamen Borel, Nchoutpouen Elysée, Awono-Ambene Parfait, Mony Ruth, Antonio-Nkondjio Christophe

# 813

# Category:

Vector Biology and Control

Larvicidal Activity of Chemically Synthesized Silver Nanoparticles Against susceptible and resistant stream of Anopheles coluzzii in Burkina Faso

Armel J. Lingani, Abdoulaye Barry, Abdoulaye Diabate, Hamidou Maiga

# 814

# Category:

## Vector Biology and Control

Assessing the potential of plastic waste in promoting incidence of medically important mosquito species in Ndirande township, Malawi.

Kestern Mkoola

#### 815

# Category:

Vector Biology and Control

Relationship between the use of vector control methods on malaria parasitemia in children under five years of age in the health district of Houndé in Burkina Faso

Wend Kouni Charles Zoungrana, Romaric Oscar Zerbo, Alassane Haro, Abdoul Aziz Sienou, Issaka Zongo, Jean Bosco Ouédraogo

# 816

# Category:

Vector Biology and Control

Evaluation of passive cooling options and vector proofing for indoor heat reduction and mosquito control in western Kenya

Bernard Abong'o, Teresa Bange, Vincent Moshi, Jacob Simwero, Jane Otima, Daniel Kwaro, Martina Anna Maggioni, Eric Ochomo

# 817

# Category:

Vector Biology and Control

Current and future opportunities of autodissemination of pyriproxyfen approach for malaria vector control in urban and rural Africa

Augustino Thabiti Mmbaga, Dickson Wilson Lwetoijera

#### R18

# Category:

Vector Biology and Control

Sterilized malaria vector, Anopheles funestus can autodisseminate sufficient pyriproxyfen to the breeding habitat under semi-field settings

Hamisi J. Kunambi, Halfan Ngowo, Naomi Urio, Amos J. Ngonzi, Institution, Yohana A. Mwalugelo, Mohamed Jumanne, Augustino Mmbaga, Felista S. Tarimo, Joseph Swilla, Fredros Okumu, Dickson Lwetoijera

# 819

# Category:

Vector Biology and Control

The effects of environmental factors on seasonal bionomics of malaria vectors in Burkina Faso.

Roz Taylor, Nombré Appollinaire, Marta Moreno, Alfred Tiono, Isabel Byrne, Moussa Guelbeogo, Chris Drakeley

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### Category:

Vector Biology and Control

Reduced efficacy of PBO-LLINs against malaria vectors in Webuye, Bungoma County, western Kenya.

Samuel Kahindi, Lucy Abel, Judy Mangeni, Andrew Obala, Wendy P Omeara

### 821

### Category:

Vector Biology and Control

Building capacity for enhanced vector control in the Western-Pacific Region

Stephan Karl, Petrina H Johnson, Rachael Farquhar, Michelle Katusele, Rebecca J Vinit, Nale Marak, Paul Daly, Fred Yeomans, Jason Richardson, Leo S Makita, Tim Freeman, Maria Ome-Kaius, Leanne J Robinson, Moses Laman

# 822

#### Category:

Vector Biology and Control

Mosquitocidal properties of isoxazoline derivatives afoxolaner, lotilaner and fluralaner against Aedes and Anopheline species

Moussa W. Guelbeogo, Harouna Soré, Soumanaba Zongo, Judith M. Bolscher, Adama Gansane, Teun Bousema, Koen J. Dechering, Katharine A

#### 823

# Category:

Vector Biology and Control

Current and future opportunities of autodissemination of pyriproxyfen approach for malaria vector control in urban and rural Africa

Augustino Thabiti Mmbaga, Dickson Wilson Lwetoijera

# 824

#### Category:

Vector Biology and Control

Genes Introgression and reproductive isolation between An. coluzzii and An. gambiae populations from a hybrid zone of Senegal Senegal.

Oumou Kalsom Gueye, Abdoulaye Niang, Mouhamed Bassir Faye, Lassana Konaté, Ibrahima Dia, Charles Wondji, Abdoulaye Diabaté, Oumar Gaye, Ousmane Faye, El Hadji Amadou Niang, Frederic Tripet

# 825

# Category:

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Phytomedicines, Pharmacology and Drug Development

l'avaluation in vitro des propriétés antiplasmodiales et cytotoxiques des extraits de picralima nitida (Apocynacea) et de Terminalia glaucescens (Combretaceae)

Sandrine Christelle Mamno, Maurice Boda, Narcisse Hervé Bayaga, Esther Del Florence Moni Ndedi, Mariscal Brice Tchat Tali, Darline Dise, Audrey Marcelle Dipita Bofia Onanena, Mélissa Djiboueng Ngouega, Fabrice Boyom Fekam, Joseph Ngoupayo

#### 826

# Category:

Phytomedicines, Pharmacology and Drug Development

ASSESSING THE INHIBITORY ACTIVITY OF SELECTED HERBAL ANTIMALARIAL DRUGS IN GHANAIAN COMMUNITY

Honyo, Enyonam Monia, Acquah, Festus Kojo, Arkor Debrah, Blesslyn Esther, Nsiah, Yirenkyiwaa Eunice, Awudzi Ernestina, Amoah Linda Eva, Futagbi Godfred

# 827

# Category:

Phytomedicines, Pharmacology and Drug Development

Preliminary data from the ethnobotanical survey and extraction of some plants used to treat the symptoms of malaria in four provinces of Gabon

Nya Paho J. M, Bourobou Bourobou H. P., Mawili Mboumba D. P., Souza A.

# 828

#### Category:

Phytomedicines, Pharmacology and Drug Development

CYTOTOXICITY LEVEL and ANTIOXIDIZING EFFECT OF TWO PLANTS EXTRACTS WITH STRONG ANTIMALARIAL ACTIVITY

Tano K.D., Koffi A.J., Rasmane N.A.K., Loua M., Koffi A.F., Yavo W.

# 829

# Category:

Insecticide Resistance

Rapid evolution of insecticide resistance and patterns of pesticides usage in agriculture in the city of Yaoundé, Cameroon

Nadège Sonhafouo-Chiana, Leslie Diane Nkahe, Edmond Kopya, Parfait Herman Awono-Ambene, Samuel Wanji, Charles Sinclair Wondji, Christophe Antonio-Nkondjio

# 830

# Category:

Insecticide Resistance

SUSCEPTIBILITY OF Anopheles gambiae s.I TO COM-MONLY USED INSECTICIDES FOR CONTROLLING MOSQUITO VECTORS IN TEREGO AND MARACHA DISTRICTS IN THE WEST NILE REGION OF UGANDA.

Kiwanuka Marvious, Akite Perpetra, Mawejje Henry Ddumba

# 831

### Category:

Insecticide Resistance

Malaria vector surveillance across 30 sentinel sites for informed decision making towards malaria elimination in Ghana

Otubea Owusu Akrofi, Christian Atta-Obeng, Ernest Boampong, Kwadwo Frempong, Andy Asafu-Adjaye, Sylvester Coleman, Victor Asoala, Samuel Asiedu, Kwame Desewu, Ignatius Williams, Keziah L. Malm, Samuel K. Dadzie

# 832

## Category:

Insecticide Resistance

Evidence of multiple mechanisms involved in the resistance of An. gambiae s.l. to pyrethroids and DDT in the municipality of Manjo (Cameroon).

Wakam Noubou R. S., Mbida Mbida J. A., Ngaha R., Ngo Hondt O.E., Akono Ntonga P.

# 833

# Category:

Insecticide Resistance

Phenotypic and molecular characterization of intensification of pyrethroid resistance escalation in the African malaria vector Anopheles funestus from four regions in Cameroon-wide

Hervé Raoul Tazokong, Magellan Tchouakui, Paule O. Matuekam Tankeu, Stevia Ntadoun Tchamga, Tatiane Assatse, Steve Valdi Djova, Gadji Mahamat, Benjamin D. Menze, Ebai Terence, Micareme Tchoupo, Leon M. J. Mugenzi, Onana Boyomo, Charles S. Wondji

# 834

# Category:

Insecticide Resistance

LARVICIDAL ACTIVITY OF THREE PLANT EXTRACTS
ON Anopheles gambiae s.l. AND THEIR ACUTE ORAL
TOXICITY ON WISTAR RATS

Chi Tchampo Fru, Metoh Theresia Njuabe, Soh Desire, Herman Parfait Awono Ambene

# 835

# Category:

Insecticide Resistance

Systematic review and meta-analysis of a randomized controlled trials on Effectiveness and Efficacy of pyriproxyfen, chlorfenapyr, and piperonyl butoxide long-lasting insecticidal nets (LLINs) with pyrethroid-only LLINs for malaria control in Sub-Saharan Africa countries

Dereje Bayissa Demissie , Getahun Fetensa Hirko

# 836

### Category:

Implementation Science and Health systems

Assessing the knowledge, attitudes and practices among health care students at university of Rwanda towards malaria prevention and eradication in Rwanda Darius Benimana, Methode Yusufu Abdoulkhalim

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#### Category:

Implementation Science and Health systems

How, why, and under what circumstances do supportive supervision programs improve malaria case management?

Jessie K. Hamon, Fatuma Manzi, Mena K. Agbodjavou, Christian Agossou, Christelle Boyi-Hounsou, Jean-Paul Dossou, Jenna Hoyt, August Kuwawenaruwa, Yusufu Kionga, Abdunoor M. Kabanywanyi, Jayne Webster

# 838

# Category:

Implementation Science and Health systems

Evaluating a Malaria Mass Drug Administration in Mozambique: Mixed-Methods Analysis of Operational Performance

#### **Authors:**

Laura Fuente-Soro, Maria Tusell, Jacopo Vecchio, Amancio Nhangave, Khalid Bapì, Christina Riley, Mércia Dimene, Samira Sibindy, Baltazar Candrinho, Pedro Aide, Caterina Guinovart

# 839

#### Category:

Implementation Science and Health systems

Impact of access to multi-level health care on potential productive years of life lost due to malaria in Uganda Authors:

Simon P. Kigozi, Ruth N. Kigozi, Victor Alegana, Emanuele Giorgi, Benn Sartorius, Chris Drakeley, Adoke Yeka

# 840

#### Category:

Implementation Science and Health systems

Assessment of health system factors affecting access and delivery of IPTp-SP and ITN to pregnant women attending ANC clinics in Ghana and Cameroon

# **Authors:**

Virtue Fiawokome De-Gaulle, Wilfred Mbacham, Orish Verner, Pascal Magnussen

# 841

### Category:

Implementation Science and Health systems

From Grassroots to Global: Lessons from the Zero Malaria Starts with Me campaign 2014-2024

# **Authors:**

Mael Ba

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# 171

# Category:

Vector Biology and Control

Biodiversity of natural bacterial microbiota in the primary malaria vector Anopheles gambiae

# **Authors:**

Dyane Nanmédé, Laurette Djossou, Wassiyath A. Moussé and Luc S. Djogbénou

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