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**Institut de Recherche
pour le Développement
FRANCE**

French National Research Institute for Sustainable Development

“Advances in surveillance and control methods for *Aedes*-borne diseases and urban vectors”

*ino***VEC**



**International
Conference**

August 26-28, 2024
Dar es Salaam, Tanzania



Co-funded by
the European Union

International conference on advances in surveillance and control methods for *Aedes*-borne diseases and urban vectors

1. Background

Over the last decades, arboviral diseases transmitted by mosquitoes, such as dengue, Zika, chikungunya and yellow fever, have seen a significant rise in prevalence and severity. From 2000 to 2019, the [World Health Organization \(WHO\)](#) reported a ten-fold increase in dengue reported cases worldwide, reaching 5.2 millions. In 2023, there were over 5 million dengue cases and > 5000 related deaths across 80 countries/territories marking it as a historically alarming year. According to the WHO, Africa is among the top 4 regions most affected by dengue, with 171,991 cases and 753 deaths in 2023, highlighting the urgent need to provide adequate response to this new threat. While the WHO has prequalified Dengue vaccine, the availability of effective vaccines and treatments remains limited. Consequently, vector control remains the cornerstone in the prevention and control of *Aedes* transmitted diseases. Unfortunately, the resurgence of dengue worldwide highlights the limitations of current vector control tools in preventing epidemics. Consequently, new affordable, scalable and community-based vector control measures are urgently needed to tackle *Aedes*-borne diseases and urban mosquito vectors (including *Aedes spp.* and *Anopheles stephensi*) to contribute to better health and human well-being.

2. Scope of the conference

The international conference jointly organized by [Ifakara Health Institute \(IHI\)](#) and [Institut de Recherche pour le Développement \(IRD\)](#) with the support of the European [INOVEC project](#) (see Section 7) will serve as a forum of exchanges within the scientific community including scientists, students, and academia as well as representatives from public health sectors, stakeholders, donor agencies, industry and international organizations engaged in controlling vector-borne diseases (VBDs). They will serve to review evidence, create new links, mobilize resources, and facilitate basic and translational research. The overarching goal is to contribute to the reduction of the burden of vector borne diseases. The conference will be structured around 3 themes as outlined in Section 3 (table 1).

3. Objectives of the Conference

- i) To facilitate knowledge exchange and promote collaborative research and innovation for the surveillance and control of *Aedes* and *Aedes*-borne diseases (ABDs) in Africa and beyond;
- ii) To review the performances of new tools, approaches and technologies for *Aedes* mosquito control and identify gaps and priorities;

iii) To promote inter-sectoral and international collaborations and facilitate discussions for actionable outcomes for improved public health measures against mosquito borne diseases.

4. Format of the conference

The conference will be held at the esteemed [Four Points by Sheraton Dar es Salaam New Africa](#), Tanzania, with 2.5 days of scientific presentations. The conference is organized around **three scientific themes**: the Biology and Ecology of Aedes Vectors, Integrated Approaches to Vector Control, and Innovation in Vector Control. A [“Call for abstract”](#) is opened to ensure broad participation and representation of speakers. Seven **keynote speakers** from different regions will share their knowledge and expertise in the field. There will be a **session dedicated to PhD Students and Postdocs** to allow early stage researchers to present their work and find new opportunities to stimulate their careers. A **turbo talk session** will be organized also to allow selected participants to briefly present their posters (3’ per poster; 10 presentations). Finally an **industry session** will be organized to allow companies and start-ups involved in R&D to present the latest advances in vector control tools and technologies. The conference will be free of charge but registration is compulsory and under approval of conference organizers.

5. Conference Themes

SN	THEME	DESCRIPTION	RELATED RESEARCH ACTIVITIES/TOPICS
1	Biology and Ecology of <i>Aedes</i> Vectors	This theme will focus on biological and ecological aspects of <i>Aedes</i> vectors. It aims to enhance understanding of the vectors' behavior and habitat, providing a foundation for more targeted and efficient control measures.	<p>Behavioral ecology of <i>Aedes</i> vectors (Host-seeking behavior, feeding preferences and patterns, daily activity and resting behavior);</p> <p>Reproductive biology (Breeding habitats and preferences, reproductive cycles and strategies, factors influencing reproductive success);</p> <p>Vector competence (<i>Aedes</i> species' ability to transmit specific pathogens, factors influencing vector competence, and evolutionary aspects of vector competence);</p> <p>Impact of environmental factors (Influence of climate on <i>Aedes</i> vector distribution and abundance, effects of urbanization on breeding sites, ecological impacts of anthropogenic activities on <i>Aedes</i> habitats);</p> <p>Population dynamics and genetics (Insecticide resistance, population structure and dynamics of <i>Aedes</i> vectors, genetic diversity and gene flow, and evolutionary aspects of <i>Aedes</i> populations);</p> <p>Interactions with other species (<i>Aedes</i> interactions with other mosquito species, predatory relationships and natural enemies, and impact on local ecosystems);</p> <p>Spatial ecology and movement patterns (movement patterns of <i>Aedes</i> mosquitoes, dispersal capabilities and range, and spatial analysis of <i>Aedes</i> population distribution);</p> <p>Adaptations to changing environments (<i>Aedes</i> vectors' adaptability to urbanization and climate change, evolutionary responses to environmental shifts, and implications for vector control strategies).</p>
2	Integrated Approaches to Vector Control	This theme explores integrated approaches to vector control. It encompasses discussions on strategies that address various disease vectors,	<p>Multi-disease vector control strategies (development and implementation of strategies addressing multiple disease vectors and integrated approaches for controlling <i>Aedes</i> mosquitoes, <i>An. stephensi</i>, and other vectors simultaneously);</p> <p>Multi-sectoral collaboration (collaboration between health and non-health sectors in vector</p>

		<p>including <i>Aedes</i> mosquitoes and <i>An. Stephensi</i>.</p>	<p>control, and involvement of agriculture, environmental, and other relevant sectors in integrated approaches);</p> <p>Community Engagement and Empowerment (involvement of communities in integrated vector control programs, empowering communities to participate in disease prevention and control);</p> <p>Surveillance and monitoring integration (integration of surveillance systems for different disease vectors, monitoring tools and strategies that provide a holistic view of vector populations);</p> <p>Capacity building and training (training programs for healthcare workers, community members, and policymakers);</p> <p>Policy and governance (development of policies supporting integrated vector control and Governance structures that facilitate collaboration between different sectors).</p>
3	<p>Innovation in Vector Control</p>	<p>This theme underscores the value of incorporating innovative and citizen-based science approaches, novel technologies, and strategies for vector surveillance and control, acknowledging the contributions of both the private sector and research institutions.</p>	<p>Technological advances in vector surveillance (latest technologies in vector surveillance, exploring how data analytics and artificial intelligence can enhance the efficiency of surveillance efforts);</p> <p>Novel strategies for vector control (examining innovative approaches to vector control beyond traditional methods, discussing the use of biological control agents, genetic modification, and novel pesticides);</p> <p>Public-private partnerships in vector management (discussing the role of industry in the research, production, and distribution of vector control tools);</p> <p>Community engagement and behavioural interventions (exploring strategies to engage communities in vector control efforts. Discussing the importance of understanding and influencing human behavior to enhance the effectiveness of vector control programs).</p>

6. Organization Committees

6.1 Scientific Committee

Emmanuel Kaindoa (Chair)	IHI, Tanzania	ekaindoa@ihi.or.tz
Fredros Okumu	IHI, Tanzania	fredros@ihi.or.tz
Halfan Ngowo	IHI, Tanzania	hngowo@ihi.or.tz
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Irene Moshi	IHI, Tanzania	imoshi@ihi.or.tz
Frederic Bartumeus	CSIC/CEAB, Spain	fbartu@ceab.csic.es

6.2 Logistic Committee (Bureau)

Rukiyah Mohammad (Chair)	IHI, Tanzania	rmohammad@ihi.or.tz
Victoria Franco (Co-chair)	IRD, France	victoria.franco@ird.fr
Sheikha Salum	IHI, Tanzania	ssalum@ihi.or.tz
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7. The INOVEC project

[The INOVEC project](#) proposes to build a large pan-European, cross-sectoral and multidisciplinary network to develop, optimize and promote integrated approaches and innovative tools for the surveillance and control of mosquito vectors of emerging arboviruses. INOVEC will gather 21 academic and non-academic institutions specialized in vector biology, social sciences and product development to stimulate basic and applied research, strengthen capacities, promote career development and facilitate knowledge and technology transfer to countries at increasing risk of arboviral diseases.

INOVEC has the commitment to coordinate and integrate sectors in order to maximize impact, raise awareness of policy makers and stakeholders, and participate in the improvement of innovation potential at the European and global level. INOVEC will contribute to international efforts to improve global health and human well-being by reducing the burden of vector borne diseases.

 [INOVEC Project](#)

 [@inovec_project](#)

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8. Information Sheet

ITEM	DETAIL	REMARKS
City, Country	Dar es Salaam, Tanzania	The International Conference on Advance in Surveillance and Control Methods for <i>Aedes</i> -borne Diseases and urban vectors
Venue	Four Points by Sheraton Dar es Salaam New Africa	Monday 26 – Thursday 28 August 2024
Hotels	<ul style="list-style-type: none"> • Four Points by Sheraton Dar es Salaam New Africa • Holiday Inn Hotel • Tiffany Diamond Hotel • Golden Tulip Dar City Centre • Johari Rotana Hotel • Onomo Hotel Dar Es Salaam • Hyatt Regency Hotel • Dar Es Salaam Serena Hotel 	These are the recommended hotels which are close to the conference venue. Check-in time is 1 p.m.. Early check-in and late check-out can be requested to the respective hotels. Kindly share your check-in timings with the organizing team and confirm checkout times upon arrival.
Weather	Weather indications for the duration of the stay	Link: https://www.timeanddate.com/weather/tanzania/dar-essalaam/ext

<p>Safety and Security</p>		<p>The Four Point by Sheraton DarEs Salaam New Africa is located Right in the heart of Tanzania’s capital city, with views of Dar es Salaam Harbour and close to the Central Business District. Four Points by Sheraton Dar es Salaam New Africa Hotel is the premier Conference and meeting venue in Tanzania. Situated near the Zanzibar ferry, the hotel is the perfect starting point for everyone who wants to explore the city and beyond. As in many big cities, please be aware of yourself and your surroundings and limit solo travel during nighttime hours.</p>
<p>TRAVEL</p>		
<p>Visas Guidelines</p>		<p>There are two options to obtain a Tanzania Visa. These are Online Visa Platform and On-Arrival Visa Platform. This means, after introduction of Online Visa System, visas are no longer issued at the Embassies;</p> <p>The On-Arrival Visa facility may only be used by applicants whose nationalities do not fall under Referral Visa category. Despite having the On Arrival Visa facility, it is recommended for all applicants to use online Visa platform;</p> <p>Applicants who wish to use on arrival Visa facility are required to counter check If their nationalities are not in the list of countries which fall under Referral Visa category;</p> <p>Online Visa applicants are advised to make their applications through the Official Tanzania Immigration website (www.immigration.go.tz) ONLY or directly through the link: visa.immigration.go.tz and Not through any other links;</p> <p>List Of Countries Whose Nationals Require Referral Visa. Afghanistan, Azerbaijan, Bangladesh, Chad, Djibouti, Eritrea, Equatorial Guinea, Iran, Iraq, Kazakhstan Republic, Kyrgyz Republic (Kyrgyzstan), Lebanon, Mali, Mauritania, Niger, Nigeria, Pakistan, Palestine, Senegal, Somalia, Sri Lanka, Sierra Leone, Syria, Tajikistan, Turkmenistan, Uzbekist, Yemen. Stateless persons or persons with refugee status.</p> <p>For countries which require Referral Visa, Visa applications will be done by the IHI events team. All other participants are requested to apply online. Payments can be made upon arrival.</p> <p>For those applying for an e-visa, please use this link: https://eservices.immigration.go.tz/visa/</p> <p>If you need a visa letter or require an invitation letter, please send an email to event@ihi.or.tz copy; rmohammad@ihi.or.tz; ssalum@ihi.or.tz; aherman@ihi.or.tz with the request and a copy of your passport</p>

		details.
Important Information	Yellow Fever	<p>1. Travelers coming from countries which are NOT IN THE LIST BELOW will not be subjected to yellow fever screening and vaccination at points of entry upon arrival.</p> <p>2. Travelers coming from yellow fever endemic countries who will not produce proof of yellow fever vaccination may be refused entry or be vaccinated and kept under close public health observation for not more than 10 days.</p> <p>3. The cost of yellow fever vaccination is 50 USD for foreigners and Tsh. 30,000 for residents and East African community members. Government receipt shall be issued for any vaccination charges paid.</p> <p>LIST OF COUNTRIES FOR WHICH VALID CERTIFICATE OF VACCINATION AGAINST YELLOW FEVER IS REQUIRED FOR ENTRY IN TANZANIA.</p> <ul style="list-style-type: none"> Countries from Africa Angola, Benin, Burkina Faso, Burundi, Cameroon, Central Africa Republic, Chad, Congo, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, South Sudan, Sudan, Togo, Uganda. Countries from South America Argentina, Bolivia (Plurinational State of), Brazil, Colombia (Including Galapagos Islands), Ecuador, French Guiana, Guyana, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Venezuela (Republic of Bolivarian). <p>Source WHO, International Health and Travel, Annex 1 Update as of 3 January 2023</p>
Airport transport service	Julius Nyerere International Airport is 28 km from the hotel	<p>Time: About 30 minutes travel time to/from the airport</p> <p>Distance: 7.45 miles/ 12KM Ground transportation service provider:</p> <ul style="list-style-type: none"> USD 35 – 45 per person travelling alone (one way) // USD 90-100 for a mini-van (cost can be shared if travelling more than one person)

		<ul style="list-style-type: none"> • The prepared Driver will meet you at the airport arrivals area outside the terminal after you collect any checked luggage. The designated driver will be holding a placard with “IFAKARA HEALTH INSTITUTE - INOVEC” written for your ease of identification. <i>But for those coming to the conference one day before the conference and leaving a day after the conference. We will provide transport to and from the airport.</i> • Participants are to bear their airport transfer costs payable in cash to the driver. • In case you do not find a driver waiting, contact Rukiyah Mohammad, Sheikha Salum or Adeline Herman their mobile number: are +255656676445, +255769016195 and +255754378735 respectively.
Registration	Day 1, Monday 26, August	Registration will take place between 7:00-9:00 am . Please register, and collect your name tag and place card from the events team outside of the main meeting room. The first session will begin promptly at 8: am on Monday 26 August.
Transport	To neighboring locations for personal errands	You may choose to use hotel tax services or ask IHI events to organize at the participant’s cost.
Special needs	Needs outside the normal program schedule	Participants should alert Rukiyah, Sheikha and Adeline in case of any special needs/allergy. Contact information is provided below.
Ethnicity night	On Tuesday 27 August, dinner will be an ethnic night	Participants are invited to carry an ethnic outfit from their ethnicity to wear for the ethnic dinner. This is with the spirit of us from different backgrounds, coming together to bridge research, innovation, and collaboration
Dress code	Tuesday 26 August – Thursday 28 August Evenings	Participants are invited to dress in outfits suitable for day-long meetings. Generally, Dar es Salaam is a hot city but participants are encouraged to carry some warm clothing, especially for the evenings.
ACTIVITIES		

Shopping	Aura Mall	A shopping mall 10km away with a wide variety of shops that cater for international and local tastes in all social aspects; numerous banks. Link: https://mlimanicity.co.tz/
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Key Contact Details

IHI Events team: For the visa, transport and hotel-related needs, the meeting, agenda, and admin-related needs:

Rukiyah Mohammad - +255656676445, **Sheikha Salum** - +255769016195 & **Adeline Herman** - +255754378735 (**Emmanuel Kaindoa** - +255 713 947 785 if you cannot reach either Rukiyah, Sheikha or Adeline.)

9. Sponsorship

We acknowledge with appreciation all the partners and sponsors contributing to this event.

OUR PARTNERS (Provisional)



OUR SPONSORS (Provisional)

