

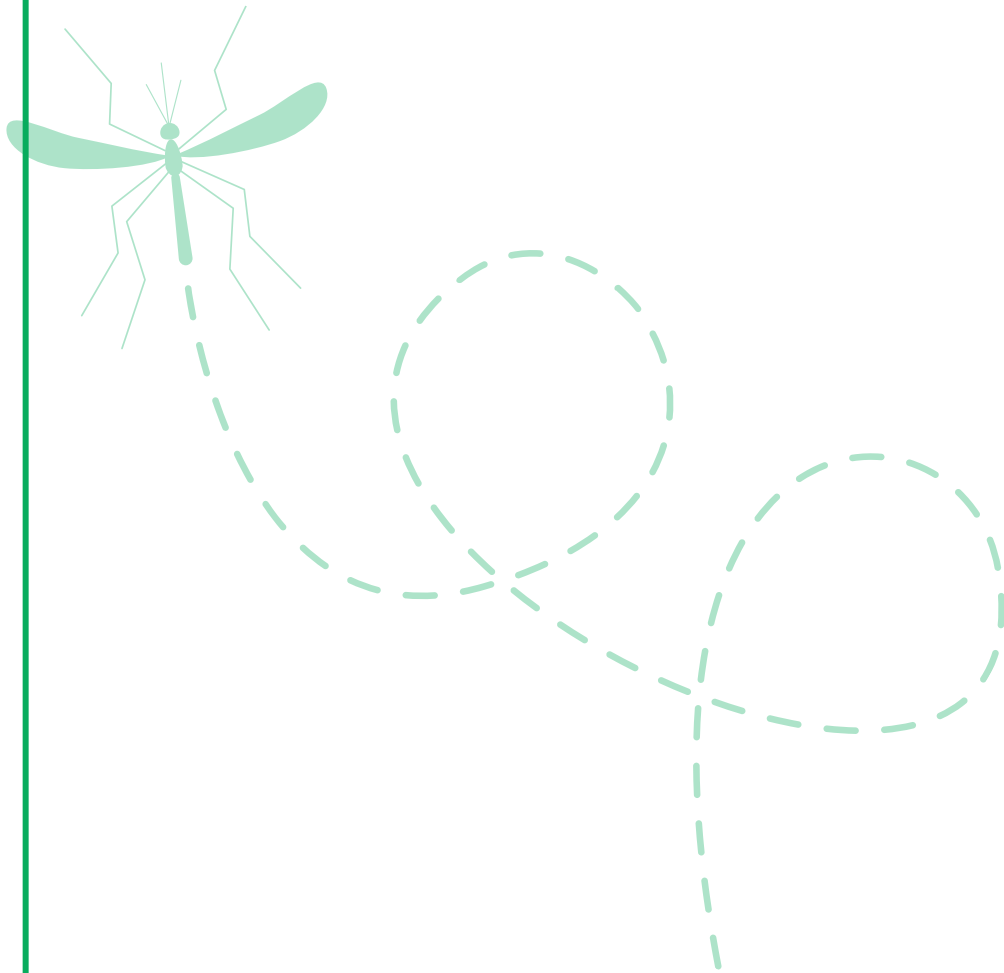
# **IFAKARA HEALTH INSTITUTE**

## **RESEARCH SITES FACILITIES**

To learn more about what we do, please visit our website or scan the QR code below.



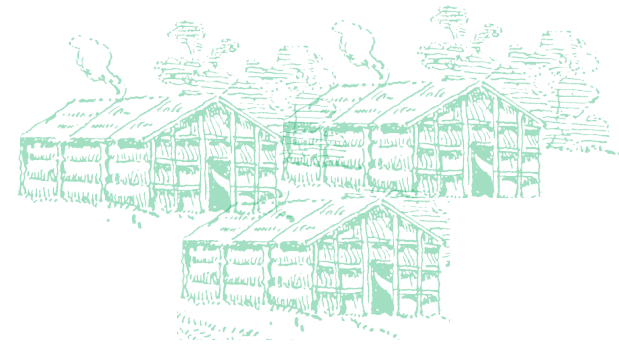
**Ifakara &  
Bagamoyo**



## Lupiro Experimental Huts



These huts are used to more realistically monitor behavioural and physiological responses of wild, free-flying disease-transmitting mosquitoes, including the African malaria vectors of the species complexes *Anopheles gambiae* and *Anopheles funestus*, to indoor vector control-technologies including ITNs and IRS.





## VectorSphere



The VectorSphere is a dedicated laboratory for mosquito biology and control situated in Ifakara. The facility is equipped with different tools that allow a wide range of entomological experiments to be conducted e.g. infrared spectrometer, climate chambers, olfactometer, videographic chamber, e.t.c. Within this facility. we have colonies of malaria and non-malaria vectors. Our colonies are pathogen-free and are maintained inside controlled rooms with restricted access.



## Mosquito City



This is one of the largest set of semi-field facilities for studying the ecology and control of mosquitoes. They are designed to mimic the natural ecosystem of mosquitoes in disease endemic communities and are used for both research and training.

Branded as 'Mosquito City,' the semi-field systems are located 5km north of Ifakara Town, in an area of 105 acres. A fully equipped electronic climate station has also been installed within the Mosquito City to monitor meteorological changes,





## CDCI + Heart & Lung Clinic



The Chronic Disease Clinic in Ifakara (CDCI) is part of St. Francis Referral Hospital (SFRH) in Ifakara, Tanzania. Since 2005, CDCI has provided HIV care to patients in the Kilombero, Ulanga, and Malinyi districts following national guidelines.

The Else Kröner Center for Heart and Lung Diseases (EKC-HLDC), established in 2021, focuses on providing care for chronic heart and lung conditions and training doctors in chronic disease management.



## Vector Control Innovation Booth



The Vector Control Innovation Booth aims to showcase cutting-edge solutions for malaria prevention and control, including novel products such as Paliga chairs, mozzie bags, eave ribbons, and other innovative interventions. This booth is designed to highlight advancements in vector control strategies that extend beyond traditional methods and promote community engagement in malaria elimination efforts.

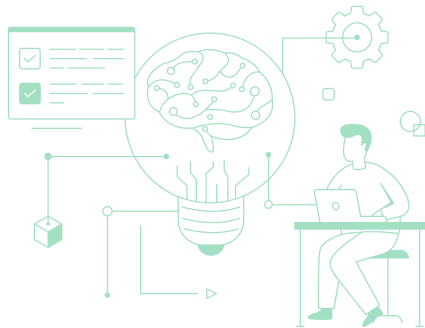




## Innovation Hub



The Ifakara Innovation Hub, based in Ifakara, is a community of inspiration, ideation and collaboration for solution development. It expands the innovation ecosystem to rural Tanzania by looking realistically at the trade-offs between knowledge exploration i.e., research and exploitation of technological innovation (development and testing products) and establishing innovations compatible with the existing social, economic and administrative systems.



## Laboratories



At Ifakara laboratory, we specialize in advanced research and diagnostics across several critical areas: mosquito research, including molecular identification and vector control; HIV diagnostics with precise CD4 counting and viral load detection; HPV molecular diagnostics for early detection and prevention; TB detection and mutation analysis using the GeneXpert machine; comprehensive biochemical testing for liver and kidney function; accurate malaria detection via microscopy.



**Bagamoyo**



## Laboratories



Our BSL II labs are well-equipped laboratories with basic and state-of the art equipments, located in IHI Bagamoyo at the premises of Bagamoyo District Hospital and Kingani Clinical Trial Facility. The laboratory is ISO 15189:2012 Accredited for Medical laboratory testing in Clinical Chemistry, Hematology and Parasitology awarded by Southern African Development Community Accreditation Services (SADCAS)



## VCPTU's Semi-field Bioassays



The VCPTU's Semi-field bioassays include 30 chambers of Ifakara Ambient Chamber Test (I-ACT), and a Semi-field biodome with four chambers where next generation ITNs, IRS, ATSB, traps and spatial repellents as well as methodologies that measure beyond known endpoints for these vector control interventions.





## VCPTU's Insectary



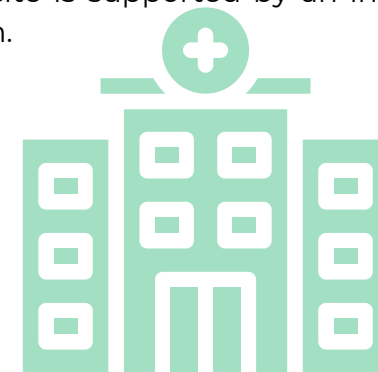
The VCPTU's Insectary produces and hosts over 5 million disease free mosquitoes per year that are used in evaluating vector control tools.



## Clinical Trials and Facility



Located on the outskirts of Bagamoyo, Kingani Clinical Trials Facility (CTF), widely known by the name of 'Kingani Hospital,' has a track record in designing and conducting Phase I to Phase III GCP-compliant clinical studies, as well as analysis and reporting for regulatory review and licensure. The site is supported by an institutional quality assurance team.



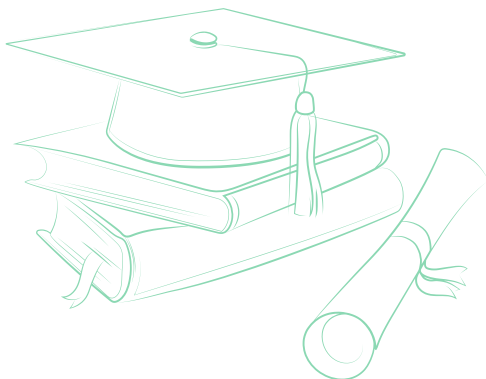


## Training Research Center



The center coordinates all training and capacity building activities which include an accredited MScPHR program, and skill transfer short courses in different scientific disciplines based on key IHI research areas.

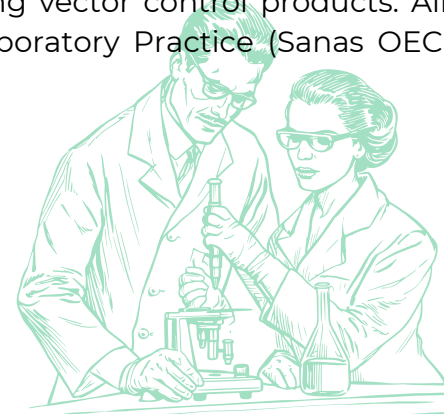
Training activities also include co-supervision of masters, doctoral and post-doctoral fellows from partner universities.



## VCPTU's Insecticide Testing Facility (ITF)



The VCPTU-ITF is equipped with a laboratory and field ITN washing and testing area including an IRS testing laboratory where different substrate blocks are sprayed using a calibrated track sprayer or hand sprayed and stored in a climate controlled block room. The testing laboratories does over 10,000 cone bioassays and 1,000 Tunnel tests evaluating vector control products. All these done under Good Laboratory Practice (Sanas OECD GLP accredited (G0033)).





## Transmission Zero

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Transmission Zero is an international research programme that involves partners from Tanzania including the Ifakara Health Institute and the National Institute of Medical Research as well as at researchers from Imperial College London in the United Kingdom. We believe that malaria eradication is possible and that the technologies to achieve it are already here now.

