

Metabiota Field Office – Cameroon

Metabiota is a US-based public health and research company whose mission is to identify pathogen risks and mitigate the clinical, social, and economic impact of outbreaks and epidemics, supporting global health security and sustainable development. Our Central African headquarters is located in Yaoundé, Cameroon, managed under the leadership of local national experts, and has been operating in the region for the past two decades as a leading public health



prevention and research organization. Metabiota has been implementing projects across Central Africa since its founding, including over \$38.5M in USG grants and contracts executed over the past ten years. Our Cameroon office has long-lasting collaborative agreements with the Cameroon Ministry of Health; Ministry of Defense; Ministry of Livestock and Animal Husbandry; Ministry of Environment, Nature Protection, and Sustainable Development; Ministry of Forestry and Wildlife; and Ministry of Scientific Research and Innovation.

Areas of Technical Expertise

- **Global Health Security**, including antimicrobial resistance, biosecurity and biosafety, emergency operations centers, laboratory systems, medical countermeasures and personnel deployment, reporting, surveillance, workforce development, and zoonotic disease
- **Infectious Disease Surveillance** of endemic and outbreak-prone diseases, including HIV and Human Influenza
- **Communicable Disease Prevention and Control** of priority diseases, including HIV, TB, and STIs
- **Viral Discovery** of pathogens of zoonotic potential, including coronaviruses, filoviruses, orthomyxoviruses, poxviruses, and rhabdoviruses
- **Clinical Research** on infectious diseases, including cross-sectional and longitudinal case-control and cohort studies, studying disease pathogenesis as well as novel diagnostics, vaccines, and treatments
- **Health Systems Strengthening** of government health facilities, including continued quality improvement; laboratory renovations and systems strengthening; infection prevention and control (IPC); commodity and supply chain management; and workforce development
- **Social and Behavioral Change** with at-risk populations, including research to identify and characterize social and behavioral drivers of disease emergence and transmission as well as the development and implementation of interventions to mitigate and reduce identified risks
- **Monitoring and Evaluation** of project performance, in order to provide continued quality improvement and data-driven planning and implementation

Military Health Research Center (CRESAR)

Metabiota's Cameroon office and Central African headquarters is hosted at the Military Health Research Center (CRESAR), a Cameroonian-based health research and surveillance center established to monitor emerging and re-emerging public health threats in military and civilian populations. CRESAR was created in early 2000 as part of a partnership between Metabiota and the Cameroon Ministry of Defense, thanks to funding from the US Military's HIV Research Program, the Walter Reed Army Institute of Research,

Johns Hopkins University, the NIH, the Google Foundation, the Skoll Foundations, the French Research Institute for Development, and the CDC.

Over the past twenty years, CRESAR has played an important role in assisting the Cameroon government in preparing for, detecting, and responding to key infectious disease outbreaks, including monkeypox, avian influenza, cholera, rabies, and human and animal influenza. Staffed by civilian and military workforce, CRESAR is a molecular biology and serology laboratory (BSL2) capable of qualitative and quantitative PCR, cloning, ELISA, microscopy, and sequence analysis. The facility has a cryopreservation capacity of 200,000 cryotubes, a 240 kVA backup generator, and an on-site liquid nitrogen plant.

Recent Accomplishments

Covid-19 Outbreak Response

Under a cooperative agreement with CDC, Metabiota has provided critical logistical and technical support to the Cameroon government in its response to the Covid-19 epidemic, including:

1. Logistical support for the training of rapid response teams, referent physicians, and security staff at international checkpoints in response protocols and IPC measures;
2. Logistical and technical contributions to consolidate COVID-19 databases in the Central and Littoral regions and establish a national LNSP database management system for COVID-19 data;
3. Acquisition of laboratory consumables and IT equipment for the MoH and NPHL to conduct site testing, case investigations, and contact tracing in highly infected regions; and
4. Logistical support and participation in the rapid diagnostic tests evaluations and development of a national COVID-19 rapid screening test strategy.

Senior Leadership



Ubald Tamoufe, MPH, MSc
Director for Africa &
Cameroon Resident Representative



Julius Oruh Agbor, MBA, PhD
Senior Finance & Operations Manager



Raphael Medang, MPH, PhD
Senior Program Manager

Select Past Performance (in Cameroon)

- DHAPP – Military Specific HIV/AIDS Prevention, Care, and Treatment Program for PEPFAR Countries – Cameroon (2014-current)
- CDC – Global Health Security Partner Engagement: Expanding Efforts and Strategies to Protect and Improve Public Health Globally (2016-2020)
- USAID – EPT PREDICT 1&2 - Surveillance for Emerging Zoonotic Disease Threats and Behavioral Risk Characterization in High-Risk Communities in Asia and Africa (2009-2020)
- CDC-UCSF – Building Sustainable Long-Term Capacity for the Collection, Use and Dissemination of Strategic Information (SI) in PEPFAR and Global Fund Countries, Cameroon (2018-2019)
- USAID – Continuum of Prevention, Care and Treatment (CoPCT) of HIV/AIDS with Most-at-Risk Populations (CHAMP) in Cameroon (2016-2019)
- AFHSC-GEIS – Influenza and Related Diseases Research in Cameroon (2009-2014)

For more information, please contact info@metabiota.com

Metabiota Field Office – The Democratic Republic of the Congo

Metabiota is a US-based public health and research company whose mission is to identify pathogen risks and mitigate the clinical, social, and economic impact of outbreaks and epidemics, supporting global health security and sustainable development. Metabiota has established itself as a leading public health and research organization in the Central African region, employing local national experts in both the DRC and Cameroon. Our DRC office is hosted in Kinshasa at



the Institut National de la Recherche Biomédicale. Metabiota has been implementing projects across Central Africa since its founding, including over \$38.5M in USG grants and contracts executed over the past ten years.

Areas of Technical Expertise

- **Infectious Disease Surveillance** of endemic and outbreak-prone diseases, including HIV and Ebola Virus Disease
- **Zoonotic Disease Surveillance and Research** to identify potential points of spillover between animals and humans
- **Viral Discovery** of pathogens of zoonotic potential, including coronaviruses, filoviruses, orthomyxoviruses, poxviruses, and rhabdoviruses
- **Outbreak Response** to halt the spread of burgeoning epidemics, including the 2017 and 2018 Ebola virus disease outbreaks and 2016 Yellow Fever outbreak
- **Communicable Disease Prevention and Control** of priority diseases, including HIV, TB, and STIs
- **Health Systems Strengthening** of government health facilities, including continued quality improvement of clinical services; laboratory renovations and systems strengthening; commodity and supply chain management; and workforce development
- **Social and Behavioral Change** with at-risk populations, including research to identify and characterize social and behavioral drivers of disease emergence and transmission as well as the development and implementation of interventions to mitigate and reduce identified risks
- **Monitoring and Evaluation** to assess the performance of projects, institutions and with the goal to improve current and future management of outputs, outcomes and impact

National Biomedical Research Institute (INRB)

Metabiota's DRC office is hosted at the Institut National de la Recherche Biomédicale (INRB) – the DRC Ministry of Health's national biomedical research laboratory headed by Professor Jean-Jacques Muyembe-Tamfum. Since 2009, Metabiota has supported the DRC Government's surveillance, detection, and response to emerging zoonotic threats, training government personnel in field surveillance and laboratory protocols for the detection of viruses of zoonotic potential.

INRB specializes in the identification, prevention, and treatment of infectious diseases and has a complete molecular biology platform, including equipment for standard PCR and ELISA chain analyses, with laboratories dedicated to virology, parasitology, bacteriology, medical entomology, clinical biology, and pathology.

Recent Accomplishments

2018 Ebola Outbreak Response in Equator Province, DRC

After an outbreak of EVD was officially declared in the Bikoro Health zone in May of 2018, Metabiota (as part of the PREDICT consortium) partnered with the DRC Ministry of Health to rapidly respond to the outbreak, providing the following support to end the outbreak:

1. Metabiota established an action plan with the Ministry of Health and immediately worked on analyzing EVD samples at the Institut National de Recherche Biomédicale in Kinshasa, DRC;
2. Metabiota procured and delivered personal protective equipment, a smartcycler, a computer, and two gloveboxes for mobile laboratories and testing facilities;
3. Metabiota supported the deployment of a *K-Plan* mobile lab at the outbreak site; and
4. Metabiota supported and organized national and provincial coordination meetings, engaging partners at all levels of the health system to collectively develop an action plan to address the EVD outbreak.

Senior Leadership



Charles Kumakamba, MD
DRC Country Director



Ubald Tamoufe, MPH, MSc
Director for Africa &
Cameroon Resident Representative

Select Past Performance (in the DRC)

- DHAPP – Community HIV/AIDS Services in the Democratic Republic of the Congo (DRC) Armed Forces (2019-current)
- USAID, EPT PREDICT 1&2 - Surveillance for Emerging Zoonotic Disease Threats and Behavioral Risk Characterization in High-Risk Communities in Asia and Africa (2009-2020)
- DHAPP – Clinical HIV/AIDS Services in the Democratic Republic of the Congo (DRC) Armed Forces (2018-2019)
- DHS S&T – Analysis of Alternatives (AoA) Study on Validation of Animal Models for Viral Hemorrhagic Fever Syndrome Using Acute Human Data (2013-2015)
- DHAPP – Serological Study on HIV in the Congolese Army (2014)

For more information, please contact info@metabiota.com