



**COR-NTD 2015**

**Philadelphia, PA, October 22-23**

### **Breakout Group Summary Report**

This document is intended to capture the key outputs of your breakout discussion, and to be representative of the group as a whole. Please denote your group's topic, presentations and research priorities before the start of the session, and dedicate the latter portion of your session to determining the key discussion points, knowledge gaps and recommended steps. Also, please indicate whether your group's recommendations align with the specified initial priority target. Your report will be shared on the NTD-SC website, and will inform future advisory panel discussions and donor priorities.

#### **Section I**

*To be filled out before the session begins.*

#### **Breakout Topic:**

2E: The Role of Molecular Xenomonitoring

#### **Presentations:**

The role of entomological monitoring for LF and onchocerciasis (Moses Bockarie)  
Monitoring of prevalence of infection in vectors in an era of elimination (Tom Unnasch)  
Point-of-Care Diagnostics for the Detection of Filarial DNA in Infected Mosquitoes (Steve Williams/ Nils Pilotte)  
Molecular Xenomonitoring for Transmission of *Onchocerca volvulus*: The OEPA Experience (Ed Cupp)  
Do we have the right tools for sampling *Culex* mosquitoes? (Ramakrishna Rao)

#### **Research priorities to be discussed:**

- Discuss strategies and tools for vector sampling and processing.
- Discuss the value of vector density and infection indicators for transmission monitoring.
- Review the human and laboratory capacities for high throughput sample processing in endemic countries.
- Discuss the implementation framework and next steps towards recommendations for entomological monitoring.

*Form continues on the next page.*



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## **Section II**

*To be filled out as the session concludes.*

### **What were your group's key discussion points?**

- Alternative sampling tools for Anopheles mosquitoes.
- Laboratory and human capacity for xenomonitoring in Africa.
- Sampling Culex mosquitoes in Asia (Bangladesh and Sri Lanka).
- Entomological monitoring for onchocerciasis in the Americas.
- Current status of xenomonitoring for LF in Africa.
- Sampling culicine mosquitoes in the Americas/Pacific region.
- The value of vector density in transmission assessment.
- The relevance of xenomonitoring in modelling for LF
- implementation framework and operationalization

### **What knowledge gaps (if any) did your group identify?**

- What method and sampling strategy is most appropriate to species/density/endemicity?
- How MX integrates with and complements existing surveillance strategies
- Making MX more accessible to communities and cost-effective to programs
- Identifying endpoints/transmission thresholds
- Entomological mapping of vectors to complement endemicity maps

### **What next steps does your group recommend?**

In addition to the above knowledge gaps, there are a number of operational questions which should be addressed through further consultation, advocacy and research. These include:

- Support for national programs to integrate vector control with MDA, integrate entomological mapping with endemicity mapping, and integrate xenomonitoring with TAS. Strengthen national and district level entomological capacity.
- Guidance is requested on how to design truly random collections, since each trap type is biased towards a certain physiological status or behavior. This includes selection of the most appropriate methodology for the dominant vector, trap placement, minimum density required and the threshold for DNA positive mosquitoes. (provisional threshold is 0.25% for Culex)

**Do your recommended steps align with the research priorities identified on page 1?**

Yes  No