Strategic Agenda for Filoviruses Research and Monitoring (AFIRM)
WHO-AFIRM Strategy Roadmap 2021-2031

Second Meeting, May 17, 2022
Meeting goals

The R&D roadmaps serve as a cardinal framework to underpin strategic goals, research priority areas and activities to accelerate R&D of the medical countermeasures for each of these priority diseases, from basic research through to late-stage development, licensure and early use of products. With WHO leadership and coordination, and using the present methodology as their basis, a series of partners will be identified to develop R&D roadmaps for each of the WHO priority diseases. The figure illustrates the potential public health value that can be derived from a dynamic R&D roadmapping effort and the synergies between each of its components.
# Anticipation: Research priorities to prevent future filovirus outbreaks

**Session 1. Anticipation: Research Priorities to Prevent Future Outbreaks**  
**Chair: Jean-Jacques Muyembe (DRC)**

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<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<td>13:25 – 13:35</td>
<td>Marburg virus ecology</td>
<td>Jon Towner (CDC)</td>
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<td>13:35 – 13:45</td>
<td>Ebolavirus ecology</td>
<td>Vincent Munster (RML)</td>
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<td>13:45 – 13:55</td>
<td>Filovirus persistence and its implications for public health</td>
<td>Gustavo Palacios (Mt. Sinai)</td>
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<td>13:55 – 14:25</td>
<td>Focus Session: Molecular epidemiology</td>
<td>Lisa Hensley (NIH)</td>
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<td>Placide Mbala (DRC)</td>
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<td>Sophie Duraffour (BNITM)</td>
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| 14:25 – 15:30 | Panel session  
Q: What tools are available to predict future outbreaks?  
What research priorities need to be implemented to enhance filovirus outbreak detection?  
What research should be done to reduce the likelihood of future outbreaks | Amadou Sall (Pasteur Senegal), Miles Carroll (Oxford Uni), Ian Crozier (NIH), Stephan Günther (BNITM), N’Faly Magassouba (MoH Guinea), Natalie Broutet (WHO) |
Main points from previous meeting

1 - Prevention of future outbreaks will require **big data complex models and multi-country coordination**. Data to be collected must include not only ecological data on putative reservoirs but also socioeconomics data (e.g. healthcare, seasonal events).

2 - Research priorities in the ‘Anticipation’ area should include: study of **virus persistence mechanisms**, expand ecology studies and sero-surveillance studies with assays that can discern specific filoviruses. **Filovirus diversity** is poorly understood.

3 - Early detection – **development of diagnostic assays** for MARV and other ebolaviruses.
Anticipation

1. What data needs to be collected for prevention of future outbreaks? What kind of analysis models and co-operations do we need to acquire & analyze such data?

2. Would it be worthwhile to setup a web-based filovirus surveillance database?

3. Do we have the right diagnostic tools? If not, what tools need to be implemented?

4. What tools do we have in place to prevent relapse and initiation of outbreaks via transmission from survivors?

5. What is the role of domestic animal and wildlife surveillance for outbreak prevention? What is the best strategy?