

Ebola Virus Disease in Liberia: Strategic Approach to EVD Vaccine Trials

Stephen B. Kennedy, MD, MPH, FLCP, FWACP

Senior Researcher, UL-PIRE Africa Center, Liberia
Formerly, Co-PI, Ebola Vaccines Clinical Trials, Liberia
Formerly, Coordinator, EVD Research, IMS, MoH, Liberia

25 October 2022

30 March 2014: EVD Confirmed in Liberia





MULTIPLE DIVERSE STRATEGIES: RUSH TO SAVE THE DAY

Liberian Researchers: Harness Local Expertise



Dr. Fatorma K. Bolay



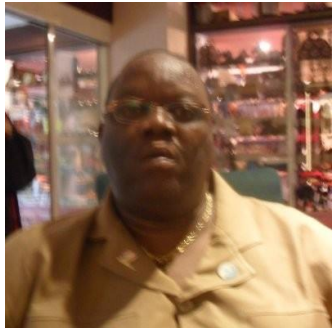
Dr. Garfee Williams



Dr. Moses Massaquoi



Dr. Mosoka Fallah



Dr. Joel Jones



Dr. Eugene Dolopei



Dr. Stephen B. Kennedy



Dr. Emmet Dennis



Luke Bawo



Dr. Saye Bawo



Cllr. Abba G. Williams



Dr. Rev. Tijli Tyee

Chronology of Events

Early October – Late December 2014

- **Point of Contact.** MoH with identification of key representatives as liaisons
- **Liberia Technical Group.** 12-person team to discuss prospects and challenges for vaccine trial in Liberia. The team had >15 formal meetings to jumpstart the steps.
- **Liberia Consultative Advisory Group.** 26-person team to advise MoH. The team had several meetings. Developed sub-committees to brief MoH on the outcomes.
- **Sub-Groups.** Multiple small working groups on designated functional areas (e.g., Social Mobilization, Ethical/Regulatory, Lab Infrastructure, Psychosocial, etc.).
 - **WHO.** Three FTF meetings on vaccine trials in Geneva and 3 vaccine trial update teleconferences.
 - **GAVI.** 1 FTF meeting in Geneva on innovative financing for EVD vaccine scale up.
 - **Diaspora Liberian Community.** Several e-mails, 1 FTF meeting, 3 teleconferences.



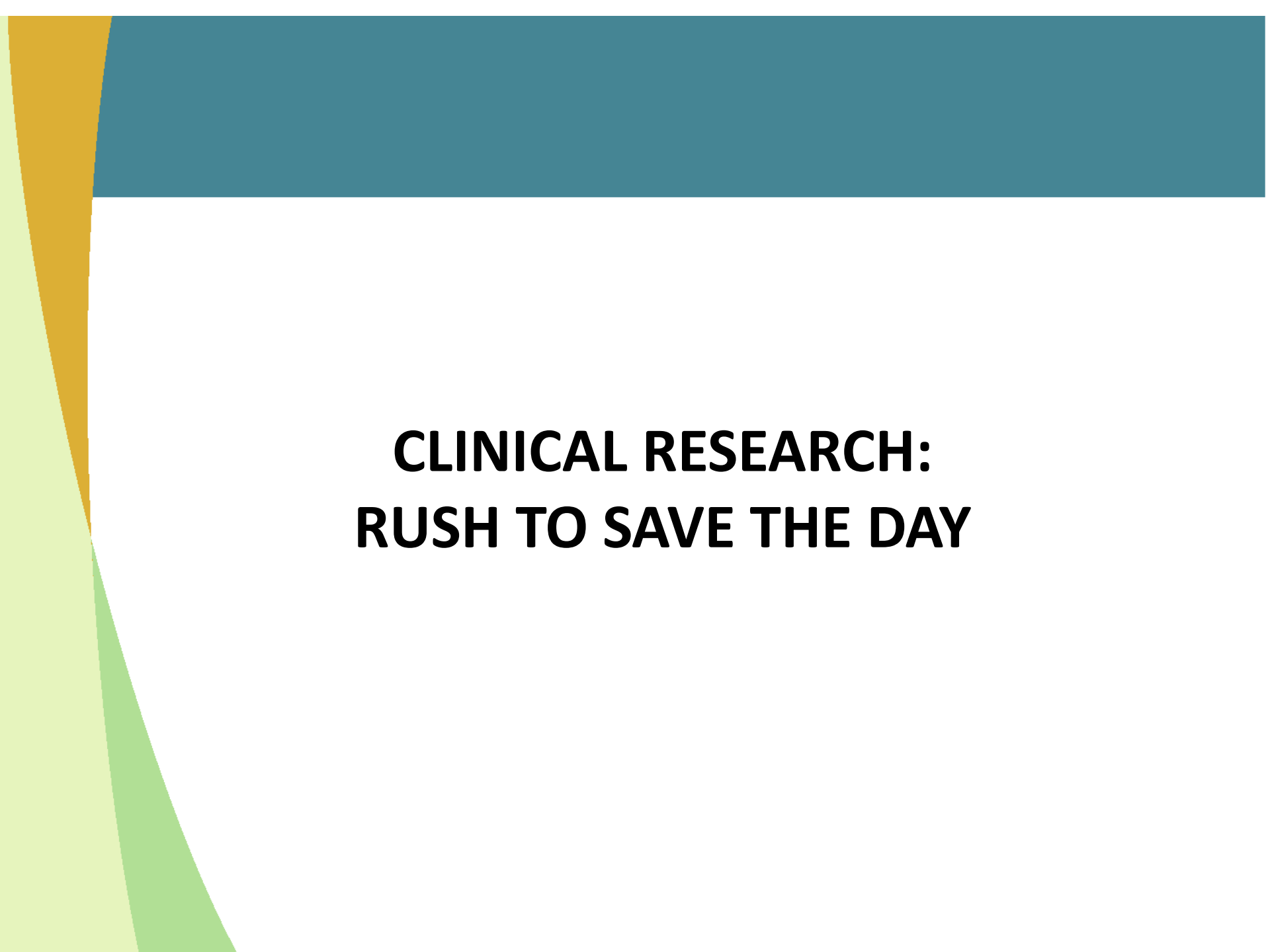
THINK LOCAL, ACT LOCAL: THE RACE AGAINST TIME

Community Engagement & Empowerment: Critical Steps for Outbreak Management & Control



Recommendations & Roadmap

- (1) General Consensus for Initiation of EVD Vaccine Clinical Trials**
- (2) Utilize Local Expertise & Existing Public Institutions**
- (3) Commence Vaccine Trial in Gradual Stepwise Progression
(Phase 1 → 2 → 3)**
- (4) Support Infrastructure/Capacity Strengthening**
- (5) Strengthen Ethical & Regulatory Systems**
- (6) Support Social Mobilization & Community Engagement**



CLINICAL RESEARCH: RUSH TO SAVE THE DAY

Birth of Clinical Research: Liberia-US Partnership

PREVAIL began in mid-2014 at the request of Liberia's former Minister of Health (MoH),
Dr. Walter T. Gwenigale.

Key was to develop partnership between the US DHHS and GoL's MoH for clinical research on therapeutic, diagnostic & vaccine products.

US Sec DHHS Sylvia Burwell, responded favorably and committed to "combat the epidemic".

Dr. H. Clifford Lane, Deputy Director, NIAID represented the US DHHS research efforts.

Drs. Fartoma K. Bolay & Stephen B. Kennedy represented Liberia's MoH research and scientific efforts.



Diagnostic Capability



EXPANDED TESTING FOR SUSPECTED CASES AND DEAD BODIES

- The timing for specimen collection, testing and disclosure of Lab results improved across strategic locations in the country



Ebola Vaccine Inoculation & Parliamentary Update



ORIGINAL ARTICLE

Phase 2 Placebo-Controlled Trial of Two Vaccines to Prevent Ebola in Liberia

S.B. Kennedy, F. Bolay, M. Kieh, G. Grandits, M. Badio, R. Ballou, R. Eckes, M. Feinberg, D. Follmann, B. Grund, S. Gupta, L. Hensley, E. Higgs, K. Janosko, M. Johnson, F. Kateh, J. Logue, J. Marchand, T. Monath, M. Nason, T. Nyenswah, F. Roman, E. Stavale, J. Wolfson, J.D. Neaton, and H.C. Lane, for the PREVAIL I Study Group*

PLOS ONE

RESEARCH ARTICLE

The impact of the 2014 Ebola epidemic on HIV disease burden and outcomes in Liberia West Africa

Soka J. Moses¹, Ian Wachekwa², Collin Van Ryn³, Greg Grandits³, Alice Pau⁴, Moses Badio¹, Stephen B. Kennedy¹, Michael C. Sneller⁵, Elizabeth S. Higgs⁴, H. Clifford Lane⁶, Mosoka Fallah⁴, Stephen A. Migueles⁴, Cavan Reilly⁶

ORIGINAL ARTICLE

A Randomized, Controlled Trial of ZMapp for Ebola Virus Infection

The PREVAIL II Writing Group, for the Multi-National PREVAIL II Study Team*

The Lancet Microbe

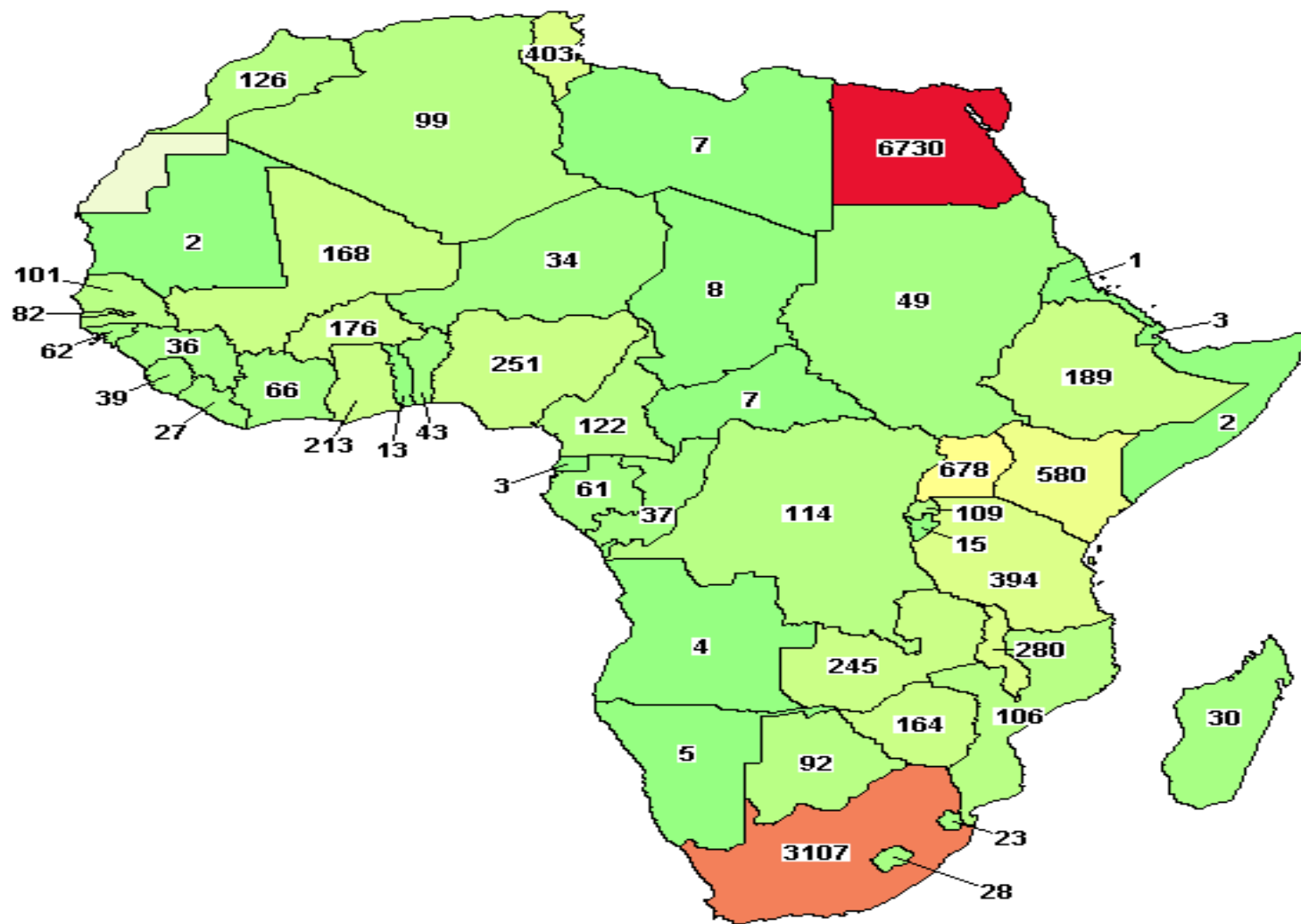
Estimation of the correlates of protection of the rVSVΔG-ZEBOV-GP Zaire ebolavirus vaccine: a post-hoc analysis of data from phase 2/3 clinical trials

Rebecca F Grais, Stephen B Kennedy, Barbara E Mahon, Sheri A Dubey, Rebecca J Grant-Klein, Ken Liu, Jonathan Hartzel, Beth-Ann Collier, Carolee Welebob, Mary E Hanson, Jakub K Simon





REGIONAL INEQUALITY IN CLINICAL RESEARCH



Clinical Research Studies Conducted in Liberia





LESSONS LEARNED

ROADMAP FOR INTRODUCTION OF VACCINE TRIALS IN LIBERIA

System Strengthening & Coordination

- Ethics, Regulatory, Laboratory, Health Care, Community Engagement

Capacity Enhancement for Rapid Response

- Sustainable Training & Professional Development Initiatives

Infrastructure for Emerging & Re-Emerging Infectious Diseases

- National Public Health Institute (NPHIL)

Stimulate Research Programs

- Basic, behavioral, Environmental, biomedical & clinical studies

“Let us not let children pay for our failures anymore.” –Kofi Annan

