

Global Foot-and-Mouth Disease Research Alliance (GFRA) Future Goals and Direction

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INTRODUCTION

A group of international animal health scientists met on Plum Island May 2008 to define the purpose and goals of the Global Foot-and-Mouth Disease Research Alliance (GFRA). The group agreed that the purpose of the GFRA should be to establish a coordinated global alliance of scientists to produce evidence and innovation that will enable the progressive control and eradication of Foot-and-Mouth Disease (FMD). The group also agreed that the following five strategic goals should drive the work of the GFRA: 1) Facilitate research collaborations ; 2) Conduct strategic research to better understand FMD; 3) Development of the next generation of control measures and strategies for their application; 4) Determine social and economic impacts of new generation of improved FMD control; and 5) Provide evidence to inform development of policies for safe trade of animals and animal products in FMD endemic areas.

DISCUSSION

There are currently no research laboratories with the necessary critical mass and support structures to achieve the GFRA strategic goals. It is therefore imperative that laboratories worldwide with active FMD research programs work together to reach the critical mass needed to achieve the GFRA goals. Critical will be to establish research programs that will meet the needs of countries that are endemic for FMD and that are the most affected by the devastating economic impact of this disease. The current members of the GFRA have therefore agreed to the following action plan: 1) identify partnership opportunities and promote funding of collaborative research projects; 2) expand and coordinate the alliance; 3) promote mechanisms and bring together the necessary experts to do gap analysis and set research priorities; 4) organize and manage GFRA and related meetings including issues of sponsorship; and 5) seek funding for GFRA coordination activities.

CRITERIA FOR GFRA MEMBERSHIP

Any organization that is interested in enabling the GFRA vision and mission will be able to join the alliance. There are three membership options within GFRA:

1) GFRA member: FMD research organization that has signed the GFRA MOU

- 2) GFRA collaborator: Organization that collaborates on a research project with a GFRA member
- 3) GFRA associate: Organization that benefits, shares, or supports the GFRA mission



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PLUM ISLAND GFRA MEETING PARTICIPANTS

C. Gay, L. Rodriguez, R. Moore, USDA/ARS-USA; J. Hammond, M. Jeggo, CSIRO-Australia: B. Charleston, D. Paton- Pirbright-UK: B. Perry, Nuffield Department of Clinical Medicine, University of Oxford, UK; P. Kitching- CFIA-Canada; A. Dekker- Central Veterinary Institute of Wageningen-Netherlands: K. DeClerg, CODA-CERVA-VAR-Belgium: S. Alexandersen, National Veterinary Institute- Denmark; R. Drummond, Food & Rural Affairs-UK

CURRENT GFRA MEMBERS

The Agricultural Research Service, United States Department of Agriculture Commonwealth Scientific and Industrial Research Organization, Australia National Centre for Foreign Animal Diseases, Canada Institute for Animal Health, United Kingdom

National Veterinary Institute of the Technical University of Denmark, Denmark

STRATEGIC OBJECTIVES

GOAL 1: Facilitate research collaborations

Objective 1

Hold meetings to facilitate and coordinate information exchange and research collaborations in FMD **Objective 2**

Identify research priorities for FMD control based on expert focus group consultation, gap analysis, and other methods.

Objective 3

Develop and maintain an active Web site to facilitate the mission of GFRA **Objective 4**

Seek funding for GFRA coordination activities

GOAL 2: Conduct strategic research to better understand FMD

Objective 1 Understand host-nathogen interactions **Objective** 2 Understand the mechanisms of viral persistence **Objective 3** Understand the ecology of FMD

GOAL 3: Development of the next generation of control measures and strategies for their application

Objective 1

Discover vaccines specifically designed for the control and eradication of FMDV Objective 2 Improved diagnostics for surveillance, outbreaks, and recovery **Objective 3** Discover biotherapeutics that will provide rapid protection **Objective** 4

Determine scientific information to implement effective biosecurity measures

GOAL 4: Organize and manage GFRA and related meetings including issues of sponsorship

Objective 1

Identify collaborations that would deliver robust cost benefit analysis to assess the impacts of the new generation of FMD control measures

Objective 2

Study social incentives to utilize control measures

Identify the product profile for new countermeasures and control strategies

GOAL 5: Seek funding for GFRA coordination activities

Objective 1

Objective 3

Provide evidence of FMD infectivity from infected animals

Objective 2

Provide evidence of infectivity and or inactivation of FMDV in animal products

Objective 3

Provide evidence for the economic and technical feasibility of compartmentalization of FMD-free areas in endemic countries

Objective 4

Provide evidence for the safety of commodities emerging from FMD-free compartments in endemic countries

NEXT STEPS

The GFRA will continue to build the alliance by adding new GFRA members and reaching out to partners and stakeholders worldwide. The GFRA will hold at least one general meeting annually in seek input from stakeholders and report on progress. The GFRA will hold scientific meetings to establish research collaborations, develop research plans, and advance FMD research programs to meet its strategic goals and objectives.

GFRA WEB SITE

www.ars.usda.gov/gfra