



Global Foot-and-Mouth Disease
Research Alliance

2013 GFRA Scientific Workshop

Epidemiology, Surveillance, Transmission and Control of Foot-and-Mouth Disease in Endemic Settings of Africa.



Hosted by Sokoine University of Agriculture and SACIDS
in Arusha, Tanzania
8 to 10 October 2013

AGENDA

8 October: Foot and mouth disease: a global one health problem

09.00-09.30	Opening session: <ul style="list-style-type: none"> • Welcoming from GFRA: Francois F Maree • Words of welcoming from local organizer: Christopher Kasanga • Official opening: SACIDS & Ministry of Livestock and Fisheries Development 	<p>10 min</p> <p>10 min</p> <p>10 min</p>
09.30-11.00	Session 1: FMD: a global one-health problem Coordinators: Francois Maree & Christopher Kasanga <ul style="list-style-type: none"> • Overview of the Global FMD situation Speaker: Don King (WRL, Pirbright, UK) • FMDV variation and molecular epidemiology in Africa Speaker: Nick Knowles (Pirbright, UK) 	<p>15 min</p> <p>15 min</p>

	<ul style="list-style-type: none"> • Foot-and Mouth Disease Ecological Studies In Endemic Settings: Knowing The Enemy You Want to Defeat Speaker: Luis Rodriguez (PIADC, USDA) 15 min • Foot-and Mouth Disease Vaccines To Address Genetic Variation Speaker: Elizabeth Rieder (PIADC, USDA) 15 min • A web-based system for near-real time sharing and analyzing FMD data. Speaker: Andres Perez (UC Davis, USA) 15 min • Molecular epidemiology of FMDV in Southern Africa: challenges for FMD control and prioritized research agenda in endemic settings Speaker: Christopher Kasanga (SACIDS-SUA, Tanzania) 15 min 	
11.00-11.30	Coffee break	
11.30-13.00	<p>Open Session 2: Coordinators: Frank Mwiine & Katherine Scott</p> <ul style="list-style-type: none"> • The relation between antibody titre and protection can be used to calculate the level of protection in the population. Speaker: Aldo Dekker (Lelystad, The Netherlands) 15 min • The influence of colostrum in the immune responses induced by foot-and-mouth disease vaccination in calves Speaker: Alejandra Capozzo (CNIA-INTA, Argentina) 15 min • Heterogeneity in the antibody response to foot-and-mouth disease primo vaccinated calves Speaker: Andres Perez (UC Davis, USA) 15 min • FMD situation and conjectured status of FMDV serotype distribution in Tanzania Speaker: Jorum Mghwira and Christopher Kasanga (MoLFD & SACIDS, Tanzania) 15 min • Comparative analysis of foot-and-mouth disease virus serotype A positive selection in Pakistan, Afghanistan, Iran and Turkey. Speaker: Barbara Brito (UC Davis, USA) 15 min • Intra-herd sequence variability for FMDV strain A/Argentina/2001 Speaker: Guido Konig (CNIA-INTA, Argentina) 15 min 	
13.00-14.00	Lunch	
14.00-16.00	<p>Open Session 3: Coordinators: Tiziana Lembo & Paidamwoyo Mutowembwa</p> <ul style="list-style-type: none"> • Genetic and antigenic heterogeneity of SAT type FMDV in southern Africa and the implication on vaccine selection Speaker: Francois F Maree (ARC-OVI, South Africa) 20 min 	

	<ul style="list-style-type: none"> Vaccine matching in selection of appropriate vaccines for FMDV Speaker: Wilna Vosloo (CSIRO, Australia) 20 min Vaccination and control of FMD in cattle at livestock-wildlife interface areas of the Kruger National Park Speaker: David Lazarus (University of Pretoria, South Africa) 15 min FMDV occurrence and control challenges in Uganda Speaker: Chrisostom Ayebazibwe (MAIFF, Uganda) 15 min Phylogeography of FMDV in endemic settings: a case study of Tanzania Speaker: Raphael Sallu (TVLA & SUA, Tanzania) 15 min Surveillance for FMDV infection in cattle and buffalo in selected livestock-wildlife interface areas of Tanzania Speaker: Mathias Mkama (TVLA & SUA, Tanzania) 15 min Epidemiology and control options of FMD in Zambia Speaker: Yona Sinkala (Epidemiology Unit, Zambia) 10 min Field evaluation of FMD vaccination programmes in an endemic setting Speaker: Theodore Knight-jones (Pirbright, UK) 10 min 	
16.00-16.30	Coffee break	
16.30-17.00	Discussions Coordinators: Wilna Vosloo & Jorum Mghwira <ul style="list-style-type: none"> Gaps in knowledge of transmission and epidemiology in local settings 	
17:00-18:30	Free time – side meetings	
18:30 – 20:00	Dinner	

9 October: Epidemiology and transmission of FMD in endemic settings

09.00-11.00	Session 4: Epidemiology and transmission of FMD Coordinators: Melanie Chitray & Guido König <ul style="list-style-type: none"> Comparative structural and functional analyses of the nasopharynx in foot and mouth disease Speaker: Jonathan Arzt (PIADC, USDA) 20 min FMDV transmission from wildlife, current studies and future trends Speaker: Bryan Charleston (Pirbright, UK) 20 min Effect of vaccination on FMDV transmission in cattle. Speaker: Natalia Aznar (CNIA-INTA, Argentina) 15 min Correlates of infectiousness and preclinical detection of foot- 	15 min
-------------	---	--------

	<p>and-mouth disease virus Speaker: Jose Gonzales (Pirbright, UK)</p> <ul style="list-style-type: none"> • Accuracy of traditional and novel serology tests for predicting cross-protection in foot-and-mouth disease vaccinated cattle Speaker: Alejandra Capozzo (CNIA-INTA, Argentina) • In-country Vaccine Matching Studies: <i>Results from Pakistan</i>. Speaker: Anna Ludi (PIADC, USDA) 	<p>15 min</p> <p>15 min</p>
11.00-11.30	Coffee break	
11:30 – 12 :30	<p>Open Session 5: Coordinator: Guido König & Philemon Wambura</p> <ul style="list-style-type: none"> • Assessing the risk of FMD transmission in the GLTFCA. Speaker: Ferran Jori (CIRAD / University of Pretoria) • Predicting the foot-and-mouth disease virus infection history of animals in an endemic area from partial data. Speaker: Miriam Casey (Glasgow University) • Antigenic variation in serotype O and A viruses from East-Africa Speaker: Amin Asfor & Mana Mahapatra (Pirbright Institute) • Assessment of correlation between in vivo and in vitro tests for FMDV O strain vaccine matching studies in endemic and free areas of South America Speaker: Claudia Perez-Beascochea (SENASA) 	<p>15 min</p> <p>15 min</p> <p>15 min</p> <p>15 min</p>
12:30 – 13:30	Lunch	
13:30- 18:30	VISIT TO ARUSHA NATIONAL PARK	
18:30 – 20:30	Dinner	

10 October: Research needs and Priorities

09.00-11.00	<p>Open Session 6: Assessment of understanding the economic and welfare impact of FMD - impact on human health Coordinator: Mark Rweyemamu & Alejandra Capozzo</p> <ul style="list-style-type: none"> • The economic impacts of FMD Speaker: Jonathan Rushton (Royal Veterinary College, UK) • Nomadic lifestyle and the role of nomads in the spread of FMD Speaker: Rebecca Garabed (Ohio University) • The epidemiology and the ecology of the foot and mouth disease at the wild/domestic interface Speaker: Eve Miguel (Institute) • Incompatibilities between trade standards and the epidemiological behaviour of SAT viruses in endemic locations in 	<p>20 min</p> <p>20 min</p> <p>20 min</p> <p>20 min</p>
-------------	---	---

	<p>southern Africa. Speaker: Gavin Thomson (TAD Scientific, SA)</p> <ul style="list-style-type: none"> Using risk-based strategic plans as a tool to aid PCP activities, and how monitoring and evaluation of outcomes can link to achieving the objectives and assessing the impact. Speaker: Eoin Ryan (FAO) OPEN 	20 min
11.00-11.30	Coffee Break	
11.30-13.00	OPEN EPIDEMIOLOGY BRIEF REPORTS – (10 minutes each)	
13.00-14.00	Lunch	
14.00-16.00	<p>Open Session 6: Breakout Sessions – Research Needs and Priorities Coordinator: B Charleston & Luis Rodriguez</p> <p>Each breakout group will review issues and problems identified during the workshop and write objectives for each research priority.</p> <p>Breakout Group 1: Disease Surveillance and Diagnostics</p> <ul style="list-style-type: none"> Priorities assessment Research objectives <p>Breakout Group 2: Disease Control – vaccines, other control methods</p> <ul style="list-style-type: none"> Priorities assessment Research objectives <p>Breakout Group 3: Epidemiology – transmission, long-term natural maintenance</p> <ul style="list-style-type: none"> Priorities assessment Research objectives 	20 min
16:00-17:00	Reports from breakout groups 1 -3 (20 min each)	
17:00 – 17:30	GFRA Meeting closing – remarks by participants	
17:30 – 18:30	Free time – side meetings	
18:30 – 20:30	Dinner	