

The National Center For Foreign Animal and Zoonotic Disease Defense

Training

GL-CRSP partners with FAZD Center to prepare U.S. for avian flu outbreak

The Global Livestock-CRSP and the FAZD Center will partner on a new project designed to prepare government extension agents, veterinarians, researchers and farmers for a potential outbreak of highly pathogenic avian influenza in the United States.

The project, announced in May, will also jumpstart a response program at the first sign of an outbreak.

The Department of Homeland Security provided \$100,000 to fund the project. The GL-CRSP is based at the University of California at Davis, a core member of the FAZD Center.

The training modules will be pilot-tested in Tanzania, California, Texas and Minnesota.

Leadership

FAZD Center seeks qualified candidates for Assistant Director for External Affairs

A nationwide search is underway for the FAZD Center's next Assistant Director for External Affairs. The position is designed primarily to promote and facilitate the development of external grants and contracts by members of the FAZD Center. The FAZD Center is headquartered in College Station, Texas.

To learn more, visit <https://greatjobs.tamu.edu/> and search postings for NOV # 01676 listed under the Institute for Countermeasures Against Agricultural Bioterrorism (ICAB).

Response

Scientists fine-tuning model to anticipate RVF outbreaks

Scientists at the University of Maryland are working closely with researchers at Texas A&M University to fine-tune a UMD spatial model for the FAZD Center that will analyze the nation's vulnerability to Rift Valley fever.

Transmitted largely by infected mosquitoes, RVF harms both livestock and humans.

UMD's Dr. David M. Hartley and Dr. Holly Gaff are applying information collected and provided by



U.S. Army photo

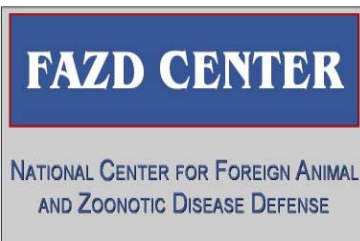
colleagues at Texas A&M., including Dr. Michael Ward. Hartley, Gaff and Ward are primary investigators with the FAZD Center. The information

includes data on climate and transportation. Hartley and Gaff also are finding that geospatial datasets collected to study foot-and-mouth disease apply to their RVF model.

The Maryland scientists also consulted with Dr. C.J. Peters of the University of Texas Medical Branch (and a primary investigator with the FAZD Center) on the dynamics of RVF.

"These discussions provided us with the fundamental understanding of how best to implement a spatial version

of the RVF model so that it can fit seamlessly into the FAZD Center's overall model," they said.



**A Department of Homeland Security
National Center of Excellence**

Lead institution

Texas A&M University

Core members

The University of California, Davis,
The University of Southern California
and The University of Texas Medical Branch

Online

Center improves access to information and breaking news on its web site

The FAZD Center has made significant changes to its web site, offering greater access to the Center's wealth of news, information and data.

New features include:

- The FAZD Center Newsroom, which offers the latest news from inside the center as well as breaking international news concerning avian influenza, brucellosis, foot-and-mouth disease and Rift Valley fever.

- Online access to the FAZD Center's Courseware Library on zoonotic diseases developed at the University of California, Davis.

- The Center's web portal to the best available online information concerning avian influenza, brucellosis, foot-and-mouth disease and Rift Valley fever.

- A self-updating list of the latest scientific literature concerning the Center's four primary zoonotic diseases.

Visit our site today: fazd.tamu.edu.

Research

Journal of Leukocyte Biology publishes Estes' paper about NK cells in cattle

Dr. Mark Estes, a primary investigator with the FAZD Center, has co-authored one of the first comprehensive descriptions of natural killer cell phenotype/subpopulations in cattle. The paper is related to Dr. Estes' research on foot-and-mouth disease for the FAZD Center.



Estes

The paper, entitled "Bovine natural killer cells acquire cytotoxic/effector activity following activation with IL-12/15 and reduce Mycobacterium bovis BCG in infected macrophages," was published in the January issue of the Journal of Leukocyte Biology.

A natural killer cell is a lymphocyte (or white blood cell) that targets tumor cells or virus-infected cells without involving antibodies.

Dr. Estes serves on the faculty of the Departments of Pediatrics, Microbiology

& Immunology and Pathology for the Sealy Center for Vaccine Development at the University of Texas Medical Branch in Galveston.

To download the paper, visit: <http://fazd.tamu.edu/publications/articles-and-papers/estes-journal-of-leukocyte-biology.pdf/view>

Detection

Investigators receive industry support in gathering of FMD data in Texas

FAZD Center investigators Dr. Bo Norby and Dr. Morgan Scott report a high level of support from the livestock industry in the Texas High Plains for a project to gather data concerning foot-and-mouth disease.

"There has been a tremendous amount of cooperation and support," the team said. "Foot-and-mouth research is clearly a high priority in this area."

Dr. Norby and Dr. Scott are with the College of Veterinary Medicine at Texas A&M University. The researchers also say they are making significant progress on a Southwest Texas survey intended to enhance a statistical FMD model.

Roughly two-thirds of respondents have submitted information for the survey of cattle producers, veterinarians and sales barns in Southwest Texas.

The data include rates of direct and indirect contact, herd types, livestock densities and distributions.

News Media

Emergency plans can overwhelm ability to enact them, Dr. Bier says in interview

When it comes to emergencies like a potential epidemic of avian influenza, plans can overwhelm any agency's ability to enact them, Dr. Vicki Bier told the Wisconsin Engineer.

"A set plan of action may look good on paper, sound feasible and give a sense of safety. When it comes to implementing those plans in an emergency situation, there are often pitfalls such as lack of resources, practice or sheer impracticalities of the plan itself," says Dr. Bier, a University of Wisconsin-Madison professor of industrial and systems engineering.

Bier is an analyst specializing in probabilistic risk analysis for homeland security and a primary investigator for the FAZD Center.

The FAZD Center

1500 Research Parkway, Suite 100A,
College Station, TX 77843-2129

Phone: 979.845.2855 Web: fazd.tamu.edu

News media: Rusty Cawley,

(469) 338-9478, rcawley@vprmail.tamu.edu