News From The FAZD Center

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fazd.tamu.edu

The National Center For Foreign Animal and Zoonotic Disease Defense

Analysis

Research develops insights into market reactions to disease outbreaks

Economists at the FAZD Center are analyzing economic consequences and recovery rates to determine how markets may react to future potential outbreaks of animal disease.

With that in mind, the economics team is studying data associated with the 2001 foot-and-mouth disease outbreak in the United Kingdom, plus the two UK outbreaks of bovine spongiform encephalopathy in 1989 and 1996.

David Bessler, a professor in the Department of Agricultural Economics at Texas A&M University, leads the study component.

Price recovery following the events appears to be tied to whether there exists a commonly understood link from the animal (non-human) pathogen to human health. This may have implications for outbreaks of zoonotic diseases like avian influenza, the economists said.

To read the complete story: fazd.tamu.edu/july/markets

Response

Software demonstrations emphasize CREATE/FAZD Center collaboration

Demonstrations of the Risk Analyst's Workbench (RAW) are illustrating the ongoing collaboration between the FAZD Center and University of Southern California's Center for Risk and Economic Analysis of Terrorism Events (CREATE).

As part of

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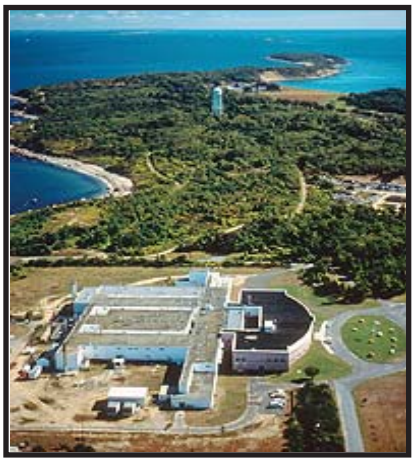
Biological Systems

Team prepares to test effects of natural killer cells in cattle

A research team from the FAZD Center will travel later this summer to Plum Island Animal Disease Center to monitor the effects of natural killer cells upon a surrogate virus. The team's goal is to create a biological product that will protect cattle in the aftermath of a foot-and-mouth disease outbreak.



Plum Island Animal Disease Center/ USDA

NK cells have been proven effective in other mammals, but not in bovine."NK cells are the 007s of microbiology," says Dr. Mark Estes, a FAZD Center primary investigator. "They have a licence to kill."

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.

It is U.S. policy to not vaccinate for FMD. "We would lose our FMD-free status," Estes says. "Thus we have a population of naive, unprepared animals who have no familiarity with the disease at all." Vaccines require seven to 10 days to become effective. The nation needs a product that closes that seven-day gap in the event of an outbreak. "Our purpose is to create that product," Estes says.

FAZD CENTER
NATIONAL CENTER FOR FOREIGN ANIMAL AND ZOONOTIC DISEASE DEFENSE

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

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CREATE's renewal review meeting in late April, a RAW demonstration highlighted several tools produced by the FAZD Center.

A similar demonstration of the software was provided at the June meeting of the DHS sponsored Integrated Network of Centers (INC) meeting held at the University of Minnesota.

RAW is a software-based system that provides risk analysts and policy/decision makers access to risk analysis resources, supporting collaboration and information exchange between and outside DHS National Centers of Excellence.

A key RAW technology being jointly developed by the FAZD Center and CREATE is the Common Modeling Environment (CME), in which complex models and systems are created by electronically linking resources found in RAW.

According to a July 10 article in the Los Angeles Times, "Some experts say (the collaborative's) most important legacy will be its development of software and decision-making tools. (RAW) is being designed as a one-stop Internet site with cost-benefit programs and links to terrorism research."

To read the complete story: fazd.tamu.edu/july/RAW

Online

New FAZD Center brochure provides insights about projects and products

A newly published four-page, full-color brochure provides insights concerning the FAZD Center, its projects and its products.

The publication addresses:

- The FAZD Center's three thematic categories: Biological Systems, IMA (Informatics, Modeling, Analysis), and Education and Outreach.
- The priorities set by the Department of Homeland Security, and how FAZD Center products meet these priorities.
- Examples of FAZD Center research.
- The FAZD Center's work with its collaborators and cooperators, including DHS facilities, national laboratories, USDA, state partners and DHS Centers of Excellence.
- The spectrum of customers who are end-users of FAZD Center products

To download the brochure, visit fazd.tamu.edu.

Education

Graduate student from FAZD Center lab attends orientation for DHS program

Stacy L. Agar, a graduate student in a FAZD Center laboratory at the University of Texas Medical Branch, represented the center at the Department of Homeland Security Scholars and Fellows Program Orientation.

At the meeting, Agar was able to obtain information regarding the Scholars and Fellows Program that will be useful for first-year UTMB graduate students interested in participating in DHS-sponsored projects.

Specifically, she learned that participants in this program are required to perform internships at DHS labs. Representatives from these facilities were present to introduce internship options.

Agar also had the opportunity to meet other members of the FAZD Center and said she particularly enjoyed hearing about other DHS-funded projects from around the United States.

Leadership

Qualified candidates are sought to apply 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 primarilty 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).

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