



A Center of Excellence (COE) Network Approach to Workforce Development

**Jackson State University
Jackson, Mississippi**

**First Annual DHS University Network Summit on
Research and Education
March 15-16, 2007
L'Enfant Plaza Hotel Washington, DC**

Homeland Security Centers of Excellence



NATIONAL CENTER FOR
FOOD PROTECTION AND DEFENSE
A HOMELAND SECURITY CENTER OF EXCELLENCE

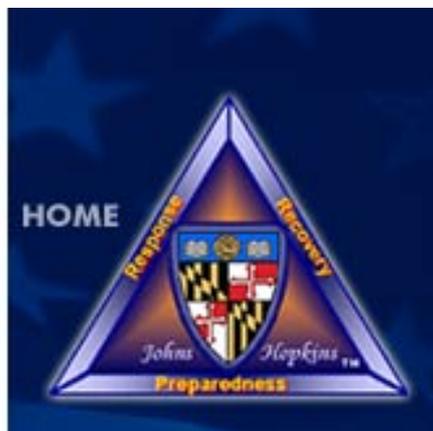
FAZD CENTER

National Center for
**Foreign Animal and Zoonotic
Disease Defense**

START ➡

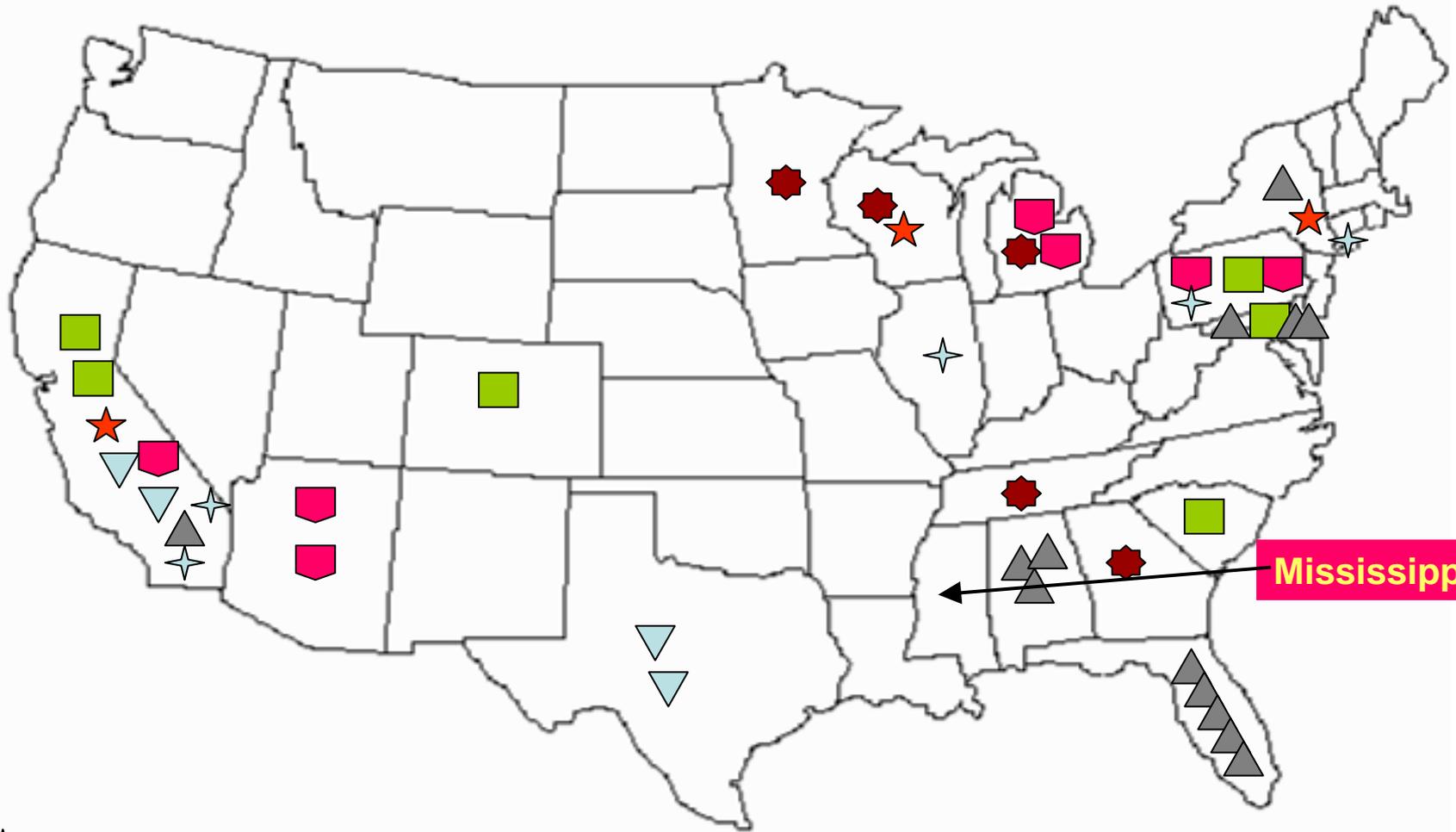
National Consortium for the
Study of Terrorism and Responses to Terrorism

A CENTER OF EXCELLENCE OF THE U.S. DEPARTMENT OF HOMELAND SECURITY BASED AT THE UNIVERSITY OF MARYLAND



Institute for Discrete Sciences

DHS University Network



★ CREATE ★ NCFPD ▼ FAZD ■ START ▲ PACER ■ CAMRA ✦ IDS

Ability to **rapidly deploy** homeland security relevant Science, Technology, Engineering and Mathematics (STEM) knowledge generated at **Homeland Security Centers of Excellence** to a wide range of **stakeholders**.

A COE Approach to Workforce Development



- Sponsored by Southeast Region Research Initiative (SERRI)
- **Objective:** Initiate an education system in homeland security-related topics and transition to addressing workforce development in the SERRI region.
- **Pilot Project:** Use capabilities of two Mississippi Educational Institutions to deploy COE Research and Education to the stakeholders in the Jackson, Mississippi area
- **Initial focus:** Avian Influenza

PARTNERS

Pilot Project: Avian Influenza

Mississippi Educational Institutions



Jackson State University (Lead)
Mississippi's Urban University



Alcorn State University
Land Grant Institution

DHS Centers of Excellence



FAZD CENTER

National Center for
Foreign Animal and Zoonotic
Disease Defense



DIMACS

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

*Center for Discrete Mathematics & Theoretical Computer Science
Founded as a National Science Foundation Science and
Technology Center*

GATEWAY IN MISSISSIPPI FOR DEPLOYING HOMELAND SECURITY-RELATED RESEARCH AND EDUCATION



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Two Components



- **Current Workforce:**

- Expanding capacity of educators to rapidly deploy STEM topics by DHS University Centers of Excellence (COE)

- **Future Workforce:**

- Building capacity of educators to rapidly deploy developmentally appropriate STEM modules at the frontier of Science & Technology

Current Workforce



- UC Davis Conducts Train-the-Trainer Program on Avian Flu School in Mississippi
- Educators at partner Mississippi educational institutions incorporate STEM content of Avian Flu School in course materials and curriculum

Future Workforce



- **Building capacity for the future through**
 - Professional development for
 - University faculty who train K-12 teachers
 - K-8 teachers
 - 9-12 teachers
- **Deployment Plan**
 - Rutgers/ECU delivers education enterprise philosophy to faculty in MS region
 - Rutgers delivers K-8 teacher program - Problem Solving and Critical Thinking with Discrete Math
 - ECU delivers 9-12 teacher program on the mathematics of avian influenza (MAI)

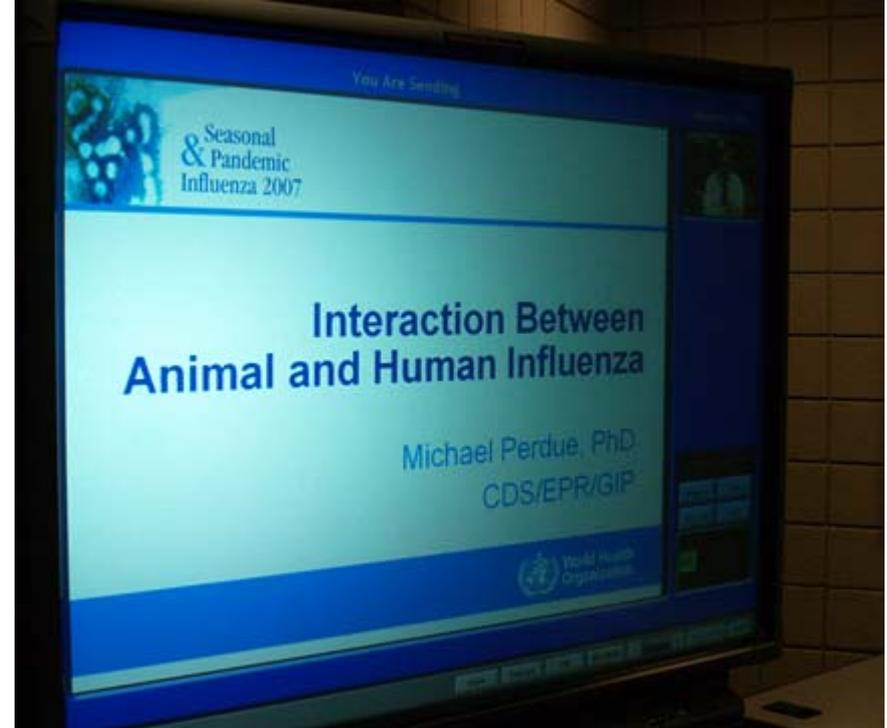
Evaluation



- **Initial questions of interest:**
 - Impact on faculty, teachers and students?
 - Value of our professional development materials?
 - Benefit to other COE sites from our experience?
 - What should we do differently?
 - How to enhance dissemination?



Workforce Development at Jackson State University



**Global Perspective on
Avian Influenza**
Michael L. Perdue, Ph.D.
Global Influenza Programme
Department of Epidemic and Pandemic
Alert and Response
World Health Organization, Geneva

February 5, 2007
Jackson State University,
Jackson Mississippi



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