National Bio and Agro-Defense Facility (NBAF) Update and Request for Input on Process for Stakeholder Priorities: Discussion with the Secretary's Advisory Committee on Animal Health

The NBAF will be a key national asset to protect our animal agriculture industry in the United States. It will replace the aging Plum Island Animal Disease Center (PIADC), and provide capabilities critical to conduct research, develop vaccines, perform diagnostic testing, and train veterinarians in preparation for, and response against, foreign animal diseases (FAD), zoonotic diseases, and emerging diseases.

For nearly 50 years, the USDA owned and operated the PIADC for Agricultural Research Service (ARS) and Animal and Plant Health Inspection Services (APHIS) programs on FADs. PIADC is the only large animal bio-containment facility in the U.S. allowed to work with Foot and Mouth Disease (FMD) live virus.

The Homeland Security Act of 2002 transferred the ownership and operations of PIADC to DHS, and USDA has continued to conduct its programs at PIADC. In 2009, DHS with input from USDA, selected Manhattan, Kansas as the NBAF site to replace the aging PIADC. The PIADC is located on Plum Island in New York.

Transition Planning

Timeline: DHS plans for the NBAF facility to be fully operational in 2023 with the select agent registration obtained by December 2022. Plans are under way to provide a seamless transition from PIADC to the NBAF that includes an overlap of operations to ensure no interruption of the critical science mission and capabilities.

Executive Steering Committee (ESC): The purpose of the ESC is to develop and implement a framework that will support strategic partnership initiatives, operational planning activities, and ongoing NBAF construction until the NBAF becomes fully operational in 2023. The ESC members are Jamie Johnson, Chair, DHS, Beth Lautner, APHIS, and Steven Kappes, ARS. The ESC meets at least monthly and quarterly with the chairs of the working groups that report to the ESC.

Working Groups: There are five working groups reporting to the ESC to address transition planning:

- operational stand-up;
- partnership development;
- facility advisory;
- advanced research and training;
- workforce development; and
- budget.

Partnership Summit: For the past two years, Kansas State University convened a "Pioneering Partnerships with NBAF" meeting. Attendees included Federal, State and local governmental personnel, academics, representatives from various livestock producer and animal health organizations, and other regional and local stakeholders. The event is a forum for conversation about how NBAF will serve America's bio/agro security needs, and allow stakeholders to share their ideas, recommendations, needs and collaboration possibilities.

NBAF Collaborations

The NBAF will be at the center of a strong partnership between USDA, DHS, academia, and industry.

USDA has participated in the design of the NBAF and on working groups planning for the transition from PIADC. DHS is developing a partnership, termed BASIS (Bio/Agro Security Innovation System), to help foster innovation in and around NBAF through engagement, partnerships, and enhanced public and private-sector investments.

APHIS Information
APHIS' Foreign Animal Disease Diagnostic Laboratory (FADDL) protects the U.S. agricultural system through early detection and diagnosis of FADs, develops and produces diagnostic reagents and proficiency test panels for the National Animal Health Laboratory Network (NAHLN), conducts vaccine testing and acts as custodian of the North American FMD Vaccine Bank, trains veterinarians in the recognition of FADs, performs safety testing and safety treatment of biological materials including animal products being imported into the U.S., and develops and validates diagnostic assays for detection and recovery from a FAD. FADDL serves as a reference laboratory for NAHLN, an FMD reference laboratory for the World Organisation for Animal Health, and a reference center for the Food and Agriculture Organization of the United Nations.

The NBAF will provide added capability to FADDL through:
- Access to BSL-4 laboratories and animal rooms to address high consequence zoonotic diseases such as Ebola, Nipah, and Hendra.
- Additional BSL-2 laboratory space to meet the increasing needs of the NAHLN.
- Improved training/necropsy facilities for training veterinarians in the detection of FADs.
- The ability to produce reagents in the NBAF BDM.

ARS Information
ARS' Foreign Animal Disease Research Unit (FADRU) conducts research to deliver scientific information and veterinary medical countermeasures to prevent, detect, control, and eradicate animal diseases that pose the highest threats to the United States. The FADRU conducts research on FMD, Classical Swine Fever (CSF), African Swine Fever (ASF), and Vesicular Stomatitis (VS).

The NBAF will provide added capacity to FADRU through:
- Access to BSL-4 laboratories and animal rooms to address high consequence zoonotic diseases such as Ebola, Nipah, and Hendra.
- Expanding the research program to seven different types of pathogens.
- Increasing research on vector borne diseases.
- Better integration of basic and applied research.
- Enhanced capability to collaborate with commercial partners to transfer technology and countermeasures.

Questions for SACAH
As planning continues for NBAF, we are asking the SACAH to consider the following questions:

1. What information about NBAF would the SACAH like to receive as planning and construction continues?
2. How would the groups you represent like to receive NBAF updates? What are existing mechanisms we can use?
3. How would the SACAH and the groups you represent like to provide input into NBAF's priorities as the programs are developed? After NBAF is operational?