

DHS SCIENCE AND TECHNOLOGY DIRECTORATE OFFICE OF NATIONAL LABORATORIES



Background and Establishment

The Department of Homeland Security (DHS) Science and Technology Directorate (S&T) Office of National Laboratories (ONL) develops and utilizes a coordinated network of DHS and Department of Energy (DOE) national laboratories to deliver enduring capabilities vital to DHS and the national homeland security mission. This extensive network of laboratories houses state-of-the-art science and technology capabilities that the Homeland Security Enterprise leverages to support long-term and day-to-day operational requirements.

ONL oversees and implements S&T's laboratories and leverages the DOE and other government laboratory capabilities to support research, testing and evaluation, and technology development needs for DHS and the Homeland Security Enterprise. ONL is organized into three branches that ensure effective construction, stewardship, and utilization of S&T labs, as well as development of enduring infrastructure dedicated to the homeland security mission.

- **Construction Branch:** Oversees the planning, budgeting, and management of laboratory infrastructure construction and upgrade projects.
- **Operations Branch:** Oversees safe, secure, and compliant management and operations under federal, state, and local laws and regulations. Provides resources for facility and personnel support.
- **Utilization Branch:** Focuses on the effective use of DOE, Department of Defense, and S&T laboratories for research, technology transition, and test and evaluation activities to meet homeland security needs.

A Premier Laboratory Network Delivering Homeland Security Solutions

ONL oversees five S&T laboratories where scientists perform mission-critical research on transportation security, chemical and biological threats and trace identification, radiological and nuclear detection, agricultural safety, and animal diseases. The specialized technical expertise and world-class research facilities of these laboratories enhance our nation's homeland security capabilities.

- **Chemical Security Analysis Center (CSAC)** – DHS established CSAC in 2006 to assess and identify vulnerabilities and respond to potential chemical threats and hazards. CSAC supports the Homeland Security Enterprise by providing a robust knowledge repository of chemical threat information; a science-based threat and risk analysis; and a robust, technical-based reach-back capability.

- **National Biodefense Analysis and Countermeasures Center (NBACC)** – NBACC is the first national laboratory created by DHS. NBACC addresses unmet needs in homeland security and provides a continuously available national capability for newly identified biological threats.
- **National Urban Security Technology Laboratory (NUSTL)** – NUSTL directly supports first responders by conducting tests, evaluations, and assessments of technologies and systems both in the lab and in operational settings. NUSTL partners with state and local agencies to inform and provide key knowledge products to the national first responder community.
- **Plum Island Animal Disease Center (PIADC)** – Since 1954, PIADC has served as the front line of the nation's defense against diseases that could devastate the market for livestock, meat, milk, and other animal products. The mission of PIADC crosses three areas: animal disease diagnostics, research and development, and education.
- **Transportation Security Laboratory (TSL)** – TSL protects our nation's transportation systems through research, development, testing, and validation of explosives technology detection systems. TSL is a key partner to the Transportation Security Administration.
- **Department of Energy Laboratories** – ONL has created a trusted and robust relationship between DHS and the DOE National Laboratory complex. As the DHS liaison to the DOE and its national labs, ONL facilitates access to the vast array of scientific expertise, research and unique capabilities they offer.

Constructing the Next-Generation Laboratory

The replacement for the aging PIADC is the National Bio and Agro-Defense Facility (NBAF), which is currently under construction in Manhattan, Kansas. NBAF will provide critical capabilities to conduct research; develop vaccines and other countermeasures; and train veterinarians in preparedness and response against foreign animal diseases, zoonotic diseases, and agro-terrorism. NBAF will represent the first large animal biosafety level 4 (ABSL-4) lab facility of its kind in the nation. Until NBAF is fully operational in 2022, DHS will continue to maintain PIADC.

Contact

Questions? To learn more about the Office of National Laboratories, email SandTNatLabs@hq.dhs.gov for more information.

