
**THE TEXAS A&M
UNIVERSITY SYSTEM**

National Laboratories Office Overview

The Texas A&M University System

Marvin Adams

Director of Research and Education to Advance Laboratory Missions

L. Diane Hurtado

Associate Vice Chancellor for National Laboratories Management

National Laboratories Office
The Texas A&M University System

Texas A&M System National Laboratories Office Leadership



M. Katherine Banks
Vice Chancellor of Engineering
and National Laboratories

- Overall responsibility for execution of Texas A&M System national laboratory engagement
- Principal executive engaged with Triad National Security, LLC (Triad)
- Serves on the Triad Board of Directors



L. Diane Hurtado
Associate Vice Chancellor
for National Laboratories
Management

- Primary point of contact and facilitator for Texas A&M System national laboratory engagement
- Liaison to the Los Alamos National Laboratory (LANL) leadership team and Triad Board and Committees



A. Scott Sudduth
Associate Vice Chancellor
for Federal Programs

- Oversees the national laboratory engagement on Capitol Hill and DOE Headquarters
- Serves on the Triad Board of Directors



Marvin Adams
Director of Research and
Education to Advance Laboratory
Missions

- Facilitates engagement of Texas A&M System researchers and educators with national laboratories
- Chair of Triad Mission Committee

Texas A&M System National Laboratories Office Mission

Serve the nation by expanding engagement between Texas A&M System faculty, staff and students and the national laboratories



DOE National Laboratories and Sites

Initial Focus

DOE National Nuclear Security Administration Labs and Sites

❖ National Laboratories

- Lawrence Livermore
- Los Alamos
- Sandia

❖ Sites

- Kansas City
- Nevada
- Pantex
- Savannah River
- Y-12

Other DOE National Laboratories

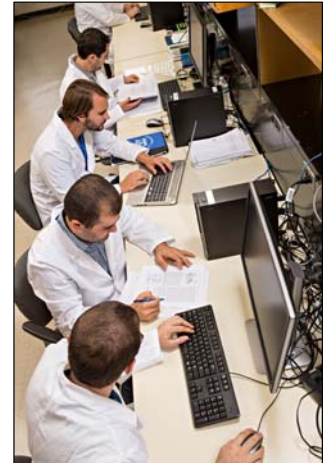
- Ames
- Argonne
- Brookhaven
- Fermi
- Lawrence Berkeley
- Jefferson
- Oak Ridge
- Princeton Plasma Physics
- Pacific Northwest
- Idaho
- National Energy Technology
- National Renewable Energy
- Naval Nuclear
- Savannah River
- Stanford Linear Accelerator



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Faculty Engagement

The Texas A&M System National Laboratories Office strives to lower the barriers for engagement with the labs in teaching, research and service



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Student Engagement

Pipeline:

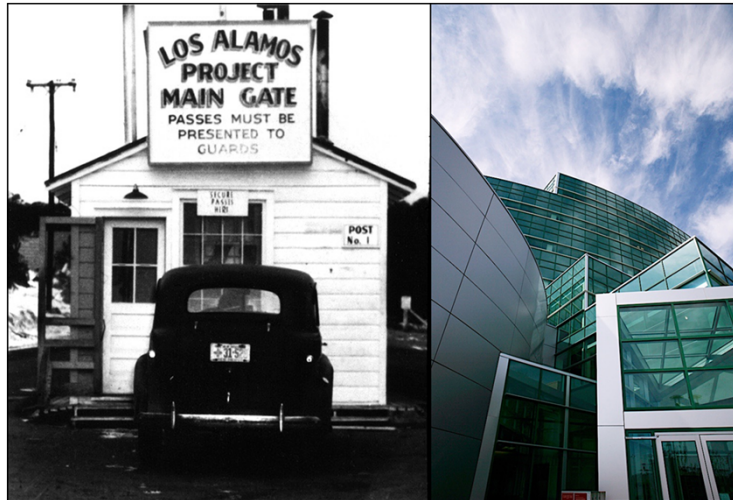
- Labs hire numerous student interns year round
- Many labs offer generous graduate and postdoctoral fellowships



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Los Alamos National Laboratory (LANL) Overview

- Established in 1943 – 75 years serving the nation
- Mission: Solving national security challenges through scientific excellence



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LANL Overview

- 40 square miles
- 47 technical areas
- 1,280 buildings / 9M sq. ft.
- 11 nuclear facilities
- 268 miles of roads
- 8,750 career employees / 12,000 workers on site
- 2,100 R&D scientists
- 1,100 veterans
- 390 postdocs
- \$2.6B budget

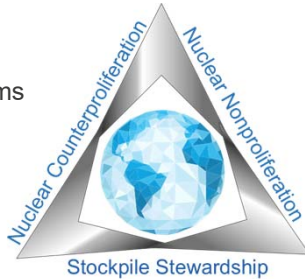


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LANL's Missions: Strategic Deterrence

Anticipating and addressing emerging, asymmetric threats

- Assessment of foreign nuclear weapons programs
- Mini-satellites supporting DoD mission
- Next generation of radio communications



- 50 years of International Safeguards
- Development of monitoring techniques for nuclear testing
- Next generation of satellite detectors for nuclear explosions

Nuclear Counterproliferation

Detecting and preventing the development or use of nuclear weapons and improvised devices



Stockpile Stewardship

Assuring our nation's defense with a strategic nuclear deterrent through theory, modeling & simulation, and experimentation



Nuclear Nonproliferation

Reducing and limiting nuclear arms and the spread of nuclear materials, technology, and expertise through cooperation and diplomacy

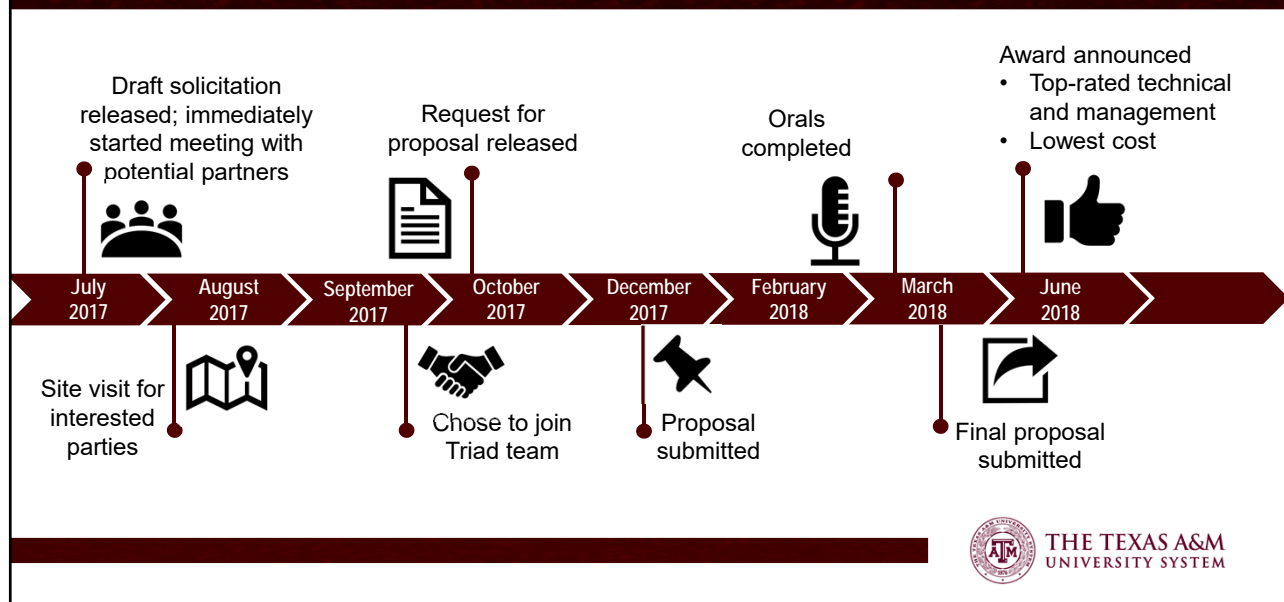


* Slide used with permission of John Sarrao (LANL Dep. Director ST&E)

LANL Management Background

- Government-Owned Contractor-Operated (GOCO)
- >\$2.5B/yr
- 1943-2006: contractor was University of California System (UC)
- 2006-2018: contractor was Los Alamos National Security, LLC (LANS), with partners UC, Bechtel, BWXT, AECOM
- 2017: competition began for new contractor

LANL Competition



LANL Competition

BATTELLE

- Demonstrated performance managing five DOE national laboratories
- World's largest independent, nonprofit R&D organization



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- Largest nuclear engineering program in the U.S., with emphasis on criticality safety
- Leading high hazard and emergency response workforce training programs



**UNIVERSITY
OF
CALIFORNIA**

- 75 years managing LANL and LLNL, where the nuclear stockpile was designed and certified
- Demonstrated commitment to scientific excellence and integrity in public service

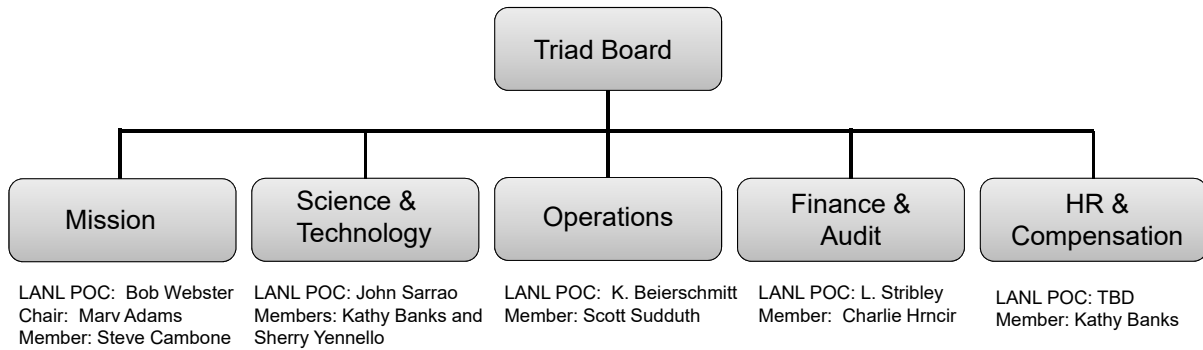


- All members contribute broadly to the Statement of Work
- Nonprofit free from commercial interests
- Seamless integrated Board



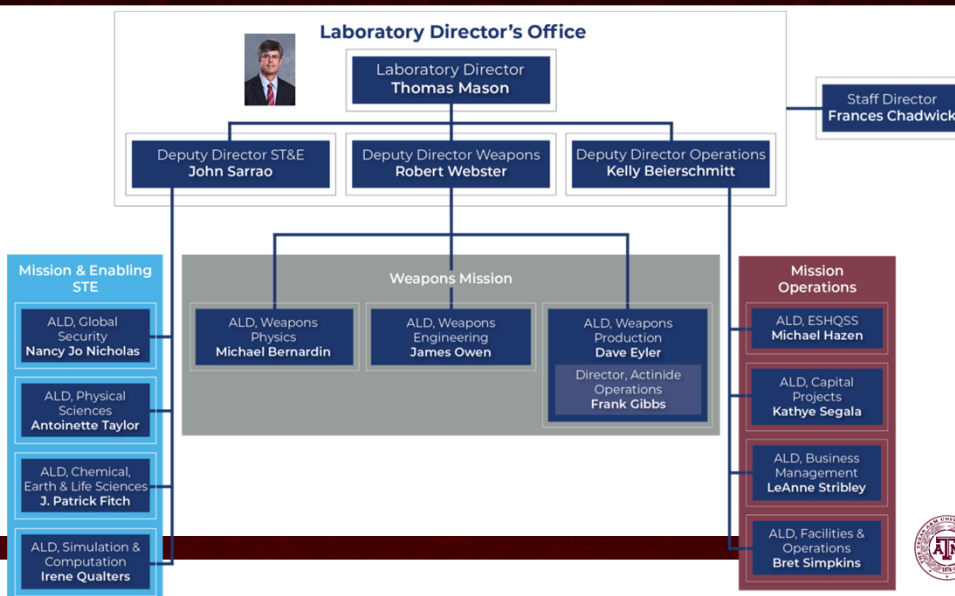
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Triad Board Committees



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LANL Leadership Overview



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LANL: Four Capability Pillars of ST&E



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Anticipated TAMUS Activities with LANL

Research

LANL "Lab Agenda" identifies areas of interest: materials science and engineering, accelerator science and applications, extreme-scale computing, quantum science and engineering, nuclear security, etc.



Education programs

Student internships, graduate fellowships, faculty engagement, curriculum development, continuing education

Workforce Development and Training

Emergency response and crisis management training, technical certificate training, small business technical training



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Progress with DOE Labs

NNSA Labs and Sites

- Umbrella agreements in place
- Numerous high level visitors from NNSA labs and sites
- Lab and site personnel helping teach TAMU courses
- Forming joint appointment programs



Other DOE Lab Progress

- Umbrella agreements with INL and PNNL
- A&M System Professors set to go to INL this summer
- Numerous high level visitors from INL, PNNL, and NREL



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If you are interested, let us know

Our office will enhance collaborations and lower barriers

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