MANAGING FOR THE FUTURE

FY 2023 was a year of building for future mission successes through new initiatives, attention to workforce needs, and expanding partnerships.

STRATEGIC LEADERSHIP

DOE Secretary Jennifer Granholm, DOE Under Secretary for Nuclear Security and NNSA Administrator Jill Hruby, and U.S. Representative Zoe Lofgren (D-CA18) were among the speakers at Ignition Day, held at the Laboratory on May 8, 2023, celebrating the historic success at the National Ignition Facility (NIF). The event honored the recent achievement and the many individuals and institutions that contributed to the inertial confinement fusion (ICF) effort over six decades. In addition to ICF, LLNL is providing NNSA with technical leadership through broad partnerships in many facets of its national security mission and efforts to modernize the NNSA complex. The Laboratory is engaged in two nuclear warhead development programs (see pp. 4-5) and is collaborating with other NNSA sites to develop technologies and procedures that will accelerate the weapon design-to-production process. These efforts are benefiting from major advances in high-performance computing and

Moving the Laboratory forward in science and technology excellence directed at important national missions

machine learning, additive manufacturing, and experimental capabilities to certify weapons performance and advance fusion research. LLNL is also actively engaged in many process improvement pilot projects aligned with NNSA's Enhanced Mission Delivery Initiative recommendations (see p. 20).

SUPPORTING A CHANGING WORKFORCE

An outstanding workforce is LLNL's principal strength. Recruiting, training, and retaining exceptional talent is a top priority at a time of rapid change in our workforce. In support of performance excellence, Laboratory culture is focused on employees and their individual needs. This focus on employees includes adoption of workplace flexibility, an award program recognizing excellent performance, and management initiatives to expand leadership training programs, pursue options to improve employee benefits, and establish an improved performance management system at the start of FY 2024 that emphasizes setting development goals and career planning.

Broad support for IDEA-inclusion, diversity, equity, and accountabilityprovides the foundation for creating an environment where the diverse talents, perspectives, ideas, backgrounds, and life experiences of all employees are valued and respected. Such an environment fosters innovative ideas and the ability to take on grand challenges that LLNL missions demand. The Laboratory's IDEA Office emphasizes culture-enhancing behavior and encourages activities of employee support groups that celebrate diversity. IDEA goals are also championed in the Laboratory's many outreach engagements with academia, veterans, and summer interns as well as STEM activities for pre-college students (see p. 24).



RIBBON-CUTTINGS AND NEW FACILITIES

In FY 2023, several key facilities began operations in support of LLNL's national security missions. In May, a ribbon-cutting ceremony officially marked the opening of the Advanced Characterization and Evaluation Laboratory, which will enable more rapid maturation of nondestructive evaluation (NDE) capabilities for NNSA's stockpile modernization programs. Advances in NDE are broadly needed for U.S. industry to accelerate manufacturing tools and processes and produce higher quality parts. Another ribbon-cutting ceremony marked the opening of a new Stockpile Modernization building that will add more than 100 offices for staff working on the W87-1 Mod and other programs. In addition, an open house in July 2023 welcomed newly modernized laboratory facilities and redesigned workspaces that support LLNL's excellence in materials science. The combination of unique capabilities and user workspaces enable researchers from across the Laboratory to pursue current projects with enhanced tools and to undertake

exciting new research opportunities. In FY 2023, site preparation began for construction of DICE—the Digital Infrastructure Capability Expansion. The facility will provide a major upgrade to LLNL's current networking and communications infrastructure and support future needs. DICE is a line-item construction project that is benefiting from NNSA's efforts to streamline construction projects and lower costs (see p. 20). The new facility will be LEED gold certified.



In July 2023, the Laboratory issued its updated Site Development Plan, which lays out a 20-year roadmap for disposition and construction on Sites 200 (the main campus) and 300. The plans are focused not only on new facilities and modernized infrastructure, but how they are arrayed to enhance the productivity and work experience of future generations of employees. The plan includes the creation of neighborhoods to increase opportunities for interaction, and it envisions a more central location for the Director's Office and core nuclear weapons program activities. A centerpiece will be the National Security Innovation Center (NSIC), a five-building complex consisting of 1,000 offices and an auditorium planned for the center of the Laboratory. The NSIC received a Critical Decision-0 sign-off at NNSA, and construction of the first building is expected to begin in 2026.



THE SITE DEVELOPMENT

PLAN 2023

LLNS BOARD OF GOVERNORS ACTIVITIES

The LLNS Board of Governors and its committees provide oversight to the Laboratory and delve into issues crucial to mission and mission-support activities. External review committees (ERCs), panels of independent experts including Board members, periodically met in FY 2023 to critically assess the quality of the Laboratory's technical workforce and the effectiveness of research efforts in meeting mission goals and future national needs. Their reports, which provided DOE/ NNSA with an independent validation of work quality, consistently affirmed the mission relevance and high impact of Laboratory research. The Board chartered functional management reviews (FMRs) on an as-needed basis. Six FMRs were completed in FY 2023 in topical areas ranging from Superblock operations and site security to work planning and control. Recommendations provided by Board committees, ERCs, and FMRs have led to substantive responsive actions.

