PHYSICAL SCIENCES

VISTAS

PERSPECTIVES ON SIMULTANEOUS EXCELLENCE | ISSUE 1 2026

AWARDS ISSUE

Los Alamos
NATIONAL LABORATORY

Los Alamos National Laboratory Director Thom Mason toasts honorees at the Lab's awards night, which was held in Santa Fe, NM.

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Physical Sciences Directorate

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FROM ELLEN'S DESK

Ellen Cerreta, Associate Laboratory Director for Physical Sciences

It is my privilege to introduce this awards issue of *Physical Sciences Vistas*, a celebration of scientific excellence, institutional impact, and the extraordinary people who make our mission possible. As you turn the pages, you will see clear evidence of what I witness every day across the Physical Sciences directorate: outstanding technical expertise, deep collaboration, and a shared commitment to advancing national security and scientific discovery.

This year's honorees—spanning early-career scientists, distinguished leaders, outstanding research teams, and transformative operational contributors—embody the spirit of simultaneous excellence. Their achievements not only solve today's challenges but also build the capabilities our nation will rely on for decades to come. Whether developing new materials models, executing groundbreaking experiments, enabling critical production milestones, or modernizing foundational infrastructure, their work strengthens Los Alamos and national security.

What stands out most in this issue is the breadth of accomplishment. From accelerator science to materials innovation, from nuclear physics to environmental stewardship, our directorate continues to lead in fundamental and applied research areas essential to national security. The recognitions highlighted here—fellowships, national awards, successful mission deliverables, and multi-institution achievements—reflect the dedication, creativity, and resilience of our teams.

I am especially proud that so many of these successes were made possible through collaboration: across the Lab and other institutions. This culture of teamwork is one of our greatest strengths. It enables us to execute with agility, innovate with purpose, and push the boundaries of what is scientifically and technically possible.

To every award recipient and team recognized in this issue: congratulations and thank you. Your accomplishments raise the standard of excellence for all of us, and they inspire the next generation of scientists, engineers, and leaders at Los Alamos.

To all members of the Physical Sciences community: thank you for your dedication to our Laboratory's mission. I hope you find this issue both energizing and reflective of the extraordinary work you contribute every day.

With appreciation and pride,

RECOGNIZING Scientific Achievement

AMERICAN NUCLEAR SOCIETY FELLOW

Christopher Stanek

Christopher Stanek (Nuclear Energy) was named a fellow of the American Nuclear Society for his "pioneering contributions to fuel and materials research and his exceptional leadership in advancing modeling and simulation for nuclear energy."

Over his career, Stanek has led major national programs—notably as National Technical Director of DOE's Nuclear Energy Advanced Modeling and Simulation Program from 2015 to 2024—helping to develop simulation tools that accelerate advanced reactor deployment.

His research has emphasized atomistic modeling of defects, materials behavior under irradiation, and nuclear fuel cycle materials.

ASM INTERNATIONAL FELLOW

Amber Black

Amber Black (Sigma) was named a fellow of ASM International. She was cited for "outstanding contributions to the field of high-energy density processing of materials and devoted service dedicated to the advancement of ASM International."

Black is a metallurgist and research and development engineer with expertise in electron beam additive manufacturing. A member of the ASM International Board of Trustees, she is a recipient of the ASM Bronze Medal and ASM Emerging Professionals Achievement Award and has led numerous ASM strategic planning committees.

BNL/RHIC sPHENIX HERO

Bade Sayki

Bade Sayki (Physics) was named a "sPHENIX Hero" for her efforts in the operation of the sPHENIX high-energy particle physics experiment underway at Brookhaven National Laboratory's Relativistic Heavy Ion Collider. The University of Colorado Boulder graduate student has been involved in nearly every aspect of the experiment's time projection chamber outer tracker—a subsystem that helps calibrate the detector's particle-tracking instrument and maximize its efficiency.

ICALEPCS EARLY CAREER AWARD

Anthony Braido

Anthony Braido (Accelerator Operations and Technology) is the recipient of the Early Career Award from the International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPCS). The biennial award recognizes individuals who have made exceptional contributions to the field of control and data acquisition systems during the early stages of their career.

Braido, who is primarily responsible for controls and diagnostics for the Los Alamos Neutron Science Center accelerator, joined the Lab in 2020. He earned a bachelor of science in electrical engineering from the University of Nevada, Reno, graduating magna cum laude with honors in his field of study.

TMS BRIMACOMBE MEDALIST

Kester Clarke

Kester Clarke (Materials Science and Technology) was named a member of the Brimacombe Medalist class of 2025 by The Minerals, Metals, and Materials Society (TMS). Clarke was recognized for "sustained contributions to the science and application of metals processing, outstanding service to our technical community, and excellence in mentoring."

Clarke leads the Materials Science in Radiation and Dynamics Extremes group. His experience includes serving as the Forging Industry Research and Educational Foundation Professor at the Colorado School of Mines and an engineer in industry.

RECOGNIZING

Scientific Service

ACS COMMITTEE ON CHEMISTRY AND PUBLIC AFFAIRS

Katharine Orr

Katharine Orr (Materials Science and Technology) has been selected to serve as a full voting member on the American Chemical Society's (ACS) Committee on Chemistry and Public Affairs. The committee provides advice and recommendations for society action on public policy matters involving the chemical sciences and technologies. As a research technologist at Los Alamos, Orr is one of the few members of this national-level committee with a perspective on issues facing government science workers.

AMERICAN PHYSICAL SOCIETY FOUR CORNERS SECTION

Verena Geppert-Kleinrath

Verena Geppert-Kleinrath (Physics) was elected vice chair of the American Physical Society's Four Corners Section. As vice chair, she helps support the professional development of scientists and college students in New Mexico, Arizona, Colorado, and Utah. Geppert-Kleinrath is a Physics deputy group leader and leads the physics design for novel neutron and gamma imaging systems and radiography diagnostics for experiments at the National Ignition Facility, the Omega Laser Facility, and the Nevada National Security Site.

DEEP UNDERGROUND NEUTRINO EXPERIMENT

Sowjanya Gollapinni

Sowjanya Gollapinni (Physics) was elected co-spokesperson for the international neutrino project, the Deep Underground Neutrino Experiment (DUNE). Fermilab is the host laboratory for DUNE, in partnership with funding agencies and more than 1,400 scientists and engineers from all over the globe. Gollapinni has been involved with the DUNE collaboration since 2015. In 2022, she received a Lab Distinguished Performance Award for her accomplishments on DUNE and the Short-Baseline Neutrino Program.

NATIONAL ACADEMIES ARMY NEXT GENERATION ARMOR WORKSHOP COMMITTEE

George 'Rusty' Gray III

George "Rusty" Gray III (Materials Physics and Applications) served as chair of a series of armor workshops hosted by the National Academies of Sciences, Engineering, and Medicine. With a focus on high-performance steel and next-generation materials, the series covered current research and development in the US Army and abroad and identified promising avenues for future study. Gray is a member of the National Academy of Engineering and a fellow of Los Alamos National Laboratory, the American Physical Society, ASM International, and The Minerals, Metals, and Materials Society.

NATIONAL ACADEMY OF SCIENCES

Brenda Dingus

Brenda Dingus (Physics) was elected a member of the National Academy of Sciences in recognition of her contributions to science. The honor is a testament to her distinguished and continuing achievements in original research. Dingus has led several pioneering gamma-ray experiments, including analysis showing the first high-energy emission from a gamma-ray burst and the discovery of a previously unknown spectral component. She played a key role in the Milagro experiment's discovery of additional gamma-ray sources and the first observation of small-scale anisotropy of cosmic rays. She also led the development, funding, and construction of the High-Altitude Water Cherenkov Observatory.

TMS BOARD OF DIRECTORS

Clarissa Yablinsky

Clarissa Yablinsky (Materials Science and Technology) was elected to The Minerals, Metals, and Materials Society Board of Directors, where she will help guide the society's mission and shape the future of the field. Yablinsky is a researcher on the Dynamic and Mechanical Testing team in the Nuclear Materials Science group.

RECOGNIZING

Team Achievement

Breakthrough Prize in Fundamental Physics

Jana Crkovska, Cesar da Silva, Matt Durham, Eliane Epple, Nicolas Schmidt, Hubert van Hecke, Ping Wong (Physics)

Physical Sciences staff were members of the international LHCb team that received the prize for its decade-long work at the European Organization for Nuclear Research's (CERN) Large Hadron Collider. The award recognized the collaboration for its detailed measurements of Higgs boson properties, discovering new strongly interacting particles, and exploring nature "at the shortest distances and most extreme conditions." The award is open to all physicists—theoretical, mathematical, experimental—working on the deepest mysteries of the universe. It was created in 2012 to recognize profound contributions to human knowledge.

DOE Secretary's Honor Awards

The highest honor a DOE employee or contractor can receive, these awards recognize exceptional contributions to DOE's mission. Physical Sciences staff were members of the following award-winning teams.

Exascale Computing Project Leadership Team

David Rogers (Materials Science and Technology)

The team was recognized for its work on the project, which developed "the world's first sustainable exascale computing software ecosystem." This 7-year collaboration, a joint effort by the DOE Office of Science and the NNSA, involved 6 DOE national labs and nearly 2,800 researchers and engineers. The outcome was the delivery of an exascale computing ecosystem to provide breakthrough solutions that address future challenges in energy assurance, economic competitiveness, healthcare, and scientific discovery, as well as growing security threats. The team also created more than 70 software technology products and fostered public–private partnerships that strengthen US competitiveness in the global computing market.

Nimble Subcritical Experiment Team

Johnny Goett (Physics)

The team was recognized for its advancement of a research capability at the Nevada National Security Site that is highly significant to NNSA and DOE missions. Such underground experiments involve nuclear material and high explosives, but do not reach criticality or release radioactive materials. The team was led by Lawrence Livermore National Laboratory, with experiment execution supported by Los Alamos and others.

NNSA Administrator's Achievement Award

The award commemorates extraordinary accomplishments and contributions to the NNSA and its missions in support of national security. Physical Sciences staff were members of the First Production Unit Team.

First Production Unit Team

Cameron Richards (Materials Physics and Applications); Najeb Abdul-Jabbar, Alexandria Alcantara, Ronald Allen, Joseph Anderson, Veronica Anghel, David Arellano, Raymond Atta-Fynn, Simon Barlow, Seth Blackwell, Lynette Casados, Ashleigh Chov, Victoria Cox, Paul DeBurgomaster, Gus Dozhier, Ryan Fulcher, Ernesto Gallegos, Luke Geeting, Amber Gellis, Dustin Gibbons, Meghan Gibbs, Alberto Gomez, Crystella Gonzales, Mathew Hayne, Isaac Hernandez, Sarah Hickam, Matthew Janish, Roger Jaramillo, Jesse Jelinek, Trevor Johnson, Karl Krenek, Theresa Kucinski, Jacob Kummer, Eric Larison, Zachary Levin, Andrew Lloyd, Georgette Maestas, Aaron Martinez, Todd Martinez, Alessandro Mazza, Martina Mercure, Michael Middlemas, Helen Milenski, Jeremy Mitchell, Gordon Moore, Benjamin Morrow, James Mudd, Holly Neff, Dan Olive, Martin Oltmanns, Thomas Ontiveros, Katharine Orr, Kristen Pace, Eric Palmateer, Itzayana Patino, Adam Phelan, David Phillips, William Ponder, Derek Prada, Brett Robinson, Daniel Rodriguez, David Rogers, Fritzgerald Sandoval, Benjamin Schumer, Edwin Serrano, Victor Siller, Alice Smith, Todd Steckley, Paul Tobash, Igor Usov, Angelique Wall, Benjamin Walusiak, David Wayne, Derek Weber, Olivia Weir, Clarissa Yablinsky (Materials Science and Technology); Case Smith (Physics); Nicholas Barta, Zachary Jones, Cassidy Mazelin, Robert Rauschendorfer (Sigma)

The team successfully delivered the first production unit of the W87-1 plutonium pit and re-established war reserve pit production. This accomplishment is the result of overcoming numerous technical challenges, fostering innovative solutions, and demonstrating exceptional resilience and collaboration.

NNSA Defense Programs Awards of Excellence

Since 1982, the NNSA Office of Defense Programs has recognized individuals and teams across the nuclear security enterprise with awards acknowledging significant achievements in quality, productivity, cost savings, safety, or creativity in support of the nuclear weapons program.

Exceptional Achievement: Moonshine Experiment Team

Ari Foley-Janish, David Moore, Dan Olive (Materials Science and Technology)

The Los Alamos Moonshine experiment team developed an experimental concept and executed an actinide experiment at the Dual-Axis Radiographic Hydrodynamic Test Facility. Moonshine helped create a new materials testing capability, a novel diagnostic suite, and new simulation capabilities.

Exceptional Achievement: W87-1 Plutonium Pit FPU Team

George "Rusty" Gray III, Cameron Richards (Materials Physics and Applications); Najeb Abdul-Jabbar, Alexandria Alcantara, Victoria Ambriz, Joseph Anderson, Veronica Anghel, David Arellano, Raymond Atta-Fynn, Simon Barlow, Nicholas Barta, Seth Blackwell, Lynette Casados, Ashleigh Chov, Victoria Cox, Paul DeBurgomaster, Gus Dozhier, Alexander Edgar, Ryan Fulcher, Ernesto Gallegos, Luke Geeting, Amber Gellis, Dustin Gibbons, Meghan Gibbs, Alberto Gomez, Crystella Gonzales, Mathew Hayne, Isaac Hernandez, Matt Jackson, Matthew Janish, Roger Jaramillo, Jesse Jelinek, Trevor Johnson, Karl Krenek, Theresa Kucinski, Jacob Kummer, Eric Larison, Zachary Levin, Andrew Lloyd, Georgette Maestas, Aaron Martinez, Todd Martinez, Cassidy Mazelin, Alessandro Mazza, Martina Mercure, Michael Middlemas, Helen Milenski, Jacob Mingear, Jeremy Mitchell, Gordon Moore, Benjamin Morrow, James Mudd, Holly Neff, Dan Olive, Martin Oltmanns, Thomas Ontiveros, Katharine Orr, Mark Ortega, Kristen Pace, Eric Palmateer, Itzayana Patino, Adam Phelan, David Phillips, William Ponder, Derek Prada, Brett Robinson, Daniel Rodriguez, David Rogers, Fritzgerald Sandoval, Benjamin Schumer, Edwin Serrano, Victor Siller, Alice Smith, Todd Steckley, Paul Tobash, Igor Usov, Benjamin Walusiak, David Wayne, Derek Weber, Olivia Weir, Clarissa Yablinsky (Materials Science and Technology); Ellen Cerreta (Physical Sciences)

NNSA, including partner laboratories and production plants, achieved the first production unit of the W87-1 plutonium pit in 2024. Reaching the milestone is the culmination of more than a decade of planning, research and development, facility modernization, and workforce commitment.

Detonator Pellet Can Assembly Team

Michael Guzman (Accelerator Operations and Technology)

The team successfully produced the first diamond-stamped detonator pellet can assembly for the W80-4 Life Extension Program. Establishing this production capability required exceptional creativity, collaboration, and rapid execution.

Los Alamos ENDF/B-VIII.1 Development Team

Shea Mosby (Accelerator Strategy Office); Esther Leal Cidoncha, Aaron Couture, Matthew Devlin, Keegan Kelly, Sean Kuvin, Hye Young Lee, Som Paneru (Physics)

The team developed and released a new nuclear data library. The resource provides significant improvements for Los Alamos and NNSA applications, including stockpile stewardship, global security, and criticality safety.

NNSA Office of Infrastructure Excellence Award

NNSA's Office of Infrastructure recognized exceptional infrastructure accomplishments made in support of the mission. Physical Sciences staff were members of the Bag-Out Port and Trolley Repair Rapid Response Team.

Bag-Out Port and Trolley Repair Rapid Response Team

Christopher Bast (Accelerator Operations and Technology); Matthew Vigil (LANSCE Facility Operations)

A multidisciplinary team applied innovative solutions to address a failed trolley used to transport materials and waste items from gloveboxes—all in under a month.

R&D 100 Awards Finalist

Physical Sciences staff were members of the LAROMance team, which was recognized as a finalist in the awards program that honors the top 100 proven technological advances of the year.

LAROMance: Los Alamos Reduced Order Models for Advanced Nonlinear Constitutive Equation

Laurent Capolungo, Andrea Rovinelli, Andre Ruybalid (Materials Science and Technology)

LAROMance provides a turnkey solution to model materials response at the component level during harsh or off-normal scenarios that are difficult to study experimentally.

RECOGNIZING

Outstanding Institutional Contributions

LOS ALAMOS OPERATIONS EXCELLENCE MEDAL

Mark Gulley

Mark Gulley (Accelerator Operations and Technology) is the recipient of the Laboratory's Operations Excellence Medal, the Lab's highest honor recognizing outstanding contributions to mission operations. Gulley serves as the deputy division leader for operations in the Accelerator Operations and Technology division, where he oversees the maintenance and operation of the Los Alamos Neutron Science Center (LANSCE) accelerator. With a 25-year career at Los Alamos, Gulley has earned a reputation for transformative leadership and technical excellence. His innovative approach has enabled LANSCE operations to thrive amid budget constraints and supply chain challenges. His influence extends well beyond Los Alamos. He is recognized as an operations expert across national laboratories, providing guidance to Argonne, Brookhaven, Fermilab, and the Spallation Neutron Source.

LABORATORY FELLOWS' PRIZE FOR LEADERSHIP

Sowjanya Gollapinni

Sowjanya Gollapinni (Physics) is a recipient of a Laboratory Fellows' Prize for Leadership, recognized for her work on neutrino physics and leadership in one of the nation's highest priority scientific endeavors. An internationally renowned particle physicist who plays a pivotal role in several impactful neutrino experiments, Gollapinni is the lead and co-spokesperson for the Deep Underground Neutrino Experiment, a global collaboration with more than 1,400 members across 35 countries, making it the largest collaboration in the history of neutrino physics.

Distinguished Performance Awards

Each year the Lab recognizes individual employees or groups of employees who have distinguished themselves through their outstanding scientific, technical, operational, and/or administrative contributions in support of the Lab's mission. Physical Sciences staff were members of the following award-winning teams.

SMALL TEAM AWARDS

Co-60 Remote Handling Team

Steven Dryja, Dominic Montano, David Newman, Ryan Smeltzer (Accelerator Operations and Technology)

The team stepped in after a radioactive source jammed outside its shielding at Kirtland Air Force Base. This required constant guard, tying up Air Force and DOE resources. Using a remote-handling robot, the team worked on-site for five days to clear the obstructions and positioned a depleted uranium shield over the source so the staff could get it back into its housing. The team's careful planning and cross-agency coordination safely resolved a months-long stalemate, earning formal commendations from both DOE and the Air Force.

DUNE Laser Calibration Team

Jan Boissevain, Sowjanya Gollapinni, Adam Martinez, Eric Renner, David Rivera (Physics)

The team pioneered novel calibration strategies, including an advanced laser system, to transform the Deep Underground Neutrino Experiment (DUNE) into a precision instrument for measuring neutrino properties. By bringing together talented scientists, engineers, and postdocs, the team established Los Alamos as a leader in the international neutrino research community.

Light Charged Particle Induced Reaction Project Team

Sean Kuvin, Hye Young Lee, Som Paneru, Christopher Prokop (Physics)

The team supported the rapid deployment of a new experimental capability by building a multi-lab, multi-university collaboration to leverage the charged-particle beams at the University of Notre Dame. Its effort resolved a longstanding issue with inconsistent evaluated cross sections for deuteron-induced reactions on lithium.

SWITCHFISH Team

Milo Prisbrey (Materials Physics and Applications)

With its prototype, the team ran exercises during DOD operator training and participated in DOD's Ice Camp Whale in the Beaufort Sea. In 2024, SWITCHFISH moved from basic research into a DOD program-executive-office, which shifted the program into full operational deployment. The team took this idea smoothly from program conception and fundamental research to a field-ready prototype. Its work earned the Lab a voice in future strategy discussions about the future of oceanic operations.

LARGE TEAM AWARDS

Cyclone-1 Team

Nicholas Dallmann, Michael Malone (Materials Physics and Applications); Estevan Sandoval, Ethan Walker (Materials Science and Technology)

The team successfully executed a suborbital flight experiment, taking just 10 months from conception of the experimental design to launch. The goal of the experiment was to launch an experimental flight vehicle into space and use a radar to measure real-time data on the vehicle as it reentered Earth's atmosphere.

Deimos Team

Miles Beaux II, Bryant Kanies, Caitlin Kohnert, Brian Patterson, Theresa Quintana (Materials Science and Technology); Rose Bloom, Tyler Garcia, Michael Hahn, Tyler Herbert, Jesus Ibanez, Erik Luther, Rafael Spillers, Tyler Vietanen (Sigma)

After three years of experiment design, the team executed the Deimos experiment at the National Criticality Experiments Research Center in Nevada, furthering understanding of future nuclear fuel technologies. The team reused high-assay, low-enriched uranium tri-structural isotropic fuel and beryllium from previous projects. The Deimos platform has since been used as a starting point for two other experiments and will accelerate the development of small modular reactors.

Dicer Team

Andrew Cooper, Aaron Couture, Paul Koehler, Thanos Stamatopoulos, John Ullmann (Physics)

The Device for Indirect Capture Experiments on Radionuclides (DICER) was used to execute the first time-of-flight study of zirconium-88. With this new capability, the Lab will be able to further study mission-critical radionuclides relevant to radiochemical diagnostics, a capability unavailable elsewhere.

Direct Cast and Alloy in Crucible Team

Rob Aikin, Emanuel Arnold, Rose Bloom, Hannah Cross, Justin Cross, Joe Florez, Bo Folks, Paul Gibbs, Charley Giese, Joseph Goodrich, Seth Imhoff, Jordyn Janusz, Wayne Jaramillo, Don Johnson, Zachary Jones, Kara Luitjohan, Rodney McCabe, Cody Miller, Carl Osborn, Greg Poling, Robert Rauschendorfer, Sean Raybon, Jeff Robison, Raymond Sandoval, Garry Sandoval, Mike Schuch, Casey Shoemaker, Hunter Swenson, Tanner Trujillo, Edward Turner, Caleb Vigil, Jeff Vigil, Jared Wittmer, Kathryn Woodruff (Sigma)

The team developed a single-step method that eliminates the inefficiencies in traditional weapons components processes. The process gives the Lab increased manufacturing efficiency and flexibility.

Double-Shell Inertial Confinement Fusion Team

Nikolaus Christiansen, Patrick Donovan, Israel Martinez, Brian Patterson, Theresa Quintana, David Ross, Derek Schmidt, Sam Stringfield, Camille Wong (Materials Science and Technology); Christopher Danly, Tiffany Desjardins, James Dowd, Mora Durocher, Robert Dwyer, Codie Fiedler, Matthew Freeman, Hermann Geppert-Kleinrath, Verena Geppert-Kleinrath, Margaret Huff, Paul Keiter, Yongho Kim, Lynn Kot, Eric Loomis, Kevin Meaney, Emily Mendoza, Elizabeth Merritt, Zaarah Mohamed, Sasikumar Palaniyappan, Alexander Rasmus, Sidney Ricketts, Harry Robey, Gary Saavedra, Britney Sanders, Landon Tafoya, Robert Van Dervort, Carl Wilde, Bradley Wolfe, Chun-Shang Wong (Physics)

In 2024 at the National Ignition Facility, the team executed the first inertial confinement fusion (ICF) implosion with a liquid fill of deuterium-tritium fuel. The team went on to perform four additional ICF experiments, and by continuously improving and refining its capsule design process, advanced the Lab's ICF research platform.

Intelligence Analysis Team

Johnny Goett (Physics)

A multidisciplinary team was mobilized, including collaborators at other national laboratories, in response to a credible breakthrough adversary technology that challenged the nation's understanding of threat environments. The team's findings ultimately informed critical national security decisions and initiated an experimental campaign.

LANSCE Modernization Project CD-0 Proposal Team

Anna Alexander, Maria Sanchez Barrueta, Kip Bishofberger, Joseph Bradley, Anthony Braido, Lawrence Castellano, Dimitre Dimitrov, Leanne Duffy, Henry Gaus, Dmitry Gorelov, Thomas Wesley (Wes) Hall, Chris Hatch, Enrique Henestroza, En-Chuan Huang, Martin Kay, Sergey Kurennoy, John Lyles, Jacob Medina, Paula Van Rooy, Taylor Roybal, Bhavini Singh, Salvador Sosa, Charles Taylor, Phil Torrez, Remington Tyler Thornton, Janardan Upadhyay, Haoran Xu, Joshua Yoskowitz (Accelerator Operations and Technology); Chris Echohawk, Cynthia Jarvison, Shea Mosby, John Tapia, Debbie Trujillo (Accelerator Strategy Office); Greg Dale, John Lewellen (LANSCE Modernization Project Office); Eric Brown (Physical Sciences)

The team received approval for the LANSCE Modernization Project (LAMP) from Deputy Secretary of Energy David Turk. The milestone recognized the need for LAMP, which aims to replace and update front-end components of the Los Alamos Neutron Science Center (LANSCE) accelerator. LANSCE holds a vital role in support of science-based stockpile stewardship, and the much-needed facility upgrades will ensure that multiple weapons modernization efforts don't experience significant delays.

Los Alamos ENDF B-VIII.1 Development Team

Shea Mosby (Accelerator Strategy Office); Esther Leal Cidoncha, Aaron Couture, Matthew Devlin, Keegan Kelly, Sean Kuvin, Hye Young Lee, Som Paneru (Physics)

The Lab played a leading role in the development and release of a new nuclear data library. As the only place in the world where all the necessary expertise is co-located, the Lab was uniquely positioned to undertake this operation. The data library presents a significant step forward from existing datasets, which should lead to pronounced advancements in applications for the Lab and the NNSA, such as stockpile stewardship, global security, and criticality safety.

Los Alamos Interstellar Mapping and Acceleration Probe Mission Team

Raymond Newell (Materials Physics and Applications); Bradley Carpenter, Micah Hickethier, Daniel Hooks (Sigma)

NASA's Interstellar Mapping and Acceleration Probe (IMAP) was launched to help discover the global plasma structures, processes, and dynamics of the interaction between the sun and the local interstellar medium. IMAP features 10 experiments, 2 of which were designed and built at Los Alamos. The team's development and qualification of these experiments will enable discovery science for years to come and continue to establish Los Alamos's central role in space and heliosphere research.

Moonshine Experiment Team

Ari Foley-Janish, Dan Olive (Materials Science and Technology)

The team developed an experimental concept and executed a plutonium experiment at the Dual-Axis Radiographic Hydrodynamic Test Facility, the first plutonium test ever conducted at the facility. The results of the experiment open up a new area of investigation in plutonium science.

Plutonium Coupon Study Experiment Execution Team

Jesse Jelinek, Helen Milenski (Materials Science and Technology)

The plutonium coupon study aims to explore the interactions between hydrogen isotopes and plutonium, marking a significant leap forward in tritium and plutonium science and research. The study's initial experiments were conducted at the Weapons Engineering Tritium Facility and represent the establishment of a new capability within the nuclear security enterprise.

Sigma Coatings Team

Devin Atencio, Rose Bloom, John Carpenter, Deeann Chavez, Courtney Clark, Justin Cross, Bo Folks, Tyler Garcia, Joseph Goodrich, Tyler Herbert, Kendall Hollis, Jesus Ibanez, Mike McBride, Kalya Molnar, Aidan Moyers, Carl Osborn, Kristofer Peltz, Sean Raybon, Robert Schieberl, Mike Schuch, Rafael Spillers, Melissa Thrun, Anthony Trejo, Ryan Wilkerson, Jared Wittmer, Kathryn Woodruff (Sigma)

The team successfully advanced two different coating technologies that will directly impact the current program of record and future systems. The timeline in which the team went from concept to realization for two different processes was incredibly short, with most of the technical work occurring within one year. Such responsiveness will be critical as new designs and prototypes are explored.

Vulcan Venture Trans Am Campaign Team

Cassidy Mazelin, JD Montalvo (Sigma)

The Vulcan Venture successfully executed the Trans Am campaign, the culmination of a multi-lab program at the Big Explosive Experimental Facility in Nevada.

W87-1 Hostile Nuclear Blast Qualification Team

Kyle Deines (Physics)

A large, multi-organizational effort was conducted to redesign elements and repair portions of the Lab's blast tube. The team's work represents a successful demonstration of an expanded blast-testing capability at the Laboratory.

Distinguished Postdoc, Mentor, and Student Awards

The Lab's Partnerships and Pipeline Office's Postdoc Program honors outstanding efforts by postdocs and mentors that have led to a positive impact on the Lab and its mission. The Student Programs Office recognizes outstanding students for positive impacts they have made to the Lab's research, mission, and goals.

DISTINGUISHED POSTDOC AWARD
Manjeet Chhetri
(Materials Physics and Applications)

DISTINGUISHED STUDENT AWARD
Abby Wilson
(Materials Physics and Applications)

DISTINGUISHED POSTDOC MENTOR AWARD
Rod Borup
(Materials Physics and Applications)

DISTINGUISHED POSTDOC MENTOR AWARD
Dean Morales
(Materials Physics and Applications)

Patricia E. Gallagher Environmental Awards

These awards recognize individuals or teams for exemplary achievement in waste reduction, waste management, or innovation that leads to environmental improvement and environmental education. Physical Sciences staff alongside their Laboratory colleagues were members of the following award-winning teams.

SILVER AWARDS

Replacement of NHMFL Corroded Water Chilling System

Ivan Balakirev, Ashish Bhardwaj, Suz Espinoza, Leonard Gonzales, Jonathan (Jay) Noerper, Josiah Srock, Hazuki Teshima (Materials Physics and Applications)

PFAS Destruction Using Electrochemical Oxidation Technologies

Sooik Im, Jihyeon (Jenna) Kim, Kwan-Soo Lee (Materials Physics and Applications); Stephen Trujillo (Chemistry)

Sigma Waste Request System

Ted Keppner, Jason Martinez (Sigma); Andrew Trent, Randy Martinez, Krista Corvey (Waste Management)

BRONZE AWARDS

TA-53 Low-level Radioactive Waste Reduction Effort

Manuel Archuleta, Andrew Martinez (LANSCE Facility Operations); Marcos Romero, Christopher Varela (Physics); Alisha Jaramillo, Alia Vigil, James Vigil (Radiation Protection); Matthew Antezana, Brooke Baker, Jeff Lucero (Waste Management)

Waste Support for Ceramic Processing Team Space Reclamation Projects

Steven Hnatko (Sigma); Krisa Corvey, Andrew Trent (Waste Management)

Custom trophies are lined up for presentation to Los Alamos Distinguished Performance Award recipients during the Lab's annual awards night.

Associate Laboratory Director
for Physical Sciences: Ellen Cerreta

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