

The Community Newsletter of Lawrence Livermore National Laboratory • • • Fall 2003

Director Emeritus Dr. Edward Teller

r. Edward Teller, worldrenowned physicist and cofounder of Lawrence Livermore National Laboratory, died Sept. 9 at his home on the Stanford University campus.

Dr. Teller was recognized as one of the leading scientists of the 20th century for his work as a theoretical physicist. His research in the fields of quantum physics, molecular physics and nuclear physics in the 1930s led to his participation in the Manhattan Project at Los Alamos National Laboratory in the early 1940s, and his later advocacy of the development of the hydrogen bomb and other national defense initiatives.

Dr. Teller, along with Ernest O. Lawrence, was a guiding force behind the establishment in 1952 of the



1908–2003

University of California Radiation Laboratory, now known as Lawrence Livermore National Laboratory. He initially served as an Associate Director of the Laboratory, and was later Director from 1958–1960. In the ensuing years, he was a professor of physics at-large for the University of California. In 1975, he was named Director Emeritus of Lawrence Livermore National Laboratory by the University of California and appointed Senior Research Fellow at the Hoover Institution, positions he held until his death.

A lifelong advocate of science education, Teller not only taught physics at the university level but was also the founder and first chair of UC Davis' Department of Applied Science, located on the Laboratory campus. Most

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Edward Teller Education Center

he Edward Teller Education Center (ETEC) was formally dedicated Sept. 9 during a ceremony at ETEC's new home, beside the UC Davis Department of Applied Science facility on the Laboratory campus. The event was attended by local community officials and representatives from ETEC's sponsoring organization, the University of California, and partners UC Davis, UC Merced and LLNL.

ETEC will provide professional development and curriculum assistance to area science teachers to help them stimulate student interest in science. "The idea is to create a bridge from the research laboratory into the class-

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From left: Jeff Wright, UC Merced; Harold Levine, UC Davis; Karen Merritt, UCOP; Laura Gilliom, LLNL; Stan Hitomi, ETEC; and Hal Graboske, LLNL.

Emergency Preparedness

n partnership with the Alameda County Office of Emergency Services, Livermore-Pleasanton Fire Department and City of Dublin, the Laboratory has helped launch a community emergency education campaign for the Tri-Valley area.

The campaign, which focuses on a "Shelter, Shut and Listen" approach to community-wide emergency response, includes a tri-fold brochure with simple self-help information on how to prepare for and respond to a community-wide emergency, as well as a refrigerator magnet listing similar self-help emer-

gency reminders.

This education material was mailed to all residents and businesses in the Tri-Valley cities of Livermore, Pleasanton and Dublin.

An emergency affecting the Tri-Valley area may require residents to shelter-in-place, shut all doors and windows, and listen for emergency information on a local radio or television station. Following the simple self-help steps provided through the campaign will serve area residents well in the event of a communitywide emer-

gency.



LLNL is

already intricately involved in the Tri-Valley's emergency response network through its mutual aid and dispatch responsibilities with area response agencies. This campaign is an extension of those cooperative, community service efforts. •

New Lab Leaders

fter a 10-year absence, former LLNL employee **Steven Patterson** has returned to the Laboratory to become Associate Director for Engineering. For the past decade, Patterson has served as a distin-



Steven Patterson

guished professor of precision engineering at The University of North Carolina at Charlotte, where he helped develop the doctoral program in engineering.

During his

previous tenure at LLNL, Patterson held a number of

positions in the areas of precision engineering and materials fabrication, and was program leader for the Brilliant Pebbles Test Program. As Associate Director, he will oversee the work of roughly 2,200 engineers, designers, technicians, machinists and other personnel involved in a variety of projects throughout the Laboratory.

David Leary, currently director of Safeguards and Security, will take on the added responsibility of Associate Director for Laboratory Services. Leary's career at LLNL has included a number of management positions in the areas of supplemental labor, property management, business services, communications and the National Ignition Facility. As

Associate Director, Leary will lead



David Leary

approximately 1,750 employees who provide a variety of business and plant services for the Laboratory. Leary will be assisted in his new role by Bernie Mattimore, who had been the acting Associate Director of Laboratory Services, while he continues his Safeguards and Security responsibilities. •

National Lab. He put his heart and soul into this Laboratory and into ensuring the security of this nation, and his dedication never foundered."

Teller is survived by his son Paul, daughter Wendy, four grandchildren and one great grandchild. For more on Dr. Teller's life and achievements, visit the LLNL Website at www.llnl.gov. •

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recently, the Edward Teller Education Center (*see related story*), situated next to the Department of Applied Science, was officially opened to help provide teaching and curriculum assistance to science teachers throughout the Tri-Valley and surrounding region. Teller also published more than a dozen books on subjects ranging from energy policy and defense issues, to his own memoirs in 2001.

"The loss of Edward Teller is a great loss for this Laboratory and for the nation," said Laboratory Director Michael Anastasio. "He was a passionate advocate for science and the development of Lawrence Livermore

BioSafety Facility

LNL has conducted bioscience-related research in the national interest for the past 40 years. Our primary focus has been on preventing and treating disease and improving human health, and in the past decade, helping safeguard our nation from the threat of bioterrorism.

The Laboratory has been working with other national laboratories on ways to better detect and identify potential biological warfare agents. In full compliance with all applicable safety and security regulations, LLNL researchers have been studying anthrax and plague, without incident, in BioSafety Level One (BSL-1) and Two (BSL-2) laboratories on site for more than three years. They are developing DNA-based "signatures" that form the basis for rapid recognition and characterization of these agents. This signature information will help public health officials more rapidly determine the identity of an agent and the cause of an outbreak, leading to more timely and effective treatment for infected individuals.

In order to take this research one important step further, LLNL is proceed-

ing with plans to bring a BioSafety Level Three (BSL-3) facility to the Livermore campus.

Contrary to what has been stated by local advocacy groups, and others who have expressed their opposition to this facility, the National Nuclear Security Administration (NNSA), which oversees the national security laboratories for the Department of Energy, conducted a full and thorough environmental review of the facility as called for under the National Environmental Policy Act. NNSA completed an Environmental Assessment for the project, which took into account such things as the effects on human health, ecological resources, air quality, noise, waste management and seismology. The assessment included public review and comment. Based on its review, NNSA concluded that the BSL-3 facility will not pose a risk to the surrounding community.

The research conducted in the BSL-3 facility will also **not** involve the development of biological weapons or "biowarfare" agents as some have alleged. This type of research is prohibited in the United States under the terms of the Biological and Toxin Weapons Convention, which this country signed onto in 1972 and the U.S. Senate ratified in 1975. Further, the facility will be subject to unannounced inspections by two federal agencies, the Centers for Disease Control and Prevention and the Animal and Plant Health Inspection Service, which oversee facilities handling certain agents.

Examples of agents that will be studied in the BSL-3 facility are Rabbit Fever and Valley Fever, endemic to California, and other lesser-known agents such as Brucellosis.

Research will not include agents such as smallpox or live Ebola virus, or other agents that require the stricter safety and security requirements of a BSL-4 facility.

BSL-3 facilities are commonplace, not only in the Bay Area, but throughout the United States at research hospitals, universities, and schools of veterinary medicine. The University of California has approximately 40 BSL-3 facilities on its nine campuses. Hundreds of BSL-3 facilities are currently in operation nationwide.

If you would like to learn more about the BSL-3 facility, please contact Scott Wilson in the Laboratory's Public Affairs Office at 925-423-3125. •

Homeland Security Briefing

Secretary of the Department of Homeland Security Tom Ridge paid a visit to LLNL this summer and received briefings from Laboratory Director Michael Anastasio and others on a variety of Laboratory programs and technologies assisting our nation in the war on terrorism. Included in his visit was a stop at the



National Atmospheric Release Advisory Center, and updates on our Nuclear Incident Response Program, Biological Aerosol Sentry and Information System, and other related programs. Secretary Ridge also addressed the media during his visit. ETEC Continued from page 1

room," said Stan Hitomi, ETEC Director.

Dr. Edward Teller, ETEC's namesake and a lifelong advocate of science education, had planned to attend the dedication on Sept. 9 before suffering a stroke a few days prior to the event. He died later that day.

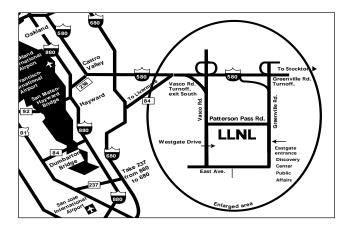
"Dr. Teller was still very much a presence at the ceremony," said Hitomi. "This center was created in the spirit of Dr. Teller as a man of ideas, a scientist and a teacher." •

Discover the Lab

iscover the Laboratory's contributions to national security and national science at the Discovery Center (formerly the Visitors Center), located on Greenville Road just outside the Laboratory's East Gate.

Here you will experience a broad-based display of the scientific technology developed at LLNL, as well as highlights of the Laboratory's history and research in such areas as defense, homeland security, and new energy sources.

The Discovery Center is open Monday through Friday, from 1-4 p.m. School tours of the Discovery Center for 4th and 5th graders are available by reservation Monday, Wednesday, and Friday from 9-11:30 a.m. Call (925) 422-5815 for more information.



The Laboratory's Public Affairs Office also offers a tour of LLNL that may include stops at the Biology & Biotechnology Research Program, the National Atmospheric Release Advisory Center, and ASCI White, the nation's fastest and most powerful super computer. Tour participants may also visit the National Ignition Facility, the world's largest and most energetic laser system, and the Center for Accelerator Mass Spectrometry, renowned for its carbon dating capabilities.

This free, two-hour tour is offered on Tuesdays and Thursdays at 9 a.m. U.S. citizens must register two weeks in advance, and non-U.S. citizens must register sixty days in advance. Special group tours can also be arranged. Tour participants must be at least 18 years of age. For more information about Laboratory tours, go to www.llnl.gov/pao, or call 925-422-4599. •

Discover LLNL is a publication of the Public Affairs Office at Lawrence Livermore National Laboratory.

If you would like to be included in the distribution of *Discover LLNL*, please contact Scott Wilson, wilson101@IInl.gov, or call (925) 423-3125.

Lawrence Livermore National Laboratory is a Department of Energy, National Nuclear Security Administration laboratory managed by the University of California.

"Ensuring national security and applying science and technology to the important problems of our time."

Lawrence Livermore National Laboratory Public Affairs Office Community Relations P.O. Box 808, L-797 Livermore, CA 94551

