## Lawrence Livermore National Laboratory

# Connections to the Community

Lawrence Livermore National Laboratory (LLNL) is a valued and involved member of the community, supporting a variety of educational programs, economic development initiatives and charitable activities.

The Laboratory takes great pride in contributing to the nation's security and equal pride in contributing to the local community and region. With a workforce of approximately 6,400, LLNL is the fourth largest employer in Alameda County and the largest employer in the City of Livermore. Most Laboratory employees reside in one of the three surrounding counties, with approximately 3,300 employees living in Alameda County, 1,250 in San Joaquin County and 950 in Contra Costa County.

The Laboratory's \$1.5 billion annual budget (fiscal year 2009) translates to a total annual payroll base of just under \$700 million. LLNL spends more than \$445 million each year for the procurement of goods and services, nearly \$190 million of which is spent in California and over \$80 million in Alameda, San Joaquin and Contra Costa counties.

#### Science Education Outreach

LLNL offers a variety of science enrichment activities aimed at inspiring the next generation of researchers and enhancing science and math education. In addition to "super science" field trips for classes, youth groups and science clubs, the Laboratory presents a free Science on Saturday lecture series at venues in Livermore and Tracy. LLNL researchers partner with local science teachers to present discussions and demonstrations on topics at the forefront of scientific research. In 2010, some 7,500 people attended lectures on antibiotic resistance, astronomical imaging, carbon sequestration, climate change and laser fusion energy.

The Laboratory also sponsors an annual Tri-Valley Science and Engineering Fair for 7th- through 12th-grade students. Begun in 1996, the fair provides a forum for students to present their science projects, interact with scientist-judges and receive feedback on their efforts. Approximately 300 students participate each year. Senior sweepstakes winners go on to compete in the prestigious Intel International Science and Engineering Fair and junior sweepstakes winners in the California State Science Fair.

LLNL provides a number of activities for middle- and high-school science teachers, from one-day science education symposia to

summer-long programs combining instructional segments and mentored research internships at the Laboratory. Every year, more than 200 teachers participate in these programs. Perhaps the most popular program is the Teacher Research Academy, which offers teachers a multi-tier professional development experience in one of four content areas that reflect the cutting-edge research performed at LLNL—fusion and astrophysics, biotechnology, energy and environment, and biophotonics. Levels 1, 2 and 3 (three to five days each) cover content knowledge, science teaching strategies, research methods, technical writing and skills for teaching students how to conduct a research project. In Level 4, teachers take part in a six- to eight-week mentored research project under the direction of an LLNL scientist. All activities are aligned with the California Science Content Standards, and participants can earn college extension credit or credit toward a Master of Science degree in Education from California State University, East Bay.

#### **Business Development Initiatives**

Efforts are under way to establish a Livermore Valley Open Campus (LVOC), a joint venture of the Lawrence Livermore and Sandia-California national laboratories. Through public-private partnerships with industry, government and academia, LVOC will engage scientists and engineers from around the world through its unique science facilities, major R&D efforts, industrial collaborations, educational programs and technology incubators



Every year, more than 300 middle- and high-school students present over 200 projects at the LLNL-sponsored Tri-Valley Science and Engineering Fair.

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the Laboratory's Science on Saturday lecture series.

to develop design alternatives for LVOC.

Community Giving

Local students attempt to spherically compress a weather balloon in a

to solve national and international challenges. The National

Nuclear Security Administration and Department of Energy have

approved the open campus concept, and work is moving ahead

The Laboratory is also party to a memorandum of understanding

to establish a Livermore innovation hub in green and advanced

transportation technologies. Participants include the City of

Livermore, LLNL and Sandia-California, three universities, a

DOE biofuels research institute, the local community college

community through volunteering and charitable giving. For more

nonprofit organizations in the Tri-Valley, San Joaquin Valley and

greater San Francisco Bay Area. In 2009, despite the economic

than 35 years, the HOME (Helping Others More Effectively)

campaign has raised money for hundreds of community and

district as well as industry and venture capital interests.

Laboratory employees are generous contributors to the

hands-on demonstration of one of the challenges of laser fusion, as part of

downturn, LLNL employees donated a record \$2 million, and Lawrence Livermore National Security, LLC, which manages the Laboratory, donated an additional \$1 million in matching funds.

LLNL recently received the President's Volunteer Service Award from the American Red Cross as the largest corporate donor in northern California. The Laboratory has sponsored blood drives for more than 25 years at which LLNL employees have donated over 18,000 units of blood. In addition, the American Cancer Society has recognized LLNL as the largest workplace donor in northern California to their annual Daffodil Days fund-raising drive.

Laboratory employees also contribute individually to the community-serving as literacy tutors in local libraries and guest instructors in area schools, helping with Habitat for Humanity projects, community food banks and neighborhood clean-up drives, collecting school supplies and holiday gifts for students and families in need, and serving on school boards, city councils and other community committees, to name just a few.

LLNL Community Impact by the Numbers (2009)							
6,400	\$1.497 billion	\$697 million	\$447 million	\$3 million	822	\$25,000	12,000
Number of LLNL employees; roughly 3,300 live in Alameda County, 1,250 in San Joaquin County and 950 in Contra Costa County	Total Laboratory budget	LLNL employee payroll base, including \$610 million to Alameda, San Joaquin and Contra Costa counties	Amount spent on procure- ment of goods and services, including more than \$187 million in Alameda, San Joaquin and Contra Costa counties	Money raised for community and nonprofit organizations through the annual Helping Others More Effectively (HOME) campaign	Units of blood donated to the American Red Cross	Money raised for the American Cancer Society's Daffodil Days	Number of students and teachers benefitting from LLNL's education outreach programs

For more information, contact the LLNL Public Affairs Office, P.O. Box 808, Mail Stop L-3, Livermore, California 94551 (925-422-4599) or visit our website at www.llnl.gov.

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