

SPECIAL ISSUE NEWSLINE

Published weekly for employees of Lawrence Livermore National Laboratory

Friday, July 26, 2002

Vol. 27, No. 29

BSL-3 facility will aid fight against bioterrorism

By Stephen Wampler

NEWSLINE STAFF WRITER

Laboratory researchers may soon be better able to help fight bioterrorist agents or infectious diseases that could be used against American citizens. A new biosafety analytical laboratory took a step toward reality this week when an environmental assessment was filed by the National Nuclear Security Administration's (NNSA) Oakland office.

Proposed for an area adjacent to Bldg. 361, the

new facility would be known as — and permit the use of organisms allowed in — a Biosafety Level 3, or BSL-3 facility.

“This proposed facility,” said Page Stoutland, deputy director of R Division, “would allow our scientists to conduct more sophisticated experiments on a wider array of microorganisms. We will be able to use the unique capabilities of the Laboratory to help us develop much needed biodefense capabilities. We’ll also be able to learn more about new emerging diseases.”

The proposed \$1.5 million, 1,500 square-foot

facility would include three BSL-3 lab rooms and be built in accordance with guidelines by the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health. It would be operated primarily by the Biology and Biotechnology Research Program directorate (BBRP) for another Lab directorate, Nonproliferation, Arms Control and International Security (NAI).

See **BSL-3**, page 11

NIF moves closer to early light

By Tom Spafford

TECHNICAL INFORMATION DEPT.

The National Ignition Facility's 192 laser beams are organized into 24 groups of 8-laser beams called bundles. Each bundle contains 130 line replaceable units (LRUs), which hold the functional optical elements for each laser beamline.

Last week, the 100th LRU was installed in Bundle 31, the bundle targeted for initial laser activation and testing. This installation

is a significant step toward NIF early light laser activation and exemplifies the successful integration of the NIF being carried out by multidisciplinary laboratory and contrac-



JACQUELINE MCBRIDE/TID

NIF team members install a line replaceable unit, which holds the functional optical elements for each laser beamline.

tor teams.

When assembled, NIF LRUs are preci-

See **NIF**, page 12

JGI's pufferfish sequence offers in-depth look at human gene pool

By Charles Osolin

NEWSLINE STAFF WRITER

An international research consortium led by the Joint Genome Institute (JGI) reported Wednesday on the draft sequencing, assembly, and analysis of the genome of the Japanese pufferfish *Fugu rubripes*.

The report was released on *Science Magazine's* “Science Express” Website (<http://www.sciencemag.org/sciencexpress/recent.shtml>).

Pufferfish have the smallest known genomes among vertebrates, the group of animals with backbones that includes humans. The *Fugu* sequence contains roughly the same number of genes as the much larger human genome, but in a compact form streamlined by the relative scarcity of the “junk” DNA that fills much of the human sequence.

Through comparison of the human and pufferfish genomes, the researchers were able



See **PUFFERFISH**, page 12

Open house will honor Deputy Director Wadsworth

Lab employees are invited to a farewell open house for Jeff Wadsworth from 9 to 10:30 a.m. on Aug. 9 in the Bldg. 111 Lobby.

Wadsworth, deputy director for Science & Technology and formerly AD of Chemistry & Materials Science, resigned from the Laboratory, effective in August, to join Batelle Corp. as a senior executive. At Batelle, he will join the technology development and commercialization organization, focusing on helping build its technology and business base in government and commercial markets.

Ceremony pays tribute to Tarter's direction

In a ceremony that was as respectful as it was ribbing, albeit good-naturedly, Bruce Tarter was honored last week for his tenure as Laboratory director.

Employees crowded the Bldg. 123 auditorium to hear representatives from the University of California, DOE and NNSA pay tribute to Tarter — among them Camille Yuan-Soo Hoo, manager of DOE Oakland; John McTague, vice president of Laboratory Management at UC; Everet Beckner, the deputy administrator for Defense Programs at NNSA; and Bob Kuckuck, the acting principal deputy administrator at NNSA and the Lab's former deputy director of Operations. Comments were also provided by

Dorothy Ng, of the Asian Pacific American Council, as well as Director Michael Anastasio, who also served as host of the ceremony.

All commended Tarter on his leadership and for helping to position the Lab where it is today. “You weathered some of the most severe storms this Laboratory has ever faced,” said Anastasio, before kidding, “the next director has only to go down.”

Camille Yuan-Soo Hoo noted the director's job is the most difficult at the Lab and the easiest for some to

See **CEREMONY**, page 11



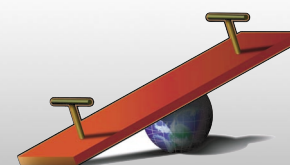
Keeping California clean

— Page 2



Lab turns tables on metrology

— Page 3



Balancing work, life

— Insert



LAB COMMUNITY NEWS

Weekly Calendar

Technical Meeting Calendar, page 11

Monday
29

The Lab's Disabilities Services is offering its second three-hour session on "How to Build Accessible Web Pages" for audiences who are visually impaired, learning disabled, or use English as a second language. Both sessions are free. For session information, times and class location, and to register online, see <http://education.llnl.gov/accessibility>.

Tuesday
30

Robert Cronback of the American Cancer Society presents "Prostate Cancer—Guidelines for Early Detection and Risk Reduction," outlining cancer screening guidelines and methods and a general review of nutrition and exercise guidelines for reduction of risk. The talk takes place from 12-1 p.m., Bldg. 123 Auditorium. Contact: Mark Costella, 2-8999.

Wednesday
31

Summer students are invited to attend "Tips for a Successful Interview," highlighting what an interviewer is looking for in resumes and cover letters, strategies that candidates should follow, and what the interviewer may infer about applicants who do or do not follow these strategies. The talk is presented by Terence Critchlow and Carol Woodward at 2 p.m. in the Bldg. 361 auditorium. For information and registration, go to <http://education.llnl.gov/sbb> or contact Barry Goldman, 2-5177.

Thursday
1

A representative from Fidelity Investments will be at the Lab. **Fidelity Investments** offers 403(b) and DC Plan participants over 70 investment portfolios in five mutual fund categories. Appointments are available by calling Fidelity at 1-800-642-7131. Be sure to specify you work at LLNL.

...
A new **Al-Anon group** for employees meets to provide help and hope for families and friends of alcoholics. The group meets from 12-1 p.m. in Trailer 3520, Room 1174 (Sycamore Room). Contact: Jane, 4-4689, or Mike, 3-4827.



The **LLNL Computer History Museum** is open every Tuesday and Thursday through the summer between 10 a.m. and 1 p.m. in Bldg. 439. To arrange a visit, contact Peggy Poggio at 2-5453 or Bing Young at 3-0281.

...
National Technological University (NTU) offers Lab employees televised graduate level academic courses from more than 50 of the country's premier universities. An NTU representative will be at the Lab on Tuesday, Aug. 6, at noon in Bldg. 571 room. 2301 to discuss the degree programs available. Contact: Kathy, 2-9335.

Keeping California beautiful



"Keep California Beautiful" President Paul Dickinson (above left) of the University Relations Program gathers litter off San Francisco's Ocean Beach at a recent Saturday clean-up. Assisting him is Michael Beatie, commissioner of the California Department of Boating and Waterways. The joint effort was organized by their affiliated agencies, in addition to the San Francisco Estuary Project. San Francisco Supervisor Gerardo Sandoval (District II), Amy Harrington, Michael Beatie and Paul Dickinson are pictured above right.

IN MEMORIAM

Kathleen M. Martinez

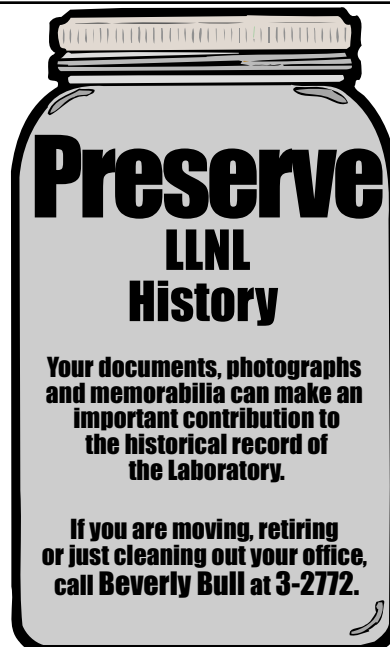
Kathleen Margarita Martinez, an administrative assistant in the Affirmative Action and Diversity Program, died in her sleep on July 19. She was 40.

Martinez, a Bay Area native, lived in Manteca and was a 10-year Lab employee. She had a love for interior decorating, arts and crafts, and shopping. She was a lymphoma cancer survivor, enjoyed volunteering at the Christian Worship

Center in Manteca and was planning to get married in November.

A memorial service will be held Sunday, July 28, from 6-8 p.m. at the Christian Worship Center, 786 Button Ave., Manteca. There will also be a viewing, Monday, July 29, from 1-5 p.m. at the P L Fry and Son Funeral Parlor, 290 North Union Rd., Manteca.

Martinez is survived by her daughter, Giselle Chappell and her fiancé, August Schweizer.



Newsline

Newsline is published weekly by the Internal Communications Department, Public Affairs Office, Lawrence Livermore National Laboratory (LLNL), for Laboratory employees and retirees.

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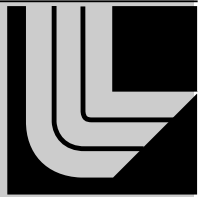
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1952 – 2002 MAKING HISTORY, MAKING A DIFFERENCE



The fine art of precision machining

This is an ongoing feature highlighting the Lab's 50-year history. This week we take a look at the year 1981.

It has been called the world's most accurate lathe, the world's most precise large machine tool. With the groundbreaking for the Large Optical Diamond Turning Machine (LODTM) in 1981, the Laboratory solidified its place at the top of state-of-the-art precision machining.

More than 20 years later, the machine's precision is such that LODTM still outperforms the measurers — the National Institute of Standards and Technology cannot corroborate the accuracy of its work. Able to handle a workpiece with a diameter up to 1.65 meters, LODTM can machine metal to a mirror-smooth accuracy within one-millionth of an inch — 1,000 times more accurate than conventional machine tools.

Livermore's first diamond turning machine was built in the late 1960s, and LODTM was conceived when researchers began considering the development of lasers with extremely large, exotically shaped optics that had to be fabricated with extreme precision. LODTM opened in 1983, incorporating exhaustive analysis and elimination of factors that caused errors in previous machine tools — from the heat of the human body to the vibration from a heavy truck passing by.



Pictured here is the large optics diamond turning machine and an aspherical mirror that the machine was first able to produce.

1981

precision machining

Around the Lab

Magnetic Fusion Energy

The Magnetic Fusion Energy Program's huge Yin-Yang magnet was installed in 1981 to produce the strong magnetic field needed for fusion experiments.

Cray Supercomputers

When Cray-1 was installed in 1981, it was one of the fastest and most powerful scientific computers available. The Lab acquired six more Crays, including several new generations — Cray II, Cray XMPs (1984) and Cray YMP (1989).

Around the nation

- Sandra Day O'Connor becomes first woman on U.S. Supreme Court
- U.S. hostages freed in Iran
- First space shuttle flight
- Reagan survives assassination attempt

Around the world

- Israeli air attack on Iraqi nuclear reactor
- President Sadat of Egypt assassinated

in other

NEWS

Other news around

the Lab, the nation

and the world.

For more of the Lab's rich history, check out the Timeline, located at: <http://www.llnl.gov/timeline/>

Time is running out to sign up foreign nationals for Family Open House

For foreign national family members and guests and P-cleared foreign national employees to attend the Family Open House on Sept. 21 and 22, their Q- or L-cleared hosts must fill out "blue cards" for the foreign nationals they will escort.

The cards are available from Wendy Bishop in the Foreign Visits and Assignments Office in Bldg. 274, room 1047, the badge offices at Livermore and Site 300, and through directorate offices. Completed blue cards must be turned in to Wendy Bishop's office no later than Aug. 7 to allow time for processing and approval. P-cleared foreign national employees should seek assistance from their organizations to identify Q- or L-cleared hosts for

themselves and their guests for the Family Open House.

For more information, see the 50th Anniversary Website/Family Open House

Planning Guide at http://www-r.llnl.gov/50th_anniversary/openhouse.htm. For additional information, contact Wendy Bishop, 3-9135, or bishop9@llnl.gov.

Volunteers needed to escort guests during Community, Family days

Want to rub elbows with Lab guests? Always dreamed of being a tour guide?

Volunteers are needed during the 50th anniversary event week to assist with escorting duty. Escorts are needed for Community Day, Wednesday, Sept. 18, and again during Family Days, Sept. 21 and 22.

Volunteers for Community Day and Family Days must be L- or Q-cleared. To volunteer for Community Day, call Scott Wilson, 3-3125 or e-mail wilson101@llnl.gov. For Family Days, call Jan Tweed, 2-4597 or e-mail tweed1@llnl.gov



NEWS YOU CAN USE

Draft assessment on East Avenue closure now available for review

The DOE/NNSA Oakland Operations Office announces the availability of a draft environmental assessment for the East Avenue Security Upgrade at Lawrence Livermore and Sandia national laboratories (SNL).

DOE proposes to administratively control a portion of East Avenue between South Vasco and Greenville roads. The purpose and need for the East Avenue Security Upgrade by the DOE is to provide additional protection to essential LLNL and SNL facilities and personnel along East Avenue.

Due to recent world events and the emerging security threats, DOE needs the ability to restrict the roadway to the general public on either a temporary or permanent basis to improve security at the labs. This is consistent with DOE's overall security enhancement plan at both laboratories.

The alternatives considered to the proposed action are (1) no action and (2) construction of new facilities and relocation of personnel and equipment. Under the no-action alternative, DOE would not administratively control East Avenue between the LLNL and SNL/CA sites, and the short-term impacts associated with the construction and traffic congestion would not occur. However, the no-action alternative would not meet DOE's purpose and need. Under the second alternative, DOE also would not administratively control East Avenue between the LLNL and SNL sites, but would undertake construction to relocate several essential facilities. Construction and operating impacts associated with the second alternative would be greater than those of the proposed action.

DOE is seeking public comment on the draft environmental assessment during a 30-day comment period. Written comments should be sent by Aug. 30 to: Samuel Brinker, DOE NEPA

Document Manager, U.S. Department of Energy, Livermore Site Office, M/S L-293, P.O. Box 808, Livermore, CA 94551-0808 or sent via e-mail to Sam Brinker, samuel.brinker@oak.doe.gov, or by fax to (925) 423-5650.

The draft environmental assessment will be available for public review at the following locations:

- The DOE Energy Information Center, Oakland Federal Building, First Floor of the North Tower, Room 180N, 1301 Clay Street, Oakland. (510) 637-1762.

- Lawrence Livermore National Laboratory Public Reading Room in the Visitors Center Trailer 6525, located at the East Gate Entrance off of Greenville Road. 424-4026.

- Livermore Public Library, 1000 South Livermore Avenue, Livermore.

Copies of the document are also available by contacting the DOE Oakland Operations Office Energy Information Center at (510) 637-1762, the DOE/OAK Website: <http://www.oak.doe.gov>, or the LLNL Website: <http://www-envirinfo.llnl.gov/>.

Awareness campaign focuses on skin cancer today

For the second year in a row, a grassroots coalition of employees is hosting a Cancer Awareness Campaign that features a number of informational talks on cancer-related topics, ranging from hormone replacement therapy to early detection of prostate cancer.

The campaign continues through Aug. 29. Following is the schedule for this summer's campaign:

- "LLNL Skin Cancer Melanoma Program and Sun Protection," by Dr. Jeffrey Schneider, dermatologist and Lab consultant, today from 12-1 p.m. in the Bldg. 123 auditorium. Schneider will offer practical tips on sun protection accompanied by a slide presentation on non-melanoma skin cancer, pre-cancers and melanoma. He will include the results of the Lab's melanoma screening campaign and the role of the Mole Patrol offered by Health Services.

- "Prostate Cancer — Guidelines for Early Detection and Risk Reduction," by Robert Cronbach of the American Cancer Society, on Tuesday from 12-1 p.m. in Bldg. 170, room 1091.

- "Peregrine: Advancing the Field of Radiation Treatment of Cancer," by Lab physicist Christine Hartmann-Siantar, on Tuesday, Aug. 6, from 12-1 p.m. in the Bldg. 543 auditorium.

- "Update on the Cancer Incidence and Mortality Among LLNL employees," by Dr. Jim Seward, LLNL medical director, and Dr. Mort Mendelsohn, former AD, on Tuesday, Aug. 13, from 12-1 p.m. in Bldg. 170, room 1091.

- "Does Overcooking Meat Pose a Cancer Risk?" by LLNL scientist James S. Felton, on Tuesday, Aug. 20, at noon in Bldg. 170, room 1091. He will present research that suggests it might be a cancer risk to overcook meat.

- "Prevention, Health Practices and Good Nutrition for Cancer Survivors," by registered dietitian Victoria Holmes Woolery of Kaiser Medical Center, on Thursday, Aug. 29, at noon in Bldg. 170, room 1091. She will discuss the role of medical nutrition therapy and intervention for cancer patients.

For more information on the events, contact Mark Costella at 2-8999 or costella2@llnl.gov.

Technical Meeting Calendar

Friday
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ENERGY & ENVIRONMENT

"Economic Modeling of Renewable Resources," by Alan Lamont, Applied Energy Technologies Program. 1:30 p.m., Bldg. 543 auditorium.

Contact: Camille Vandermeer, 3-2672.

Monday
29

INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"SPAN: Shared-Memory Performance Analysis," by Frank Mueller, North Carolina State University. 10 a.m., Bldg. 451, room 1025 (property protection area).

Contacts: John May, 3-8102 or Leslie Bills, 3-8927. For more information, see <http://www.llnl.gov/casc/calendar.shtml>.

CHEMISTRY & MATERIALS SCIENCE/ MATERIALS SCIENCE & TECHNOLOGY

"Hydrogen Bonding Dynamics at Surfaces and in Liquids," by Kelly Gaffney, Stanford University. 10 a.m., Bldg. 235, gold room (uncleared area). Contact: Tony Van Buuren, 3-5639, or Roberta Marino, 3-7865.

Tuesday
30

INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"Numerical Methods for Elasticity: Stress-Displacement Formulation," by Zhiqiang Cai, Purdue University. 10 a.m., Bldg. 451, room 1025, (property pro-

tection area). Contacts: Barry Lee, 4-3613, or Leslie Bills, 3-8927. For more information, see URL <http://www.llnl.gov/casc/calendar.shtml>.

CHEMISTRY AND MATERIALS SCIENCE, NEW FRONTIERS SYMPOSIUM

"Imaging Addiction in the Human Brain," by Joanna Fowler, Chemistry Department, Brookhaven National Laboratory. 10:30 a.m., Bldg. 235, room 1090 (Gold Room). Contacts: Mike Fluss, 3-6665, fluss1@llnl.gov or Kristine Ramirez, 3-4681, ramirez24@llnl.gov. For more information, see http://www-cms.llnl.gov/cms_frontiers_ext/index.html

Wednesday
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CHEMISTRY AND MATERIALS SCIENCE

"Acoustic Emission Testing In Materials Failure Analysis," by Daniel Day, LLNL. 10 a.m., Bldg. 235, gold room (uncleared area). Contact: Dan McCright, 2-7051, or Roberta Marino, 3-7865.

INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"Structured Population Models" by Fabio Milner, Purdue University. 10 a.m., Bldg. 451, room 1025 (property protection area). Contacts: Tanya Vassilevska, 4-4823, or Leslie Bills, 3-8927. For more information, see URL <http://www.llnl.gov/casc/calendar.shtml>.

Wednesday
7

MATERIALS RESEARCH INSTITUTE SEMINAR

"Mass Action Research Consultancy," by William Byers-Brown, Devonshire House, Buxton, Derbyshire United Kingdom. 3:30 p.m., Bldg. 219, room 163.

Contacts: Larry Fried, 2-7796, or Joanna Allen, 2-0620.

Thursday
8

ELECTRONICS ENGINEERING TECHNOLOGIES DIVISION

"Mathematics in the Movies," by Kathleen Greene. 9:30-10:30 a.m., Bldg. 141, room 1104 (Bay 1). P Classification.

Contact: Steve Azevedo, 2-8538.

Monday
19

MONDAY, AUG. 19- FRIDAY-AUG. 23

The Sixth IBM Scientific Computing User Group (ScicomP) meeting, hosted by Lawrence Berkeley National Laboratory. For more information see <http://www.spscopicomp.org/ScicomP6/>. Early registration deadline is Monday, July 29 and proposals for user and vendor presentations must also be in by July 29. Contacts: Bronis de Supinski, bronis@llnl.gov or Tom DeBoni, TMDDeBoni@lbl.gov.

The deadline for the next Technical Meeting Calendar is noon, Wednesday.

MANAGING WORK-LIFE ISSUES

AN UPDATE ON THE SURVEY ACTION INITIATIVES



BALANCING ACTS

BY JAN TULK

Survey initiatives aim to balance work, life

With implementation of various suggestions from the employee survey, "Assessing the Workplace," well under way, the Laboratory is demonstrating its commitment to improving the workplace.

In the past few weeks the Laboratory has rolled out a new flexible work schedule policy that incorporates adjusted work schedules (see accompanying story, page 9) an apprenticeship program for the 800/900 job series, and UPS service for employees offered through LLESA.

In the coming months, the Laboratory will add dry cleaning services via LLESA, expanded childcare referral services and break ground for a new Central Café.

These suggestions came from all of you who participated in the employee survey. Like former Director Bruce Tarter, Director Michael Anastasio has heard you and is committed to implementing the various initiatives. Senior management also is committed to ensuring resources are available to complete these projects.

Timelines set, all systems go

Recently project managers implementing the Survey Action Team (SAT) initiatives met to provide action plans and timelines for their SAT projects. To date, implementation has begun on all survey suggestions. The majority of these projects have no anticipated challenges, and most will be completed by the end of the calendar year or early 2003. Some projects, such as construction of the Central Café, is expected to stretch into late 2003.

Other projects will result in ongoing processes that will last long after the project is complete. For example, the performance management system, career development opportunities, supervisor training and the apprenticeship program will be the subject of continuous process checking, upgrades and/or fine tuning. The same goes for the Laboratory's commitment to creating and maintaining a collegial environment, one in which vigorous debate and civility are equally encouraged.

Communication a key

With initiatives such as these, improved internal communications are a must (this was yet another suggestion from the survey). A multifaceted program will be launched to inform the employees of project implementation status and highlight the benefits of the changes as they are implemented.

This communication will utilize such vehicles as *Newsline* and *NewsOnLine*, the Web, MyLLNL and a return of the old "400"

See **DIRECTOR'S OFFICE**, page 8

Lab embraces work-life amenities

By Elizabeth Campos Rajs

NEWSLINE STAFF WRITER

As anyone who attempts to work and manage a household already knows, it often seems like there just aren't enough hours in the day to get it all done. Attempts to shoehorn errands such as trips to the dry cleaner and post office, or squeeze exercise into an already full work day, leave many employees feeling stressed out and stretched too thin.

As a result, more and more employers are looking for ways to help their employees find balance between their work and home lives. What work/life

balance means exactly and how to achieve it are questions the Laboratory is actively seeking to answer.

"The term work/life balance has come to mean including life outside of your job, inside your job," said Tommy Smith, deputy AD for Strategic Initiatives and Diversity in the Administration & Human Resources Directorate.

Although UC established a committee approximately five years ago to study ways to incorporate work/life balance into the workplace, the issue recently came to a head in the employee survey, Smith said.

See **WORK-LIFE**, page 8

Lab renews contract with LLESA

The Laboratory recently renewed its contract through 2005 with the Lawrence Livermore Employee Services Association (LLESA) to continue providing work/life services for employees that enhance "morale, health and productivity."

"The Lab is really interested in work-life issues and LLESA is the prime mechanism to do this," said Hank McDonald, president of the LLESA board of directors and former AD for Engineering. "We can hire life-guards, childcare workers, exercise instructors and massage therapists. The Lab can't do that. This is really a great period for LLESA. The Lab has a really strong Administration directorate that really cares about employee services."

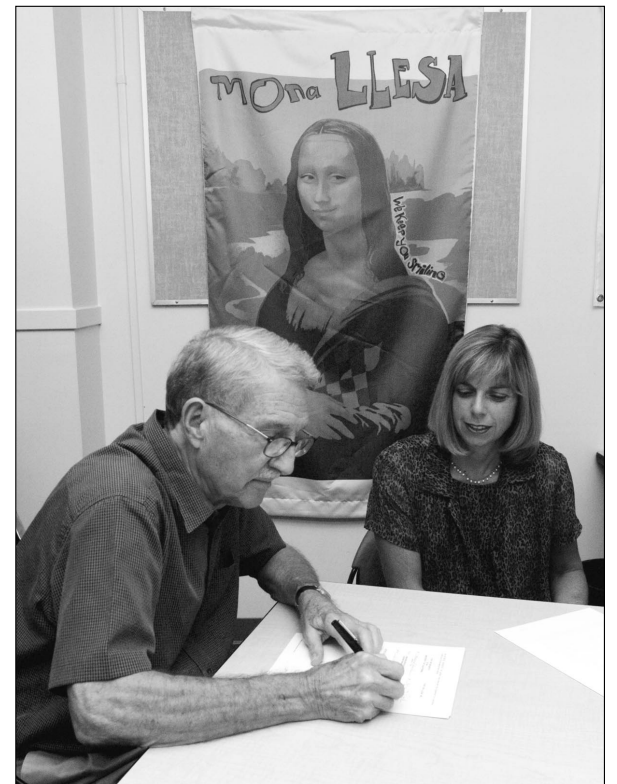
The Lab has had an employee services association onsite since 1954. Today, LLESA provides a wide range of services, from a childcare center to exercise classes to employee networking groups.

In the past year, 2,500 employees participated in networking groups, 425 employees participated weekly in Fit for Business classes, 600 were enrolled in lap swimming and 1,000 people participated in summer swim lessons.

In addition, LLESA coordinates the Lab's quarterly blood and bone marrow drives, collecting more than 1,200 pints of blood a year. The Lab is the single largest corporate donor to the American Red Cross in Northern California.

In September, for the second year in a row, LLESA is sponsoring a "blended drive" for blood and bone marrow. To schedule an appointment in advance, go to <http://www.beadonor.com> (company code: LLNL) or call the LLESA Office at 2-9402.

LLESA also operates the Time Zone, an employee store which features Lab-logo items for sale, discounted tickets for BART, Wheels, entertainment parks and theaters, as well convenience items such as stamps, film processing and over-the-counter medicines. Last year



MICHAEL ANTHONY/TID

Hank McDonald, president of LLESA Board of Directors, and AD Jan Tulk ink a new contract.

alone, LLESA sold 2,535 BART and Wheels tickets.

"The Lab is committed to making sure LLESA provides the services employees want and are willing to pay for," said Pat Clelland, acting manager for Compensation, Benefits and Work/life Programs. "This continuing employee support has made LLESA what it is today — a true employee services organization"

For more information about LLESA, go to <http://llesa.llnl.gov>

Booking time for work-life opportunity

By Stephanie Esposito

NEWSLINE STAFF WRITER

Editor's note: How do you balance your working world with the life you keep after hours and in between? Employee spotlight focuses on just that. Each month this section will spotlight employees who are making a difference through their work and play.

Library Division Manager Isom Harrison is hopeful that LLNL's Library Community Outreach Program, which is helping welfare recipients and local high school students gain work experience, will inspire other departments to establish their own programs.

In October, Harrison and Mary Allen, group leader for Collection Development, contacted the Alameda County California Work Opportunity and Responsibility to Kids program (CalWORKS), which provides parents with the training and experience needed to get a job. Harrison got the idea from a similar pro-

gram in San Joaquin County that has been successful in Stockton. Harrison figured that the library could offer a temporary place of work for local CalWORKS participants as a way to reach out to the Livermore community and help people get off welfare.

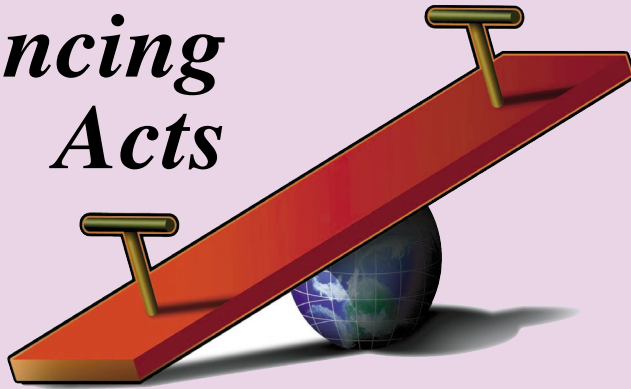
"I got the idea that since the Lab is right in the heart of the community, then why not give back to the community?" Harrison said. "We wanted to bring someone in with the idea of giving them work experience, not necessarily to work here, but to get the work experience and then go work somewhere else that way they can get off the welfare rolls."

In the program, CalWORKS, also known as "Welfare-to-Work," will send someone who is in need of a job and basic work skills to Harrison for an interview. Harrison can then decide whether to hire the applicant to work in the library. If hired, Harrison said the employee would then work to gain experience with

See **OUTREACH**, page 8

AFTER HOU

Balancing Acts



"Dance Away With Me." See Aug. 19 for details.



TUESDAY
6 AUG

Learn how **Peregrine** is advancing the field of radiation treatment of cancer. Noon, Bldg. 543 auditorium.

2002
Cancer
Awareness
Campaign

Ready, set, get wet!
LLESA aqua aerobics begins today through Sept. 5 at the Lab pool.

TUESDAY
13 AUG

"Update on the Cancer Incidence & Mortality Among Lab Employees."
Noon. Bldg. 170.

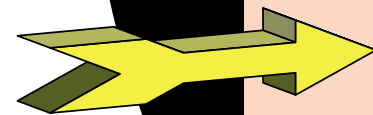


MONDAY
19 AUG

Dance away the calories or be at one with your body. **Registration begins** in the LLESA Office for Yoga, Salsa, East & West Cost Swing, Hip-Hop/Funk Dance and New Beginnings Aerobics. Bldg. 415.

TUESDAY
20 AUG

Well done steaks, roast that resembles raw hide; "Does Overcooking Meat Pose a **Cancer Risk**?" Noon. Bldg. 170



Basic Investment
Bldg. 1879
Two half-day

MONDAY
26 AUG

Sign up today for the Holiday Faire and Vintage Vehicle Show registration.



Send Us Your Calendar

Would your employee networking group activity group like to publish its events? This section will run the last Friday of the month. Dates are due by the 20th of each month. If you're interested, write to us at Newsline.

JRS AND in between

July 26-Aug. 30

THURSDAY

1 AUG

Get in the swim with LLESA's **summer swim program** now through Aug. 23. Recreational swimming, 2 to 6:45 p.m., and swimming and water polo lessons too. Sign up in Bldg. 415.



FRIDAY

2 AUG

Pressures of work rubbing you the wrong way? The **onsite massage program** provides relaxing relief Monday through Friday, 10 a.m. to 4 p.m. Call 4-5321 to schedule an appointment.



THURSDAY

15 AUG

Call it a crash course in multiculturalism. The annual **Diversity Day on the Green** returns with ethnic dance, dishes and dress. If you would like to participate, call Michele Cardenas, 3-2796. Noon. LLESA lawn area.



SATURDAY

17 AUG

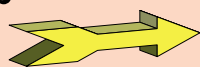
The **Greatest Show on Earth**, Ringling Brothers and Barnum & Baily Circus, pulls into Oakland. LLESA has discount tickets for the 11:30 a.m. show. Call 2-9402.



Also on Tuesday, Aug. 20

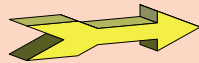
Workshop

room C
sessions.



Ongoing Healthy Lifestyles Meetings

Noon, Bldg. 571. Locations vary. Call 3-6869.



Apple Networking Group

7 p.m., Visitors Center auditorium. Drop-ins welcome. Call 2-6766.

Items

group or LLESA in this calendar? the month. Items month. sline@lInl.gov.

THURSDAY

29 AUG

"Prevention, Health Practices and Good Nutrition for Cancer Survivors." Noon. Bldg. 170.

2002
Cancer
Awareness
Campaign

"Life—to be continued..."

FRIDAY

30 AUG

Want to know how to preserve that nest egg? Check out the **403(b) Brown Bagger**. 12:15 to 1:30 p.m. Bldg. 571, room 2301.



Web guide points the way to work-life enhancements

The Laboratory is working to enhance and improve the quality of services to employees that address work-life concerns. A Website entitled, "Work Life Web Guide," details what services are available and how to find them.

The Website, located at http://eoddserv.llnl.gov/Work_life_guide/index.html, is designed to help employees better understand work/life issues and provide information on the

services available to employees that relate to those issues.

Employees using the Website will find information on nine work/life issues: Parenting Resources, Childcare, Employee Assistance Program (EAP), Employee & Family Health, Great Place to Work, Stress Management, LLESA, Elder Care and Policies & Procedures.

Brief overviews of Lab employee pro-

grams and outside community resources and support groups are included for each of the nine areas. The Web Guide provides contact information and Web links.

Employee comments also are available concerning services such as childcare and Lab network groups.

For additional information or to comment about the Work Life Web Guide, contact Brenda Perry at perry3@llnl.gov.

OUTREACH

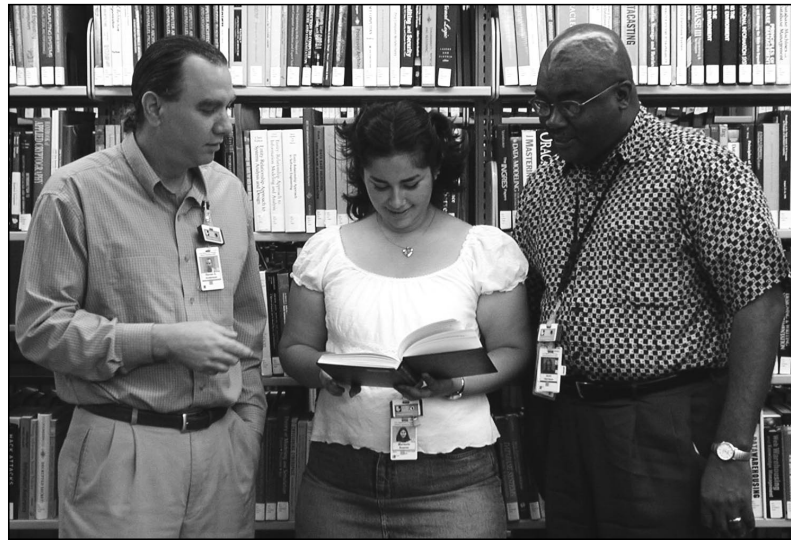
Continued from page 5

computers and learn library procedures for how long they choose to work or until they find another job to help them get on their feet and off welfare.

"The beauty of the program is that if they don't work out, we can send them back at any time. There's no requirement to keep them," Harrison explained. "If they don't work out or don't show up for work, then we just call the program and tell them that we no longer want this person."

So far, after hiring one employee at the library through the CalWORKS program, Harrison said he was fortunate enough to not have to take that step. In fact, that employee worked out very well and was able to apply and land a position at the Lab library.

"It was just opportune that we had an opening at the time, so we put him on the payroll here," Harrison said.



STEPHANIE ESPOSITO/NEWSLINE

Library assistant Steven Anderson (left) and student worker Marisela Suarez from Livermore High School work at the Lab through the library outreach program headed by Isom Harrison (right).

Harrison is now looking to take on another person using the CalWORKS program.

The library's outreach program, started by Tom Smith, who at the time was a group leader for Collection Development, also works with local high school students. Currently two student workers help order and shelf books, and assist in the inter-library loan department.

"A lot of kids go through school, all through high school without a job, go through college without a job, and they get out and they say, 'what am I supposed to do?'" Harrison said. "If you have some work experience, then maybe it won't be such a shock to you."

Harrison hopes that by working at the Lab, some of the student employees will someday aspire to be librarians.

"We try to show them that it's a very honorable profession," he said. "When most people think of librarians they think of a little old lady with her hair in a bun telling people to be quiet, but it's not that...it's much more. Being a librarian is a very rewarding profession."

WORK-LIFE

Continued from page 5

It was the first time the Laboratory included work/life balance questions on a survey, and employees were outspoken in their responses.

"It was a varied response, but overwhelmingly Lab employees wanted to have their workplace embrace work/life amenities," Smith said. "The Lab is now looking at the things that got the most attention."

Bruce Warner, who co-chaired the survey action team that focused on work/life balance, said the response from employees was wide ranging, but the team was able to develop three key areas: flexible work schedules, employee services such as child care, food availability and increased exercise facilities; and communication methods to better inform employees of what services the Lab already offers.

"Most workers are here eight-and-a-half hours plus and they have a hard time fitting everything in, like going to the dry cleaners, the bank, picking up lunch and checking on their children," said Warner, who is deputy AD for NIF. "As an employer, if we can provide services that can help reduce stress for our employees, we will have happier, more effective employees."

The survey action team, which was co-chaired by Director Michael Anastasio, made a final list of recommendations, including short and long-term proposals.

The new UPS service at the employee store, the Time Zone, was one of the team's proposals. Another recommendation, dry cleaning service, is expected to start in December.

One of the first changes to come out of the survey will be the expansion of flexible work schedules. The Lab currently has policies permitting employees, with the approval of their supervisors, to work flexible 5/40s, 4/10s and telecommute. The Lab, based on the recommendation from the Work/Life SAT, is adding an option for a 9/80 work schedule. This flexible work schedule, in which employees work nine-hour days and take every other Friday off, will be rolled out in some directorates as early as Oct. 6. The directorates are doing it in phases, Smith noted.

"One of the most significant work/life initiatives to come out of the survey is bringing more flexible work schedules to our employees, including 9/80 workweeks," he said. "By having the flexibility to modify their workweek, employees can better take care of their work/life needs."

Warner added, "This is intended to be a partnership, an employer-employee win-win."

Another area that generated a large number of written comments in the survey was the need for a new Central Cafeteria with enhanced food services.

"One of the most overwhelming responses was people really want food choices and a nice place to eat," Warner said. "The Central Cafeteria was originally built 22 years ago as a temporary facility and doesn't have an adequate kitchen. The survey is helping to provide the push necessary for a new cafeteria, centrally located in the Lab."

The survey action team also realized from many of the written comments that a large number of employees don't know what services the Laboratory already offers and don't know how to find that information, Warner said. Human Resources is looking into creating a single point of contact to help direct employees to all the work/life balance amenities offered onsite. This special section in *Newsline* is also the result of the Work-Life SAT's recommendations.

"As the diversity director, I'm often lobbying on behalf of one constituency or another. Work/life issues are universal. Employees from all groups have children, parents to look after and other home concerns. Work/life issues emphasize the common humanity in all of us," Smith said. "I find it very gratifying to work on work/life issues."

DIRECTOR'S OFFICE

Continued from page 5

meetings (a gathering of key managers throughout the Lab who will be briefed on information that they can then take to their various departments and divisions).

This communication effort kicks off today with the rollout of a new section in *Newsline* devoted to work/life balance as well as communicating the various issues surrounding the employee survey. This section will appear as a "pullout" on the last Friday of each month and will feature a variety of stories, employee profiles and a complete listing of events and resources to help employees balance their working world with their everyday lives.

I invite you to take some time to look through the section and let us know what you think. Is there

Employee survey recommendations

Here are the initiatives that will be implemented as a result of the employee survey:

- Maintain a competitive "Total Rewards" program.
- Modify performance management system by implementing best industry practices.
- Significantly increase investment in employee development.
- Promote organization values of rigorous debate in an atmosphere of mutual respect.
- Encourage use of flexible work schedules.
- Enhance the vitality of the research environment.
- Significantly enhance work/life services and resources.

something you want to see, something you want to change? If you have suggestions or comments, e-mail newsline@llnl.gov.

Summing up — It's all about support

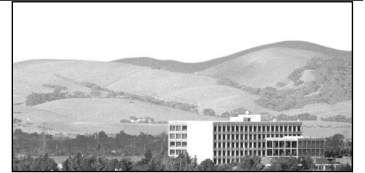
The degree of support and the level of commitment to implementing the suggestions from the employee survey is unprecedented within the Laboratory. Once completed, these initiatives will lead to substantive improvements to the workplace.

It is the Laboratory's goal to provide a work environment that is second to none. As you look through the pages of this monthly supplement, I am sure you will agree we are well on our way.

Stay tuned to see what's next.

Jan Tulk is the associate director of the Administration and Human Resources Directorate and the chair of the Survey Action Steering Committee. She has appointed Tommy Smith to lead the effort to implement the survey initiatives. For more information, contact Smith's office at 2-6634 or e-mail smith80@llnl.gov.

AROUND THE LAB



Alternative work schedule policy explained

Editor's note: The Laboratory recently unveiled its new policy on alternative work schedules. Many of these schedules will begin in October. Here are some frequently asked questions regarding flexible work options.

Question: Do employees need to "sign up" for flexible 5/40 or flexible part-time schedules the same way they do for 9/80's or 4/10's?

Answer: No. The approval process spelled out for 9/80s and 4/10s does not apply to flexible 5/40s or to flexible part-time schedules. In order to move to a flexible 5/40 or a flexible part-time schedule effective Oct. 1, an employee would need management approval.

Q: If an employee decides on a flexible schedule, do they need to specify a set schedule or can their hours vary each week? For example, can a 75 percent time employee work three eight-hour days and one six-hour day one week and three 10-hour days the next week or can a 100 percent time employee work five eight-hour days one week and three 10-hour days and two five-hour days the next?

A: Employees cannot decide their schedules or hours of work per day on their own, whether they are part-time or full-time. All employees must have their schedule and work hours approved in advance by the appropriate level of management. This is because work hours are scheduled to meet business/staffing needs.

Ordinarily, one would expect both part-time and full-time employees to have fairly stable schedules so that work can be planned and accomplished with the appropriate level of staff in attendance. However, in the event the schedules meet business needs, management has the authority under the new policies to approve schedules in which the hours per day vary from week to week.

Q: I have heard that full-time monthly paid employees on flexible 5/40 schedules can work an



"unofficial 9/80" and have whatever day off they want. Is that true?

A: No. The policy says that "unlimited-time employees assigned to a flexible 5/40 work schedule report to their Laboratory work site and perform work (or charge leave) on each of the five calendar days beginning Monday and ending Friday, and, over the course of each calendar month, account for 100 percent of the working hours of the month through effort reporting. Regular duty days may be established on Saturday and Sunday when necessary to achieve business objectives." A 9/80 schedule is a rotating two-week schedule in which an employee is expected to be in the workplace or charge leave on five specified days of the first week (Monday – Friday) and on five specified days of the next week (Monday – Thursday).

Q: Can full-time employees on flexible 5/40 schedules have a permanent schedule that uses vacation to achieve 40 hours per week?

A: There are rare instances, for example, in the case of ongoing part-time family and medical leave, when use of vacation on a weekly basis may be justified and approved. Use of vacation is always subject to management approval. It is difficult to see how permanent weekly use of vacation to achieve a full-time work schedule would meet the business needs of any organization. Nevertheless, there may be instances in

which temporary weekly use of vacation to achieve a full-time work schedule can be approved, such as when the employee is "maxed out" on vacation and accrues vacation at the maximum rate, provided the business needs of the organization can be met in this fashion.

Q: Can full-time employees on flexible 5/40 schedules have a regular schedule that includes three 12-hour workdays and two two-hour workdays?

A: No. First, a regular 12-hour workday (not including overtime) is not authorized for any Lab employee. Second, it is unlikely that such a schedule could meet business needs on an ongoing basis, thus highly unlikely Lab management would approve it. If warranted for business or work/life balancing needs, supervisors do have the discretion to approve a temporary schedule change to permit a schedule like this on a short term basis for an employee assigned to the flexible 5/40 schedule.

Q: Can full-time monthly paid employees on flexible 5/40 schedules have a regular schedule of six 10-hour days one week followed by two 10-hour days the next, or four 10-hour days every week?

A: No. Employees on Flexible 5/40 schedules must work or charge leave on each of five days during each calendar week, no more and no less.

Q: Do set hours need to be specified for flexible 5/40 schedules or can work hours vary week to week?

A: Hours per day need to be approved in advance by the supervisor and, generally speaking, will need to be fairly stable from week to week. This is because a schedule in which the hours per day vary from week to week would make staffing unpredictable, which would likely not meet an organization's business needs. Within a stable flexible 5/40 schedule, however, a supervisor can approve periodic temporary schedule changes to address business and/or employee work/life needs.

STEP workshop hones student research skills

By Stephanie Esposito

NEWSLINE STAFF WRITER

Twenty-five Bay Area high school students received diplomas recently during a lunch-time ceremony celebrating their completion of the Lab's Science and Technology Education Program Student Research Academy (SRA).

The program, now in its third year, is a two-week workshop that helps prepare students to organize and complete a science research project. During the research academy, the students visited LLNL research facilities, talked with Lab scientists and learned skills that will help them develop and answer their own research questions.

During the coming school year, each student will conduct research for his or her project with the help of a science teacher who has agreed to support the student's research efforts.

In addition to the student academy, this year STEP introduced the first Teacher Research Academy (TRA), a week-long workshop that helps teachers prepare a course curriculum designed to motivate and teach their students how to conduct research projects.

In addition to learning how to teach the basic elements of research, the teachers developed their content knowledge in a specific scientific topic. This year, the focus was on molecular science. The teachers learned cutting-edge biotechnology laboratory techniques such as sequencing mitochondrial DNA, protein extraction and electrophoresis.

Tracy High School science teacher and director of the research academies, Kirk Brown, said the focus on one scientific topic prepares teachers to mentor students "on topics worthy of real

research within that focus area."

"The Teacher Research Academy prepares teachers to mentor students on doing research," said Stan Hitomi, director of the Edward Teller Education Center located at the UC Davis Department of Applied Science, Livermore campus. Hitomi also said the student academy will help students to do more "focused research" for their school project using the research techniques learned at the Lab.

At the graduation ceremony, STEP manager Richard Farnsworth encouraged parents and teachers to keep their students motivated about their research projects throughout the school year.

"Every little thing you can add to a college application will help set you apart," Farnsworth told the graduates. "Completion of a thorough research project may add that one little extra that will help you get into your college of first choice."

Keynote speaker and lab research scientist John Marion gave a brief overview of Lab research projects and encouraged the students to



STEPHANIE ESPOSITO

Lab research scientist John Marion stands with his daughter Laura after her graduation from STEP's Student Research Academy on July 12.

take risks in their research.

Brown agreed, saying, "They need to think outside of their current box and experience things they never have before."

Although this year's academy has ended, the students will return to the Lab throughout the school year for follow-up instruction. They will learn how to create research posters that they can use in science fair competitions and how to present their research findings at a symposium sponsored by STEP next spring. Lab scientists and SRA instructors plan to maintain contact with the students to check on their progress and answer questions about their research and presentations.

"The people at the Lab have a wealth of knowledge, which offers a great opportunity for the students," Brown said. "This is a good service for the community—we're providing science and technology education so students become interested and go into a math or science field."

The Teacher and Student Research academies are offered by STEP in collaboration with the Edward Teller Education Center (ETEC) and the UC Davis Department of Applied Science. The Web link to ETEC and information on STEP or either of the academies can be found at: <http://education.llnl.gov>



CLASSIFIED ADS

See complete classified ad listings at <https://www-ais.llnl.gov/newsline/ads/>

AUTOMOBILES

2000 - Sienna XLE, fully loaded, leather, mint condition, 35K mi, \$24,500 obo 925-447-0430

1995 - Red Acura Integra GS-R Sport Coupe. 75,000 mi. 5spd manual trans, CD changer, car cover. Original owner, all regular maintenance. \$8500. 510-486-8634

1992 - Mitsubishi Diamante Sedan 4D, air, PS/PW/cruise control, good condition, 114,000 miles, \$3,500. 925-634-2362

2001 - Kia Rio, AT, AC, 4 dr, grey, tinted wind, warranty, 20K mi, exc cond. \$6,999. 510-569-7806

1984 - BLACK CORVETTE DROPTOP \$4,000.00 OBO, needs some work window and fan motor, pwr win/dr, cd, Rodney 925-980-4332. 925-980-4332

2000 - Honda accord EX, V6, Color Green, 26,000 miles Extended warranty 19,500 209-543-0542

1980 - Triumph TR8, Convertible, 3.5L V8, 5 speed, good condition, \$6500.00 209-869-8019

1995 - GMC Safari Van, Extended, 8 Pass, AWD, Great for Skiing! Loaded, SLT trim, new tires, brakes, tuneup, 123k miles, high book \$10,600, \$7900. 209-599-4644

1999 - Chrysler 300M, Excellent Condition, Garaged, Fully Loaded, 33K miles, Charcoal Grey, still under warranty. 925-784-8160

92 - camero RS, with mags, t tops, cd, 38k miles, looks and runs great, gotta check it out 925-443-9179

1996 - Saturn SL, 4dr, 5sp manual, 83kmiles, AC, power brakes, steering, locks and windows, safe, reliable transportation \$3500 925-455-6942

AUTOMOBILE ACCESSORIES

RIMS: 4 Al rims for 1990 Honda Accord EX. BO. 925-634-2307

Front and rear seats out of 1993 Ford Crewcab pick-up truck, \$100. 209-339-0811

BICYCLES

TREK Mountain Bike \$300 obo. 1993. 20 inch frame. LX components. Front Shock. Questions: 530-677-5915

20in HUFFY girls bike, 18 speed digital, shift in handlebar, pump & helmet. very good condition. \$40.00 925-449-4056

Ladies Silver Canyon 10 speed bike, 24 inches. Hot pink with blue speckles. Excellent condition. \$60. 925-648-0671

BOATS

1978 Vanson boat trailer, 20 ft. length x 6 ft. wide, good cond. Would make good flat bed trailer. \$400-OBO 925-846-0717

AVON inflatable boat, w/ 9.9 Honda and trailer, \$1500 925-447-5194

ELECTRONIC EQUIPMENT

Nintendo 64, five games, two controllers, ruble pack \$60 firm. 925-484-9028

Sony 26 inch console Color TV, model KV2602. Very nice oak cabinet. \$100. 209-836-4605

Sega Dreamcast, two controllers, memory card, several games and strategy guides. \$65/obo 925-292-0348

Car stereo-Kenwood KDC-716S w/CD receiver and hidden face-plate. In box \$150. obo. Call Tony after 4:30pm. 209-836-0174

Television - 27 in. Zenith Color TV with remote (cable ready) \$75.00 925-875-1463

GIVEAWAY

King-size headboard, light greenish/yellow with cane inlay, good condition. You haul. 925-846-3653

Free Moving Boxes and Packing Paper to first who can pick them up. Located in Livermore close to Lab. 925-447-1676

15 Foot Trampoline With Cage Like Protective Fence Around It. 5 Years Old. Looks Weathered, Perfectly Funtional. Come And Get It 925-754-6390

Free Kenmore washer and dryer need work, pickup in Danville. 925-837-4935

FREE - 2 drawer lateral file cabinet, a tall bookcase (both oak finish) and a wicker chest. I live close to the lab - easy to come and pick up. 925-454-1608

HOUSEHOLD

AIR CONDITIONER - Beat the heat. 6200 BTU window unit. Never out of box. Cost \$350 new, yours for \$150. 925-243-0293

New Sealy Posturpedic California King mattress set, \$695 925-447-0430

Fisher Price Little People: Doll house, doctors office and extras, excellent condition, \$25. Kids size white resin table and 4 chairs, \$8. 925-294-9022

FIREWOOD: Reserve your firewood NOW; supply is limited; will deliver if necessary 925-634-2307

GE Smooth Top Range/Oven. Used 10 months. Excellent Condition. Originally \$900 Yours for \$500. 925-447-1676

Childcraft Oak Crib & Change Table. Sharp style. Light finish. \$150 (new-\$600). Extra Long Twin Mattress Set w/ Frame \$50. All very good condition. 209-833-9141

Student desk/Bookcase \$35, Recliner couch \$35, Blue wingback chair \$25 925-455-9414

White twin bed, head & foot boards. Matching 6-drawer dresser & attached mirror. Good condition, few blemishes.

Baronet all wood. Asking price \$500 925-933-0847

Garage Sale 7/27 only - 8am to noon. Furniture, clothing, household items. Great Stuff! 633 Zircon Way, Livermore. 925-443-6957

Lawnmower. 21 inch Mulcher or Side Discharge. Self Propelled, Good Condition, 3 yrs old. Make Offer. 925-240-1090

Blue sofabed and matching loveseat \$100. Dark wood bookshelf \$25. Baby crib \$50. Boys clothes, 18mo to 3yr \$2 to \$10. All in very good shape. 925-833-8229

Moving sale: contemporary Italian-style bedroom set with sturdy mattress (queen), \$1500. 6 ft tall entertainment center, \$45. 925-461-9839

Stereo system: Yamaha cd player (new) Technics amp and Fulton speakers. Cost \$850. Sell \$175 925-829-1474

Sofa, cherry wood arms and sides, used 6 months, excellent condition, paid \$800, asking \$250 OBO 925-443-5044

2 pine finish bookcases. Good condition. approximately 7 ft high 1.5 ft wide. Paid \$115 for each. Asking \$75 for both. 925-443-4778

Craftsman 22 inch, lawn mower, 6.0 hp. large real wheels, low hrs., less than 3 years old. \$125 or BO 209-524-0245

Combining households: Brass/Glass dining table, 36x60, \$25; sofa/hide-a-bed, queen, neutral color/pattern, \$50. 510-713-9873

Refrigerator. Magic Chef 21 Cu. Ft. White, with icemaker. \$185 209-824-2177

Two matching sofas for sale. Great condition. Each sofa has two reclining seats on each end. \$1000.00 OBO. Pictures available. 925-209-8064

Matched Reclining Chairs (2) by La-z-boy. One year old. Paid \$1175 for the pair. Sell the pair for \$550. 925-447-6391

LOST & FOUND

FOUND: Prescription glasses in burgundy case. 19 jul 2002. Outside T4387 in Bike basket. Go to LLNL Lost and Found. 925-456-7826

MISCELLANEOUS

2003 Entertainment Books pre-order now, lab delivery mid Aug. \$30 Eastbay(Alameda/Contra Costa) Call Dorothy 925-516-2728

Staying Sale. Kids growing up. 7/27 9-4. Kids clothing, toys. Little Tykes. Books. 1463 Winding Stream Drive Livermore 925-243-0293

Britax Roundabout car seat, 0-40 lbs, blue denim plaid, tether, good condition, \$70. 925-294-9022

Roxy wrist watch, brand new in original box, never worn, expandable band, silver/w white face. Marked price \$55. Sell for \$30. 925-846-3653

YARD SALE August 3. From 7

am - 2 pm. 1152 Hibiscus Way (Springtown, off Bluebell/Heather). Clothes, toys, household items, child car seat. 925-443-2172

Bruce Springsteen & E St. Band, Aug 27, Compaq Center, San Jose, Sect110/R18/Seats5-8. Will sell pairs or singles (pairs/all preferred) \$86.28ea 925-449-1481

2 tickets for Rush. \$65 ea. Good seats. Chronicle Pavilion. Tues, Sept 17, 8 p.m. Call Paul Harding 510-220-7630

BABY ITEMS. Crib/mattress, toddler bed, baby gates, carriers and lots of misc. items. All in excellent condition. Call for more details. 209-832-3772

Mattress for queen size sofa bed. Never used! \$25. Baby items - crib, changing table, clothes. Make an offer. 209-836-5764

Electrolux replacement bags (46) for canister vacuum cleaner. \$0.30 ea (less than half price). 925-484-1319

Craftsman lathe. 12in. swing, Runs, needs a little work. \$49 GREAT for small jobs, Will not last. CALL NOW 925-462-6356

Golf Clubs (King Snake graphite shaft irons & metal woods) \$225, Entertainment Center (6 ft., pine) \$200, Bakers Rack (black w/ wicker) \$100. 925-875-1463

Mens sportcoat, Bella Nora brand, Navy, size 42. Worn twice, paid \$250 at Nordstroms. \$50. 925-648-0671

Multi-Family Garage Sale, Brentwood, June 27th. Furniture, Computer Equipment, Toys, etc. 1217 Claremont Ct. Vasco/Balfour (left)/Claremont (left) 925-516-4142

GE gas dryer \$75; fire safe \$100; router table \$50; light boxes \$50; 4-drawer file Cabinet \$25; large mature plants various prices. 925-443-2725

MOTORCYCLES

2001 - Harley-Davidson XL1200 Custom. Lots of extras. Too many to identify. Must see! \$11,000.00 firm. 209-836-3123 After 5:00 p.m. 209-836-3123

1978 - Honda GoldWing GL1000. Excellent condition with full fairings, hard saddlebags, AM/FM/cassette, luggage rack. Asking \$2500. 925-443-9285

2002 - Yamaha TTR125-Only ridden a few times. No wipe-outs or crashes. Great for novice to intermediate rider. \$2,400 209-602-5168

Front Fender, Yamaha, YZ80, Blue, Plastic. Fits 95-01, New, \$20.00 or offer 925-443-3970

1988 - ATC - TRX 70 quad, automatic, 4 speed, runs great, good condition. \$1000 209-236-1691

MUSIC INSTRUMENTS

Winter, spinet piano, good condition, \$850 925-447-0430

Yamaha keyboard, almost-new condition. 5 octaves, full size

keys. 100 voices and rhythm styles, 20 songs. Stand included. Asking price \$95 925-933-0847

PETS & SUPPLIES

CATS-free to good home. Mindy & Mandy. Spayed, declawed, microchip implant, 3 yrs old. Very loving. Owner moving. Will email picture. 209-830-0905

Black female labs, 8 weeks, AKC, hunting and field champion blood line, \$650 925-449-7263

Hot Walker for four horses. Professionally built, used at the track, good condition, needs new electric motor, \$450 209-847-1231

Floppy-eared bunny needs good home. Female, 1 yr old. Good with kids. We are moving 925-243-0599

Peach faced lovebird, hand fed as baby, loves people. \$25 obo 925-706-2337

PET SITTER Aug 22-26. Resp. person to feed, play with and exercise precious 6 mos Springer Spaniel Pup at our Livermore home. References please. 925-443-8132

Divorce is forcing owner to seek new home for 4yr, friendly, shepherd mix, all shots/spayed, good with children. 925-837-0863

J&J Pet Services will happily groom and/or walk your dog. If you are in Livermore, give us a call! 925-292-9231

Large Stainless Steel rabbit cage with plumbing. holds 12 rabbits max. worth \$2500. Seller asking \$900 OBO. mint condition. 925-447-7897

Border collie puppies for sale. \$600.00 for females, \$500.00 for males. 925-381-2359

Australian saddle, used infrequently. \$100/offer 209-848-8965

Dogloo dog house for medium to large dog. \$25.00 925-443-2827

Akita for Sale. Female, 1yr, AKC, Show quality, Red Brindle, 3/4 Import, Champion lines. \$600 nego. 209-629-3630

Dogloo dog house for larger dog. \$50 obo 209-480-3279

FREE Purebred Labs 1yr(1 Chocolate/ 1 Yellow). These guys need a family that can spend the time with them. Great with kids. Some obedience training. 209-832-7971

Free to a good home, 4 year-old male tiger striped parakeet. Must have a companion. 925-373-8317

RECREATION EQUIPMENT

Stair Stepper w/electronic counters \$20.00 925-449-1481

BIG POLE Wakeboard Pylon \$300 obo. By Wake Designs. 7ft high. Slips over your existing short pylon. Great condition. 530-677-5915

Stepper machine. Get in shape before the summer is over! \$20 209-836-5764

Due to space limitations, Newsline may withhold ads that have already run. They will still appear on the Web.

CEREMONY*Continued from page 1*

criticize. "It takes a special person to do this job and do it well," she said. "Thank you, Bruce, for doing your part."

John McTague praised Tarter's "strategic thinking. He could think and talk faster than I could listen and learn." McTague credited Tarter with creating an atmosphere in which "everyone works together as a single team. He has a deep commitment to the Lab's missions... and if he has an enemies list, I've never seen it."

He thanked Tarter for "envisioning the future and enabling it to happen, then presented him with a special citation honoring his "leadership and accomplishments in support of outstanding science and management."

On a less serious note, McTague presented Tarter with a special gift, in which he challenged the former director to conduct a special experiment in which he could measure the performance of certain "projectiles": golf balls. He also presented Tarter with a special T-shirt, the front decorated with the UC seal and the back emblazoned

with the words, "Free at Last!"

Beckner presented Tarter with two awards, the Gold Award from DOE and the NNSA Administrator's Award for Distinguished Service."

"As director of the Lawrence Livermore National Laboratory, Bruce Tarter guided it through the most challenging of times, as it made the world a safer place through advances in science and technology," Becker read from the NNSA citation. "The institution remains Lawrence's Laboratory — it achieves major scientific contributions of scale and of national importance using multidisciplinary teams."

Kuckuck, a longtime friend of Tarter's as well as his former deputy director, warned all in attendance that he would depart from the afternoon's customary compliments, announcing "I come to bury Caesar, not praise him." He then chided Tarter on his managerial style, his indecipherable handwriting, and questioned why Tarter insisted on beginning his formal name with the initial C. Kuckuck then mentioned Tarter hails from Kentucky and perhaps he was trying to copy another famous Kentuckian, the racehorse Sea Biscuit, who starts his name in a similar

manner.

Kuckuck then presented a typical day "in the fog" of the Director's Office, and he thanked Tarter's administrator, Joni Schuld, who acted as an instructor of people skills as well as the translator of Tarter's "Gaelic"-looking memos.

Tarter was then called to close the ceremony. He thanked all for their "gratifying" comments, then good-naturedly chided Kuckuck for not presenting a gift. Turning serious, Tarter then thanked UC for preserving a "climate of intellectual freedom." He also paid special tribute to Schuld, whom he credits as his "right arm, left arm, right brain and personality trainer."

Of his tenure, Tarter said he had one regret — the almost daily meetings with various sponsors and stakeholders around the country hindered his ability to spend more time walking around the Lab. Now that he is associate director at large, Tarter hopes to change that.

Tarter thanked employees for coming and wished his successor luck on his new job. He closed by advising Anastasio "these are not big shoes to fill, as long as you wear one hiking boot and one ballet slipper."

BSL-3*Continued from page 1*

The Laboratory has been asked by the CDC to develop DNA signatures for a number of pathogens to improve detection and understanding of those diseases.

However, as the Laboratory currently does not have a BSL-3 facility — and can't work with live organisms designated for use in such facilities — the work of Livermore scientists for countering terrorism and some infectious diseases is slowed, according to Bert Weinstein, acting associate director for BBRP.

For a number of years, Lab scientists have conducted research — and operated — biomedical facilities at the lower levels of biosafety one and two. The previous research by Livermore scientists has already proven valuable in the development of DNA signatures that speed detection of various microorganisms and can help save lives.

This research is done in collaboration with Los Alamos National Laboratory, the CDC, the Department of Defense and the U.S. Department of Agriculture.

Two examples of DNA signatures developed through this process are for *Bacillus anthracis*, the bacteria that causes anthrax, and *Yersinia pestis*, the bacteria that causes plague. Both plague and anthrax can be produced for criminal purposes or occur as natural diseases.

To conduct research on other organisms, such as valley fever and rabbit fever, Lab scientists have had to travel to other BSL-3 facilities in California and even other states, Weinstein said.

"Since we started working with plague and anthrax in our existing BSL-2 facility we have found we can progress two to three times faster in developing tests for detecting pathogens than we could before," Weinstein said.

Once DNA signatures developed by Livermore scientists and other researchers are approved by the CDC, they are then distributed to public health laboratories around the nation.

The first use of a Livermore DNA signature to detect a public health disease in the environment took place in May 2001 when plague was found in a small community northwest of Flagstaff, Ariz.

Naturally-occurring outbreaks of plague often hit the Southwest region of the U.S., particularly Arizona and New Mexico, in the spring and summer months. While tests for plague have usually required seven to 10 days to confirm, the Lab's DNA signatures — used by Northern Arizona University researchers — confirmed the presence of the disease within four hours. Rapid detection of plague can save lives, as the survival rate of the disease is nearly 100 percent with the prompt treatment of antibiotics.

"With DNA signatures, we are working toward faster identification of these diseases, some

of which, like anthrax, have symptoms that can be confused with the flu," Weinstein said.

With a BSL-3 facility, Lab researchers could have access to small amounts of the microorganisms that cause two diseases endemic to California — valley fever and rabbit fever.

Lab scientists plan to develop a DNA signature for *Francisella tularensis*, the bacteria that causes rabbit fever and is named for Tulare County.

"Since 2000, Lab researchers have worked with a number of strains of anthrax and plague for the NNSA's Chemical and Biological National Security Program," Weinstein said, adding the work has been conducted safely and in full compliance all applicable security, health and other administrative requirements and guidelines.

"We now have the track record and trained personnel that make us confident we can conduct high-quality and safe research with a BSL-3 facility," he said.

The environmental assessment process, which opened Wednesday, runs until Aug. 23. If there is a determination that the BSL-3 facility would have a minimal impact, the project could go out to bid in September or October and be built by March or April, 2003.

One of the options being strongly considered for a Livermore BSL-3 facility is the purchase of a pre-fabricated building. These buildings are available from a number of different manufacturers.

Time Works accelerated action fitness machine with computer operation, \$50 OBO 925-443-5044

Sale: Bauer Black Panther hockey skates, Mens 6, \$25. CCM Powerline SG 90 Leg Pads, 30cm, \$8. 650-497-1735

Baby Trends jogging stroller. Hardly used! Perfect condition! \$65.00 925-456-6023

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>

Manteca - Drive 1 day/wk + 1 Friday/mo. Relax the rest of the time! Save money & stress. GREAT carpool! 209-823-8309, ext. 3-1050

Lafayette - LaMOrinda (also Walnut Creek stop at Rudgear Rd) luxury Vanpool (reclining seats, reading lights) 8-4:45, \$100/mo (pretax reduction available) 925-943-6701, ext. 2-3005

Orinda - Carpool from Lamorinda (Highway 24 and St. Stephens)

needs 4th rider/driver. Lab hours 8:10am to 5 pm. 925-253-0498, ext. 2-9823

Manteca - Rider/Driver for four person carpool. 8-4:30 209-823-5085, ext. 2-0643

SERVICES

Licensed Videographer-great for weddings or to consolodate/edit those old home movies into one great collection. Can convert to DVD! 925-918-3624

Headshot Photography / Distinctive B&W Portraiture for actors, entertainers, musicians and artists. Livermore Studio. 925-449-0107

Babysitter. College Girl. Needs job with flexible hours. 925-447-8557

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Tracy - Room overlooking pool/waterfall. \$550 month, \$200 dep. Includes cable, full privileges. 209-833-6443

TRUCKS & TRAILERS

2000 - Ford Ranger Stepside Sport. Only 16K miles. A/C, CD player, chrome wheels, dual airbags, 4cyl/5spd, sliding rear window. \$10,250. 925-556-9282

1955 - Studebaker truck, 1/2 ton, step side, could be running with tlc. No cancer, good body. Just want it out of my yard, \$300. 209-847-1231

1983 - Starcraft-Tent trailer good cond. 3 way fridge, current registration. \$1,850 OBO 925-846-0717

1984 - Nissan 2x4, 5-speed pickup w/ camper shell. Body, paint in excellent condition. Runs well. \$1350 925-443-9285

VACATION RENTALS

SOUTH LAKE TAHOE - 3 Bedroom 2 bath Chalet, newly remodeled, nicely furnished, all amenities, Park w/Lake, playground, etc. Great for Families! Hurry for Summer! 209-599-4644

Maui, HI - Kahana Reef oceanfront 1BR/1BA condominium. Beautiful two-island view, oceanside pool, and BBQs. Low LLNL rates for year-round reservations. 925-449-0761

WANTED

Wanted: Tailgate to fit 1992-96 Ford F-series pick-up truck. 209-339-0811

KAYAK, 17ft, Aquaterra Perception. 925-443-3865

Looking for very reasonably priced - Tall Bookshelves(4-5 shelves). Decent condition. Please contact 209-823-9617

WANTED: Old vacuum tube stereo equipment, tubes, speakers, etc. 925-443-2954

Need someone with upholstery experience to upholster a recliner (small). I have fabric. 925-754-7090

PET SITTER Aug 22-26. Resp. person to feed, play with and exercise precious 6 mos Springer Spaniel Pup at our Livermore home. References please. 925-443-8132

Old Macintosh computer (Macintosh Classic or newer model) for child. Please call or leave message at 510-657-9557

Cement mixer, working or not. 209-832-2846

Wanted - 2 tickets for Jewel concert at Wente Vineyards on Sept. 9, 2002. 925-443-1673

Wanted-Weights set. Bench with weights for teenage son. Beginner. Cheap. Thank you. Please call after 5:30. 925-443-6015

Need designing ideas and help on landscaping a large backyard. New home-owner willing to help with deck-work but lacks creative ideas! Call Paris at 510-537-4777

Looking for child's playhouse, LittleTikes or similar. 925-454-0877

Typewriter for college student. File cabinet for legal size filing and miscellaneous office equipment. 209-832-7112

2 SF Giants/SL Cardinals baseball tickets for July 22nd, 23rd OR 24th at Pac Bell Park. Preferably July 23rd. 925-556-9282

PUFFERFISH*Continued from page 1*

to predict the existence of nearly 1,000 previously unidentified human genes. These additional hypothetical human genes are of largely unknown function, but contribute to the complete catalog of human genes.

Determining the existence and location of genes helps enable scientists to begin characterizing how they are regulated and function in the human body.

"Comparative genomics programs like the Fugu project are key to understanding the biology of the human genome," said JGI Interim Director Eddy Rubin. "As historic and important as the Human Genome Project is, it's only the first step in determining how genes work – and why they sometimes don't work the way they should."

The draft sequencing and assembly of the Fugu genome, announced last October, marked the first publicly released animal genome after the human sequence, and the first vertebrate genome publicly sequenced and assembled using the whole genome shotgun method. The Fugu genome sequence, along with other information about the project, is available on the World Wide Web at www.jgi.doe.gov/fugu and www.fugubase.org.

The JGI, one of the largest public genome sequencing centers in the world, is operated jointly by three DOE national laboratories managed by the University of California – Lawrence Berkeley and Lawrence Livermore in California, and Los Alamos in New Mexico.

In addition to the Fugu project, the JGI has genomics programs focused on microbes, fungi, animals, and plants.

Fugu is a delicacy in Japanese cuisine that can deliver a deadly neurotoxin if improperly prepared. Its scientific value, however, is based on its small genome size. According to Daniel Rokhsar, Associate Director for Computational Genomics at the JGI, the compact structure of the Fugu genome (only one-eighth the size of its human counterpart) made it possible to identify genes that had been obscured by the many repetitive and non-coding sequences that make up about 97 percent of human DNA.

Rokhsar noted that nearly three-fourths of the genes in the human genome have identifiable counterparts in Fugu, highlighting the shared anatomy and physiology common to all vertebrates.

"These similarities are recognizable in the two genome sequences despite the 400 million years of evolution since the two species diverged from their common ancestor," he said. "Proteins found in humans but not in pufferfish, and vice versa, help define the sets of genes at the core of differences between four-limbed animals (reptiles, amphibians, birds, and mammals, including humans) and finned fish."

"For the first time we are seeing the overall differences as well as the similarities in the protein parts that make up fish and man," said Dr. Samuel Aparicio, Principal Investigator at the Wellcome Trust Centre for Molecular Mechanisms in Disease at the Department of Oncology, Cambridge University, England. "When we matched the predicted Fugu

proteins directly against the human genome sequence, for 961 cases we found that there was a match in human which didn't overlap an already predicted or known human gene.

"This flags up for human geneticists the position of potentially novel human genes in the human genome. In addition, direct comparisons of the fish DNA with the human DNA show that more human genes will be found by comparing fish with man. In this way, the pufferfish sequence is helping to find previously undiscovered features in the human genome sequence – a process often compared to the decipherment of the Rosetta stone."

The study also revealed how the ordering of genes in genomes can be shuffled over time. Many small groups of genes are found in the same order in man and fish, but over longer distances, the ordering of genes becomes scrambled. The rearrangements found by the researchers shed light on the processes that drive genome evolution.

The International Fugu Genome Consortium was formed in November 2000 by the JGI and the Singapore Biomedical Research Council's Institute for Molecular and Cell Biology. Other members of the consortium are the UK Medical Research Council's Human Genome Mapping Resource Centre in Cambridge, England, the Cambridge University Department of Oncology and the Institute for Systems Biology in Seattle. Two U.S. companies, Celera Genomics of Rockville, Md. and Myriad Genetics, Inc., of Salt Lake City, contributed to the consortium's efforts.

More information about JGI can be found at www.jgi.doe.gov.

NIF*Continued from page 1*

sion electro-optical/mechanical structures weighing between 500 and 1,000 kilograms. LRU components are received at the NIF warehouse on Patterson Pass Road. Optical components are shipped to the Optics Processing Laboratory in Bldg. 391 (home of the former NOVA laser) where they are inspected, cleaned and mounted before they are delivered to the Optics Assembly Building (OAB), adjacent to NIF. There, LRU design and OAB teams assemble and test the LRUs in a class 100 cleanroom environment. These tests validate the cleanliness, alignment, and operation of these complex assemblies.

Teams from Systems Engineering help to verify that the test data meets or exceeds LRU requirements before beampath installation.

"We rely on Systems Engineering 'Expert Teams' to help verify our results and make sure no facet is overlooked," said Gina Bonanno, associate project manager for assembly, installation, and refurbishment. "When we release an LRU, we're certain that the optics are precisely aligned with the optical axis of the beamline, that the mounting process has not introduced distortions or contamination, and that the LRU will perform as designed."

Next in line, transport and handling teams use automated guidance vehicles to position and install the LRUs into the laser beampath infrastructure system. Since its completion in October, the beampath has been maintained in its operational cleanliness conditions. The LRU delivery vehicles maintain stringent cleanliness levels during transport and installation operations.

When Bundle 31 LRU installations began in May there were still more than 100 crafts workers installing water, air, electrical, mechanical, vacuum, and cooling utilities throughout the laser bay.

"To our great pleasure, everything has gone according to schedule. This is a testament to the coordination efforts of many Laboratory groups and contractors and the willingness of all the teams to work together to execute a difficult assignment," Commissioning Manager Bruno Van Wouterghem said.

LRU associate project managers Steve

Johnson and Doug Larson also are proud of the integrated team efforts. "Installation of this many LRUs puts us in a position to begin firing the flashlamps, which further cleans the laser amplifiers and provides the first online tests of NIF systems," Johnson said.

"The teamwork needed to build, validate and install this large number of flashlamp LRUs paves the way for our power conditioning teams to test the flashlamps and moves us closer to running the laser," Larson said.

Toward 10-kJ laser light activation

Full installation and activation of Bundle 31 LRUs are required to support a NIF milestone of 10 kJ (kilojoules) of laser energy. The first step—full-energy, flashlamp shots—has already started. Subsequent LRU installations will support alignment of laser bay optics, verify systems that correct for wavefront distortions and test overall controls, timing, and diagnostics. Installation of amplifier LRUs will enable low-energy laser shots, precursors to full-energy laser operation.

Another planned milestone of NIF early light entails attaining 4 kJ of ultraviolet laser light at the center of the target chamber next spring. The wavelength of this light will be converted from 1.053 μm (infrared) to 351 μm (near ultraviolet) through frequency conversion crystals inside a final optics assembly LRU mounted on the target chamber.

Initial experiments will accelerate and illuminate flat foil targets, which will generate shock waves that reveal equation-of-state data relative to stockpile stewardship and basic science. Some experiments will focus three laser beams onto a foil while the fourth beam illuminates a back-lighter target that takes radiographs of the shock front, providing important material properties information that can only be provided by laser systems. Other experiments will measure hydrodynamic instabilities similar to those observed in supernovae.

"Livermore will have a world-class experimental laser facility with the activation of the first NIF quad," said Brian MacGowan, associate project manager for NIF mission support. The NIF laser will have long-duration laser pulse capability with precise pulseshaping, enabling unique experimental possibilities. "A single NIF quad is

packaged in a small, solid angle, allowing for more efficient coupling to experiments. A NIF quad, although only 2 percent of the complete NIF laser, has the potential to provide more energy than that produced by all of the Nova laser."

Team NIF

The efforts of hundreds of additional NIF team members have enabled impressive construction, assembly, and testing progress. Included are the many support organizations from within the NIF project and throughout the Laboratory, vendors providing essential products and services according to demanding schedules and crafts people installing and integrating critical support utilities and systems. It is the continued support and dedication of all NIF team members that is making NIF a success.



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