

NEWSLINE

Published weekly for employees of Lawrence Livermore National Laboratory

Friday, October 6, 2000

Vol. 25, No. 40

FDA clears Peregrine for takeoff

Lab gives doctors new weapon in cancer fight

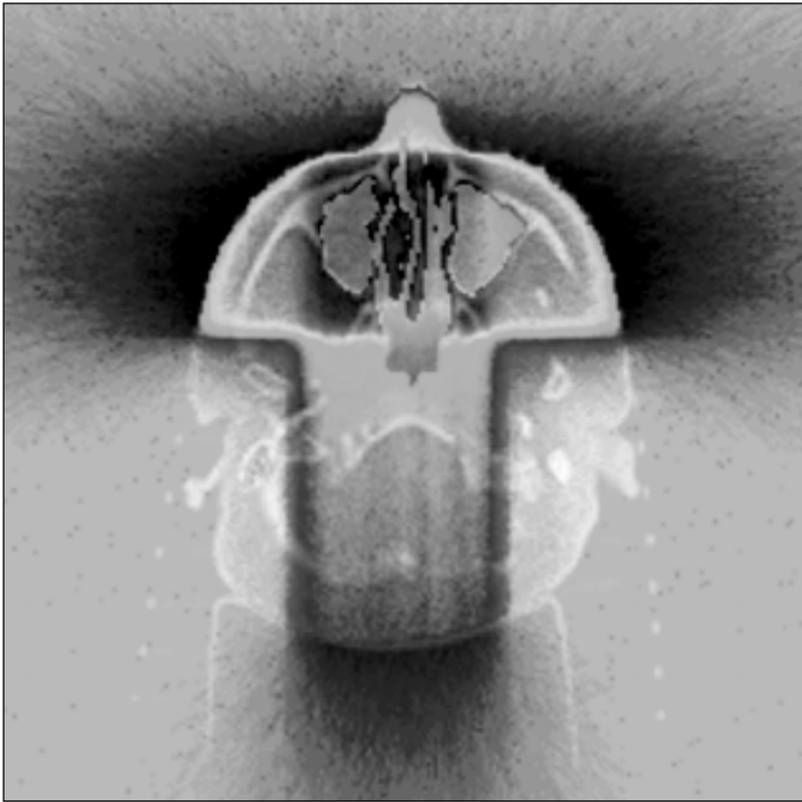
NEWSLINE STAFF REPORT

Clearance has been granted by the U.S. Food & Drug Administration for an advanced method for targeting tumors with radiation treatment developed by researchers at the Laboratory.

Dubbed Peregrine — after the patron saint of cancer patients — the technology gives doctors new insight that will help them target radiation at tumors, while minimizing damage to surrounding healthy tissue.

NOMOS Corporation, a leading supplier of radiation treatment technologies located in Sewickley, Pa., recently received U.S. Food & Drug Administration clearance to produce and market Peregrine systems to the medical community.

Energy Secretary Bill Richardson will announce the FDA's decision today at NOMOS headquarters. "Peregrine could change the way cancer is treated in America," said Richardson. "This technology was developed through advances



This 3-D slice of Monte Carlo-based Peregrine calculation shows a patient's head and is focused on the sinus region. The Peregrine dose calculation is superimposed on the patient's CT image.

resulting from nuclear weapons research and with the multidisciplinary scientific expertise of a Department of Energy national laboratory. This is an excellent example of turning swords into plowshares."

See PEREGRINE, page 8

Lab's annual salary review gets under way; increases reflected in Dec. 1 checks

The annual October salary review for Laboratory employees is now under way. The review process is scheduled to run through Oct. 30, when all salary actions must be finalized. Both biweekly and monthly paid employees will see changes reflected in their Dec. 1 paychecks. All increases will be retroactive to Oct. 1, 2000.

As in prior years, the merit budget increase proposal to the DOE was based on a comparison of the Laboratory's average salaries for job classifications against market averages for similar jobs as reported in a number of market surveys.

In addition, the Laboratory asked for and received DOE

approval for a special Critical Skills Retention Allocation (CSRA) that was needed due to severe market salary pressures and the need to stem a growing attrition problem among scientists and engineers with critical and/or hot skills. The Laboratory was able to support its proposal by supplementing its normal market salary survey information with information provided by employees leaving the Laboratory.

The special adjustment is funded at 1 percent of the S&E payroll. Approximately 64 percent of the CSRA will be distributed during the salary review to about 500 scientists and engineers in five directorates experiencing the most severe problems. The Lab director will reassess the retention situation again mid-year to determine how to utilize the remaining CSRA.

As he has for the last several years, Lab Director Bruce Tarter also approved redistribution

**SALARY ALLOCATIONS
BY THE NUMBERS
— PAGE 4**

See SALARY, page 4

Laboratories' success lies in balance of science, security, says LANL director

By Don Johnston

NEWSLINE STAFF WRITER

Achieving a balance between an open environment in which science can flourish and the restrictive environment required for effective security is critical to the success of the national laboratories in the 21st century, Los Alamos Director John Browne said Tuesday in an address to the Commonwealth Club of California.

Browne described how Los Alamos has been "rocked" by a series of "unrelated and unfortunate incidents" that have put the laboratory's security practices under a microscope. The indictment of Los

“ Our scientists have always taken security seriously. ”

— John Browne ”

Alamos weapons researcher Wen Ho Lee on 59 counts of improperly downloading classified data and the disappearance from a classified vault of computer hard drives containing classified weapons informa-

See BROWNE, page 7

Get ready for HOME opener

Mark your calendars and lace up your running or walking shoes, or perhaps the rollerblades, for Friday, Oct. 27. That's the day when the Run for HOME and Agency Fair return to the Laboratory.

Both events are the official kickoff for the Lab's annual HOME Campaign, in which employees contribute primarily through payroll deduction to a wide variety of charities, most of them based in surrounding communities. Last year the campaign raised just over \$1.2 million; this year's goal is \$1.25 million.

This year's HOME Run and



Fair will have a new look, thanks in large part to a new location.

See HOME, page 8



Hispanics' rich diversity

— Page 2



Remembering Roger Batzel

— Page 3



Sounding alarm on fire safety

— Insert



LAB COMMUNITY NEWS

Weekly Calendar

Technical Meeting Calendar, page 4

Friday
6

As part of National Breast Cancer Month, LLESA is sponsoring a **breast cancer information booth**, 11 a.m. to 2 p.m. at the Employee Store. Information will be available on self-examinations, mammograms and guidelines for early detection of breast cancer. Breast cancer stamps will also be available for purchase. A portion of the stamps' sales goes toward breast cancer research.

Monday
9

The **B Division book sale** returns today through Friday, Oct. 13, 11:30 to 1:30 p.m., in Bldg. 132, room 1200 (Q- or L-cleared only). The sale will offer romance books, mysteries, kids' books, cookbooks, sci-fi, technical — you name it. Books are \$1 each or six for \$5; CDs and videos are \$3 each. All proceeds help Tri-Valley Haven, Shepherd's Gate, Focus and Family Ties, Mary Graham Hall, plus individual families in need. Contact: Lynn Groves, 2-1684.

•••

Goodenough Books will host a talk and book signing with former Lab employee **Kevin J. Anderson** and Brian Herbert, authors of "Dune: House Harkonnen," at 7:30 p.m. The event is free and open to the public. Contact: Goodenough Books, 443-4354.

Tuesday
10

Want better relationships? **Codependents Anonymous** (CoDA) meets every Tuesday at noon in Bldg. 571, room 2016. The group offers 12 steps to recovery from codependency. Contact: Mike, 3-4827, or Jane, 4-4689.

Friday
13

Whitestone Books in Livermore is hosting the **"Deadly Divas Tour"** at 7 p.m. Four mystery writers, Letha Albright, author of "Tulsa Time;" Sherri L. Board, author of "Angels of Anguish;" Susan McBride, author of "And Then She Was Gone;" and Denise Swanson, who writes the Scumble River Mystery Series, will be on hand to sign books and meet with fans. The event is free and open to the public. Discussion with the authors is encouraged. Diva wear, including boas and tiaras, is optional.

Send all calendar items to Elizabeth Campos Rajs at rajs1@llnl.gov

BROADCAST
SCHEDULE

On Tuesday and Thursday, Lab TV will rebroadcast a "Technology Today" show on **fire safety** at 10 a.m., 1 p.m. and 4 p.m., and the Science 2001 talk, **"Satellites, Rocketry & Manned Space Flight,"** at 11 a.m., 2 p.m. and 5 p.m. Both shows will air on channel 4.

Rice professor to discuss Hispanic diversity

Richard Tapia, mathematician and professor at Rice University, will speak on "U.S. Hispanics: Diversity Within Diversity," at 11 a.m. Tuesday, Oct. 10, in the Bldg. 123 auditorium.

Tapia's presentation is part of Hispanic Heritage Month and the ongoing Diversity Speaker Series sponsored by the Affirmative Action & Diversity Program. All employees are invited.

Tapia is known not only for his research in computational and mathematical sciences, but as a national leader in education and



Richard Tapia

outreach programs.

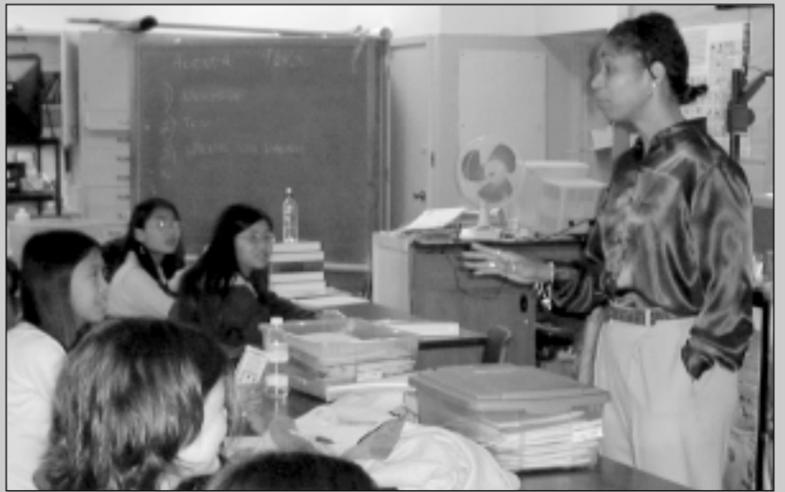
He works with women and underrepresented minorities to help them earn doctorates in mathematics, and he is director of Rice's Alliances for Graduate Education, which helps minority and women students.

Cornell University has named a lecture series in honor of Tapia, and on Oct. 14 he will be honored with the Distinguished Scientist Award from the Society for the Advancement of Chicanos and Native Americans in Science.

For more information on the talk, contact Michele Cardenas, 3-2796.

Aerospace engineer touches down at local schools

Prior to her Science 2001 lecture last week on "Satellites, Rocketry & Manned Space Flight," rocket scientist Aprille Ericsson-Jackson visited students at three East Bay schools, including a group of girls at Bret Harte Middle School in Oakland taking a specialized science class (right). She spoke about her experiences as an aerospace engineer at NASA Goddard Space Flight Center, and encouraged them to pursue careers in math and science.



LORI TAYLOR/PUBLIC AFFAIRS OFFICE

Lab fair spotlights ridesharing options



JULIE KORHUMMEL/NEWSLINE

At the Lab's Commuter Fair Wednesday, Tess Lengyel Jouyate of the Alameda County Transportation Authority (right) chats with Spare the Air coordinator Joell Ormonde (left), and City of Livermore engineer Anna Vickroy (center). The fair featured displays on commute alternatives by a number of outside agencies as well as the Lab's Transportation Systems Management Program. As part of California Rideshare Week, solo drivers were encouraged to consider ridesharing.

Deadline approaches for LLLWA scholarship awards

The deadline to apply for a LLNL Women's Association scholarship is Oct. 15.

The scholarship program, which is funded by the LLLWA and the Affirmative Action & Diversity Program, provides financial support to Lab employees pursuing educational training as a means of career and personal advancement.

To be eligible, applicants must have worked at the Lab for at least one year, work 50 percent time or more, have completed academic work within the last two semesters and be a current member of the LLLWA.

Qualified applicants will be judged on their educational history and transcripts, a statement of objectives and a personal interview.

For more information, call Joni Schuld, 2-4168.

Newsline

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AROUND THE LAB

Batzel remembered for his dignity and strength

By Lynda Seaver

NEWSLINE STAFF WRITER

Whether he was guiding the Lab through massive growth or teaching his kids to catch a fish, Director Emeritus Roger Batzel conducted his life with a calm temperament, dignity and strength.

"He was the Gary Cooper of the nuclear world," said Mort Mendelsohn, a longtime friend of Batzel's and the former associate director of the biomedical program. It was Batzel who convinced Mendelsohn to come to the Lab in 1972 and lay the groundwork for the Lab's major role in human genome research.

"Roger was a man of few words, but he had the strongest convictions," Mendelsohn said. "He never let management interfere with creativity."

Mendelsohn's recollections were part of a special gathering of Batzel's friends, family members and former colleagues, who came to the Lab Saturday for a ceremony in honor of the Lab's sixth director. Batzel, who led the Lab from 1971-88, died July 29 after a heart attack. He was 78.

Former Directors Mike May and John Nuckolls were among those who participated in the commemoration, along with Director Bruce Tarter, who hosted the tribute. Following the ceremony, Tarter announced the Lab would dedicate Bldg. 132, the national security building, in Batzel's memory, for his "legacy of excellence in support of national security." As part of the dedication, a bronze bust of the former director will be placed in the lobby and a plaque will be placed outside the entryway.

In many ways the commemoration resembled more of a Lab reunion, with many of Batzel's high-ranking managers and consultants all coming to reminisce. Among those who joined May and Tarter in offering up memories were Director Emeritus Edward Teller, former Deputy Director Duane Sewell, former Executive Officer and Principal Lab AD Phil Coyle, Mendelsohn and Stella Batzel, Roger's oldest daughter.

Family members included Eddy Batzel, Roger's wife of nearly 54 years, his daughter Stacy, and his two grandsons, Chris and Sam. His



JULIE KORHUMMEL/NEWSLINE

Eddy Batzel

son Roger could not attend. It was Stella who served up memories of Batzel teaching his children to fish or ride horses; trying to convince them a burning trash heap on a hill was actually an erupting volcano; or breaking away from meetings or other Lab business to catch up with his college-bound daughter on the phone.

"The mark of a good manager is not how he treated the special people, but how he made everyone feel special," said Stella of her father.

"Roger built a home for colorful, creative leaders," said Coyle of the director. "It was a rainbow of talent that any institute would treasure."

It is Batzel who is credited with spearheading the massive growth of the Lab during his tenure. As proof, the audience was treated to videotape of Batzel's farewell address to employees in 1988 when he announced his retirement. Batzel showed

pictures of the Lab in the early 1970s, when two thirds of the square-mile facility was still grasslands occupied by so many jackrabbits. By 1988, the grassy fields gave way to state-of-the-art scientific and technological facilities, thanks to the addition of the laser facilities and expanded programs such as energy, biology and biotechnology and computational research.

Under Batzel's tenure, the Lab grew from a budget of \$128 million and 5,400 employees in 1971 to a budget of \$815 million and 8,000 employees (not including 2,000 contractors) in 1988.

During the video, Batzel thanked his many managers and senior scientists, among them Nuckolls, Tarter, Mendelsohn, George Miller, Roger Werne, Lowell Wood, Bill Shuler and Bob Andrews, among others, for their work in "helping the Lab meet its commitments" and providing "no worries that it will meet its future commitments."

"It is a tribute to the people that this Lab has been so successful," Batzel summed up.

Yet those who came on Saturday attributed that success back to Batzel.

"Roger had the ability to support diverse programs and talents so each person felt like part of a whole," Coyle said.

"Roger could always be trusted," said May, both for his technological expertise and his judgment of people. "He had the respect of Washington as well as his own people. He was an American success story."

Following the ceremony, the group gathered at the West Cafeteria for more reminiscing amidst a photo montage of Batzel's life and scientific contributions.

"Dad's death has been really hard for the family but this (tribute) makes everything a little easier," summed up Stella Batzel. "Everyone at the Lab has been wonderful in sharing their memories. We are grateful for everyone here for helping to make his time at the Lab so special."

For a closer look at Batzel's tenure, see the Web at <http://www.llnl.gov/PAO/Newsstand/articles/2000/8-04-00-batzel.html>

Searing account of Cerro Grande



DON JOHNSTON/NEWSLINE

George Van Tiem of Los Alamos National Laboratory (center) met with Associate Deputy Director of Operations Den Fisher and BJ Sibley of emergency management before giving a presentation on the effort to quell the Cerro Grande fire that threatened LANL back in May. Van Tiem gave a chronological report of the wildfire that consumed more than 46,000 acres of forest land and destroyed several lab structures.

No "Training Bulletin" in today's Newsline

Although the "Training Bulletin" customarily appears as an insert in *Newsline* on the first Monday of each month, it is not running in today's paper.

The October "Training Bulletin" will be published in *Newsline* on October 13.

Training
Bulletin



NEWS YOU CAN USE

SALARY

Continued from page 1

of allocations within the Technical Salary Program, as recommended by the Technical Salary Committee, to address continuing market recruitment and retention issues with computer technicians.

Depending on the structure, the Laboratory's compensation increase plan is divided into two or three categories: merits, adjustments and promotions. The merit allocation represents "pure merit" increases. The adjustment allocation, ranging from 0 to 1.5 percent, is for other common salary actions such as internal and external equity adjustments, structure/range adjustments, and retention pay for particular job classifications or families.

As in past years, an additional half percent has been allocated in the merit structures for increases resulting from promotions. The merit allocations and step structure adjustments for the different series are shown in the accompanying table. Individual increases will vary based on ranking and how current salaries compare to those of peers.

The variation in numbers across the different series reflects differences in the respective markets. Adjustments to the salary ranges also reflect market differences; some of the ranges have been broadened to reflect the wider range spreads seen in surveys. Complete range information is included in the Salary Program Guidelines, which are available on the Web (<http://www-hr.llnl.gov/PDF/compensation/>). Questions may also be directed to your directorate's compensation representative.

Salary Increase Allocations**Unlimited time (merit) — monthly paid**

051 Series	Fire	2.5
055 Series	Security lieutenants	7.2
100 Series	Administrative	2.5
200 Series	Scientists and engineers	4.0
300 Series	Technicians	5.0

Limited time (merit) — biweekly paid

400 Series	Administrative	4.5
500 Series	Technicians	4.5

Step structures — biweekly paid

600 Series	Protective Services, sergeants/CAS	6.5
600 Series	Firefighters and dispatchers	2.0
700 Series	Apprentices	
	— related to skilled crafts	4.3
	— related to machinists	3.3
	— related to hazardous waste technicians	4.5
800 Series	Facilities	4.3
900 Series	Machinists	3.3

Source: Human Resources

◆◆◆ Technical Meeting Calendar ◆◆◆

Friday
6**CHEMISTRY & MATERIALS SCIENCE**

"Bond-Order Potentials: Bridging the Electronic to Atomistic Modeling

Hierarchies," by David G. Pettifor, University of Oxford, Department of Materials, United Kingdom, 10:30 a.m., Bldg. 235, room 1090 (uncleared area). Contact: Patrice Turchi, 2-9925, or Nancy Pullen, 2-4321.

INSTITUTE FOR GEOPHYSICS & PLANETARY PHYSICS

"Coupling of Climate Change and Tectonics on Venus," by Sean Solomon, Carnegie Institution of Washington. Noon, Bldg. 319, room 205 (open area). Contact: Joanna Allen, 30621, or see <http://www.llnl.gov/urp/IGPP/SemCalendar/IGPPSemCal.html>.

PHYSICS & ADVANCED TECHNOLOGIES

"Effects of Anharmonicity on Equations of State for Solids Under Strong Compression," by Wilfried Holzapfel, University of Paderborn, Germany. 1:30 p.m., Bldg. 219, room 163 (open area). Contact: Bill Nellis, 2-7200, or Miriam Rinnert, 2-7369.

Monday
9**H DIVISION**

"Aspects of D and F Electron Systems," by Anna Maria Delin, International Center for Theoretical Physics. 10:30 a.m.,

Bldg. 319, room 205 (open area). Contact: Giulia Galli, 3-4223, or Darlene Klein, 4-4844.

Tuesday
10**LC CUSTOMERS MONTHLY MEETING**

9:30 a.m., Bldg. 111 Poseidon Room, (Cleared area). Contact: Teresa Felgenhauer, felgenhauer2@llnl.gov.

Wednesday
11**PHYSICS & ADVANCED TECHNOLOGIES**

"A Four-Cavity Search for Galactic Halo Axions," by Darin S. Kinion, UC Davis, 1:30 p.m., Bldg. 211, room 227 (uncleared area). Contacts: Karl van Bibber, 3-8949, or Pat Smith, 2-0920.

Thursday
12**PHYSICS & ADVANCED TECHNOLOGIES**

"CP Violation in the B Meson System: Recent Results from the Belle Experiment," by Eric J. Prebys, Princeton University, 1:30 p.m. Bldg. 211, room 227 (uncleared area). Contacts: Eugene Brooks, 3-7341, or Pat Smith, 2-0920.

Friday
13**H DIVISION**

"A Quantum Monte Carlo Study of Exchange and Correlation in the Silicon Atoms," by Aaron Puzder, Georgia Institute of Technology. 10 a.m., Bldg. 319, room 205 (open area). Contacts: Jeffrey Grossman, 3-6991, or Darlene Klein, 4-4844.

ENGINEERING

"Some Problems Involving the Interaction of Electromagnetic Waves and Natural Media," by Gary S. Brown, Virginia Polytechnic Institute

and State University. 10 a.m., Bldg. 235, Gold Room. Contact: Sherene Goulart, 2-1923.

Monday
16**INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH**

"Diffpac — Object-Oriented Software Solutions for PDEs," by Are Magnus Bruaset, Numerical Objects, AS. 2 p.m.,

Bldg. 451, room 1025 (uncleared area). Contacts: Dan Quinlan, 3-2668, or Leslie Bills, 3-8927.

Tuesday
17**X DIVISION**

"Mathematicians and Physicists in Quantitative Finance," by David S. Kershaw. 3 p.m.,

Bldg. 543 auditorium (uncleared area). Contact: Alek Shestakov, 2-4213.

Deadline for the next calendar is noon, Wednesday, Oct. 11.

- Address e-mail to tmc-submit@llnl.gov or fax to 2-9291.
- Mail listings to Technical Meeting Calendar, L-797.
- Telephone ext. 2-9709 for information regarding the printed calendar.

For information on electronic mail or the newsgroup llnl.meeting, contact registrar@llnl.gov



NEWS OF NOTE



FAMILY DAYS

Events will need ES&H walk-downs

Lab facilities and programs planning events for Family Days have until Friday, Oct. 13, to submit a list of displays, tours and other activities to their Family Days committee representative. Each committee representative must then forward this information to Family Days committee administrator Sheryl Rikard, rikard2@llnl.gov, for overall planning purposes.

Hazards Control must conduct “walk-

downs”/reviews of all displays, tours and other activities open to the public to ensure that environmental, safety and health considerations have been addressed. These walk-downs/reviews will be performed by the local ES&H Team and must be completed prior to allowing public access on Oct. 21.

Hazards Control must be aware of all the planned activities by Oct.13 to allow enough time to complete the walk-downs/reviews and, if needed, support the resolution of ES&H issues (such as access issues

related to small children).

Last day for Newsline special edition

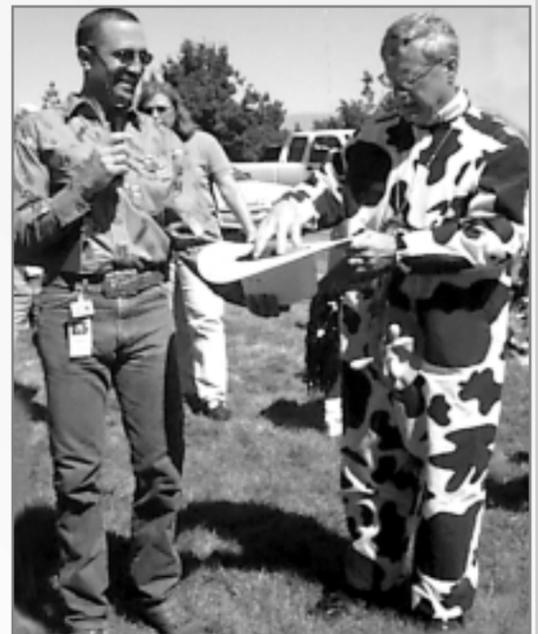
Today is the last day to submit your Family Days events for the special edition/guide of *Newsline*. Please send your items to newsline@llnl.gov. If you have photos you would like to include, *Newsline* can take them electronically, or you can mail them to L-797. For more information, call 3-3103.



Time Out around the Lab

Directorates and programs around the Lab took time out recently to celebrate. The Physics and Applied Technology and Energy and Environment directorates celebrated their merging, while the Systems Network Department partied to a “Survivor” theme.

SND PHOTOS BY JULIE KORHUMMEL/NEWSLINE



CIRCLE E PHOTOS COURTESY OF BETTY ROTHACHER



Clockwise from left: More than 350 employees of the newly formed Physics and Advanced Technologies Directorate enjoyed a noontime picnic, coordinated by Germaine Clark and Gloria Purpura. Jeff Wadsworth presented a door prize to Willem De Vries (far left). In Hawaiian garb and dressed for SND’s “Survivor” gathering are Lee Sardinha and Randy Syester. Patty Rogers tries to stay alive in a balloon toss, while Heidi Peterson and Leo Spencer (center) measure up winners of a water gathering contest. At the Circle E picnic (top right), for the Energy & Environment Directorate, emcee Mark Costella and cow-boy Bill Dannevik rustle up some prize winners, while Nanette Sorensen does some horsing around.

PAT PHOTOS BY CHRISTIE SHANNON



CLASSIFIED ADS

Check out the Employee Ads Web Services site at:
<https://www-ais.llnl.gov/newsline/ads/>

AUTOMOBILES

1998 - Ford Contour SE, 4cyl, 38,000 miles. Black. \$11,000 b/o. 510-656-7140

1992 - Saturn SL1, many options, runs great \$3600/obo. Call after 7PM. 209-823-5085

1990 - 69k miles, loaded, xlnt condition except for one fender ding; \$4400 (lo-book) or best offer. 925-447-6707

1993 - Toyota Xtra Cab Pick-up Truck. 175K commute miles, A/C, Shell, carpet kit. The most reliable vehicle I own. \$5200 209-545-2688

1993 - Toyota 4runner 4x4 v6, metallic blue, 73K, auto, sun roof, AM/FM/CS/CD, power everything, security sys, AC, cruise, tinted, tow pkg, org. owner. 925-447-4819

1992 - Corvette coupe, automatic, white w/light gray leather seats, chrome wheels, 50K miles. Excellent condition. \$16,000. 925-443-7422

1996 - Pontiac bonneville SE, very clean, 123K miles, newer GM cert trans. full power, \$7,500 BO. 925-449-9197

1998 - Volvo S70, clean, moon roof, leather, full power, 30,000 miles and just serviced. \$22,000 925-449-9197

1996 - GMC Jimmy S-15 SLE 4x4 Pwr windows and doors, AT, CC, tilt, Roof Rack, Tow Pkg, Pvcy. glass, 51K miles, Looks and runs great, \$12,900/OBO 510-305-4611

1993 - Plymouth Voyager 7 passenger van, Excellent condition, 89,000 miles, Extras. \$4,900. 925-455-6750

1994 - 94 Ford Escort station wagon 54000 miles good shape and runs well. 2500.00 or offer. 925-447-8930

1999 - VW Passat 19,700 Miles, Excellent condition, Automatic, Power Windows, Alarm, Metallic Black, Remote 6 disc CD changer, Asking Below BlueBook 925-846-9594

1997 - Plymouth Voyager. 6cyl. 7 passenger. Original Owner. Runs great. No mechanical problems. Some external blemishes. \$10,000. 925-294-9446

1973 - Mercedes 450SL, white ext., blue int., 4.5L V8, pwr windows, 4 speed automatic, 2 tops, 75K miles, \$6000 or BO. 925-447-0666

1997 - Saturn SL1, 4DR, dark green, 61K miles, 2 year warranty, excellent condition, automatic, remote entry, cassette, 35 MPG highway \$9400 OBO 925-447-5434

AUTOMOBILE ACCESSORIES

Truck rack with side panels for full size Chev P.U. with long bed. \$500 OBO. 925-516-2617

14 inch TIRES: 205/75/R14 good used TIRES fit many cars/pickups 2 for \$20, all 4 for \$30 925-447-7070

1998 Honda Civic EX (4) Stock Rims, Hub Caps, with Firestone P185/65 R14 Tires. Very little wear. \$200 925-462-4927

Extended mirrors for camper or trailer towing \$20.00 925-447-4961

Middle Bench Seat w/built-in child seats for 1996 Dodge Grand Caravan. Multi-colored grey material. Excellent condition - \$150.00 925-833-2754

Ladder rack for long bed Toyota, heavy duty. Dimensions 87x59, \$100.00. Call 925-449-3776

BICYCLES

2-speed street bike, many accessories, great commuter bike, \$100 or best offer 925-443-7841

Childs Schwinn bicycle, excellent condition, 20-inch wheels, 6 speed grip shift, \$60. 925-606-6071

BOATS

Searay Cruiser/fishing, 1981, 26+ ft., slips 6, head/shr, refer, electronics, Delta cnvs, cover, recent haul, 3xl trlr. \$14,000 209-835-1991

Outboard Motor-5HP Evanrude Trolling, Runs Great \$200.00. 925-455-0183

CAMERAS

MAMIYA C330 with three lens, and more \$650. firm. Some darkroom equipment, timer, sink and more. Call after 5:00 p.m. 209-892-6186

Twin lenas camera 3 lens/offer/ Misc. photo equip./albums/retail carry bags 925-735-6002

ELECTRONIC EQUIPMENT

Programmable-Scanner, Realistic Table Model-Pro2011, over 22,000 Frequencies, 20-channels for storing frequencies, Owers Manual, Antenna. \$40.00. 925-447-1009

Professional DJequipment, Ramsa mixer and speakers, Alesis, mikes, two hardcase roller trunks. Sharp 100inch LCD projector. Perfect. Make offer. 925-736-7799

MacPowerPC 6500/225/3Mb HD/32Mb RAM/ 28k modem/ CD/Apple 1710 color monitor/Color Stylewriter 4500 printer/Works great \$400 209-833-9183

GIVEAWAY

FREE reptile cage! Painted plywood and glass. 72 inches tall by 38 inches wide by 28 inches deep. 925-294-9810

Flame point Siamese and black tabby kittens rescued on 9/24-25. Ready for good home around 10/15. Adorable. 925-373-9518

AIR CONDITIONER, 5000 BTU window unit. Works fine. 925-443-2095

Lattice Panels, various sizes smaller than 4ft. x 5ft. 925-443-7082

FREE -- coffee table, dresser, futon, and dryer -- All in good or fair condition. Call for details. 925-371-0316

HOUSEHOLD

CARDBOARD boxes, sturdy moving/storage: Big and Bigger: 40 for \$50, Huge: \$2, Wardrobes: \$6 925-447-7070

IBM Selectric II - used but in perfect condition -make offer 707-580-2074

Air Conditioner, Kenmore, wall/window mount, 25,000 btu, \$200. Range, G.E., white, excellent condition, \$200. Please call after 6pm. 925-449-6899

2-Antique Model Cannons, all metal parts, one 24-inches long, with 5-inch diameter cast-iron wheels, the other brass and steel. \$75.00 and \$35.00. 925-447-6099

HUGE Garage Sale-Oct.6-7 868 Mohawk Dr. Livermore. Tools, furniture, dryer, garden tools, furniture, gift samples, household items, lots of toys. 925-426-8452

Entertainment center, 3 pieces, with glass doors, drawers & storage. Holds large TV. Excellent condition. Originally \$1,300. \$600/offer. 209-833-1342

Antique Armoire \$425. Afghani hand-made wool rugs - 8x12 \$1750, 7x9 \$1250. 925-443-1547

Seven-drawer wood desk 22x52 excellent condition \$175 925-447-8613

Moving boxes, 2 boxes w/ foam envelopes & dividers for glass stemware, 1 dishpack box w/ envelopes for plates, saucers. \$3.00 per box 925-606-6155

Entertainment center, gold oak, 60 in wide, 72 in tall, holds 35 in TV, adj shelves, \$200.00 or B/O 925-606-6155

Calla Lillies in 5 gal pots, \$5 ea. 925-447-6192

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BROWNE*Continued from page 1*

tion led to a series of investigations and reviews by federal agencies.

"A lot of powerful people were saying we shouldn't have our scientists working in an open environment," Browne said. "In an open society, there will always be a certain amount of tension between science and security. This is due to the simple fact that science flourishes in an open environment that allows the free exchange of information, debate and cross-fertilization of ideas."

In contrast, security "is largely about keeping information away from people, compartmentalization and need-to-know," he said.

These security incidents have put security at the national labs in the spotlight and eroded the nation's confidence in the laboratories' "ability to keep the nation's most vital secrets," Browne acknowledged. "However, in retrospect, the government may have overreacted to these events, tacitly accepting the implication of significant foreign espionage, convening congressional committee hearings, and passing legislation intended to 'fix' the problem."

Revamping security

The Cox report, alleging that China had stolen nuclear secrets from the labs, and subsequent reports on lab security led Congress to create a new semi-independent agency with DOE, the National Nuclear Security Administration (NNSA), now under the leadership of Ret. Gen. John Gordon, he said.

In response Los Alamos and Livermore have expended a great deal of time and effort in revamping cyber security and physical security at the national labs. "There's an implication our scientists can't keep secrets. Our scientists have always taken security very seriously," Browne said. "Security and science have always been a part of our culture."

Congress further responded to the security incidents by passing legislation mandating polygraph tests for scientists with access to certain categories of weapons information, reducing travel budgets, cutting funds for basic exploratory research (Laboratory Directed Research and Development) and placing a moratorium on visits by sensitive-country foreign nationals, Browne said.

"These punitive measures, coupled with the devastation of the Cerro Grande fire in May, have caused morale at the Laboratory to suffer greatly, making the recruitment and retention of top-level science and engineering staff very difficult," he said. "Employee morale was also profoundly affected by DOE's decision to re-examine the UC contract to manage the laboratory. This has caused a number of present and potential employees to question whether they want to work in an environment of fear that a 'mistake' could result in jail time."

Browne noted that the most recent report by for-

mer Sen. Howard Baker and former Congressman Lee Howard warned that the scientific vitality of the national labs is likely to suffer "in the current security atmosphere" and proposes a "path forward" with "a more cooperative, less threatening relationship with technical staff."

Roots in the Manhattan Project

Earlier in his talk, Browne reminded the audience that the tension between science and security has existed since the earliest days of the Manhattan Project to build the first atomic bomb. Gen. Leslie Groves, project military commander, and theoretical physicist John Oppenheimer, scientific director led the effort begun in 1942.

"These two men embodied the science-security dichotomy. One of the first signs of the science-security tension was the general's attempt to enlist the scientists in the Army and put them in uniform. Surprisingly, Oppenheimer supported this plan, but it had to be abandoned because it made recruitment extremely difficult," Browne said.

"Groves, who was a strong believer in compartmentalization, viewed the scientists' weekly technical colloquium as a major security hazard, but finally had to allow them because of morale considerations," he said. "Interestingly, we still hold this colloquium at the same time, 8:10 a.m., as the original Manhattan Project colloquia."

Browne said he has been "disappointed" by press coverage and media reports on the Wen Ho Lee case and security incidents at the laboratory.

"The media picked up on inflammatory statements in the summary of the Cox report," he said, noting that the statements were not contained in the body of the report.

The allegations that Wen Ho Lee transferred classified information from a secure computer to an insecure computing system then downloaded it to portable media were "very serious," he said.

Nonetheless, Browne said he was deeply troubled by the impact the case has had on Asian American employees and by the question of whether racial profiling occurred in the original investigation of possible espionage.

"I think that this question should be carefully investigated by an independent group," he said. "Although the treatment of Dr. Lee while he was incarcerated can and should be seriously questioned, the fact remains that he did plead guilty to one felony charge of mishandling classified information."

Browne said Los Alamos welcomed the "thoughtful" reports by other agencies that have shed light on longstanding problems, noting the laboratory had independently concluded, "the threats to national security are different today than they were during the Cold War."

"We must respond to the new threats of cyber security and terrorism. Our approach must engage the scientific staff as partners in protecting the secret

information that they create," he said. "Their engagement will produce willing cooperation as well as modern technical solutions to evolving security challenges posed by the information age."

"Although there is still more to be learned about both security incidents, I believe we understand them well enough to develop practices and procedures that would effectively inhibit their re-occurrence," Browne continued. "Now it is important that we be given a chance to re-focus our energies on our vital national security mission."

"However the current negative climate and low morale are not conducive to doing good science," he added. "Again, the balance issue arises: It is not enough to guard diligently the secrets we have today, we must also ensure that we have a strong, vital scientific culture so we can continue to make the scientific and technological advances needed to meet our national security mission. We create the secrets that are worth this country protecting."

"I reject the notion that science and security are incompatible. The tension that exists between the characteristics of security and science can be managed effectively. In fact, it has been since 1943. We recognize that relief from external pressure will not come from our promises, but from results," Browne said. "My challenge is to engage our employees in developing a new and more effective security culture while continuing to meet our programmatic obligations and nurturing the scientific initiatives that form the foundation for future contributions to our nation's security."

UC plays vital role

Browne also emphasized the importance of the University of California's historic role in managing Los Alamos and Lawrence Livermore national labs for DOE. "University management fosters an environment conducive to the spirit of scientific enquiry, the discovery of new knowledge, and the intellectual freedom that allows us to participate fully in the world scientific community."

Readily admitting, "everything wasn't perfect in security at Los Alamos," Browne worried that in the process of addressing issues "you don't destroy the institution to solve security problems."

Though he said people at Los Alamos "feel we were and still are under a microscope," Browne is upbeat about the lab's future. "If we can create the right atmosphere for scientific creativity while protecting the nation's secrets, then the people, the laboratory and the country will benefit."

"We have thousands of loyal, talented, and dedicated people at the laboratory, who contribute to exciting scientific endeavors that are important to the nation and, indeed, the world," Browne concluded. "Working together, we will put these difficult days behind us and show that we are able to manage the balance between science and security successfully. I am optimistic about the future of the laboratory."

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1983 - Ford F-150 pick-up, supercab, long-bed, Automatic, V-8. \$1,200. 925-447-0343

1991 - Isuzu TrooperII, 2.8LV6, 4WD, 5spd, 130K mi. Runs great. New brakes. Some exterior dents/dings. All around great truck. \$4000. 925-294-9446

1991 - Ford Ranger XLT. Original owner. Silver w/ matching shell, 7 ft bed. Looks good, runs fine. \$2,250. 707-525-8418

1998 - 1998 Ford Ranger King Cab XLT, Excellent running condition, 50k freeway miles, \$13,500 or take over payments. 510-207-6392

1992 - Travel Trailer, Dutchmen Royale, 30 ft, loaded, 7000 lb. GVWR; \$6500 OBO. 925-516-2617

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Wanted - Cement Mixer for small backyard jobs, resonable. 925-455-5066

Honda trail 70 (CT70) or any other motorcycle less then 90cc running or not. Will pay resonable price. 209-607-2158

Wanted: World War Two war souvenirs and memorabilia, US, German, Japanese. Cash paid for Grandpas old stuff. 209-957-3471

WANTED: Flute for fifth grade

boys music class. 925-443-5906

Wanted 45 RPM records in good condition, especially 50s and 60s. 925-454-9291

The Last Opus by Berkley Breathead, replacement for one lost in a house fire, favorite book of learning disabled 9 year old. 925-443-8605

Boat Approx. 12 feet long. For picking up duck decoys. 925-447-4961

4-10 gallon air compressor for air tool, sprayer, and home maintenance use. 925-447-5101

Wanted an aquarium or terrarium for a lizard. Reasonable priced. 925-778-5982

Hot Tub: Wanted, an old (does not have to work) portable hot tub. 925-455-1730

New first grade teacher needs a paper cutter in good working order to help with large craft projects. 925-426-9886

PEREGRINE

Continued from page 1

Peregrine has been under development at the Laboratory since 1994, in collaboration with researchers at UC, San Francisco and other academic institutions. It has won prestigious awards including the R&D 100 and FLC technology transfer award, and principal investigator Christine Hartmann Siantar has become a Teller Fellow because of her work in the Peregrine project.

Edward Moses and Ralph Patterson, former Peregrine project managers, stated that Peregrine is symbolic of what small programs can do at the Laboratory. Never more than 10 people and funded by LDRD and small grants, the Peregrine team adapted core weapons technology and applied it to the treatment of cancer.

"Getting it to patients has always been the Peregrine team's goal and now it is happening," said Moses. "It opens up new and accurate ways for dealing with something that affects a large number of people, either because they or a family member or friend has to go through radiation treatment for cancer."

Sarita May, who shepherded Peregrine through the FDA process and commercialization, said, "Peregrine is something that only the Laboratory could do. We have a unique blend of physics and engineering skills that could do the technical work and coupled it with IPAC and Legal to ensure that the marketing, licensing and regulatory issues associated with this effort were done correctly and in a timely manner."

More radiation where it's needed

Peregrine is a computer-based system for calculating, in three dimensions, where radiation goes in the body, and how much of it is striking tissue, bone or empty cavities. Peregrine will allow doctors to more accurately target tumors with radiation, permitting physicians to increase the dose needed to destroy tumors without increasing damage to healthy surrounding tissue.

Each year, more than 100,000 cancer patients who are treated with radiation in hopes of a cure die with active tumors at the primary cancer site. Improved dose calculations using Peregrine could help doctors more effectively attack such tumors.

"Peregrine will touch lives," said Siantar, the Lab's principal Peregrine researcher and program leader. "It is a breakthrough technology that could be used in treatment clinics everywhere."

John A. Friede, chairman, president and chief executive officer of NOMOS, said, "The combined efforts of the NOMOS and LLNL Peregrine teams to compile the data necessary to obtain FDA clearance has been extraordinary. Sarita May from LLNL was instrumental in managing this process and our business relations and Tom Daly, Ron House, Dewey Garrett, and the rest of the team supplied unsurpassed technical support.

"We can now offer this unparalleled technology to doctors and clinicians who can provide 'better medicine' for cancer patients, underscoring our commitment to improving the treatment of cancer as well as the lives of cancer patients throughout the world."

NOMOS' initial deployment of Peregrine will be incorporated into its own inverse treatment planning system, called CORVUS, and will be showcased at the upcoming meeting of the American Society for

Team effort leads to Peregrine success

Peregrine is the result of a multidisciplinary research effort at the Lab.

Among the current research team members are program leader and principal investigator Christine Hartmann Siantar, program manager Rosemary Walling, physicist Thomas Daly, medical physicist Marie-Anne Descalle, computer scientists Donald Jong and Ronald House and engineers Dewey Garrett and Clark Powell.

Past research team members include Paul Bergstrom Jr., Bill Chandler, Lila Chase, Larry Cox, Don Fujino, Brian Guidry, Bob Gulliford, Steve Horstein, David Knapp, Al Leibe, Richard Lewis, Sarita May, Edward Moses, Ralph Patterson, Warren Persons, Jim Rathkopf, Alexis Schach von Wittenau, Michelle Svatos, Jody White,



Current research team members include (from left) Clark Powell, Rosemary Walling, Thomas Daly, Christine Hartmann Siantar, Donald Jong, Marie-Anne Descalle. Not shown are Ronald K. House and Dewey N. Garrett.

Roger White and Dave Williams.

The key player from IPAC was Jim Sommercorn and from legal is John Wooldridge.

Therapeutic Radiology and Oncology (ASTRO), scheduled to be held in Boston Oct. 22-26. A stand-alone version of Peregrine will subsequently be developed to work with other treatment planning systems, making its unmatched capability and accuracy available to every cancer patient.

Monte Carlo improves the odds

Peregrine combines Livermore's almost 50 years of radiation physics expertise with advanced computer architectures to produce a system that determines radiation dose information in minutes.

"This is just a tremendous feeling — one of those once-in-a-lifetime opportunities that truly effect people's lives in a positive way," said Ralph Patterson.

"The fact that we are able to take advantage of the multidisciplinary skills here at the Lab, and put that into a technology transfer that is going to help a lot of hurting people, it is the highlight of everyone involved in this project."

Peregrine relies on a mathematical technique called Monte Carlo to track radiation. It simulates the trillions of radiation particles that enter the body during treatment and accurately predicts radiation dose. Peregrine uses individual patient CT scans to tailor precise radiation dose calculations for each patient, based on each patient's distinct anatomy and disease.

Researchers at UC San Francisco worked closely with Livermore scientists during development and validation of Peregrine.

"Our collaboration convinced us that this program will be able to accurately predict dose distributions for the most complex intensity modulated radiotherapy plans," said Lynn Verhey, professor and vice-chair of Department of Radiation Oncology, UCSF. "The Peregrine program will allow us to use the system clinically to plan and deliver these radiotherapy plans with greater confidence."

Multidisciplinary capability produced Peregrine

Making Peregrine a reality required the expertise

of Livermore researchers from a number of disciplines, including physicists, computer scientists and electrical engineers (see accompanying story).

Rosemary Walling, the current program manager of Peregrine, says the distributed effort is what ensured the project's success. "This was not just about physics," she said. "Everyone worked hard to see this project get the validation and verification it needed to get it through to a commercial channel."

Peregrine began in 1994 as a part of Laboratory Directed Research and Development, which sets aside a percentage of funding to pursue research selected by the Lab. Were it not for the LDRD program, the Lab may not have been able to attract many of the researchers involved, including Hartmann Siantar, said Rockaya Al-Ayat, acting director of the Laboratory Science & Technology Office. Siantar worked on cancer research at a hospital in Wisconsin before coming to the Lab.

"Through LDRD we can leverage the science developed at the Lab to work in other important areas of research," Al-Ayat added. "We can attract great researchers through LDRD."

While Peregrine is far from the only LDRD success story, the fact that it is a technology with profound public benefit makes it "that much more special for everyone in the project," Walling said.

"We're extremely pleased to be able to advance science in an area of great human significance," said Jeff Wadsworth, Livermore's deputy director for Science and Technology. "That's what Lawrence Livermore is all about."



NEWSLINE
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HOME

Continued from page 1

Whereas previous fairs have been staged on South Mall near the South Cafeteria, this year's events will take over the Z-1 and Z-2 parking lots near the Director's Office (Bldg. 111).

"It gives us more space to move around," said Roger Werne of the Nonproliferation, Arms Control and International Security Directorate, which is sponsoring Run for HOME and Agency Fair. Werne is chair of the run and fair.

"These events have been growing significantly and this is the best way to accommodate everyone involved," Werne added.

For example, last year's Agency Fair featured just over 90 charitable organizations setting up

informational booths for employees. This year, more than 130 agencies will be on hand.

While the fair will tone down some of the entertainment from previous years, the street carnival atmosphere will prevail. A bluegrass band will provide music.

Food will also be available — a free lunch will be provided to participants who participate in the 3K run/walk/skate, while Eurest will have food carts available for others to purchase their meals.

"All Laboratory employees are encouraged to come to the Run and Agency Fair to see for themselves how Laboratory employee generosity benefits our local community," Werne said.

More details on the HOME Campaign, the Run for HOME and the Agency Fair will appear in upcoming issues of *Newsline*.

