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Friday, January 30, 2004

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NEWS FROM THE UNIVERSITY OF CALIFORNIA

— Robert Dynes, UC President



UC explores partnership to manage national labs

It has been three months since I became President of the University of California, and in that time I have gained an even deeper appreciation for the breadth and distinction of the research being conducted throughout the UC system. A key component of the University's research enterprise is the work of the Lawrence Berkeley, Lawrence Livermore, and Los Alamos national laboratories. These three labs, through both independent and collaborative efforts with one another and with our campuses, continue to make tremendous contributions to the scientific advancement and national security of the United States.



This month, the University of California Board of Regents voted to preserve the University's options to compete for national laboratory management contracts and gave the University the authority to team with industrial partners. A final decision on contract competition will not be made until the terms of the competition are known, but the Regents' action puts the University in the best position to compete if, in fact, that is the ultimate course we pursue.

Because the concept of teaming with industrial partners is a new one, I want to reassure you that the University believes that this approach will further strengthen our management and business practices at the laboratories. By entering into teaming arrangements, the University will be able to demonstrate that we are innovative in our management practices and committed to ensuring that we have the strongest and most effective business and management practices in place.

In the near future, we expect to reach agreement on contracts with industrial partners at Los Alamos, and we are having initial discussions with potential industrial partners about teaming arrangements at the Lawrence Livermore. It is important to note that both labs are actively involved in defining the scope of work for the industrial expertise at each laboratory.

I recognize that this prospect may raise many questions for employees: What does this mean for the University's overall management at the labs? What about my job? What about the reporting structure? Let me be clear that the University of California continues to manage the national laboratories and will continue to do so under these teaming arrangements. The industrial partners will be brought

See UC, page 8

JGI unveils new sequencing effort

By David Gilbert

NEWSLINE STAFF WRITER

The Department of Energy's Joint Genome Institute (JGI) is poised for a resounding response to the age-old question, "If we build it, will they come?" Already, collaborators are queuing up to take advantage of one of the world's most powerful DNA sequencing facilities for the debut of DOE's Community Sequencing Program (CSP).

"The primary goal of the CSP is to provide a world-class sequencing resource for the expanding diversity of disciplines: geology, oceanography, and ecology, among others that can benefit from the application of genomics," JGI Director Eddy Rubin said.

The model put forward by the CSP will attract a new audience of researchers not traditionally served by sequencing centers that

focus on biomedical applications, Rubin said.

Just as physicists and climatologists submit proposals to get time on accelerators and supercomputers to address fundamental questions, JGI is inviting investigators to bring important scientific challenges that can be informed with at least 10 million basepairs of sequence. The CSP will, in effect, cover the biosphere of possibilities.

The DOE, under the auspices of the Office of Biological and Environmental Research within its Office of Science, will allocate roughly 12 billion bases of sequencing capacity per year through the CSP — roughly four times the size of the human genome. This constitutes more than half of the JGI's yearly production total. Starting in February, the JGI will consider CSP applications from researchers

See JGI, page 7

Target tour



JACQUELINE MCBRIDE/NEWSLINE

Nearly 100 attendees of the Photonics West conference in San Jose toured the National Ignition Facility Thursday, including an in-depth look at the NIF target chamber. A day earlier, the conference featured a full-day symposium on optical technology applied to NIF, co-chaired by Engineering's Monya Lane and NIF's Craig Wuest. NIF Associate Director George Miller delivered a keynote address to the conference Monday evening.

Details of water-to-air interface revealed

By Anne M. Stark

NEWSLINE STAFF WRITER

Using the latest tera-scale ASCI computers, Laboratory scientists have revealed details of the reactive states and faster relaxation of molecules at the water-to-air interface.

Characterizing water at the liquid-to-air interface produces important results in atmospheric science.

Scientists Christopher Mundy and I-Feng Kuo created the first *ab initio* calculations of a stable aqueous liquid-vapor interface. The simulations serve as a robust predictive tool in the investigation of electronic properties of molecules at interfaces.

These complex theoretical models have captured surface phenomena of water that have recently been observed experimentally in the group of Rich Saykally at UC Berkeley. The results are presented in the Jan. 30 edition of *Science*.

The researchers first stabilized a region of bulk water in the center of a water slab so they could quantify the reactive states and surface relaxation as the bulk water approached the liquid-vapor interface.

Data analysis shows that there is a faster relaxation of water molecules at the interface and the surface contains far more reactive states than the bulk.

See MOLECULAR, page 8



Co-existing
in cougar
country
— Page 7



A laser
technology
ha-peening
— Page 8



LAB COMMUNITY NEWS

Weekly Calendar

Technical Meeting Calendar, page 4

Friday
30

The Benefits Office will continue the brown-bag series on how to enhance financial security by participating in the **Tax-Deferred 403(b)**. The next session will be held today from 12:15 - 1:15 p.m. in Bldg. 571, conference room 2301. Additional sessions will be held on the last working day of each month, excluding November and December, throughout 2004. Attendance is open and no pre-registration is required. Bring your lunch and your questions. For additional information about benefit services or events, please see the Website at www.llnl.gov/jobs/benefits.

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LLESA's **Magazine Discount Program** continues through today. Check out the great prices available by visiting the LLESA Web page at <http://llesa.llnl.gov/> and click on the artist's paint palette marked "Magazine Discounts" or just stop by the LLESA Office, Bldg. 415, room 142.

Saturday
31

The **Livermore-Amador Symphony** will be conducting an estate sale today and Sunday from 8 a.m. to 3 p.m. as a fund raiser for the Symphony. Special sale items are 10 Navajo rugs that date from the early 1900s; antique quilts; miniatures, toys, and other collectibles from the 1920s and '30's; a 100 year-old cedar chest; plus, all the usual household furniture and goods. The sale will be held at 895 Sundial Circle in Livermore. Come with cash only and support your local symphony. For more information, call 447-3672 or visit the Website at www.livamsymph.org.

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The Laboratory's popular **"Science on Saturday"** lecture series begins today at 9:30 a.m. featuring "Catch a Falling Star: Creating a Miniature Sun on Earth Using NIF- the World's Largest Laser," presented by NIF project manager Ed Moses and Monte Vista High School teacher Stan Hitomi. Students will receive a free color NIF poster and teachers will receive the power point presentation from the talk. All lectures through Feb. 28 are free and held at the Amador Theater at 1155 Santa Rita Rd., Pleasanton. Seating is on a first come, first serve basis and there is no pre-registration. For more information, check <http://education.llnl.gov/sos/2004>. See story page 3.

Wednesday
4

In celebration of **Black History Month**, the Association of Black Laboratory Employees (ABLE) and the LLNL Worklife Programs Office are sponsoring a series of events. The first is the film "A Raisin In The Sun," which begins today at noon in the Bldg. 361 auditorium. In Lorraine Hansberry's "A Raisin in the Sun," Sidney Poitier heads a cast in the story of an African American family in Chicago in the 1950s struggling with mixed aspirations, not enough money, conflicts over religion, and institutionalized racism. Part 2 airs at noon on Thursday in the Bldg. 361 auditorium.

Taxi service reduced due to budget constraints

Taxi services will be reduced due to budget constraints. Effective Feb. 9, the following services will be provided by the on-site taxi service:

- Continued support of ridership from the Vasco Road ACE Train Station with two pickups in the morning for the 6:30 a.m. and 7:41 a.m. trains and one drop-off in the evening for the 5:25 p.m. train.
- Continued support of ridership between Echo 2 Station (Vasco Road and East Avenue) and

LLNL.

- On-site service between the hours of 7:45 a.m. and 4:45 p.m., Monday through Friday.

Due to service restructuring, we anticipate that wait times will increase for on-site trips from an average of five minutes to an average of 12 minutes. To ensure that the new level of service is still meeting employee needs, ridership levels and average wait times will be monitored and modifications will be made if necessary.

IN MEMORIAM

Randy Burton

Randy Burton, a Livermore resident for 33 years, died Dec. 26. He was 47.

He was born Jan. 31, 1956, in Hollywood and worked at the Lab for 24 years. He enjoyed gambling, fishing and going to Starbuck's.

He is survived by his wife Cathy of 28 years; daughters, Heather King, Holly Burton and Hope Burton, all of Livermore; son, Joseph Burton of Livermore;

his mother Gloria Berkey and stepfather, Jack Berkey, of Henderson, Nev.; his father Jerry Burton, and step-mother, Bev Burton, of San Jacinto, Calif.; brothers, Curtis Burton of Pahrump, Nev. and Mike Berkey of Las Vegas; and cousin, Jeff Sellers of Las Vegas.

Memorial contributions may be sent to the Valley Humane Society, 273 Spring St., Pleasanton, CA 94566.

Eugene Gatze

Eugene J. Gatze, of Tracy, died Jan. 16. He was 79.

A native of Baltimore, Gatze moved with his family to Southern California when he was 2. Later, the family moved to Berkeley. After graduating from Berkeley High School, Gatze took college classes and served during World War II in the U.S. Army Signal Corps. in Europe.

Following the war, he became a technical photographer with the U.S. Department of Agriculture in Alban and then worked at Dugway, Utah, for 3 1/2 years. In 1957, Gatze joined LLNL at site 300 as a high-speed photography specialist. He retired in 1986.

Gatze and his wife, Barbara, moved to Tracy in

1958. The Gatzes were active in the Tracy Camera Club where Gatze served a year as president. He also enjoyed sailing, old airplanes and music. He was a member of the West Side pioneers Association.

In addition to his wife of 46 years, survivors include a son, Scott Gatze of Tracy, three grandchildren, Scott E. Gatze of Manteca, Sharlene Gatze of Tracy and Jane Adame of Lafayette; and a brother, Allan Crates of Point Richmond.

Memorial services will be held Saturday at 1:30 p.m. at Hotchkiss Mortuary, 5 W. Highland Ave. in Tracy. Memorial contributions in Gatze's name may be made to the Tracy Historical Museum, 141 Adam St., Tracy, CA 95376.

John Balanda

Retiree John Balanda died Jan. 9 in Hope Hospice. He was 92.

A 1938 graduate of the University of Chicago, Balanda worked as a chemist in the Laboratory's Hazards Control division for 20 years until his retirement in 1976. After retiring he built a 40-foot Piver Trimaran,

which he sailed for 10 years.

Balanda is survived by his wife of 65 years, three children and four great grandchildren. Contributions in his memory may be made to Hope Hospice, 6500 Dublin Blvd., Suite 100, Dublin CA 94568-3151.

James P. Ruff

James P. Ruff, a long-time Livermore resident, died Jan. 27. He was 82.

Born in Idaho on July 7, 1922, he worked in the Lab's Classification Office from the late 1950s through 1963. He was an active full-time employee in the Office of Classification & Export Control until 1982, then worked part-time until officially retiring in April 2001.

James P. Ruff was an early proponent in the use of computer databases in classification. He developed several tools that have grown into complex-wide usage today. He compiled, edited, disseminated and maintained a publication of all of the complex-wide DOE nicknames, designators and code words that was finally adopted by DOE as a full DOE guide. He published the Unclassified Event Listing during the time when the fact that some Nuclear Tests had occurred was classified. He also prepared a keyword index to all of the existing Topical Classification Guides, a tool that clarified the need for DOE to provide consistency in the writing of guidance and sparked a major ongoing effort within DOE to accomplish that objective.

Ruff also published a historical volume chronicling the forced move west of his ancestors in the 1800s.

He is survived by his son Robert, a daughter in law, eight grandchildren and 16 great grandchildren.

A memorial service will be held this Saturday at 1

p.m. at the Mormon Church on Hill Crest Avenue in Livermore.

Donations may be made to Children's Hospital of California in Oakland.

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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AROUND THE LAB



Steve Grey tapped for FCC advisory committee

Steve Grey, a member of the Navajo tribe originally from Kayenta, Ariz., has been selected to serve on the Federal Communications Commission’s (FCC) Intergovernmental Advisory Committee (IAC). Grey’s term begins immediately and ends Jan. 31, 2006, or until the committee terminates, which ever is earlier.

The IAC serves as a source of information and guidance to the FCC on a broad range of telecommunications issues of concern to local, state and tribal governments. Grey was informed of his invitation to serve on the IAC in a letter dated Dec. 10, 2003,

from Michael K. Powell, chairman of the Federal Communications Commission.

Grey was selected based on his experience serving as chairperson of the Navajo Nation Telecommunications Regulatory Commission as well as being part of the Laboratory. The Navajo Nation is the only tribe that recently established a telecommunications commission. The Tribal Regulatory Commission oversees all telecommunication activities across the 26,000 square miles of the Navajo Nation. The Regulatory Commission is a seven- member commis-

sion comprised of Navajo professionals.

Grey is currently serving as director of Indian Affairs for the Department of Energy headquarter’s office within the office of Congressional and Intergovernmental Affairs. There he serves as an adviser to the deputy assistant Secretary for Congressional and Intergovernmental Affairs as well as other senior DOE staff. As director for Indian Affairs, Grey oversees all Indian activities within DOE. Grey has worked at the Laboratory for 15 years.

Grey holds both an engineering and an MBA degree.

Opening of 5th Street will bring changes to traffic circulation

According to the Lab’s Traffic Safety Committee, the Fifth Street Roadway Repair and Re-Route Project is nearing completion, with two stretches of Fifth Street scheduled to open Monday, Feb. 2:

- Between West Perimeter Drive and Avenue A.
- Between Avenue B and West Inner Loop.

There will be new permanent stop signs and pavement markings installed on both Avenues A and B at the Fifth Street intersections making them stop-controlled streets. There also will be a new stop sign and pavement markings installed at the Fifth Street/West Inner Loop intersection making it a four-way stop.

The last stretch of Fifth Street, between Avenues A and B, is still undergoing reconstruction. It will be ready to open in approximately late March. Temporary stop signs also will be placed on Fifth Street at the Avenue A and B intersections.

At the opening of the third and final stretch of Fifth Street, between Avenues A and B, the temporary stop signs will be removed. Fifth Street then will become a major, non-stop-controlled through street in both directions.

Motorists and cyclists are reminded that, historically, Avenues A and B have been non-stop-controlled through-streets in the north/south direction. With the opening of Fifth Street as the

new connector roadway from West Perimeter Drive to the center of the Laboratory at West Inner Loop, Avenues A and B will no longer be continuous through-streets. Motorists should be aware of these new roadway changes, and exhibit proper care and driving behavior when approaching the modified intersections.

The roadway changes are in response to new building construction and changing traffic patterns within the Lab, according to Dennis Barrett, who chairs the Traffic Safety Committee. “Please, always remember, safety first,” Barrett added.

Direct any questions or comments to Sheree Swanson, project manager, 3-5636, or to Tim Kemper, construction manager, 2-1500.

Science series gets off to blazing start

By Linda Lucchetti
NEWSLINE STAFF WRITER

Returning for its eighth season, the Lab’s popular “Science on Saturday” lecture series will kick off its five consecutive Saturday sessions on Saturday, Jan. 31 with the talk “Catch a Falling Star: Creating a Miniature Sun on Earth Using NIF — the World’s Largest Laser,” “a special look at the National Ignition Facility (NIF) presented by NIF project manager Ed Moses and Stan Hitomi, biology teacher, Monte Vista High School.

The free lecture begins at 9:30 a.m. at Amador Theater, 1155 Santa Rita Road, Pleasanton.

The first lecture will focus on lasers and the goal of creating a miniature sun on planet Earth, using lasers; what makes laser light different from ordinary light; why laser light is necessary to achieve fusion; and, how the NIF laser will achieve this result.

Students will receive a free color NIF poster and teachers will receive the power point presentation from the talk.

New this year is “Science Chat,” a program addition to enhance the students’ lecture experience. Chat invites high school and community college students with an interest in science, to par-

ticipate in a unique opportunity — to “stay after school” and informally meet world-class scientists and ask them questions. Science Chat will follow each of the

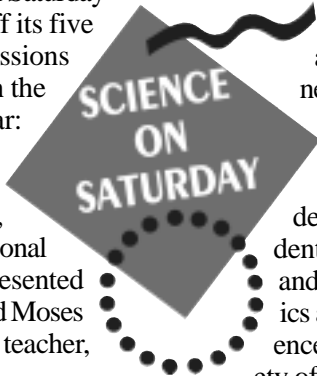
Science on Saturday presentations. To participate, a teacher should accompany the student; teachers need to pre-register on the Science on Saturday Website: <http://education.llnl.gov/>

“Science on Saturday” lectures and demonstrations are intended for students in 6th grade through high school and will run through Feb. 28. The topics are selected from the forefront of science and technology research in a variety of disciplines. From lasers and biodefense to climate change and outer space, the slate of topics promises to satisfy a wide range of interests.

Each presentation in the series is a collaboration between a Lab scientist and a science teacher and is aligned with the California Science Standards.

All lectures are free and held at the Amador Theater. All lectures start at 9:30 a.m. and end at 11:15 a.m. Seating is on a first come, first serve basis and there is no pre-registration. Directions and maps are available on the SOS Website at <http://education.llnl.gov/sos/2004/>

For additional information, contact Richard Farnsworth, manager of LLNL’s Science & Technology Education Program, at 2-5059.



Science on Saturday-2004 Lecture Series

◆ January 31, 2004 ◆

Catch a Falling Star: Creating a Miniature Sun on Earth Using NIF – the World’s Largest Laser
Ed Moses, physicist, LLNL
Stan Hitomi, biology teacher, Monte Vista High School

◆ February 7, 2004 ◆

Biodefense: Detection to Protect the Nation
Frank Y. S. Chuang, biomedical scientist, LLNL
Dora Gutierrez, bio-engineer, LLNL
Kirk Brown, biology teacher, Tracy High School

◆ February 14, 2004 ◆

Radiocarbon Applications: Isotopes, Oceans, and Climate Change
Michael Kashgarian, research scientist, LLNL
Sarah Palmer, science teacher, Tri-Valley Regional Occupational Program

◆ February 21, 2004 ◆

Star Dust: Catching a Comet By the Tail
John Bradley, astrophysicist, director of the Institute of Geophysics and Planetary Physics, LLNL
Dan Burns, physics teacher, Los Gatos High School

◆ February 28, 2004 ◆

Galaxies and Black Holes: The Good, the Bad, and the Ugly
Wil van Breugel, research astronomer, Institute of Geophysics and Planetary Physics
Dan Burns, physics teacher, Los Gatos High School

All lectures are free and held at the Amador Theater located at 1155 Santa Rita Rd., Pleasanton. All lectures start at 9:30 a.m. and end at 11:15 a.m. Seating is on a first come first serve basis and there is no pre-registration.



NEWS YOU CAN USE

Lab workshop assesses future of multiscale simulations

The Institute for Scientific Computing Research (ISCR) recently hosted a two-day workshop to review and assess current and future directions in multi-algorithm methods for multiscale simulations, for scientists, engineers and mathematicians from U.S. national laboratories, academia, industry and abroad.

Topics included applications in solids, liquids

and gases and crosscutting techniques. The workshop was sponsored by the ASCI Institute for Terascale Simulation on behalf of the ASCI program, which has numerous multiscale applications.

Co-organizers Richard Hornung of the Center for Applied Scientific Computing (CASC) and Alej Garcia of the Physics Department at San

Jose State University expressed their hope for a “gestalt experience” in which practitioners of multi-algorithm methods from a variety of fields would find common ground and provide cross-fertilization.

The workshop Website [http://www.llnl.gov/casc/workshops/multiscale_simulations/] contains a complete list of talks and participants.

Procurement develops new ordering systems

(Editor’s note: This is the first in a series of articles on new developments from P&M.)

Procurement and Materiel is developing a new application to replace the existing PARIS, TOPS, and other legacy ordering systems. The new application is called the Laboratory Integrated Network for Contracts and Supply (LINC



S). One of the first applications developed under the LINC project was an Electronic Ordering System (EOS). EOS is an e-commerce application that supports on-line catalog review, shopping cart, checkout features, electronic approvals and notifications, advanced search capabilities and electronic transmission of orders to suppliers. Laboratory technical release representatives (TRRs) have been using EOS since the spring of 2002 to purchase desktop and laptop computers.

Beginning in June 2003, P&M established a pilot group of TRRs and provided access to a limited number of catalogs that were brought online during the second half of last year. These catalogs included Allied Electronics and Newark InOne for electronic

components, Grainger for tools, Oakland Valve for valves and fittings, and VWR for chemicals. The pilot TRRs have been using EOS and providing feedback for enhancements and bug fixes.

The next phase of EOS development is the conversion of P&M’s Material Request system to EOS. Between February and May, P&M will transition the Material Request catalogs to EOS catalogs. In addition to the commodities used for the pilot program, P&M will transition catalogs for office supplies, electrical supplies and fasteners during this period. Since many TRRs use Material Requests to order these commodities, all TRRs must have access to EOS and its catalogs. During February, P&M plans to give EOS access to all TRRs.

TRRs received an EOS briefing and a demonstration showing how to create and issue orders in EOS on Wednesday. P&M Customer Service is scheduling drop-in EOS training sessions to further help TRRs learn to use EOS. Watch the P&M Home Page and the P&M Portal for dates and times. For further information or questions about using EOS, contact P&M Customer Support at 3-3448.

Dublin/Pleasanton schools seek volunteer interviewers for elementary science fair

The Dublin and Pleasanton Unified School Districts are seeking Lab volunteers for their Science Fun Fair on Tuesday, Feb. 17, from 8:30 a.m. to noon. Volunteers are needed to interview students in kindergarten through fifth grade about their science fair projects. Interviews will not be used for competition, recognition or grading. Each student receives a button, ribbon and personalized certificate just for participating.

Volunteers can be scientists, engineers, or anyone willing to interview students and provide positive and encouraging comments while giving a sense of professionalism to the event. Organizers anticipate more than 200 volunteers will be needed to evaluate 3,500 projects. Volunteers will be assigned to one of Dublin and Pleasanton’s 14 elementary schools.

Lunch will be provided for all interviewers. If you would like to participate, call Catherine Brown at 833-2560 or email scienceinterview@earthlink.net.

Technical Meeting Calendar

Friday
30

CENTER FOR GLOBAL SECURITY RESEARCH
“Nonproliferation and Regime Change,” by Robert S. Litwak, director, Division of International Studies, Woodrow Wilson School. 10 a.m., Bldg. 132 South, Homeland Security Organization, Summit Room 1784. P-cleared attendees welcome. Contact: Tami Alberto, 2-5969.

INSTITUTE FOR GEOPHYSICS & PLANETARY PHYSICS
“HST Ultraviolet Observations of the Central Nebulae in Clusters of Galaxies: Hot News from Cool Cores,” by Chris O’Dea, Space Telescope Science Institute. Noon, Bldg. 319, room 205. Contact: Wil van Breugel, 2-7195, or Josie Morgado, 2-7181.

DEFENSE & NUCLEAR TECHNOLOGIES AX DIVISION/ASCI PROGRAM OFFICE
ASCI Alliance site visit-Stanford University. The staff of the Stanford ASCI Alliance Center will visit LLNL. They will present results achieved as they pursue their ASCI objective of Integrated Turbulence Simulations. Their overarching problem is the numerical simulation of a realistic gas turbine engine. Stanford overviews will begin at 10:15 a.m. in the Bldg. 123 auditorium. Student

poster presentations will be in the West Cafeteria at 3:15 p.m.

Monday
2

BIOSECURITY & NANOSCIENCES LABORATORY SEMINAR
“Transport and Mechanics at the Interface of Hard and Soft Nanomaterials,” by Arun Majumdar, Department of Mechanical Engineering, UC Berkeley, Materials Sciences Division, LBNL. 2 p.m., Bldg. 151, room 1209 Stevenson Room (P-cleared). Contact: Aleksandr Noy, 4-6203, or Brynn Bollinger, 2-6637.

INTEGRATED COMPUTING & COMMUNICATIONS
Michael Tiemann, Red Hat’s CTO, will take the hour to explain what Red Hat is “really” doing, how the pieces all fit together, what the skeptics are missing this time around, and how Red Hat’s continued evolution keeps pace with LLNL’s technology goals. 10 a.m., Bldg. 543 auditorium. Contact: Neal Mackanic, mackanic2@llnl.gov, 3-2396.

MAC DEVELOPER’S GROUP
Demonstration of the LabJack USB data acquisition and control device and a demo of Controller objects. Noon, Trailer 1578, room 1012. Contact Dave Sopchak, 2-2240, or sopchak1@llnl.gov.

Tuesday
3

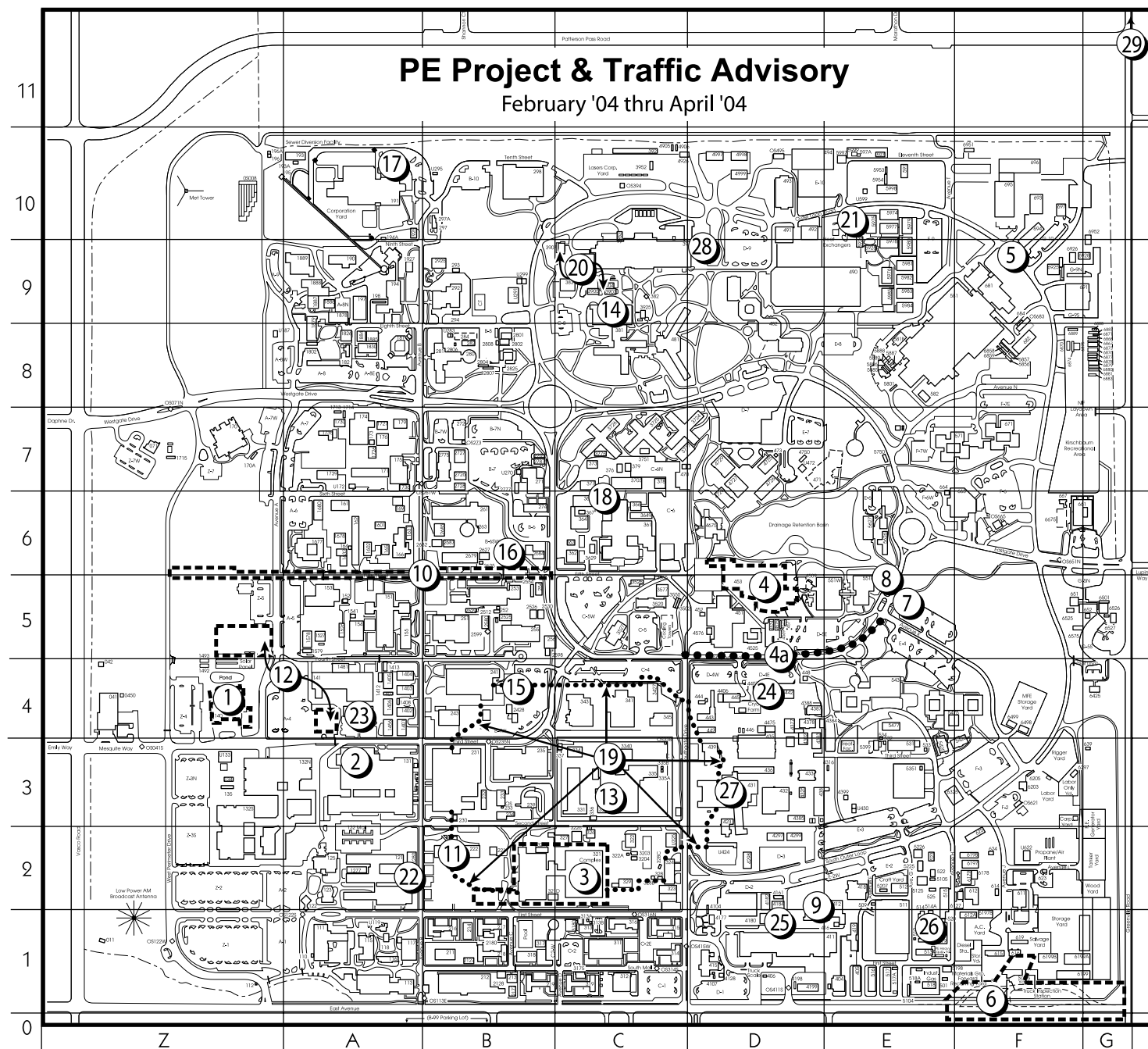
UNIVERSITY RELATIONS PROGRAM
“Flame Instabilities in Type Ia Supernovae,” by Michael Zingale, Lick Observatory, UC Santa Cruz as part of the two-day interview process for the Lawrence Fellowship. 10 a.m., Bldg. 319, conference room 205. Contact: Rich London, 3-2021, or Brenda Foster, 3-8257.

ENERGY & ENVIRONMENT DIRECTORATE
“Postdoc Poster Symposium.” E&E postdocs will display posters and discuss their research. All LLNL employees are invited both to attend and to participate in the voting for an award for best poster. 1:30-3:30 p.m., Bldg. 543 lobby area. Contact: Camille Vandermeer, 3-2672

Wednesday
4

UNIVERSITY RELATIONS PROGRAM
“Reversible Stress Evolution in Transition Metal Thin Film Growth & Catalytic Properties of Transition Metal Ultra-Thin Films,” by Cody Friesen, MIT as part of the two-day interview process for the Lawrence Fellowship. 10 a.m., Bldg. 319, conference room 205, Contact: Rich London, 3-2021, or Brenda Foster, 3-8257.

Thursday
5



Item No.	Project Name	Grid Location	Contact Name/ Extension	Staging Area	Construction Start Date	Estimated Construction Completion	Impacts
①	International Security Research Facility, Bldg. 140	Z-4-5	Roy Neyer, 2-8830	North of 140, north of Mesquite Way between West Perimeter Drive and Avenue A	Started	Feb. '04	Mesquite Way between West Perimeter Drive and Avenue A to close Feb. '04 to thru traffic.
②	Bldg. 131 Backlog Reduction	A-3	Dave Hipple, 3-5042	Corp yard west of 131 high bay	Started	Aug. '04	Impact to Third Street, north of Bldg. 131.
③	ETCU 321	B-2, C-2	Paul Kempel, 3-0565	West of 321 and in 321 corporation yard	Started	Mar. '07	Local traffic delays.
④	Terascale Simulation Facility, Bldg. 453	D-5-6	Anita Zenger, 3-7959	East of 451, north of South Inner Loop Road	Started	Sept. '06	Impacts to C-4, C-5, D-5E, D-5W, E-4 and E-5 parking lots, traffic delays on Inner Loop Road. Vehicle and foot traffic redirected at eastern end of Fifth Street and access road to 451 corporation yard.
④a	TSF, Big Dig	D&E-5	Ian Watson, 3-2842	Various	Started	Apr. '04	Local impact varies with segment schedules. For details, call Ian Watson.
⑤	National Ignition Facility and Outer Loop Road	F-9	Vaughn Draggo, 3-0185	Multiple locations	Started	TBD	North Outer Loop traffic is now open for normal access as of Oct. '03.
⑥	Truck Inspection Station, Bldg. 610	F-1	Bill Huddleston, 2-8107	Sales yard, south of 616	Started	Feb. '04	Minor traffic delays during construction of truck inspection station.
⑦	Remediation Drilling	E-5	Jon Ulrech, 4-2816	Northwest corner of E-5 parking lot	Started	Feb. '04	Local area impacts.
⑧	Remediation Drilling	E-5-6	Jon Ulrech, 4-2816	By Inner Loop Road, east of Bldg. 551E	Started	Mar. '04	Inner Loop Road, east of Bldg. 551E.
⑨	Bldg. 412 Demolition	D&E-1-2	Mitch Waterman, 2-0444	TBD	Started	Sept. '05	Minimal impacts to area.
⑩	Fifth Street Rehabilitation and Extension	A,B&Z-5-6	Sheree Swanson, 3-5636	Between West Perimeter and Avenue A	Started	Mar. '04	Local area impacts; road work may impact facility access. Regarding road closures: ~Feb. 2, '04 - reopen road between West Perimeter Drive & Avenue A, and Avenue B & West Inner Loop; Fifth Street between Avenue A & Avenue B will reopen sometime late March '04.
⑪	Bldg. 222, North - Demolition	B-2	Greg Stremel, 3-4454	East of 222	Started	Sept. '04	Traffic impacts to First Street and Avenue B.
⑫	Replacement Building, Bldg. 142	A-4/Z-5	Danny Nguyen, 2-4883	Z-5 sector west of 1478 and 1578	Started	Feb. '04	Parking restrictions to the A-4 parking lot and intermittent traffic delay from laydown area to 142.
⑬	Bldg. 332 Electrical Replacement	C-3	Gary Freeland, 2-9411	Tentatively in Super Block	Started	May '04	Periodic impact to accessing Bldg. 332.
⑭	Bldg. 381W, Hi-Bay Mods	C-9	Len Freitas, 2-0690	381 corporation yard	Started	Mar. '04	Local impact around Bldg. 381.
⑮	Replacement Bldg. 242	B-4	Danny Nguyen, 2-4883	TBD	Started	Dec. '04	B-4 parking lot closed. Traffic delays on Third Street and local area impacts.
⑯	Replacement Bldg. 264	B-6	Danny Nguyen, 2-4883	TBD	Started	May '05	Impacts to B-6 & B-6SW parking lots. Interim delays on West Inner Loop and Fifth Street; also local area impacts.
⑰	HEAF, 191 Courtyard	A-10	Fred Glaski, 3-2987	TBD	Started	July '04	Minimal impacts to area.
⑱	Building 368	C-6	Mike Atkinson, 2-9217	Bldg. 368 area	Started	Mar. '04	Local area impacts.
⑲	Superblock Perimeter Barriers	C-3	Fred Glaski, 3-2987	Various, TBD	Feb. '04	Nov. '04	Various. Extended vehicle exclusion area from Superblock.
⑳	Trailer 3903, 3904, 3905, & 3907 Demolitions	C-9	Wally Klatt, 2-3214	TBD	mid-Feb. '04	Aug/Sept. '04	Minimal impacts to area.
㉑	5928 Demolition	E-10	Wally Klatt, 2-3214	TBD	mid-Feb. '04	Aug/Sept. '04	Local area impacts.
㉒	1253 Demolition	A-2	Wally Klatt, 2-3214	TBD	mid-Feb. '04	Aug/Sept. '04	Local area impacts.
㉓	1477 Demolition	A-4	Wally Klatt, 2-3214	TBD	mid-Feb. '04	Aug/Sept. '04	Local area impacts.
㉔	4440 Demolition	D-4	Wally Klatt, 2-3214	TBD	mid-Feb. '04	Aug/Sept. '04	Local area impacts.
㉕	4181 Demolition	D-1	Wally Klatt, 2-3214	TBD	mid-Feb. '04	Aug/Sept. '04	Local area impacts.
㉖	Bldg. 513/514 Area Demolition	E-1	Bill Huddleston, 2-8107	513/514 area	Mar. '04	Sept. '04	Impacts to Avenue G and First Street, and local area impacts.
㉗	Bldg. 431 Demolition (Partial)	D-3	Matt Robison, 2-9975	TBD	Apr. '04	Sept. '05	Local area impacts.
㉘	Bldg. 391 Backlog Reduction	D-9	Ed Siosin, 2-0609	C-9 parking area	Apr. '04	Jan. '05	Impacts to C-9 parking lot, east of Bldg. 391.
㉙	City of Livermore - Greenville Road Railroad Crossing	G-11	Tom Schmiegel, 2-0135	- - -	Spring '04 (Apr./May)	7 months	Greenville Road detours required for 4 months; additional 3-month traffic controls and traffic delays.

Note: Project information is subject to change and is based on the best information available at the time of publication for projects within the Feb. '04 thru Apr. '04 timeframe. Go to the website for the most current information (http://www-r.lrl.gov/plant_eng/siteplan/siteoff.html) to "Project Map" from the pulldown menu).

SSP-04-0008-CHU

SSP-04-0008-CHU



AUTOMOBILES

1989 - Buick LeSabre 4-dr. 57K miles. Clean. Garaged. In Livermore. \$1400/BO. 805-528-4275

2002 - Mitsubishi Montero Sport. V6,auto,alloy rims,all options except leather.Excellent cond. 42000 miles. \$12500 925-240-7066

1991 - BMW 325i Convertible (6 cylinder); 104k miles, excellent condition, 5 speed manu- al transmission, white with black cloth roof; \$6100, o.b.o. 209-823-8538

1993 - Ford Escort LX 2 door hatchback. 1.9 liter, 5 speed. 110k miles. Still gets 33 mpg. \$925 925-455-8609

1984 - GMC Caballero V-8, LOADED, Rare Amarillo package. New wheels and tires. Needs only minor body work and paint. \$4495/obo 925-371-8111

2000 - Toyota Sienna LE:3.0 Liter/V6;54K mi;White:Power windows,locks,steering, mir- rors:ABS:AM/FM Cassette/CD/AC:Rear Air;Roof Rack;Exc. Cond.: \$15,250 OBO 510-656-7990

1998 - VW Beetle Blue, 50K miles, PL, WV, CC, A/C 5 speed, \$8000 925-443-5534

1989 - Nissan Pulsar XE, Auto., Air, AM/FM/Cass., T-bar roof, 121k miles, looks good, runs well, \$1000 obo., Carfax report pro- vided upon request. 925-961-1095

1990 - Honda Accord EX-5 spd, needs minor work, make offer 209-982-0692

2002 - Buick LeSabre Limited Ed. 15kmiles,excellent condition,Gold color,leather interior,\$20K call eves,lv.msg. 209-823-7901

1995 - Honda Civic LX, white, 5spd, 135k mi, excellent condition, one owner since new, meticulously maintained, complete records available, \$5,000. 925-426-0125

1995 - SAFARI Van, SLT,AWD,8 Passenger, Loaded, All Options, 135k miles,Great for Ski Trips! \$4500.00 B/O. 209-599-4644

1996 - Buick, Park Ave,Ultra, leather interior, CD player, sunroof, all the extras. 62k miles. \$7995 925-443-6149

2000 - Honda Accord LX Sedan 4D ULEV Engine - Loaded. 53k miles. \$11,995 obo. 209-830-4566

1996 - VW Jetta, black, 83,500 miles. Automat- ic.New hood(primed) ,grill,sunroof,windshield, alternator.Interior great condition.Premium sound system.\$4700/BO. 925-447-6734

1979 - Ford Pinto brown 2-dr glass hatch 2.3L 4cyl AT New: Windshield PS-Rack tires head- gasket intakemanifold radiator starter Alt/Bat Manuals \$500. 925-447-4712

2003 - Camry LE. Green ext. Fully loaded. 9000 miles. \$18,000.00 925-371-6927

1994 - Accura Integra, new paint, new wheels, cd, a/c, new battery, clean. \$5,000 or best offer. 925-837-4829

1996 - Honda Civic LX, AT, AC, AMFM, Air Bags, white, alloy wh, 23,000mi. Exc. Cond., new batt, newer tires, fully detailed, Kelly BI BK \$6800. 925-373-6280

1973 - Plymouth Satellite Sebring, V8, 4 speed manual, blk/blk, low milage, lots of new parts, runs well. as is \$6500. call Matt 925-784-2844

AUTOMOBILE ACCESSORIES

Three car audio amplifiers (75W, 150W, 250W) and a full range Kicker SS100 box (two 10 inch woofers and two horn tweeters. \$250 for all OBO. 209-836-9082

185/60R14 Kelly Charger tires. Used less than 2000 miles. Set of 4. \$120 for all 4 tires, obo. 925-830-0323

GMC-Brand new Bridgestone P265 70R17 Tires w/Rims,6-lug, Off of 2004 Yukon, \$400 or B.O. 209-599-7499

Factory aluminum wheels & 33/16in tires with 15000 miles, off of 1999 ford f250 SD 4x4 lugs and center caps inc. very good cond \$ 400.00 OBO Rare. 209-543-0722

2 GM Keyless Entry Remotes \$40 OBO. 209-483-8719

Cab Over Camper Tie-Downs: Happy Jack camper tie downs, like new, complete set, \$115 Tom 925-833-6076

BOATS

15 ft Coleman RAM-X square stern canoe \$125.00. 925-625-0290

Fishing Boat 1989 17ft. with 50HP outboard and trailer,trolling motor,with extras in excellent condition. Asking \$3,500.00. 209-239-5730

Outboard Motor, 9.5 hp, Johnson, \$300, 925-443-5549

CAMERAS

Canon SLR 35mm, AE-1 w/ external flash. \$150 OBO 209-483-8719

ELECTRONIC EQUIPMENT

Nintendo 6400, 3 controllers, connectors, 7 games 45.00 925-998-2620

Roland VS-890 digital audio workstation - records up to 128 tracks of 24 bit audio, on board effects for guitar and voice. \$450 OBO. 209-836-9082

IBM Pentium II Computer System \$150 includes zip drive and Bose speakers. 209-483-8719

TX-8211 Stereo Receiver Mint Condition \$120 2 X 50 watts, remote, A/B speaker, 4 audio inputs lv msg 925-447-8890

GIVEAWAY

Grinding rail for skate boards and/or roller blades: 7 ft. long; slight slope from front to back; good for practicing tricks. U-Pick-up. 925-447-7872

Grass & weed mower w/briggs stratton 11 hp engine. needs work. you haul. 925-516-6379

Golden Retriever. 8 yr old female, great with children and other animals. Recently moved, could use more room. Free to good home. 209-863-0882

Garage Door Opener. Stanley 1/2 hp chain drive with 1 remote and instructions. Old but runs. 925-447-7406

Ping Pong Table, good condition, 925-443-5549

HOUSEHOLD

Full size sofa bed. Very good condition. Red/green plaid design. \$100 925-456-8120

DRESSER, walnut color, 29 inch high with a matching mirror, \$70; call after 6 pm 925-455-4947

Rkadia Home Entertainment Center - solid alderwood, lighted, floating bridge & upper curio. Measures 10 ft x 7 ft tall. New. Make Offer. 209-835-8241

Leather couch sets (one offwhite, one yellow), both great condition. Darkwood diningroom table, 6 chairs. Call for great prices. 925-443-1673

Whirlpool Gold Refrig. 21.5 cu ft - white, auto ice mkr/5 yrs old/great condition. \$400 925-634-0778

Artificial silk tree, 6 feet tall. \$20 925-455-8609

Delux used swing set, multiple swings, fort, rope. \$50 925-447-7912

Curio Cabinet for kids room with light and glass shelves, cabinet below. Oak color. 73 in. tall X 23 in. W x 14 in. D. \$40.00 Leave message 925-447-8890

White metal futon Bunk Bed, twin upper, full lower. Have twin mattress, no futon for lower. \$50.00 Leave message. 925-447-8890

Solid Oak Desk. 30 inches high, 60 inches wide and 31 inches depth. Seven drawer, good condition \$250.00 or best offer. 925-625-0290

Sofa + loveseat combination, dark green, beige pillows. Only two years old, great condition; \$650. 925-606-5577

Jenn-Air Electric Stove-Top. Black glass, smooth top, radiant heat, no vent. 4 years old, works great, have books/original receipt. \$150, OBO. 925-447-4797

Trash compactor black, stove top exhaust fan unit black, oven/micro combo \$25 each. 3 hanging chandeliers from remodel- gold color- \$20 each. 925-964-0534

Desk with bookshelf & corner table. White, sturdy, good condition. Can deliver. \$125/OBO. 209-239-7888

Futon Bunkbed. Black rod iron. Frame only. \$50. 925-455-8526

BEEF - Born/Raised & Locally Grown Range Fed stock (+40 years) available for June/July sales. 925-525-7713

Desk, office type, 60x29, five drawers, wood construction with dark finish, excellent condi- tion \$150 925-443-7531

Kenmore Gas Dryer 4 yrs old. Good condition some dents,But works great.\$50.00 obo 925-454-1478

Dishwasher - Black. Hotpoint. Works great. \$40 OBO. 925-449-5865

Dining Room table medium oak with two leaves and six chairs two are captains, good condition asking \$400.00. 209-239-5730

Student Desk, 4-Drawer, Unfinished Bare Wood \$35 925-784-4298

2 leather recliners. Great condition. Southwest teal/green. Make offer. 925-899-9675

Diamond Ring .15 CT \$50 OBO 209-483-8719

Craftsman 10 in. compound mitre saw, \$80. Craftsman air compressor, 25 gal., 4HP, dual voltage, \$150. 925-443-2424

Walnut dining table, 2 leaves, 6 chairs, hutch, mint condition, must sell, \$500 OBO. CA King bed, \$100 OBO. 925-443-5957

Old school desks (one has ink-well and lift top storage), water dispenser, little tykes football, rolling knee chair. Make offer. 925-443-4413

Late model Graco baby swing, open top, bat- tery powered \$20. 209-835-5962

Queen (\$100) and Full (\$50) size Futon Mattresses for sale, box spring and frame includ- ed. Call after 7:00p.m. 925-454-9807

Maytag Washer (elec) and Dryer (gas) Great Condition, all in working order, garage units, new belt on dryer. \$60 for the pair. Leave mes- sage. 925-447-8890

ANTIQUE oak ampires. 3 to choose from \$400 up. 4 feet wide. Call me and I can email you photos. Also oak secretary. Located in Manteca. 209-606-6445

LOST & FOUND

Womens 1/2 frame wire glasses found between Sandia Parking Lot and B113 week of January 11. 925-449-5481

MISCELLANEOUS

Boys clothes, toddler to 6yrs, Gap, Old Navy, etc - excellent condition, prices 925-998-2620

Plexiglass arm extension for Pfaff 7570 sewing machine. \$40 925-447-3432

Lego Bionicles \$3, Transformer like toys \$8, RC Car in box \$40, Tonka Trucks \$5 each. 925-449-6048

Engagement RINGS, marquise cut solitaire rings, one third carat each, one yellow gold, one platinum, excellent Valentines gift.\$95Obo. 209-545-6892

Yard/security light. Mecury vapor, 100 watt, 4500 lumens, illuminates 6000 sq feet. Includes mounting arm and bracket. \$20 925-455-8609

Welder: Lincoln TIG-300/300. Excellent Condi- tion. Has all; Cart, Bernard Cooler, Bottle, Regu- lator, Cabling. \$1195 209-996-8852

One year old Amana refrig, white, runs great. Asking 550.00 OBO Emerson microwave, 30.00,OBO 510-537-7222

COMPRESSOR, gas powered, broken starter rope \$100. Leedal LIGHT TABLE 34x44 needs glass top \$25. 925-443-1547

Estate Sale: Misc. items including: Furniture, Rascal type electric cart, and much more! Call Roberta for more info. 925-443-3790

Helmet, full face, used by my son when riding his dirt bike, \$15 925-484-4099

Rocking chair, pine/light unfinished wood, \$75; double stroller, tandem, very good condition, \$75; antique end tables (1920s era), \$350/pair 925-443-2114

White porcelain kitchen sink from recent remodel. Single basin, decent shape. \$20. 925-964-0534

Treadmill, NordicTrack EXP1000, iFIT, barely used, \$700 nev, excellent condition. Folds for storage, asking \$375. 925-443-8118

Nokia 5185i mobile phone with home charger and manual \$25 OBO. 209-483-8719

Craftsman 10 in. compound mitre saw, \$80. Craftsman air compressor, 25 gal., 4HP, dual voltage, \$150. 925-443-2424

Water dispenser, little tykes football, rolling knee chair. Old school desks (one has ink-well and lift top storage). Make offer. 925-443-4413

Grey Giftbags with satin lining \$1.50 ea (have 75).Beautiful brass Bud vase 6in tall \$2.00 ea(30).Call eve 925-828-6568

Peg Perego full-sized twin stroller, independent backrests, ventilated hood. Like new \$100. 925-846-3548

Genie 1/2 HP screw drive garage door opener w/Safe-T-Beam system, two remotes and all hardware. \$50 925-447-8890

Circulated silver dollars, \$6.00 each. 925-373-9274

MOTORCYCLES

1997 - Harley Davidson FLSTS Heritage Springer: Windshield, Alarm, S&S Super E carb, Spyke ignition, Kirker exhaust, Hiway bar, pegs, etc. \$16,500 925-449-4182

1991 - HONDA 250 XR250L enduro, on- or off-road, 3300 orig mi, always garaged, super-

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

MUSIC INSTRUMENTS

Ernie Ball music man axis guitar with Floyd Rose Trem. Dimarzio humbuckers. Comes with tour case. \$800.00 209-239-2639

Kohler upright piano. \$350 / BO Located in Manteca. 209-606-6445

PETS & SUPPLIES

Misc. Horse Equipment, Saddles, Bridles, Holters and much more reasonably priced 925-462-0564

MIN SCHNAUZER PUPS-adorable & healthy; well behaved; loving parents w/ great personali- ties; AKC; \$600, will negotiate, 209-601-8342, 209-839-9497

AQHA buckskin mare. 13 yrs old. Doc Bar, Skipper W bloodline. Good potential brood- mare. \$1800. OBO. 925-447-6682

Dog Run, Cyclone fencing 6ft by 6ft by 14ft with latched gate. All parts included. \$225.00 or best offer. 925-625-0290

Free to good home indoor cat, female, spade, declawed white cat. Very friendly and loving. Must find her new home due to allergies. 925-443-5008

Wanted: dachshund puppy, preferably female. 925-371-2323

CUSTOM CAT FURNITURE - Does your feline deserve (demand:-) the best in life? Posts, beds, houses & catnaziums are my specialty. 925-606-0234

30yr old quarter horse needs a loving home. Good companion horse. 925-550-0831

SNAKES Kenyon sand boas 6 months old. Located in Manteca. I can email you photos. \$25 each 209-606-6445

RECREATION EQUIPMENT

Stearns shorty wetsuit. Mens 3mm/2mm. \$30 925-455-8609

Weider weight machine, 3 stations, 6 different workouts. excellent cond. \$125 925-516-8339

Portable basketball hoop; slightly used; slightly weathered. Free: U-Pick-up. 925-447-7872

Snowboard: 165cm Burton Floater - wide board (for 11+ shoe sizes). Excellent condition, used 5 times, \$150 firm. 925-606-5577

Baseball cleats, metal cleats, used one season by my son, size 8 1/2, made by Addidas, \$5 925-484-4099

Pro Form Treadmill, Model 775EKG, one year old all original paperwork/manuals, folds for easy storage, \$450/OBO. 925-447-4797

TaylorMade 320Ti 7 degree Driver. 44in Pro- force 85 Gold FX Flex Shaft. New Winn Grip. \$125 obo. 209-982-0076

Weight bench. Good condition. \$15. 925-899-9675

Tony Little Gazelle Elite. Perfect condition; 1 yr. old; hardly used. \$100. 925-606-7879

DUI CF-200 Drysuit. Mens large w/ size 11 rockboots. Includes divevware. Excellent condi- tion. \$700 obo. Other dive gear available too - please call 925-454-9253

Cross-Country Skis for Kids w/ poles, fits on any shoes, good for 4-6 year olds, new cond, \$30. 209-369-3308

bowflex exercise machine. Has all attach- mants,paperwork and instructional video. \$1000.00 707-374-6143

RIDESHARING

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

Lafayette - LaMOrinda Vanpool (also WALNUT CREEK stop at Rudgear Rd): reclining seats, reading lights, 7:45-4:45, \$105/mo (pretax reduction available) 925-943-6701, ext. 2-3005

San Jose & Fremont - Vanpool space is avail- able from San Jose and Fremont areas. Work hours: 7:30 - 4:30. 408-238-1909, ext. 3-3057

Oakland/Montclair - Vanpool seeks additional riders. 5/40 schedule: at LLNL 8:15-5:00. Fare depends on # subscribers; \$132/mo if one additional. 510-530-1289, ext. 2-9831

Modesto Mall Park & Ride - Immediate Open- ing(s) Daves Luxury vanpool, captain seats, reading lights cellphone 8-4:45 ridership-based fares 209-404-6680, ext. 3-3194

Orinda - Lamorinda carpool seeks 4th rider/dri- ver. Lab hours 8-4:45. Carpool meets near St.

Stephens and Hghwy 24. 925-253-0498, ext. 2-9823

Modesto - Working 4 10 hr. days? Vanpool Mon.-Fri. Leaves 6 a.m. and returns at approx. 5 p.m. 209-667-2365, ext. 2-8321

Patterson - Vanpool has seats available for 7:30-4:00 shift. Pre-tax transportation & Guaranteed Ride Home Programs available. 209-892-2118, ext. 2-9502

Manteca - 9/80s alternate work schedule. Rider driver needed. Very flexible. Meet at Walmart. 7am to 5pm. 209-825-0326, ext. 3-0631

SERVICES

TUTORING in high school and college math and chemistry. 925-443-2095

SHARED HOUSING

Livermore - Large Southside mstr bdrm/ba for rent. Quiet and friendly environment. Full priv. \$600/mo includes util. Female pref. 925-606-0260

Livermore - furnished room for rent. Clean/quiet. No pets/no smoking. \$550.00/month. Share utilities 1/3. Deposit. Mature adult. 925-449-1128

Livermore - \$850Room to rent.no lease/term or dep. 5min to lab 3br2.5ba Garage Thouse. Very Clean. Room canm furn. TV/Net included. S925-449-0603

TRACY - , New Home, 3 rooms and a master bed room available. \$400 & up, plus deposit & util. Call- 209-832-4335

Livermore - Large room available in house (10 minutes from the Lab). Your own bath. \$700 month including utilities. Non-smoker. 925-899-9675

TRUCKS & TRAILERS

1979 - Suburban, Silverado edition, 4x4, 400 ci, tow package w/brakes, many extras, runs and drives, as is 1200.00 OBO. 925-449-5626

1990 - F-250, 460 eng., man trans, 87k miles, ex. cond., orig. owners, \$5K/OBO 925-447-7912

1999 - Dodge Ram 1500 Ext Cab. 26K miles, Power Windows, brakes, door locks, 5 speed manual, Hard tonneau cover. 5.2LV-8. Please leave message 209-484-0701

2000 - Chevy Silverado LS, regular cab,all power,CD, new tires, 48K miles, original owner, excellent cond.\$14,500/OBO 925-373-4791

1984 - Ford F-250 XLT, 8600GVW, Frozen 460 engine, 133K, recent transmission service, excelent condition, shell, fully loaded, \$2000/bo 925-833-6076

VACATION RENTALS

Lots of snow around nice mountain cabin near Arnold. 4 bedr, 2 bath. Fully equipped kitchen, wood burning fireplace. Near Bear Valley Ski Resort. 925-245-1114

Soooo cute beach cottage in Santa Cruz. 4blks from ocean. 2 bedr,2 bath. Fully equipped kitchen, spa. 925-245-1114

SOUTH LAKE TAHOE - 3 Bedroom 2 bath Chalet, nicely furnished, all amenities, close to all skiing, 209-599-4644

Gualala, Mendocino: - Relax with stunning views of waves crashing against rocks. Walk to downtown restaurants, 2/2, fireplace. <http://coralcove.us> \$180/night. 925-606-1845

WANTED

26 to 30 foot travel trailer. Up to \$4500. 925-455-8006

Looking for a chrysler 8 3/4 center section in 3.91 or 4.10 gear ratio, sure grip. 209-368-4286

Need used engine for a 1993 Honda Civic. 1.5 209-531-1527

80-200 Canon FD Zoom Lens for AE-1. Must be in excellent condition. 925-447-6682

Ray-O-Vac pool swvep. Willing to pay \$100 209-832-1105

used rototiller for gardening 209-823-6394

AROUND THE LAB



Mountain lions are part of Tri-Valley environment

One early spring morning in 1999, a mountain lion was discovered within the fenced perimeter of the Laboratory. Around 7 a.m., as the early commute traffic began to file into the Laboratory, the cat made a determined move to leave the property along the west perimeter. This attempt placed the cat between Bldg. 132 north and the cross traffic on Mesquite Way. The lion followed its instincts that morning...

A similar story could have occurred in a multitude of places across the western states. More than half of the state of California is considered mountain lion habitat. Known as the largest true carnivore in the Golden State, and known in scientific circles as *Felis* or *Puma concolor*, this cat can weigh and measure in length as much as an average man. Its geographic range is two-pronged in shape. One prong extends along the coast from the Oregon border to Los Angeles; the other extends from the northern edge of the Sierras south to the Mexican border and beyond. This is an animal built for moving long distances, and can traverse 20 miles overnight if required. Male lions may have a home range of 100 square miles and the females' range is generally half that size. Numerous females may reside within one male lion's territory.

Historically, lions could afford to live in remote areas and subsist on the deer herds within their territory. Today, most Coastal and foothill areas of California are far from the remote settings of yesteryear. The deer numbers have diminished, and people/cat conflicts are on the rise. This trend should be expected to continue. Lions naturally want to avoid people and their elusive behavior demonstrates this predisposition. Yet, given the ever more developed landscape, mountain lions have fewer escape routes available to evade human encounters.

A scientific study by Professor Paul Beier (formerly of UC Berkeley) found that mountain lion attacks on humans have been exceedingly rare. In the U.S. and Canada from 1890 to 1990, only 10 human deaths were attributed to such attacks. The California Department of Fish and Game has carefully documented encounters



By Jim Woollett



More than half of California is considered to be the mountain lion's habitat. This lion is known to be the largest true carnivore.

within the state and less than 16 injuries have been recorded during the last century.

Although prior to 1963, the State of California offered a bounty for each mountain lion killed in the state, the mountain lion is currently a "specially protected species" in California. Under California law it is only legal to harm or kill mountain lions in certain situations.

"The Department of Fish and Game may remove or take any mountain lion, or authorize an appropriate local agency with public safety responsibility to remove or take any mountain lion, that is perceived to be an imminent threat to public health or safety." The law also allows an individual, whose "livestock or other property" that has been damaged or destroyed by a lion, to report the incident to Fish and Game and obtain a permit to dispatch the offending animal.

Mountain lions are formidable neighbors if encountered. What is the smart rule of thumb for a human that lives or works in cat country? Know the local food source. Assume lions are in your neighborhood if deer herds exist nearby. Follow the conduct guidance outlined by the state Fish and Game when you are enjoying the outdoors in mountain lion range. And know how to identify a lion if you see a cat.

What happened to that mountain lion sighted at LLNL in 1999?

With an advancing workforce arriving onsite that morning, the lion sought cover under the closest and only bush within several hundred yards and did not move for the next fourteen hours. At 9 p.m. that night, the animal moved offsite and was not seen again for some time. Of additional note, a smaller and younger lion, suffering from malnutrition, was euthanized a week later only a few miles to the south of LLNL.

California Department of Fish and Game estimates between 5,000-6,000 lions exist in the state today. Whether you are driving to work or enjoying the outdoors, recognize that you are sharing space with a powerfully independent animal; in this case, the mountain lion. And take the necessary precautions to protect yourself and your family. See this Website (<http://www.dfg.ca.gov/news/news04/04009.html>) for the rules of conduct that the Department of Fish and Game suggest are followed in mountain lion areas.

In light of the recent lion attacks in Southern California and the repeated mountain lion sightings at Sandia National Laboratory, it is critical that people be aware of their surroundings and that mountain lions may be present. As suggested in this article, mountain lions can be found in urban areas as well as wilderness areas.

LLNL/Sandia security and wildlife biologists strongly suggest that Lab employees avoid walking or jogging at Sandia until the situation is determined to be safe. Updates on lion sightings will continue to be posted in *Newsline* and/or *News Online*. Please report observations (location, time, activity level) of mountain lions to LLNL's wildlife biology program at "4-WILD" and Sandia Security at 294-2300.

JGI
Continued from page 1

geared toward generating informative DNA sequences from whole organisms or communities of organisms. Successful proposals, Rubin said, will be driven by meritorious science that will advance our understanding of the natural world.

Proposals submitted to the CSP will be evaluated by a group of experts from the scientific community. Once approved, DOE will cover the costs associated with the sequencing effort at the JGI. Data generated under CSP-supported projects will be made freely available to the entire scientific community in accordance with the JGI's data release policy.

Founded in 1997, JGI was initially tasked with unraveling and interpreting a large complement of the human genome chromosomes 5, 16, 19 comprising nearly 11 percent of the three-billion-letter human genetic code. Now in its seventh year, the JGI has assembled considerable expertise and instrumentation at its Production Genomics Facility (PGF) in Walnut Creek. JGI has grown to more than 61,000 square feet of laboratory and office space and is home to more than 150 researchers and support staff at Lawrence Berkeley, Lawrence Livermore and Los Alamos national laboratories.

Beyond tackling human sequencing, the JGI has gone on to elucidate the genomes of such diverse organisms as the puffer fish (*Fugu rubripes*), a sea squirt (*Ciona intestinalis*), por-

tions of the mouse genome, as well as dozens of other organisms including those responsible for fermentation, photosynthesis in the ocean, Sudden Oak Death, Pierce's Disease (affecting the vitality of the grape growing and wine industries) and acid mine run-off. Among those organisms currently under investigation are a species of frog (*Xenopus tropicalis*), the alder tree (*Populus trichocarpa*), and a type of green algae (*Chlamydomonas reinhardtii*).

The first deadline for proposals is Feb. 20. For additional information on the CSP and for those interested in submitting sequencing proposals see: http://www.jgi.doe.gov/CSP/user_guide/index.html > http://www.jgi.doe.gov/CS P/user_guide/index.html

Transfer of laser peening technology celebrated



Karena McKinley said the Laboratory is recognized as a leader in technology transfer.

Rep. Ellen Tauscher, Livermore city representatives and Laboratory officials attended a demonstration Jan. 23 of the Lab-developed laser peening technology at Metal Improvement Co.'s Livermore processing facility. Based in New Jersey, Metal Improvement uses the powerful laser technology to treat metal components of commercial aircraft engines. The result is greater dura-



Laboratory physicist Lloyd Hackel explains laser peening to KTVU reporter John Fowler.



JACQUELINE MCBRIDE/NEWSLINE

From left: David Francis, executive vice president of Metal Improvement, and Rep. Ellen Tauscher watch a demonstration of laser peening at the company's Livermore processing facility.

bility for parts and reduced maintenance costs. "We've married government, the private and public sectors in a way that creates economic opportunity and security, not only for Livermore and the nation, but also contributes to national security," Tauscher said. She added that such collaborations serve as an "incubator" for future science in the Tri-Valley area and as "an engine for the new economy." Representing the Laboratory were Glenn Mara, deputy director for Operations, Ron Cochran, Lab executive officer, George Miller, associate director of NIF Programs, and Karena McKinley, director of the Lab's Industrial Partnerships and Commercialization Office. Also in attendance was Lloyd Hackel, who led the effort to develop the technology, and members of the Lab team that worked on laser peening.

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Continued from page 1

on to enhance specific aspects of our laboratory management. At Los Alamos, these areas include human resources, supply chain management, procurement, finances, and high hazard facilities management. The specific areas at Lawrence Livermore are still being determined. These teaming arrangements are about supplementing the existing workforce and ensuring that management practices are of the same high level of quality as our scientific and technical programs. The industrial partners would work with the management team at the lab and report to the director. The partners we are considering have excellent reputations, and we believe they would only enhance the operations of these critical institutions. As we move forward, I know many of you will have questions about the competition process and its effects on the labs, the University, and each of you as

employees. In an effort to keep you informed about the University's actions, I will be writing periodic columns for your laboratory publications. In addition, I have set up an e-mail account by which you can submit questions as well as suggestions for future columns. This feature, called "Dynes' Desk," is based on an initiative I implemented while Chancellor at UC San Diego, where I found it a very effective way to stay in touch with the community. While I cannot respond personally to every e-mail, I promise that I will read each one submitted and will respond, in future columns and other messages, to the broad concerns and suggestions being expressed. To submit an email to Dynes' Desk, visit www.universityofcalifornia.edu/president/desk.html. Thank you. We'll be in touch. Sincerely, Robert C. Dynes, President



MOLECULAR

Continued from page 1

"These simulations serve as an important step toward the use of tera-scale resources to produce simulations of water in complex environments," Mundy said. "The chemistry and physics of the aqueous liquid-vapor interface has been receiving recent attention because of new experimental techniques to characterize its structure." The *ab initio* simulations of the aqueous

liquid/vapor interface have a resolution of ~35 angstrom and contain a total of 216 water molecules. The Saykally group experiments on the aqueous liquid-vapor interface have provided additional proof of dangling oxygen-hydrogen bonds present at the surface, strong evidence for surface relaxation, and new structural portions in which both hydrogens are dangling. The Livermore work seems to have captured all these surface events. *Ab initio* simulations present an unbiased representation of water in different environments and are ideal for explaining surface conditions.

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