

NEWSLINE

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UC's new VP visits Lab



JACQUELINE MCBRIDE/PUBLIC AFFAIRS

John McTague, (center), the UC vice president of Laboratory Management, is finishing up his visit to the Laboratory today as part of his efforts to get acquainted with Lawrence Livermore and its programs. Yesterday, McTague met with Director Bruce Tarter, UC Vice President Robert Van Ness and Deputy Director Michael Anastasio (from left), along with various associate directors and other Laboratory managers, for overviews of the directorates and programs such as stockpile stewardship, NIF, ASCI, the National Atmospheric Release Advisory Center and more.

Today is your last chance for completing your copy of the employee survey

Today is the final day to complete the employee survey, "Assessing the Workplace." The online survey comes to a close at the end of the day.

If you have filled out the survey, thank you.

If you have not filled out your survey, you can access the Website at <https://www.isrsurveys.org/llnl.gov>. The survey is designed to take about 30 minutes and you may fill it out during Lab time.



If you have started the survey but have yet to complete it, please do so before the closeout tonight.

The survey is your opportunity to tell management what you think about the quality of your work life at the Laboratory and what you would like to see improved.

To date, 67 percent of the Lab's employees have completed the survey, while more than 300 employees have started the survey but have yet to complete it.

Help make the survey more meaningful by driving the total number of completed responses even higher.

See SURVEY, page 5

Laser/plasma physicist Mordy Rosen named winner of Edward Teller Medal

Laser/plasma physicist Mordy Rosen is one of two recipients of the prestigious Edward Teller Medal for 2001. The award was announced this week by the American Nuclear Society. Rosen was named along with Professor Stefano Atzeni of the University of Rome "La Sapienza" and the Italian National Institute for the Physics of Matter.

The Edward Teller Medal recognizes pioneering research and leadership in inertial fusion sciences and applications.

"This is a fabulous feeling," said Rosen. "I feel humble knowing the company of people I am in. These winners were pioneers in this field and I am honored to be a part of them."

Rosen, the former X Division leader and now its chief scientist, is recognized internationally for major contributions to the development of laboratory soft X-ray lasers, and to the design and analysis of complex high energy density and ICF target physics experiments, elucidating electron and radiation transport,



Mordy Rosen

See MEDAL, page 8

Lab helps SLAC get to the heart of the matter

By Don Johnston

NEWSLINE STAFF WRITER

The search to resolve a long-standing mystery of particle physics has reached a milestone with publication of the first results from the B Factory experiment at Stanford University's Linear Accelerator Center (SLAC).

Lab scientists played a key role in analyzing the data from the experiment designed to resolve the mystery of why there is more matter than antimatter in the universe. The "BABAR" collaboration of more than 500 physicists at 72 institutions in nine countries published their first results in the March 19 edition of Physical Review Letters.

Preliminary, but unpublished, results were announced last summer at a meeting in Osaka, Japan (see the Sept. 15, 2000 edition of Newsline).

"This is very exciting," said Doug Wright, principal investigator for LLNL's B Factory team.



PHOTO COURTESY OF DOUG WRIGHT

Vuko Brigljevic, Doug Wright and David Lange (from left) played a key role in analyzing data from the B Factory experiment.

"We have more than doubled our data set since last summer and substantially improved the analy-

See B FACTORY, page 8



DDLS to update breast cancer research

— Page 3



Providing Rx for computer viruses

— Page 4



Merced educators get show and tell

— Page 5



LAB COMMUNITY NEWS

Weekly Calendar

Technical Meeting Calendar, page 4

Friday
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Three panel discussions are planned this summer on **"School to Career."** The first panel will be held today from 10:30 a.m. to noon in the Bldg. 543 auditorium. A number of the fellowships represented will also be on display in the lobby outside the auditorium. Panel members are: Charlie Westbrook, UC Davis Applied Science Fellowship; Gene Bailey, National Physical Science Consortium; Carla Trujillo, director, Graduate Academic Diversity/Julia Morgan Engineering Program at UC Berkeley; Alan Wootton, Lawrence Fellowship; and John Knezovich, director of the Center for the Accelerator Mass Spectrometry and UC Davis graduate. For additional information, go to <http://education.llnl.gov/sbb>.

Monday
2

The Lab's quarterly **blood drive** begins today and will be held from 10 a.m. to 4 p.m. It continues on Tuesday, Thursday and Friday from 7:30 a.m. to 1:30 p.m. in Bldg. 415. In addition to the blood drive, there is also a drive for bone marrow donors. (See related story on page 3.) Employees can participate in either drive or both. The bone marrow test is a simple blood draw and can be done at the same time as the blood donation. To sign up on-line for the blood drive, go to www.beadonor.com (group code: LLNL). Contact: Mandy Lewis of the Red Cross, (510) 594-5211.

Tuesday
3

The final session of three workshops geared toward students on the **secrets to being a successful scientist**, "The Three M's — High Quality Methods, Manuscripts, and Money," will be held at 10:30 a.m. in Bldg. 219, room 163. This course focuses on the aspects of being a scientist not covered in subject specific courses. For more information or to register, go to <http://education.llnl.gov/sbb>. Contact: Barry Goldman, 2-5177, or e-mail, goldman1@llnl.gov.

Wednesday
4

Independence Day. **The Laboratory is closed.** Happy Fourth of July.

UP
COMING

All postdoc employees are invited to participate in the **Summer 2001 Postdoc Employee Social** on Tuesday, July 10, 3-4:30 p.m., in the Lab's West Cafeteria (Bldg. 125). This is the fourth annual event for postdoc employees to network and discuss key issues and information with each other and senior managers. All postdoc employees are encouraged to attend along with their respective mentor(s) if possible. To help with various administrative details, it would be helpful if postdocs would RSVP their participation to Don Correll, dcorrell@llnl.gov, by July 2.

Lab celebrates Juneteenth



The Association of Black Laboratory Employees sponsored a Juneteenth celebration recently to raise money for the ABE scholarship fund. Employees heard a talk by Lionel Lyons, director of the City of Phoenix's Equal Opportunity Department (above). The festivities included dancing. At right, Tory Bobo and Andrew Gawin dance the Electric Slide.



ALI CARRIGAN/NEWSLINE

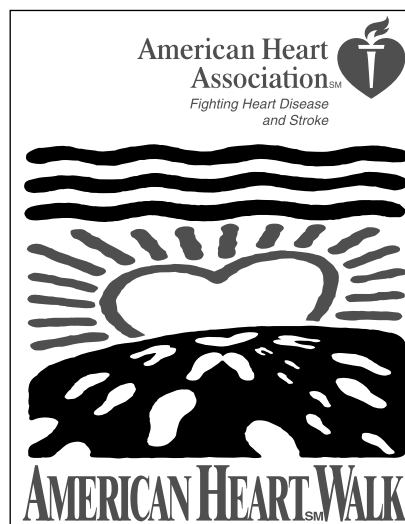
Employee team captains needed for Heart Walk

The American Heart Association (AHA) is looking for Lab employees who are willing to be team captains for the upcoming American Heart Walk.

The walk will take place on Sept. 30 in Walnut Creek. Ideally, the AHA would like one Lab captain to oversee other team captains within the organization. Team captains are responsible for recruiting teams of employees, and the head captain would act as a liaison between the AHA and employees who decide to walk.

The AHA will provide the lead captain with information about the walk so he or she can answer questions. Captains are also expected to motivate team members in collecting sponsorships and donations.

"Heart disease is the number one killer in the United States," AHA representative Kit Becerra



said. "This walk is a great way for everyone to get involved with fighting it."

Money that is raised for the AHA will support research and community education programs about heart disease and stroke.

"It's only a few hours out of one weekend, but it can make such a big difference," Becerra said. She also emphasized the fact that the walk is intended to be a family affair.

"We want to encourage families to bring their kids out," she said. "We have a lot of activities planned for the kids, from face painting to mini-golf to a pancake breakfast."

Becerra is hoping that local companies and businesses, including the Lab, will have at least 10 percent of their workforce walk.

"The walk helps enhance employee morale — it provides a wellness activity for employees, and helps them stay involved in the local community," Becerra said.

For more information about becoming an LLNL team captain for American Heart Association's annual Heart Walk, contact the AHA's East Bay representative, Kit Becerra at (510) 632-9606 or by email at kitb@heart.org.

IN MEMORIAM

William McLane

William (Bill) Eugene McLane died in his home at Grants Pass, Ore., on June 17. He was 77.

Born in East Moline, Ill., McLane served in the Coast Guard from 1942 to 1965. He worked at the Laboratory in Procurement and Materiel's Stores from 1968 to 1971 and later worked at Intel in Santa Clara from 1974 to 1996. He and his wife Donna moved to Grants Pass, Ore. in 1996 from Oakdale.

McLane enjoyed computers, reading and loved his border collie "KC." He was a member of the Grants Pass Elks Lodge.

McLane is survived by his wife, Donna McLane of Grants Pass; two daughters, Linda Correia of Merlin and Ruth Ann Strauss and her husband Ronald of Grants Pass; his brother Roy McLane of Oakdale; three granddaughters, two grandsons and five great-grandsons.

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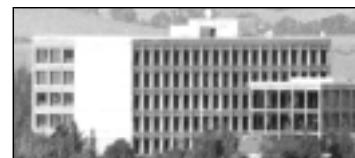
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AROUND THE LAB



Specialist Susan Love to discuss cancer research

Nationally recognized breast cancer specialist Dr. Susan Love will speak at the Lab on Tuesday, July 10, at noon in the Bldg. 123 auditorium as part of the Director's Distinguished Lecturer Series.

Love, an adjunct professor of surgery at UCLA and the medical director of the Susan Love M.D. Breast Cancer Foundation, was appointed by President Clinton to the National Cancer Advisory Board and is one of the founders and a director of the National Breast Cancer Coalition.

Her talk at the Lab, "Wishful Thinking Is Not Enough," is the final presentation in the monthlong Cancer Awareness Campaign.

In her talk, Love will address the latest issues and hot topics in breast cancer research, including her current work.

Love graduated from SUNY Downstate Medical School cum laude in 1974. She did her surgical residency at Boston's Beth Israel hospital and was chief resident in 1979. She opened a private practice in general surgery in 1980 as the first



Dr. Susan Love

women surgeon on the staff of Boston. In 1982, she joined the staff of the Dana Farber Breast Evaluation Clinic, the first comprehensive multidisciplinary center for breast care.

In 1988, in the private sector she founded the Faulkner Breast Center in Boston, the first facility in the country to include a multidisciplinary, all woman staff with five surgeons, two clinical nurse specialists, a plastic surgeon, radiation therapist and medical oncologist.

She taught at Harvard Medical School for more than 12 years before joining UCLA in 1992, where she founded a multidisciplinary, comprehensive program addressing all aspects of breast care. In the fall of 1994, a gift from Revlon led to the establishment of the UCLA/Revlon Breast Center. The center, under Love's direction, developed the first comprehensive practice guidelines on breast disease published in *The Cancer Journal* from Scientific

American in January 1996.

She lectures extensively, appears in magazine interviews and on the radio and television. She has published more than 30 articles in professional journals and contributed chapters to 14 publications. Her book, "Dr. Susan Love's Breast Book," was called the bible for women with breast cancer by *The New York Times*. The revised third edition was released last year.

Her book on menopause and the hormone dilemma, "Dr. Susan Love's Hormone Book: Making Informed Choices About Menopause," was released by Random House in February of 1997.

In 1996, after 20 years of direct patient care, Love left clinical practice to devote more time to her basic research and her growing interest in women's health.

She has a \$500,000 grant from the Department of Defense to develop an intraductal approach to breast cancer. In addition, she is starting an independent think tank on women's health issues and ways to improve the health care of women in the managed care environment.

She holds two patents for methods and kits for identifying ductal orifices and has 11 applications pending in the same field.

Memory of colleague fuels Lab bone marrow drive

Elizabeth Campos Rajs

NEWSLINE STAFF WRITER

Dec. 29, 2000

"I have a personal favor to ask of everybody out there that might want to do something to help. Go to your blood bank and ask to be registered with the "National Bone Marrow Registry..." Even though there is almost no chance that anybody out there that I know will be a good HLA match for me (save my brother), the possibility of saving other people's lives makes this a good thing to do. Thanks."

Barely three days after writing the above request to his family and friends on his Website, Lab chemical engineer Ken Westerberg, who was being treated for leukemia, passed away. He was 35.

To honor their son's dying wish, his parents requested in lieu of flowers that friends and family donate blood and register with the bone marrow transplant registry.

Now, Westerberg's Lab co-workers, working with LLESA, Health Services and the Affirmative Action & Diversity Programs, have helped organize a bone marrow registry drive on site. It will be held next week, beginning Monday, in conjunction with the Lab's quarterly blood drive. Employees can participate in either the blood drive, the bone marrow drive or both.

"Since the Laboratory already has a blood drive in place, it seems that incorporating a bone marrow transplant registry drive on site would be a dynamic contribution to our co-workers and local communities for the near future," said Margie

Altenbach, who had worked with Westerberg as his secretary in the Chemical Sciences Division.

After learning of his death, Altenbach was inspired to work to honor Westerberg's dying wish. It was during a conversation with Jenni H. de Pruneda that they decided to try to start a bone marrow drive at the Lab.

"We were both grief-stricken by Ken's death and were anxious to see his last wishes come true," Altenbach said. "It took teamwork to get this effort going."

Westerberg, who was an avid cyclist and member of the Cycletrons, was diagnosed with leukemia in November. He returned home to Pittsburgh for treatment and started a Web journal last December as he began chemotherapy. His journal can be read on the Web at <http://www.ndim.edrc.cmu.edu/ken/>.

Dec. 30, 2000

"I think that, if there is a silver lining here, it will be that we can get some more people into the bone marrow registry. It will save lives down the road."

For the bone marrow drive, a blood sample is drawn and the information is entered into the national registry. In some cases, people who can't participate in the blood drive because they aren't feeling well that day or are pregnant, can still participate in the bone marrow drive, according to Jerry Quintana of the American Red Cross/National Marrow Donor Program.

"The bone marrow test is a simple blood test. A DNA test will be done on the white cells to determine the antigen structure and the information will

be entered into the National Bone Marrow Registry," Quintana said. "It takes less than five minutes for the test and is completely free."

The National Marrow Donor Program and the local Rotary's Project Share Life are picking up all costs for the bone marrow testing, he added.

The "blended" drive for blood and bone marrow will be held on Monday, July 2, from 10 a.m. to 4 p.m. and July 3, 5 and 6 from 7:30 a.m. to 1:30 p.m. in Bldg. 415.

To schedule a blood donation appointment, the American Red Cross encourages individuals to register on-line at <http://www.beadonor.com> (company code: LLNL) or by calling Mandy Lewis at the American Red Cross at (510) 594-5211.

Appointments for entry into the National Bone Marrow Registry can be made by calling Lewis at the number listed above. The LLESA home page has the bone marrow registry form at <http://llesa.llnl.gov/blooddrive/donor.html>.

In addition to the bone marrow drive, Westerberg can be remembered through a memorial fund. The Ken W. Memorial Prize for Excellence in Chemical Engineering Research has been established by the Department of Chemical Engineering at Carnegie Mellon University, where his father has been a faculty member since 1976. This prize will be presented every year at graduation to a Carnegie Mellon senior who has shown exceptional promise for research in chemical engineering.

Funds may be payable to "The Ken W. Memorial Fund," Department of Chemical Engineering, Doherty Hall 1105, Carnegie Mellon University, Pittsburgh, PA 15213.

Red Cross national bone marrow program seeks minority donors

Caucasians who need a bone marrow transplant have a 90 percent chance of finding a match through the national registry. But for ethnic minorities, that number drops to less than 50 percent, according to Jerry Quintana of the American Red Cross/National Marrow Donor Program.

"There is such a shortage of ethnic minorities in the bone marrow registry," he said. "Since bone marrow is very specific, it has to be a very close antigen match. To have that, individuals most likely match someone from their own racial category. We need to increase the number of ethnic minorities in the registry so that everyone who needs a transplant has a

better chance of finding a match."

Quintana urges Lab employees who are ethnic minorities to consider joining the National Marrow Donor Program during next week's drive at the Lab.

The Lab's quarterly blood drive will also feature a bone marrow drive. Employees can participate in either drive or both.

The "blended" drive for blood and bone marrow will be held on Monday, July 2, from 10 a.m. to 4 p.m. and July 3, 5 and 6 from 7:30 a.m. to 1:30 p.m. in Bldg. 415. The bone marrow drive consists of a simple blood test. The sample is typed and entered into the registry.

According to the National Marrow Donor Program Website, should you ever come up as a match for someone who needs a transplant, you will receive additional screening as well as a physical exam to determine your health status and whether there are any special risks from either of the two donation procedures. One involves a surgical procedure to remove bone marrow from the back of your pelvic bone and the other involves drawing stem cells from your blood. Both procedures can cause pain that lasts for a couple of days.

To learn more about becoming a marrow donor, log onto <http://www.marrow.org>.



NEWS YOU CAN USE

New policy offers classified computers virus and code protection



CIO UPDATE

By TED MICHELS

LLNL's Computer Security Council has approved a revised policy specifying the requirements for protecting classified computing resources against viruses and malicious code.

There are over 50,000 known viruses, and new viruses are detected constantly. In addition to viruses, there are other forms of malicious code, which can cause substantial damage to computing resources, including loss of system availability and/or loss of data. Existing policy, P-2025, establishes requirements to protect our unclassified resources from these threats, but the very different environments and circumstances of our classified computing operations require separate treatment.

Threat

Viruses and other forms of malicious code can be introduced into systems by means of freeware/shareware, diskettes, file transfers over networks, e-mail, or by an insider. Potentially, even code developed by commercial vendors can be a threat. All of these potential sources of malicious code are used on classified machines at LLNL and make it possible for files on one infected machine to infect others. Since many classified computers at LLNL are accessible from SecureNet or other classified networks, there is a real threat

that viruses can infect LLNL systems from other sites as well.

Solution

Modern virus/malicious code detection software using up-to-date definitions provides substantial protection against most forms of malicious code. LLNL maintains site licenses for Macintosh and PC anti-virus/malicious code software, which is available for use by all Laboratory employees as part of LLNL's Information Architecture desktop standards. This software is most effective when it and its associated definitions are updated appropriately. The required update frequency as specified in this policy is determined by the connectivity circumstances of each computer system.

Policy

This policy, P-4351, requires that classified Windows, DOS and Macintosh systems must use anti-virus/malicious code software depending on their network connectivity, where technically feasible. Specifically:

- Systems attached to interconnected classified networks, including Closed LabNet, are required to use anti-virus/malicious code software and must update the definitions monthly.
- Systems attached to stand-alone classified local-area-networks (LANs) are required to install the software or use it to scan all incoming files for viruses. The update frequency can be determined by programmatic personnel, based on a cost/risk assessment considering the threats and other factors associated with that network.
- The use of anti-virus/malicious code

software for systems not attached to any networks can be determined by programmatic personnel, based on a cost/risk assessment considering the threats and other factors associated with each system.

The full text of the policy can be found on the Web at www-r.llnl.gov/cso/Pubs/c-docs/P4351.pdf.

Implementing the policy

The policy, which goes into effect immediately, requires that any cost/risk assessments used to make determinations under this policy must be documented in the security plan for each classified system. Failure to comply with this policy, without an exception specified in a DOE-approved security plan, may result in administrative or corrective actions. Any system found distributing viruses will be removed from service until brought into compliance.

Effective practice

This policy makes a requirement of a practice that has been common at LLNL for some time. When we read news reports of new viruses inflicting major costs on computer systems around the world, we learn that LLNL has not had the major losses suffered by so many institutions around the world. That good fortune is not an accident. It is the result of prudent use of anti-virus software and regular updating of virus definitions. As a result, LLNL employees continue to use computing resources without fear that viruses and malicious code will destroy their data.

Ted Michels is the principal deputy associate director for Computation and LLNL's acting chief information officer (CIO).

Technical Meeting Calendar

Friday
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MATERIALS RESEARCH INSTITUTE

Computational Materials
Science & Chemistry Summer
Institute Summer Lecture Series

"Materials Thermodynamics by Atomistic Simulations", by Maurice de Koning, LLNL. 10 a.m., Bldg. 661, room 7 (open area). Contact: Maureen Tortorelli, 3-5031.

NAI

"MATLAB Based DSP Compiler for FPGAs," by Sabine Lam, Xilinx. 1 p.m., Bldg 132S, room 1781. Contact Hsueh-Yuan Pao, 4-9744.

Monday
2

INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"Dynamic Meshes, Dynamic
Interfaces, and Hemodynamics,"
by Omar Ghattas, Carnegie

Mellon University. 10 a.m., Bldg. 451, room 1025 (uncleared area). Contacts: Carol Woodward, 4-6013, or Leslie Bills, 3-8927.

Friday
6

INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"A Scalable Hierarchical
Algorithm for Unsupervised
Clustering," by Daniel Boley,

University of Minnesota. 2 p.m., Bldg. 451,

room 1025 (uncleared area). Contacts: David Littau, 3-2597, or Leslie Bills, 3-8927.

MATERIALS SCIENCE & TECHNOLOGY

"Half Metallic Ferromagnets — A Potential Source for Spintronic Devices," by Simon Morton, Lawrence Berkeley National Laboratory. 3:30 pm, Bldg. 235, room 1090 (Gold Room, uncleared area). Coffee and cookies will be served at 3:20 p.m. Contact: Thomas E. Felter, 2-8012.

Monday
9

PHYSICS & ADVANCED TECHNOLOGIES

"The Role of Neutrons in Gamma
Ray Bursts: Hope for Pinning
Down the Central Engine," by

Jason Pruet, University of California, San Diego. 1:30 p.m. Bldg. 211, room 227 (uncleared area). Contacts: Rob Hoffman, 4-6411 or Pat Smith, 2-0920.

Wednesday
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CENTER FOR APPLIED SCIENTIFIC COMPUTING

"Computer Simulation of the
Heart," by Charles Peskin, Courant
Institute of Mathematical Sciences,

New York University. 3:45 p.m. Bldg. 543 auditorium (uncleared area.) (Please note change of location; all visitors must be badged.) Contacts: David Keyes, 2-1325, or Terry Garrigan, 3-6209.

Friday
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INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"Hybrid Intelligent Systems for
Industrial Data Analysis," by
Arthur Kordon, Dow Chemical

Company. 10 a.m., Bldg. 551W, room 1400 (Del Valle Room, uncleared area). Contacts: Ghaleb Abdulla, 3-5947, or Leslie Bills, 3-8927.

MATERIALS SCIENCE & TECHNOLOGY

"Plutonium Surface Science: A Study of
Internal and External Corrosion," by Paul
Roussel, Atomic Weapons Establishment, U.K.

3:30 p.m., Bldg. 235, room 1090 (Gold Room, uncleared area). Coffee and cookies will be served at 3:20 p.m. Contact: Thomas E. Felter, 2-8012.

Monday
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INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH

"Parallel and Robust Multigrid
Techniques on Structured
Grids," by Ignacio Llorente,

Universidad Complutense, Madrid. 10 a.m., Bldg. 451, room 1025 (uncleared area). Contacts: David Keyes, 2-1325, or Leslie Bills, 3-8927.

The deadline for the next Technical Meeting Calendar is noon, Thursday, July 5.

NEWS OF NOTE



Merced educators get a primer on Lab's missions

By Stephanie Esposito

NEWSLINE STAFF WRITER

There was a little extracurricular activity going on at the Lab last Friday, when 90 educators from the Central Valley to San Diego came to participate in the UC Merced and Merced College Education Day.

Along with the educators were state Sen. Richard J. Monteith (R-Modesto) and Assemblyman Dennis A. Cardoza (D-Merced), both supporters of a memorandum of understanding (MOU) between the Lab, UC Merced and Merced College.

The day began with an overview of the Lab's mission of national security presented by Lee Younker, associate deputy director for Science & Technology. Ben Duran, president of the Merced Community College District, and Don Correll, director of the Lab's Science & Technology Education Program, provided an update of activities associated with the MOU signed last year with LLNL, UC Merced and Merced College.

"We want to have a world-class university," Duran said of the UC system's soon to be 10th campus in Merced. "We want to create opportunities in the Central Valley so we can keep our kids in the Central Valley...we don't want them running off to other parts of the state."

"Teachers and students from the Central Valley from Tracy to Merced continue to be a large fraction of STEP'S K-12 participants," Correll said while summarizing the lab's education outreach activities.

Some of the Lab's proposed joint projects with UC Merced were also introduced to the visitors, including Lab scientist Bill Dannevik's Virtual Valley Concept.

Dannevik of the Atmospheric Sciences Division explained the concept as being a comprehensive, environmental information system.

"This has great potential to do so much for the



MARCIA JOHNSON/TID

Debbie Sater (right) demonstrates STEP's "Crystals in the Classroom" to Education Day participants, among them Assemblyman Dennis Cardoza (third from left).

Valley," Dannevik said.

According to Dannevik, by using advanced sensor systems and high-performance computers, the Virtual Valley would allow scientists to predict weather trends, seismic activity and other such hazards, and then be able to possibly predict the size of the hazard and give advanced warning. The Lab's next step in the Virtual Valley project is to design a prototype.

Another joint project discussed was the Ambient Ground Water Project. Lab researcher Bryant Hudson explained how the project is set up to investigate the quality of the public water supply, while Sarah Palmer, a teacher for Livermore High School's Advanced Placement Regional Occupational Program (ROP), explained one of the projects her class has done in relation to the Lab project.

The students were able to experiment with a groundwater model, which demonstrated how easily groundwater is contaminated, and how difficult it is to clean up and purify.

Student excitement over science-related issues,

is just one example of the goals of the Edward Teller Education Center (ETEC), another stop for the touring Merced educators.

According to Richard Freeman, chairman of the UC Davis Department of Applied Sciences (DAS) and representative for ETEC, the center wants to make programs available to teachers, with the help of LLNL research facilities and libraries, to bring hands-on, state-of-the-art science and technology equipment into the classrooms.

After all the project updates, Education Day participants were bused to DAS for lunch and a quick look around at various Fun With Science exhibits. The teachers also got up-close looks at a PATHS (Promoting Achievement Through Hands-on Science) experiment, the Lab's Geotracker Project, and a few fast-growing KDP crystals that can be used for the National Ignition Facility.

At the end of the day, all Education Day participants were treated

to a tour of three Lab research facilities: the National Atmospheric Release Advisory Center (NARAC), the KDP Crystal Growth Lab, and the Center for Accelerator Mass Spectrometry (CAMS).

NARAC employee Jim Ellis informed the group that the Lab can calculate anything that moves with the wind or the atmosphere, helping predict where chemicals from a spill, or smoke from a fire, will travel.

At CAMS, the group toured the accelerator rooms. Director John Knezovich explained how separating atoms in the accelerators enable scientists to measure carbons and do anything from dating old artifacts to interpreting how often major earthquakes happen along a fault.

The KDP Crystal Lab offered a look at both fully formed crystals and crystals still in the growing process. Ruth Hawley-Fedder and Randy Floyd described how the crystals are made and how they are used for laser projects such as NIF.

Temp employees may be eligible for service credit

Under a new provision in the UC Retirement Plan, more than 800 Lab employees have automatically received one or two years of retirement service credit for past time worked in temporary positions.

Employees who at one time worked as casual or temporary employees at the Lab and were not part of the UC Retirement Plan during that time may be eligible for the additional retirement plan service credit, said Valerie Gentry, Benefits Office group leader.

Last week, more than 15,000 UC staff employees — including 840 at the Lab — received letters regarding the UC Retirement Plan Service Credit Allocation Program. Those who received letters automatically received either one or two years of retirement plan service credit.

If you believe you may be eligible for the program but did not receive a letter, contact the Benefits Office at 2-9955.

The additional service credit increases the value of future retirement benefits for those employees who otherwise qualify to receive retirement benefits. The additional retirement service credit does not affect vacation or sick leave accrual rates, Gentry said.

The automatic allocations were based on the best available records, and it is possible that they did not identify everyone who is eligible. If you are a career employee who did not receive an automatic allocation, you may be eligible to receive an allocation upon request if you:

1. Had an active University staff appointment on

Jan. 1, 2001 (or were on an approved leave with or without pay on that date); and

2. Were an active UCRP member on Jan. 1, 2001 (or will become a UCRP member by Dec. 31, 2001); and

3. Had a period of temporary employment at UC that occurred before Jan. 1, 2001, and lasted at least six consecutive months, based on your appointment start and end dates (regardless of the hours or percentage of time worked).

To receive an allocation, your past University employment must not be exempt from this program. The deadline for allocation requests is July 31, 2002. If you think you may be eligible, see the "One-time UCRP Service Credit Allocation Program" booklet for complete eligibility requirements, forms, and instructions on requesting an allocation. The booklet is available on UCbencom (<http://www.ucop.edu/bencom/>) or from the Benefits Office.

UCRP members who received an allocation but believe they qualify for more service credit may forfeit their allocation and appeal for a correction of the service credit allocation under this program. The deadline for appeals is July 31, 2002.

Eligibility requirements and information on appealing an allocation are included in the "One-time UCRP Service Credit Allocation Program" booklet. The Benefits Office can answer questions about making an appeal and help determine if you are eligible for additional service credit.

For additional Benefits information, visit the LLNL Benefits Office Web page at www.llnl.gov/jobs/benefits.

Hartmann-Siantar to lead Glenn T. Seaborg Institute

Christine Hartmann-Siantar, principal investigator of the Peregrine Program, has been selected as director of the Glenn T. Seaborg Institute (GTSI).

As director, Hartmann-Siantar will interact with scientists and senior management within the Laboratory, university faculty, federal research and development sponsors and other national and international laboratories. She will be responsible for initiating and guiding all the research within the Institute to national prominence.

In the actinide and bio-nuclear areas, the mission of the GTSI is to develop and enhance specific competencies essential to the Department of Energy's missions in national security, energy and environment and bioscience and healthcare.

SURVEY

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Remember, you will need your password to access the survey Website. If you have lost your password or suspect you never received one, contact your directorate representative immediately. You will be issued a new password, with no questions asked.

You'll find a list of directorate contacts at http://www.llnl.gov/llnl/06news/Employee/articles/2001/06-01-survey_data.html. While there you can also check out the participation rates of the various directorates.

Congressional aides get an overview of Lab's work in environmental management

Representatives from the offices of Sen. Dianne Feinstein, Sen. Barbara Boxer and Rep. Ellen Tauscher came to the Lab last week for an overview of the Lab's Environmental Management programs and treatment facilities. From left are Ellen Raber of EPD; Chris Norem, field representative for Sen. Feinstein's office; Jennifer Field, associate field representative for Feinstein's office; Albert Lamarre, division leader for ERD; and Dannielle Lorta, congressional aide for Tauscher.

MICHAEL ANTHONY/TID



MEDAL

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and the properties of hot dense matter. These experiments were carried out on a long line of high power lasers at LLNL and, along with the subsequent work of many others, formed the foundation for the national science-based stockpile stewardship effort and contributed to DOE approval of the National Ignition Facility.

The American Physical Society has recognized Rosen's outstanding work by naming him a Fellow, Centennial Lecturer, Distinguished Lecturer in plasma physics, and recipient of its Excellence in Plasma Physics Award. He has also received the Award of Excellence from the Department of Energy and has been appointed as one of the first Teller Fellows at LLNL.

Rosen credits his colleagues at the Lab with much of his success. "I don't think I could have accomplished any of this working at a university alone," he said. "This award is a tribute to my colleagues — the talented people at the Lab who actually carry out the

experiments, and the computational people who write the codes. Without their help I would not be here."

The Teller Medal was created in honor of Director Emeritus Edward Teller, who is recognized worldwide as a pioneer in inertial fusion sciences. The award has been granted to 18 scientists from nine countries in previous years. Originally established by the conference series formerly called Laser Interaction and Related Plasma Phenomenon, the award is now under the auspices of the ANS Fusion Energy Division and will be given biannually at the international conference on Inertial Fusion Sciences and Applications.

The next conference takes place Sept 12 in Kyoto, Japan, where the awards will be presented. The conference, organized by Osaka University, the University of California and Ecole Polytechnique, will bring together about 400 scientists and engineers from all parts of the world to compare notes on the latest research in inertial fusion.

"I've never been to Japan before, so this seems like a pretty good reason to go," quipped Rosen.

Nominations for the Edward Teller Medal are widely solicited, and nominees need not be members of ANS. Twenty-two scientists were nominated for

this year's medals. The field of candidates was narrowed by a selection committee comprised of past Teller Medal winners, as well as Teller himself. The final nominations were approved by the ANS Fusion Energy Division.

Rosen's fellow recipient, Stefano Atzeni, who did much of the research for his Teller award while he was at the Frascati laboratories of ENEA (Italian National Agency for New Technologies, Energy and the Environment), is being honored because of his leading contributions to understanding and teaching the high energy density physics related to Inertial Confinement Fusion.

The American Nuclear Society is a not-for-profit, international scientific and educational organization. It was established at the National Academy of Sciences in Washington, DC in 1954 by individuals seeking to unify the professional activities within the diverse fields of nuclear science and technology. The ANS has since developed a multifarious membership of approximately 13,000 engineers, scientists, administrators, and educators representing more than 1,600 corporations, educational institutions, and government agencies.

B FACTORY

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sis. We've achieved the world's best measurements by far."

The B Factory experiment studies the decay of subatomic B mesons, a heavy and rare form of nuclear matter. By measuring the asymmetries in time distributions between the decay of B and anti-B mesons with great precision, scientists will be able to confirm or refute the currently accepted theory about quark interactions and possibly find evidence for new physics not predicted by current theory.

Cosmological models that result in a universe dominated by matter, such as ours, require the existence of a process called charge-parity, or simply "CP," violation. Only one CP violation process has ever been discovered (in the 1960s) but the theoretical mechanism invented to explain it has, until now, remained untested; and the observed effect is too small to account for the dominance of matter in our universe.

"Current theory is either incorrect, or the CP violation required by cosmology remains undetected," Wright said.

B Factory experiments consist of very sophisticated subatomic sleuthing with scientists seeking rare, often difficult to detect B meson decay events generated in the PEP-II collider and measured with the BaBar detector. Only one in 10,000 events "is an interesting B decay."

The experiment can observe CP violation in two modes, CP- and CP+. A clear and consistent signal in both modes would be an impressive dis-

covery. Of the two modes, CP+ is much more difficult to "extract from background" because other physics processes mimic the signal.

Not only has the BABAR collaboration been able to collect more data, they've also been able to improve the analysis, thanks in good measure to the work of postdoctoral physicists David Lange and Vuko Brigljevic. "Finding the CP+ events and extracting the asymmetry is very tricky," Wright said. "These guys made it happen."

All three agree that the results will only get better as the luminosity, or collision rate of the PEP-II accelerator beams, is increased. "If the luminosity of the accelerator is turned up, things will be much clearer and we may start to see evidence that will confront theory," Brigljevic said, explaining that more data not only adds to the signal, but also allows the physicists to better understand the detector and improve the analysis.

Wright adds, "We think we're onto something, not just because of our data, but data coming from our other experiments as well."

Fueling the intensity of the BaBar collaboration's effort is the work of a rival Japanese-based group, which also published its first results in the March issue of Physical Review Letters.

While the current data is insufficient to draw any definitive conclusions, preliminary results hint at a CP- violation signal. However, these tantalizing hints are not solid enough to impinge on the integrity of the theory that has been "ironclad" for the last 30 years.

"There's something wrong with this theory, but we don't know what it is," said Lange. "We may get a hint in our data, which is essentially at low energy, of new physics that should appear at

higher energies."

Wright describes the B Factory experiment as a "project that bridges the gap until the next generation of accelerators, such as the Large Hadron Collider and Next Linear Collider, that can explore directly the physics at higher energies."

"Our results are very promising," he said. "If everything goes as well as we hope, we should be able to make a definitive measurement within a few years."



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