

'Science and technology capability underpins our Laboratory goal of being the premier national security science laboratory.'



Meeting MaRIE

by Todd Hanson

Laboratory Director Michael Anastasio last week unveiled to Laboratory employees plans for MaRIE, a proposed signature experimental facility at the Los Alamos Neutron Science Center. MaRIE stands for "Matter-Radiation Interactions in Extremes" and alludes to Madam Marie Curie.

In a presentation at the Physics Building Auditorium and for employees watching on LABNET, Anastasio shared the stage with Terry Wallace, principal associate director for Science, Technology, and Engineering and John Sarrao, Materials Physics and Applications (MPA) Division leader, in a discussion of how Laboratory capabilities and opportunities coalesced during the institutional planning for the signature science facility and what MaRIE

Laboratory Director Michael Anastasio, left, and Principal Associate Director for Science, Technology, and Engineering Terry Wallace talk to Laboratory employees about MaRIE during a presentation last week. MaRIE, an acronym for "Matter-Radiation Interactions in Extremes," would coalesce Laboratory capabilities and opportunities into a potential new Signature Science Facility. Key criteria for selecting a particular signature experimental facility for the Laboratory was its ability to support the investigation of a broad range of scientific questions relevant to the Laboratory's core mission, yet be flexible enough to accommodate future scientific needs.

Photo by LeRoy N. Sanchez, Records Management/Media Services and Operations

might become. Sarrao will serve as the "capture manager" for MaRIE.

Anastasio began the meeting by stating, "Science and technology capability underpins our Laboratory goal of being the premier national security science laboratory" and noting that Los Alamos must be prepared for what the country wants us to do in terms of national security science.

"The question is," Anastasio continued, "how do you create a broad-based scientific capability to serve national security far into the future?"

To answer that question, Anastasio described some of the intellectual work that went into evaluating a number of concepts for potential signature experimental facilities.

Anastasio summarized key selection criteria:

- The facility would support the investigation of a broad range of scientific questions relevant to the Laboratory's core mission, and yet be flexible enough to accommodate future scientific needs.
- It would need to serve as a magnet to attract students, post-docs, collaborators, and visitors and possess the ability to become a symbol of the Laboratory's commitment to developing and applying the best science to national security needs.
- The new facility would be used to deliver significant science and push the limits of science, while building upon the Laboratory's experience and strengths in experimental science, theory, and modeling.
- It also would support what Anastasio called translational research, or work that ranges from concept to scientific product.

In all respects, MaRIE met all these criteria, he said.

Building upon Anastasio's foundation, Wallace provided more specifics about the process. Wallace originally rolled out the idea for a signature research facility in March. The role of such a facility, according to Wallace, would be to provide tools that allow the Laboratory to address the critical scientific questions relevant to current and future Laboratory missions.

After a Grand Challenges workshop yielded 24 pre-proposals, an independent panel comprised of Laboratory Fellows, members of the Science Council, and associate directors selected four leading proposals in the areas of astro-informatics, materials, L-PARC, and biosecurity. These proposals were sent to experts inside and

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NewsLetter

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Fourteen-mile-per-hour speed-limit signs were installed to remind drivers to slow down before entering Potrillo Drive from the Technical Area 36 access road. Photo by James Bland, Health Physics Measurements

Safety improvements for TA-36 completed

by Caryn Johansen

A roadway intersection at Technical Area 36 is safer thanks to three new safety improvements recently completed. Speed limit signs and a stop sign were erected and lines were painted on an access road.

Motorists were driving on Potrillo Drive at an excessive speed. Cars were pulling onto Potrillo Drive from the access road at TA-36 without stopping. To remind drivers to slow down before entering Potrillo Drive from the access road, fourteen-mile-per-hour speed limit signs were installed, said James Bland of Health Physics Measurements (RP-2).

The stop sign was added to ensure the safety of drivers coming from behind Building 0001 around a blind curve, Bland explained. Because no stop sign was at the access road and Potrillo Drive intersection, people would pull onto Potrillo Drive without stopping, which led to a near miss between two vehicles, he said.

In addition to the blind curve and the lack of a stop sign, the road leading out of the building complex had no lane lines. This was a serious hazard for Lab employees, Bland said.

Safety and security can be achieved only through employees taking personal responsibility and getting involved, Bland noted. He applauded employees of the Radiation Instrumentation and Calibration team at TA-36 for raising the issue to the Worker Safety and Security team in the Environment, Safety, Health and Quality Directorate and working to make safety improvements.

Bland added that another pedestrian safety improvement effort through the Worker Safety and Security Team is under way at TA-53.

UC President Dynes plans to step down next year

University of California President Robert Dynes plans to step down as president by June 2008. Dynes was named UC's 18th president in October 2003.

The University of California operated the Laboratory since its Manhattan Project inception in 1943 through May 31, 2006.

Since June 1, 2006, UC has been part of the management and operations contractor known as Los Alamos National Security, LLC, which now operates the Lab.

"I depart knowing that the university, at its core, remains strong," Dynes said. "And that is because of the dedication, hard work and vision of its faculty, staff and students. They represent the foundation on which this great university has been built, and for that I express my heartfelt thanks to our entire community."

"I extend that same gratitude to the Board of Regents for honoring me with the privilege of this experience, as well as to my leadership team—from Provost Wyatt R. Hume and Executive Vice President Bruce Darling, who have worked beside me for several years, to Executive Vice President Katherine Lapp, who has only recently joined the university. They all deserve credit for helping to steer this great university. They will provide UC with a strong and stable transition to a new president."

"It has been a distinct privilege to know and work with Robert Dynes," said Board of Regents Chairman Richard Blum. "During his time of leadership, the UC community has continued the journey to an even better university. Initiatives have been launched to begin addressing critical problems in the areas of diversity, K-12 educational disparity, and salary gaps. And we have laid the groundwork for the restructuring of the university's administrative infrastructure to create a more effective and efficient organization."

Provost and Executive Vice President Hume will act as the university's chief operating officer, in addition to his other academic and health affairs duties. This appointment is effective immediately and will continue until a new president is named.

Over the remaining months of his presidency, Dynes indicated that he would devote himself to advancing a number of strategic university priorities. They include continuing to advance the university's research, development, and delivery portfolio in partnership with industry, and expanding UC's international presence through strategic partnerships with peer institutions in China, India, Mexico, and Canada.

More information is in a UC news release at <http://www.universityofcalifornia.edu/dynes/pressrelease.html> online.



Robert Dynes

Meeting maRIE ...

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outside the Laboratory for review. What emerged was a plan for a facility that would be used to explore material properties far into the future.

"This is a decade-long challenge for us," said Wallace. "This is going to be a lot of hard work. Not only do we have to internally agree on what this thing is, but we have to be behind this."

Noting that MaRIE fits Los Alamos's existing international security mission, Wallace said, "It's right for the Laboratory because it builds on our existing strengths. The time is right. We have opportunities from the standpoint of what the nation needs."

MaRIE

Acknowledging that MaRIE still is in the planning stages, Sarrao provided more



John Sarrao, Materials Physics and Applications Division leader and "capture manager" for MaRIE, provides some details about the proposed facility during last week's all-employee meeting. Photo by LeRoy N. Sanchez, Records Management/Media Services and Operations

details about the facility to be built adjacent to LANSCE sometime in the future.

MaRIE will be designed to deliver what Sarrao called, "game changing advances in national security, energy security, and discovery science" by exploiting radiation-matter interactions in such areas as

- studies of self-healing radiation damage resistance
- research toward harvesting solar photons at quantum efficiency
- predictive design of novel multi-functional sensor platforms. MaRIE also might provide unique multi-scale for dynamic imaging capabilities.

To do its work, MaRIE will be designed to create and exploit extreme radiation fluxes. This would be part of an effort to accelerate discovery science and its translation to practical application under what the MaRIE team has dubbed the rubric of "M4—Making, Measuring, Modeling Materials."

Next steps

The next few steps in MaRIE's development will be to engage the entire Laboratory science community in developing science content for MaRIE through both internal and external scoping workshops to be held this fall. The internal scoping workshops will help elaborate on science drivers for future missions. The external scoping workshops will help engage international community to refine national needs and validate the unique value of MaRIE capabilities along with seeking to define user community needs and opportunities.

By year's end, the MaRIE team hopes to hold two facility definition workshops that will define facility specifics inspired by science drivers, develop integrated user interface and governance models, and create a facility advisory board for each principal MaRIE facility.

Los Alamos NewsLetter

The Los Alamos Newsletter, the Laboratory bi-weekly publication for employees and retirees, is published by the Communications Office in Communications and Government Affairs (CGA). The staff is located at 135 B Central Park Square and can be reached by e-mail at newsbulletin@lanl.gov, by fax at 5-3910, by regular Lab mail at Mail Stop C177 or by calling the individual telephone numbers listed below. For change of address, call 7-3565. To adjust the number of copies received, call the mailroom at 7-4166.

Editor:
Jacqueline Paris-Chitanvis, 5-7779

Associate editor:
Steve Sandoval, 5-9206

Production editor:
Denise Bjarke, 7-3565

Graphic designer:
Edwin Vigil, 5-9205

Los Alamos National Laboratory is a multidisciplinary research institution engaged in strategic science on behalf of national security. The Laboratory is operated by a team composed of Bechtel National, the University of California, BWX Technologies and Washington Group International for the Department of Energy's National Nuclear Security Administration.

Los Alamos enhances national security by ensuring the safety and reliability of the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction, and solving problems related to energy, environment, infrastructure, health and global security concerns.



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Preserving the Lab's history

Historic Tapa Room relocated to National Security Sciences Building

by Cynthia Casados

The Tapa Conference Room has a new home. Originally located in the Administration Building, its historical artifacts are now in Room 2415 of the National Security Sciences Building.

The Tapa Room is adorned with artifacts from the age of atmospheric testing. Robert Brownlee of the former Field Testing (J) Division started the tradition of bringing back tapas, decorative bark cloths, from the testing locations. Several other artifacts also are represented in the room, such as formal portraits of the leaders of J Division, a model of a diagnostic airplane, and a sign from Operation CASTLE. The Operation CASTLE sign represents the fun and excitement of the nation's first major thermonuclear test series.

"Many of the artifacts, such as the tapas and the CASTLE sign are unique. Together these artifacts represent a unique era in history. The nation relied on J Division and its legendary leaders to meet the unprecedented challenges of the Cold War," said Alan Carr, Laboratory historian in Laboratory archives (IRM-RMMSO).

For decades, the former Field Testing Division was involved in nuclear weapons development. J Division conducted hundreds of nuclear weapons tests over nearly half a century at the Nevada Test site and in the Pacific.

"Though nuclear testing is but a memory, the spirit, mission, and achievement of that era is preserved in the Tapa Room," says Carr.

The Tapa Room preserves the memory of this era and also the contribution of the men and women from J Division who maintained the country's nuclear deterrent. "J Division had the highest morale of any Laboratory group. As a family [its employees] felt good



Carrying a tapa cloth are Anthony Casados, right, of KSL Services with the assistance of Randy Parks, behind pillar, of Infrastructure Planning. Photo courtesy of Ecology and Air Quality

about what they were accomplishing," said John Hopkins of the Weapons Physics Directorate (ADWP). Staff members worked and lived together building a tightly knit family and a legacy that has outlived the days of testing, he said.

The Threat Reduction (TR) Directorate had oversight of the Tapa Room when it was in the Administration Building. The respect shown by the Laboratory staff for the historic nuclear testing legacy the artifacts represent is itself a significant statement, said Carr.

The Weapons Systems Engineering (W) Division now provides oversight of the relo-

cated Tapa Conference Room.

The move of the Tapa Conference Room was funded from the Footprint Reduction Initiative as a part of the planned closure of the Administration Building.

The relocation of the Tapa Conference Room also is consistent with the Laboratory's compliance obligations to the State Historical Preservation Office recognizing the historic times in which the Administration Building served the Laboratory.

For more information, contact Randy Parks of Infrastructure Planning (IP-DO) at 5-7525 or rparks@lanl.gov by e-mail.

Reproductive Health Assistance Program available for Laboratory employees

The Laboratory's Reproductive Health Assistance Program (RHAP) helps employees become fully informed about occupational conditions that may affect their reproductive health.

RHAP can help employees who are planning a family by addressing workplace questions and decisions. RHAP assists both male and female workers make informed decisions regarding their reproductive health, said Rubén Rangel of Radiation Protection Technical Support (RP-3).

The Reproductive Health Assistance Program is an integrated process supported by Occupational Medicine (OM-DO), Health Physics Operations (RP-1), Radiation Protection Technical Support (RP-3), and Industrial Hygiene and Safety (IHS).

The process begins with an initial visit to Occupational Medicine, where information is requested. In addition to receiving reproductive-health information, employees also can formally declare a pregnancy. Once a pregnancy is formally declared, the Laboratory is required to meet federal requirements to safeguard the embryo/fetus. The RHAP process involves employee job related interviews and formal workplace evaluations to determine if any actions are necessary to protect the embryo/fetus. Declared pregnancies are tracked through the employees' termination, and they are provided a return-to-work evaluation process, said Rangel.

For more information, go to <http://int.lanl.gov/safety/radiation/rhap.shtml> online.



Fall Festival 2007
LOS ALAMOS NATIONAL LABORATORY EMPLOYEE PICNIC

**It's a festival...
and you're invited!**

Come join your Laboratory co-workers for a day of food, fun, and entertainment at the 2007 Fall Festival.

Saturday, Sept. 29
11 a.m. to 4 p.m.
Sullivan Field
(across from Los Alamos High School)

All Laboratory employees and contractors (KSL, PTLA, etc.) are invited, and each can bring up to five guests.

Planning to attend? Go online to <http://int.lanl.gov/fallfest/> for more information and to register, noting the number of guests you plan to bring. Lab organizers need this information for logistics, including ordering food.

See you there!



Los Alamos Space Science Outreach Program integrates science into New Mexico schools

by Cynthia Casados

Teaching math and science to today's students who may one day be tomorrow's scientists and researchers is important to the Laboratory's future.

Helping middle- and high-school teachers develop new and exciting ways to teach science and math while also creating an interest in the scientific research going on at the Laboratory is the goal of the Los Alamos Space Science Outreach Summer Teachers' Workshop.

"The Los Alamos Space Science Outreach Summer Teachers' Workshop is an excellent way to integrate the work done here at the Laboratory into the New Mexico school system," said Laurie Hixson of Space and Remote Sensing (ISR-2).

The recently concluded teachers' workshop included a 10-day summer institute where Laboratory staff members from Space Science and Applications (ISR-1) and Space and Remote Sensing (ISR-2) and other groups presented information about NASA-funded scientific research projects at the Laboratory.

"Great science is coming from the Laboratory," says Neoma Long, a fourth grade teacher from Rio Rancho. "It blows your mind how sophisticated these projects are. It's a lot easier to get jazzed about teaching when you know there is a future in science."

The program concludes with an additional five-day session on new methods for teaching science.

"This program really helps you stop and think about what we're actually teaching. It teaches teachers how students learn science," says Robert Watson, an eighth-grade teacher from Farmington.

Teachers designed and created space science lessons for inclusion in an online Space Science Activity Book. Long created a Microsoft PowerPoint presentation on the history of telescopes while Watson focused on the effects of gravity.

The 2007 teachers' workshop was held at the Española Middle School East campus. Nine teachers in grades 4 to 12, from all over New Mexico participated in the event.

The program is a collaborative effort between the Laboratory's Center for Space Science and Exploration, the Education and Postdoc Program Office (STB-EPDO), and technical groups at Los Alamos. Funding for the workshop comes from NASA and the Department of Energy.

For more information, contact Los Alamos's Lorenzo Gonzales at (505) 747-7883 or by e-mail at lxg@lanl.gov. Or go to <http://www.lanl.gov/education/lasso/> online.



Laboratory program helps others in need

by Caryn Johansen

Tim Martinez exudes enthusiasm and determination to make a difference in the lives of children in need around Northern New Mexico.

Martinez of the Lab's Community Programs Office (CPO) is directing that energy and enthusiasm toward a new program to collect money to buy shoes for children.

"Kids are out there who need our help. There are kids who need shoes," said Martinez. Hence, "LANL Laces," a new, year-round Laboratory employee-giving program. Donations to this year's LANL Laces program will assist students in the Santa Fe and Española public schools. Martinez hopes that eventually other school districts in Northern New Mexico can participate.

The program is designed to help children purchase shoes for the school year; the school districts are identifying children who have the greatest need for these resources. Community Programs staff, along with school personnel, will help oversee the fitting of shoes, and the Lab expects the first fittings to be done around February, said Martinez.

LANL Laces is supported by the Mervyn's and J.C. Penney stores in Santa Fe. The stores are offering a discount and will bring in additional employees to assist the students with the fittings, according to Martinez.

Laboratory employees can choose one of two methods to donate to LANL Laces:

- Mail a personal check or money order to the Cashier's Office at Mail Stop P231. Employees should indicate on the check that it is a donation to LANL Laces.
- Stop by the Cashier's Office in the basement of the Otowi Building, Room S115, to make a donation with a Visa or Mastercard, or to drop off checks. Tell the cashier that the donation is for LANL Laces. Donations to LANL Laces are tax-deductible.

Martinez has high expectations for the drive at Los Alamos. "In the past, my experience with Lab employees is that they're very giving when it comes to this type of program," he explained. "The people here are amazing."

For more information about LANL Laces and to obtain a form for tax-deduction purposes, contact Martinez at 7-2390 or timothy@lanl.gov by e-mail.



Small-business forum draws large turnout

Joyce Matthews, left, of Subcontracts talks with Holly Grounds and Nancy Holt, right, of Edgewood Aggregates, LLC, at a small-business supplier forum the Laboratory sponsored in Santa Fe. Some 150 businesses were represented at the forum, designed to provide Northern New Mexico small businesses information about upcoming opportunities to provide goods and services to the Laboratory. Inset photo: New

Mexico Congressman Tom Udall, talks with Acquisition Services Management Division Leader Kevin Chalmers, center, and Joyce Matthews of Subcontracts at the small-business supplier forum. Udall was the keynote speaker; he spoke about recent action in Congress pertaining to the Small Business Fairness in Contracting Act, which contains several provisions to assist small businesses. Photos by LeRoy N. Sanchez, Records Management/Media Services and Operations

Video Teleconferencing Pilot project under way at Research Library

Meeting need to be there, providing cost saving to Lab

by Erika Martinez

Need to absolutely, positively attend a conference but don't have money in your travel budget, or is your family counting on you being home? Video teleconferencing is one way to be at the conference without leaving the Laboratory.

According to Dave Carver of Travel (CFO-Travel), Lab employees who utilize video teleconferencing (VTC) could save the Lab an estimated average of \$1,100 per trip in travel costs. He said the Lab spends more than \$30 million on domestic travel costs a year and VTC is a viable alternative to a face-to-face meeting.

A cross-functional team of employees from the Research Library (STBPO-RL); Chief Information Officer (CIO); Chief Financial Officer (CFO-Travel); Information Systems and Technology (IST); Computing, Telecommunications, and Networking (CTN); Bioscience (B); Atmospheric, Climate, and Environmental Dynamics (EES-2); Program Management (PM-DO); Plasma Physics (P-24); Weapons Systems Engineering (W) Division; and Safeguards Science and Technology (N-1) are putting together a pilot program that will give Lab employees the chance to learn how VTC and collaborative software work and to increase their use. It also will give employees a chance to provide feedback on their experience using VTC, which will provide management with data on VTC as an alternate to travel.

"Video teleconferencing can help individuals in different ways," said Dennis Chavez of Telecommunications (CTN-4). "Not only does it save Lab divisions money because there are no recharge costs, but it also improves quality of life by allowing employees to spend more time at home, with their family, and friends, among other benefits."

He added that the team's efforts to raise awareness of VTC use also will help employees improve personal productivity and avoid injuries that may occur during travel to and from airports and meeting sites.

The pilot program will be in the new VTC room at the Research Library. According to Helen Boorman of the Research Library, the recently completed facility also offers connections to the Access Grid, which is an ensemble of resources used to support group-to-group interactions across the Internet. Both systems use the latest equipment. Large screen, state-of-the-art plasma displays enhance the VTC experience, while multiple projectors and a 25-foot-wide viewing screen provide the multimedia large-format displays, presentation, interactive and visualization environments of the Access Grid. Same-time collaborative software also is available for file sharing. The room can accommodate up to 15 people.

Other features of the VTC room include

- It is available at no cost to all Laboratory badge holders, including foreign nationals.



Laboratory employees use the video teleconferencing room at the Research Library. Photo by Michelle Mirabal, Research Library

- The room is available for training sessions, Web meetings (including file sharing), local presentations, or viewing of LABNET presentations.

The VTC room is an open Laboratory facility so it is available for unclassified meetings only.

Contact Boorman at 7-4448 to schedule a tour of the VTC facility.

To schedule a meeting to use the new VTC room, contact the VTC Team at 5-3000, or vtc@lanl.gov by e-mail. Availability of VTC rooms can be checked through Meeting Maker; choose the STBPO-AG/VTC Scheduler from the Resource drop-down in Meeting Maker. One week advance notice is required. To ensure a successful meeting, employees should provide technical contact information for each site that will participate in the meeting. Also, specify the type of meeting, VTC or AG, and any additional equipment desired for the session.

More information about video teleconferencing can be found on CTN-4's Audio and Videoconferencing Web page at <http://int.lanl.gov/orgs/ctn/ctn4/vtc/index1.shtml> including

- Frequently asked questions, http://int.lanl.gov/ctn/ctn4/vtc/vtc_faqs.shtml
- Planning a VTC, http://int.lanl.gov/orgs/ctn/ctn4/vtc/pdfs/plan_video_confer.pdf
- Using Meeting Maker to check VTC room availability, http://int.lanl.gov/ctn/ctn4/vtc/pdfs/vtc_guide%20.pdf
- Travel alternatives, <http://int.lanl.gov/orgs/ctn/ctn4/vtc/index2.shtml>.

Ride home treat from United Way of Santa Fe County

Karen Sanchez-Samora left, hands a thank you gift to Ruben Rangel, right, of Radiation Protection Technical Support at the Technical Area 3 park-and-ride bus lot as Debbi Wersonick of the Community Programs Office looks on. Sanchez-Samora and Paula Scarpellino came to the Laboratory to give out the bags—each bag had a cookie, carton of milk, thank you note, and information about United Way of Santa Fe County—as a token of thanks to Lab employees for their support of the Santa Fe United Way program. About 100 bags were given to Lab employees who ride the park-and-ride buses home. Laboratory employees have been the largest contributors to the United Way of Santa Fe County campaign for seven consecutive years. Laboratory employees pledged or donated \$165,000 to the United Way of Santa Fe County's 2006 giving campaign. The amount was matched dollar-for-dollar by Los Alamos National Security, LLC, which operates the Laboratory. The Laboratory's 2008 United Way giving campaign, "There are a Million Reasons to Give," begins September 17 and continues through October 19. Lab employees will receive campaign information at their mail stops. A campaign kick-off event is scheduled from 11 a.m. to 1 p.m., September 17 outside the National Security Sciences and Otowi buildings. A book fair with music, food, and United Way agency representatives are part of the kick-off event. Read the Daily NewsBulletin for more information about the Lab's 2008 United Way giving campaign. Photo by LeRoy N. Sanchez, Records Management/Media Services and Operations



So...what do you think?

Q: Science legends Richard Feynman and Niels Bohr were famous for their witty comments on science and science-related topics. Take for instance Feynman's quote "If you thought that science was certain—well, that is just an error on your part" or Bohr's "Prediction is very difficult, especially about the future." What is your favorite science-related quote? If you don't have a favorite, what quotable thought on science would you offer?



Anthony Salazar of Space Data Systems (ISR-3)

I don't know if it's really science or if it's really a quote, but it's what I live by: "Murphy's Law is not a question of if but a question of when."



Glen McDuff of Nuclear Counterterrorism Response (IAT-3)

One of my favorites from Harold Agnew is what he said when, after dropping "Little Boy" on Hiroshima, the plane circled around to see the mushroom cloud and all Agnew said was: "It worked, it really worked."



Michelle Thomsen of the Center for Space Science and Exploration (CSSE)

I have a good one by Mark Twain on my door: "There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact."



Gabriel Rockefeller of Computational Physics and Methods (CCS-2)

Leon Lederman's quote always makes me laugh: "Physics isn't a religion. If it were, we'd have a much easier time raising money."



Henrietta Gallegos of Advanced Nuclear Technology (N-2)

I like Wernher von Braun's quote: "Research is what I'm doing when I don't know what I'm doing."



Ruth Skoug of Space Science and Applications (ISR-1)

While I was attending a talk at a conference, an audience member said to the speaker that he did that research 20 years ago, to which the speaker replied: "It just goes to show that sometimes two years of research can save you a week in the library."

PEOPLE



2007 Laboratory Fellows Prize winners selected

By Jaclyn J. Valdez

Tom Vestrand, Scott Crooker, Dan Thoma, Juan Fernandez, and Jeff Bedell are the 2007 Laboratory Fellows Prize recipients.

Vestrand of Space Science and Applications (ISR-1) and Crooker of the National High Magnetic Field Laboratory (MPA-NHMFL) are receiving the Fellows Prize for outstanding research.

Thoma of the Lab's Institutes Office (INST-OFF) and Fernandez of Plasma Physics (P-24) will be awarded the Fellows Prize for leadership.

A new Fellows Prize recognizing exceptional performance in the area of nonproliferation and national security was awarded to Bedell, of International Research, Analysis and Technical Development (IAT-1).

"These individuals embody the excellence in scientific research and leadership essential to the Laboratory's success; their contributions are indispensable to accomplishing our mission," Laboratory Director Michael Anastasio said in an all-employee memo.

Laboratory employees nominate staff members for the Fellows' Prize. A committee of Lab Fellows reviews the nominations and makes recommendations to the director.

Fellows' Prize winners will be recognized at an awards ceremony in mid September in the Physics Building Auditorium hosted by Anastasio.

Outstanding research

Vestrand joined the Laboratory in 1999. Since then, he has become the principal investigator and architect for the Thinking Telescopes Project and the RAPTOR (Rapid Telescopes for Optical Response) robotic telescopes. His work has a significant impact on the Laboratory's pro-

grammatic missions and has helped position the Laboratory to make important contributions to national needs.



Tom Vestrand



Scott Crooker

Crooker has been on the scientific magnet lab staff since 2000. Some of Crooker's work has been recognized with highly cited articles in *Nature*, *Science*, and *Physical Review Letters*, as well as with invited and plenary talks at the American Physical Society's annual meetings, the Gordon Conference,

and several other national and international seminars.

The Fellows' Prize for outstanding research in science or engineering recognizes individuals for outstanding research performed at the Laboratory that was published within the last 10 years and that has had significant impact on its discipline or program.

Leadership

Thoma joined the Laboratory as a Postdoctoral Fellow in 1992 in the Materials Science and Technology (MST) Division. By 1997 Thoma was both a team and project leader and active with the national materials community through several professional societies. Thoma's support for the Minerals, Metals and Materials Society (TMS) was recognized with the TMS Distinguished Service Award.



Dan Thoma



Juan Fernandez

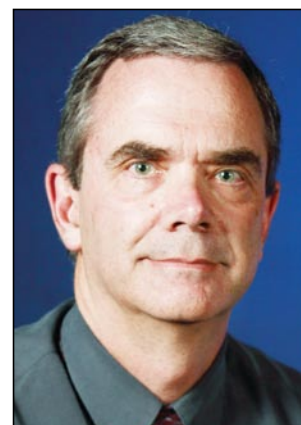
Fernandez began his career at the Lab in the former Controlled Thermonuclear Research Division in 1985. The group achieved international recognition for developing the concept of magnetic injection. He later joined Physics (P) Division where he gained worldwide recognition

for his expertise in laser-plasma instability physics. For the past five years, Fernandez has led P Division's short pulse laser project.

This Fellows' Prize is awarded for outstanding leadership in science or engineering and to recognize the immense value of leadership in science and engineering at the Laboratory.

Nonproliferation and national security

Bedell came to Los Alamos in 1998. He is senior project leader for nuclear export control, international safeguards policy program, related nuclear proliferation assessments and studies. He also serves as lead technical adviser to the Department of Energy and State Department delegations to the Zangger Committee and the Nuclear Suppliers Group.



Jeff Bedell

In Memoriam

Cletis Land

Laboratory retiree Cletis Land died May 26. He was 72.

Land joined the Laboratory in 1957 as a staff member in the former CME Division and retired in 1995 while in the former Nuclear Materials Technology (NMT) Division.

He received a bachelor's degree in metallurgy from the University of Arizona and a master's degree from the University of California, Berkeley.

Land is survived by his daughter Jenny and granddaughter Abby of Gainesville, Fla.; his brother Leo of Yuma, Ariz.; partner, Nancy Spring; and several nieces and a nephew.



August service anniversaries



Devon Engleman

Engleman completes Weapons Intern Program

by Caryn Johansen

Devon Engleman of Quality Performance (MQ-2) became the first Los Alamos employee to attend the prestigious Weapons Intern Program (WIP) at Sandia National Laboratories.

Engleman graduated from the course July 26 with fifteen other participants from around the nuclear weapons complex and the Department of Defense.

"This class was a great opportunity, and I want to thank all the people who helped me during the program," said Engleman. "I am extremely honored to be the first representative and graduate from [the Laboratory]."

The Weapons Intern Program, created in 1998, is a ten-month program designed to pass critical knowledge from retiring scientists to the next generation, to acquire a broad range of nuclear weapon knowledge, and to provide knowledge and exposure to the stockpile stewardship mission.

"Sandia established this program because of the importance of transferring knowledge to the future stewards of the nuclear weapons program," said Richard Castro of Applied Engineering and Technology (AET-DO).

The 2006-2007 program from which Engleman graduated was the first time WIP was open to Laboratory employees. Other participants were from Sandia National Laboratories, the United States Air Force, Honeywell/Kansas City Plant, the National Nuclear Security Administration, and the Defense Threat Reduction Agency.

"It's unique, it's competitive, it's a success that someone from the Lab has completed the course," said Castro.

The program includes presentations, site visits, homework and a final project. Participants must relocate to Sandia National Laboratories in Albuquerque and have their divisions support them for ten months.

Engleman, who was sponsored by the Laboratory's Pit Manufacturing Program, moved his family to Albuquerque.

"It has to be your job assignment," said Castro. "It's a school."

The next program begins in October, and interested individuals are encouraged to apply.

For more information, contact Castro at 7-5191 or rcastro@lanl.gov by e-mail.

40 years
John McAfee, DE-6

35 years
Ross Garcia Jr., PP-SRTR
M. Evelyn Lucero, IRM-RMMSO
Michael Lynch, AOT-RFE
Daniel Steinberg, ADE

30 years
Deborah Clark, P-25
Stephen Foltny, MPA-STC
Alexander Gancarz, CAO-SA
Samuel Gonzales, HPC-2
William Hulst, MST-6
John Ireland, SPO-CNP
Harvey Rose, T-13
Walter Sandoval, MST-6
Milton Shaw, T-14

25 years
Billy Baker, MQ-3
Bruce Carlsten, ISR-6
Dennis Finney, CM-CMGRS
Carl Geisik, IHS-IP
Kevin Jones, AOT-DO
Paul Littleton, WT-7
Dean Preston, P-22
Robert Roussel-Dupre, EES-2
Cora Roybal, C-DO
Earl Salazar, CFO-2
David Trujillo, WT-DO

20 years
Ernest Aragon Jr., PF-DS
Francisco Bailon, MQ-1
George Busch, C-ADI
Phillip Devargas, OS-PT
June Dukowicz, CPO-OFF
Randall Edwards, MST-6
Dino Farfan, PF-TDI
Jessica Fernandez, CTN-3
Danny Gallant, PMT-4
Richard Gonzales, CFO-GA
David Hayden, W-5
William Heimbach, CGA-GAO
Jacqueline Hurshman, CFO-3
Michael Macinnes, X-2-N2
Susie Marquez, ADWE
Roberta Martinez, CFO-3
Randy Michelsen, DHS
Daniel Naranjo, WT-3
Joyce Ortega-Tapia, CS-PCS-4
Timothy Pierce, DE-9
Timothy Pollat, PF-DO
Margarita Salazar, IST-APPS1
Clyde Sanchez, CFO-3
Stephen Schreiber, PMT-DO
Philip Stephens, CM-DO
Ronnie Trujillo, MSS-MCFO
Robert Webster, X-3

15 years
Michael Altherr, B-7
Alan Bond, WCM-1
Gregory Cunningham, ISR-1
Raymond Flesner, HX-3

Claire Harmon, SAFE-MCAS4
Karen Hill, B-7
Brenda Kelley, CS-OCS-1
Michelle Kirsch, CAO-DS
Cynthia Mahan, C-DO
Michael Mallett, RP-2
Emily Martinez, OM-OMO
Manuel Martinez, IRM-RMMSO
Mona Mosier, IAT-1
Judith Mourant, B-9
Adan Ortega, IHS-OS
Diane Otero-Bell, SAFE-MCAS4
David Padilla, MSS-UI
Paige Pardington, B-7
Donald Sandoval, X-4-NS1
Vickie Saye, WT-DO
Dan Thoma, INST-OFF
Maxine Valdez, RP-2
Nancy Vaughn, CFO-2
Richard Wight, IST-IS11
Carolyn Zerkle, ADNHOO
Theresa Zhangwilliams, CFO-2

10 years
Janelle Armendariz, SEC-DSS9
Donna Baker, D-6
Doris Bryant, IST-APPS1
Loren Byers, IAT-1
Michael Calhoun, IST-APPS3
Leisa Davenhall, C-CSE
Christina De La Torre, CTN-3
Patricia Dickerson, MST-6
Timothy Germann, X-1-SMMP
Ronald Herrera, IST-APPS1
Elaine Hickman, WCM-3
Mark Hoverson, HX-3
Rashi Iyer, B-7
Marcelo Jaime, MPA-NHMFL
Brenda Joyce, IST-APPS1
Gerard Jungman, T-6
Adam Kuiper, W-11
Denise Lopez, CTN-4
Evangeline Martinez, ISR-DO
Ferenc Mezei, LANSCE-LC
Ryszard Michalczyk, B-8
Robert O'Day, IST-APPS1
Shenel Pacheco, CFO-3
Shane Perkins, HX-3
Craig Rasmussen, CCS-1
David Smith, SEC-SIS2
Joe Strotman, IAT-2
Darla Thompson, DE-1
Michael Torrez, MPA-10
Ella Twary, IHS-OS
John Valdez, AET-5
Gregory Van Tuyle, DHS
Dianne Wilburn, ENV-EAQ
Erica Wissinger, DE-1

5 years
Gerald Arellano, WCM-1
Jesus Arellano, HX-3
Walter Barkley, AET-2
Eric Bauer, MPA-10
Christopher Binns, CAO-PMCI
Daniel Borrego, TA55-OS
Noah Buck, MSS-MSE

Christopher Casillas, CTN-2
Phillip Chacon, AOT-IC
Hee Chang, N-4
Anu Chaudhary, B-7
Carolyn Connor, HPC-5
Beverly Crawford, EES-12
Terry Creque, IT
Charles Criswell, TA21
Jacob Edkin, CTN-4
Mark Fitzgerald, QA-OA
Bo Folks, MST-6
Alexander Friedland, T-8
Dawn Goodman, CFO-3
Anne Hallman, RP-3
Brian Hollander, P-25
Raymond Kellow Jr., WCM-2
Tim Kelton, IST-APPS1
David Kimball, B-9
Robert Kroutil, B-7
Eli Lattin, TA55-OS
Kenneth Leivo, HR-B
Louie Leyba, PF-DS
Cornelio Lopez Jr., W-6
Cynthia Lovato-Farmer, LC-ELB
Rodina Lucero, PF-MS
Clay Macomber, MPA-MC
Pamela Martinez, IAT-2
John Martinez, PF-DS
Kristina Mckeown, PF-DS
Jason Medina, P-25
Gavin Mier, EA-AUDITS
Adam Montoya, P-22
Andrew Montoya, P-23
Robert Morgan, CTN-1
James Naranjo, N-2
Jon Nelson, SB-PF
Arthur Nichols III, CTN-4
Larry Nunn, IAT-3
Shelley Olguin, CTN-4
Dennis Ortiz, AOT-OPS
Steven Pearson, ERSS-RS
Meghan Quist, HPC-5
Joseph Reichert, WCM-1
William Robertson, WCM-1
Donald Roeder, PF-DS
Benny Rose, PMT-5
Charlotte Rowe, EES-11
Luce Salas, SEC-SIS2
David Satterwhite, SB-PG
Didier Saumon, X-1-SMMP
David Sayre, X-DO
Scott Semanision, AOT-OPS
Robert Shoup, D-6
Michael Sullivan, HR-SCIENG
David Taylor, IST-APPS1
Leroy Towles, PF-DS
Therese Trujillo, RP-3
Marcus Unzueta, AET-3
Algis Urbaitis, P-21
Aaron Vigil, MC-PC
David Waschezyn, PF-TDI
James Witt, AOT-MDE
James Young, SEC-SA5
Aleksander Zubelewicz, T-3

Luiz Jacobsohn of MST-8 celebrated his five-year anniversary in June.

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A soldier returns from Iraq

Lab employee says life is a gift of time

by Erika L. Martinez

Imagine being in a foreign country where destruction is a constant, death is everywhere, and fear is unavoidable. Returning to the comforts of home is something that, after awhile, may seem more like a dream than a reality.

Most Americans know that living in a free country has a price. Headlines about the war in Iraq in newspapers and broadcast media reports provide daily reminders of the dangers U.S. soldiers face. These reports routinely give the names and show the faces of soldiers who paid the ultimate price with their lives.

Amid the death and destruction, however, are rays of hope: American soldiers returning home to warm welcomes from family and friends. Tod Caldwell of Condensed Matter and Thermal Physics (MPA-10) was one such soldier. Deployed in Iraq, he recently returned home safely, giving his family, his fellow Americans, and himself one more life to rest easy about.

"I felt relief when I landed on American soil, in terms of stress, security, and personal safety," said Caldwell. "The best part about returning home was seeing and being with my family."

Caldwell was deployed for a 45-day train-up in the states before heading to Iraq for a year. There he served as a military



Photo by Sandra Valdez, Records Management/Media Services and Operations

Wall at TA-18 honors fallen soldiers

Nearly 3,700 United States military personnel have lost their lives in the Iraqi war. To honor their memory, protective force personnel from Protection Technology Los Alamos created a wall dedicated to the fallen soldiers.

The wall is inside Station 211 at Technical Area 18.

"The guards on the swing shift mostly came up with the idea, and we also got inspired by a similar wall that is on display in Angel Fire," Donald Kain of PTLA said.

Both pictures and names of all soldiers who have died during the war are on the wall. According to Kain, the names and pictures of the soldiers are obtained from a once-a-month magazine called AirForce Times. The wall also includes articles from the Albuquerque Journal about soldiers from New Mexico that were killed in the war.

"These soldiers sacrificed everything they had in the name of freedom and protection against terrorism," Kain said. "We want people never to forget them and to keep their memories alive."

advisor to the Iraqi Army in Al-Anbar province for eight months and was with the Iraqi National Police in Baghdad for four months.

During Caldwell's time in Iraq, he was awarded the Bronze Star and a Combat Action Badge.

"The main effort I was involved in was to revitalize and rebuild an Iraqi military that could counter both internal and external threats," Caldwell said. "This, in my opinion, is the appropriate mission for the military, one that can be accomplished and has a direct impact on the Iraqi people."

"The most difficult issues to deal with were adapting to the culture, enduring long, hard work days and combat in general," Caldwell said.

For some Americans, the war in Iraq has become just another part of everyday life, and even more so for Iraqis, he noted. "Watching and reading the news, I think the American public has become desensitized to [the war]. Essentially, the public has been overexposed by the coverage, the length of the war, the entertainment industry, and the political overtones that it represents," explained Caldwell.

"Most of the misconception is seeded by not having a direct tie to service members or the war. Most of the burden of this war is on the soldiers/marines/sailors/airmen and their families and employers [in the case of Reserve and National Guard members]," he added.

Though difficult, Caldwell said he took time to appreciate certain aspects of his deployment to Iraq. He said he enjoyed gaining insight into the Iraqi military and people. Learning how to work within a military system in a foreign country also was something Caldwell took the time to appreciate.

Upon his happy return home, Caldwell found that he would have a bit of difficulty adjusting back into old ways. He said the



Tod Caldwell displays the Bronze Star he received while in Iraq for showing "personal courage by securing the area first, direct[ing] the evacuation of casualties, and remain[ing] on-site to ensure cleanup and investigation of the hostile location" following an attack on a combat patrol he was in. For more information on Caldwell, see an article by Karen Kippen in MPA Material Matters available at <http://www.lanl.gov/orgs/mpa/materialmatters.shtml>. Photo by Karen Kippen, Communication Arts and Services

sense of time was one of the hardest things to get used to after he came back home.

"It [time] is different both in Arabic culture and in a combat environment. Time is not divided but rather flows like water in Arabic culture. However, in a combat environment, you become so focused on the present, that your attention span is about ten seconds, but with an intense or heightened awareness," Caldwell said.

"Another difficulty I had was adjusting to or considering situations in which the family or my work colleagues have not had me present and have adapted their own approaches," he shared.

Although Caldwell initially had difficulties, he is very happy to be home. "I feel good," he said. "I returned alive with a 'different' perspective on life. I am more appreciative of what I have and that life is a gift of time."

The Lab currently has three soldiers on military leave and three others who were on military leave earlier in the year. Currently, at least 45 military reservists work at the Laboratory.

Military mom packages support for U.S. soldiers in Iraq

Josephine Torres's 19-year old son, Marvin, recently returned from military duty in Iraq. Yet, his being home hasn't diminished her support for American troops still stationed there. And she wants them to know it.

For the past five months, Torres of Space Science and Applications (ISR-1) has led an effort to send care packages to soldiers in Iraq, thanks to monetary and material donations.

"I contacted one of Marvin's commanders, Captain Muder, who also was stationed in Iraq, and requested a list of all the soldiers in his unit and a letter from him stating I was a member of the Family Readiness Group," said Torres.

She described the organization as consisting of family members who support American troops by sending care packages and letters to soldiers, from family members, school children, and other supporters.

"After I received the letter, I wrote one of my own requesting donations for care packages to send to our soldiers serving in Iraq," Torres said. "As I distributed these letters, I started receiving help from family, friends, banks, shopping centers, and so forth."

Torres also organized a motorcycle run last June, which raised \$810. The money was enough to complete sending 160 care packages to Iraq.

Torres said her son was the inspiration for the care-package project. "My love and support for my son is always and forever. He is my hero, and I love him with all my heart," she explained, adding that her son will be home for 18 days and then returns to Taji, Iraq, in early September.

To make a donation, contact Torres at 6-0938 or (505) 692-5494, or jost@lanl.gov by e-mail. Donations may include monies for shipping and purchasing items or just useful items such as toothpaste/toothbrushes, sunscreen, foot powder, insect repellent, lip balm, jerky, energy bars, gum, candy, trail mix, socks, bandanas, soap bars, wipes, etc. Torres also is collecting supplies to send care packages to soldiers outside her son's unit.

"I continue to submit letters and e-mails for donations," said Torres. "I want everyone to know that our U. S. soldiers need our help. They sacrifice so unselfishly every day."