

volume 4 number 5

the laboratory connection

your community's link
to information, opportunities, and people
at Los Alamos National Laboratory

june/july 2003

a
word
from

the Community Relations Office

A Message from Interim Lab Director Pete Nanos



As our stakeholders and neighbors, you have undoubtedly heard that the Secretary of Energy has decided to call for competitive bids to run the Laboratory when the University of

California's present contract runs out in September of 2005. While there is an element of uncertainty in this prospect, let me assure you that we are also in a period of unprecedented opportunity for the future of this institution. What that future looks like will depend on the efforts of our employees and on the support we hope to continue to receive from our friends and neighbors.

The April announcement by the Department of Energy recognized the significant improvements that have been made in our business practices because it allows the University of California to continue in its management role until the end of the contract period. In addition, by urging the University of California to compete for contract renewal, the Department is recognizing its value to the Lab's mission.

We now have an opportunity to build on our successes. We will continue to show the world that we are the premier nuclear weapons laboratory, and that our business processes,

continued on page 4

Bradbury Science Museum Exhibit Explains U.S. Weapons Program

Interactive displays offer hands-on view of stockpile stewardship

A comprehensive, interactive exhibit at the Bradbury Science Museum gives visitors a unique perspective on the Laboratory's stockpile stewardship mission, telling a top-secret story in an unclassified way.

The exhibit, which opened earlier this spring, uses films, lightboxes, hands-on activities, and a replica of a security gate, complete with badge reader, to acquaint visitors with the essential components of the stewardship program and to attempt to define and answer its central questions.

"In other museum exhibits, we told the story of the Manhattan Project and the Cold War story of the development and testing of nuclear weapons," said Museum Director John Rhoades. "But we still had to tell the story of the post-1992 era of suspended weapons

continued on page 2



The Museum's nuclear weapons exhibit features eight interactive stations examining aspects of the Lab's stockpile stewardship mission. A chain-link fence topped with barbed wire separates potentially classified topics from more general information.

Exhibit
continued from page 1

testing and the extraordinary shift in the direction of the Lab's weapons mission that resulted from it."

Stockpile stewardship carried out in the absence of nuclear testing is a demanding scientific and technical challenge involving an ongoing cycle of activities designed to ensure that the stockpile remains safe, secure, and reliable. The exhibit examines and explains a number of those activities in a manner that nontechnical people can understand.

There were numerous challenges for the exhibit designers, who had to tell the nuclear weapons story from two points of view. First, they had to find an unclassified way to explain to the public what nuclear weapons workers do. In describing stockpile science, they also had to answer some basic questions visitors have about nuclear weapons themselves: why do we still have them, how many are there,

where are they and how can we be sure they won't accidentally go off?

To accomplish this, the designers created an exhibit that functions as a metaphor for the many processes and procedures involved in nuclear weapons work, physically mounted on a realistic security fence.

At the entrance to the exhibit, which is "outside the fence," are panels that address some of the public's questions about nuclear weapons and attempt to place the Lab's mission in a global context. Interactive displays accompany the panels and are particularly appealing for students who visit the exhibit.

"We tried to find activities that would be suitable for young people, who learn by doing," Rhoades said.

One display uses a map with light features showing the spread of weapons of mass destruction across the globe, with different colored lights signifying the presence of

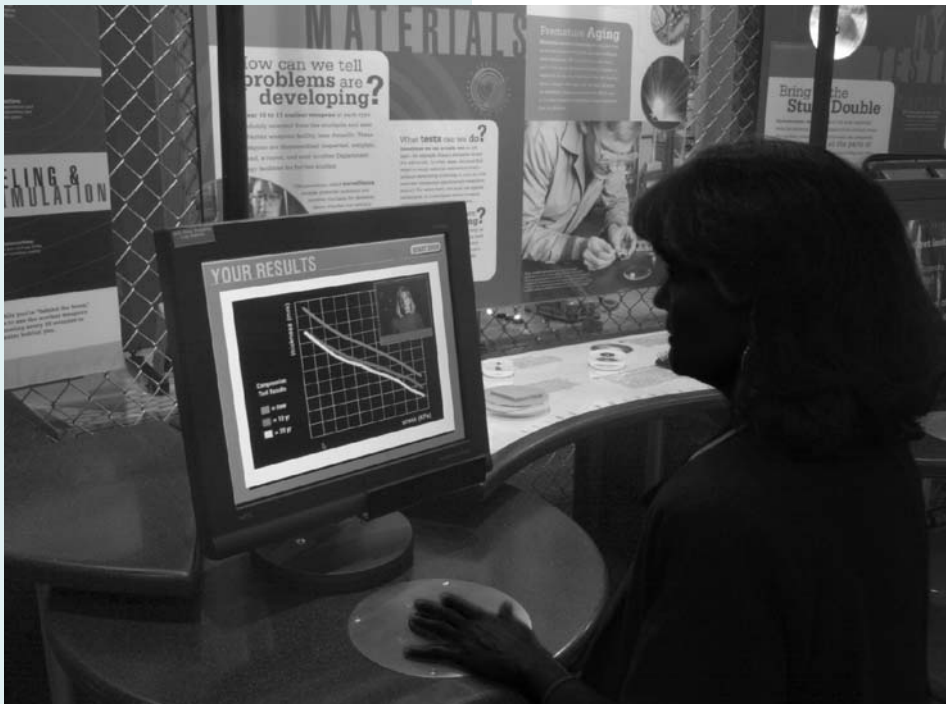
nuclear, chemical, or biological weapons. Another helps visitors understand how nuclear weapons work by showing films of the effects of past nuclear explosions, including the first tests, tests in the Pacific and high-altitude tests. Interactive controls allow viewers to slow the film down to study exactly how the explosion unfolds. A third panel examines the changing numbers in the stockpile, and the interactive exhibit shows how the weapons complex has changed dramatically over time.

Before learning about how today's scientists attempt to certify the effectiveness of aging weapons without full-scale testing, visitors first can pass through a security fence with a badge reader, just like the ones Lab employees pass through everyday to get to work. "Inside the fence," they learn about the work of a stockpile steward. More interactive stations allow visitors to test the aging of materials used in nuclear weapons, perform a subcritical test of aged plutonium at the Nevada Test Site and perform tests to understand the cycle of calculation and experimentation that allows scientists to certify the reliability of the nation's nuclear stockpile.

For visitors who are interested in the program's hardware, there are examples of weapons that are currently in the stockpile and information about their missions and the submarines, planes, and missiles that deliver them. Finally, to put the whole story together, the Museum designed and built an automated theater, which shows a 16-minute overview film on stockpile stewardship.

According to Rhoades, the entire exhibit is "the most complete

continued on page 6



A visitor views the results of simulated tests on aging foam, one component of weapons in the nuclear stockpile. The test results confirm that the foam loses resiliency over time and must be replaced to ensure the weapons' reliability.

The Austin Company's Apprenticeship Program Promotes Economic Development



Kari Chung works as an apprentice on the EOC building.

As part of its economic development initiative, the Laboratory has been partnering with its subcontractors to promote job creation, local workforce development, and education in northern New Mexico.

The Austin Company, which the Lab contracted to design and build the new Emergency Operations Center (EOC), has supported the Lab's commitment to the Northern New Mexico Economic Development Initiative by providing a unique and multifaceted economic development plan. The Lab's initiative addresses economic development in the counties of Taos, Rio Arriba, Santa Fe, Sandoval, Mora, San Miguel, and Los Alamos and at the Pueblos.

Austin's plan includes apprenticeships, training programs, and cooperative agreements with northern New Mexico high schools and colleges for work/study programs and scholarships. They coordinate with the Central and Northern New Mexico Apprenticeship Training Program.

The Austin Company's EOC apprenticeship program provides apprenticeship opportunities for qualified residents within northern New Mexico. It provides job training for young men and women entering the job market who are interested in the construction trades.

The Austin Company provided 12 training or apprentice positions through its trade

subcontractors on the EOC project. It funded a portion of the trainee/apprentices' pay from a project-dedicated educational fund, and paid all administrative costs for the program. It also worked with its subcontractors to fund the balance of the trainee/apprentices' pay. The original goal for the project was six positions, but Austin's subcontractors embraced the program, doubling the number.

One of its subcontractors, Commercial Enterprise, Inc. of Albuquerque, recruits at high school career fairs and job training centers.

"Our apprenticeship program started at Santa Fe Community College in 1996 as a residential program, then became a commercial carpentry program, which it's been since 1999," explained Chuck Cambron, Apprenticeship Coordinator and Safety Coordinator for Commercial Enterprise. "We have a contractual relationship with the Navajo Nation under the Workforce Investment Act."

Apprentices who successfully complete the Commercial Enterprise training program have the option of becoming journeymen in skills like drywall application, metal framing, and welding for the commercial carpentry business.

One of the recruits, Darnell Tsosie, 19 is from Pinedale, New Mexico. He heard about the program from his father who also works for Commercial Enterprise.

"It's a two-year program and once you've completed it, you're certified as a journeyman," Tsosie said.

Kari Chung, also 19, is from Rio Rancho. She heard about the program through some friends and was the only female apprentice on this project



Darnell Tsosie (pictured on the right) works on the EOC building as an apprentice drywaller.

"I've never done any of this work before, but I'm definitely learning a lot," she said.

"We encourage everyone who is interested in the building trades to apply," said Cambron. "We want interested young men and women who are highly motivated to enter the building trades."

David Gonzales, project foreman, said he is pleased with the Central and Northern New Mexico Apprenticeship Training Program.

"It's a really good program. I wish it had existed when I graduated from high school," he said. (Gonzales was hired locally).

The Austin Company is also offering scholarships to local students enrolled in architectural, engineering, or construction management studies and made a commitment to attend scheduled local "career days" at local high schools, Community Colleges, and Universities.

Austin has recently been awarded a new design and construction project for the Lab at TA-50 and has pledged to continue the Apprenticeship Program on this new project.

Los Alamos Officials Prefer Shelter-in-Place to Fire Evacuation

Los Alamos National Laboratory, local government and area schools say a “shelter-in-place” program may be better than mass evacuations in case of a wildfire this year.

About 25,000 people were evacuated in and around Los Alamos and the nuclear weapons lab in May 2000 after a fast-moving wildfire roared into the high mountain community. The Cerro Grande fire, which eventually charred about 43,000 acres, grew from a blaze set by a National Park Service crew hoping to burn away dense growth at nearby Bandelier National Monument. Winds whipped the so-called controlled burn into a wildfire.

Three years later, it’s a different world, officials say.

“This fire season, we do not foresee the need for a mass evacuation with the volatile fire conditions being somewhat restricted to the canyon areas,” said Phil

Taylor, Los Alamos County emergency management coordinator.

Forest areas around Los Alamos have been thinned. In addition, bark beetles have infested many surrounding areas, and if those trees burn, they will burn small, hot and fast, creating a scenario that could make mass evacuations unnecessarily dangerous.

Any fires this season are expected to be smaller—in the 200- to 300-acre range—and not last as long.

That “different kind of danger” calls for different planning and response, officials said.

A “shelter-in-place” plan would typically last only a few hours.

The Lab and Los Alamos Fire Department would move only those people directly affected by a localized fire and would typically send them somewhere nearby, but out of harm’s way,” said Gene Darling of the Laboratory’s emergency management and response group.

Most people would be asked to remain in their homes or offices, said Darling. Students would remain at their schools or would be moved to another school if necessary, and officials are asking parents to resist their natural inclination to rush out and pick up their children.

With school about to be out for the summer break, the county will also begin to work with summer programs and day-care centers about the shelter-in-place program. Those programs can then explain their fire procedures to parents.

“Again, we want residents to resist the impulse to quickly try and pick up their kids and begin evacuating,” Taylor said.

Fire Department officials said people clogging the roads trying to evacuate could delay firefighters and other emergency vehicles and put people at risk.

Message from Nanos
continued from page 1

program management, and other administrative efforts will be equal of our scientific excellence. We will ensure that our most important job—that of ensuring the reliability of the nation’s nuclear stockpile—is done to the very best of our collective abilities. Whatever the future holds, Los Alamos National Laboratory will continue to perform its vital national security mission for our nation and the world.

As we embark on this endeavor, I am heartened by the knowledge that we have strong allies in our northern New Mexico neighbors. Community leaders and other stakeholders can rely on us to keep their interests in mind as we move forward.

STB Participates in Awards Ceremony



Joe Vigil of the Laboratory’s Science and Technology Base (STB) Education Program Office explains how a piece of robotics equipment works in space as a real world application of how robotics plays a key role in our world and the science applications of robotics to students and parents attending the Española After-School Program Recognition Ceremony. About 75 students received certificates of completion for the program.

Laboratory Security in a Post-September 11-World

Although security has always been an important issue at the Lab, the tragedy of September 11th has resulted in a reevaluation of all security operations at the Laboratory, said acting Security Division Director, Scott Gibbs. One of the challenges the Lab faces is the combination of dealing with sensitive information, classified documents, classified computing, and nuclear materials, all at the same facilities – or rather - a series of facilities. “Los Alamos is somewhat unique in the variety of things it has to protect as well as the sheer distance over which they are distributed,” he said, “but we have solid, credible programs to safeguard all our materials.”

One strategy taken by the Lab has been the reduction of nuclear materials to only those necessary to perform the mission of the Lab. One ton of materials has been moved off site thus far, reducing the resources required to keep them inventoried and protected. The Lab is also looking at removing another two more tons in future years, said Gibbs.

In the area of information protection: the Lab is in charge of 7 million classified documents, 2,000 classified computers as well as 1,500 security containers and 97 “vaults” used to process and store classified materials. One step to help control these materials, Gibbs said, has been the bar coding of 65,000 documents for better inventory control. Additional efforts include end-of-day inspections to help ensure that all materials are secured on a daily basis and increased random inspections to help ensure that all mandated security procedures are being followed.

Other steps taken include increased physical security in the form of a larger and better-trained protective force, said acting deputy division leader, Kevin Leifheit. Not only has the guard force seen improvements in general overall preparedness but their equipment has also been upgraded, he said. These upgrades include new armored vehicles, portable detection equipment, explosives detection capabilities, and state-of-the-art firearms. “Our inspections by the Department of Energy and the National Nuclear Security Administration are showing solid improvement in our key physical protection programs and we are committed to building on the progress we’ve made,” he said.

Personnel and budget increases along with a reduction in what needs to be protected illustrates just some of the steps taken to safeguard employees, materials and the community. Another aspect being strengthened is facility security, including improvements to alarm systems, video detection

systems, increased patrols, infrared sensors, better lighting, and new protections being designed and built into new facilities as they are coming on line.

Less visible are the administrative controls being put in place to ensure that all hazards are considered and prioritized, said Gibbs. This also extends to access requirements to ensure that only people with the correct level of security clearance and a “need to know” have access to classified or nuclear materials, tighter controls on copying equipment in secure areas, and higher levels of inventory for all important items.

“While the security picture continues to evolve, and new technologies become available, the Lab is working to set the standard for other facilities when it comes to the protection of its national assets,” said Gibbs.



Members of the Protection Technology Los Alamos (PTLA) organization participate in regular training exercises to ensure that they're ready for any situation.

Cooperative Agreement Pueblo Governors Host Open Forum

The four Cooperative Agreement Pueblo governors held an open forum panel discussion in May to discuss the relationship between the local pueblos and the Los Alamos National Laboratory from the viewpoint of tribal government officials. Other discussion points were the University of California (UC) Contract, educational initiatives, employment, and recruitment.

The participating governors represent the four Native American pueblos that have signed Accords with the Department of Energy (DOE) and a Cooperative Agreement with the Laboratory, San Ildefonso Pueblo, Santa Clara Pueblo, Cochiti Pueblo, and Jemez Pueblo. The governors spoke about the government-to-government relationship of the pueblo nations with the Laboratory and the DOE, its past and present, and their views of the future.

The panel discussion, which was open to both Laboratory employees and the public, drew a capacity crowd.

By improving relations with the Laboratory, the four pueblo governors said they hope to improve educational and employment opportunities while creating a higher level of concern for the environment and Native American cultures.

"We need to improve relationships with the Lab and DOE," said Gov. Raymond Loretto of Jemez Pueblo. "We have issues. The environment is a big concern."

Loretto said that he wants to improve pueblo education and increase the number of degreed professionals from tribal communities working at the Lab.

Gov. Simon Suina of Cochiti Pueblo works in Security Services (S-5) and said he is encouraged by improvements between the Lab and Northern New Mexico pueblos.

"Our relationship with DOE has come a long way during the last 10 years," Suina said.

Gov. John Gonzales of San Ildefonso believes that there are opportunities to build better relations with the Lab. He complimented the relationship UC and the pueblos are building. He said he is encouraged about what he sees as a great working relationship with Interim Laboratory Director Pete Nanos.

"We can offer the federal government resources," Gonzales said. "We're seeing doors beginning to open." He said that after he graduated from Stanford University and

MIT, he had many opportunities, but he chose to come back to northern New Mexico.

All four governors said that a better relationship with the Lab and DOE would help create a better future for everyone.

"Something we instill in our youth is 'never forget where we come from,'" said Denny Gutierrez of Santa Clara Pueblo. "It's very important to keep things in perspective."

The Lab's American Indian Diversity Working Group, the Diversity Office, the Diversity Affirmative Action Board and the Tribal Relations Team in the Government Relations (GRO) office hosted the forum.



Pictured left to right are Jemez Pueblo Governor Raymond Loretto, Santa Clara Pueblo Governor Denny Gutierrez, San Ildefonso Pueblo Governor John Gonzales, and Cochiti Pueblo Governor Simon Suina

Exhibit
continued from page 2

treatment of the subject of nuclear weapons available anywhere in the country. It was a very challenging exhibit in many ways," he said. "The subject matter is very complex, and since much of it is classified, we had to walk a fine line between translating the material for the public and safeguarding classified information. We tried to include some of the theory and science and something of the awe and power of nuclear weapons."

The exhibit was prepared with the advice and assistance of scientists in the Weapons Engineering and Manufacturing and Weapons Physics Directorates.

The Bradbury Science Museum serves as a bridge between the Laboratory and the community by helping to improve science education and science literacy. It also interprets Laboratory research and promotes greater public understanding of the Lab's role in national security programs.

Newspaper Honors Two Lab Employees Who Made A Difference

In the 18 years that The New Mexican has been recognizing exemplary citizens with their "10 Who Made a Difference" awards, Lab employees have won a few. But 2002 was the first year that two Los Alamos staffers were selected.

The awards are given annually to recognize local citizens who have made significant contributions to their community with no expectation of reward or recognition. Selection of Dave Neal and Diane Albert were "easy calls," according to Bruce Krasnow, assistant city editor at The New Mexican.

Dave Neal, a team leader for the Lab's high performance computing group, isn't sure who nominated him for the award, but it's bound to be someone who cares about the Pojoaque Valley Schools. A civil engineer by training, Neal is chairman of a volunteer committee that has orchestrated the raising of \$19 million for the school system over the past five years. He and the other seven core members of the Capital Improvement Advisory Committee were among local residents at the groundbreaking for a new high school, one of the construction projects made possible by the committee's efforts.

"I'm a person who really believes that you must give back to your community," he said. "If you don't participate, you are taking advantage of the benefits."

Neal has worked at the Lab since 1984 and lives in El Rancho where his wife, Cristella Trujillo-Neal, was born and raised. After volunteering for a school board vacancy that went to another candidate, he was asked to join the all-volunteer funding committee. At that time, the school board had lost the previous three bond issue elections and knew a new approach was needed.



Dave Neal and Diane Albert are enthusiastic supporters of the Lab's community service program. The two award-winners met for the first time on the day this photo was taken.

The Committee—nicknamed the 49ers because they meet 49 Mondays a year—has put in more than 5,000 hours of volunteer time over the years. Many of the members are Lab employees and include individuals with expertise in contracting, engineering, and contract management.

"Lab employees on the committee qualify for the Lab's community service benefit, which has turned into a real benefit for the Pojoaque Valley," Neal said.

Under the Committee's guidance, three bond issues have passed since 1998.

"The most recent win was particularly significant because we did no campaigning and won by the highest margin," Neal said. "We are now in a revenue stream, and the district's taxes will never increase again. We will continue the planning process until our schools are second to none."

Diane Albert is a materials scientist by training, a Big Sister, YMCA fitness specialist and Los Alamos County Councilor. She is also an educator and the driving force behind a relatively new materials science

technician training program designed to provide a pipeline of trained workers for some of the Lab's critical programs.

Albert was nominated for the award by Santa Fe City Councilor David Pfeffer who met her in 2001 at a land use and water forum sponsored by 1,000 Friends of New Mexico.

"At the time, Diane had only been in office about a year, and I was running for the first time," he recalled. "But she was brimming with positive energy about serving in public life, and that energy really fueled me in

my campaign."

Albert encouraged her Santa Fe colleague to attend a Los Alamos County Council meeting last spring when the Council considered a resolution against the war in Iraq. The Santa Fe City Council had previously considered a similar resolution and Pfeffer was able to provide some perspective based on his experience.

"It helps to talk to other elected officials," Albert said. "There are vitally important challenges out there like improving public transportation, creating effective workforce training and technical education, and preserving access to recreational lands that are of concern to all of us. Los Alamos, Santa Fe, and Rio Arriba need to cooperate more. He built a bridge. Now we are all starting to communicate."

Pfeffer gave the credit to Albert.

"Bridge building is what Diane does," he said. "She goes outside of Los Alamos to make contacts and establish this kind of connection."

2003 Pollution-Prevention Award Winning Projects

More than 20 different Laboratory divisions and subcontractors were recognized for designing and implementing successful projects that either reduce waste generation, recycle or reuse materials, save money and time, or do all three. The 2003 Pollution Prevention Awards program showcased nearly 50 pollution-prevention projects completed either individually or by working in teams.

This program, which has existed for more than 10 years, has successfully minimized waste despite growth in the number of employees and the number of projects. Since 1993, sanitary waste generation at the Laboratory has decreased by 34 percent; low-level waste generation has decreased by 82 percent; mixed, low-level waste generation has decreased by 63 percent; and hazardous waste generation has decreased by 95 percent.

In the area of recycling and reuse, three of the Lab's facilities were demolished and about 6,200 cubic yards of concrete and 2,600 cubic yards of asphalt were crushed for reuse. In addition, about 2,100 cubic yards of metal was sold to recycling companies, and a 10,000-gallon underground storage tank and 12 utility poles were donated to the Jemez Mountain Volunteer Fire Department. More than 10,000 board feet of oak planks were salvaged for reuse and some office furniture and fixtures were donated to Habitat for Humanity.

Another Lab team in the Applied Engineering Technologies group replaced or retrofitted electrical equipment with PCB (polychlorinated biphenyls) capacitors. Disposing of the existing PCBs improved employee safety and eliminated the possibility of a spill.

Another winning project, the Otowi Energy Savings Retrofit Project, was a team effort. Its

goal was to make the Otowi Building more energy efficient. The solar water heater was reactivated to help provide hot water for the cafeteria and bathrooms. Motion sensors were installed on office lighting to automatically reduce energy demand, and variable frequency drives were installed on all large motors for heating and air conditioning because the motors don't always need to run at full power. Since the retrofit, the Otowi Building energy demand has decreased by more than 95,000 kilowatt-hours per month. This decreased energy demand has resulted in annual savings of more than \$90,000.

Honors
continued from page 7

Albert said she has broached the topic to other elected officials from the region to attend County Council meetings to encourage regional, collaborative thinking. She and Pfeffer continue to collaborate and communicate, as she has introduced him to regional and state organizations like TRADE, the New Mexico Municipal League, and got him involved with New Mexico First Town Halls.

"Another thing we have in common is that we have another life outside politics," she said. "He's an architect and I'm a technical workforce educator. We do share many values and have lots of conversations about things like how lonely it can be serving as a public official. We remind each other to always take the high road, and sometimes those conversations take place by e-mail at 3 am."

Neal and Albert have taken different paths to make their contributions, but both have clearly made their mark.

"We look for passion, people who don't just attend meetings but who work to build a community," Krasnow said. "We hope that by honoring these individuals, we will inspire others to do the same."

Santa Fe Community Days Draws Large Crowd



Laboratory employee Reyna Sandoval (right) tends to a crowd at the Santa Fe Community Days event on Saturday, May 17, on the Santa Fe Plaza. The Laboratory staffs a booth at this event annually and provides information about educational programs, employment opportunities, technological accomplishments, and ongoing projects.



Please take a few minutes to help us improve "The Laboratory Connection" newsletter by filling out the survey on the next page. Just tear out the page when you've completed it, fold it in half, and drop it in the mail. The postage is prepaid for your convenience.

Thank you!

(fold)

Nonprofit
organization
US Postage
PAID
Albuquerque, NM
Permit No. 532

Los Alamos National Laboratory
The Laboratory Connection
P.O. Box 1663, Mail Stop A117
Los Alamos, New Mexico 87545



1. How often do you read issues of "The Laboratory Connection?" (check one)

- Every issue*
 Most issues
 Few issues
 This is my first issue

2. How do you perceive the overall quality of the publication? (circle one)

Low overall quality 1 2 3 4 5 *High overall quality*

3. Do you like that the publication has themes for the issues, such as the education issue? (circle one)

Don't like it at all 1 2 3 4 5 *Like it very much*

4. What subjects would you like to read more about? (circle all that apply)

- | | | |
|----------------------------------|-------------------------------------|--|
| <i>Reasearch and development</i> | <i>Safety</i> | <i>Awards</i> |
| <i>Science education</i> | <i>Diversity/Affirmative Action</i> | <i>Services available from the Lab</i> |
| <i>Recruiting</i> | <i>Environmental issues</i> | <i>Services available in Northern NM</i> |
| <i>Laboratory facilities</i> | <i>Volunteering</i> | <i>Employee profiles</i> |
| <i>Students at the Lab</i> | <i>Waste Management</i> | <i>Bradbury Science Museum</i> |
| <i>Employment issues</i> | <i>Economic development</i> | <i>LANL Foundation/Scholarships</i> |
| | | <i>Other</i> _____ |

5. What subjects would you like to read less about? (circle all that apply)

- | | | |
|----------------------------------|-------------------------------------|--|
| <i>Reasearch and development</i> | <i>Safety</i> | <i>Awards</i> |
| <i>Science education</i> | <i>Diversity/Affirmative Action</i> | <i>Services available from the Lab</i> |
| <i>Recruiting</i> | <i>Environmental issues</i> | <i>Services available in Northern NM</i> |
| <i>Laboratory facilities</i> | <i>Volunteering</i> | <i>Employee profiles</i> |
| <i>Students at the Lab</i> | <i>Waste Management</i> | <i>Bradbury Science Museum</i> |
| <i>Employment issues</i> | <i>Economic development</i> | <i>LANL Foundation/Scholarships</i> |
| | | <i>Other</i> _____ |

6. How do you receive this issue of "The Laboratory Connection?" (check one)

- In the mail*
 Pick up copy at drop point
 Access via Internet
 Other _____

7. How satisfied are you overall with The Laboratory Connection?
 Completely
 Somewhat
 Not at all

8. Comments/suggestions (please write in)

Food Network Star discusses "Science of Good Eats"

When Alton Brown, host of the popular show "Good Eats" on Food Network, addressed a packed Physics Auditorium at the Laboratory in April he said that the place where his interests and the Lab population's overlap is in the science arena. "The kitchen is a laboratory and everything about food and cooking is science," he said. He also stressed that communicating science concepts can be difficult but when it comes to obtaining funding it's important because people won't give up money if they don't understand what you're trying to accomplish.

During the talk, Brown showed clips from his show and talked about what he does to try and get the science to his audience while at the same time keeping things entertaining. "People learn more when they

don't know you're teaching them," said Brown. He also stressed the importance of self editing to ensure that only the really important ideas are communicated to an audience. "Five points that people sorta get isn't as good a three points people really get," he said, "I'll even settle for just one point." He pointed to his own experience indicating that no one likes a "know it all" and that he wants to be perceived as friendly. If he purposely talked over people's heads they wouldn't perceive him that way, he said.

One of the television clips shown to the audience included a "love triangle" acted out by children's dolls to illustrate the reason why salt should only be added at the very end of cooking oatmeal (water is more attracted to salt than to a compo-

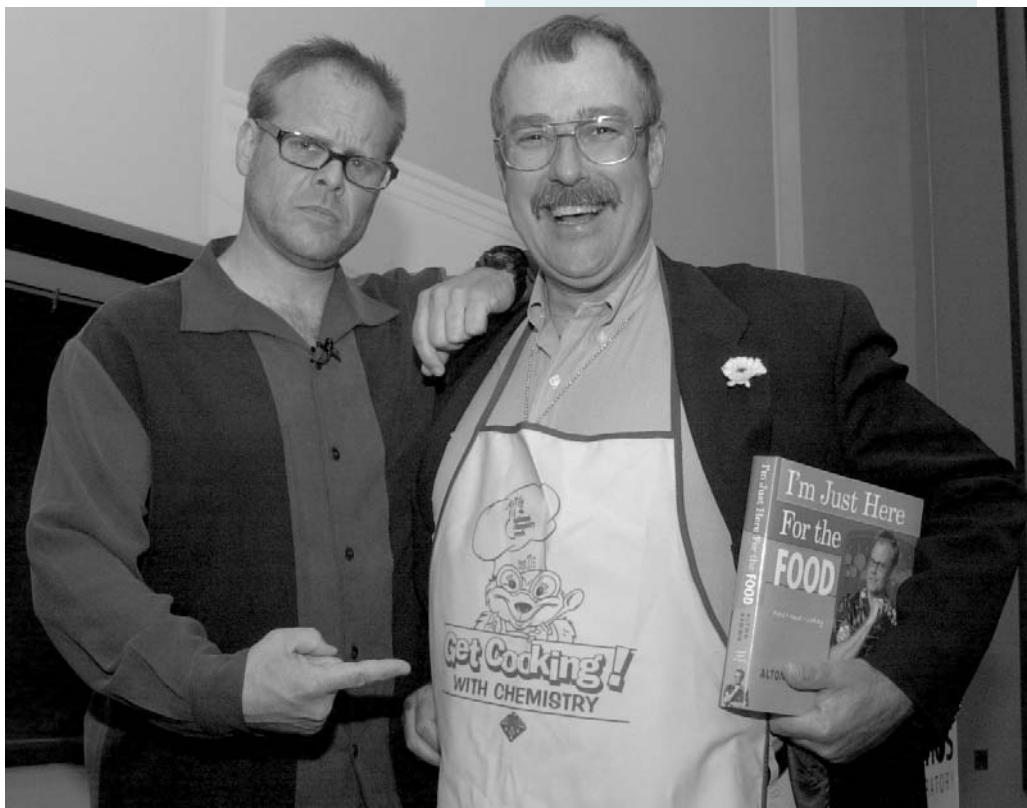
nent in the oats that needs to be released to make it creamy). Another showed how a water bath helps control temperature while making custard with a rapidly accelerating and braking remote controlled car. His comment at the end of the doll sequence: "Yes, I'm a forty-year-old man, and I play with dolls. And I'm okay with that," received laughter from the audience as did many comments and observation made during the presentation.

Brown also talked about how he frequently uses models and analogies to get his points across but tries to do it using things he can find around the house. People relate more closely with objects from their lives, he said, adding that he even goes out of his way to use toys when the ideas he's trying to convey are complicated so that the warm fuzziness of the association with the toy helps keep people's attention while he tries to get his point across.

Since his appearance at the Lab, Brown's first cookbook "I'm just here for the FOOD: Food + Heat = Cooking," received the prestigious James Beard Award in the Reference category.

Brown's Laboratory presentation was so well received that the local chapter of the American Chemical Society and the Lab's Chemistry Division are working to bring him back some time in the fall.

The talk, which was open to the public, saw its share of children and visitors who sat side by side with Lab employees to listen to Brown describe how science has taught him to be a better chef and how he communicates food science to his audience.



Alton Brown, here with Chemistry Division Leader Al Sattleberger, spoke to a full crowd at his April 9 presentation. Brown, whose cable TV show "Good Eats" has a wide following, spoke about the science involved in cooking.

1943 - 2003

Los Alamos NATIONAL LABORATORY

Ideas That Change the World



Teens enjoying refreshments at the Los Alamos Youth Center, circa 1950 (left). The Laboratory Communications group, circa 1950 (above).

Photos courtesy of Los Alamos Historical Society.

Inside

A Message from the Interim Lab Director

Museum Exhibit Explains US Weapons Program

Apprenticeship Program Promotes Economic Development

Los Alamos Officials Prefer Shelter-In-Place to Evacuation

Laboratory Security in a Post September 11 World

Cooperative Agreement Pueblo Governors Host Open Forum

Newspaper Honors Two Employees Who Made a Difference

2003 Pollution-Prevention Award Winning Projects

Brown's Science Communication to Lab Audience a Success



Los Alamos, New Mexico 87545

A National Nuclear Security Administration,
U.S. Department of Energy Laboratory
Pete Nanos, Interim Director

Nonprofit organization

US Postage

PAID

Albuquerque, NM
Permit No. 532

The Laboratory Connection, a monthly publication for northern New Mexico, is published by the Information Management Division and the Community Relations Office.

The staff can be reached by e-mail at community@lanl.gov, by telephone at 1-888-841-8256, by fax at (505) 665-4411, or by Laboratory interoffice mail at Mail Stop A117.

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the University of California for the U.S. Department of Energy under contract W-7405-ENG-36. All company names, logos, and products mentioned herein are trademarks of their respective companies. Reference to any specific company or product is not to be construed as an endorsement of said company or product by the Regents of the

University of California, the United States Government, the U.S. Department of Energy, nor any of their employees.

Editor: Vanessa A. De La Cruz Assistant Editor: Kay Roybal Designer: Kelly Parker
Community Relations Office, IM-1, and Public Affairs contributed to this publication.