Los Alamos NATIONAL LABORATORY
NewsLetter

Week of Feb. 3, 2003 Vol. 4, No. 3

A new facility to support chemistry and metallurgy research

DOE gives OK for conceptual design to begin on the CMR Replacement Project

by Denise Sessions and Meredith Coonley, from the current issue of the Actinide Research Quarterly

After a year of developing plans and defining the requirements needed in a new chemistry and metallurgy research facility, the Laboratory has been given the go-ahead to begin conceptual design of the facility.

Energy Secretary Spencer Abraham in late July signed a memorandum for Critical Decision-Zero for the replacement of the 50-year-old Chemistry and Metallurgy Research (CMR) Building, which has a planned "end of life" on or around 2010. Abraham's signing of the initial Critical Decision-Zero also authorized the Department of Energy to begin preparing an Environmental Impact Statement and to hold public meetings on the CMR Replacement (CMRR) Project.

The main focus of the new facility's design will be to ensure that Los Alamos can meet and grow with the requirements of its major client, National Nuclear Security Administration Defense Programs. The CMRR project will provide the space needed for the analytical chemistry, materials characterization and actinide research and development capabilities currently housed in the existing CMR that support the nuclear programs defined for Los Alamos in the Stockpile Stewardship and Management-Programmatic Environmental Impact Statement.

Research capabilities necessary for stockpile stewardship

The applied chemistry and metallurgical research performed at Los Alamos is crucial to the pit surveillance program, enhanced surveillance program, primary physics and manufacturing projects. These projects require high-quality chemical and metallurgical analyses of a variety of plutonium metal and alloys to ascertain the effects of age, microstructure and other potential variables on the stockpile.

Metallurgical research is performed using a wide variety of instrumentation, including electron microscopes, X-ray diffractometers, calorimeters and a multitude of surface science equipment. The equipment used in the research and development activities in the CMR Building also acts as an enhancement to equipment and activities based at the Technical Area-55 plutonium facility.

Moreover, the CMR facility houses key actinide science capabilities in analytical chemistry, processing and separations, solution chemistry and spectroscopy. These capabilities support DOE programs in defense, nonproliferation and nuclear safeguards, counterproliferation, nuclear materials technologies, basic science, environmental stewardship, medical radioisotope and technology development for waste treatment and minimization. The CMR facility also provides analytical reference standards for nationwide distribution.

The scale of studies could grow with a new facility. Because of the CMR operational limitations associated with the existing CMR aging, it has been downgraded to a Security Category 3 facility, which limits material compatibility studies. Certain areas of the new CMRR could be rated from "radiological facility" — the ability to work with up to 8.4 grams of plutonium-239 equivalents — to Security Category 1 and 2, where researchers can initiate more and larger-scale studies.

One of the current difficulties with supporting the nation's defense programs is a lack of trained personnel. DOE and NNSA officials and Los Alamos researchers hope that the new facility can be used to recruit and train actinide and nuclear workers to provide a pool of qualified candidates for defense activities throughout DOE.

Integrated nuclear planning

The CMRR Project is integrated into the science-based stockpile stewardship program and site planning activities that are seeking relocation and consolidation of nuclear facilities at Los Alamos. This integrated nuclear planning activity is aimed at reducing costs and increasing efficiency.

Because the existing CMR and PF-4 aren't adjacent to each other and are not even located at the same site, operations are not as cost efficient as possible.

Relocation of the CMRR special nuclear material facilities to the preferred site at TA-55 could potentially save up to tens of millions of dollars each year by sharing safeguards and security efforts; eliminating equipment redundancies for operations performed now at both CMR and TA-55; and even more simply, by becoming more efficient in moving samples between facilities.

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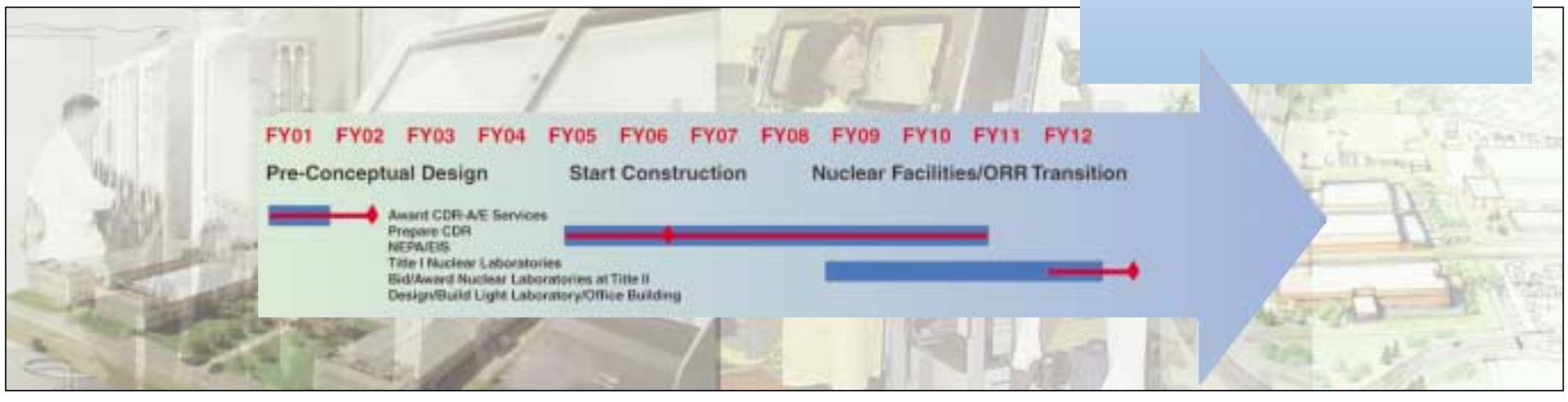

Inside this issue ...

Los Alamos NewsLetter

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Los Alamos enhances global security by ensuring safety and confidence in the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction and improving the environmental and nuclear materials legacy of the Cold War. Los Alamos' capabilities assist the nation in addressing energy, environment, infrastructure and biological security problems.

National Nuclear Security Administration

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FROM THE TOP

Meeting the challenge


Interim Laboratory Director Pete Nanos

As you read this issue of the Los Alamos NewsLetter, it has been one month since I assumed the position of interim director. There have been a lot of changes in those 30 days or so, and there will many more changes in the weeks ahead if we are to succeed in this transformation we have undertaken.

The only way we will succeed is for each and every employee to make a personal commitment to making it happen.

The science at Los sAlamos National Laboratory always has been worldclass. There is no doubt about that, no challenge to it. The reputation for scientific excellence that always has been associated with this Laboratory continues unabated. What we now must do is bring the execution of our business processes to that same level of excellence.

The challenge facing us is to do that within our existing systems. There is no magic bullet that is going to make this quick or easy. The only way we will succeed is for each and every employee to make a personal commitment to making it happen.

One laboratory

It might be easy for the technical side of the Laboratory to say, "Oh, it's not our problem. It's those business or support people. I don't have to change." If you're thinking that thought, you couldn't be more wrong.

To succeed in meeting the challenge we're facing, we have to work as a team; we're all in this together. The processes we're talking about — the processes that are broken, that have brought us a tremendous amount of unfavorable publicity and that have caused people to lose confidence in us — are the processes that everyone uses, every day. There's no scientific or technical project that doesn't order goods and services, issue contracts, record time and effort, maintain property inventories or account for travel expenditures. We're in the business of big science, and in many ways, that science is big business.

We each must redouble our efforts to ensure we are accountable. Routine business reports must take on the same level of importance as recording program milestones. Accounting for computers, cell phones and other Laboratory property must be handled with the same attention to detail we exhibit in accounting for special nuclear materials. It is all part of our stewardship of resources that belong to the American people.

Supporting the group leaders

Achieving business-process excellence will require a two-phase effort. First, we must find out what it will take to do the job with our existing business tools and systems. We need to provide support to group leaders to get the job done. That process already is under way. In late January, we asked the group leaders to give us feedback, to identify the areas in which they needed support. The members of the Senior Executive Team are looking at that feedback right now to determine how best to make the group leader's job more doable.

The next step will be to identify some of the best of the best among group leaders from across the Laboratory. They will be charged with identifying the core set of business processes we need to carry us into the 21st century. Those common business practices will be put in place across the Laboratory and will form the basis for the modules we will incorporate in the Enterprise Resource System. You'll be reading more about that system in the weeks and months ahead. It will be a major step forward for the Laboratory when it comes online, but we can't wait for it. We must move ahead now.

Communication

In my remarks at the all-employee meeting the day I became interim director, I promised you open communication. We must be open and honest about what we are doing, the problems we encounter and the efforts we are making. Everyone must be forthright in identifying problems, reporting them and getting the needed help to fix them. That includes communicating both inside and outside the Laboratory.

I hope you've seen evidence of that promise. We're trying to ensure you learn about major changes within the Laboratory from us, not from the newspapers.

I've said that I'm "on the record" in meetings with leaders and managers, and I've asked them to share information from those meetings with employees throughout the Laboratory. I hope you're seeing that increased information flow, and if you're not, ask your group leader or manager to start bringing those messages to your team.

We are all one Laboratory. We are all working together, striving for excellence. Everyone owns the problem, and everyone owns the solution. With your help and commitment, we will succeed.

Business Operations (BUS) Division restructured

by Linn Tytler

The Laboratory's Associate Director for Administration Richard Marquez and University of California Vice President for Financial Management Anne Broome have announced the immediate restructure of the Lab's Business Operations (BUS) Division.

"The University of California is soliciting consulting expertise from private-sector firms to initiate an independent evaluation of the Laboratory's key financial processes to determine business and control effectiveness," Marquez said. "However, we believe an immediate interim restructuring is required while we await the final results of that evaluation."

Marquez said that the entire Laboratory is undertaking a focused effort to ensure Lab-wide improvement in its business processes; the interim restructure will support that effort while longer-term recommendations are being developed.

"During the next four months, we will make assignments that make sense given the current urgency of corrective action," Marquez continued. "Permanent organizational assignments will not result until the independent evaluation is complete. When made, those assignments will be coordinated closely between the Laboratory and the University of California."

Marquez and Broome announced the following immediate personnel changes and structural realignment:

• **Jim Lopez**, principal deputy associate director for administration and human resources and former comptroller at Lawrence Livermore National Laboratory, who became acting deputy associate director for administration at Los Alamos on Jan. 20, will serve as the acting BUS Division leader and chief financial officer.

• **Jay Johnson**, formerly chief of staff to the Laboratory's associate director for operations, will continue in the controller role to which he was recently appointed. He has day-to-day responsibility for integration of the Laboratory's business processes as well as for the division's internal controls project. Johnson also will serve as the Laboratory's action officer for all UC or external audit action items pertinent to business and financial management. In addition, Distributed Finance (BUS-2) will report to Johnson, as will the division's administrative staff.

• **Tom Palmieri**, who was formerly the BUS leader and chief financial officer, will lead the budgeting process. Palmieri will remain the Laboratory's point of contact for budget matters. Palmieri and the Program Integration Office will ensure that institutional budget requirements receive priority attention, including support to the recently created Program Integration Board.

• **Dennis Roybal**, formerly deputy division leader, will become a special assistant to the associate director for administration.

• Accounting and Systems Management will report to **Jim Herring**; the Standard General Ledger Project also will report to Herring. Herring formerly served as deputy division leader.

• **Chuck McDonald**, manager of procurement and property in the University of California's Laboratory Administration Office, will lead Procurement Processes on an acting basis. Procurement, the Procurement Quality Office and the Small Business Office will report to McDonald. In addition, **Sue Sebring**, who has been working in the division office on procurement quality, will lead a re-created Purchase Card Office and will report to McDonald.

"In view of the many corrective actions still needed to respond to the Layton report, the pending UC audit, and the need to continue reconciliation and training," Marquez said, "I felt it was imperative to begin with a newly constituted team in this key area."

• **Allen Wallace** will continue to lead the Property Management Office.

• Shipping and Receiving will continue to report to **Carol Smith**.

• **Mary Erwin**, previously division chief of staff, will serve as special assistant for business and financial systems, reporting to Jim Lopez and Anne Broome.

In an earlier announcement, Marquez said the Audits and Assessments (AA) Division would no longer report within the Laboratory structure. Instead, it reports directly to UC auditor Patrick Reed. That unit also has added the fraud, waste and abuse processes formerly found in the Security and Safeguards (S) Division's Office of Security Inquiries.

In all instances, management personnel changes and any resultant impact to salaries will be evaluated in accordance with University of California policy and the procedures outlined in the Jan. 16 letter from Robert Van Ness, assistant vice president for laboratory administration at UC to Ralph Erickson, director of the Department of Energy's Office of Los Alamos Site Operations.

Marquez and Broome also announced creation of a Business Processes, Procedures and Practices Council. Council members come from across the Laboratory's technical and administrative divisions and will provide immediate advice regarding the impact of proposed changes to Laboratory financial management and business operations processes.

DOE gives OK …

continued from Page 1

The old CMR Building is the largest at Los Alamos, covering more than a half million square feet. The proposed CMRR will be much smaller — less than 250,000 square feet. The design currently preferred is a three-building option that includes a light laboratory/office building outside the security fence at TA-55, which has radiological laboratories, and two nuclear facility buildings inside the security area at TA-55.

Several proposals are being considered for the old CMR Building. One of the alternatives being proposed in the CMRR Environmental Impact Statement is to decontaminate and decommission the entire CMR facility.

You'll be among the first to know

Employees now will receive news releases relating to Laboratory actions and initiatives through the LANL-ALL electronic mailing. These distributions will be made before or at the same time the news release is issued to the media. Sharing these news releases directly with employees is part of Interim Laboratory Director Pete Nanos' initiative to improve communication within the Laboratory. Employees are encouraged to read these mailings.

CalPERS Long-term Care Program open enrollment

Human Resources

The CalPERS Long-term Care Program 2003 application period is April 1 through June 30.

Long-term care is the extended care needed because of a chronic illness, injury or frailty of old age. CalPERS long-term care offers financial protection from the devastating costs of long-term care while providing peace of mind that the best long-term health care will be available if needed in the future.

It's not too early to apply for long-term care. Premiums are age-related, so the younger the applicant, the less the plan costs. Check monthly rates with the CalPERS premium calculator.

University of California Laboratory employees, retirees, their spouses, parents (includes step-parents), parents-in-law and siblings (18 years and older) are eligible for the CalPERS Long-term Care Program.

To request an application kit, call 1-800-266-1050 or visit the Web site at *www.calpers.ca.gov/longtermcare/*. This year, CalPERS is offering an informational video to learn more about the program. When requesting the application materials ask for a copy of the free video.

LANL Media Theater
The Audio Video Database

Director's presentations available online

Go to http://www.lanl.gov/media, choose "Search the Archive" and search for "Nanos" as the speaker.

Laboratory creates Nuclear Technology and Applications Program Development Office

by Todd Hanson

The Laboratory has created the Nuclear Technology and Applications Program Development (NTA) Office. The office has responsibilities for new program development in areas of advanced nuclear-fuel-cycle technology; advanced nuclear-reactor design and supporting technologies; radioisotope production; and initiatives with the Nuclear Regulatory Commission.

Creation of the new office was announced recently by Tom Meyer, associate Lab director for strategic research. Meyer is the Lab's Senior Executive Team champion for nuclear-energy-program-development activities.

While program management functions associated with these areas reside in appropriate Laboratory divisions, the NTA Office has primary responsibility for Laboratory interactions with the head of the Department of Energy Office of Nuclear Energy and with leaders of similar efforts at other DOE laboratories.

Although the NTA Office is situated in the Strategic Research (ADSR) Directorate, it will work with programs and technical leads across the Laboratory, Meyer said. An NTA planning and working group has been created that consists of program managers and leaders from the Advanced Fuel Cycle, Yucca Mountain and advanced repository programs; the Nuclear Regulatory Commission programs; space nuclear applications; safeguards, radioisotope production; as well as Nuclear Systems Design (D-10); Probabalistic Risk Analsysis (D-11); Actinide and Fuels Cycle Technologies (NMT-11); and Advanced Chemical Diagnostics and Instrumentation (C-ADI). Concurrently, an NTA Advisory Group has been created that also reports to the ADSR.

A search for a permanent director will begin shortly. In the interim, Edward Arthur has been appointed as acting office director for NTA.

UC will pursue WorldCom lawsuit in superior court

The University of California will file an action under California securities fraud law on its behalf in California Superior Court against WorldCom Inc. officers and directors; Salomon Smith Barney and/or its parent Citigroup Inc; and WorldCom's auditor, Arthur Andersen LLP. UC's Board of Regents authorized the move at its meeting in San Francisco Jan. 16.

In the wake of the collapse of WorldCom's stock price, several class-action complaints were filed and subsequently consolidated in federal district court in New York City, with the New York State comptroller as lead plaintiff. UC is currently a class member in that case.

The university has determined that it should bring a separate suit rather than participate in an on-going federal class action in New York.

"Each securities case must be evaluated independently to determine whether class action or separate litigation is in the best interest of the university's investment funds," said James Holst, the university's general counsel.

WorldCom Inc. announced June 26, 2002, that it had improperly booked $3.8 billion in expenses as capital expenditures, thereby boosting reported cash flow and profits. WorldCom has subsequently announced additional accounting improprieties, resulting in more than $7 billion in restatements of its financial reports. The announcement resulted in a collapse of WorldCom's stock price and its eventual bankruptcy, the largest in U.S. history.

UC's losses totaled in excess of $353 million, based on 10.2 million shares of WorldCom and related securities purchased between 1998 and early 2000. UC sold off all of its WorldCom holdings in June through July 2002. The current value of UC's diversified portfolio, which includes both pension and endowment funds, stands at $49.9 billion, as of Dec. 31. 2002. UC's losses represent only 0.7 percent of total funds under management.

Atkinson appoints oversight board

University of California President Richard C. Atkinson has announced the appointment of a five-member oversight board to help guide Interim Laboratory Director Pete Nanos in scientific and management operations.

The appointments are the latest in a sweeping series of personnel changes and new controls on Laboratory administrative, business and audit operations announced by Atkinson during the past several weeks.

The oversight board members are

- University of California Regent Richard Blum of Blum Capital Partners in San Francisco, an investment firm;
- Sidney Drell, professor emeritus, Stanford Linear Accelerator Center;
- Chancellor Robert Dynes of UC San Diego, a physicist;
- Regent Gerald Parsky of the Aurora Capital Group in Los Angeles, an investment firm; and
- Regent Peter Preuss, president of the Preuss Foundation of La Jolla, Calif.

"The oversight board brings together a group of knowledgeable and experienced people from diverse areas," Atkinson said. "I believe each of the members will provide Admiral Nanos with invaluable expertise and insight as he addresses his challenging assignment."

Both Blum and Parsky are highly regarded financial experts with long experience in financial management. Parsky's firm acquires and builds middle-market companies in the industrial sector of the economy. Under his leadership, Blum's firm has helped to build numerous publicly and privately owned companies both in the United States and abroad.

Drell served in 2001 to 2002 as chair of the senior review board for the Intelligence Technology Innovation Center and also served in 1992-2001 as a member of the President's Foreign Intelligence Advisory Board.

Dynes is a physicist specializing in semiconductor research. He came to UC San Diego in 1991 after a 22-year career with AT&T Bell Laboratories and was appointed chancellor in 1996. He has two decades of experience consulting and advising on national laboratory oversight issues, including as vice chair of the President's Council on the National Laboratories.

Preuss is president of the Preuss Foundation, which is involved in brain tumor research. In 1970, he founded Integrated Software Systems Corp., the first software company specializing in computer graphics. He is chairman of the Regents' Committee on Oversight of Department of Energy Laboratories.

Atkinson indicated that additional members to the oversight board might be named in the future to bring additional outside expertise to its oversight functions.

Former Laboratory staffer Pettit walks in space

Some people take walks in their neighborhood, at the local shopping mall or during their lunch hour. Former Laboratory technical staff member Don Pettit took a different type of walk. Pettit, right, with fellow astronaut Kenneth Bowersox, walked in space last month as astronauts aboard the International Space Station. Pettit is the mission space officer and prime operator of the robotic arm aboard the International Space Station. Bowersox is the mission commander. Pettit is an affiliate in Applied Engineering Technologies (ESA-AET) and worked at Los Alamos 12 years. He is part of NASA's Expedition 6 crew that launched last December for a four-month stay aboard the space station. For more information on the Expedition 6 space flight, go to spaceflight.nasa.gov/station/ online. For more information on Pettit, go to the Nov. 11, 2002, Los Alamos NewsLetter at www.lanl.gov/worldview/news/LANL/111102.pdf online (Adobe Acrobat Reader required). *Photo courtesy of NASA*

Reflecting on Renaissance Painting: The link between optics and art

by Edwin Vigil

Were Renaissance artists gifted geniuses or did they have a little help from science? Charles Falco, professor of optical physics at the University of Arizona and artist David Hockney think they may have the answer. Falco presented his thoughts on optics and Renaissance art in January in the Physics Building Auditorium.

Falco's interest in art and optics began in 2000 after reading The New Yorker Magazine article, "The Looking Glass." In the article, artist David Hockney put forth the idea that as early as the 15th century, some artists may have employed the use of optics as a tool in the execution of their artwork. Hockney's thesis was met with considerable skepticism and considered by many art historians and others in the art establishment to be heresy.

Intrigued by the article, Falco talked with Hockney about his ideas.

"Here is David Hockney, who along with Picasso has been proclaimed one the greatest artists of our time," said Falco. "He has been looking at the Renaissance masters for sometime and there is something in their work that had him questioning their technique. I figured with my knowledge of optical physics, I could help provide the scientific evidence he needed to prove his theory.

"In March of that year, I walked into David's huge studio, which had been built over an old tennis court, and on the walls were all these images of Renaissance art, laid out chronologically and in an orderly fashion, very much like a scientist would do it," said Falco. "Here was an artist employing scientific methods.

"After several hours talking, we began what would be the start of the most intensive scientific collaboration of my career," he said. "In the process, we exchanged more than 500 pages of correspondence."

Thus the scientist came to the aid of the artist.

Falco used slides to illustrate his research. The first was the "Arnolfini Wedding" from 1434 by the Flemish painter Jan van Eyck.

He noted, "When I first started giving this talk many argued that optics didn't exist during the period I was referring to, but here we have a painting from the early 1400s with a convex mirror in it, proof that indeed the tools did exist."

Another slide was of a frescoe by Tommaso da Modena circa 1352 that depicted monks using optical devices including "spectacles" or eyeglasses and magnifying glasses, which emphasized his argument.

"We have even found references to mirrors in 13th century literature, 200 years before van Eyck," said Falco.

He showed an excerpt from a book called the "Romance of the Rose" written around 1230, in which the word mirror is mentioned several times.

"Further evidence that optics were around during this time," he said.

Then Falco showed a slide of Lorenzo Lotto's painting, "Husband and Wife" from 1543. In it he pointed to a detail in the red tapestry in the painting. As he put up another slide, a magnification of that detail, he pointed out how soft and out of focus that part of the tapestry had been rendered, something that an artist with his own eyes would not normally see.

"An artist wouldn't deliberately do that unless of course he were using a lens of some sort," he said. "This became our Rosetta Stone."

With one image after another, Falco presented further evidence of the use of lenses, including paintings of subjects with unusually small heads and larger bodies, women with abnormally large foreshortened arms and even one woman who, if she were to stand up, would have been 11-feet tall. None of the subjects in the paintings were sideshow freaks, but the artists by virtue of the optics they employed had dramatically altered their perception of the real world.

During a question-and-answer period afterward, one audience member asked that, given the geometric simplicity of the pattern in Lotto's painting, the artist didn't just paint it without the aid of optics?

University of Arizona professor of optical sciences Charles Falco speaks about the use of optics in Renaissance art to a full house in the Physics Building Auditorium. Shown on the screen is Lorenzo Lotto's, "Husband and Wife" from 1543, an example of Renaissance painting that shows how artists of this period may have employed optics in the creation of their artwork. *Photo by LeRoy N. Sanchez*

"It's a painting of wealthy patrons and the tapestry may have cost $50,000 or more, and therefore, it would have been very important to the patron that the artist render it accurately so that those seeing the painting would be impressed by this couple's wealth and good fortune," he said.

Another asked, Why haven't any mirrors from that period been found?

"Some, in fact, have survived. The trouble is accurately dating them. How do we determine how old they really are?" he replied.

Falco's career path has taken some interesting turns, crossing back and forth from science to art, and has included his varied interests in optics, motorcycles and Renaissance painting.

In addition to his detective work concerning Renaissance art, Falco also has been co-curator of the exhibit "The Art of the Motorcycle" at the Guggenheim Museum in New York City. He helped choose the motorcycles for the exhibition. The show traveled to other museums, becoming one of the most popular industrial design exhibitions ever.

Elevator in Otowi Building out of service

The Otowi Building at Technical Area 3 is without elevator service because of mechanical failure. Repairs have begun on the elevator.

Facility management personnel in the Otowi Building will work with groups in the building to develop accommodations for all occupants during this period. Lab personnel who don't work in the Otowi Building but use the building for official business, to dine in the cafeteria and other matters, are asked to remain cognizant of this situation and plan accordingly.

Individuals who are handicapped can access the Otowi Building's third floor through the west-side entrance, while access to the middle floor is available through the east-side entrance. The basement level isn't accessible to mobility impaired individuals; however, such individuals can call Diversified Facilities (DWO-DF) at 5-2272 or write to *otowi@lanl.gov* by e-mail and facility management personnel will attempt to accommodate them.

Lab workers should wear badges on Lab property

During a recent Department of Energy Office of Independent Oversight and Performance Assurance inspection, auditors observed workers in security areas who weren't wearing badges properly or not at all.

Laboratory workers are required to wear badges above the waist with the photo facing out at all times while on Laboratory-owned or -leased property. Badges also should be worn when participating in recreational activities during the lunch hour, if these activities take place on Laboratory-owned or -leased property.

If wearing a badge on a lanyard or clipped to clothing isn't feasible because of safety concerns or the physical demands of a job, badges can be clipped on an arm band. Arm bands are available through the Boise Cascade Office Products just-in-time under part number A5504-ARFW.

Badges should be removed when leaving Laboratory-owned or -leased property and when entering businesses or other locations where the badge can be observed by members of the public. Lab personnel also shouldn't leave their badges in unattended vehicles.

Lost or stolen badges, or workers who suspect their badge has been compromised, should report it to the Badge Office in person. For additional reporting guidance, go to *badge.lanl.gov/procedures/lost_badge.shtml* online.

For more information, call the Security Help Desk at 5-2002, or write to *security@lanl.gov* by e-mail.

Laboratory hires new MST Division director

Paul Follansbee

Former Los Alamos scientist **Paul Follansbee** is the new director of the Laboratory's Materials Science and Technology (MST) Division.

Associate Director for Strategic Research Thomas J. Meyer announced the selection and said, "In addition to his significant scientific prowess, Paul has had extensive experience dealing with governmental agencies and international corporations. He not only brings with him a critical understanding of U.S. and international commercial-scientific research perspectives, but an understanding of the importance of the strengthening the Lab's relationship with its stakeholders."

"Seven years in industrial research and development have taught me a lot about the commercialization and implementation of technology," said Follansbee, "but I've also observed the short-term focus and volatile support base that limits real innovation. I believe that this is a niche that the national laboratories can and should fill for our nation. Although MST is both stronger and more diverse than when I left in 1993, I understand the operational environment has changed greatly, which poses continued challenges to us. Still, I am eager to work with the MST leadership team and staff to serve our national security missions."

Follansbee was most recently vice president of technology for Howmet Castings and President of the Howmet Research Corp. in Whitehall, Mich. Howmet is a subsidiary of Alcoa Inc. specializing in precision investment castings and coatings for aerospace and industrial gas-turbine applications. Before Howmet, Follansbee worked for General Electric as laboratory manager of the Physical Metallurgy Laboratory at GE's Corporate Research and Development Center in Schenectady, NY. From 1994 to 1995 he served as team leader on a national manufacturing assessment project for the Department of Commerce while on change-of-station from the Lab. From 1990 to 1993 Follansbee was deputy division leader of MST Division.

Follansbee came to Los Alamos in 1981 and served the Laboratory in various capacities: as a technical staff member, deputy group leader and group leader. He received the Los Alamos Fellows Prize in 1989 for theoretical and experimental work on the rate sensitive behavior of metals with regard to the hardening behavior of metals and alloys with large changes in plastic strain rate and the application to Department of Defense armor/anti-armor technology.

Beason picked for S and T deputy post in NIS

J. Douglas Beason is the new Nonproliferation and International Security (NIS) Division deputy division leader for Science and Technology. Beason, since August 2001, has been deputy associate director for Threat Reduction Science and Technology.

J. Douglas Beason

Cobb said of the appointment, "During the past year Doug has done a terrific job of getting the word out on Los Alamos capabilities to a broad segment of the defense and intelligence communities. He will now take these skills and learning and apply them as part of the leadership of one of our own major technical divisions, NIS, which will continue to play a key role in nonproliferation, homeland security and defense transformation."

In his new role, Beason will participate as a member of the NIS Division senior management team in developing long- and short-term planning for NIS core competencies, technical capability development, programmatic planning, programmatic performance and principal customer interactions. He will support NIS Division's role with the Intelligence Community and the Department of Defense, including working to keep NIS science at the forefront of its respective disciplines, with a particular emphasis on intelligence-related and defense-related science and technology and supporting the Laboratory's intelligence and defense development thrusts.

Before joining the Laboratory, Beason was commander of the Phillips Research Site and deputy director for directed energy at the Air Force Research Laboratory. Before that he was at Lawrence Livermore National Laboratory and the White House Office of Science and Technology Policy. Among Beason's areas of responsibility at OSTP was the National Aerospace Plane project as well as contributions to presidential decision directives on Global Climate Data Information Systems and LANDSAT satellite systems. He also was a research fellow at the National Defense University, where he wrote a book on science and technology policy that is now a textbook at the National War College.

Beason is a fellow of the American Physical Society. He retired in 2001 after a 24-year career the United States Air Force. He holds a doctorate in physics (radiationhydrodynamics) from the University of New Mexico.

Three Lab organizations receive Quality New Mexico awards

Three Laboratory divisions will be among 47 organizations honored for performance excellence at a Quality New Mexico Award ceremony March 13 at the Hyatt Regency Tamaya Resort and Spa at Santa Ana Pueblo.

Actinide Analytical Chemistry (C-AAC), Waste Management and Environmental Compliance (NMT-7) and Radiation Protection Services (HSR-12) will receive the organization's Piñon Award.

The New Mexico Quality Awards are given to New Mexico businesses and organizations that have a strong commitment to quality, are making progress in quality or have achieved excellence in quality.

Groups of trained volunteer examiners judged applicants in the categories of leadership, strategic planning, customer and market focus, human-resource development and management, process management, customer satisfaction results as well as information and analysis.

The program uses the Malcolm Baldrige National Quality Award criteria and is broken into three levels. The Zia Award is the highest honor bestowed to an organization that clearly demonstrates performance excellence. Piñon and Roadrunner awards recognize commitment and progress.

"If you clear the performance bar, then you get recognition," said Bill Wadt, director for the Lab's Quality Improvement Office (QIO) and a member of Quality New Mexico's board of directors. "The dedication of our examiners, including several from the Lab and our contractors, makes the process work," said Wadt.

For more information, go to Quality New Mexico's Web site at *www.qualitynewmexico.org* online.

In Memoriam

Dick Burick

Dick Burick, former deputy Laboratory director for operations, died Jan. 23 in Los Alamos. Burick served the Laboratory for 25 years. During this time, his duties ran the gamut: He worked on isotope separation programs; he helped develop particle beams, including one that would go into space and help secure the United States' advantage during the Cold War; he also served as a deputy associate director; directed the Engineering Sciences and Applications (ESA) Division; and eventually took charge of Laboratory operations as a deputy director. That last job included the demanding task of maintaining continuity at the Lab during and after the Cerro Grande Fire. His fondest memories came from working on the Beam Experiment Aboard Rocket (BEAR) Project, which put a small particle accelerator in space, a feat many said couldn't be done. He retired from the Laboratory in January 2002.

A feature article on Burick that appeared in the Dec. 13, 2002, issue of the Los Alamos NewsLetter (Page 8), is available online at *http://www.lanl.gov/worldview/news/LANL/121301.pdf.*

January 2003 service anniversaries

Editor's note: The January 2002 service anniversaries inadvertently ran in the week of Jan. 20 Los Alamos NewsLetter. Following are the January 2003 service anniversaries:

35 years
Lorraine Silva, BUS-6

30 years
James Brewton, CCN-7
Charles Burns, LANSCE-6
Sandra Cata, FWO-UI
Michael Cline, T-3
Mary Edgett, IM-5
Ronald Kirkpatrick, X-2
Bernabe Martinez, CCN-4
Margarita Martinez, ESA-TSE
Gerald Streit, D-4
William Thompson, ADWP

25 years
Johnny Anderson, C-ADI
Yolanda Archuleta, ESA-WMM
James Barefield, C-ADI
Elizabeth Foltyn, NMT-9
Jeffrey Hatchell, NMT-14
Edmund Kettering, ESA-WMM
Phil Kleinschmidt, NMT-16
Peter Ladelfe, NIS-2
Richard Lemler, NMT-5
Tien Li, NIS-5
Peter Lopez, NMT-5
Raymond Martinez, DX-2
Consuelo Montoya, RRES-WQH
Lorraine Montoya, IM-5
Arthur Romero, ESA-WSE
Lourdes Thompson, ADWP
Douglas Tuggle, S-8
E. Alan Wadlinger, DX-6
William Wray, X-7

20 years
Stephen Becker, X-2
John Benage Jr., P-22
John Conwell, IM-8
Carol Cox-Devore, HSR-IM
Brian James, ESA-TSE
Richard Lauer, ESA-WMM
Comora Montoya, HR-D-TR
Monte Parker, D-4
Mitchell Trkula, MST-7
Arthur Voter, T-12
David Yeamans, NMT-11

15 years
Lee Arellano, FWO-FMU-61
Jeffrey Bloch, NIS-2
David Clark, NMT-DO
Fernando Garzon, MST-11
Bruce Lamartine, IBD
Rick Martineau, X-2
Lori Mullen, FWO-SWO
Lawrence Ticknor, D-1

10 years
Diane Albert, MST-OPS
John Benner, ESA-WR
James Bland, HSR-12
Stephen Boerigter, D-7
George Erickson, NIS-10
Robert Farris, FWO-FIRE
Loren Hatler, ESA-WR
Robin Justice, AA-1
Frank Krawczyk, LANSCE-1
Monica Lucero, BUS-5
Susan Martin, HSR-5
Gordon Medford, ESA-WSE
Lisa Mora, NMT-5
Arthur Nobile, MST-7
David Schmidt, P-21
Paul Schumann, RRES-DO
Robert Tonelli, BUS-5
Rajendra Vaidya, NMT-10
Terri Villareal, BUS-5

5 years
Catherine Agresto, LC-LM
William Anderson, DX-2
Sheldon Apgar, NMT-2
Eve Bauer, C-INC
Geoffrey Brown, IM-8
John Collings, HSR-2
David Crane, ESA-WR
James Doyle, NIS-7
Carlos Dozhier, NMT-9
Moses Gallegos, CCN-2
Steven Hare, DX-3
George Hrbek, X-3
Michael Jordan, PM-DS
Ekkehard Koch, IM-8
Keith Lacy, NMT-4
Erica Larson, ESA-TSE
Elizabeth Martinez, PM-DS
Braxton Melton, FWO-CFS
Richard Orear, DX-3
Billy Pearl, NIS-DO
Kenneth Schlindwein, FWO-DF
Carolyn Smith, NIS-7
William Smith, EES-2
Leonard Trujillo, NIS-6
Mark Ulitsky, X-3
Beth Wingate, CCS-2

Changes coming to Laboratory's travel credit card program

As the result of a competitive bid process, the Laboratory will be implementing a new corporate travel credit card program effective March 1. Members of Accounting/Travel (BUS-1) currently are working with the new vendor, U.S. Bank, to set up the program. The details of the new program will be announced in the near future. While the current travel card program with Diner's Club will remain in effect until Feb. 28, Diner's Club recently has informed the Laboratory of some changes they plan to make in the near term as they prepare to close down the Lab's account.

Diner's Club has taken the following actions in preparation for the card program changeover:

- No new Diner's Club cards will be issued.
- ATM cash advances will be limited to $100 in a seven-day period.
- Accounts that have been inactive for the preceding six months will be closed.
- All cards that are 60 days or more delinquent will be suspended.
- Cards with a poor payment history will be suspended for all retail purchases; legitimate travel expenditures will be allowed.
- Cards with a poor payment history will have a spending limit of $3,000.

As stated previously, details regarding the roll out of the new travel card program will be announced. Questions regarding these changes may be directed to Guy Sandusky of BUS-1 at 5-0459 or *sandusky@lanl.gov* by e-mail.

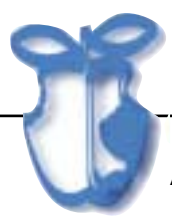
Dosimeters shouldn't be packed in checked luggage

Laboratory personnel are reminded not to place external dosimeters in luggage to be checked through airport screening devices.

Beginning this year, all checked luggage for travel on the nation's major airlines must be screened for explosives. This involves the scanning of luggage using radiation producing machines.

Laboratory employees shouldn't travel with their external dosimeters without the approval of Health Physics Measurements (HSR-4). And, if external dosimetry is approved for use while on travel, dosimeters shouldn't be placed in checked luggage.

Machines now being used to scan checked luggage can register a significant dose on a dosimeter. However, the X-ray machines that are used for carry-on luggage screening are not powerful enough to register a signal. Dosimeters may be placed in carry-on luggage, if necessary.



TO YOUR HEALTH

American Heart Month

February is American Heart Month. Following are some tips from the American Institute of Preventive Medicine:

Heart attack behavior

New research shows that the time-oriented, competitive, do-two-things-at-once characteristics exhibited by Type A people are not harmful. It's the Type A behaviors of anger and mistrust that can lead to a heart attack.

Heartbreaking career

According to a study in the "Journal of the American Medical Association," a job that is very stressful can cause harmful physical changes in the heart. Besides an increased risk of hypertension, job stress was associated with an increase in heart size, which is a potential risk factor for heart disease.

Lab employee nabs a spot on Antiques Roadshow

by Betty Katz, Communication Arts and Services (IM-1)

Kyle Wheeler, left, of Communication Arts and Services (IM-1) made an appearance on one of public television's most popular shows, the Antiques Roadshow. Last summer, Wheeler went to Albuquerque with her great-grandmother's 1940 treasures for the taping of the show. Shown below are two of the pieces of jewelry that Wheeler brought with her. One is a ballerina brooch with a diamond face and skirt of rubies and sapphires that her great-grandfather had custom-made for his wife. The brooch appraised between $8,000 and $10,000 by the Roadshow appraiser. The other, a diamond and sapphire necklace, had originally been designed as a monogram pin for her great-grandmother. The pin's ET initials are filled with diamonds and supported by rows of sapphires and diamonds. *Photos by LeRoy N. Sanchez*

Three episodes filmed in Albuquerque kicked off the new season of Antiques Roadshow. On the third episode, aired Jan. 20, Communication Arts and Services' (IM-1) Kyle Wheeler had her "15 minutes of fame."

Wheeler successfully navigated the various hurdles in nabbing the spotlight on one of public television's most popular shows. Last summer, she stood in line with her great-grandmother's 1940 treasures, which caught the eye of the program's jewelry appraiser from Boston. Wheeler then made it to the green room; got her TV make-up; and recorded her segment, explaining the details of her family antiques.

"I wanted to be filmed if that would help me find out more about my great-grandmother's jewelry," she said. "I already had what the show's experts called 'provenance' or extra information about the monogram piece. My mother had the diamond and sapphire pin made into a necklace for me as a wedding gift, and I had a photo of the pin its original form. The photograph was taken by the jeweler who altered the piece, and the Roadshow crew made every effort to show the viewers how the pin looked before it was changed."

It's impossible not to be dazzled by this 1940s piece, which Kyle wore to the IM-1 holiday party. Originally designed as a monogram pin for her great-grandmother, Edna Tim, the pin's ET initials are filled with diamonds and supported by rows of sapphires and diamonds. The Roadshow expert recognized this piece as typical of jewelry made for celebrities in the 1940s. Off camera after filming, another appraiser told Kyle the piece would be much more valuable if it were returned to the original form.

The other piece Kyle took to be appraised is a ballerina pin designed with a pear-shaped diamond face and a skirt of rubies and sapphires. The Roadshow appraiser valued the ballerina pin at $8,000 to $10,000. This custom piece was created by the famous New York jewelers, Van Cleef and Arpels. With a special "lipstick camera," the crew was able to show the fine detail on the back of the pin.

Wheeler explains that family folklore hinted that her great-grandfather, a New York City stockbroker, would give his wife extravagant pieces of jewelry to make up for his rumored extracurricular activities.

Edna Tim, who died in 1981 at age 101, lived in a Park Avenue apartment in Manhattan where Wheeler had the pleasure of visiting her many times. Wheeler, a second-generation Laboratory employee who grew up in government housing in Los Alamos, said she could hardly imagine the lifestyles of her mother's relatives. "I don't have many occasions to wear my great-grandmother's fabulous jewels in New Mexico, but I enjoyed taking them to the Roadshow and learning more about them."

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