Week of October 9, 2006 Vol. 7, No. 21

Five honored as 2006 Lab Fellows



Rajan Gupta



Keith Despain

LALP-06-001







Beth Nordholt



Joyce Guzik

by Kevin N. Roark

Los Alamos scientists Petr Chylek, Keith Despain, Joyce Guzik, Rajan Gupta, and Beth Nordholt are the 2006 Laboratory Fellows as selected by Director Mike Anastasio.

The award is the Laboratory's highest honor for technical accomplishent and recognizes scientists who have sustained high-level achievement in programs important to the Laboratory, made a fundamental or important discovery that lead to their widespread use, or have become a recognized authority in their field, including outside recognition and an outstanding record of publications.

"Approximately 2 percent of the Laboratory's current technical staff members hold the title of 'Fellow' at any one time," said Anastasio. "The Fellows play an important role in demonstrating and maintaining the scientific excellence of the Laboratory. On occasion, I and other senior leaders will charge the Fellows to assess issues where their experience and advice is particularly useful. In welcoming these five new Fellows, I want to thank the entire group of Fellows for their sustained contributions to the Laboratory. They all bring honor to the Laboratory."

Chylek of Space and Remote Sensing (ISR-2) is a world-recognized expert in optical sciences, aerosol physics, atmospheric science, and climate change research. He is a fellow of the American Geophysical Union and the Optical Society of America.

Despain of Navy-2 (X-2-N2) has made sustained, high-level achievements in nuclear weapons programs, is a recognized authority in weapons design, and has provided distinguished and exemplary service to Laboratory programs.

Gupta of Elementary Particles and Field Theory (T-8) is a leading figure in the international high-energy physics community. A fellow of the American Physical Society, he is noted for pathbreaking contributions to the development of lattice quantum chromodynamics and computational high-energy physics.

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## **For Your Safety**



## Monitor your monitor

computer monitors should be the right height for the user. That's the message of the newest Safety Short, a series of timely, concise topics to help everyone at the Laboratory stay safe at work and at home.

"A computer monitor that is too high forces you to hold your head back and your chin tipped up. This can stress the nerves and muscles of your neck, and cause pain in your neck, upper shoulders, and the area between your shoulder blades," says Kerith Stender of the Industrial Hygiene and Safety (IHS) Division, the Lab's ergonomics team leader

The Web-based Safety Short provides a flier as well as other tools, available at <a href="http://int.lanl.gov/safety/safety/short">http://int.lanl.gov/safety/safety/short</a> online.

In addition, a Toolkit for Safety Meetings can be used to present the Safety Short during organizational safety meetings, tailgate meetings, and nested safety and security meetings. The Toolkit is available at http://int.lanl.gov/safety/ safetyshort/#toolkit online.

For questions or suggestions regarding the Safety Short content, Toolkit, or future topics, contact Robin Nicholas of ISH Division at *safetyshort@lanl.gov* by e-mail.



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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.





Laboratory Director Mike Anastasio recently delivered the first all-employee talk from the new National Security Sciences Building Auditorium. He touched on safety and security, lauded individual and programmatic accomplishments, and discussed budget and other issues in the 90-minute talk.

# Anastasio updates work force on accomplishments, path forward

Thanks employees for hard work during period of change

by Steve Sandoval

Laboratory employees should feel good about the many accomplishments the Lab has made so far during this period of change to a new management and operations contractor. But there is always room for improvement.

That's the message Director Mike Anastasio gave workers at an all-employee meeting in the National Security Sciences Building Auditorium and to those watching on LABNET.

In the 90-minute talk, which included some candid questions from employees about personnel and budget matters, Anastasio said the Lab has met several mission milestones, garnered several science awards, made improvements in safety and security, and developed a new procurement approach that is helping streamline how the Lab buys its products and services.

Anastasio also detailed what he described as tough budget issues for the 2007 fiscal year and beyond.

Anastasio promised to meet with employees and communicate candidly on work force issues. "I do plan to meet with you regularly in the future. This will be the first in a continuous series of meetings," he said.

## Safety and Security

Anastasio reminded employees to be vigilant about safety. He said that since Los Alamos National Security, LLC began managing the Lab June 1, there have been a number of safety issues and at least three near-miss electrical safety incidents. He also mentioned the hoisting and rigging incident in July that injured two employees.

Anastasio said Lab managers understand the seriousness of these incidents and are applying rigorous processes to ensure safety in the workplace. He also applauded the ability of the Lab to call on experts, from the parent organizations of LANS to help the Lab correct safety deficiencies. "Go get help where we need, when we need it, and if we need it," he said, noting that the Lab reached back to its parent companies for help addressing the hoisting and rigging accident.

He added that NNSA is showing confidence in the Lab; when the hoisting and rigging incident occurred, he was in Washington, D.C., and knew about it within an hour.NNSA's Los Alamos Site Office also entrusted Los Alamos to conduct its own vigorous investigation (rather than initiate a DOE Type B investigation).

Since June 1, there also has been an overall improvement in the Laboratory's safety and security statistics. "And so at this point, I have a big 'thank you' for each of you, because in these last months we've seen real improvements in safety and security," said Anastasio. He used a statistical chart to show that from October 2004 to September 2006 there has been a "dramatic change" in the number of safety incidents. "They're really starting to come down. The trend is good, and you should be very proud," he said.

Anastasio said the Lab also is doing well in security matters but can do better. "We can't lose our focus. We need to get better. It's something each of us can do," he said.

Anastasio pointed out that change can be difficult but the challenges that are a result of change also create opportunities. "These are changes that have caused [us] to be different in how we manage the Laboratory [today] than how it was 60 years ago."

"The challenge that we have to deal with is not about when is it going to go back to the way it used to be, but rather, how do we meet the challenges for the future."

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# A model collaboration

# New theory emerges that may help explain how superconductors work

by Todd Hanson

Scientific collaborations typically bring together two or more individuals in the expectation that working together will make a whole that is greater than the sum of its parts. While not always successful, collaborations that succeed can be inspiring.

Take, for instance, the joint effort between a Los Alamos team and a Cornell University imaging team that some might consider a model collaboration.

In 1999, Los Alamos condensed matter theorist, Alexander Balatsky found himself in a conversation with Cornell University experimentalist Séamus Davis over some data that Davis had sent out to the scientific community for interpretation. Balatsky of Condensed Matter and Statistical Physics (T-11) and Davis long had shared an interest in the highly ordered electronic structures of high-temperature superconductors and the irregularities that other researchers had reported in these lattices. As a theorist, Balatsky was curious about the nature of the irregularities. Davis wanted to image them. The conversation launched a scientific collaboration and a friendship that continues

"At the time," says Balatsky, "conventional wisdom held that these irregularities were simply a nuisance and a distraction from the real effects that were taking place. I initially held the same view, but after talking with Séamus, I came to believe that understanding these 'irregularities' might be the key to a better understanding of the nature of superconductivity. Together, we set out to look for nanoscale evidence of these irregularities."

From the start, the resulting collaboration was a strong one. Davis was a seminal figure in the application of scanning tun-



Alexander Balatsky



Séamus Davis

neling microscopy to superconductivity, and Balatsky was a leading condensed matter physics theorist in the understanding of the properties of strongly correlated electron systems. The friendship that developed between Davis and Balatsky would replicate the time-honored theorist/experimentalist relationship and translate into collaboration between teams. This collaboration expanded in 2002 when Jian Xin Zhu, also of T-11, and Artem Abanov (now a professor at Texas A&M University) joined the project. Both Zhu and Abanov brought new expertise to the study of the complicated problem, and their help proved crucial to the success of the collaboration.

"Discovering new knowledge is not a one-step process," says Davis. "The theorist makes some specific assumptions and the experimentalist then sets out to make an analysis. The results that come back from experiments are rarely complete or one hundred percent correct, and the process requires several iterations. The places where theory and experiment don't match up are often the places where new discoveries are made.

The collaboration that ensued between the Cornell and Los Alamos researchers

eventually led to a new theory on how to image the interactions the team believed might be responsible for how superconductivity occurs in modified copper oxides called cuprates. Balatsky and his team developed a theoretical model to provide an approximate location for patches or irregularities in the superconducting glue for these materials, while Davis and his team developed imaging techniques to find them.

Using one of the first cuprate superconducting materials discovered to operate at "high" temperatures — at temperatures of minus 252 degrees

Fahrenheit — the team was surprised to discover patches and inconsistencies in the material's structure that allow the formation and movement of electron "pairs" that form when electrons are paired with phonons, or vibrating atoms. The results of the team's studies were recently published in the scientific journal Nature, where Zhu and Balatsky are the coauthors along with the Cornell team.

With this new knowledge in hand, scientists might be able to create room-temperature superconducting materials. "In my mind," says Balatsky, "the ability to image the interactions is a step toward quantifying the mechanism that enables high-temperature superconducting. After all, if to see is to know, and knowledge leads to better understanding, and understanding can lead to control, then after we can see these interactions we might someday be able to control them."

The model collaboration continues today, with the work of the Los Alamos team being supported by funding from the Department of Energy's Office of Basic Energy Sciences and Los Alamos Laboratory-Directed Research and Development funding.

# Lab, UCLA receive funding to develop high-speed, high-volume laboratory network for infectious diseases

by Todd Hanson

The Laboratory and the University of California, Los Angeles, School of Public Health will receive part of \$9 million in funding from the state of California's Office of Homeland Security for the expansion facilities and enhancement of a Los Alamosdeveloped high-speed, high-volume laboratory network capable of quickly analyzing and processing large numbers of biological samples. The High Speed, High Volume Laboratory Network for Infectious Diseases, currently being developed under Department of Defense funding, is designed to serve as a new early warning system for influenza and other threatening infectious disease outbreaks

The Laboratory's Chemistry (C) Division will lead the Los Alamos portion of the project in close collaboration with team members from the Bioscience (B), Applied Engineering Technologies (AET) and Theoretical (T) divisions, who will work together to develop the first node for UCLA. The network is designed to improve the nation's ability to make rapid and critically important decisions to save lives in the event of bio-terror attacks or infectious disease outbreaks. Los Alamos' role in the

project will be to build the high-speed, high-volume laboratory networked systems and deploy them at UCLA's NanoSystems Institute.

According to Tony Beugelsdijk of Chemical Sciences and Engineering (C-CSE) and Scott Layne of UCLA, co-principal investigators of this project, "Funding for this initiative comes at time when avian influenza continues to pose a threat to societies around the globe. In effect, this network will help provide a first-line defense against the flu and is likely to change the way we, as a nation, responds to epidemic outbreaks."

The network will provide a new innovative method of generating and rapidly distributing the accurate and near real-time information needed to deal with an infectious disease outbreak and will help to safeguard public health in several ways. In the event of human transmission of influenza, the laboratory will provide information to help guide emergency workers work to control the outbreak with antiviral drugs. In addition, the laboratory network will continuously monitor the emergence of ongoing influenza strains and help guide critical decisions to update pandemic vaccines, or use them in combination with limited supplies of antiviral drugs.





Jay Johnson, deputy chief financial officer in the Chief Financial Officer Division, enjoys a frito pie at the United Way kick-off event. Hamburgers, hot dogs, roasted corn, and other food items were available for purchase.

# Lab kicks off United Way campaign







Laboratory Deputy Director John Mitchell, above, welcomes employees and Los Alamos residents and talks about the importance of giving to the United Way at the Lab's "Pirates of the Hill" United Way kick-off at Central Park Square in downtown Los Alamos. Los Alamos' goal this year is \$1 million. Los Alamos National Security, LLC, is matching dollar for dollar, employee contributions to United Way up to \$1 million. Also addressing event participants were Debbi Wersonick of the Community Programs Office, center, and Katherine Freeman, chief executive officer/president of the United Way of Santa Fe County.

Right: Hundreds of Laboratory employees and Los Alamos residents converged for the kick-off of the Lab's 2007 United Way giving campaign. The pirate-themed event included food, live music, a book fair and silent auction, and a pirate lookalike contest.

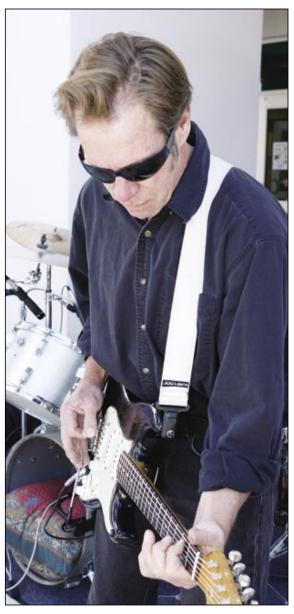












Above: Eddy Partridge of RF Engineering and the Nomads rock band belts out a tune at the Laboratory's United Way kick-off event. The theme for this year's giving campaign is "United in a New Way." Pledge materials have been delivered to Lab employee mail stops. Employees who haven't received pledge cards should contact Community Programs at 5-4400. The giving campaign continues through October 20.

Top left: Tim Wong, left, of Materials Technology: Metallurgy talks with Jean Elson of the Materials, Science and Technology Division at the Laboratory's 2007 United Way "Pirates of the Hill" kick-off in Central Park Square in downtown Los Alamos. For more information, see the September 14 Daily NewsBulletin at http://www.lanl.gov/newsbulletin online.

Middle left: Jutta Kayser of Ethics and Audit looks at one of the many items available for purchase through a silent auction bid at the Laboratory's United Way kick-off, which also included a book fair, food, music, and other activities.

Bottom left: Ed Vigil, left, of the Communications Office sells roasted corn to a customer at the "Pirates of the Hill" United Way kick-off event. The Aggies on the Hill alumni chapter of New Mexico State University sold roasted corn to raise money for the Laboratory's 2007 United Way giving campaign. The chapter also sold ice cream floats.

Photos by LeRoy N. Sanchez of Records Management/Media Services and Operations and Carla D. Martinez of Purchasing





Laboratory Director Mike Anastasio talks with student Maria Castro of Subatomic Physics; her mentor, Gerd Kunde also of Subatomic Physics; and Laboratory Fellow Frank Harlow at the annual Student Symposium awards banquet at University of New Mexico, Los Alamos. Anastasio thanked students and mentors for their work at Los Alamos. Harlow, a guest scientist in the Theoretical Division and 2004 Los Alamos Medal recipient, gave the keynote talk at the symposium awards banquet. Photo by LeRoy N. Sanchez of Records Management/Media Services and Operations

## Students, mentors recognized at symposium banquet

Six students and staff members received Distinguished Student and Mentor awards at the Laboratory's Student Symposium. A number of students also received awards in various scientific disciplines, including, chemistry, computing, earth and space sciences, and biosciences.

"Symposium 2006: Highlighting Student and Postdoctoral Research," gave students and postdocs an opportunity to present technical papers and posters describing their research. The symposium included an awards ceremony and a keynote address by Laboratory Fellow and Los Alamos Medal Award recipient Frank Harlow and Michael Steinzig of W88 Systems Engineering (W-4).

The symposium is coordinated by the Education and Postdoc Program Office (STB-EPDO) and the Students' Association.

Distinguished Student and Mentor award recipients received a monetary award. Following are the Distinguished Student and Mentor award recipients:

## Distinguished Student Performance awards

Elias Salazar of Security Integrations S-2 (SEC-SIS2), Melanie Zamora of the Human Resources Service Center (HR-SVSCTR), Richard Kraus of Plasma Physics (P-24), Jennifer Gagner of the Lujan Center (LANSCE-LC), Agnes Zurek of the Center for Integrated Nanotechnologies (MPA-CINT), and Keith Russell of Information Systems Support (IST-ISS)

## Distinguished Mentor Performance awards

John Kaszuba of Hydrology and Geochemistry (EES-6), Lawrence Earley of High Power Electrodynamics (ISR-6), Dena Edwards of Safeguards and Security Training (CT-SS), Robin Reynolds of Water Quality and RCRA (ENV-RCRA), Brenda Andersen of Response Services (ER-RS), and Jaroslaw Majewski of LANSCE-LC

## Anastasio ...

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## **Accomplishments**

Anastasio cited a number of mission accomplishments, including the first production unit in the B61 life extension project and the Reliable Replacement Warhead project. "There's a lot of energy at this Lab about the RRW," he said.

Anastasio also noted the successful Unicorn experiment at the Nevada Test Site and the Cibola Flight Experiment satellite, which is in final stages of preparation for launch; the Roadrunner supercomputer; and the recent dedication of the Center for Integrated Nanotechnologies.

In the business and operations area, Anastasio said the Lab's Enterprise Project is on track to be completed by end of the year and that the Operational Efficiency Project has been completed. He also lauded the work of the Lab's Fix-It Team and the Barrier Removal Program to help remove impediments to getting work done.

Last month, the LANS Board of Governors met at Los Alamos. Anastasio said, "They were excited and impressed about what they heard. They're very pleased about the progress we're making, and that's good news."

The director also said Los Alamos — in conjunction with its sister laboratories — has begun the first steps toward moving to a truly national stockpile. Anastasio said he conducted a daylong review with the Lawrence Livermore National Laboratory director to ask questions and learn about stockpile issues and concerns. "I thought it was a very exciting day. We were able to get answers to questions about systems we're responsible for. It was very productive," said Anastasio.

And the director also noted that the Lab through LANS recently received two grants totaling more than \$1 million from the Mellon Foundation for research.

## **Budget**

Anastasio minced no words about the budget, saying it is a significant issue for Los Alamos. "It is one of the most difficult issues I have to face as a Laboratory director ... Not only is it a financial issue, but it also deals with people," he said.

Anastasio noted that the Lab's overall budget is expected to be relatively flat in the 2007 fiscal year, which began October 1.

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October is National Ergonomics
Month, during which efforts are
heightened to make workers more aware
of ergonomic issues in the workplace
and at home. One bit of advice routinely
offered by ergonomic professionals is to
avoid maintaining static positions for
long periods, such as sitting at a computer terminal or workstation for hours
on end.

Do you make it a habit to get up from your computer or work area and move around during the day? If so, what do you specifically do during these breaks?



## Elaine Deschamp of the Research Library (STBPO-RL)

I do, although I am not as good about it as I should be. I took the Back Wise ergonomics class offered through the Lab, so I know how to prevent ergonomic

injuries. The class helped me. I just need to be more conscientious.



### Vanessa De La Cruz of the Government Affairs Office (CGA-GAO)

I remind myself to get up, stretch, and walk out into the lobby of the Study Center where my office is. I also plan to register for and

take the Wellness Center's Computer Jocks class, because it is designed to help prevent cumulative trauma injuries.



## Bill Wadt of the Contractor Assurance Office (CAO-DO)

I keep my printer in a remote location, on purpose, so that I have to get up and move to pick up my printing. Personally, I think the key is to listen to your

body. If you listen, your body will tell you when it is time to take a break. Being self-aware is very important, and during times of stress, you need to take more breaks. No project or activity is so important that it warrants hurting yourself or anyone else. Just listen to your body.



## Sharon Hickey of the Policy Office (POL)

Yes, I take breaks. I get up to get water and I also play music. When a song ends, I stand up and stretch. I get up to answer the phone and go down the

hall to visit and check in with other staff. Going to meetings also is another opportunity to stretch and get moving, take a deep breath, and just relax.



## Donna Medina of Shock and Detonation Physics (DE-9)

I leave my desk on a regular basis and walk down the hall to check with my staff and see if they need anything. I also check my office drop point for any supplies

that have come in.



## September employee service anniversaries

#### 35 years

Theresa Abeyta, WCM-1 Richard Campion, HPC-2 William Feldman, ISR-1 Richard Hodson, ISR-3 Paul Martinez, CTN-5 John Morrison, HPC-DO Thomas Williams, IAT-3

#### 30 years

Barry Bailey, WT-7
Benny Jacquez, MST-8
Clyde Kain, IHS-IP
Pearl Lucero, SEC-DSS9
George Ortiz, AET-1
John Parker, PMT-4
Gary Read, AET-DO
William Reass, AOT-RFE
Floyd Rodriguez, WCM-1
Michael Salazar, MQ-SC
Alvin Trambley, WT-8
Robert Walker, T-12
David Waters, CTN-4
Jan Wouters, IST-AUBAD

#### 25 years

Keith Axler, W-7 Michelle Baran, SEC-DSS9 Robert Chrien, X-3-MP James Fitzgibbon, PF-DS Herbert Fry, C-PCS Carol Haynes, CFO-3 Vincent Hesch, PF-MS Thomas Hicks, ASM-DO Daniel Hughes, CAO-A Charlene Martinez, IAT-DO Marjorie Mascheroni, TT-DO Marcella Medina, CTN-3 Arthur Montoya, C-DO Phyllis Quintana, SAFE-MCAS4 Maida Trujillo, C-DO Douglas Veirs, PMT-1

#### 20 years

Carolyn Bell, B-2
Roger Byrd, ISR-1
Joseph Carlson, T-16
Bryan Fearey, ADWP
Edward Freer, EWMO-RLW
June Garcia, P-22
Stephen Guillette, CTN-3
Alan Harrison, X-3-LGRN
Emil Mottola, T8
Ronald Nelson, LANSCE-NS
Robert Newton, P-22
R. Blaine Randolph, MST-7
Gerald Rivera, MST-7
Yvonne Rivera, PMT-4
Marcos Trujillo, PF-MS

## 15 years

David Bruce, B-5 Mark Chadwick, X-1 Stephanie Frankle, X-4-TAR Peter Goodwin, MPA-CINT Salman Habib, T-8 Janet Harry, ADEPS Philip Jones, T-3 Jonathan Mace, DE-2 Brian Scott, MPA-MC Darrin Stafford, ER-RS David Swingle, CAO-A David Taylor, TA55-OS John Zumbro, X-1-TA

#### 10 years

Mark Bibeault, AET-1 Frances Chadwick, CFO-3 Lloyd Davis, DE-2 Martha Espinosa, CTN-5 Kreg Gauss, FME-PSE Mark Gulley, AOT-OPS Shunsheng Han, B-5 Thomas Lopez, FIRP-PGIU Hanna Makaruk, P-22 Tommy Morris, W-10 Gerardo Ortiz, T-11 Paul Pedersen, CCS-3 Michael Ramos, MST-16 Richard Rasmussen, RP-1 Carlos Tome, MST-8 Patrick Trujillo, CFO-2 Michael Wyman, IAT-1 Xinxin Zhao, C-NR

#### 5 years

Steven Archuleta, PMT-2 Stephen Ashworth, MPA-STC Howard Barnum, CCS-3 J. Douglas Beason, ADTR Jane Beltran, CTN-4 Jean Challacombe, B-5 Barry Charles, IAT-2 Petr Chylek, ISR-2 Anthony Cuaron, FME-PSE

John Florez, D-4 Lloyd Gibson, DE-2 Andres Gomez, WCM-1 Benjamin Gutierrez, EES-12 Beverly Herrera, IRM-RMMSO Robert Hueckstaedt, X-2-N2 Noor Khalsa, W-6 Shelby Leonard, N-2 Antoinette Lopez, ASM-ASM Kevin Martinez, PMT-2 Michael Martinez, W-6 Julie Martinez, IHS-IP Steven Myers, WS-LLWD Michael Pearson, N-2 Robyn Petersen, WS-WA Darren Quintana, PMT-5 Lee Reilly, B-5 Charlene Rodriguez, NN Arleen Roybal, W-DO Arsenio Salazar, RP-1 Gary Sanchez, AOT-IC Linda Sandoval, IRM-RMMSO Jeannie Sandoval, IST-ISS Evelyn Sandoval, IAT-1 Timothy Schaefer, W-6 Brendon Sehorn, CFO-2 John Sena, IST-AUBAD Randall Smith, HPC-3 James Sowers, AET-3 Jacqueline Stephens, PMT-2 James Thrasher, ISR-4 Nestor Trujillo, PMT-3 Manikantan Velappan, MQ-QP David Warner, W-6

Frank Dickson III, PMT-5

## Anastasio ...

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Congress hasn't passed the 2007 fiscal year budget for the Department of Energy, so a Continuing Resolution will likely continue in place, which will cause additional uncertainty with respect to the Lab's budget.

But he said Laboratory managers are committed to managing the budget process and minimizing impacts wherever possible. He said a team headed by Deputy Laboratory Director John Mitchell reviewed the proposed 2007 fiscal year indirect budget requests for the entire Laboratory to ensure consistency with Anastasio's budget principles. Those principles were to keep costs to customers stable and to ensure no reduction in current LANS staffing. Except for the Laboratory Directed Research and Development (LDRD) program, all Laboratory organizations were asked this summer to identify 10 percent indirect budget

reductions in formulating their fiscal year 2007 budget requests.

With inflation and other expected cost increases, gross receipts taxes LANS is obligated to pay the state, and the increased management fee, Anastasio said the Lab is looking at about \$175 million in costs it needs to reduce.

"I believe we can absorb these extra costs, maintain LANS staffing, and maintain LDRD funding," he said. "There will not be a RIF [reduction in force]. There will not be plans for a RIF."

Anastasio said there will be impacts to contract employees, noting that as many as 350 contract employee positions funded through the overhead budget, and a perhaps 200 more that are direct funded, could be eliminated. But he said the Lab would monitor the situation "... to ensure that it will be a fair process."

"While it puts a strain on the Laboratory and [its] people, I think that's a reality no matter what decision is made. The reality is this is a real challenge. But by doing this, I know it puts the Laboratory on a path to significantly increase the efficiency of the Laboratory," he said.

## The path forward

Anastasio said the Laboratory has an ambitious agenda in the near future, including integration of the nuclear weapons process, RRW, strengthening specific partnerships in the Lab's threat reduction program and seeing the Roadrunner supercomputer program through to fruition. He also wants to address the Lab's grand challenges to help better organize and focus Los Alamos' science and technology expertise and work.

Business and Operations initiatives include continuing safety and security improvements and further improving the Lab's procurement system, ensuring a pay-for-performance salary management process, and planning and beginning the reduction of the Lab's "footprint" to reduce the cost of operating and maintaining Laboratory facilities.

In concluding, Anastasio said Lab managers understand that they still have to build credibility and earn the trust of Lab workers, and he acknowledged employee skepticism.

"This is something that's going to take time and our actions," he said, noting that continued communications with employees will be important.

## Director names ...

continued from Page 1

Guzik of Navy 1 (X-2-N1) has a sustained record of high-quality contributions to the nuclear weapons program and a substantial body of internationally recognized work in astrophysics. She also was recognized for her unclassified work on stellar evolution and pulsation.

Nordholt of Applied Modern Physics (P-21) has an international reputation in space science, having developed mass spectrometry and oncentrator instrumentation deployed on the NASA Cassini, Deep Space 1 and Genesis missions. In addition, she has made substantial, high-level contributions to intelligence community programs and is recognized and acknowledged for her work in quantum cryptology.



Laboratory Director Mike Anastasio talks with Manvendra Dubey, right, of Hydrology and Geochemistry and Bruce Robinson, left, of the Yucca Mountain Project Program Office after speaking to employees from the National Security Sciences Building. Dubey earlier asked Anastasio about what role the Lab can take in addressing the nation's energy needs. LeRoy N. Sanchez, Records Management and Media Services and Operations

# And the winner of the 2006 Best CD is ...





Members of the Immaculate Heart of Mary Quartet, from left to right, are Rene LeClaire of Decision Applications and his wife, Cathy, and former Laboratory employee Stephen Coggeshall and his wife, Theresa. Photo courtesy of LeClaire

by Erik Eakins

Twenty years ago, Rene LeClaire of Decision Applications (DA-EIA) and his wife, Cathy, never knew that a meeting with former Lab employee Stephen Coggeshall and his wife, Theresa, would land them seats at the 2006 New Mexico Music Awards. "The entire experience was a pleasant surprise," recalls Le Claire.

The LeClaires met the Coggeshalls at the Immaculate Heart of Mary Church in Los Alamos when they joined the choir. Ever since that day, the four have been singing together as a quartet. When schedules permit, they join up with the Los Alamos Big Band for performances around town. Stephen Coggeshall previously worked in Inertial Fusion and Plasma Physics (X-1).

Performances by the quartet range between Jazz and Religious in musical styles

and typically are a cappella. During the Laboratory's 50th anniversary, the quartet performed Jazz numbers as The Manhattan Project Transfer.

The Immaculate Heart of Mary Quartet is a unique blend of voices and talent. Music always has been part of Rene and Cathy's lives, but they never received formal training. Stephen has a master's degree in chorus direction and a doctorate in physics, while Theresa has a bachelor's degree in vocal performance.

"We really have to thank Pete Sheehey for where we are as a group," says LeClaire. One Sunday, Sheehey, a parishioner at Immaculate Heart of Mary, heard the group singing in the choir and decided that he wanted to produce an album for them. The quartet recorded their first album at Maricom Studio in Santa Fe. After Larry Mitchell, independent sound engineer working at Maricom Studio, recorded and mixed the album, he encouraged the group to enter the CD in the New Mexico Music Awards competition.

The NMMA features 32 categories ranging from Hip-Hop to Native American and Jazz to Rock-Punk. The Immaculate Heart of Mary Quartet performed during the award ceremony. Holy Ground was nominated for Best Vocal Performance, Best CD, Best CD of the year, Best Engineer, Best Packaging Design, and Best Producer. It won Best CD and the quartet was asked to perform at the banquet following the awards.

Holy Ground is on sale and a second album is being discussed. The album is a charitable project in which all proceeds go to the Immaculate Heart of Mary Church. LA Music sells the CD as well as the church office. The Candyman and Cornerstone Books in Santa Fe also carry the CD.

For more information on the Immaculate Heart of Mary Quartet, visit their Web site at http://cybermesa.com/~ihmcc/ihm\_quartet\_cd.html.

