

# LANL

## LOS ALAMOS NEWS LETTER

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## Laboratory's neutron spectrometer orbits Mars

by Shelley Thompson

A neutron spectrometer designed and built at the Laboratory aboard NASA's Mars Odyssey went into orbit around Mars Oct. 23. The neutron spectrometer was turned on the following morning and began sending data back to Earth.

A similar Laboratory instrument aboard NASA's Lunar Prospector provided compelling evidence for water-ice at the moon's poles.

The 2001 Mars Odyssey mission is designed to map the mineral and chemical makeup of the Martian surface and the location of water and

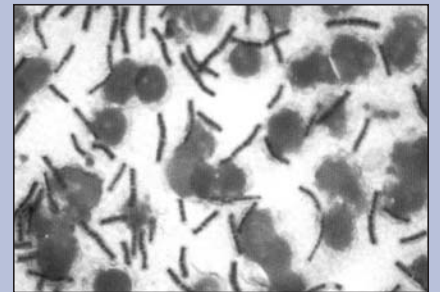
shallow buried ice, and, for the first time, study the radiation environment of the planet to gauge the risk for future astronauts.

The neutron spectrometer will map the water table in the upper meter of the Martian soil, helping scientists to understand the climatic history of the planet and also providing information on the location and quantity of water available for future exploration and possible colonization. The neutron spectrometer also will map the basaltic lava cover, measure the seasonal variation of dry-ice snowfall at the poles and help convert gamma-ray data from another instrument that will determine the quantity and composition of various elements on the planet.

"I was very nervous," said Bill Feldman, of Space and Atmospheric Sciences (NIS-1) principal investigator on the design and construction of the neutron spectrometer. "We were here before in 1993 with the Mars Observer, and that spacecraft was lost. But everything is great.

*continued on Page 2*

**Lockheed Martin Astronautics technicians assembling the Mars Odyssey spacecraft install Los Alamos' neutron spectrometer. The neutron spectrometer is 6.8 inches long, 5.7 inches tall and 12.4 inches wide. The spectrometer was installed in August 2000 at Lockheed Martin Astronautics in Denver.** Photo courtesy of NASA



## Anthrax research

Last month the Laboratory was able to confirm that it is providing technical support in DNA analysis relating to the current anthrax incidents. The Lab performs detailed analyses of bacterial DNA and is able to aid in identification of the strain of bacteria sampled. The institution also can detect evidence of genetic engineering, which can aid in identifying the source of the bacteria. However, any test results will be forthcoming, as appropriate, from the responsible federal agencies.

Below is an overview of the Lab's anthrax research; more information can be found at <http://www.lanl.gov/worldview/news/> online.

At the Lab, intensive research on *B. anthracis* conducted during the past several years has led to a wealth of information on its genome sequence and elite technologies

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# UC president addresses laboratory workers

*Last month, University of California President Richard C. Atkinson sent the following letter to all members of the Laboratory community in response to the events of Sept. 11.*



**Richard C. Atkinson**

As our nation recovers from the shock and destruction of the terrorist attacks on Sept. 11, we want to tell you how proud the University of California is of the way you have responded to the crisis.

In addition to being concerned about site security as well as your personal safety, you have responded tirelessly to help public health officials,

law enforcement authorities and others throughout the nation understand and deal with the new threat of terrorism. Fortunately for the nation, many of you have been helping to determine how to respond to such a threat long before the need became so tragically clear to everyone, and for that we are deeply grateful.

The Los Alamos and Lawrence Livermore labs were created in times of crisis — LANL during World War II and LLNL during the Cold War. Through all of the changes and challenges the laboratories and the nation have faced in the intervening years, the defining characteristic of the labs' leadership and staff has been their keen sense of national mission — working toward important goals and

performing with extraordinary skill and dedication. This attitude was the legacy of Ernest Lawrence, whose programs became the model for America's national laboratories, and of Robert Oppenheimer, the first director at Los Alamos. Today it is your legacy.

Our world is very different now than it was half a century ago; the past few weeks alone have brought extraordinary changes. We have little doubt that there will be more challenges in the war against terrorism, and we are certain that you will continue to create the science and technology essential to meet those challenges. The University of California is proud to manage the national laboratories, and we are indebted to you for all that you do for the University and for our nation.

## Spectrometer ...

*continued from Page 1*

I am so happy and excited. The neutron spectrometer was turned on and is working perfectly. We look forward to a long and successful mission."

Mars Odyssey, after a six and one-half month, 286-million-mile journey, entered into orbit around the red planet at 8:30 p.m. MDT on Oct. 23. Now in orbit, the spacecraft will gradually tighten its elliptical path to get into an orbit appropriate for science mapping. By late January or early February, all instruments aboard Mars Odyssey, including the neutron spectrometer, will begin sending data about Mars back to Earth for a planned 917 days.

The neutron spectrometer also collected background and calibration data while cruising to Mars. "We've already analyzed data from the cruise and it is really beautiful," said Feldman. "The cruise data will be extremely useful for calculating the amount of radiation exposure astronauts might receive traveling to and from Mars." Feldman and his colleagues are preparing a paper for the scientific publication *Geophysical Research* that analyzes these data.

For planetary measurements, neutrons are generated when galactic cosmic rays slam into the nuclei of atoms on the planet's surface, ejecting neutrons skyward with enough energy to reach an orbiting spacecraft. Elements create

their own unique distribution of neutron energy — fast, thermal or epithermal — and these neutron flux signatures allow scientists to determine the general distribution of the soil's elemental composition based on the data received from the instruments.

By looking for a decrease in epithermal neutron flux the scientists can locate hydrogen. Because hydrogen is most likely in the form of water-ice, the spectrometer will be able to measure directly the amount of ground ice up to a meter deep into the Martian surface and how it changes with the seasons.

Other instruments aboard NASA's 1,600-pound spacecraft include a thermal-emission imaging system, a gamma-ray spectrometer, a high-energy neutron detector and a radiation monitor.

A team of scientists and engineers from Space and Atmospheric Sciences (NIS-1) and Space Instrumentation and System Engineering (NIS-4) headed by Feldman, Ken Fuller, Steven Storms, Danny Everett, Glenn Thornton and Jerry Longmire designed and constructed the neutron spectrometer.

Development of the instrument supports the Lab's New Initiatives research and development product goal. The neutron spectrometer aboard NASA's 2001 Mars Odyssey spacecraft focuses on basic scientific research, but the technology also can be applied in the threat-reduction arena to detect the detonation of nuclear devices.



The Los Alamos News Letter, the Laboratory bi-weekly publication for employees and retirees, is published by the Public Affairs Office in the Communications and External Relations (CER) Division. The staff is located at TA-3, Building 100, and can be reached by e-mail at [newsbulletin@lanl.gov](mailto:newsbulletin@lanl.gov), by fax at 5-5552, by regular Lab mail at Mail Stop C177 or by calling the individual telephone numbers listed below.

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# Lab taking precautions with incoming mail

by Steve Sandoval

While the nation's attention is turned toward the anthrax scare on the East Coast and what's in the mail, the Laboratory is taking precautions to ensure that its mail is safe for Lab workers to open.

Lab workers should immediately report mail or packages that they think are suspicious, security and mailroom officials said.

Generally speaking, Lab workers should be alert for suspicious package characteristics in interoffice and regular postal mail.

Packages with misspelled words that are bulky, stiff or unusually heavy items as well as unexpected packages or letters should be treated with caution. Packages with no return address; restrictive markings such as "personal"; excessive postage; lopsided or uneven packages; those with excessive tape or string and with oily stains, discolorations or crystallization on the packages outer wrappings; and packages with strange odors shouldn't be opened.

Mike Barnes of Emergency Management and Response (S-8) said a single characteristic does not make a package suspicious. But a combination of these characteristics may make a package suspicious. Recipients of such packages, he

said, should ask themselves if they are expecting a package from the source.

Carol Smith, group leader of Materials Management (BUS-4), said the Lab is looking at the mail with increased diligence. She noted that packages that look suspicious are being held and not distributed.

Smith said the Lab's mail service operations handles about 57,000 pieces of mail daily. Much of the incoming mail is handled at least twice before being delivered to Lab workers. Workers in the mailroom, she said, are encouraged to wear gloves and masks as a safety precaution.

Smith added that Lab personnel who receive packages that look suspicious shouldn't open them; the suspicious package should immediately be reported to S-8 at 7-6211. Lab workers also should call 9-1-1 if they receive a package they believe may be dangerous.

The Safeguards and Security (S) Division has a Web site at <http://int.lanl.gov/security/sec-con/index.shtml> where security bulletins are placed providing additional guidance on handling suspicious packages.

Industrial Hygiene and Safety (ESH-5) and S-8 are using recommendations and guidance from the Centers for Disease Control and



**Arlene Martinez of Materials Management (BUS-4) sorts mail at the Laboratory's mail service mailroom at Technical Area 3. Workers in the mailroom are encouraged to wear latex gloves and other personal protective equipment while processing mail. Lab workers are encouraged to immediately report mail or packages they consider to be suspicious to Emergency Management and Response (S-8) at 7-6211.** Photo by LeRoy N. Sanchez

Prevention and other sources in developing its guidelines for handling packages, letters and materials. The CDC home page is at <http://www.cdc.gov/> online.

In addition, Occupational Medicine (ESH-2) has information about anthrax on its Web page. The information can be found online at <http://www.medical.lanl.gov/>.

## Anthrax ...

*continued from Page 1*

for detecting and identifying the organism down to its precise DNA fingerprint.

Lab technologies have been applied both in the field and in the laboratory. Some technologies already have been transferred to agencies with national responsibilities for investigating and resolving anthrax diagnoses. Specialty analysis of the DNA sequence can reveal similarities or differences among the *B. anthracis* found in various cases of infection. The degree of relatedness among different samples also can be determined in much the same way that human DNA fingerprinting is used to establish family relationships.

Information gleaned from the study of the *B. anthracis* genome has resulted in the Lab's development of unique reagents for specifically amplifying fragments of the *B. anthracis* genome using polymerase chain reaction. These reagents have been made available to federal agencies and can be used for

the rapid detection of *B. anthracis* in times of concern.

The most mature of these technologies — called Amplified Fragment Length Polymorphism analysis — has been developed and optimized over the past several years to analyze *B. anthracis* samples from naturally occurring anthrax outbreaks around the world. An extensive collection of *B. anthracis* AFLP fingerprints has been assembled and is used as a resource for matching or relating an unknown sample to the large number of fingerprints in the collection.

A newer technique for genetic analysis of *B. anthracis*, Multiple Locus Variable Number of Tandem Repeat analysis, gives a very high resolution of DNA fingerprint. It recognizes the presence of repeated DNA sequences in the genome by using a set of "markers" that surround these repeats.

This research continues to enrich the nation's reservoir of knowledge and contributes to the Lab's overall institutional goals, specifically in the areas of new initiatives in threat reduction and homeland defense. This research also provides important opportunities in civilian research partnerships.

# Open Enrollment continues through Nov. 30

by Shelley Thompson

Open enrollment, which began Nov. 1 for University of California employees and retirees, ends Nov. 30. Open enrollment is for medical, dental, vision and Dependent Care Assistance.

Monthly health-plan premiums for 2002 and the comparison between 2002 and 2001 co-payments are shown in the tables on Page 5. The new health-plan premiums will be deducted from employees' paychecks beginning Dec. 27.

UC Laboratory employees should have received open enrollment packets at their home mailing address from the UC Office of the President containing details about how to make changes. As in the past, changes will be made by telephone through the "Open Enrollment Action Line." If employees choose not to make any changes, no action is necessary and current plan choices will continue in effect for 2002, said Helga Christopherson, Human Resources (HR) Division leader. Employees hired Sept. 25 or later should receive an open enrollment packet from Compensation and Benefits (HR-1). If employees have not received this information, they should contact Benefits at 5-5864.

According to Christopherson, "This year's health-care contract negotiations between the University of California Office of the President and the Department of Energy were intense and lengthy because health-care costs continue to rise dramatically across the nation and are expected to continue to rise for the next several years." In spite of increasing health-care costs, UC Lab employees' share of the health insurance premiums remain relatively modest, said Christopherson. Employee contribution rates increased about 25 percent, but, she noted, employees' percentage of the total premium cost rose from 13.5 percent to 15.7 percent, a tribute to Laboratory

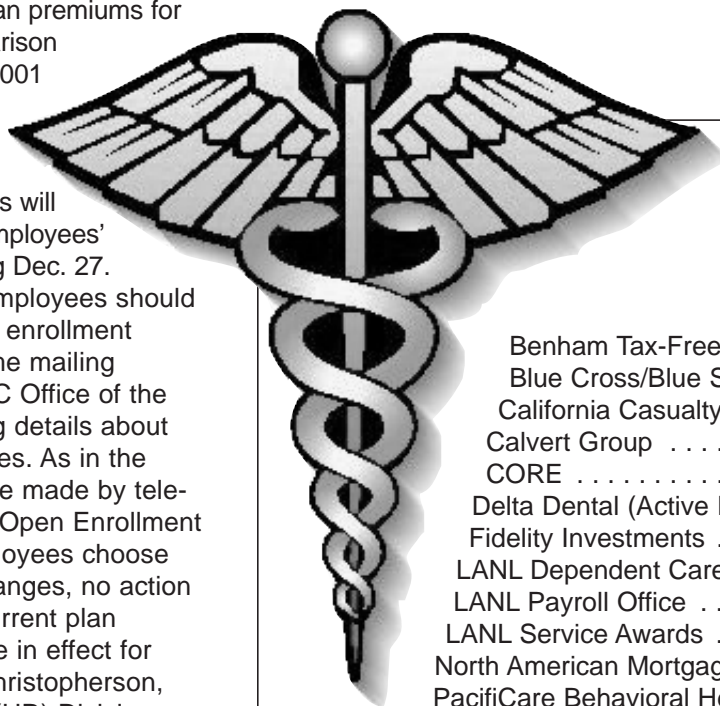
management's desire to hold down employee costs amidst the national trend of rising health-care costs.

"Every effort was made to keep the increases to a minimum while continuing to offer comprehensive insurance coverage and ensure

quality care across our diverse population," Christopherson said.

Changes to the HMO medical plan include the addition of McKinley County to the coverage area, the removal of the annual co-payment maximum and increases in co-payments. Hospital

*continued on Page 5*



## Frequently used telephone numbers and Web sites Laboratory Benefit's Office 667-1806

Benham Tax-Free Funds	1-800-472-3390
Blue Cross/Blue Shield of NM	1-800-711-3795
California Casualty	1-800-841-1231
Calvert Group	1-800-368-2745
CORE	1-800-632-0524
Delta Dental (Active Employees)	1-800-999-0963
Fidelity Investments	1-800-343-0860
LANL Dependent Care Referral	665-4113
LANL Payroll Office	667-4595
LANL Service Awards	667-8282
North American Mortgage Co.	1-800-496-4499
PacifiCare Behavioral Health	1-800-817-8811
PCS Mail Service (Prescriptions)	1-800-966-5772
PERS	1-800-352-2238
Signature Legal Care	1-800-841-0193
UC Benefits Customer Service Office (bencom.fone & 403b)	1-800-888-8267
UC Loan Office	1-800-239-4002 Ext. 70747
UC Telephone Fund Transfer	1-800-933-0306
Vision Service Plan	1-800-877-7195

### Web sites

Benefits Home Page	www.lanl.gov/benefits
Blue Cross/Blue Shield	
HMO and POS Primary Care Providers	www.bcbsnm.com
Delta Dental	www.deltadentalnm.com
Signature Legal Care	www.legalcareplan.com
The Home Loan Program	www.loan-uc.com
UC Bencom	www.ucop.edu/bencom
Retirement Estimator	
403b Loan Program	
UCRS Balances	
Transfer UC Funds	
Begin/Change 403b Contributions	
Change Your PIN	
On-Line Forms	
Vision Service Plan	www.vsp.com

# Open Enrollment...

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admission also will now have a co-payment of \$250.

The Lab's 2002 dental plan includes a change in the age limit for pit and fissure sealant coverage to age nine for primary molars and age 15 for secondary molars. The Vision Plan will now cover polycarbonate lenses.

There are no changes to the Core New Mexico Plan.

A summary of rates and changes is shown below. Full details about the plan design changes along with open enrollment meeting schedules can be found at <http://www.hr.lanl.gov/Benefits/OpenEnrollment/Index.stm> or at the UC benefits Web site at <http://www.ucop.edu/bencom/oe> online.

### Prescription drugs

New formulary applicable (A list of formulary drugs can be found at

[http://www.bcbsnm.com/Members/LG/lanl/Lanl\\_formulary.htm](http://www.bcbsnm.com/Members/LG/lanl/Lanl_formulary.htm) online)

- Monthly supply limit – 30 days/120 units, for example, four pills per day for 30 days

- 90-day supply — two co-payments for 31-90 days/360 units supply, whichever is less

### Other Plan Changes

- Supplemental Life Plan — rates will decrease by 2 percent

- Health Care Spending Account Plan — will be added spring of 2002.

2002 monthly health plan premiums			
	Single	Two-party	Family
LANL contribution	\$219	\$460	\$590
Employee contributions			
BluePremier HMO-NM	\$34.84	\$72.74	\$95.80
BluePremier POS-NM <sup>1</sup>	\$125.40	\$262.93	\$340.34
BluePremier POS-NM <sup>2</sup>	\$41.10	\$85.89	\$112.71
CORE	\$0	\$0	\$0

<sup>1</sup> Living in New Mexico HMO area

<sup>2</sup> Not Living in New Mexico HMO area

2002 and 2001 co-payment comparison chart		
	2001 Co-payment	2002 Co-payment
Primary care physician visit	\$15	\$20
Emergency room HMO	\$35	\$75
Emergency room POS	\$50	\$75
Hospital admission (HMO)	\$0	\$250
Brand name prescription drugs	\$25	\$30
Nonformulary prescription drugs	\$40	\$45
Generic brand prescription drugs	\$15	\$15



**For Laboratory closures, delays or early dismissal information, call UPDATE at 667-6622 or 1-877-723-4101 (toll free).**



### IGPPcelebrates 20th anniversary

Laboratory scientist Charles "Chick" Keller, center, talks with Burton Wendroff, left, of Mathematical Modeling and Analysis (T-7), and Jody Heiken of Communication Arts and Services (IM-1), at a retirement reception for Keller last month in the Otowi Cafeteria side dining rooms at Technical Area 3. Keller led the Laboratory's Institute of Geophysics and Planetary Physics for 13 years. The IGPP held an open house to celebrate its 20th anniversary at Los Alamos. The institute is part of the Lab's Earth and Environmental Sciences (EES) Division. Photo by Ed Vigil



## NEWSMAKERS



**Antonio  
"Tony"  
Andrade**

• **Antonio "Tony" Andrade**, group leader for Radiation Protection Services (ESH-12) and a 20-year Lab employee, has been selected to serve with the Bush administration as a member of the President's Advisory

Board on Radiation and Worker Safety. Nominated for the position by Sen. Pete Domenici, R-N.M., the appointment was made in response to a request to Congress and other government agencies to help convene a group of experts in the areas of dose assessment, dose reconstruction, radiation effects and current issues associated with the compensation of workers with

radiation-related injury and illness claims. Andrade received an undergraduate degree from the University of Texas and a master's and doctorate from the University of Michigan.

• Lab engineer **Brett Kniss** has received the Department of Energy's Distinguished Associates Award, the



**Brett Kniss of Weapons Component Technology (NMT-5) talks to Gen. John Gordon, National Nuclear Security Administration administrator, via video conference.** Photo by LeRoy N. Sanchez

highest that DOE can give a nonfederal employee. Kniss, chief engineer for the Lab Pit Production Project in Weapons Component Technology (NMT-5), received the award for his many years of work establishing Los Alamos' capability to produce small numbers of plutonium pits, the cores of U.S. nuclear weapons. Gen. John Gordon, chief administrator of DOE's National Nuclear Security Administration, congratulated Kniss via video conference during the recent award ceremony. Kniss came to the Lab in 1984. He served as project leader for the Los Alamos Pit Surveillance project from 1993-96. Before that, he worked on engineering and production assignments for Los Alamos at Rocky Flats and the Pantex plant.

# Uninvited guests can spoil holidays

by Fran Talley

With all the time, effort and planning that goes into holiday cooking, it's tempting to take a few shortcuts when it comes to preparing the meal. But don't.

Food preparation practices popular during this time of year can increase the risk for unwelcome bacteria and food-related illness. Hectic schedules may contribute to cutting corners in the kitchen and home cooks may be less familiar with cooking the large pieces of meat and poultry often served at this time of year. Buffet dinners and large group meals also pose special challenges.

Keep your foods and dining experiences safe and enjoyable this holiday season by following these tips:

Practice the "Clean-Separate-Cook-Chill" guidelines.

- Clean: Wash hands and food-contact surfaces often.
- Separate: Don't cross-contaminate; this is especially important for raw meat, poultry and seafood.
- Cook: Cook to proper temperatures. Use a food thermometer.
- Chill: Refrigerate promptly.
- Keep hot foods hot and cold foods cold. The "danger zone" for the growth of harmful bacteria is 40-140 degrees F.

• Perishable foods should not be left at room temperature for more than two hours. (Try not to be the last through the buffet line!)

• Enjoy commercial eggnog, but stay clear of home-prepared eggnog made with raw eggs. Salmonella, present in raw and undercooked eggs, also is a risk in raw homemade cookie dough.

• Follow food safety guidelines for the preparation, handling and storage of homemade food gifts that you give and receive.

These food safety tips are courtesy of the Wellness Center (ESH-2). For more information, visit the Gateway to Government Food Safety Information seasonal advice pages at <http://www.foodsafety.gov/~fsg/holiday.html>.

## In Memoriam

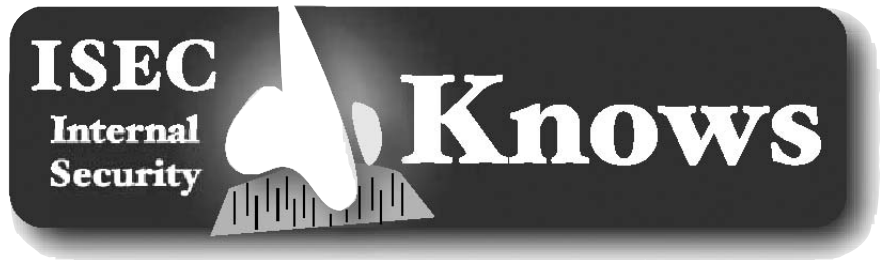
### Shawn H. Harshbarger

Shawn H. Harshbarger, 36, of Hernandez died Oct. 2 in a motorcycle accident. Harshbarger began his career with the Laboratory in 1991 for the Operations Group. He joined Facilities Management in 1993 as a technical facility operator where he worked until his death. He was part of the team that helped during the Cerro Grande Fire as an Operations Center operator. Harshbarger served from 1985 to 1991 with the U.S. Navy on the USS Florida Trident submarine as a reactor operator. He attended college at City University in Washington where he received an associate of science degree in general studies.

- A consortium of federal laboratories has recognized Los Alamos for its support of technology transfer and regional economic development. The Mid-Continent Region of the Federal Laboratory Consortium for Technology Transfer named Los Alamos as "Laboratory of the Year" for 2001. The FLC said in a statement that Los Alamos was recognized for "its visionary and critical support of the Los Alamos Research Park," a cooperative economic development effort involving Los Alamos County, the Los Alamos Commerce and Development Corporation, the Regional Development Corporation, the Economic Development Agency of the U.S. Department of Commerce, DOE's Los Alamos Area Office, the Laboratory and the private sector. The FLC recognized Los Alamos for its role in the Research Park, attracting corporate partners to collaborative research and making the Laboratory's library and open computing systems available to other tenants. For more information on the Los Alamos Research Park, go to [www.la-rp.org](http://www.la-rp.org).

- Seven organizations and projects at the Laboratory received Green Zia awards from the New Mexico Green Zia Environmental Excellence Program for their efforts in pollution prevention. The **Environmental Science and Waste Technology (E)**, **Human Resources (HR)** and **Engineering, Science and Applications (ESA)** divisions won Achievement Awards. The

**Business Operations (BUS)** and **Facilities and Waste Operations (FWO)** divisions, the **Nuclear Materials Technology Group** and **ARAMARK Corp.**, the Lab's food service provider, won Commitment Awards. The Lab's winning applications are available online at [http://emeso.lanl.gov/eso\\_projects/green\\_zia/Applying/application.html](http://emeso.lanl.gov/eso_projects/green_zia/Applying/application.html).



## The OPSEC process

### Step 1: Identify Your Critical Information

by Kevin Roark

In this first step, you identify which information must be protected to ensure that your adversary/competitor does not gain a significant advantage. To determine critical information, the adversary/competitor will link critical indicators like pieces of the puzzle to make assumptions or uncover logical patterns that provide a route to the facts or activities that need protection.

Critical information consists of information and observables about your activities, intentions, capabilities and/or limitations that must be denied to your adversary/competitor to keep that adversary/competitor from gaining a technological, economic, political or military advantage. Critical information varies from organization to organization as well as from project to project. The people actually working the project best define critical information.

Critical indicators are activities that can be heard, observed or imaged and are often categorized as

- Indicators that establish a profile: Activities which provide the adversary with patterns showing how activities within the organization are normally conducted.
- Indicators that show a deviation: Activities that are not part of your organization's normal conduct.
- Tip-off indicators: Activities that provide your adversary with information on where they should focus their collection capabilities. In other words, these are direction signs for your adversary.
- Some general indicators include

Location	Emblems
Restrictions	Acronyms
Hours of operation	Stereotyped activities
Arrival times	Volume of visitors
Departure times	Volume of communications
Staff composition	Delivery and pickup times and place
Activity intensity	

For more information on OPSEC, call the OPSEC Program Office at 5-3372.



### The flu and you

Flu vaccinations are recommended for all Americans, but especially those who are at high risk. These include people age 65 and older; people with heart disease, diabetes, asthma, kidney disease and other lung diseases; and those who live or work in institutional settings, such as nursing homes, schools or military bases. People who come in contact with somebody who is at high risk should also consider getting the shot.

For information on the Laboratory flu shot clinic, go to <http://www.hr.lanl.gov/GoodHealth/flu2001.stm> online.

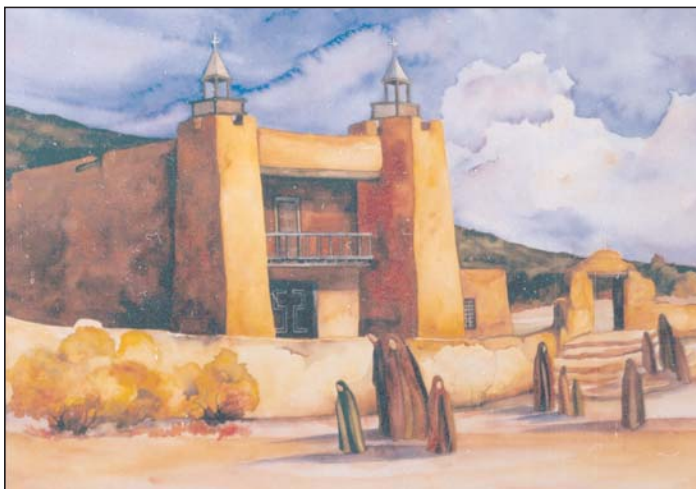
# Closet artist breaks into art world

by Lecole Trujillo

Since Michelle Ferran's childhood, she has had an amazing talent. She is blessed with the ability put her world on paper for others to view. Ferran is a watercolorist from the Española Valley. She has been drawing and painting for years but kept her work under her bed until 1998. Ferran has been working for Facilities Management (NMT-8) for the last 9 years and has been working at the Lab for nearly 20 years.

Ferran was brought up in La Mesilla. When she was growing up, it was a small farming area where she, her three sisters and two brothers helped work the land and participated in raising farm animals. She also participated on the Ferran family farm in Coyote, N.M.

Artistic talent runs in Ferran's family. She has weavers, painters, poets and musicians in her immediate family.



**Pictured are two of Michelle Ferran's watercolors. Ferran of Facilities Management (NMT-8) has been drawing and painting for years but just recently began entering her work in art shows and contests. To view the above paintings in color, go to <http://www.lanl.gov/worldview/news/LANL/111501.pdf> online.**

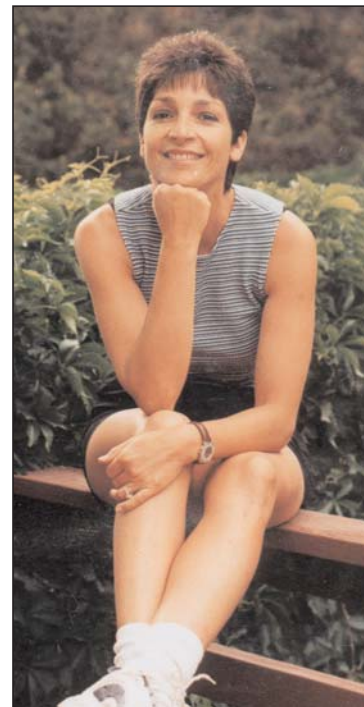
In hopes that one day her sisters might join her in selling and showing their art, she started her business called Ferran Fine Art.

She loves painting. She said, "It is my escape, my own private escape." Through years of practice she has sharpened her skills; her work is now sought after by fans and collectors.

As a closet painter, she was afraid at first to display her artwork because she felt as though she was putting herself on display for criticism. Slowly she began to enter local art shows. People responded positively to her paintings, enticed by her vibrant colors that bring her work to life.

As she became more confident in her work, she entered more sophisticated contests like the Santa Fe Spanish Market and the New Mexico State Fair. The first major contest she entered was the Española Valley poster contest in 1998. It was the 400 anniversary of Don Juan De Oñate's arrival in New Mexico, and Ferran painted a piece to celebrate his coming. She won. In 2001 she won the same contest. Since then she has received "Best Artist" in the Valley by the Rio Grand Sun and is the first artist to receive that honor two years in a row. Also in 2001, she was accepted into the Hispanic art showcase at the New Mexico State Fair where she won first place from the Harvest Maiden Gallery and third place in best of show for watercolors, oils and acrylics.

To view more of Ferran's work, go to <http://www.galleryofart.cc> online.



**Michelle Ferran**

## Los Alamos News Letter

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