



March 28, 2008

New Method Explores DNA Radiation Damage Suggests mechanism for why some types of radiation are more harmful than others; wins DOE pollution prevention award

Betsy Sutherland

A new technique for assessing the damage radiation causes to DNA indicates that the spatial arrangement of damaged sites, or lesions, is more important than the number of lesions in determining the severity of the damage. The technique, developed by scientists at BNL, helps reveal why high-energy charged particles such as the heavy ions in outer space are more po-

tentially harmful than lowerenergy forms of radiation such as x-rays and gamma rays. The research, which was published online on March 19, 2008, by the journal *Nucleic Acids Research*, could help clarify the risks faced by future astronauts flying long-term missions to the moon or Mars.

The new technique uses different colored fluorescent "tags" instead of radioactive ones to monitor an enzyme's ability to repair damage to DNA, life's genetic instruction molecule. Because these

fluorescent tags reduce the amount of hazardous waste associated with the research (and its cost) the BNL scientists, Betsy Sutherland of the Biology Department and Brigitte Paap, now at Arizona State University, have been recognized by DOE's Office of Science for their "Best in Class" pollution prevention innovation.

This research was funded by DOE's Office of Biological & Environmental Research within the Office of Science, the National Aeronautics and Space Administration, the National Space Biomedical Institute, the National Institutes of Health, and the BNL Pollution Prevention Program.

"Understanding the effects on humans of radiation exposure — whether in the natural environment, in outer space, in the workplace, or due to radiation therapy — requires insight into the induction and repair of damage to DNA," said Sutherland, an expert in the study of space radiation. "It's very rewarding to come up with a new technique that helps us understand this process while at the same time reducing the waste associated with traditional techniques."

Radiation can damage the DNA double helix — a two-stranded, twisting molecule — in a variety of ways. That damage can result in a failure of the molecule to perform its main task, telling cells which proteins to make, which can lead to out-of-control cell growth (cancer) or death.

Cells can often use specialized enzymes to repair radiation-damaged DNA. But damage from ionizing particle radiation appears to be harder to repair than that caused by lower-energy forms of radiation such as x-rays and gamma rays. Scientists have long hypothesized that the high-energy ionizing particles caused more complex damage containing many lesions close together on the DNA, leading to slower and less accurate repair. The technique developed by Sutherland and Paap allowed them to test this hypothesis.

The results were surprising: Instead of being dependent on the number of lesions, the ability of the DNA-repair enzyme to recognize damaged

sites on the molecule appeared to be most affected by the spatial arrangement of lesions on the DNA strands. The enzyme readily recognized and repaired lesions on one of the DNA's two strands that occurred all to one side of a reference lesion on the opposite strand (think of it as "upstream"). If the lesions occurred "downstream" from the reference lesion, however, the repair enzyme was unable to work properly. When the lesions occurred in a two-

sided cluster both up and downstream from the reference lesion, again the repair enzyme worked poorly.

"Since x-rays produce about half upstream, easily repaired clusters and about half downstream, repairresistant clusters, about half of them would be readily repaired," Sutherland said. "The heavy, charged particles in space radiation, on the other hand, produce much more complex, two-sided clusters, containing so many lesions that most of them are repair-resistant. This directional dependence of the ability to repair lesions explains why damage from charged-particle radiation, such as that encountered in outer space, is potentially more harmful."

Winner of DOE Pollution Prevention Award

The new technique that uses fluorescently labeled synthetic DNA fragments replaces a technique in which radioactive isotopes are used as tags. While efficient, radioactive isotopes are more expensive than the fluorescent tags. Also, using radioactive tracers requires frequent preparation of freshly labeled DNA, and disposal of the experimental samples as hazardous waste which further increases the cost of the research.

Fluorescently labeled molecules can be stored frozen for long periods. So the new method minimizes waste generation and improves worker safety by avoiding the handling of radioactive material.

The technique may now be used throughout DOE labs and in universities and industry, and may be considered for other awards, including the White House "Closing the Circle" award competition. — Karen McNulty Walsh For more details, see www.bnl.gov/bnlweb/pubaf/

For more details, see www.bnl.gov/bnlweb/pub pr/PR_display.asp?prID=08-24 .

Exploring Research Interests Linking SUNY, SBU, BNL

To learn at first hand about the close relationship between BNL and the State University of New York (SUNY)'s Stony Brook University (SBU), and how BNL can contribute to SUNY's research strengths, James Weyhenmeyer, the new Senior Vice Provost of the SUNY system and Senior Vice President of the SUNY Research Foundation, visited the Lab on March 14. With him that day was Gail Habicht, Vice President for Research with the Research Foundation at SBU, who had been a Stanford summer student at BNL's Medical



James Weyhenmeyer (second from left) of the State University of New York and Gail Habicht of the Research Foundation at Stony Brook University talk with BNL Director Sam Aronson (left) and BNL's Jim Davenport at the New York Blue Supercomputer.

Department in the 1960s. More recently, she is credited with helping establish the New York Center for Computational Sciences, also known as "New York Blue," at BNL.

After a welcome from Lab Director Sam Aronson and Michael Holland, Manager of DOE's Brookhaven Site Office, the visitors, accompanied by Aronson, toured some of the Lab's research facilities to meet with several BNL science leaders. First, at the Positron Emission Tomography facility, Associate Lab Director for Life Sciences Fritz Henn and Neuroimaging Program Director Joanna Fowler, with Medical Department Chair Gene-Jack Wang and medical scientist Paul Vaska gave an overview of BNL's latest translational neuroimaging research, of particular interest to Weyhenmeyer, who, as a cell biologist and neuroscientist, has published extensively on degenerative brain disorders.

Weyhenmeyer and Habicht then met with others among the Lab's science leaders, including Computational Science Center Director Jim Davenport at the New York Blue supercomputer, Associate Director for Light Sources Steve Dierker and National Synchrotron Light Source (NSLS) Department Chair Chi Chang Kao at the NSLS, and Center for Functional Nanomaterials (CFN) Director Emilio Mendez at the CFN, where Associate Director for Basic Energy Sciences Jim Misewich discussed the Lab's energy profile. The final stop before lunch and the visitors' departure was at the Biology Department, where Fritz Henn, Biology Chair Carl Anderson, and senior biologist John Dunn shared views with the visitors on research at BNL in epigenetics, the study of certain modifications in chromatin and DNA that are inherited when the cells divide, allowing cells to maintain different characteristics despite containing the same genomic material. — Liz Seubert

News From the March 2008 American Physical Society Meeting

Modeling How Electric Charges Move

Learning how to control the movement of Lelectrons on the molecular and nanometer scales could help scientists devise small-scale circuits for many applications, including more efficient ways of storing and using solar energy. At the American Physical Society meeting on March 10, Marshall Newton, a theoretical chemist in the Chemistry Department, preMany scientific talks were presented by researchers from BNL at the American Physical Society meeting, March 10-14, 2008, at the Morial Convention Center, New Orleans, Louisiana. Two among these talks are featured this week, below, and two more will follow in the next issue of the Bulletin on April 4. The research described below was funded by the Office of Basic Energy Sciences within DOE's Office of Science.

sented a talk highlighting the theoretical techniques used to understand the factors affecting electron movement.

"Electron transfer plays a vital role in numerous biological processes, including nerve cell communication and converting energy from food into useful forms," said Newton. "It's the initial step in photosynthesis, as well, where charges are first

separated and the energy is stored for later use — one of the concepts behind energy production using solar cells."

Newton described how combining electronic quantum mechanical theory with computational techniques has led to a unified, compact way to understand the nature of charge transfer in complex molecular aggregates.

"In essence," he explained, "the research of has led to understanding electronic (continued on page 2)

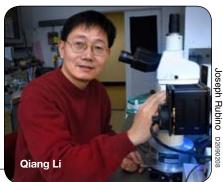


Two-Dimensional Fluctuating Superconductivity

Scientists at BNL have discovered a state of two-dimensional (2D) fluctuating superconductivity in a high-temperature superconductor with a particular arrangement of electrical charges known as "stripes." The finding was uncovered during studies of directional dependence in the material's electron-transport and magnetic prop-

erties. In the 2D plane, the material acts as a superconductor — conducts electricity with no resistance — at a significantly higher temperature than in the 3D state.

"The results provide many insights into the interplay between the stripe order and superconductivity, which may shed light on the mechanism underlying hightemperature superconductivity," said physicist Qiang Li of the Condensed Matter



Physics & Materials Science Department, who presented this work at the APS meeting on March 13.

Other scientists at BNL from the same department who worked on this research are: John Tranquada, Markus Hucker, Alexei Tsvelik, and Genda Gu.

Understanding the mechanism of high-temperature superconductivity is one of the outstanding scientific issues in condensed matter physics, Li said. *(continued on page 2)*

The Bulletin

CALENDAR of Laboratory Events

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area.
- The Recreation Building #317 (Rec. Hall) is located in the apartment area.
 Contact names are provided for most
- events for more information.
 Events flagged with an asterisk (*) have an
- accompanying story in this week's Bulletin.

- EACH WEEK -

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermediate, Advanced classes. Various times. All are welcome. Learn English, make friends. See www.bnl.gov/esol/schedule. html for schedule. Jen Lynch, Ext. 4894

Mondays: BNL Social & Cultural Club Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov

Mondays & Wednesdays: Pilates 5:15-6:15 p.m. Rec. Hall. Ext. 5090

Mondays & Thursdays: Kickboxing \$5 per class. Noon-1 p.m. in the gym. Registration is required. Ext. 8481

Mon., Thurs., & Fri.: Tai Chi Noon-1 p.m., B'haven Cntr N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov

Tuesdays: Hospitality Coffee 10:30 a.m-noon, Rec. Hall lounge. All welcome. Ext. 5090

Tuesdays: BNL Music Club

Noon, B'haven Center, N. Room. Come hear live music. Joe Vignola, Ext. 3846

Tuesdays: Knitting Class 2 p.m. Rec Hall. All levels of skill. Ext. 5090 for information.

Tuesdays: Toastmasters

1st & 3rd Tuesday of month, 5:30 p.m., Bldg. 463, Rm 160. Guests, visitors welcome. www.bnl.gov/bera/activities/toastmstrs/

Tue., Wed. & Thu: Rec Hall Activities 5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

Tue., Thurs. & Fri.: Ving Tsun Kung Fu Noon-1 p.m., B'haven Center, North Room. Taught by Master William Moy. Scott Bradley, Ext. 5745, bradley@bnl.gov

Tues. & Thurs.: Jazzercise Noon, Rec. Hall. Ext. 5090.

Tuesday & Thursday: Aerobic Fitness 5:15 p.m., Rec. Hall. 10 classes for \$40 or \$5 per class. Pat Flood, Ext. 7866, flood@bnl.gov

Tuesday & Thursday: Aqua Aerobics 5:30-6:30 p.m., Pool. Ext. 5090

Wednesdays: On-Site Play Group 10 a.m.-noon. Rec. Hall. Infant/toddler drop-in event. Parents meet while children play. Petra Adams, 821-9238.

Wednesdays: Ballroom Dance Class

B'haven Center, N. Ballroom. Instructor: Giny Rae. Starts September 12 and 19. Ext. 3845.

Wednesdays: Weight Watchers

Noon-1 p.m. Michael Thorn, Ext. 8612

Wednesdays: Yoga Noon-1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, ila@bnl.gov

Thursdays: BNL Cycletrons Club Noon-1 p.m., Only on first Thurs. of the month. Berkner Hall, Room D.

Toni Hoffman, Ext. 5257 **Thursdays: Reiki Healing Class** Noon-1 p.m., Call for location. Nicole Bernholc, Ext. 2027

'Certificate in Supervision' Program Helps Develop Leaders at BNL

In 2004, the Lab's Human Resources & Occupational Medicine Division (HROM) implemented the "Certificate in Supervision" program to assist supervisors with communication, motivation, and delegation of responsibilities. To date, about 25 percent of the Lab's supervisors have earned certification.

"Supervisors, and people in general, want to do the right thing," said Susan Foster, HROM. "They all want to enhance their skills and strengthen their understanding of Lab policies so they can provide a good working atmosphere for the Lab's most important resource — our employees." Foster, who initiated the program, said that working as the Lab's Employee Relations Manager, she knows firsthand the positive differences an effective supervisor can make.

Alistair Rogers, a scientist in the Environmental Sciences Division received his certificate in 2007. "The value of some aspects of the course was not immediately apparent," he said, "but as time passed and unique situations arose, I came to appreciate and draw upon much of what I had learned."



Coordinators of BNL's Certificate in Supervision program, (back, from left) Starr Munson and Beth Schwaner, are pictured with three program graduates: (seated, from left) Alistair Rogers, Steve Coleman, and Alexa McGill.

Steve Coleman, an integrated safety manager for the Lab's Deputy Director of Operations who also received his certificate in 2007, agrees with Rogers. "For me, the training was a strong influence in two important ways: building and fostering teamwork, and developing interpersonal skills that have helped me when giving presentations to high-level managers," he said.

According to Beth Schwaner,

Training Manager in HROM, the overall goal of the program is to teach the participants how to address the many challenges they face on a day-to-day basis. "Participants become better supervisors now and are prepared for more demanding leadership roles in the future. Most importantly, we are getting positive feedback from participants," she said.

To earn the certificate, candidates must complete training

modules that build communication skills and teach how to handle performance management and safety leadership. Participants also benefit by networking with other supervisors from around the Lab and are offered additional career development opportunities to help them pinpoint their strengths and learn how to use them effectively.

The most recent graduate, Alexa McGill, a telecommunications manager in the Information Technology Division, will receive her certificate in May 2008.

"By Lab standards, I'm a new employee because I only began working here two years ago," McGill said. "At no time during my career was I ever afforded the opportunity to participate in such a comprehensive management development program." — Jane Koropsak

For more information about this program and to find other resources for supervisors, visit the new supervisory development site at www.bnl.gov/HR/staffdev/ Supervisory%20Site.asp or contact Starr Munson, Ext. 7631 or munson@bnl.gov.

Local Students, Teachers Are 'Physicists for a Day'

n March 5, hosted by Helio Takai of the Physics Department, students and teachers from Ward Melville, Shoreham-Wading River, and Smithtown East High Schools came to BNL to participate in the fourth annual Hands-on Particle Physics Masterclass. Particle physics refers to the study of elementary particles, or constituents of matter, and the interaction between them. The program allows students and teachers to be "particle physicists for a day" and to research the mysteries of particle physics in which particles are accelerated at high speed by - close to the speed of light 5 or energy.

the students a taste of how data from real experiments are handled. Through videoconferencing, they compare and discuss their views and results with participants from around the world, just as actual physicists do in international research collaborations.

The program started with a presentation on the CERN ATLAS detector and its physics reach from Howard Gordon, BNL Physics Department Deputy Chair and U.S. AT-LAS Project Manager and Deputy Program Manager. Ken White, Manager of BNL's



On March 5, BNL physicist Helio Takai (back second from right) hosted students and teachers from Ward Melville, Shoreham-Wading River, and Smithtown East High Schools at the fourth annual Hands-on Particle Physics Masterclass. The program, which allows participants to discuss the mysteries of particle physics with scientists from around the world, also allows the students and teachers to be "particle physicists for a day."

Office of Educational Programs, then gave an overview of educational opportunities at the Lab.

This year, two teachers — Tania Entwistle from Ward Melville and Tom Tomaszewski from Shoreham-Wading River — attended the event. Another teacher, Gillian Winters of Smithtown East, who was unteachers and the students," said Takai. "The students and their teachers were really enthusiastic about the program. These types of programs are helping students to become interested in physics as well as helping teachers incorporate particle physics into their curriculum. This program will continue in the future when we expect students to analyze

Fridays: Family Swim Night 5-8 p.m. BNL Pool. \$5 per family

Fridays: Family Gym Night

5-8 p.m. Family gym activities. Free.

Fridays: BNL Social & Cultural Club

Noon-1 p.m., B'haven Center, South Room, free beginners dance lessons. 7-11:30 p.m. North Ballroom, Dance

CIGNA Representative

A CIGNA Healthcare representative is available as needed in Human Resources, Bldg. 400, or by phone to assist with claims issues you have been unable to resolve yourself through CIG-NA's Customer Service number (1-800-CIGNA24). Mary Beth Kivlen will be available by appointment only. You will need to provide all pertinent documentation. To schedule, call the Benefits Office, Ext. 5126. able to attend, was instrumental in preparing students for the experience.

"This is the third consecutive year that BNL has participated in this event, and we're getting great feedback from the data from ATLAS and CMS, two detectors located at the Large Hadron Collider at CERN in Switzerland." — Jane Koropsak

For more information on the program go to www.physicsmasterclasses.org.

News From the March 2008 American Physical Society Meeting (cont'd) LabVIEW & More, 4/9

Modeling How Electric

Charges Move (cont'd) transport in terms of quantitative answers to a few basic mechanistic questions: namely, how far, how efficiently, and by which route (or molecular 'pathway') a charge moves from a 'donor' to an 'acceptor' in the molecular assembly." The answers come from detailed molecular quantum calculations of the energy gaps separating the relevant electronic states, and the strength of coupling between adjacent molecular units along the pathways.

"This new approach may

yield ways to predict and control electronic transport behavior by 'tuning' the molecular components, resulting in capabilities that can be used to design new solar-based energy schemes," Newton said.

— Karen McNulty Walsh

Two-Dimensional Fluctuating Superconductivity (cont'd)

Understanding this mechanism could lead to new strategies for increasing the superconducting transition temperature of other superconductors to make them more practical for applications such as electrical transmission lines.

"As electricity demand increases, the challenge to the national electricity grid to provide reliable power will soon grow to crisis levels, according to the 2006 report of the Basic Energy Sciences Workshop on Superconductivity," Li said. "Superconductors offer powerful opportunities for restoring the reliability of the power grid and increasing its capacity and efficiency by providing reactive power reserves against blackouts, and by generating and transmitting electricity." - Karen McNulty Walsh

On April 9, at 8-11 a.m. in Bldg. 515's Seminar Room on the second floor, Terry Stratoudakis, from ALE System Integration, will be available for free technical assistance and consultation on BNL employees' automated test, control, and measurement applications. Stratoudakis is also a certified LabVIEW developer, so participants are invited to bring all their LabVIEW questions. Also on hand will be Robert Berger, the local National Instruments representative. Coffee & donuts will be provided by ALE System Integration. For more information, contact Christine Herbst, Ext. 5304 or herbst@bnl.gov.

Meet Kim Hayes of BERA Singles Club



Kim Hayes, a radiological control technician at the National Synchrotron Light Source (NSLS), spends much of her workday checking the radiological materials that come in to the NSLS, conducting radiological surveys on the beam lines, and issuing dosimetry badges. She is also a member of DOE's Radiological Assistance Program, a group of professional and technical

first-responders who evaluate radiological emergencies. But in her off-duty hours, Hayes likes to dance, go to the movies, and generally have fun.

Having a difficult time finding others to join in her social activities, Hayes decided that there must be other singles at the Lab looking to get out and enjoy life. So in November 2007, she took the initiative and formed a new group — the BERA Singles Social Club.

To date, the club has 35 members who have already enjoyed ballroom dancing classes, bowling, and dinners at local restaurants. Said Hayes, "The purpose of the club is not to make matches, but to get members to participate in group activities."

Hayes came to the Lab in 2002 as a guest to take a threemonth computer class. At the end of that class, she submitted an application to Human Resources and was pleasantly surprised when she received a call a week later, asking if she was interested in the Lab's Radiological Control Technician Apprenticeship (RCTA) program. Before that, Hayes had been working in a medical office, but she seized her chance when offered a place at BNL. "The Lab offered me a new career, and I am very grateful for the opportunity," she said.

Together with other members of the BERA Singles Club, Hayes is coordinating upcoming events, including a night out to see That 70s Band, a comedy show, and a music and laser light show. Hayes is also coordinating a bus trip to Pennsylvania for the Abraham & Sarah Christian dinner show, which is open to everyone. There is no age limit and Hayes urges any single BNLer to join the club. Outside members are welcome, but only if they are sponsored by a BNL employee. The Club meets at 5 p.m. the second Friday of the month at the Brookhaven Center.

Said Hayes, "I have already met so many wonderful people at the Lab who I wouldn't have had the opportunity to get to know otherwise. Each member has brought ideas to the table, and we are well on our way to enjoying the benefits of a successful BERA Club. So far, it's been a fun ride. Come join us." — Jane Koropsak

Nominations Wanted: For Environmental Stewardship Awards

As part of BNL's commitment to environmental stewardship, the Lab presents awards annually to employees who help to make the environment healthier and more livable. Nominations are requested for winners of the 2007 award: winners will be employees who have demonstrated an outstanding contribution in the areas of pollution prevention, recycling, waste minimization, energy conservation, compliance, or resource conservation.

Awards will be presented at the annual Earth Day Award Ceremony on April 24. If you believe you or someone you know should be recognized for environmental stewardship efforts, forward your name, or your nominee's name, extension, division, Bldg. number, and an overview of the contribution, with any supporting documentation, to Karen Ratel, Bldg. 120, by April 16. For more information, contact Ratel at Ext. 3711 or ratel@bnl.gov.

BNL's Hispanic Heritage Club Offers Four \$500 HS Scholarships

The Hispanic Heritage Club (HHC) at Brookhaven National Laboratory is proud to announce that it will be granting four \$500 scholarships to high school seniors who are interested in pursuing a science or engineering degree.

Applicants should a) have a minimum 3.0 cumulative GPA, b) be accepted by a college for fall 2008 classes with the goal of obtaining a degree in science or engineering, c) attend Bellport, Longwood, Riverhead or William Floyd high schools, d) have some degree of Hispanic ancestry, and e) be U.S. citizens or permanent residents. The application deadline is April 7, 2008. The application form can be downloaded from www.bnl.bov/bera/activities/hispanic. The winners will be announced on April 30, 2008.

The Hispanic Heritage Club at BNL was founded in 2001 and is part of the Brookhaven Employees Recreation Association. It currently has about 30 members. The HHC is committed to supporting educational achievements of Hispanic students. This will be the second time the HHC is embarking on such a project. The scholarships are funded by proceeds from ticket sales of past events sponsored by the HHC.

BNL Career Open House, 3/29 — Tell Friends

BNL will hold a Career Open House on Saturday, March 29, 10 a.m.-3 p.m., in Berkner Hall. Human Resources (HR) representatives and hiring managers will conduct preliminary interviews for specific positions at the Laboratory. This Open House is for outside applicants only; current BNL employees interested in positions should apply through the BNL homepage.*

BNL employees are encouraged to tell non-BNL friends and professional acquaintances who might be interested in working at the Lab to pre-register and attend the Open House. To register, go to http://www.bnl.gov/HR/CareerOpenHouse.asp . Prospective candidates should bring a copy of their resumé. All visitors to the Lab age 16 and over must carry a photo ID.

At the Open House, when outside candidates are interviewed for a position, if appropriate, they may credit the employee who suggested that they attend. Certain positions are posted as "ERAP eligible" within the posting. ERAP, which stands for "Employee Referral Award Program," means that a BNL employee who is the first to refer a candidate for successful placement in an ERAP-eligible position will be rewarded.

The Career Open House will showcase careers in many areas of the Lab, including engineering, information-technology, technician, contract-specialist, and project-control positions. The Lab is especially seeking mechanical and electrical engineers, projectplanning professionals, information technology experts and other technical staff for both BNL's soon-to-be-built National Synchrotron Light Source-II (NSLS-II) and the Collider-Accelerator Department.

*BNL employees interested in positions at the Lab should apply through the BNL homepage: click on Careers at Brookhaven and then Employment Opportunities to view all open positions. Anyone who requires assistance with this process should feel free to call either Felicia Hartsough, Ext. 2213 or Susan Clements, Ext. 2883.

Reimbursement Account Deadline, 3/31

According to the Internal Revenue Service, contributions to health care or dependent day care accounts not used by the end of the calendar year will be forfeited. Do not forget to use balances within all 2007 reimbursement accounts by claiming expenses incurred in 2007. To do so, submit claim forms by March 31, 2008.

Join the Easter Egg Hunt Tomorrow, 3/29

The BNL Hospitality Committee invites all to the Annual Easter Egg Hunt in the Recreation Building, Bldg. 317, on Saturday, March 29, at 11 a.m. There will be games, crafts, and a raffle. Each family should bring one dozen hard-boiled decorated eggs and a dish to share. Bagels, fruit, and drinks will be provided. The egg hunt will start at 11:30 a.m. and the games at noon, so be on time (11 a.m.) so that there is enough time to hide the eggs. Looking forward to seeing all of you! For information contact: Jennifer Lynch, Ext. 4894 or jlynch@bnl.gov.

In Memoriam

Walter Palais, who became a draftsman IV in the Photography &

CALENDAR

- THIS WEEKEND -

Friday, 3/28

Last Day to Vote for BERA Board

11:30 a.m.-1:30 p.m. Research Support Bldg. 400. lobby. Last day to vote for four new BERA Board members out of the eight candidates. Information on and quotes from each candidate supplied. Or, vote on line from the BERA homepage.

*Employee Lunchtime Tour: BGRR

Noon-1 p.m. Berkner Hall upper lobby. Tour will take participants to the Brookhaven Graphite Research Reactor (BGRR), to learn some of its history and the plans for its future. Meet the group at Berkner to be taken to the BGRR; the tour will return there by 1 p.m. For more information, contact Elaine Lowenstein, Ext. 2400.

*Kane Daily Rock, Blues Band

7:30 p.m. Brookhaven Center. Sponsored by the BNL Music Club. Tickets: \$10 in advance, \$12 at the door. See p. 4.

Monday, 3/29

*Children's Easter Egg Hunt

11 a.m. Recreation Hall in apartment area. The Hospitality Committee will hold the annual Easter Egg Hunt. See notice below, left.

— WEEK OF 4/31 —

Monday, 3/31

*Start of Spring Fitness Program — Register Ahead!

All are encouraged to register for the Lab's 2008 Spring Fitness program, "Brand New U," sponsored by the Employee Health Program managed by Michael Thorn. Find out more information and/or register at www.bnl.gov/hr/occmed/HPP orasp or contact Thorn, Ext. 8612 or mthorn@bnl.gov. See also p. 4.

– WEEK OF 4/7 –

Wednesday, 4/9

BSA Noon Recital

Noon, Berkner Hall. Violinist Solomiya Ivakhiv will perform. All are welcome to this free concert. Visitors to the Lab of 16 and older must carry a photo ID.

- WEEK OF 4/14 -

Wednesday, 4/16

*LabVIEW Meeting, More

8-11 a.m. Bldg. 515. 2nd. Fl. Seminar Room. See notice, p. 3.

435th Brookhaven Lecture

4 p.m. Berkner Hall. Nicholas Camillone of the Chemistry Department will speak on "Crossing Interfacial Frontiers: Surface Chemical Dynamics at the Temporal and Spatial Limit." All are welcome to this free lecture. Visitors to the Lab of 16 and older must carry a photo ID.



One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Wednesday, April 9; Wednesday, April 23; and Wednesday, April 30; to answer employees' questions about financial matters. The consultant will help you: understand the importance of protecting your assets against inflation; find the right allocation mix for you, learn about TIAA-CREF retirement income flexibility, and compare lifetime income vs. cash withdrawal options. For an appointment, call Suzanne Leone, (866) 842-2053, ext. 4601.

LIANS Dinner Meeting, 4/1

The next meeting of the Long Island Chapter of the American Nuclear Society (LIANS) will be held on Tuesday, April 1, when Michael Ryan, Consultant in Radiological Sciences and Health Physics, will speak on "The Russian Health and Epidemiological Studies Program." The meeting will be held at the South Shore Restaurant, just north of Sunrise Highway on the west side of Route 112, Patchogue. Complimentary appetizers/cash bar will start at 6 p.m., dinner at 7 p.m., and Ryan's talk at 8 p.m. The cost is \$25/person. Reserve by Monday, March 31, with Arnie Aronson, Ext. 2606. Graphic Arts Division on September 15, 1975, and retired on November 30, 1992, as an illustrator, died on November 28, 2007. He was 85.

Louis Potter, who joined the Architectural Planning & Plant Maintenance Division as mechanic A on June 9, 1947, and retired as a technician IV from the Accelerator Department on March 30, 1973, died at age 97 on December 19, 2007.

Marco Donno, who came to the Lab as a custodian in the Plant Engineering Division on August 26, 1985, and retired as a stores clerk from the Supply & Materiel Division on October 10, 2003, died on December 20, 2007. He was 67.

Martha Hill, who joined the Medical Department as a registered nurse on November 1, 1949, and retired as Head Nurse on January 31, 1980, died at 93 on January 20, 2008.

Chasman Scholarship Application Deadline, 4/1

Applications are now being accepted for the Renate W. Chasman Scholarship for Women. The scholarship was established in 1986 to encourage women who have taken a break from formal education to resume their studies in natural sciences, engineering or mathematics. The winner will receive a one-time award of \$2,000 from BNL's Brookhaven Women in Science, a not-forprofit organization whose aim is to promote the advancement of women. For application forms and scholarship requirements, see http://www.bnl.gov/BWIS/scholarships.asp. The application deadline is April 1. For more information, contact Loralie Smart at lsmart@bnl.gov, or Ext. 2425.

Monday, 4/21

436th Brookhaven Lecture

Noon. Berkner Hall. Vasilis Fthenakis, head of the National Photovoltaic Environmental Research Center at BNL, will give a talk titled "Solar Grand Plan." Sponsored by the Brookhaven Lecture Committee and the "Earth Week Program" coordinated by the Environmental & Waste Management Services Division. All are welcome to this free talk, open to the public. Visitors to the Lab of 16 and over must carry a photo ID.

Arrivals & Departures

Arrivals –
 Kevin Campbell CFS
 Laurie Casarole..... Plant Eng.
 Donna Lombardi..... HROM
 Departures –
 Levertis Butts..... Plant Eng.

Classified Advertisements

Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible employees within the Laboratory; and (3) outside appli-cants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. Each week, the Human Resources Division lists new place ment notices, first, so employees may request consideration for themselves, and, second, for open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people. Except when operational needs require otherwise, positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882. Access current job openings on the World Wide Web at www.bnl.gov/HR/jobs/.

To apply for a position, go to www.bnl. gov. Select "Careers at Brookhaven" then "Employment Opportunities."

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates. POSTDOCTORAL RESEARCH ASSOCI-ATE - Requires a Ph.D. in physics, chemistry or materials science. Experience with polymers and x-ray scattering is essential. Candidate is expected to participate in preparing nanotemplated substrates. The emphasis of the research will be to carry out in-situ studies of solvent annealing using synchrotron x-ray scattering measurements and AFM. The role of the nanotemplated substrates on the structural order and on the solar efficiency will also be explored using the same techniques. This is a joint project between the Condensed Matter Physics & Materials Science Department and the Center for Functional Nanomaterials. When applying for this position, make sure to attach curriculum vitae, recent reprints/preprints and three letters of reference to the Candidate Gateway application. Under the direction of B. Ocko, Condensed Matter Physics & Materials Science Department. Apply to Job ID # 14421.

PRINCIPAL COMMUNITY RELATIONS SPE-CIALIST (A-8) - Requires a highly seasoned, senior professional with a minimum of a bachelor's degree and 10 years' experience community relations or a related field. Highly refined communication skills, ability to give presentations and coach others in presentation skills is required. Must be selfmotivated and able to operate effectively under pressure. Position requires working some Sundays and evenings. Develops and manages community relations initiatives that align with the Laboratory's science and operations priorities. Responsible for leading outreach efforts and making key, high-level programmatic decisions. Provides input to senior management regarding strategic decisions. Must be able to develop and cultivate mutually beneficial relationships with key stakeholders, including those from government agencies, educational institutions, industry, community organizations, and other external and internal audiences. Must be able to expertly gain an understanding of all stakeholder viewpoints, facilitate excellent working relationships with members of the internal and external community; have a broad understanding of the Laboratory's esearch and discoveries and connect them to the interests of key opinion leaders and other stakeholders. Responsible for creating communication and engagement plans for science and operations priorities and for new and existing programs, conducting research and analysis and anticipating, tracking, and managing issues that may be of importance to the Laboratory. Initiatives that are important to the science mission and operations of the Laboratory include priorities such as developing communication

ment documents for the cryogenics system; developing layout drawings and installation plans for the cryogenic subsystems; and providing engineering support for setting up an RF test facility. Will also commission and operate the system and supervise maintenance and upgrades. The system will consist of a 900W helium refrigerator/liquefier and a 3000 liter dewar feeding up to six

RF cavity cryostats, along with associated valve boxes, transfer lines, and helium recovery systems. Will report to the NSLS-II Mechanical Engineering Group Leader. National Synchrotron Light Source II. ERAP eligible: \$1,000. Apply to Job ID # 14402.

mates, and schedules; preparing procure-

PHYSICS ASSOCIATE I/DEPOSITION (P-8) (REPOSTING) - Requires an MS degree in physics or a related discipline and 10 years' relevant experience. Experience in thin-film deposition of complex oxides, UHV and thin-film characterization is highly desirable. Must have excellent written and oral communication skills and be able to interact effectively with a diverse group of scientists, technical staff, and users The candidate's main goal will be to assist in achieving 1nm x-ray optics at NSLS-II. Will report to the NSLS-II High Spatial Resolution X-ray Optics Group Leader and will help lead the effort in growing and characterizing thin-film multi-layers for use in 1nm x-ray optics. Will also design and assemble the equipment needed for thin-film deposition. May supervise a Postdoctoral Research Associate in performing R&D work. National Synchrotron

Light Source II. Apply to Job # 4473. ASSOCIATE STAFF ENGINEER/WATER SYSTEMS (P-3) - Requires a BS degree in mechanical engineering or equivalent. Work experience or training in an accelerator facility will be given preference. Knowledge of engineering fundamentals in hydraulics, machine design, analysis, materials, and manufacturing processes is required, as is experience in using 2-D and 3-D design and drafting tools. Handson experience with instrumentation, data acquisition, and data analysis is desirable. Must have high degree of initiative and must be able to plan, coordinate, and perform given assignments with minimum supervision. Good communication and interpersonal skills are required to interact with a diverse group of technical staff. Will assist in engineering design, fabrication, and installation of various water systems for NSLS-II. Will report to the Mechanical Engineering Group Leader. National Synchrotron Light Source II. ERAP eligible: \$1,000. Apply to Job ID# 14422.

Motor Vehicles & Supplies

06 FORD MUSTANG GT - red/blck leather, A/T, int. upgrde pkg, 18" polished wheels, perf. cond. 14K mi. \$21,500/neg. 258-5809. 05 KAWASAKI MEAN STREAK - 1600 cc,

efi, shaft drive, 5 spd, Magma Pearl Red, excel cond. 5,100 mi. \$7,500/neg. 880-2425. 05 MAZDA RX-8 - metalic wht., blk int, load-

ed, a/t, sport suspnsn, 18" whils, extd warr, perf. cond. 8,500 mi. \$19,500. Ext. 5665.

03 HYUNDAI TIBURON - sports pkg., red, mint cond., 6-spd man., fully loaded. 30K mi. \$8,000. 929-0961.

94 OLDS CUTLASS CIERA - 4 dr., a/t, a/c, all pwr., c/c, am/fm/cass., new batt., excel., must sell. 84K mi. \$2,950/neg. 839-6327.

Boats & Marine Supplies

19' CELEBRITY SAILBOAT - excel., fully equip. w/trailer and 2 sets of sails. \$1,500/neg. Jerry, 909-1801.

25' TANZER SAILBOAT - 2'11" Draft, 1996, 9.9 HP OB, DF/VHF/C, GPS, RF. \$6,900/neg. Jerry, 909-1801.

27' C&C MK1 - rec. WB winner, fully equip. for racing/cruising roller furl, ad. \$10,500/ neg. \$10,500/neg. 298-7022/335-7173.

Furnishings & Appliances

COUCH - deep, pillowback, earthtones. immac, pics avail., ask/\$500. Ext. 4144. COUCH & LOVESEAT - Blk/Wht tweed. pillow back, gd. cond., pics avail., ask/\$400. Ext. 4144.

DEHUMIDIFIER - \$45; wheel barrow, Craftsman, metal type, full size, \$45. Both in gd. cond. Joe, Ext. 3783.

TV - Panasonic TAU 36", flat screen, silver cabinet, 2 component inputs S-video, remote control, pics avail., \$400. Francine, Ext. 3381 or 744-4061.

TV/VCR COMBO - Toshiba MV13P2, gd. cond., 13" screen, w/remote. 849-5897.

Sports, Hobbies & Pets

CLAYBIRD THROWER - grdmount, \$50; 12' canoe, Oldtown Stillwater, excel, \$400; recordplayer/radio, RCA, \$50. 727-0911. GUITAR - Ibanez Acoustic-elect., blk, cutaway, blt-in tuner, like new, orig/\$300, ask/\$200. Gordon, Ext. 3586 or 369-5815. MOUNTAIN BIKE - woman's 18 spd., Sierra Trail Roadmaster, purple, hardly used, new/\$60, ask/\$30. Rachel, Ext. 3500.

TABLE SAW - metal, 8" w/2 new blades, Sears, \$75; Saws, dovetail & wallboard, \$12; Scroll saw, Delta, 15", \$50. Ext. 7647.

TELESCOPE - Meade ETX-70AT w/auto star computer, extras, case, tripod,,cost \$500+. Make offer. John, Ext. 4414 or 775-9173.

TICKETS - 4 tickets for Yankees v. Toronto, 4/3 7:05 p.m., Tier 32 Row H, \$10/ea. Andrea, Ext. 4656.

TRAILER - '02 Colman Caravan, front slide out, orig. owner, sleeps 8, heat, a/c, m/ wave, oven, refrig. 27'L, \$9,200. 821-8347.

Tools, House & Garden

SANDER - Campbell Haufield Dual Action, Model TL1004, air tool, Uses 6" disks, \$15/obo. Gary, Ext. 7779.

Miscellaneous

CHILD CAR SAFETY SEAT - Evenflo convertible, infant/rear face to forward face up to 40lbs. grt cond., w/latch, \$25. Ext. 7132. EVENING DRESSES - sizes 14 & 16, beaded or sequined, slveless, long & c'tail lgth, designer lbls, \$35/ea. 516-241-4598. PIANO - old, prestigious 'Waters Piano Co, NY, USA, excel. cond., new repairs & parts, \$500/neg. Che, Guangwei, Ext. 3152. POLAROID CAMERA - SX-70, One Step

Land w/case, \$20. John, Ext. 4028.

Free

COMPUTER MONITOR - 19" CRT. Gateway. Not flat panel LCD. Rich, Ext. 7294. MICROWAVE - GE Profile, wall unit, black. Ext. 7588.

Wanted

ATTORNEY FOR CAR FRAUD - certified car w/undisclosed prior collision, please refer me to experienced lawyer. 401-218-2344. FEMALE ROOMMATE - share a 2-bdrm

apt., post-doc, 5 min to Lab. Beginning May. Ext. 3829.

FIREARMS - old or new, paying fair dollars. Joe, Ext. 3783 or 487-1479. GUITAR - Martin, 12-string D-28, gd.

cond. Charles, Ext. 2705. GUITARS - old, unwanted or in need of

repair. Chris, Ext. 2094 or 831-3469. JAZZ MUSICIANS/STUDENTS - for Monday evening jams. Ext. 7657.

MOUNTAIN BIKE - used; reasonable. Ext. 4340.

PROM GIFT CERTIFICATES - for hair & nails, Brookhaven Twn./Riverhd area, new makeup donations, too. Christine. Ext. 5090.

ROOMATE - to share a 2-br apt/house, from May 1st. Kunal, Ext. 2043.

Lost & Found

FOUND - CAT - On Lab site on 3/7/08. She is very unhappy. Any info about her or help finding her owner appreciated. Kathy, Ext. 3832 or 275-5642.

For Rent

FARMINGVILLE - Bdrm in Lg house, full kit., l/r, d/r, share bath w/2, cable, wifi, phone, elec incl. \$495/mo. 513-8275.

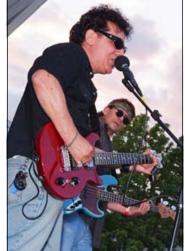
MANORVILLE - 3 bdrm, 1 bath, f/p, 2 car gar., wood flrs., mins. from Lab; 2 bdrm., \$1850: both rentals util. not incl. \$1,450/ mo. 418-7910.

MEDFORD - v/lg. studio, eik, newly renov., util. incl. \$800/mo. 289-8893.

MILLER PLACE - studio apt. located in a quiet n'hood, newly ren. w/full kit, prvt. ent., off st. prkg., no smkg/pets, int. incl. \$750/mo. Tim, 848-2979.

Kane Daily Rock, Blues Concert Tonight, 3/28

The Kane Daily Band will perform tonight, Friday, March 28, at 7:30 p.m. at the Brookhaven Center. Sponsored by



the BNL Music Club, the concert is open to the public. All visitors to the Lab age 16 and over must bring a photo I.D.

rockabilly, and blues performances in the New York area, the Kane Daily Band features Daily on lead guitar and vocals; George Ellert, an experienced, enthusiastic bass player; and the talented Al Henneborn on percussion.

For more information, call 631 344-5139.

Employee Lunchtime Tour at BGRR Today, 3/28

Today, Friday, March 28, the Employee Lunchtime Tour will take participants to one of the first of BNL's great science facilities, the Brookhaven Graphite Research Reactor, to learn about some of its history and plans for its future. Meet the group at the upper lobby of Berkner Hall at noon prior to joining the tour, which returns to Berkner by 1 p.m. No reservations are necessary. For more information, call Elaine Lowenstein, Ext. 2400.

'Take Children to Work Day' Volunteers Needed

Parent volunteers are needed to help prepare for "Take Our Children to Work Day," which will be held on Thursday, April 24. Contact Ernie Tucker, Ext. 5735, tucker@bnl.gov, or Liz Gilbert, Ext. 2315, gilbert@bnl.gov for more information.

BNL Motorcycle Club Membership Drive, 4/1

The Cycletrons will have an information table set up at Berkner Hall on Tuesday, April 1, 11:30 a.m.-1 p.m. Stop by to pick up Department of Motor Vehicles (DMV) permit booklets and forms, view a rider instructional DVD, safety information and club rides and events. The Club members will also display their own bikes, weather permitting.

Donate Women's Business Attire, 4/2

The Dress for Success Organization solicits donations to help women who want to re-enter the workforce but may not have the means to purchase suitable business attire. To help address this need, BNL's Diversity Office is working with a representative from Dress for Success to hold a clothing drive on Wednesday, April 2, in Berkner Hall lobby from 11:30 a.m. to 1:30. p.m.

Items to be donated should be in good condition and perfectly clean. Suits, blouses, dresses, and coats should be on hangers. Other needed items are accessories such as scarves, handbags, shoes, and costume jewelry. The items should be delivered to Berkner on April 2. If you can also help with transporting the donations to a drop-off site afterwards, please contact Rosa Palmore, palmore@ bnl.gov, Ext. 2703.

Join New Spring Fitness Program — **Register Now, Start Monday, March 31**

All are encouraged to register for the Lab's 2008 Spring Fitness Program, "Brand New U," sponsored by the Employee Health Program managed by Michael Thorn. Register today, March 28, by completing and sending to Thorn the form that was sent to all employees, or register on line at www.bnl.gov/HR/OCCMED/HPP.asp. The program is designed to: help identify your current fitness habits (if any!) and set realistic goals to get you moving, track your progress, enjoy healthy activities with coworkers and family, and even earn fitness-related prizes for completing the program. Join in!

WADING RIVER - 4 bdrm 2 bath house, newly renov., poss mother/daughter, full bsmt, priv., beach, SWRSD, 10 min. to Lab.

In Appreciation

Best known for classic rock,

Tickets for the show are \$10 in advance at the BERA Store or through www.ticketweb.com or \$12 at the door on the day of the show. Seating is limited, and advanced ticket purchase is recommended.

nt plans to environmental issues, safety in the workplace, and Lab-wide audits like Integrated Safety Management, and conducting focus groups/surveys for the directorate. Com-munity Relations/Community, Education, Government & Public Affairs Directorate. Apply to Job ID # 14420.

PROJECT ENGINEER I/CRYOGENIC SYS-TEMS (P-9) (REPOSTING) - Requires a BS degree in mechanical engineering and at least ten-plus years of relevant experience; advanced degree is highly desirable. Knowledge of cryogenic system design, analysis, materials, and manufacturing processes is required, as well as considerable experience in cryogenic system specifications, drawing standards, and engineering codes. Strong communications skills and ability to work closely with a diverse group of scientists and engineers are essential. Responsibilities will include leading the cryogenic engineering effort for the superconducting RF cryogenic system of NSLS-II to be built at BNL; reviewing and updating design specifications, cost-estiPATIO SET - metal, Ig., rectangle table w/6 chrs, sq. table w/4 chrs, 2 ottomans, 1 end table, ask/\$900 pics avail. Ext. 4144.

POOL LOUNGE CHAIRS - 2 white PVC adjustable back & stackable chairs, pic upon request, ask/\$40/ea. Ext. 4144.

BADIATORS - cast iron from a 1912 house, need reconditioning, make offer, Stevenson, Ext. 4414 or 807-0947.

TABLE - round, formica, almond, \$75: 2 twin beds, maple, both in gd. cond., \$100/ea. 874-3606.

PIANO - upright, "Cable"#446038, 1979,USA. Just tuned. picture, appraisal avl. \$900. Ext. 7806 or 476-4983.

Audio, Video & Computers

CAMCORDER - JVC, GR-D200U, batt. charger, doesn't turn on, poss, blown fuse. \$15. Ariane, Ext. 5245.

COMPUTER - Gateway GT5628, Refurb Quad Core 2.4Ghz PC,3GB RAM, 500GB HD, NVIDIA GeForce 8500 256MB, Vista Home Premium 32bit. \$800. Cris, Ext. 5341.

PORT JEFF STATION - new, 3 br, 1 fb, eik, huge Ir, priv. ent. & park, close to schools & shopping, all util. incl., upper level. \$1,850/mo. Brian, 484-7439.

ROCKY POINT - share 2 bdrm apt. w/ Ph.D. student, bdrms. upstairs, kit. l/r, bath 1st. flr., incl. ht., mcbennet@umich. edu \$550/mo. Marcus, Ext. 4962.

ROCKY POINT - 1 bdrm. cottage, wood stove, near beach, no pets, 1 mo. sec., plus util. \$1,100/mo. 744-5282.

SHOREHAM - 1bdrm, bsmt, eik, lg lr, full bath, priv. ent., no pets/smkg, Heat & electric incl, \$1,000/mo. 1 mo. Sec. Refs. \$1,000/mo. 744-4568.

SOUND BEACH - partly furn., a/c, studio w/efficy kit., 15 min. to Lab & SBU, beach rights, priv. prkg & ent., all util. incl., suit for one, avail. June 1, \$700/mo. Ext. 5165.

ST. MARTEEN - Flamingo Beach Resort studio, slps 4, full kit., top flr. overlks beach, Carribean sea, priv. balc., pool, dining, casino on site, \$700/wk, 475-0373.

\$1,850/mo. John, Ext. 4028 or 821 5334.

YAPHANK - Whispering Pines, 1 mi. to Lab. 2 or 3 bdrm condo. all renov. 1 & 1/2 bath, clubhouse, pool, pets okay, \$,600/ mo. incldes commons chg. 988-8233.

For Sale

BELLPORT - 4-BR. ranch. 2 bth. I/r w/dble fp to den, d/r, eik, oak flrs, screened deck, laundry rm, fin. bsmt: w/4th BR, bar, full bth, 2 rms; gar., 2 sheds, sprinklers, \$398.000: 949-7797.

FARMINGVILLE - 3br, 2 bath Ranch, 2.5 gar., cac, alarm, igp, igs, FSBO.COM Listing#101489 for more details/photos. \$459,900/neg. Carol, 516-906-3348.

SOUTH ROYALTON, VT - 2 homes on 3.5 acres, incl. furn., extras, priv., soon to be listed w/real estate agent, pictures avail. \$330,000/neg. Ext. 7125 or 466-8637.

WADING RIVER - 3 bdrm., 2 bath, on .5 acre, Ig mstr bdrm w/cath ceiling, Ig lvg area, 1.5 car gar, unfin. bsmt. SWRSD, nr. .5 mi to Sound, grt cond. \$499,000/neg. 379-2282.

much support with fruit baskets, prayers and expressions of sympathy since our Dad's passing. We are grateful for the life he had and the time we shared together. Thank you. - Sue Perino & Patti Bender

On-Site Services

ENTERPRISE RENT-A-CAR - on-site office at Bldg. 355. Wkend specials, daily rates. Ext. 4888 or www.enterprise.com. **ON-SITE SERVICE STATION - Is your NYS** inspection sticker out of date? We can do NYS inspections, oil changes, new batteries, etc., while you are at work. Ext. 4034.

CAFETERIA GOURMET SPECIALS - on Mondays & Tuesdays: Boar's Head coldcuts, chips, 16 oz soda, \$6:50 +tax, Many other choices. Try b/fast: wkdays, \$2.99 up; Dinner: B/haven Center, full menu 5-8 p.m.; \$10.99 + tax specials 5-6:30 p.m.

Services

For a printed list of employee services, contact 344-2346 or lseubert@bnl.gov.

Bulletin

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