

NYS Senate Honors Joanna Fowler

Joanna Fowler of the Chemistry Department, Director of BNL's Center for Translational Neuroimaging, has been honored with a 2006 New York State Senate Woman of Distinction Award. Senator Caesar Trunzo (3rd Senate District, Brentwood) presented the award plaque to Fowler at a ceremony in Albany. The award honors her for personal and professional contributions to her local, state and global communities.



Senator Caesar Trunzo presents Joanna Fowler with a New York State Senate Woman of Distinction Award.

"I am proud to honor Dr. Fowler as a Woman of Distinction, and prouder still of the recognition she has earned from her neighbors, colleagues and friends," said Senator Trunzo. "Her selfless dedication to science, education and health are an inspiration for the entire community."

The Senate's "Woman of Distinction" program was created in 1998 to honor New York women who exemplify personal excellence, or whose professional achievements, acts of courage, selflessness, integrity or perseverance serve as an example to all New Yorkers.



"With support from the Department of Energy and our state-of-the-art imaging facilities at Brookhaven Lab, our group has been able to develop many new scientific and clinical tools to help in understanding and diagnosing numerous diseases." — Joanna Fowler

"I am honored to receive this recognition from New York State," Fowler said. "With support from the Department of Energy and our state-of-the-art imaging facilities at Brookhaven Lab, our group has been able to develop many new scientific and clinical tools to help in understanding and diagnosing numerous diseases. Most recently, we have focused on the mechanisms of addiction, a brain disease that is devastating for families and society."

Joanna Fowler has been a major contributor to brain research and the study of diseases such as addiction and cancer, which she has investigated using an imaging technique called positron emission tomography (PET). In 1976, Fowler and her colleagues synthesized 18F-fluorodeoxyglucose (FDG), a radiotracer used in PET. Today, FDG is widely used in PET centers around the world to study and diagnose neurological and psychiatric diseases and to diagnose lung and colon cancer. She also developed another radiotracer that first showed that cocaine's distribution in the human brain parallels its effects on behavior.

In addition, Fowler developed radiotracers to map monoamine oxidase (MAO), a brain enzyme that regulates the levels of nerve-cell communication chemicals. Using these radiotracers, she discovered that smokers have reduced levels of MAO in their brains. This may account for some of the behavioral and epidemiological features of smoking, such as the high rate of smoking in individuals with depression and drug addiction.

Fowler earned her Ph.D. in chemistry from the University of Colorado and did her postdoctoral work at the University of East Anglia in England and at BNL. She joined BNL's staff in 1971. A member of the National Academy of Sciences, Fowler's numerous other honors include the American Chemical Society's 2002 Glen T. Seaborg Award for Nuclear & Radiochemistry, the 2000 Society of Nuclear Imaging in Drug Development's Alfred P. Wolf Award; DOE's 1999 E. O. Lawrence Award, and the 1998 Francis P. Garvan-John M. Olin Medal.

Fowler has mentored dozens of students and scientists, and she holds adjunct appointments in the Departments of Chemistry and Biomedical Engineering at Stony Brook University and the Department of Psychiatry at Mount Sinai School of Medicine. She has been published in more than 300 peer-reviewed articles in leading scientific journals and holds eight patents for radiolabeling procedures. — Diane Greenberg

Haixin Huang Receives Faraday Cup Award

Haixin Huang, a physicist in the Collider-Accelerator Department, and Kazuyoshi Kurita of Rikyo University, Japan, are the recipients of the 2006 Faraday Cup Award. The two scientists shared the \$5,000 award, which was given by the Beam Instrumentation Workshop, an international forum on techniques for measuring charged particle beams produced in high energy accelerators, and donated by Bergoz Instrumentation of Saint Genis Pouilly, France, manufacturers of electronic instruments. The workshop was held at Fermi National Accelerator Laboratory this year.

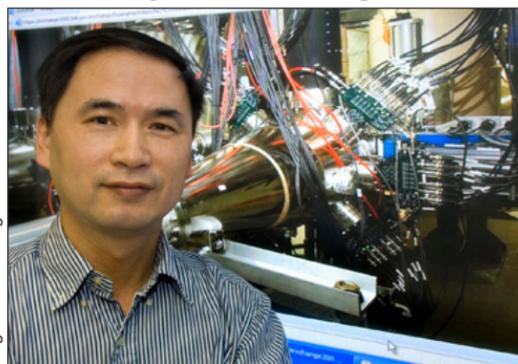
The Faraday Cup Award is presented for outstanding contributions to innovative beam instrumentation. Huang and Kurita won the award for developing an instrument called a proton-carbon Coulomb Nuclear Interference (CNI) Polarimeter

for use in BNL's accelerator, the Relativistic Heavy Ion Collider (RHIC). The device measures the spin of protons that are accelerated in the collider.

"I am very pleased to be chosen for this award, along with my colleague, Kazuyoshi Kurita, who worked for the BNL-RIKEN Research Center at the time we were developing the polarimeter," Huang said. "The compact design of the polarimeter makes it economical, and it provides

very precise measurements."

This year, RHIC is dedicated to understanding proton spin, as physicists collide beams of polarized protons — protons spinning in the same direction — at various collision energies. Physicists have believed that the spin of a proton, which is somewhat analogous to the Earth spinning on its axis, is the sum of the spin of its three component smaller particles called quarks. But experiments have shown that quarks account for only about 20 percent of the proton's spin. RHIC is the world's only machine capable of colliding high-energy beams of polarized protons, so it is a unique tool for helping to answer the question: What



Roger Stoutenburg 05/28/06

Haixin Huang

accounts for the missing 80 percent of the proton's spin?

The new polarimeter was developed in 1998 and tested at BNL's Alternating Gradient Synchrotron (AGS), an accelerator that currently serves as an injector for RHIC. The CNI Polarimeter works by measuring the scattering pattern of protons after the beam hits a carbon target. Silicon detectors are used in a vacuum to measure the scattering of particles.

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BNL, WARD'S Natural Science Develop Science Education Kits

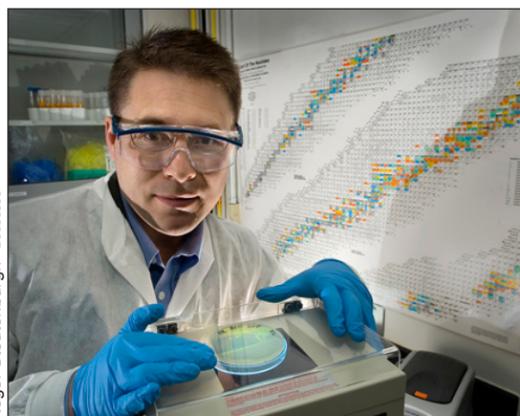
Through a Cooperative Research & Development Agreement, BNL and WARD'S Natural Science of Rochester, New York, have developed four science education kits, which are used as hands-on learning tools in the classroom for middle school, high school, and college students. Marketed by WARD'S, the kits focus on environmental chemistry and life science.

"We worked directly with BNL scientists to identify the kit concepts," said Scott Bronson, an education coordinator in the Office of Educational Programs who turned the concepts into the educational kits.

"The kits provide a context for teaching scientific principles, and with the materials and instruction provided, students can perform experiments themselves. Hundreds of students participating in educational programs at BNL tested the kits before they were marketed."

Students can learn about environmental chemistry by using two kits that are based on a green-chemistry process invented by BNL scientists. The kits include all naturally occurring materials — citric acid, common soil, and benign bacteria — to remove metal contaminants from soil. Using the kit, students

can safely extract iron, used as a model for a metal contaminant, from soil using citric acid, the same acid that is present in citrus fruit. With the aid of another kit, they can then use harmless bacteria to remove the



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Scott Bronson

William Throwe Takes Home Gold At International Physics Olympiad

William Throwe, son of Thomas Throwe of the Physics Department, took home a gold medal at the International Physics Olympiad recently held in Singapore. Throwe was one of five representing the U.S. at the international competition. To prepare for it, he and 23 other students participated in the U.S. Physics Olympiad Program, which was started in 1986 to promote and demonstrate academic excellence, reward outstanding physics students, and train them for the International Physics Olympiad. The U.S. team is co-sponsored by the American Association of Physics Teachers (AAPT) and the American Institute of Physics.



A 2006 graduate of Shoreham-Wading River High School, Throwe is also a recipient of a 2006 BSA Scholarship. He has been interested in science from an early age. As a fifth-grader, he participated in the Lab's Elementary School Science Fair by submitting a project on siphons and pumps. This fall, he will attend the Massachusetts Institute of Technology to study physics.

According to the AAPT website, an unofficial ranking of countries based on total score of the five team members, shows the United States ranked second. China's students had the highest overall total scores. The U.S. team won four gold medals and one silver. This year's competition was the largest International Physics Olympiad to date — 86 nations participating with a total of 383 competitors.

For additional information on the International Physics Olympiad, go to: www.aapt.org/olympiad2006/. — Jane Koropsak

BNLers Take SBU's E&WM Master's Degree On Site

See story on page 2

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CALENDAR OF LABORATORY EVENTS

- The BERA Sales Office is located in Berkner Hall and 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 (Rec. Hall) is located in the apartment area.
- Contact names are provided for most events for more information.
- Calendar 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: CIGNA Rep On Site

10 a.m.-3 p.m. CIGNA's Janice Petgrave is in Bldg. 185, to assist CIGNA medical plan participants with claims issues. Call Linda Rundlett, Ext. 5126, for 30-min. appointment.

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 & Thursdays: Kickboxing

\$5 per class. Noon-1 p.m. in the gym. Registration is required. Christine Carter, Ext. 5090.

Mon., Wed., & Fri.: Tai Chi

Noon-1 p.m., Brookhaven Center North Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov.

Tues., Thurs. & Fri.: Ving Tsun Kung Fu

Noon-1 p.m., Brookhaven Center, North Room. Taught by Master William Moy. Tuition. Scott Bradley, Ext. 5745 or bradley@bnl.gov.

Tue., Thu. & Fri.: Upton Nursery School

On Summer Recess. Call Ext. 5090 for information on Sept. enrollment.

Tuesdays: Welcome Coffee

10 a.m.-noon, apartment area gazebo. First Tuesday of every month is special for Lab newcomers and leaving guests. Lisa Yang, 979-3937.

Tuesdays: BNL Music Club

Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846.

Tuesdays: Jiu Jitsu Club

6:30-7:30 p.m. in the gym. All levels, ages 6 and above. \$10 per class. Tom, Ext. 4556.

Tuesdays: Toastmasters

1st and 3rd Tuesday of each month, 5:30 p.m., Bldg. 463, room 160. Guests, visitors always welcome. www.bnl.gov/bera/activities/toastmasters/.

Tues., Wed. & Thurs: Rec Hall Activities

5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

Wednesdays: On-Site Play Group

10 a.m.-noon, apartment area gazebo. An infant/toddler drop-in event. Parents meet while children play. Fang Dong, 871-5362.

Wednesdays: Market Day

11:30 a.m.-1:30 p.m., Berkner Hall parking lot. Fresh vegetables, plants, arts & crafts, and more. Joanne Rula, Ext. 8481.

Wednesdays: Weight Watchers

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

Wednesdays: Yoga

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

Thursdays: Reiki Healing Class

Noon-1 p.m., Bldg. 211 Conference Rm. Nicole Bernholz, Ext. 2027.

Fridays: Family Swim Night

5-8 p.m. BNL Pool. \$5 per family.

Fridays: BNL Social & Cultural Club

Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov.

BNLers Take SBU's E&WM Master's Degree On Site First Group Nears Achievement: Second Group to Form for Fall



Roger Stoutenburgh D1990706

To discuss plans for next semester's courses, which are taken on site, the present group of E&WM Masters Degree students: (standing, from left) Cheryl Burns, Robert Lofaro, Dennis Ryan, Ann Emrick, Bill Gunther, Jason Remien, Nick Contos, Jean Odin McCabe, Laura Kirk, and John Selca, met with: (seated, from left) Starr Munson, Human Resources & Occupational Medicine Division, who administers the program; and Marge Lynch, Assistant Laboratory Director for Community, Education, Government & Public Affairs, Sheldon Reaven, Stony Brook University (SBU) Professor, and Ed Kaplan, BNL retiree and SBU Visiting Professor, who teach courses within the program.



"I have been very pleased with the quality of the professors in the program and the interesting and useful sources of information and knowledge that they bring to the classroom. They are cognizant of our own work schedules and have been accommodating with regard to travel or other work-related absences. The curriculum has been geared to our interests and work experiences as much as possible. Overall, I am pleased that I enrolled in the program; it is a great opportunity to work with my BNL colleagues in a very challenging, but rewarding, venue." — Bill Gunther, currently enrolled in the Environmental Master's program

Over the years, many BNL employees have journeyed to Stony Brook University (SBU) campus to obtain a master's degree in Environmental & Waste Management from SBU's College of Engineering & Applied Sciences.

Last year, however, a group of BNL employees asked if the program could be offered to BNL employees on site after normal business hours. Marilyn Pandorf of the Human Resources & Occupational Medicine Division, now retired, was responsible for employee educational programs and worked with Ed Kaplan, now retired from the Nonproliferation & National Security Department, and now a guest scientist and SBU visiting professor, and SBU's Marypat Taveras to bring the program to BNL.

Developed by SBU professor Sheldon Reaven and Kaplan, the program comprises 30 credits of coursework and a master's thesis project. It emphasizes environmental and waste problems in industry and federal facilities, pollution prevention and waste

minimization, regulatory compliance, hazardous and radioactive wastes, contamination and site cleanup, and the assessment of new technologies.

Said Reaven, "The curriculum is particularly well-suited for mid-career professionals who want to advance in and expand their current environmental careers, or add environmental skills to their main area of expertise. Courses are designed to provide employees with an early start on their master's projects, and to coincide with their day-to-day responsibilities and interests."

The BNL program also added two exciting and essential courses that are becoming an established part of the program at SBU:

homeland security and technical communication. Sam Morris, another retired BNL scientist, also taught in the program.

Said Kaplan, "The homeland security course last fall proved to be a riveting experience. The class assessed the threats from nuclear, biological, chemical, and computer terrorism, measures to detect, reduce, or eliminate those threats, and response and recovery actions should attacks occur. Threats to airports, subways, water supplies, nuclear plants, agriculture, oil refineries, and so on, were covered. The class took part in a regional emergency drill simulating a major biological incident."

The course in technical communication is given by Marge

Lynch, Assistant Laboratory Director for Community, Education, Government & Public Affairs. Lynch has developed an exciting curriculum that hones skills in technical writing, oral presentation, and interactions with the public. Her course covers effective risk communication, channels of communication, preparation of clear informational materials, and the best practices in stakeholder communication, crisis communication, and community involvement in decision making. Several outside consultants and members of Lynch's staff, including Jeanne D'Ascoli, Kathy Geiger, and Mona Rowe, have lectured in her class.

Current students, who come from many parts of the Lab, attend classes in the HR Training Room and Berkner Hall. Two courses are offered each semester, and each class meets one night per week. The BNL program is expected to continue here on site with a second group of master's degree students starting in the fall.

— Liz Seubert

Interested in the Environmental Master's Degree?

Stony Brook University and BNL plan to continue the on-site Master's Degree program in Environmental & Waste Management. A new group will be formed to go through the program together, taking one or two courses per semester, as with the first group. Classes would meet at 5:30 p.m. at the Lab. If you are interested or have questions, contact Ed Kaplan, Ext. 2007; or Sheldon Reaven, 632-8765.

In Memoriam

Charles Robinson, who joined the Medical Department as an associate scientist on March 1, 1963, was named scientist in 1967, and retired from the Safety & Health Services Division on November 30, 1982, died at the age of 90 on February 8, 2006. He had left the Lab in 1970, remaining a guest scientist until December 1979 when he had rejoined as a senior research associate.

Huang Receives Faraday Cup Award (cont'd)

Polarized protons reveal a certain symmetry that is proportional to the amount of polarization.

In the early 1990s, another type of polarimeter that measures subatomic particles called pions had been proposed to determine proton spin in RHIC. BNL researchers working on the polarimeter design determined that the CNI Polarimeter had distinct advantages over the pion polarimeter.

"The CNI Polarimeter is faster and more efficient than the other method," said Huang. "It's easier to see carbon particles' scattering pattern, an indicator

BNL, WARD's Natural Science Develop Science Education Kits (cont'd)

iron from solution, a process called bioremediation. The same processes are potential solutions for cleanup of industrial sites around the world.

A.J. Francis of the Environmental Sciences Department, one of the supporting researchers for the environmental chemistry kits, said that he was "excited that students are able to learn some of the basic concepts involved in bioremedia-

tion of contaminated sites by replicating some of our research in the classroom."

Another kit involves the use of the T7 bacterial virus, which forms the basis of the T7 expression system, developed and patented at BNL in the 1980s and 1990s, and used worldwide by academia and industry to produce specific proteins within bacterial cells. With the tools in the kit, students are able to use T7 to infect a harmless strain of the bacterium *E. coli*. Because the *E. coli* has been genetically engineered to express green fluorescent protein only after infection, students can determine where infections have occurred with the aid of ultraviolet light. Using T7 as a model, students also can safely learn about other viruses, such as HIV, influenza and SARS.

F. William Studier of the Biology Department, who has long worked with T7 to learn about basic genetic and biochemical processes, commented, "T7 grows rapidly and results come quickly, and students should have fun working

with it. I certainly do."

With the tools in a protein extraction and purification kit, students can learn techniques that scientists use at the Lab's National Synchrotron Light Source to study biological materials. Using chromatography, a technique to identify the components of chemical mixtures, students learn how to extract and purify green fluorescent protein from jellyfish. Students also can learn about a technique called protein crystallography, a critical process in determining a protein's structure.

The four kits are advertised in WARD'S catalog as part of its new product showcase. Jeff Douglass, President of WARD'S Natural Science, said, "We are honored to partner with BNL to bring revolutionary science within the reach of students and teachers everywhere. The Nobel Prize-caliber of science at Brookhaven Lab and the 145 years of education expertise at WARD'S create a powerful combination of innovation and technology."

— Diane Greenberg

— Diane Greenberg

BNLers Compete in Long Island Marathon

This year, on May 7th, ten BNL long distance runners participated in the annual Long Island Marathon, a 34-year old tradition for Long Island distance runners that brings those who enjoy the sport together for a day of competition and fun.

A full marathon is a distance of 26.2 miles. But, in 1984, the half-marathon (13.1 miles) was introduced as part of the Long Island marathon for those who wanted to compete but not run 26 miles. It is currently one of the largest half-marathon races in the U.S.

This year was extra special for Paul Geiger (below, second from left) of the Lab's Budget Office. He has participated in many long distance races, but this year he was the winner of the half-marathon in the 55 to 59 age category with a time of 1:30:37. Other half-marathon participants from the Lab were: Mel Cowgill, Gerry Granzen, Tony Kuczewski, Don MacKay, Laura Miller, Swapna Mukherji, Vincent Racaniello, and John Young. Two BNLers, John Bohenek and Victor Usack, ran the full marathon.

— Jane Koropsak

Gathered below are many BNL long-distance runners who participated in the 2006 annual Long Island Marathon.



Integrated Safeguards & Security Management Working together to keep BNLers, BNL interests safe, secure

As part of a DOE directive to help keep workers safe and secure, the Safeguards & Security Division (SSD) recently implemented an Integrated Safeguards & Security Management (ISSM) program. The mission of the program is to integrate safety and security practices throughout the entire Lab. Upon review, it was found that BNL had already accomplished the outlined mission, but there were some "gaps" that needed to be addressed. To eliminate any gaps and further improve communication on safety and security for all workers and visitors, ISSM representatives have been appointed for each Laboratory organization. A current list of ISSM representatives can be found at <http://intranet.bnl.gov/ssd/issm.asp>. These representatives provide guidance and act as liaisons between their individual Lab organization and SSD by identifying ISSM vulnerabilities and reporting them to SSD management.

Says Len Butera, Deputy Division Manager of SSD, "We do not expect every employee or visitor to become an expert on security requirements, but if we work together, we can continue to keep each other safe and secure at work. I urge everyone to contact me with any questions or suggestions they have regarding security in the workplace."

Here are a few helpful reminders about security:

- Always remain aware of security issues while you are working.
- Report any suspicious activity immediately to the BNL Police Group at Ext. 2238. If a stranger calls you with a bomb threat, remain calm. Refer to the checklist in the back of the BNL telephone directory to record details about the call or see <https://sbms.bnl.gov/sbmsearch/subjarea/15/0q04e011.pdf>.
- Wear your badge at all times. Register your vehicle with the SSD, and display your vehicle registration sticker. Always keep your badge in safe place when you are off site.
- Complete the Lab's online visitor notification form when you are expecting a visitor.
- Follow the procedures for foreign national visitors and complete the Guest Information System (GIS) at least 30 days prior to the visit (15 days for foreign visitors that are NOT affiliated with a sensitive country). Contact the Foreign Visits and Assignments Office (fvahelp@bnl.gov) for processing requirements and country designations.
- Comply with the Lab's cyber security, classified information, and export control procedures. Remember to protect your computer with a password when you leave your office for an extended period of time.
- Lock offices and buildings when they are not occupied, and ensure that equipment and material is adequately protected. Report any unusual circumstances to SSD, Ext. 2238. Remember to comply with the procedures for securing your building after hours and weekends.
- Use the Security Checklist when doing any work planning with the work permit.
- Lock both Lab and personal vehicles when they are not in use.

If you have any questions on security, go to the SSD website for the point of contact in your Lab organization (www.bnl.gov/ssd/SSD_Contacts.asp) or call Ext. 2238.

One-On-One TIAA-CREF Retirement Counseling

A TIAA-CREF consultant will visit BNL on Monday, July 31, to answer employees' questions about financial matters and help BNLers understand the importance of protecting assets against inflation, find the right allocation mix, learn about TIAA-CREF retirement income flexibility, and compare lifetime income vs. cash withdrawal options. For an appointment, call Arlene Lyons, (866) 842-2053, Ext. 4629. (Not the on-site Ext. 2053.)

Vehicle Auction, 8/7-14

The Government Services Administration will offer 19 motor vehicles, located at Warehouse T-87, for public auction from Monday, August 7, through Monday, August 14, during which time anyone may bid on the vehicles. Photos of each vehicle, with pertinent information, is available at www.gsauctions.gov. To inspect the vehicles, call Jerry Quigley, Ext. 4527. For more information, contact Rosalie Alongi, Ext. 5138, ralongi@bnl.gov.

Estate Planning, 8/16

Join speaker Nancy Burner for the Elder Law Lecture "Estate Planning With Retirement Funds: What You Need to Know" on Wednesday, August 16, from noon to 1 p.m. in Berkner Hall, Room B. Check your mailbox for registration forms. For more information, contact Michael Thorn, Ext. 8612 or mthorn@bnl.gov.

Arrivals & Departures

— Arrivals —
 Louis Falco Plant Eng.
 Chunyan Tang Biology

— Departures —
 None

Weight Loss, Diabetes Talk

Join registered dietitian Amy Shapo on Friday, August 3, from noon to 1 p.m. in Berkner Hall, Room B, where she will present "Weight Loss and Diabetes: Taking It Off and Keeping It Off," a discussion of techniques for successful weight loss without dieting. Preregistration is required. Contact Michael Thorn, Ext. 8612.

Correction

The Bulletin regrets that in the photo caption to a story on a new neutrino experiment in China, on page one of the issue of 7/21/06, the name of David Jaffe, Physics Department, was inadvertently misspelled.

Friday Fun at the Science Learning Center

The BNL community and their families are invited to the Science Learning Center (SLC), Bldg. 935, Railroad Ave. and E. Fifth St., today, Friday, July 28, and Fridays August 11 & 25, from noon to 1:30 p.m., to explore the many interactive exhibits and to visit the 3D visualization theater. See what makes the SLC such a popular visit for more than 25,000 elementary school children each year. The SLC also offers a limited selection of science-related toys for sale. An adult must accompany children under 14 years old.

Fall Undergraduate Student Selection Now Open

To host a student for 16 weeks during the fall semester, the DOE Science Undergraduate Laboratory Internship (SULI) student database is now open for review. Hosting a student will require the requesting department to provide funding for the stipend, \$6,400, and housing, approximately \$3,600, for the appointment to be made. The Office of Educational Programs will cover student travel costs and other incidental program expenses as necessary.

The deadline for appointments is August 31; it is recommended that requests be made much sooner than the deadline. Contact Mel Morris, Ext. 5963, for more information or to gain access to the database to review the available students.

New Support Group for Families of Armed Forces

A significant portion of the Lab employee population may be impacted by having a loved one serving in the Armed Forces in the Middle East. The BNL Employee Assistance Program (EAP) is considering starting a support group for employees who have a family member (spouse, child, sibling, etc.) who is serving in Iraq or Afghanistan. The support group would probably start in September. If anyone is interested in such a group, then e-mail EAP Manager Nancy Losinno, nlosinno@bnl.gov, by August 15.

CIGNA Representative On Site, Mondays

Each Monday, Janice Petgrave of CIGNA Healthcare will be available in Human Resources, Bldg. 185, to assist CIGNA medical plan participants with claims issues, 10 a.m.-3 p.m. Be sure to bring all pertinent documentation. For a 30-minute appointment, call Linda Rundlett, Ext. 5126.

CALENDAR (continued)

— THIS WEEKEND —

Friday, 7/28

***Science Learning Center Open**
 Noon-1:30 p.m. Explore interactive exhibits at BNL's Science Learning Center. See notice below, left.

***Celebrate Friedlander's 90th B-Day**
 Noon, Hamilton Seminar Rm., Bldg. 555. An afternoon of talks, reminiscences by a variety of speakers, BNL colleagues, friends, and family will honor Gerhart Friedlander, distinguished nuclear chemist and Chair of Chemistry, 1968-1977.

— WEEK OF 7/31 —

Thursday, 8/3

***WWII Airman to Give Talk**
 Noon, Berkner Hall. Lee Hayes, a World War II Tuskegee Airman, will talk on his experiences as one of the first black military airmen in the U.S. Sponsored by BERA and BNL's Diversity Office. All are welcome. See notice on page 4.

Friday, 8/4

Sweet Charity Show, Bellport
 6:30 p.m. Bellport Gateway Playhouse. BERA's catered tent party before the *Sweet Charity* show begins at 8 p.m. will be held on the front lawn of the Playhouse. Wine, beer, soda, water, cheese and vegetable/antipasto platters will be offered. \$53 per person includes show ticket. Buy tickets at the BERA Store, Berkner Hall.

Sunday, 8/6

Ellis Island, Statue of Liberty Trip
 9 a.m. Luxury coach leaves Brookhaven Center for the trip, sponsored by BERA. \$20 per adult/child. Sold out.

— WEEK OF 8/7 —

Friday, 8/11

***Science Learning Center Open**
 Noon-1:30 p.m. Explore interactive exhibits at BNL's Science Learning Center. See notice below, left.

— WEEK OF 8/14 —

Wednesday, 8/16

***Talk on Estate Planning**
 Noon-1 p.m. Berkner Hall, Room B. Nancy Burner to give Elder Law lecture on "Estate Planning With Retirement Funds: What You Need to Know." All are welcome. See notice at left.

Saturday, 8/19

BERA Trip to Atlantic City
 9:30 a.m. Brookhaven Center. Luxury coach departs, leaving Atlantic City at 7 p.m. Cost is \$10 per person, with \$15 cash and \$5 food voucher returned to each person. All participants must be 18 and over. Sold out.

— WEEK OF 9/4 —

Monday, 9/4

Labor Day Holiday. Lab Closed.

— WEEK OF 9/11 —

Monday, 9/11

BSA Distinguished Lecture
 4 p.m. Berkner Hall. Neal Lane of Rice University will talk on "Confessions of a President's Science Advisor." All are welcome to attend this BSA Distinguished Lecture, which is free and open to the public.

Note: This calendar is updated continuously and will appear in the Bulletin whenever space permits. Submissions must be received by the preceding Friday at noon to appear in the following week's Bulletin. Enter information for each event in the order listed above (date, event name, description, and cost) and send it to bulletin@bnl.gov. Write "Bulletin Calendar" in the subject line.

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 applicants. 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 placement 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/.

OPEN RECRUITMENT – Opportunities for Laboratory employees and outside candidates.

MK3152. SCIENTIFIC STAFF POSITION – The Chemistry Department and the Center for Functional Nanomaterials (CFN) invite applications for a scientific staff position in the area of electrocatalysis/catalysis. Requires a Ph.D. in chemistry, chemical engineering, or a related field and a strong preference will be given to candidates with two years of postdoctoral experience. Experience with fuel cell electrocatalysis, *in situ* studies of catalytic systems, surface science techniques, nanoparticle synthesis, electrochemistry, application of synchrotron light sources to catalysis and surface science is highly desirable. We seek a promising scientist who will develop a vigorous research program that is strongly connected to other research activities in the Chemistry Department and the CFN. We particularly encourage programs that exploit unique new and planned facilities at the CFN and broadly at BNL to pursue *in situ* and *ex situ* studies of model and nanoparticle electrocatalysis/catalysis systems. Initial rank is open, and nominations for appointments at a senior level will be considered. Overviews of BNL catalysis and electrocatalysis science programs, the Chemistry Department, and the Center for Functional Nanomaterials can be found at: www.bnl.gov/chemistry/catalysis/overview.asp. Under the direction of R. Adzic, Chemistry Department.

MK3589. POSTDOCTORAL RESEARCH ASSOCIATE – Requires a Ph.D. in theoretical elementary particle physics. Position is with the High Energy Theory Group, which has active programs in electroweak physics, collider physics, B-physics, perturbative QCD, spin physics, lattice QCD and physics beyond the Standard Model. Under the direction of A. Soni, Physics Department.

MK3588. POSTDOCTORAL RESEARCH ASSOCIATE – Requires a Ph.D. in physics, electrical engineering or a related discipline with emphasis on accelerator technology. Hands-on experience in the design and operation of the RF photo injector and linear accelerators, the use of diagnostics for characterization of short high brightness electron beams is desired as is knowledge of RF systems and accelerator modeling software. Will design, participate and support experiments with electron beam and high power lasers. The experiments will be conducted at the BNL Accelerator Test Facility. Both experimental work and computer simulations will be required. Under the direction of V. Yakimenko, Physics Department.

TB3719. ADMINISTRATIVE SERVICES ASSISTANT (A-2, reposting) – Requires a bachelor's degree in a relevant field or formal office administration training and four years' relevant experience. Must also possess strong organizational skills and a working knowledge of MS Access, Excel, and Word. Under minimum supervision, provides administrative and office work support. Responsibilities include complex administrative functions such as database development, entry and maintenance; calculation of performance metrics for project management of cost and obligation baselines; configuration control of engineering documents; digitizing and microfilming original engineering drawings; preparing web requisitions for processing; maintenance of project files; archiving completed projects; purchasing and restocking supplies; copying, collating, and assembling reports and presentations; clean-up and maintenance of the drawing reproduction area; sending out original drawings for blueprints; processing shop drawings; packaging and mailing documents; and other related duties in support of the engineering staff. Plant Engineering Division.

Motor Vehicles & Supplies

05 PONTIAC GTO - 6.0 LS2 400Hp, 400ft/lbs 6spd manual, 18" wheels, loaded. 30000 mi. \$26,000/neg. Mark, 902-8188.
04 CROSSROADS CRUISER - 30' trailer, dbl. slide, qu. br. lg. bath, bunks, storage, excel., used 5 times. \$21,500/neg. 924-0139.
02 VW GOLF - excel., orig. owner, 5spd., 2dr., abs, a/c, fr. & side airbags, alarm, keyless ent., drl. 41K mi. \$9,900/neg. Ext. 2414.
00 BMW 328i - tinted wdws, Xenons, a/t, w/steptronic, CD w/Ipod Inter, new tires, brakes. 66K mi. \$17,000/neg. Ext. 8190.
00 SUZUKI ESTEEM WAGON - 4cyl. 87K mi. \$3,200. Samantha, 632-8241.
99 CHEVY SUBURBAN K-1500 - 4X4, 6.5L, diesel w/turbo, 20 hwy, dual a/c, p/s, p/b, p/w, 3rd seat, HD. trl \$8,500/neg. 591-1193.
97 JEEP GRAND CHEROKEE LAREDO - black, 6cyl, 4wd, full power, cd stereo, well maint., 123K mi. \$5,000/neg. Ext. 5937.
97 NISSAN MAXIMA - a/t, a/c, p/w, p/b, p/l, c/c, rem., pwr seat, air bags, child locks, rec. brkes, insp. 117K mi. \$4,250/neg. Ext. 5080 or 766-7701.
97 DODGE GRAND CARAVAN SE - 6cyl., 3.0L, fair cond., last insp. 3/2006, new cooling controller, cd, a/c. 167K mi. \$2,400/neg. Ext. 5146 or 946-9405.
91 BUICK CENTURY - all power, a/c, new tires and cd player, runs well. 155K mi. \$1,250/neg. John, Ext. 4669.

Boats & Marine Supplies

15' MAINE CANOE SQUARE-BACK - red, two seater, paddles, takes small gas or elec. motor, great for camper or fishing. \$350/neg. Ext. 2015 or 929-5911.
18' SEA RAY SPORT - pics avail. \$15,500/neg. Rich, 765-8092.
19' CELEBRITY DAY SAILOR - all lines & rigging, 2 sets sails, boom cover, and trailer. \$2,100/neg. Ext. 2815 or 874-0437.
25' TANZER SAILBOAT - comp., DF, new VHF, new GPS, RF and extra jib. \$9,000/neg. Ext. 2815 or 874-0437.
DOWN RIGGERS - (2) Penn Fathom-Master 600, gunnel mnts, wts., rod holders, more, excel. cond. \$150 ea. 475-8183.

Furnishings & Appliances

AIR CONDITIONERS - 5,200 Btu, 10.8 EER, \$60; 8,000 Btu, 9.8 EER, \$90; both Kenmore w/thermostats, remotes. 865-9668.
BEDFRAME - Queen size, brand new, still in box. \$25. 331-3765.
COFFEE/END TABLES - solid wood Colonial-American < 6 mos. old, too big for apt., paid \$300, sell for \$100 obo. 345-3757.
CRIB & CHANGING TABLE - matching set, white wood, excel. cond., pic avail., orig. \$300, ask \$150/set. 331-3765.
ELECTRIC RANGE - GE, smth. top, \$100 obo; new Gold's Gym Power Flex home gym, pd \$350, sell \$200 obo. 909-3156.
ENTERTAINMENT CENTER - excel. cond., black, side storage, shelves w/glass drs., up to 32" TV, pic. avail. ask \$150. 331-3765.
KITCHEN TABLE, CHAIRS - 31x48 tbl, 4 chs., honey oak color w/green trim, legs & chair backs, excel. cond. \$200. 878-7655.

Audio, Video & Computers

CAR STEREO - Durabrand, in dash, CD/MP3/CDR/CDRW playback w/MP3 display, 45Wx4, 30 presets, \$120. 434-5824.
CAR STEREO - Pioneer, 50W/ch., CDR/RW/MP3/WMA playback, satellite/iPod compat. \$200. 434-5824.
CELL PHONE - Motorola flip style, limited edition. \$50. Jo Ann, Ext. 7009.
CHARGERS - 2 Sony Ericsson CDS-11 deskstand chargers, 110V & 110-240V supplies, \$5/ea. Achim, Ext. 4750 or 816-0348.
TV - 27" Samsung flat CRT, 1 yr. old., includes remote, model TXN2730F, pd \$300, ask \$150. Gary, Ext. 2550 or 312-3300.

Sports, Hobbies & Pets

MOUNTAIN BIKE - men's small, 21 speed, alum. frame, Shimano gripshift drivetrain, in great shape. \$40. Travis, Ext. 7451.
NORDITRACK AND TUNTURI BIKE - gently used, best offer. 744-8386.
SURFBOARD - 9 foot longboard, hardly used, white w/red trim. Paula, 924-0139.
TICKETS - 2 tickets to *An Evening with Harry, Carrie & Garp*, Radio City Music Hall, 8/1, \$90/ea. Renee, Ext. 8278.

Tools, House & Garden

CRAFTSMAN - 16" 36cc, runs v. well, needs chain. \$30. Travis, Ext. 7451.
INSULA-DOME SKYLIGHT - vented w/ screen, 14" X 45.5", new in box \$150. DJ, Ext. 3555, or Joe, 475-8183.
SANDER - Powermatic oscillating spindle, w/HTC mobile base \$200. Grizzly 6" jointer w/HTC mobile base \$250. 286-2843.

Happenings

CONCERT - "Afterlife" pays tribute to Berkner fans from March w/prog rock performance at Landmark Theatre, 8/12. 516-414-1176.
MEMORIAL SERVICE - for Pat Tuttle, Tues., 8/1, 5 p.m., Shrine of Our Lady of the Island, Manorville, if rain, then in Chapel. Daniel, Ext. 4651 or 878-9037.

Free

BELLTONE ORGAN - Belltone ORGAN, 70s model, w/foot pedals, bench, works v. well, you pick up. Linda, Ext. 5126.

BOX SPRINGS - one full size, one twin; 4 universal bed frames. 917-865-9668.

DISHWASHER - Asko 1895, \$1000 new, needs \$300 circuit board, stainless steel int., v. quiet, energy effic. John, Ext. 2258.

FLATBED SCANNER - 600 dpi. Parallel or SCSI interface. Travis, Ext. 7451.

MAZDA MIATA PARTS - rear window w/ defroster & rain gutter for Miata w/glass window. Jim, Ext. 7912 or 516-316-6346.

SOFA - nice black leather, you pick up. Dejan, Ext. 3078.

Wanted

ADULT DAY CARE PARTICIPANTS - Little Flower Family Svcs. in Wading River may start a non-medical adult day care service and seeks to gauge BNLers interest in such a program. To register your interest or for more information, call Paul, 929-6200, Ext. 1812.

MALE ACTORS - faithful, dedicated actors to participate in Gospel comedy play to take place winter '06. Tiffany, Ext. 7692.

MEDELA - used w/dual electric pump. Ext. 4532.

RECORDS - LPs and 45s, I'll give them a good home. Ext. 7661.

REFRIGERATOR - working, looks not important, will pick up. Paul, Ext. 4689.

REFRIGERATOR - working, lg., will pick up. Michael, Ext. 7861.

SEWING MACHINE - looking for used, working machine in good cond. Pat, Ext. 5159 or 399-1679.

For Rent

ANTIGUA - timeshare week 11/25-12/2, studio in beautiful resort w/beach view, see www.antiguavillage.net. \$1,000/wk./neg. Mike, Ext. 2550 or 744-7360.

FARMINGVILLE - 1 bdrm. in house, share bath w/2, full kit., elec. incl., avail. 9/1. \$450/mo. Ben, 513-8275.

MASTIC - 4-bdrm. ranch, full bath, bdmt., 1/2 mile from high school, 5 miles from Lab. \$1,500/mo. Daniel, Ext. 7658.

MATTITUCK - on the water, lg. deck, 1 bdrm., den, lg. 1/2 kit. combo, full bath, all lg. w/a nice view and quiet area. \$850/mo. Ronald, 298-5625.

MILLER PLACE - share lg., furn., non-smkg. Colonial house in prof. resid. area, cac, internet, TV cable, back yard deck, own bdrm., 10 mi. to BNL. \$650/mo. 744-8386.

RONKONKOMA - 1 bdrm bsmt. apt. w/ sep. ent., full kit., l/r, full bath, pkg spot in driveway if car does not leak, close to LIE for travel. \$900/mo./neg. Pete, 433-4495.

S. SETAUKET - 2 BR apt., bath, kitch., A/C, W/D, Internet, cable, 9 mi from Lab, one car prkng. <http://tinyurl.com/s84e>. \$1,000/mo. Lin, Ext. 4508 or 631-698-2891.

SHIRLEY - all new bsmt. apt., lg. kit., bdrm. and l/r combo, full bath, pvt. ent., all util. incl., 4 miles from Lab. \$800/mo. Carol, 399-6337.

SHOREHAM - 3-bdrm. ranch, 1 bath, l/r, den, kit., washer/dryer, 1-car gar., lg. yard, utilities extra. \$1,800/mo. 258-4607.

YAPHANK - studio, quiet n'hood, single person, 4 mi. to BNL, no pets/smkg., deposit and 1st month req'd., avail. 8/4. \$650/mo. incl. all. 345-5244.

For Sale

BRIGHTWATERS - trad. Ackerson Colonial in center village, diamond, all renov., 4 bdrm., 2 bath, new Viking kit., new porch, decks. \$650,000/neg. 516-810-6555.

RIDGE - 2-bdrm. condo in Strathmore Ridge, new FB, l/r, d/r, attic, new cherry wd. cabinets, ceramic tile, s/s appl., low taxes. 5 min to BNL. \$159,000/neg. 704-9912.

ROCKY POINT - quiet neighborhood, close to stores, beach, 3 bdrm., 2 bath, small lot, taxes less than \$1,500. \$225,000. Samantha, 632-8241.

SHOREHAM - Dutch Colonial, 4 bdrm., 2 bath, d/r, l/r, lg. fam rm., wood flrs., new lg. kit., new appl., 1-car gar., igp, fenced yrd., family n'hood. \$499,000/neg. 258-4607.

On-Site Services

ON-SITE SERVICE STATION - We can supply your needs for boat & motorcycle starters, alternators, all vehicle services, oil changes, checkups, NYS inspections, new batteries, tires, timing belts, repairs, etc., while you are at work. Ext. 4034.

ENTERPRISE RENT-A-CAR - Need to rent a car or a truck for a day only? Or for longer? Stop by the on-site Enterprise Rent-a-Car office at Bldg. 355, 50 Brookhaven Ave., to check weekend specials, daily rates. Or call Ext. 4888 or see www.enterprise.com.

In Appreciation

To my friends at C-AD: Your kind words of comfort, beautiful flowers and sympathy card made the passing of my father easier on me and my family. All of your acts of kindness has meant the world to us.
— Richard Przybylinski

To my friends at SMD: Your kind words of comfort, and all your acts of kindness have made the passing of my mother easier on me and my family.
— Andrew Sauerwald

Summer Sundays, Now Through 8/20

What can you do that's free, fun, and educational on a lazy summer Sunday? Visit BNL to enjoy a variety of entertaining activities for people of all ages. The science research laboratory that is home to six Nobel Prizes will feature interactive exhibits and an exciting, action-filled science show. Each week, tour a different facility at the Laboratory's 5,300-acre campus and learn about everything from DNA to the perfect liquid, a state of matter now thought to have existed at the beginning of the universe. Summer Sundays is offered from July 9 through August 20. No reservations are needed. Visitors may arrive any time between 10 a.m. and 3 p.m. All visitors age 16 and over must bring a photo ID. The "Whiz Bang Science Show" will be staged at 10:30 a.m., noon, 1:30 p.m. and 3 p.m. each Sunday, with a special exception: At 3 p.m. on August 6, a magician will show off some amazing science tricks. Visitors may test their mathematical skills at Nature's Numbers, a hands-on exhibit that features designs in nature and shows how they relate to math. Also, a historical exhibit on Camp Upton - the U.S. Army base that occupied the Laboratory site during World Wars I and II - will be on display.



See With Invisible Light This Sunday, July 30

Powerful beams of invisible light help scientists make remarkable discoveries that can impact our everyday life. The National Synchrotron Light Source is one of the world's brightest sources of x-ray, infrared, and ultraviolet light. Used by over 2,000 researchers from around the world each year, the Light Source has contributed to advances in medicine, materials, space travel, and more. Enjoy hands-on activities, and take a quiz to win a prize.

Talk by WWII Tuskegee Airman Lee Hayes, 8/3

Lee Hayes, a World War II Tuskegee Airman, will give a talk at noon in Berkner Hall on Thursday, August 3, about his achievements and challenges as one of the first black military airmen in the U.S. Sponsored by the Brookhaven Employees Recreation Association and BNL's Diversity Office, the talk is free and open to the public. All visitors to the Lab age 16 and over must bring a photo ID.

Hayes, a resident of Amagansett who worked at BNL as a custodian from 1958 to 1966, served in an all-black bomber squadron at Tuskegee Army Air Field in Alabama. He was among 994 precedent-breaking black soldiers at Tuskegee who passed rigorous tests between 1942 and 1946 to become pilots in the then-segregated armed forces. According to the Tuskegee Airmen, Inc., website (www.tuskegeearmen.org), "These airmen fought two wars - one against a military force overseas and the other against racism at home and abroad."
— Diane Greenberg

Summer Science Explorations Science Camp for Elementary School Scientists

All BNL employees are invited to register their 4th, 5th, and 6th grade children in BNL's Summer Science Explorations Program, which is a free offering from the Lab's Science Learning Center. The summer camps reserved for the BNL community will be held during two weeks: August 1-3 and 15-17, Tuesday through Thursday, 8:30 to 11:30 a.m. The three-day program will give the students a hands-on environmental field experience, an engineering day, and a day devoted to the solar system.

Space is limited, so register your child or grandchild early by contacting the Science Learning Center Program Office, Ext. 4495, soon. Children must attend all three days, and the parents of participating children are also welcome to attend.

Have Fun on BERA Trips

For information and to buy tickets, visit the BERA Store, weekdays, 9 a.m.-3 p.m. Also, see www.bnl.gov/bera/recreation/events.asp.

Sweet Charity Show With Pre-Show Party, 8/4

Friday, August 4. At 6:30 p.m. on the Bellport Gateway Playhouse front lawn, join a BERA-catered tent party, which will include wine, beer, soda and water along with cheese and vegetable/antipasto platters. Following the party will be the 8 p.m. performance of *Sweet Charity* - all for \$53 per person.

Showboat Casino, Atlantic City, 8/19

Saturday, August 19. Enjoy the hottest casino, beach and boardwalk in Atlantic City! Tickets are \$10 per person, but you will get \$15 cash and a \$5 food voucher, so you are already making money! Advanced tickets are necessary. The coach bus will leave the Brookhaven Center at 9:30 a.m. and depart Atlantic City at 7 p.m. Participants must be 18 and over for this trip.