

BNL's Fritz Henn Awarded New York Academy of Medicine's Thomas William Salmon Award

Fritz Henn, Associate Laboratory Director for Life Sciences, has been named a recipient of the Thomas William Salmon Award by the New York Academy of Medicine. He received the Salmon Medal at the 75th Annual Salmon Lecture and Medal Award ceremony at the academy's headquarters in New York City on December 4, 2008.

Each year, the New York Academy of Medicine recognizes a prominent specialist in psychiatry, neurology or mental hygiene by presenting the Thomas William Salmon Award for outstanding contributions to those fields. The Salmon Medal was first awarded in 1942 in memory of Thomas W. Salmon (1876-1927), a gifted physician whose contribution to the cause of the mentally ill was one of the most notable in his generation. Henn was honored for his outstanding work in psychiatry and mental hygiene.

"This award means a great deal to me," said Henn. "Many of my heroes in psychiatry have received it, and I am proud to be in their company."



Joseph Rubino D2590406

Henn is an expert in the neuroscience of depression, an area of research that he has pursued for his entire career. Recently, he discovered a new neural circuit that, if stimulated electrically, can ease depression. This new circuit, a group of interconnected neurons, or nerve cells, that influence each other, has been identified in both animals and humans through two medical imaging methods used at BNL — magnetic resonance

See *Henn* on pg. 2

New York Blue Supercomputer Aids In Global Climate Research

Scientists at BNL have published research focused on the formation of clouds, comparing computer simulations to aircraft observations. This research paper, the first climate-science paper to be published on research using the supercomputer New York Blue, is in the December 22, 2008 aerosol-precipitation issue of *Environmental Research Letters*. Co-authors on the study include Huan Guo, Yangang Liu, Peter Daum, and Gunnar Senum of BNL; and Wei-Kuo Tao of the National Aeronautics & Space Administration (NASA) Goddard Space Flight Center.

This work, under BNL's Climate Science Initiative, was funded by DOE's Atmospheric Radiation Measurement and Atmospheric Sciences Programs, Office of Science, and NASA. Funding for New York Blue was provided by New York State. Located at BNL, New York Blue is used by the Lab and Stony Brook University in a cooperative effort, the New York Center for Computational Sciences.

"Clouds are one of the most turbulent environments you can find in nature," said Liu of the Environmental Sciences Department, a cloud physicist and the project's principal investigator. "There are many things we don't know about clouds."

Clouds play critical roles in many climate processes, includ-

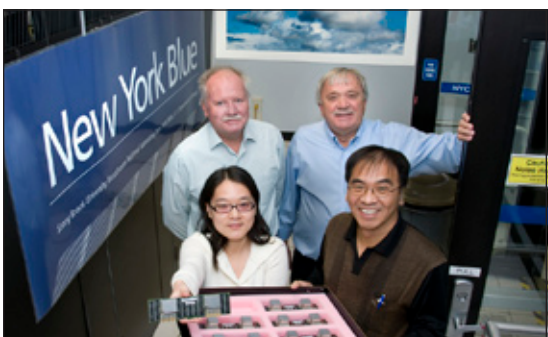
ing the Earth's energy and water cycles. They are an essential part of the global climate system yet are considered one of the largest uncertainties for future climate projection.

Research on clouds presents some major challenges, given that cloud processes span a huge range of scales, from hundredths of an inch to hundreds of miles, and over these distances and time, are highly variable. This multiscale variability makes it difficult to simulate clouds and represent them in climate models. Smaller scales cannot demonstrate cloud systems, while larger scales lose resolution of individual clouds.

In order to represent a cloud numerically, researchers must consider turbulence in addition to factors such as tiny aerosol particles suspended in the air. As a result, the three-dimensional cloud simulation demands an enormous amount of computer resources.

That is where New York Blue comes in. About 10,000 times faster than a personal computer, it uses more than 36,000

See *Climate* on pg. 2



Roger Stoutenburgh D1171208

Members of the cloud study team: (front, from left) Huan Guo and Yangang Liu of the Environmental Sciences Department (ESD); (back, from left) Gunnar Senum, ESD, and Peter Daum, Energy, Environment and National Security Directorate. Not pictured: NASA meteorologist Wei-Kuo Tao.

Inside Story

BNL Added \$32 Million+ To Long Island Economy in FY2008

— Read the story on pg. 2 —



From left: Steven Dierker, Marisa Lago, and Chi-Chang Kao at the National Synchrotron Light Source



Steven Vigdor and Marisa Lago look at a PHENIX image at the Relativistic Heavy Ion Collider

Empire State Development Corp's Marisa Lago Visits Brookhaven, Discusses BNL/NYS Initiatives

On January 22, Marisa Lago, President and Chief Executive Officer of the Empire State Development Corporation (ESDC), with other key ESDC staff, visited BNL to learn about Lab facilities and research, especially work involving collaborations with New York State (NYS).

Lago, who joined NYS government in September 2008 after a career in federal and municipal government and in the financial services industry, has complete oversight of economic development initiatives throughout the State. In naming her to this ESDC position last August, Governor David Paterson, who characterized ESDC as "a critical partner in bringing new business to New York and growing the successful companies that generate jobs and revenue for our State," expected her appointment to "bring new vitality to our economic development mission."

Lab Director Sam Aronson and DOE's Brookhaven Site Office (BHSO) Manager Michael Holland welcomed Lago, ESDC's Andrea Lohneiss, and Barry Greenspan to BNL. Lago and her staff were also greeted by Deputy Director of Science & Technology Doon Gibbs, Deputy Director of Operations Michael Bebon, Associate

Lab Director for Basic Energy Sciences Jim Misewich, Assistant Director for Community, Education, Government & Public Affairs Marge Lynch, BHSO's Business Management Division Director Robert Gordon, and BNL's Manager of Energy Management Mark Toscano.

After an overview of research and NYS initiatives and tour of the Center for Functional Nanomaterials, the group visited the National Synchrotron Light Source (NSLS) to meet Steven Dierker, Associate Director for Light Sources, and Chi-Chang Kao, NSLS Chair and Director of the future Joint Photon Sciences Institute (JPSI). JPSI, which is supported by NYS, will serve as an intellectual center for development and application of the photon sciences and a gateway for users of the future NSLS-II. As the brightest synchrotron light source in the world, NSLS-II will enable advances in fields such as materials design and function, energy — including alternative energy innovations — health, and drug design.

The group next stopped at the PHENIX experiment at the Relativistic Heavy Ion Collider (RHIC), where Steven Vigdor, Associate Director for Nuclear & Particle Physics; Derek Lowenstein, Collider-Accelerator Department

Chair; and PHENIX scientists explained some of the renowned discoveries made at RHIC, the world's premier heavy ion and polarized proton collider, where more than a thousand scientists and users pursue research on the fundamentals of the nucleus and the origins of the universe.

New York Blue, the Stony Brook/BNL supercomputer, was the last stop on the tour. Support from the New York State Foundation for Science, Technology, & Innovation (NYSTAR) has enabled research using New York Blue in fields from genomics to climate science. James Davenport, Director of BNL's Computational Science Center, explained that New York Blue is part of the New York Center for Computation Sciences. Ranked as the 28th fastest supercomputer by Top 500, New York Blue has had about 200 users since its installment in 2007 — including global climate researchers and Intel finalist Christine Shrock (see stories at left and below).

Concluded Aronson, "Ms. Lago expressed great interest in the Lab's research facilities and activities, especially as they relate to New York State efforts in alternative energy. This was an important visit as we look to continue to build our relationship with the State." — Liz Seubert

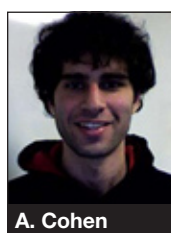
Intel Finalist, Semi-Finalists Worked on Projects at BNL

Four high school students who worked on their science projects at BNL have been recognized in the Intel Science Talent Search competition.

Christine Lee Shrock of Ward Melville High School was named a finalist. Shrock's mentor was Carlos Simmerling, a BNL guest scientist from Stony Brook University who works at the New York Blue supercomputer at the Lab. The three semi-finalists were Andrew Cohen from Columbia Grammar & Preparatory School, whose BNL mentor is Tom Butcher, Energy Sciences & Technology Department; Seth Fichtelberg from Kings Park High School, whose mentors are Scott Bronson, Office of Educational Programs, and William Sherman,



C. Lee Shrock



A. Cohen



S. Fichtelberg

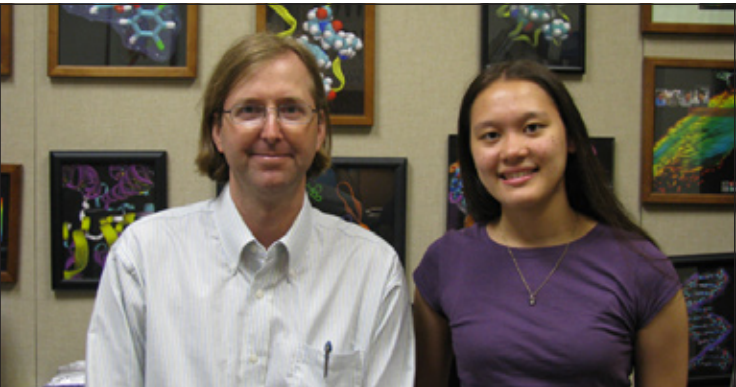


G. Meyerowitz

Center for Functional Nanomaterials; and Glen Meyerowitz from Northport High School, who is mentored by Helio Takai of the Physics Department.

Christine Lee Shrock came to BNL through a Stony Brook University program. For her project in bioinformatics and genomics, Shrock built computer models to carry out molecular dynamics simulations in studying the protein MDM2 and its effect on tumor suppression. She specifically focused on MDM2's effect on p53, an important tumor-suppressing protein. To conduct her experiment, Shrock used 3 million node hours on the NY Blue supercomputer. NY Blue is the centerpiece of the New York Center for Computational Sciences, a cooperative effort between BNL and Stony Brook University. Shrock hopes to attend Harvard or Princeton.

See *Students at BNL* on pg. 2



Intel finalist Christine Lee Shrock of Ward Melville High School with mentor Carlos Simmerling, a BNL guest scientist from Stony Brook University. Shrock used the New York Blue supercomputer at BNL for her research.

Students at BNL from pg. 1

Andrew Cohen came to BNL through the High School Research Program, coordinated through the Lab’s Office of Educational Programs. The title of his project is “Preliminary Studies of Ethyl Levulinate: a Non Food-Source Biofuel.” Cohen was interested in biofuel storage and came to BNL mentor Tom Butcher with a large binder filled with copies of key papers and reports he had collected. Cohen decided to focus his project on ethyl levulinate, a biofuel that may be interesting for the future. “Andrew was very motivated,” said Butcher. “While he was at BNL he made a few presentations on his work to visitors. He did a great job and I think he is on the path to a great scientific career.”

Seth Fichtelberg also came to BNL through the High School Research Program. The title of his project was “Modeling and Sequencing the Elements of a Bent Linear DNA Array.” Fichtelberg was the first high school student to do research at the Center for Functional Nanomaterials, which became fully operational in March 2008. Under the direction of mentors Scott Bronson and William Sherman, Fichtelberg worked full-time at BNL last summer. He continues to work a few hours a week during the school year to build the structures he designed. The goal of his project was to find an easy way to make large, structurally complex nanostructures using a minimal number of unique strands of DNA.

Glen Meyerowitz came to the



Seth Fichtelberg, an Intel semi-finalist, with his mentors Scott Bronson (left) and William Sherman (right).

Lab through a Stony Brook University program and has been working with his BNL mentor, Helio Takai, for two summers. His topic for the Intel contest was “Uncovering Elusive Ultra High Energy Cosmic Rays: Development of a Method to Detect Cosmic Rays,” which involves a new technique being explored to detect very high-energy cosmic rays. Meyerowitz has been accepted at both the California Institute of Technology and the University of Chicago, but he has not yet decided where he will go for his degree.

The students’ teachers are enthusiastic about BNL’s educational programs. For example, Jane Schoch, a teacher at Kings Park High School, said, “We feel fortunate to have educational resources like Brookhaven available to our students and hope that students can continue to participate in the research opportunities offered there for many years to come.”

Congratulations to all the winners and their mentors!

— Jane Koropsak

Henn from pg. 1
imaging (MRI) and positron emission tomography (PET). This research may lead to new, more effective treatments for depression. Henn also recently found evidence that invalidates a current theory on depression. The theory states that a decrease in the generation of new nerve cells contributes to depression. New advances in brain imaging have allowed scientists to more accurately measure the creation of new nerve cells, which, contrary to earlier theories, are generated throughout life in humans. Henn’s new studies show that these nerve cells

continue to be created at a normal rate in depressed individuals as well. At BNL, Henn has continued with his studies of depression.

Among Henn’s honors is the Federal Cross of Merit, a high-level honor of the Republic of Germany, awarded for his leadership and distinguished scientific contributions as Director of the Central Institute of Mental Health, Heidelberg, where he served 1994-2006, until he assumed his current position at BNL.

— Diane Greenberg

For more details on Henn’s contributions, see www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=878.

Climate from pg. 1
processors to handle over 100 trillion calculations per second. This capacity allows it to handle such a large and complex 3D model efficiently.

To improve global climate modeling, Liu’s research team used New York Blue to simulate the development of a cloud deck found over western coastal waters over time and space with a 3D model. Characteristics of the model’s cloud were compared with actual cloud observations made by aircraft.

“The model is accurate for central areas of the cloud, but not for the cloud base or top,”

said Guo, the study’s lead author. “What makes it especially difficult is that the bottom surface is smooth, but the top surface is like a cauliflower.”

The cloud model best matches the actual cloud as the model’s grid size becomes finer, down to an area of about 30 square feet. Nevertheless, even the highest resolution simulations still fail to account for frequent and large variations, typical of turbulence. This finding has crucial implications for model improvement and cloud representation in climate models.

— Satya Shanmugham

College Mini-Semester Students Spend Winter Break at BNL

Twenty-two students from 15 colleges — from locations as far-ranging as New York and Alabama — spent five days of their winter break at BNL, discovering cutting-edge science. The students were enrolled in Lab’s College Mini-Semester Program, in which they learn about the world-class science performed at BNL through lectures, tours, and team research experience.

The students toured Brookhaven’s world-class facilities, such as the Relativistic Heavy Ion Collider, where physicists discovered a “perfect” liquid that they believe existed in the early universe; the National Synchrotron Light Source, where researchers probe materials as diverse as comets and computer chips; and the Center for Functional Nanomaterials, where the studies of the ultra-small may lead to ultra-big discoveries.

The focus of study for the students was the Laser-Electron Accelerator Facility (LEAF), where James Wishart of the Chemistry Department and other scientists investigate chemical reactions by bombarding samples with tiny clusters of high-energy electrons. This technique allows scientists to “see” chemical processes that occur on extremely short time scales.



Roger Stoutenburgh D2290108

Mini-Semester Program students working on a chemistry experiment at BNL are: (seated) Khaing Thinzar Win from St. Joseph’s College, Brooklyn campus; (from left) William Willis, Stony Brook University; Adeyemi Adebayo, Holyoke Community College; and Jockquin Jones, Howard University, who was assisting the students as a mini-semester group leader.

“At the end of the mini-semester, each student made an oral presentation on the week’s work and was required to present a research report on how LEAF would be an important tool for his or her area of study,” said Noel Blackburn, an educational programs administrator in BNL’s Office of Educational Programs, which manages the Mini-Semester Program. “All the students are

science, technology, engineering or mathematics majors, and the Mini-Semester Program often whets their intellectual appetite for more scientific exploration. Students in the program often go on to attend our summer internship programs.”

For more information on BNL’s educational programs, see www.bnl.gov/education.

— Diane Greenberg

BNL Added \$32 Million+ To Long Island Economy in FY 2008

BNL purchased more than \$32.5 million worth of supplies and services from Long Island businesses in fiscal year (FY) 2008, a period from October 1, 2007 to September 30, 2008.

In addition to the Lab’s buying goods and services from Long Island vendors, most BNL employees live in Suffolk County and shop on Long Island. All told, employee salaries, wages and fringe benefits amounted to \$322.2 million, or 60.7 percent of the La’s \$530.9 million budget in FY 2008.

Owned and primarily funded by DOE, BNL creates and operates major facilities available to university, industrial, and government personnel for basic and applied research in the physical, biomedical, and environmental sciences, and energy technologies.

BNL’s total procurement budget in FY 2008 was approximately \$175.9 million. Out of that amount, the Lab spent about \$5.8 million on 508 purchases in Nassau County and \$26.6

million on 3,001 purchases in Suffolk County.

Don Rawlings, Manager of Brookhaven’s Procurement & Property Management Office, which handles purchasing for the Lab, said, “Brookhaven Lab’s expenditures contribute significantly to the local economy. We strive to do business locally not only with big companies, but also with small businesses whenever we can. In addition, the Laboratory’s spending creates new jobs locally.”

BNL’s top three vendors on Long Island in FY 2008 were Rockmore Contracting Corporation of Smithtown; Construction Consultants-Long Island, Inc., of Port Jefferson; and Roppelt Electrical Contractors, Inc., of Blue Point. Rockmore Contracting received approximately \$5.8 million for two construction projects, which included a 11,000 square-foot expansion of computing facilities used for physics research conducted at BNL’s Relativistic Heavy Ion Collider (RHIC) and the ATLAS detector at

the Large Hadron Collider at CERN, the European particle physics laboratory in Switzerland. Rockmore also built an 8,400 square-foot materials-handling facility, which is used for inventory and shipping and receiving materials and supplies.

Construction Consultants-Long Island received over \$1.5 million for office renovations for a 60-year-old building. Other renovations included making a seminar room out of an outdated training area and modifying six bathrooms so that they are compliant with the American Disabilities Act.

The Lab paid Roppelt Electrical Contractors over \$1.3 million for installing the power distribution system for the electron beam ion source project, a new pre-injector system currently under construction to facilitate physics research at RHIC and biological research at the NASA Space Radiation Laboratory, located at Brookhaven. The project’s scheduled completion date is 2010.

— Diane Greenberg

Pick a Summer Student

Student applications for the summer 2009 undergraduate science internship programs sponsored by DOE’s Office of Workforce Development for Teachers and Scientists will be available on February 1, for review on an electronic database. Contact Kathy Gurski of the Office of Educational Programs (OEP) at Ext. 4503 or gurski@bnl.gov for the database address and passwords.

Selections for the first round choices must be submitted by February 28, however, the earlier the better to have a greater likelihood of getting a student. Students will be here for ten weeks, from June 1 to August 7. Stipends, housing, and travel are funded through OEP with a \$1,000 cost share requested from the hosting department. See www.bnl.gov/education for more information.

Arrivals & Departures

— Arrivals —

Frederick Bornemann, IV C-AD
Yun CaiChemistry
Yong Hu.....NSLS-II
Jayesh ShahNSLS-II
Alexander Velytsky Physics
Feng Wang..... CMP&MS

— Departures —

Dolores Collins C-AD
Jean-Francois Pratte..... Instrum.
Dardo Tomasi..... Medical

In Memoriam

Arie van Steenberg, a former National Synchrotron Light Source (NSLS) Deputy Department Chair, 1982-84, who helped bring the facility to fruition, died on January 2, 2009, at 81. Van Steenberg joined BNL as an assistant physicist at the Alternating Gradient Synchrotron (AGS) on October 10, 1957, and he worked on multiple accelerator magnet projects. Later, he headed an AGS group, playing a valuable role in commissioning the machine after an important upgrade in the late 1960s. In addition, he spent a year at Fermi National Accelerator Laboratory (Fermilab), starting in 1967, to participate in the design of the Fermilab Booster. He rose to senior physicist on January 1, 1976, after receiving tenure on July 1, 1967. In 1977, he became Project Director of the NSLS, the world’s first facility designed and built specifically for producing and exploiting synchrotron radiation. From 1984, he worked on projects that included the first free electron laser (FEL) experiment at the NSLS and inverse FEL experiments at the Accelerator Test Facility, and served as a member of the Relativistic Heavy Ion Collider Accelerator Advisory Committee before the facility’s construction. He retired on September 1, 1995, continuing as a guest scientist until 1996, and as a consultant, 1996 through November 30, 2001.

Hispanic Heritage Club Offers \$500 Scholarships

The BERA Hispanic Heritage Club is accepting applications for five \$500 scholarships for high-school seniors. Applicants should:

- Be a high school senior graduating in 2009
- Have a minimum 3.0 cumulative GPA on a 4.0 scale (or equivalent)
- Be accepted by a college for fall 2009 classes to pursue a degree in science or engineering
- Be a Long Island resident attending Bellport, Longwood, Patchogue-Medford, Riverhead or William Floyd High Schools
- Have some degree of Hispanic ancestry
- Be a U.S. citizen or legal permanent resident with a valid permanent resident card

For information, see www.bnl.gov/bera/activities/hispanic, or contact Carmen Alvarado, alvarado@bnl.gov, Ext. 8900.

Camera Club, 2/12

The Camera Club will meet in Berkner’s Room B on Thursday, February 12 at noon. For more information, contact Ripp Bowman, Ext. 4672.

BERA Updates

Wholesale Club Membership Drives: Representatives from BJ’s, COSTCO, and Sam’s Club will be in Berkner Hall to answer questions and receive membership applications, 11 a.m. – 2 p.m. BJ’s: Monday, March 2; Costco: Friday, March 6; Sam’s Club: Friday, February 27.

Trips

- **Philadelphia Flower Show:** Saturday, March 7. Leave BNL at 6 a.m. Leave PA at 4 p.m. \$35 per person adult or child.
- **Atlantic City Trip:** Saturday, April 4. Casino to be announced later. Leave BNL at 9 a.m. Leave NJ at 8 p.m. \$25 per person.
- **NY International Auto Show @ Javits Center, NYC:** Saturday, April 18. Leave BNL at 9 a.m. Leave NYC at 4 p.m. \$20 per person.
- **Newport, RI Tour:** Saturday, April 25, and Sunday, April 26. Includes ferry (from/to Port Jeff), harbor cruise, Hampton Inn hotel, hot breakfast, tour of Marble House & the Breakers, free time. Single: \$259; double, \$187; triple, \$163; children 17 and under, \$115. \$100 at sign up, remainder by March 24. See also http://www.bnl.gov/bera/linkable_files/Newport-RI-TourBNL2009a.pdf.

All tickets include transportation on a luxury coach. Tickets are nonrefundable and limited to four per person for the first two weeks of sale.

Meet Tammy Stein, A Dedicated Blood Donor

Two years ago, Tammy Stein’s husband, had a heart attack. He was diagnosed with several aneurysms, and their youngest child had not yet turned a year old.

“If anything happens,” Stein said, “he may need a blood transfusion one day.”

Thinking about people who require blood transfusions was not a new idea for Stein. She began donating blood at the Lab long ago, in 1992, to help others who were sick — most likely people she would never meet.

She had not expected one of the possible recipients to be in her own house.

“My blood may not match my husband’s, but it matches someone else’s,” she said. “I will just have to hope that someone else will donate what he might need.”

Stein said she is blessed to have four healthy children, but she has met families who are not as lucky. Her 12-year-old daughter’s classmate has brain cancer, and, each week, goes to Stony Brook University Medical Center for treatment and blood transfusions. “Some of the kids there

aren’t old enough to understand what cancer is or even pronounce the type of disease they have,” Stein said.

Stein’s daughter, in support of those like her classmate, donates her hair to Locks of Love: 12 inches every two years. Ed and their son also volunteer their hair through St. Baldrick’s Foundation, an organization that coordinates worldwide head-shaving events to fund childhood cancer research.

Donating blood helps those who need it but also alerts the donor to the health of their blood, Stein added, which is how she learned of her own low iron levels.

Stein has been the Administrative Assistant to the NSLS-II Project Support Division Director since 2006, and is very happy that the Lab makes it so convenient to donate blood.

“It’s a simple sacrifice that each of us can make,” she said. — Satya Shanmugham



Please Give Blood, 2/12

As always, blood is desperately needed. The next BNL Blood Drive will be held on Thursday, February 12, 9:30 a.m. – 3 p.m., at the Brookhaven Center.

Donors must be 16 to 75 years of age, in good health and weigh over 110 lbs. Restrictions may apply to individuals from the United Kingdom and Europe. Donors should have a photo ID and know their social security number.

To make an appointment, log on to the Human Resources webpage, click on “Blood Drive” and select “Schedule an Appointment.” Or, contact Liz Gilbert, Ext. 2315.

Inside Information Symposia at AAAS Meeting

BNL scientists who study topics ranging from new strategies for addressing the nation’s energy needs to subatomic interactions in physics to mysteries of the art world will present their work in three separate symposia at the world’s largest scientific gathering, the annual meeting of the American Association for the Advancement of Science (AAAS), Feb. 12-16, in Chicago.

The symposia are: “Basic Research for Global Energy Security: A Call to Action,” to be moderated by James Misewich, BNL; “Quest for the Perfect Liquid: Connecting Heavy Ions, String Theory, and Cold Atoms,” moderated by Peter Steinberg, BNL; and “Casting New Light on Ancient Secrets,” moderated by Murray Gibson, Argonne National Laboratory, including a talk by Peter Sidons, BNL. Brookhaven science will also be featured at a booth. See <http://www.bnl.gov/aaas09/>.

Road Closings During Week of 2/9 – 13

During the week of February 9 all or portions of Groves Street, between Weaver Drive and Brookhaven Avenue, will be closed at times to facilitate construction activities associated with NSLS-II site preparation work. BNL employees, visitors, and guests are requested to avoid the area and to obey all posted barricades, warnings and signs. During this time, every effort will be made to maintain access to the truck scale and Building 485 for vehicles requiring access to those facilities. For more information, contact Steve Sawch, Ext. 7593.

Toastmasters Club Adds Noon Meeting, 2/10

BNL Toastmasters Club is adding a monthly lunchtime meeting on the second Tuesday of each month, noon-12:55 p.m., in Berkner Hall, Room D. The next meeting will be held on Tuesday, February 10. Toastmasters meetings are a very friendly way to practice public speaking and communication skills, and many BNLers attend for the fun they experience. Meetings on the first and third Tuesdays of the month, 5:30-7 p.m., will continue to be held in Room 160 of Bldg. 463 (Biology). For more information, call Beth Lin, Ext. 3372.

Nominations Wanted for Scharff-Goldhaber Prize For Women in Science: Deadline, 2/15

Brookhaven Women in Science (BWIS) is accepting nominations for the Gertrude Scharff-Goldhaber Prize, which was established to recognize substantial promise and accomplishment by a woman graduate student in physics. The award is open to all students who are either enrolled at Stony Brook University (SBU) or are performing their thesis research at BNL.

The prize was created to honor Gertrude Scharff-Goldhaber for her outstanding contributions in the field of nuclear physics, and for her support of women in science. The winner will receive a \$1,000 award and give a seminar on her work at the award ceremony in May. The nominee must have been admitted to the candidacy for the doctoral degree, must still be actively enrolled in the graduate program, and must not be receiving her degree before Spring 2009.

The award recipient will be announced in April 2009, and the award ceremony will take place in May. Please submit all required materials before February 15 to: Linda Bowerman, Ph.D., BNL, EENS Research Operations, Bldg. 185, Upton, NY 11973.

For more detail about the award, see The Bulletin of 1/30/09, p. 3, or www.bnl.gov/bnlweb/pubaf/bulletin/2009/bb013009.pdf.

A Reminder from the Benefits Office

The birth of a child, adopting a child or getting married are all exciting life events. Remember to enroll any newly attained dependents in your medical and/or dental programs within 30 days from the date your new dependent is born, adopted, or otherwise becomes eligible for coverage. If you do not enroll your dependent through the Benefits Office within 30 days, you will be required to wait until the next Open Enrollment Period to enroll him/her. If you have any questions, call the Benefits Office, Ext. 2877 or Ext. 5126.

CALENDAR

— THIS WEEKEND —

Today, Friday, 2/6

What It Means To Go ‘Red’

Noon. Berkner Hall. Jean Marie Cacciabuo, M.D., will talk about maintaining a healthy heart. Register at Ext. 2733 or nlosinno@bnl.gov.

Saturday, 2/7

Play in GO Tournament

9 a.m.-5 p.m. Recreation Hall. BNL community members who know the Chinese board game “GO” are invited to a friendly tournament. Bring the family. Contact Xin Zhao, xinzhao@bnl.gov or Ext. 2107.

— WEEK OF 2/9 —

Mon.-Fri., 2/9-13

*Road Closings

All or portions of Groves Street between Weaver Drive and Brookhaven Avenue will be closed at times to facilitate construction activities. See notice below, left.

Thursday, 2/12

*BNL Blood Drive

9:30 a.m.-3 p.m. Brookhaven Center. See story, left.

— WEEK OF 2/16 —

Monday, 2/16

President’s Day, Holiday

The Lab will be closed for President’s Day. No Bulletin will be issued on Friday, 2/20.

Tuesday, 2/17

‘Exercise Anywhere, Any Time’

Noon. Berkner Hall, Room B. Amy Shapiro, registered dietitian, will give a talk on exercise. All are welcome. Register with Michael Thorn, mthorne@bnl.gov or Bldg. 490.

Wednesday, 2/18

BSA Noon Recital

Noon. Berkner Hall. Award-winning pianist Vassily Primakov will play Schubert, Schumann, and Beethoven. All are welcome to this free public event, sponsored by Brookhaven Science Associates. Visitors to the Lab of 16 and older must carry photo ID.

446th Brookhaven Lecture

4 p.m. Berkner Hall. Lin Yang, National Synchrotron Light Source Department, will talk on “Beyond Protein Crystallography: Seeking Alternatives to Study Biological Membranes and Membrane Proteins.” All are welcome to this free public lecture. Visitors to the Lab of 16 and older must carry photo ID.

Saturday, 2/21

*Rock Bands Electrix, Reckoning

7 p.m. Berkner Hall. Two six-piece bands, local rock band The Electrix and the band Reckoning, will liven the evening at BNL. All are welcome to this concert, open to the public. Tickets are \$15 in advance at the BERA Store or www.ticketweb.com — or \$20 at the door. See pg. 4.



Classified Advertisements

To apply for a position, go to www.bnl.gov. Select "Job Opportunities," then "Search Job List."

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE (Computational Physical Chemistry) – Requires a Ph.D. in physics, chemistry or materials science. Experiences with computational methods of physical chemistry and a strong background in solid-state physics or chemistry are desired. Work will involve theoretical studies based on density functional theory (DFT), Transition State Theory (TST) and Kinetic Monte Carlo (KMC) modeling. The focus is on analyzing the geometrics of the model catalysts and describing their catalytic activities in both the heterogeneous catalysis of alcohol synthesis and the electrocatalysis of ethanol oxidation. The candidate must also be open to collaboration with experimental and theoretical groups. Under the direction of P. Liu and J. Muckerman, Chemistry Department. BNL policy states that Research Associate appointments may be made to those who have received their doctoral degrees within the past five years. Apply to Job ID #14736.

APPLICATION SOFTWARE PHYSICIST (S-1/S-2) - The National Synchrotron Light Source II Project is seeking a physicist or engineer with expertise in the development of application software for the high-level control system for the NSLS-II accelerators. Responsibilities include developing application programs to be used in the commissioning of the NSLS-II accelerator systems, as well as participating in commissioning activities. This position requires a Ph.D. in physics or engineering, at least two years' postdoctoral experience in the development of high level application programs for accelerators, experience carrying out machine physics studies on storage rings, a strong understanding of the physics of accelerators, fluency with high level programming languages, and a successful track record in the development of machine physics applications for high-level accelerator control. Reports to the Accelerator Physics Group Leader. National Synchrotron Light Source II. Apply to Job ID #14732.

LATTICE DESIGN PHYSICIST (S-1/S-2) - The National Synchrotron Light Source II Project is seeking an accelerator physicist with expertise in lattice design and nonlinear single particle dynamics. The successful candidate will participate in the continuing design and optimization of the NSLS-II storage ring lattice, and in the commissioning of the NSLS-II accelerator systems. This position requires: PhD degree in physics, at least two years postdoctoral experience in lattice design and nonlinear single particle dynamics, experience in carrying out machine studies on storage rings is highly desirable. Reports to the Accelerator Physics Group Leader. National Synchrotron Light Source II. Apply to Job ID #14734.

INSTRUMENTATION PHYSICIST/ SYNCHROTRON RADIATION DIAGNOSTICS (S-1/S-2/S-3) - The National Synchrotron Light Source II Project is seeking an experienced physicist or engineer with expertise in the design of X-ray beamlines and optical instrumentation for synchrotron radiation diagnostics. Responsibilities include the design and commissioning of synchrotron radiation diagnostics for NSLS-II accelerator systems and carrying out R&D on x-ray beam position monitors. This position requires a Ph.D. in physics or engineering, at least two years' postdoctoral experience in accelerator instrumentation, expertise in the design and use of optical, x-ray, and electronic instrumentation, and a successful track record in the development and use of advanced instrumentation. Reports to the Accelerator Physics Group Leader. National Synchrotron Light Source II. Apply to Job ID #14733.

MANAGER, SAFETY & HEALTH SERVICES (M-3) Requires a bachelor's degree in safety, environmental science, civil, chemical or nuclear engineering plus 15+ years of progressive safety and health experience in positions of increasing responsibility, including at least 5 years' experience managing a technical organization responsible for these programs. Master's degree and professional certification as a CSP or CIH highly preferred. Experience within DOE as well as private industry is a plus. A distinguished career in the environment, safety, and health field, accompanied by proven success in management within a research and development facility is required. Excellent technical, leadership, interpersonal and management (people and project), communication, data analysis and decision-making skills, and proven ability and successes in proactively seeking and executing creative solutions, developing and executing strategic plans on time and within budget, motivating staff and leading change, a strong customer service orientation, and negotiating and partnering effectively with line management, DOE, regulators, workers (union and non-union) and the public is required. Must be able to develop and sell safety and health services to internal customers to integrate safety and health into design and operations. Must be technically proficient in areas of risk management, worker's compensation, industrial safety, industrial hygiene, safety engineering, hazards analysis, chemical management, work planning and

project management. Extensive knowledge and experience working within the Department of Energy and regulatory agencies such as NRC, OSHA and DOT are highly desirable. Reports to the Assistant Laboratory Director for Environment, Safety, Health & Quality to provide overall leadership, strategic direction, personnel development, and oversight to ensure full implementation of all Division responsibilities, accomplishment of all Division objectives and satisfaction of all Division customers. Environment, Safety and Health Directorate. Apply to Job ID #14735.

ELECTRICAL ENGINEER – INJECTION SYSTEMS/RESEARCH ENGINEER II (P-7) - Provide expert technical advice to develop, design, and evaluate project plans and criteria for projects in NSLS II Injection Systems. Includes utilizing new or improved engineering techniques, procedures or equipment with strong design and troubleshooting skills. These projects will include the design, specifications, and procurement documents for pulsed power systems and high precision power supplies. Requirements: BS Degree in Electrical Engineering and a minimum of 7 years of experience in design and development of high-current pulsed power systems, design experience with precision ramping and DC power supplies, and experience using circuit analysis software for modeling high power systems. Must possess excellent interpersonal skills and the ability to interact with a diverse group of scientists and technical staff and the ability to provide high quality reports and presentations, strong technical writing skills are required to support major procurements. Preferred requirements: Design experience with high level pulsed power drivers for precision pulsed magnets, using lumped element and line type PFN's in the nanosecond to millisecond timescale and experience in the design of precision analog and digital control systems for use on high precision power supplies. Knowledge in reliability criteria as it pertains to pulse power systems and power supplies and familiarity in the design of PLC controls for power systems are a plus. Reports to the Electrical Engineering Group Leader, National Synchrotron Light Source II. ERAP Eligible: \$1000. Apply to Job ID #14724.

POWER SUPPLY DESIGN ENGINEER/PROJECT ENGINEER II (P-7) - Using strong design and troubleshooting skills, will develop, design, implement, and evaluate plans and criteria for a variety of electrical engineering projects for power supplies at the NSLS-II. Responsibilities include utilizing new or improved engineering techniques, procedures or equipment. Requires a BS Degree in Electrical Engineering and a minimum of seven years' experience in design, development of complex precision analog and digital control systems. Experience with electronic circuit analysis software and hardware development systems for FPGA and micro-controllers required. Must possess project management skills, excellent interpersonal skills, demonstrated ability to interact with a diverse group of scientists and technical staff, and the ability to provide high quality reports and presentations. Must have demonstrated experience overseeing the work of engineers, technicians and others. Preferred requirements include experience in circuit board and small chassis designs, familiarity with high current power supplies, familiarity in the design of PLC controls for power systems, and instrumentation data acquisition systems. Reports to the Group Leader of the Electrical Engineering Group. National Synchrotron Light Source-II. ERAP eligible \$1,000. Apply to Job ID #14723.

SUPERVISOR, CONSTRUCTION INSPECTION/MECHANICAL (T-6) - Responsibilities include verification of the general contractor's compliance with contract drawings and specifications for the mechanical trades on a large scientific facility, organizing and assigning required testing and controlled inspections for the general contractor and mechanical subcontractors of the project, conducting daily inspections of the ongoing mechanical work inspection of other trades, facilitating coordination of the facility construction with end users, monitoring contractor's progress and substantiating progress payments. Must have a minimum of ten years' experience as a construction inspector or equivalent field experience for Mechanical trades (plumbing, HVAC, fire protection and controls). Must have technical education in mechanical trades through trade union, trade school, or college. Must be proficient in reading contract drawings, specifications, schematics drawings, and technical documents. Must have familiarity with mechanical codes and specifications, such as ASME b31.1 and b31.9, ASHRAE standards, AWS welding standards, NFPA, and National Plumbing Code. Must have excellent verbal and written communication skills, experience as a mechanical construction inspector on large projects is preferred, familiarity with building management systems and controls such as automated logic, johnson controls etc., experience installing or inspecting of fire protection systems and underground utility piping for water or hot water/steam services. American Welding Society (AWS) Certified Welding Inspector (CWI) certificate highly desirable. Experience as a supervisor or experience as a foreman on a construction project also desirable. Reports to the Assistant Director, Construction Management, NSLS-II. National Synchrotron Light Source-II. ERAP eligible \$1,000. Apply Job ID #14725.

Motor Vehicles

07 MAZDA 6 - excel. cond : 4cyl. 4dr. auto trans. power w/d/steer/brake. 6cd. am/fm. a/c. warr. 16K mi. \$16,000/neg. Ext. 5351.
03 VOLKSWAGON GOLF - 4dr, 2.0L, 5spd, a/c, abs, p/w, p/l, clean, runs well. 100K mi. \$5,500/neg. 516-446-2420.
02 ACURA 3.5RL METALIC GREEN - recent tires/brakes. 43K mi. \$13,500/neg. David, Ext. 7484.
00 NISSAN MAXIMA - 6 cyl, 4 dr, a/t, leather seats. \$7,000/neg. 291-5431.
99 JEEP CHEROKEE - 4 dr, 4wd, a/t, b/o over \$1,000. 185K mi. Daniel, Ext. 7141.
99 HYUNDAI ELANTRA - 4cyl, 4dr, 2.0L, a/t, 33mpg. a/c, am/fm/cass., v/clean, runs excel. 110K mi. \$2,750/neg. 375-6341.
99 NISSAN ALTIMA - a/c c/c, p/w, standard SE model, 4spd, gd. cond. 75K mi. \$4,400/neg. Brad, Ext. 4369.
97 JEEP GRD CHEROKEE - Laredo model, blk, 6 cyl., a/t, 4wd, well maint. new parts, v/reliab. 148K mi. \$2,350/neg. 258-5809.
95 CHEV PICKUP - 8cyl 5spd a/c 4x4 well maint, new parts, need cat conv/pipes to m/fld, rest excel. 145K mi. \$2,000. 286-3681.
94 JEEP CHEROKEE - 6cyl a/t, 4X4, v/clean, orig. owner. 107K mi. \$1,800/neg. Ext. 7638 or 266-2199.

Audio, Video & Computers

BOSS VF-1 EFFECTS PROCESSOR - Perfect for home studio, guitar, keyboards & vox. Needs generic PSU. Make offer. Ext. 3621.
CAMERA RECORDER - Sony HDV1080i, HVR-HD1000 sries. nr new, tripod std, lthr/mtl case, m/phone, lenses, etc. 207-0030.
DRUM MACHINE - Roland R-5, with user manual and power supply, \$120, BOSS VF-1 effect unit, \$140. Ext. 3621.
DVD +-R/+RW - External Sony DVD burner. Works perfectly. \$40. Ext. 7397.
DVD SET - Stargate SG-1 DVD Box-set. Complete 10 Seasons, 54 DVDs. Asking \$120 obo. James, Ext. 2288.
SANYO VIDEO PROJECTOR - PLV-Z1 16:9 LCD w/remote & manual \$280 yoyos'ma@hotmail.com 4 info, pics. Ext. 4619.
SONY 27 - PIP, like new, Model KV-27FS200. Charlie, 821-0521.
TIVO DVR - 2.Gen, up to 220h capacity, lifetime service subscription, network adapter, \$300. Achim, Ext. 4750.

Miscellaneous

ENTERPRISE RENTAL CERTIFICATE - Two \$40 certificates for sale at half price. They expire by 2/23/09. Fan, Ext. 4343.
JAPANESE ANTIQUES - Yoroio, katana, etc. Michiko, Ext. 7761.
LEGO BUILDING SETS - Ocean Divers, orig/\$60, ask/\$20, Aquanauts, orig/\$80, ask/\$25. Ext. 7235 or 286-1018.
PIANO - Winter upright, needs tuning, can help move, reduced, \$350. Lynda & Michael, Ext. 7235.
TICKETS - 5, to Staller Center to see *Not Just For Kids*, AGA-BOOM, Sun., May 3, 3:00pm, v/gd seats, \$12/ea. 821-5334.

Yard & Garage Sales

MT. SINAI - Barn sale, Sun., Feb. 15, 10a-3pm. 52 Mt. Sinai Av. Toys, kitchenware, clothes, records, electronics. 744-8632.

Happenings

'GO' TOURNAMENT - Sat., 2/7, 9-5, Rec Hall. If you play the GO game, join us. Bring family. Contact xzhao@bnl.gov, Xin Zhao, Ext. 2107.

Farewell Gathering

BILL HEMPFLING - Retirement Party, Friday, Feb. 27, B'haven Center - South Rm, 5:30-8:00pm, \$35/pp. Leesa, Ext. 2700.
PAT WILLIAMS - Farewell Party, Tuesday, Feb. 3rd, Rock Hill Country Club 5:30pm,\$25/pp. Includes buffet dinner/gift. Beth, Ext. 8035.

Wanted

ADOPT-A-PLATOON - Monetary donations always gratefully accepted towards mailing shipments to military overseas. Joanne, Ext. 8481.
CELL PHONE CHARGER - wall/car/usb for Nokia 2610. Ext. 5351.
HONDA OR TOYOTA - Accord/Civic or Camry/Corolla, a/t, gd. cond., 2000 after, mi. lower than 90K. Huijuan, Ext. 4394.
NEW HOME INSPECTOR - NYS certified and/or experienced inspector with affordable rates needed. Ext. 3807.
PACK N PLAY - Good condition. Reasonable price. Ext. 2716 or 878-2425.

For Rent

BROOKHAVEN HAMLET - rm for rent in charming house, quiet, use of house cable & patio yard, TV, w/d, kit. incl all. \$485/mo. 286-4028.
LINCOLN, NH - Deer Park Resort President's wk, Feb 13-20, unit sleeps 8, full kit., 2 baths, f/p, w/d, 2 mi from Loon Mountain. \$800/wk. Ext. 4669.
ROCKY POINT - 2 bdrm, 2 bath, very cute priv. house, wood flrs, f/p, w/d, walk to beach, 15 min. to BNL, 1 mo sec., pets ok. \$1,450/mo. 745-9611.
SHIRLEY - rms, studio for rent, kitnet, furn, full bath, sep ent, heat/elect/int/all incl., 5min to stores/beach/LIRR/Sunrise hwy., no smkg/pets, 1 mo sec. \$600/mo. 804-8609.
SHIRLEY - lg 1 br bsmt apt, sep ent. close to beaches/parks/hwys., 1 mo rent + 2 sec, 15 min. to Lab, no smkg/pets, suitable for one. \$725/mo. Ext. 3846.

Send a Love Note to Your Valentine — by 2/9

Is there a special message you'd like to send to your valentine? Are you looking for a valentine? You can have your Valentine's Day message printed in The Bulletin on February 13. (We believe that since love conquers all, it will hold off potential bad luck.) Send your 15 – 20 word "love note" to The Bulletin by Monday, February 9, or earlier if possible. If you use paper, send it to BNL, The Bulletin, Bldg. 400C, Upton, NY 11973, and mark the envelope "Valentine's Day." Or, e-mail your message to bulletin@bnl.gov, marked "For Valentine's Day" in the subject line. You must include your name and life number and extension or home phone, but your name will not be printed unless it is clearly part of the message. Copy must be deemed tasteful. All "love notes" will be accepted at The Bulletin's discretion.

Become a Lab Envoy — Attend Meeting, 2/15

The Envoy Program of the Community Relations Office offers monthly presentations during work hours to employees interested in BNL so that employee-envoys can learn more about the Lab. The goal: to enable employees to be knowledgeable and comfortable enough to speak to their coworkers, neighbors, friends, and family about BNL's science and operations — and to bring questions, issues and concerns back to the Community Relations Office.

To encourage new membership, Envoy Program coordinator Nora Detweiler will hold an open meeting at 9 a.m. on Wednesday, February 11, for all BNL employees who, with their supervisors' concurrence, would like to consider becoming an envoy. Detweiler will discuss what employees can get out of the program and what they can contribute. The meeting will be held in the large conference room of the Medical Department, Bldg. 490, and light refreshments will be served.

If employees become envoys, they will be updated on the Lab's latest discoveries or issues at a monthly meeting. On February 15, Tim Green, the Lab's Cultural & Natural Resources Manager, will discuss BNL's natural resources management program. For more information, contact Detweiler, ndetweiler@bnl.gov or Ext. 4458.

Rock Bands The Electrix, Reckoning: 2/21



Representing the best of the region's improvisational musicians, the six-piece local rock band The Electrix (above), together with the six-piece band Reckoning, will perform classic rock and original compositions on Saturday, February 21, at 7 p.m. at Berkner Hall. 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 ID. Tickets are available at the BERA Store or through www.ticketweb.com — at \$15 in advance or \$20 at the door. For more information, call Ext. 3846.

Informational Meetings on Deer Management

Last fall, more than 825 employees responded to a survey on deer management at BNL. One of the findings was that 75 percent of Lab employees think it is important for the Lab to have a deer management program. However, there was significant disagreement on the best method of management.

The Lab has scheduled a series of informational sessions for the BNL community that will include explanations of the various management options.

These sessions will be designed to provide an in-depth understanding of each option; feedback from the Lab community will be solicited and

used to help determine the best way to manage deer on site.

The following meetings will each be held at 4 p.m. in Berkner, Room B:

- **Tuesday, Feb. 10** – Contraceptive management and trap and transport
- **Tuesday, Feb. 24** – Hunting options and deer management assistance programs
- **Tuesday, March 10** – Culling options and various combination of options

Comments submitted by employees will be compiled and posted on the deer management website at http://www.bnl.gov/esd/wildlife/Deer_management.asp.

eik, center hall, 2 br, 2 bath, sun rm, deck, 1 gar. attic, in Leisure Glen gated w/sec. club house, pool, etc. \$380,000 Ext. 5665.

In Appreciation

The Holidays are over but the generosity of BNLers lives on in the support to UW, Brkhaven Interface & other organizations we supported this past December. Keep it going, support Food Drive & Adopt A Platoon! Thanks! — Christine Carter

To my Brothers & Sisters of Local 2230, my friends and co-workers: My sincerest thanks for your generosity while I was recuperating from surgery. — Pauline Gagnon