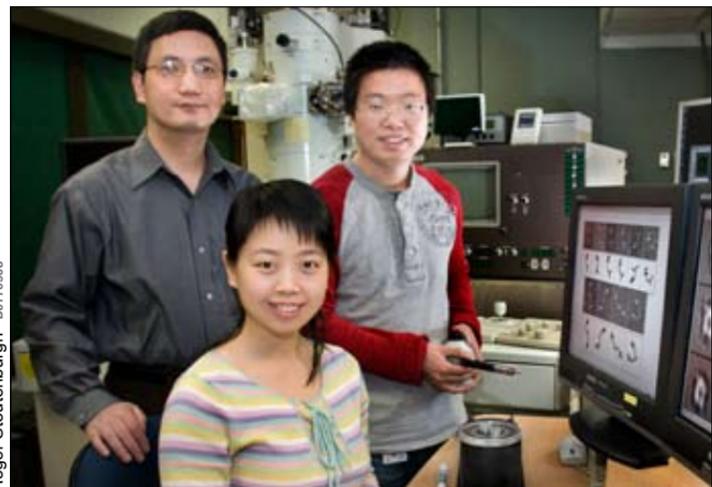


Molecular 'Snapshots' Capture Infectious Pili Formation

Understanding how bacterial sticky fibers grow may help thwart kidney, bladder infections



In BNL's Biology Department, Huilin Li (left) worked with postdoctoral researchers Tao Wang and Chunyan Tang (front) to use single-particle cryo-electron microscopy to determine the structure of a partially formed pilus in association with the usher dimer in *E. coli* bacteria.

Using two sophisticated imaging techniques, scientists at BNL and collaborators at Stony Brook University (SBU), University College London, and Washington University School of Medicine have captured molecular-level "snapshots" of the cellular machinery that assembles hairlike projections on certain bacterial cells. These projections, called pili, enable the bacteria to attach to and infect bladder and kidney cells.

In a paper appearing in the May 16, 2008, issue of the journal

Cell, the team describes how their newly revealed structures provide a mechanistic understanding of the pilus assembly process — which could lead to new ways to thwart or treat urinary tract infections. This research was funded by the National Institute of General Medical Sciences and National Institute of Allergy and Infectious Diseases, both of the National Institutes of Health, and by BNL's Laboratory Directed Research & Development Program.

see *Snapshots* on page 2

Peter Johnson Named Department Chair Of Condensed Matter Physics & Materials Science

Peter Johnson has been named Chair of the Condensed Matter Physics & Materials Science Department (CMP&MS), effective June 1.

CMP&MS has 80 employees and an annual budget of about \$14 million. The researchers in the department study basic, theoretical and applied aspects of materials; their uses; and their electronic, physical, mechanical and chemical properties in relation to their structure. The researchers endeavor to optimize the behavior of materials and to create new and improved materials that will help fulfill DOE's missions.

Currently, much of the research in the department is focused on finding or improving materials that may be of use in meeting the nation's energy needs. For example, studies of the properties of superconductors may lead to better materials for electric power transmission. Because superconductors have no electrical resistance at low temperatures, they would transmit electricity with no loss. In addition, researchers are exploring materials for use in photovoltaics to produce solar energy; investigating strongly correlated materials, in which the interaction between electrons is stronger than in ordinary materials; and studying nanomaterials, materials on the order of billionths of a meter that have properties differing from ordinary materials because of their small-length scales. Research in each of these areas may lead to discoveries that optimize energy efficiency or provide the basis for alternative energy.

"It is exciting to have the opportunity to



Joseph Rubino - D065-1107

lead a department that is working in areas relating to energy security, which is so critical for our nation and the world at the present time," Johnson said.

Johnson is an internationally recognized leader in surface science and photoelectron spectroscopy, a process in which an electron absorbs energy from light and is ejected from the material under study, thus revealing information about its properties. Johnson has focused on materials in which electrons are confined to two dimensions, rather than the usual three dimensions.

Two-dimensional materials include the surfaces of metals, where catalytic reactions take place; magnetic multilayers, consisting of alternating layers of thin films of magnetic and nonmagnetic materials; and high-temperature superconductors.

After earning a Ph.D. in physics from Warwick University in 1978, Johnson worked for Bell Laboratories, and then joined BNL in 1982. He rose through the ranks to become a senior physicist in 2000, and he became Acting Associate Chair of the Physics Department in 2003. Johnson was appointed Deputy Chair of CMP&MS upon its founding in April 2006. In June 2007, he became Acting Chair of the department. He also leads the department's electron spectroscopy research group.

A recipient of BNL's Science and Technology Award in 2001, Johnson is a Fellow of the American Association for the Advancement of Science, the American Physical Society and the Institute of Physics in the United Kingdom. He is the author of 150 peer-reviewed scientific papers. — Diane Greenberg

437th Brookhaven Lecture, 6/25 Strengthening International Safeguards

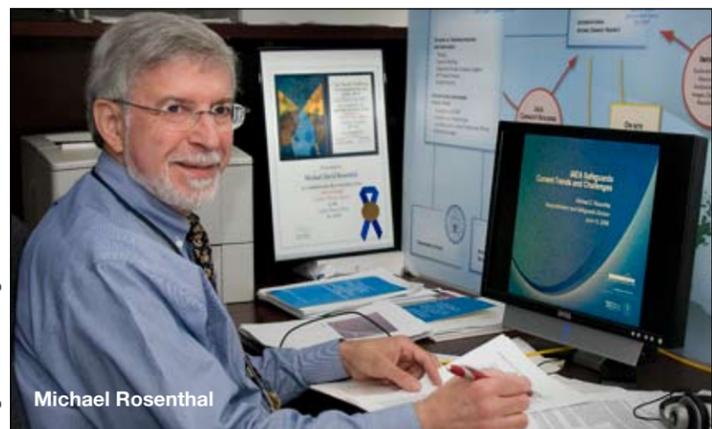
On Wednesday, June 25, at 4 p.m. in Berkner Hall, Physicist Michael Rosenthal of the Energy, Environment & National Security Directorate will give the 437th Brookhaven Lecture, entitled "Strengthening IAEA Safeguards: Challenges Ahead." All are welcome: this free talk is open to the public, and refreshments will be offered before and afterward. Visitors to the Lab of 16 and over must carry a photo ID.

The International Atomic Energy Agency (IAEA), centered in Vienna, Austria, and known as the "Atoms for Peace" agency, seeks to promote the peaceful use of nuclear energy and to inhibit its use for military purposes. The IAEA serves as a forum for scientific and technical co-operation in the peaceful use of nuclear technology worldwide and applies international safeguards against its misuse. Established in 1957, the IAEA's current contributions toward world nuclear nonproliferation and nuclear safety and security are as vital and as highly regarded as they have ever been: in 2005, the organization and its Director General, Mohamed ElBaradei, were jointly awarded the Nobel Peace Prize.

BNL has long been involved with helping to further IAEA aims, most specifically, in providing technical advice and assistance to the IAEA Department of Safeguards. The International Safeguards Project Office (ISPO), headquartered at BNL with an office in Vienna, is responsible for the day-to-day technical and administrative management of the U.S. Support Program to IAEA Safeguards and for helping to transfer technology available in the U.S. private and public sectors to the IAEA for increased effectiveness and efficiency in IAEA safeguards.

Now, although reading only a few world headlines daily shows the continuing urgency of assisting IAEA's work in nuclear safeguards, strained budgets and ever-present political sensitivities

see *Safeguards* on page 2



Roger Stoutenburgh - D0420608

Michael Rosenthal

Diversity in Physics

More than 100 attend session asking, 'What Can We Do Better?'

Women and minorities, greatly outnumbered in physics, often experience both intentional and unintentional biases. On May 29, more than 100 women and men gathered in Berkner Hall to discuss disparities and encourage equity in the field. The occasion was a special session of the RHIC and AGS Annual Users' Meeting, entitled "Diversity in Physics: What Can We Do Better?"

"A lot of people, in principle, are sympathetic and want to see women in physics but they are not familiar with the problems," stated session co-organizer Christine Nattrass, a graduate student at Yale University. "We hoped to educate the community on the research to get people to be a little more self-critical when they are evaluating others in the field." Nattrass recently won the Gertrude Scharff-Goldhaber Prize, which recognizes the promise and accomplishments of women graduate students in physics performing thesis research at BNL or Stony Brook University (see story, page 2).

Session co-organizer Astrid Morreale, a University of California at Riverside (UCR) graduate student who is posted at BNL, said, "In organizing this discussion of increasing diversity in physics, we hoped to expose issues and existing conditions backing them up the same way we do our research: using scientific studies, and statistics. We felt this was a method that scientists could relate to." Morreale recently

received the Benjamin C. Shen Memorial Award, an award for outstanding graduate students studying heavy-ion or high-energy physics at UCR.

During the evening, three women speakers, physicist Meg Urry, Yale University; physicist Elke-Caroline Aschenauer, Thomas Jefferson National Laboratory (JLab); and social scientist Laurel Smith-Doerr, National Science Foundation (NSF), addressed the question, "Why are there so few women in the physical sciences?" All three presented quantitative, data-driven research to illustrate their findings as they debunked several common biases and sentiments: *women don't like physics, women are not good at physics, a shortage of hireable qualified women exists, and families affect women's abilities to continue their work in science.*

The first presenter, Urry, who chairs the Department of Physics at Yale and directs the Yale Center for Astronomy & Astrophysics, cited numerous studies to refute typical claims for why so few women and minorities are in physics. Her findings also pointed to unintentional tendencies shown by both women and men. Studies she quoted indicated that women and men rate a job applicant as less qualified if the name on a resume is female or associated with a minority group. Another study found that letters of recommendation

Speakers



Meg Urry
Yale University



Laurel Smith-Doerr
National Science Foundation



Elke-Caroline Aschenauer
Thomas Jefferson National Laboratory

for women are more likely to contain adjectives like "hard-working" and "diligent" rather than adjectives like "outstanding" or "brilliant," and that recommendations are more likely to discuss a woman's personal life and contain deal-breakers such as, "her work was good considering how many personal problems she had." (Trix & Penska, 2003) see *Diversity* on page 2

CALENDAR OF LABORATORY EVENTS

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

— EACH WEEK —

Weekdays: Free English for Speakers Of Other Languages Classes

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

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

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

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

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

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

Tuesdays: BNL Music Club
Noon, B'haven Center, N. Room. Come hear live music. Joe Vignola, Ext. 3846

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

Tuesdays: Jiu Jitsu
6:30-7:30 p.m. Gym. All ages, 6 yrs. to adult. \$10/class, pay as you go. Tom Baldwin, Bldg. 452, Ext. 4556

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

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

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

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

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

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

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

Wednesdays: Weight Watchers
Noon-1 p.m. Michael Thorn, Ext. 8612

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

Wednesdays: LabVIEW
1:30-3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304

Thursdays: BNL Cycletrons Club
Noon-1 p.m., First Thurs. of month. Berkner, Rm. D. Toni Hoffman, Ext. 5257

Thursdays: Reiki Healing Class
Noon-1 p.m., Call for location. Nicole Bernholz, Ext. 2027

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

Fridays: Family Gym Night
5-8 p.m. Family gym activities. Free

Fridays: BNL Social & Cultural Club
Noon-1 p.m., B'haven Center, S. Room, free beginners dance lessons. 7-11:30 p.m. N. Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov

CIGNA Representative

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

Snapshots from page 1

The research focuses on the surface pilus of *E. coli* bacteria, which cause urinary tract infections in one in 10 women in the U.S. each year. *E. coli* normally reside in the human gut, where they are harmless. But if the microbes get into the urinary tract, they produce sticky tendrils known as pili. These pili allow the bacteria to recognize, stick to, and invade cells lining the bladder and kidneys, and go on to cause infections.

"Understanding how the bacteria assemble these pili is a first step toward finding an antimicrobial inhibitor that interferes with the process," said biophysicist and study co-author Huilin Li of BNL's Biology Department.

According to Li, there have been extensive studies on many aspects of *E. coli* pili biogenesis. "The basic process and major molecular players — including the structures of many pilus components and the fully assembled hairlike projections — are known. What has been unknown is this difficult, albeit crucial, question: how the individual components are assembled and moved across the bacterial outer membrane," Li said. The new images — derived by x-ray crystallography at the

European Synchrotron Radiation Facility in Grenoble, France, and by single-particle cryo-electron microscopy (cryo-EM) at BNL — help to answer this question.

They reveal a protein that traverses the cell membrane, catalyzes the assembly of individual components into a pilus, and provides a pathway for the assembled pilus to move out of the cell and extend from the cell surface. The protein is a "dimer" made of two identical parts, each forming a barrel-shaped pore with a "plug" blocking the opening of the barrel.

Coauthors on the paper are: Han Remaut, University College London (UCL); Chunyan Tang, BNL; Nadine Henderson, SBU; Jerome Pinkner, Washington University, St. Louis (WU); Tao Wang, BNL; Scott Hultgren, WU; David Thanassi, SBU; and Gabriel Waksman, UCL.

The scientists still do not know how the assembly is initiated or how the plugged pore is opened for secretion. Future research will address these questions, as well as whether the molecular mechanism observed here operates in other related systems.

For more detail, see www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=08-49.

— Karen McNulty Walsh

Diversity from page 1

Urry also presented findings showing how certain factors, including living outside the United States and having the ability to speak multiple languages, affect salaries of men and women very differently. Data showed that many of the same factors commonly benefit men more than women, sometimes even increasing men's salaries while decreasing women's salaries. (Egan & Bendick, 1994)

Smith-Doerr, an NSF program director, then discussed her research in comparing women's careers in biology in hierarchical organizations, such as academia, pharmaceutical companies, and national laboratories, to those in organizations with less formal structures, such as some smaller biotech firms. Smith-Doerr's own findings demonstrated that work environment plays a key role in the diversity of an organization. Less-structured organizations that promote collaboration and transparency are typically more equitable — for example, women are 7.9 times more likely to be supervisors. In contrast, they are 60 percent less likely to work in a supervisory role in hierarchically-structured organizations, Smith-Doerr found.

Aschenauer is a leader in high-precision physics research both in her native Germany and in the United States, and has studied and worked in Germany, the Netherlands, and Belgium. She discussed her personal experiences as past spokesperson of the Hermes experiment in Hamburg and fellow at the National Institute for Nuclear Physics and High Energy Physics in Amsterdam, comparing women's experiences in the physical sciences between Europe and the United States.

Aschenauer noted differences in childcare, schooling, and mentoring among several European countries. One might assume that women would increasingly be found in high-level positions with supervisory roles in nations with inclusive health-care systems providing child-care to families

with very young children—under the age of three. According to Aschenauer, that surprisingly is not the case. Across Europe and even in countries where both men and women are expected to work, Aschenauer noted that very few females had high-level positions in the field of physics.

To answer the question she posed at the beginning of her talk, Aschenauer said, "I did not think there was a difference for women in physics between Europe and the United States — until tonight. In Germany, only women would have attended this session."

So what can be done? What will it take to diversify the physical sciences, ensuring that the best-qualified scientists of today have the opportunity to lead the next generation of scientists to the discoveries of tomorrow?

According to the presenters, several fundamental changes must occur. One is that biases need to be acknowledged — by minorities, by majorities, by students, and by leaders. Another is that young scientists need mentors — role models they can identify with and look up to. It is also important for those in leadership roles to ensure that women and minorities have a chance to succeed and for the community to hold leaders responsible for ensuring that this happens.

In discussion following the presentation, session attendee Barbara Jacak, a distinguished physics professor at Stony Brook and PHENIX Collaboration spokesperson, warned young scientists in the audience not to focus too much on disparities.

"The natural response is to get angry," she said. "But it is essential to channel that anger into doing something. The right thing for young women to do is put all that energy into doing the science and succeeding." Jacak added, "The way more senior scientists and management can help is to use all opportunities to be aware of the bias and actively change it."

— Joe Gettler

In Memoriam: Robert Sinatra

Robert Frank Sinatra, Jr., a staff specialist in the Nonproliferation & National Security (NNS) Department, died on May 22, 2008. He was 28.

Said Sinatra's supervisor, Susan Pepper, who heads the International Safeguards Project Office (ISPO) within NNS, "While Rob only worked with us in International Safeguards for a few months, he had already distinguished himself as a bright, enthusiastic young man who could get the job done and work well with others. His responsibilities included his helping and getting information from counterparts in other national laboratories who he might never meet face to face. He had already established close working relationships with several of these people. I saw him as the future of BNL — not that I ever wanted him to leave ISPO, but I knew in time that he would move on to positions with greater responsibility and visibility within the Laboratory. Words cannot express how much we miss him."

Sinatra earned a B.A. in mathematics with a minor in economics from Binghamton University in 2001 and received his MBA from Adelphi University in 2007. He worked for some



years as a senior analyst at Publisher's Clearing House in Port Washington, and then joined NNS on January 28, 2008. He was no stranger to the Lab, having held an internship in the Information Technology Division during the summer of 2000, where he is still remembered as a useful and very pleasant coworker.

A resident of Lake Ronkonkoma, Robert Sinatra was well known among family and friends for his love of sports, being an active member of the Lake Grove Softball League and a keen Raiders and Yankees fan. He is survived by his wife, Jennifer Nicole, his two children, Ashley Rose and Rebecca Claire, his sister Jennifer Lynn, and his parents, Robert Sinatra Sr., and Linda Sinatra, who works in BNL's Fiscal Services Division.

— Liz Seubert

Safeguards from page 1

place an increasing burden on the IAEA and its supporters. In his lecture, Rosenthal will discuss these challenges and BNL's part in helping to resolve them.

Michael Rosenthal came to BNL in May 2007. With a bachelor's degree in physics and mathematics from Wesleyan

University, he earned his Ph.D. in physics at Cornell University. Before joining the Lab, he worked in the U.S. Department of State and has had two tours of duty with the IAEA. Those who wish to join the speaker for dinner at a restaurant off site after the lecture may contact Susan Carlsen at carlsen@bnl.gov or Ext. 7647.

— Liz Seubert

Yale Student Wins 2008 Scharff-Goldhaber Prize



Goldhaber Prize winner Christine Nattrass (third from left) is seen with thesis advisor, John Harris, Yale University, and Brookhaven Women in Science scholarship committee members: (from left) Aimee Sumereau, Pat Williams, Vinita Ghosh, and Loralie Smart.

Christine Nattrass, a graduate student at Yale University who expects to graduate with a Ph.D. in physics in May 2009, has been awarded the 2008 Gertrude Scharff-Goldhaber Prize, consisting of a framed certificate and \$1,000. BNL established the award to recognize substantial promise and accomplishment by women graduate students in physics who are performing their thesis research at the Lab, or who are enrolled at Stony Brook University.

Administered by Brookhaven Women in Science (BWIS), a non-profit organization that supports and encourages the advancement of women in science, the prize honors the outstanding contributions of the late nuclear physicist Gertrude Scharff-Goldhaber. In 1950, she became the first woman Ph.D. physicist appointed to BNL staff. She also was a founding member of BWIS.

Nattrass earned a B.S. in physics from Colorado State University in 2003 and enrolled at Yale for graduate studies in the same year. She is currently performing her thesis work at Brookhaven's Relativistic Heavy Ion Collider, where physicists have discovered a "perfect" liquid, which many describe as quark-gluon plasma, a form of matter that is thought to have existed ten-millionths of a second after the Big Bang. At the award ceremony, Nattrass gave a brief talk about her research, titled, "Jets as a Probe of Quark-Gluon Plasma." Nattrass hopes to pursue a career in academia.

— Diane Greenberg

Supporting the National AdoptaPlatoon Program

Soldiers Still in Need Of Supplies

For the past year, BNL has participated in the national AdoptaPlatoon program (AAP). This effort is coordinated by the Brookhaven Veterans Association and the AAP committee. However, more supplies are urgently needed.

Ida Hagg, executive director for the AAP said, "The support from BNL this past year is directly linked to the positive increase in morale of deployed U.S. troops. There are no words to adequately express our gratitude to BNL."

Under the program, a specific platoon is designated for the Lab. AAP committee members collect appropriate items such as toiletries, snacks, books, hats, playing cards, socks, and other general supplies. (For a list of acceptable items go to: http://www.bnl.gov/bera/activities/va/PDF/AaP-Donation_suggestions.pdf.) The items are packaged and sent to the soldiers, who are happy to receive a package from "home." The committee also collects cash donations, which they use to purchase items or

pay for shipping costs. To date, AAP has shipped about 3,600 pounds of supplies from BNL.

BNL had been assigned the 503rd Airborne Division, which recently received orders to come home. "But, that doesn't mean we stop collecting," said BNL AdoptaPlatoon Chairman Ken Erickson. "We will be assigned a new platoon soon, and we continue to send packages to BNLers' family members who are currently serving."

AAP has put out a new request. Erickson was told by Hagg that there is a shortage of towels at medical stations and field hospitals, and that soldiers are using their dirty uniforms to dry off after showering. The AAP was able to obtain a donation of 800 towels from a manufacturer, but needs help getting them packaged and shipped. That is where the BNL AAP committee comes in. Once the towels are delivered to the Lab, AAP committee members will re-package them according to military shipping regulations and send them

I just want to take this opportunity to thank all of my father's co-workers for their outstanding support for me and my fellow brothers-in-arms. Everything you have done has been extremely appreciated and I cannot put into words the amount of heartfelt gratitude I have for each and every one of you...Thanks again, and God bless. — Tommy Daniels



Specialist Tommy Daniels, is the son of BNL employee Tom Daniels. He is currently stationed at Camp Stryker at Baghdad Airport.

To see more photos and thank-you notes from soldiers, go to the BNL AdoptaPlatoon website: www.bnl.gov/bera/activities/va/Adopt_A_Platoon.asp

off. AAP hopes to ship 200 additional towels each month.

Erickson says he, the members of the Brookhaven Veterans Association, and the AAP committee are proud of what the BNL chapter of the AAP has accomplished. "None of this would be possible without the generosity of BNLers, the hard work of the committee, and the assistance by the Upton Post Office," he said. "In recent months donations have dropped off, but soldiers are still in need of supplies. We're hop-

ing that BNLers will continue to support the efforts of the AdoptaPlatoon program."

If you wish to donate supplies, you can put them in drop-off boxes in the lobby of Buildings 488 (Berkner Hall) and 400 (Research Support Building). Cash donations may be sent to: AAP, c/o Pete Palamidis, P.O. Box 671, Upton, NY 11973.

For more information on AAP, contact Ken Erickson, erickson@bnl.gov, Ext. 4935, or Mike Paquette, mpaquette@bnl.gov, Ext. 5891. — Jane Koropsak

BNL/BSA Disaster Fund: \$66,000

For the past few weeks, donations the Lab community made to benefit victims of the flooding in Myanmar and the earthquake in China have been recorded by two BERA clubs — the Chinese Students & Scholars Association (CSSA) and the Asian Pacific American Association (APAA). As of June 13, the BNL donation deadline, Lihua Zhang and Susan Wong report that the total of donations reached \$41,744. Brookhaven Science Associates, the company that manages the Lab, generously matched the BNL dollar donations up to \$25,000, making up a total of \$66,744.

This sum included donations of \$7,538 resulting from special events organized by Lab groups and BERA clubs. These included:

5/29. Car Wash by the Brookhaven Veterans' Association and Cycletrons Motorcycle Club, cosponsored by the Lab Fire Department and Safeguards & Security Division: \$706

5/30. Dance Social hosted by the Social & Cultural Club: \$620

5/31. "Project Floyd" Concert sponsored by the BNL Music Club: \$2,000

6/05. Family Movie Night sponsored by the Indo-American Association (IAA) and cosponsored by the Association for Students & Postdocs: \$351

6/07. BNL Cultural Concert sponsored by the CSSA, APAA and co-sponsored by many other BERA clubs, local community and school groups: \$2,000

6/12. International Food Tasting sponsored by the English for Speakers of Other Languages, in collaboration with the APAA, CSSA, and IAA: \$987

5/27 & 28, 6/04, 6/10 & 11. Poster Appeal sponsored by the CSSA: \$874

On behalf of the CSSA and APAA, Zhang expresses appreciation for BNL's and the community's generous support. "We thank Lab Director Sam Aronson, Lab management, Human Resources & Occupational Medicine Division Director Bill Hempfling, Quality of Life and BERA Supervisor Christine Carter, Lab community members who donated, Nayyarson Corp. for donating food at five events, and the BERA club members, local community groups, school groups, and volunteers who worked so hard to organize the special events," she said. "It is very satisfying that we can help people who are in such desperate need."

Join a BERA Trip!

Buy tickets at the BERA Store, Berkner Hall, Bldg. 488, Ext. 3347, weekdays, 9 a.m.-3 p.m. Trips leave from the Brookhaven Center.

• **Young Frankenstein** on Broadway, Hilton Theatre, 213 West 42nd St., 3 p.m., Sun., 6/29. \$145/person. 40 orchestra seats available. Bus leaves BNL 10 a.m., leaves city about 5:30 p.m. Best for 10 years & older.

• **Circle Line Cruise** of New York City, plus "Do-As-You-Please" time in NYC, Sun., 7/13. Bus leaves BNL at 9 a.m., leaves NYC at 5:30 p.m.

Two-hour cruise begins 11:30 a.m., \$28/person, 55 tickets available. Sail down the Hudson, around the Battery, up the East River, and under the Brooklyn, Manhattan and Williamsburg Bridges to the United Nations and back. Then, free time.

• **Atlantic City**, Sat., 7/26. Boardwalk casino. Leave BNL 9 a.m., leave city 8 p.m. Adults only, 18 and over. \$25/person. 53 seats.

• **Wildwater Kingdom, Dorney Park, PA**, Fri., 8/1. \$35/adult or child (recommended for 4-and-over

years old). Leave BNL 7 a.m., leave PA 6 p.m. 55 seats.

• **Boston — overnight trip.** Sightseeing tour of Boston, Sat. & Sun., 8/9 & 10. \$280/person double, \$255/person triple, \$230/person quadruple. Includes Port Jeff ferry, coach, Duck Boat tour, lodging at 1927 Boston Park Plaza Hotel, lunch at Vinnie T's, breakfast at hotel, all-day City View Trolley ticket. Non-refundable \$50/person deposit due immediately, all payment by 7/11.

• **Renaissance Festival**, Sterling

Forrest, Tuxedo, NY, Sat., 8/23. \$20/person for coach, entrance. Leave Lab 9 a.m., leave Festival 5 p.m.

• **US Open**, Tues., 9/2, (not a Lab holiday). \$58/person for ticket & coach. Leave BNL 8:30 a.m., leave stadium 7:30 p.m. Section 311 & 312, upper promenade level.

• **New York City Dinner Cruise**, Sat. 9/27. Sailing on the *Skyline Princess* in New York Harbor, 7-11 p.m. Full buffet dinner, luxury coach transportation. \$90/person includes tax.

Accent Modification Program Planned

BNL employees who have an accent or regional dialect that makes communication difficult may want to join an Accent Modification training program. If your colleagues often ask you to repeat yourself, or to slow down your speaking, or misunderstand you, you may find that accent modification for better English pronunciation is a great tool to assist you with clearer and more effective communication skills.

The program will be held on site during August and September. It will consist of one group class and one additional private coaching session each week. To participate in this pilot program or for more information, e-mail training@bnl.gov.

Defensive Driving Course In Two Parts, 6/23 & 26

The next six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on Monday and Thursday: June 23 and 26, in the Brookhaven Center South Room, from 6 p.m. to 9:15 p.m. The course is open to BNL, BSA, and DOE employees, facility-users, and their families. The cost is \$38 per person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message. Include your phone number. For more information, call Sarah Wiley, Ext. 4207.

BSA Noon Recital: Pianofest, 6/25

Participants in Pianofest, a summer workshop held in the Hamptons, will showcase two recitals on Wednesday, June 25, and Wednesday, July 23, at noon in Berkner Hall. All are welcome to this free event. See Calendar, right.

Lunchtime Tour Today, 6/20

All the Lab community is welcome to meet in Berkner Hall upper lobby at noon today, Friday, June 20, to be taken to the Water Treatment Plant on site, where Bill Chaloupka of the Plant Engineering Division will explain the Lab's water treatment systems. The group will return to Berkner by 1 p.m. For more information, contact Elaine Lowenstein, Community Relations, Ext. 2400.

Camera Club, 6/25

The Camera Club's next meeting will be on lighting, both natural and in a professional studio. Photographers at all levels of skill are welcome. A DVD presentation given by professional photographers will be shown. The meeting will be held in Berkner Hall, Room D, noon to 1 p.m. For more information, contact Ripp Bowman, Ext. 4672.

CALENDAR

Friday, 6/20

***Employee Lunchtime Tour**
Noon. Berkner Hall Upper Lobby. All the Lab community is welcome to meet the group to be taken to the Water Treatment Plant, where Bill Chaloupka will explain the Lab's water treatment systems. Participants will be returned to Berkner by 1 p.m.

— WEEK OF 6/23 —

Monday, 6/23

IBEW Meeting
6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes nominations for union president and officers.

***Defensive Driving, Part I**
6-9:15 p.m. Brookhaven Center, South Room. Part I of a two-part course. Part II will be on Thursday, 6/26 (see below). See also notice, left.

Wednesday, 6/25

***BSA Noon Recital: Pianofest**
Noon. Berkner Hall. Pianofest, a summer workshop for talented pianists, will showcase a recital, sponsored by Brookhaven Science Associates, the company that manages the Lab. The concert is free and open to the public. All visitors to the Lab age 16 and over must bring a photo I.D. The workshop's founder and director, Paul Schenly, will select prize-winning Pianofest participants to perform from the great classical repertoire for the recitals. For more information on Pianofest go to: www.pianofest.com/

***437th Brookhaven Lecture**
4 p.m. Berkner Hall. Michael Rosenthal, Energy, Environment & National Security Directorate, will talk on "Strengthening International Atomic Energy Agency Safeguards: Challenges Ahead." All are welcome to this free lecture, open to the public. All visitors to the Lab age 16 and over must bring a photo I.D. See story, p. 1.

Thursday, 6/26

Sam's Club
11 a.m.-2 p.m. Berkner Hall lobby. Representatives describe benefits of Sam's Club cards, \$43.45/year. Giveaways, raffle.

***Defensive Driving, Part II**
6-9:15 p.m. Brookhaven Center, South Room. Part II of a two-part course. See notice, left.

— WEEK OF 6/30 —

Thurs. & Fri., 7/3 & 4

Independence Day Holidays
BNL will be closed on Thursday, July 3 as a Lab Floating Holiday, and closed on Friday, July 4, in celebration of Independence Day. No Bulletin will be issued during this week.

Note: Submissions for this calendar 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.

Arrivals & Departures

— Arrivals —

Janelle Collins..... Medical
Raymond Conley.....NSLS-II
Leah Selva.....Biology

— Departures —

Elizabeth Bradley.....ITD
Adele Billups..... Medical
Dmitri Volja..... CMP&MS

Correction: *The Bulletin regrets that in the issue of June 13, 2008, new employee John Gosman was inadvertently listed as having joined the NSLS; he joined NSLS-II.*



Roger Stoutenburgh D089508

Classified Advertisements

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

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

STRUCTURAL/SEISMIC ENGINEER I (P-9) – Requires an MS in civil, structural or mechanical engineering and 10 years experience with an engineering design organization. Experience in the analysis of nuclear power plant structures and components, including non-linear finite element analysis, soil-structure interaction, site response, seismic margin analysis, seismic probabilistic risk assessment (PRA), and structural fragility assessment is also desirable. Work would involve planning and conducting research and providing technical support for projects related to the safety assessments of existing and proposed nuclear plant facilities. Work would involve one or more of the following programs: a) collaboration with Japan on seismic issues; b) development of technical bases for performing seismic margin assessments and fragility analyses; and c) technical assistance in support of the review of design certification and combined license applications for nuclear power plant designs. Energy Sciences and Technology Department. Apply to Job ID # 14516.

LABORATORY SPECIALIST (A-2) – Requires an AAS degree in a scientific or related technical discipline or equivalent and a minimum of four years laboratory experience, good communication skills and the ability to work with U.S. and international investigators. Under general direction, and with some latitude for the exercise of initiative and judgment, will perform a variety of laboratory assignments in support of a NASA-sponsored project. Individual will join a team of scientists and associates to provide logistical support to NASA-sponsored radiobiology investigator's at Brookhaven's NASA Space Radiation Laboratory (NSRL) and the Medical Department's Long Term Support Facility <http://www.bnl.gov/medical/NASA/LTSF.asp>. Must possess general knowledge of a laboratory environment in order to set up and maintain cell culture laboratories. Duties will include sterilizing incubators, organizing supplies for the outside investigators and scheduling repairs for equipment when needed. Medical Department. Apply to Job ID # 14511.

PROJECT ENGINEER I (P-9) – Requires a bachelor's degree in engineering or closely related field of study with a minimum of ten years' progressively responsible work experience. Master's degree preferred. Significant experience with facility project management, design management, sustainability, and construction techniques, and a well developed maturity in decision processes and leading/managing diverse teams with conflicting needs or requirements. Must possess a broad knowledge of project management, construction, engineering, operations, procurement and other project-related activities. Proven ability to plan and manage capital and expense recapitalization projects is required. Candidate will possess a solid understanding of financial concepts including budgeting, project financing, and risk analysis and assessment. Experience in utilizing process improvement concepts specifically geared towards project management. Ability to select and lead a cross-functional team and thrive in a highly matrixed environment. Demonstrated ability to establish and maintain strong and effective customer relations as well as being able to effectively represent the Voice of the Customer (VOC). Reporting to the Manager, Facility Operations Office, the Project Engineer, Special Projects will be responsible for developing and managing the planning and implementation of both long and short term projects that will contribute to the success of Facilities & Operations overall business strategy. Facility Operations Office of the Facilities & Operations Directorate. For a more complete job description view position on the BNL web site. Apply to Job ID # 14517.

Motor Vehicles

05 BUICK LESABRE LTD - all extras, gar'd home & work, excel., hwy. mi., pearl white, m/roof etc. 83K mi. \$11,500/neg. 375-8519.

03 MERCURY MARAUDER - Black/Black, Auto Start, 6 CD Changer, Loaded, Warr, excel cond. 19K mi. \$28,500/neg. 379-7961.

02 MITSUBISHI MONTERO - 7 seater, int. col tan, vgd. cond., schd. serv. maint., pics. 93K mi. \$12,900. 924-0037 Ext. 221.

02 CHEVROLET BLAZER - a/c, new am/fm/cd, blue, 2dr, 4x4, tinted glass, excel. beach buggy, 110K mi. \$4,495/neg. Ext. 4553.

01 MITSUBISHI MONTERO SPORT - LS, 6cyl., 2wd, silver, clean. 77K mi. \$5,900/neg. Heather, 929-4886.

00 SUBARU OUTBACK - excel. cond., awd, abs, a/c, 5spd man. tranny; cass. cd, orig. owner, all records. 59K mi. \$9,500. Ext. 4587.

99 FORD SE MINI VAN - 3.8LV6, air, p/w, p/l, p/b, c/c, vg. cond - 18-23 mpg, 4dr-one auto slide. 132K mi. \$4,500/neg. 807-1380.

96 TOYOTA CAMRY - Orig owner, beige, 4-dr, a/t, a/c, 27 mpg, gd. cond. 140K mi. \$3,500. 286-1022.

96 HONDA CIVIC EX - gd. gas mi., 4 dr, p/s, a/t, a/c, rem start, abs, am/fm, c/c, gd. cond. 171K mi. \$3,100/neg. 751-1224.

95 TOYOTA CAMRY - 6cyl. 2dr., am/fm/cass/cd, ABS, c/c, p/b, p/w, v/gd. cond. 208K mi. \$4,000/neg. Youwen, Ext. 4563.

78 FORD F250 - 351, 4 spd, runs/drives v. well. \$2,700. 289-9727.

Boats

17' SAILSTAR EXPLORER SAILBOAT - Mainsail & jib, centerboard, seats six, 2.5-hp motor & trailer. \$1,450. 286-1022.

23' SEA SPRITE CUDDY CABIN - '88, 3.7L FWC, new top, rebilt carburtr, 3 yr old out-dr, rdy for water. \$1,800/neg. 727-4417.

BOAT - 27' RINKER AFT CABIN - Excell-cond., 1992, low hrs. 5.7L Chevy Mer-cruiser otldr. Prof maint. \$13K. Ext. 4320.

Furnishings & Appliances

AIR CONDITIONER - Emerson Quiet Kool window unit in v/gd. cond., pd. over \$200, ask/\$70. Jinsuo, Ext. 2586 or 981-2056.

AIR CONDITIONERS - 2) Carrier 8000 btu 115 v. \$40 each, GE 12000 btu 115v. \$55. Ext. 4719 or 751-8240.

CEILING FAN - 30", new in box, hugger mount, 6 blades w/light, 3 spd, reversible, pic: smgill@bnl.gov, \$25. 928-6469.

ENTERTAINMENT CABINET - solid oak, excel. cond., approx. 54wx48hx17d, ask for pics, must pick up, \$175. Ext. 3689.

TABLE - Formica, mtd., almond, \$70; 32" SONY Trinitron TV, \$250; Ent/taimnt Ctr, 68wx28x31, white, low, lustr, \$375. 874-3606.

FUTON - Couch futon, blue, convertible, hardwood and steel frame, good shape, \$100. Ext. 3319.

VACUUM - Dirt Devil/Bagless Upright vacuum in mint cond., Model 086700W, ask/\$40. Jinsuo, Ext. 2586 or 981-2056.

Audio, Video & Computers

19" LCD MONITOR - Samsung 914V flat panel. \$50 or best offer. Gary, Ext. 2550 or 312-3205.

HP DESKJET 840C PRINTER - gdcond, \$15; Magnavox rcordplayr/radio, c1960, faircond, \$40; RCA rcd/playr/radio, \$40. Ext. 7647.

LAPTOP - Dell Inspiron, excel. cond., 2.4GHZ celeron w/512MB ram, win XP, office, case \$325. Ext. 4026 or 872-8966.

VACUUM TUBES - Lge assortment of new tubes in boxes & v. large assortment of good used ones. Frank, 334-5096.

Car Pool

PATCHOGUE - Looking for people to share the ride to and from Patchogue. Carl, Ext. 5360 or 569-2818.

Sports, Hobbies & Pets

BOWFLEX MACHINE - ultimate home-gymtones, sculpt, increases all-around strength. \$1,200/neg. 924-0037 Ext. 221.

COLEMAN POP-UP TRAILER - '83, sleeps 6, stove, sink, storage, needs new tires, 1600 lbs., ask/\$800. Ext. 2716 or 878-2425.

DOG GROOMING TABLE & CRATE - \$100 <http://www.brookhavenkc.org/tc.html>. Sandy, Ext. 2922.

GAMES - Gamelife Horseshoe set, \$10; Trivial Pursuit 20th Anniv, \$5; Scrabble for travel, \$5; Yarn, \$1/skein. Ext. 7647.

NASCAR BRICKYARD 400 TICKETS - 2 tckts at Indy, July 27. Finish line, access to pit row. \$90ea/make offer. Howard, Ext. 3198.

SHIH TSU PUPPIES - Adorable little pups are ready for you to take home! Maria, 745-6721.

SUMMIT TREE STAND - \$100; Ground-mount claybird thrower, \$50; Sherpa cartop carrier w/rain gutter sys, \$10. Ext. 7647.

TICKETS - 3 Yankee, bleacher section 39, right field, Sat., 6/21 1:30, Interleague vs. Reds. Mat, Ext. 4377.

Tools, House & Garden

36 COMMERCIAL TORO LAWN MOWER - 12.5 hp in grt cond., many extras asking \$1,200. John, Ext. 2075 or 6312417611.

WAGNER - elect. pwr. painting system in orig. box w/instructional video, orig. \$200, ask/\$100. Peter, Ext. 5551.

Miscellaneous

BABY'S ITEMS - girl's clothes, gd condition, 3 mos size, lot of 6 outfits + extras \$25; 3-6mos lot of 7, \$30. Carol, Ext. 3667.

BABY'S SEATS/BOUNCERS - Fisher Pr, Deluxe swing seat/LeapFrog w/music/lights, pink Bumbo seat \$15/ea. 928-6955.

DIAMOND RING - sz. 9, 075ct., 14k wg, chrn diopside wt. 1.15ct., \$1,700; D-necklace, 2.0ct, 18k, 18"/chn, \$1,000. 924-0037 Ext. 221.

HANDBAGS - ladies who love pink, low cost, beautiful, brand new, request pic, \$150. 924-0037 ext. 221.

Yard & Garage Sales

RIDGE - 2 family yd. sale, 45 Newcomb Trail, 10 am to 4 pm. Ext. 4669.

Wanted

ELECTRICIANS/HANDYMEN - Looking to sell assorted switches, nails/screws, electrical outlet boxes, make a deal. Ext. 7647.

FIREARMS - new or old, all types, fair prices pd. Joe, Ext. 3783 or 487-1479.

GAMES - Monopoly, Taboo, Cranium, Scrabble, uno- any unwanted (but fun!) games. lheady@bnl.gov. Lindsey, Ext. 2728.

GIRL'S BEDROOM SET - Good Condition. White. Daniel, Ext. 7658 or 495-2596.

Lost & Found

LOST - Plantronics bluetooth headset by research support building. Ext. 2492.

LOST - gold band ring w/4 seasons carvings, in the area of Berkner Hall and cafeteria. Catherine, Ext. 3054.

For Rent

PATCHOGUE - 1 bdrm, full bath, kitchen, lr, sep entr/prkg. A/C, basic cable, i/net & electric included. No pets/smoking. 1 month sec. \$900/mo. Selena, 654-0579.

SHOREHAM - 1 bdrm, garden apt, 1st flr, indep. ent/drwy, full bath, kit, lr, w/d, cac, no smkg/pets, few mi. to BNL, 1 mo. sec., util. not incl. \$1,150/mo. 833-8374.

SOUND BEACH - 1 BR apt. Kitch, lr, full bath. Priv. entr. Front deck. Off street prking. Walk to beach. Utilities incl. Avail. immed. \$950/mo. Ext. 5205 or 662-4968.

YAPHANK - 1 bdrm. apt., grd. ent., Pergo flrs., high hat lighting, lots closet spc., lg. l/r w/g. window, no smkg/pets, incl. util/cable \$1,100/mo. 775-6568/681-6651.

BAREFOOT BAY, FL - retirement community, 18-hole golf, tennis courts, pools, etc. 2 bdrm, 2 bath home avail. for season. \$1,600/mo. Lewis, 770-786-4609.

HARRISONBURG, VA - Eagle Trace Timeshare, T/house sleeps 6, waterpark on site, golf, etc. see www.massresort.com, 7/26-8/2 \$500/wk. Ext. 3750 or 672-4141.

For Sale

EAST ISLIP - Diamond Split in Country Village. 3 bdrm, new granite kitch, new baths, flrs, drs, wndws. Easy acc. to Hecksher, Sunrise. \$479,000/neg. 581-8119.

MASTIC BEACH - cust. built 3-bdrm ranch, full basement, 1 & 1/2 car gar., move-in cond. \$259,900. 281-5511.

MILLER PLACE - well maint Old Field ranch, 3 bdrm, full bath, lr w/tp, Andersen wndws. .34/acre level prop, w/1.5 car det. gar. w/elec \$310,000/neg. 241-4166.

PORT JEFF STATION - 4 bdrm. Col., Three Vill/ SD, Minnesauke/Gelinas, gar., Gunite igr, f/p, s/room/jacuzzi, 1/3 ac, fen. yd., 2 sheds. \$500,000/neg. 834-8255.

RIVERHEAD - 3/flr. house, bsmt., 3-4 b/r, 3.5 bath, d/r, eik, den, 1 car gar., 5 min to shopping, 1/2 circle drway, cac/heat, 2549 sq. ft., b/o. \$350,000/neg. 767-6428.

ROCKY POINT - New on market: immac 3-bdrm, 3-bath ranch, newly decorated, nice neighborhood, beautiful yard, easy walk to beach. \$365,000, 790-2966.

SHOREHAM - Middlecross Estates, 4 bdrm., 2.5 bath Col., fml l/r & d/r, den w/ fp, lg. kit. w/dinette, 2-car gar., fin. bsmt., igs, SWRSD, \$539,000/neg. 821-3320.

SHOREHAM - 4 bdrm, 2.5 bath Colonial, new kitchen, wood floors, private 2/3 acre lot with above-ground pool. 7 min. to Lab. \$455 John, 356-4299.

SHOREHAM VILL. - custom ranch, 3 bdrm. 3 bths, renov. kit/bths, 1 acre borders, pk-land wood flrs, pool, screen porch, igs, Anderson windows/drs. \$579,899, 744-2404.

In Appreciation
To my friends at BNL, my family and I would like to express our appreciation for your kindness and condolences during the passing of my mother. Thank you.

— Sal Marino & Family
On behalf of the Jones Family, we thank all those who have expressed their condolences during the loss of my brother, Anthony McCoy. Thank you all for your support during this time of sorrow.

— Terry Jones
The members of the American Legion Auxiliary of Leisure Knoll thank the employees of BNL for their generous contributions to the Veterans on Poppy/Memorial Day.

Emergency Management Audit Next Week, 6/23-7/2

Message from John Searing, Manager of BNL's Office of Emergency Management:

From June 23 to July 2, the Lab will undergo a rigorous inspection of its emergency management program. DOE's Office of Emergency Management Oversight (HS-63) will conduct the audit. The audit group will interview a wide cross-section of the Lab's emergency response organization and may also speak to random employees.

The HS-63 team came to BNL last week and set the groundwork for the data-collection phase of the audit, which begins on Monday, June 23. They reviewed a wide variety of site documents — including plans, procedures, and building-specific information — to help them target key personnel who play an enhanced role in emergency response, and to identify key facilities where walk-throughs may be appropriate.

A major component of the first few days of the audit will be limited-scope performance tests designed to challenge the emergency response organization. The audit team will collect data on our response and how well we work together. During the remainder of the visit, the team will conduct interviews with personnel and validate our plans and procedures.

If you encounter an exercise in progress or in your building, please follow the instructions of your local emergency coordinator or any emergency response personnel on the scene. Please obey all traffic control devices and barricades that may be associated with the exercise.

If you are interviewed by a member of the team, be truthful, and if you don't know the answer to a question, it's okay to say so. If you can, let the auditor know where you would go to obtain that information (your local emergency coordinator, SBMS, etc.).

More Information

Additional emergency response information is available at <http://www.bnl.gov/oem/SiteInfo.asp>, or by clicking on the "Emergency Information" link in the left column of the internal home page. Other preparedness information can be found in the SBMS "Emergency Preparedness Subject Area" at https://sbms.bnl.gov/sbmssearch/subjarea/15/15_SA.cfm?parentID=15.

Cicadas On Site

If you hear a loud, ringing noise emanating from the woods at the Lab this week, don't be alarmed. It's most likely just the mating song of a group of Brood XIV male cicadas. These cicadas have been sweeping through the Northeast for the past couple of weeks.

Brood XIV is a periodical cicada, so named because the entire population is developmentally synchronized. Mature Brood XIV cicadas emerge every 17 years from the ground to mate. The males serenade to the females using tymbals, ribbed membranes at the abdomen base. When making a sound, the males crease their tympana, the organ used to receive sound, to avoid going deaf. Most cicada species live for multiple years, but the life cycles of many species, known as "annual" cicadas, are not synchronized, meaning adults can be seen flying around most summers.

Tim Green, BNL's Cultural and Natural Resources Manager, encourages people to see and listen to the swarms of harmless cicadas over the next few days.

"A lot of people are complaining about the noise, but this is unique," Green said. "It's a one-in-17-years chance to see a phenomenon of nature. Enjoy it while it's here."

And you should have a good chance to hear the Brood XIV cicadas at the Lab, where pesticides are used only when absolutely necessary. Pesticides are more of a threat to cicadas than to many other insects, Green explained.

"They spend 99.9 percent of their life in the soil around tree roots," he said. "They just don't have an escape mechanism from the pesticides."

A periodical cicada-mapping project sponsored by the National Geographic Society might help to determine the extent of the effect of human activities and pesticides on cicada populations. You can report the emergence of periodical cicadas online at: <http://magicicada.org/report/report.php>.

For more information about cicadas, visit: <http://hydrodictyon.eeb.uconn.edu/projects/cicada/cc.php>.

— Kirsten Dorans

Summer Students, BNLers: Join Talent Show, 7/22

The Office of Educational Programs invites all the Lab community to attend their annual Summer Student Talent Show on July 22, at 5:30 p.m. in Berkner Hall. This annual event is wild, creative, fun, and, of course, talented.

Students and BNL staff members who would like to perform in the show, contact Tabatha Wyche, Ext. 4503.

