Bulletin



Vol. 59 - No. 8 March 11, 2005

Helping to Unravel Mechanisms Of Prenatal Drug Damage

Non-invasive imaging techniques may also help assess effectiveness of pain medication following fetal surgery

Funded by the Office of Biological & Environmental Research within DOE's Office of Science, and the National Institute on Drug Abuse, scientists at BNL demonstrated a new way to assess the potentially damaging effects of prenatal drug exposure — a technique that could also be used to monitor a fetus's response to therapeutic drugs — using sophisticated, non-invasive medical-imaging tools. The scientists used magnetic reso-



Helene Benveniste

nance imaging (MRI) combined with positron emission tomography (PET) to track the uptake and distribution of trace amounts of cocaine in pregnant monkeys. They found significant differences in where and how fast the drug accumulates in maternal and fetal organs.

"Understanding how drugs are transferred between a mother and her fetus during pregnancy may help us unravel the mechanisms of the drug's damaging effects on unborn children," said Helene Benveniste, Medical Department Chair and lead author of the paper, which appears in the February 2005 issue of the *Journal*

of Nuclear Medicine. "While studies that follow human drug abusers and their children over decades provide valuable information, animal studies can more quickly provide clues to the underlying mechanisms of damage and suggest ways to test new treatment or prevention strategies," she said. Working with Benveniste are: Joanna Fowler and William Rooney, Chemistry Department, Walter Backus, Stony Brook University (SBU),

Congwu Du, Medical; Nora Volkow, now of National Institute on Drug Abuse; and the PET and MRI teams.

The imaging tools could also be used to assess the effects of therapeutic drugs, for example, synthetic narcotics administered to pregnant women following surgical procedures performed on fetuses in utero. "Following such surgeries, which are becoming more common to correct congenital malformations, the mother is treated with narcotics for pain — and anesthesiologists are relying on the mother's transferring the pain medication to the

fetus via the placenta. But we actually do not know if what we give is sufficient to 'satisfy' the pain level of the fetus," said Benveniste, who is also a professor of anesthesiology at SBU.

Though other scientists have attempted to use PET to monitor maternal-fetal drug exchange and pharmacokinetics (how quickly a drug is taken up and distributed among the body's organs) non-invasively, the PET technique alone did not provide adequate anatomical detail of the tiny fetal organs. The current study combined PET with high-resolution magnetic resonance imaging (MRI).

"The MRI images, which

have the necessary detail, served as a high-resolution anatomical template onto which we 'overlaid' the PET pharmacokinetic data using sophisticated computer techniques," Benveniste said. "The resulting images allowed us to look at cocaine uptake and distribution in the mother and fetus simultaneously."

The combined images show that cocaine and/or its labeled metabolites readily cross the placenta. But the cocaine uptake distribution pattern observed in the fetus was very different from that of the mother. For example, mothers showed rapid uptake and clearance of the drug in the heart, kidneys, and lungs, with slower uptake in the liver and brain. In the fetus, cocaine accumulated at the highest levels in the liver (due to the unique anatomy of fetal circulation) and to a lesser extent in the brain.

The high uptake of radiolabeled cocaine in the placenta is also particularly relevant, the researchers said, because cocaine is known to constrict blood vessels in the placenta.

It may be that this constriction of placental blood flow is one of the mechanisms underlying the harmful effects of cocaine exposure during pregnancy.

For this research, the monkeys were obtained from the Primate Laboratory, Department of Psychiatry, State University of New York, Downstate. They were anesthetized prior to scanning. MRI scans were performed first, followed by PET. Afterwards, the monkeys were returned to their social colony to deliver their offspring.

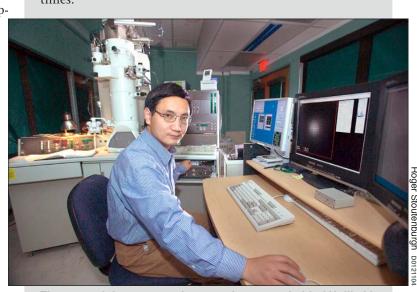
— Karen McNulty Walsh Note: For more information on Helene Benveniste, see page 2.

Identifying the Path To Infection

New protein structure is a first step toward preventing E. coli diseases

Scientists from BNL and Stony Brook University (SBU) have determined the two-dimensional crystal structure of a membrane protein involved in the process by which the *Escherichia coli* (*E. coli*) bacteria infects a human. This protein structure is a first step to a better understanding of how an *E. coli* infection begins, which may lead to information on how to block it.

"E. coli is responsible for urinary tract infections, one of the most prevalent diseases in the U.S.," said the Biology Department's Huilin Li, lead researcher on the study, which is reported in the *Journal of Molecular Biology*, December 10, 2004. "Between 50 and 80 percent of U.S. women will experience a urinary tract infection at least once during their lifetimes."



The state-of-the-art cryo-electron microscope behind Huilin Li, Biology Department, allows fragile biological structures such as PapC to be imaged with minimum damage. On the screen is an image of a PapC two-dimensional crystal, one of many such images processed to synthesize the PapC structure.

Working with Li are Luping Qian and Zhiqiang Chen in the Biology Department; Danielle Thibault, a BNL and DOE sponsored summer intern; Tianbo Liu of BNL's Physics Department, and David Thanassi of SBU's Department of Molecular Genetics & Microbiology. The research was funded by a BNL Laboratory Directed Research & Development grant, the National Institutes of Health, and the Office of Biological & Environmental Research within DOE's Office of Science.

Li explained that in the first stage of an infection, *E. coli* binds tightly to human kidney cells, using an "adhesive protein" secreted by the cells through a membrane protein "channel."

"Our structure of this protein channel, which is known as 'PapC,' helps show how secretion occurs, which may eventually lead us to determine how to stop *E. coli* from attaching to the human cell," he said. "In future investigations, we hope to learn more about the process, which will aid in the study and treatment of urinary tract infections and other related diseases." — Laura Mgrdichian

For more information on the research methodology and findings, see www.bnl.gov/bnlweb/pubaf/pr/PR_display. asp?prID=04-99.

402nd Brookhaven Lecture, 3/16

Burr Presents 'Genetically Modified Plants: What's the Fuss?'

enetic transformation is a Jrelatively new and powerful tool used by plant breeders and for basic research. Benefits of gene transformation include resistance to pests and herbicides, which has led to a reduction in pesticide application and soil erosion. Genetically modified plants are used on a massive scale in agriculture in the U.S. and other countries, in part because they are less expensive and more convenient to work with. Yet, despite the benefits, genetic transformation remains a controversial subject and groups in the U.S. and abroad contest its practice.

To gain insight into this contentious debate, join Ben Burr, a senior geneticist in the Biology Department, on Wednesday, March 16, at 4 p.m. in Berkner Hall, where he will present

the 402nd Brookhaven Lecture, "Genetically Modified Plants: What's the Fuss?"`

According to Burr, to appreciate this controversy fully, it is important to understand how genes work, how they are organized in plant genomes, and how they are inherited. Moreover, the use of gene-transfer technology should be regarded in light of how and why plants are improved. The scope of changes that scientists have selected in plants to make them more productive should also be considered. In fact, recent discoveries about the genes that have been selected and the nature of plant genomes are some of the most interesting aspects of this controversy, says Burr.

As he will explain, the risks presented by conventional plant improvement and gene-



Ben Burr

transfer technology have been reviewed by the National Academy of Sciences, the U.S.

Department of Agriculture, and the Food & Drug Administration. These groups have concluded that gene-transfer technology poses no risk or danger above that present in conventional plant breeding. Furthermore, the use of transgenic organisms, including those used for research at BNL, is closely regulated in the U.S.

Burr obtained his Ph.D. in genetics from the University of California at Berkeley in 1969 and did postdoctoral work at the University of Wisconsin and at the Institut Pasteur in Paris, France. He was a staff researcher at Oak Ridge National Laboratory for a short time before coming to BNL in 1976.

Ben Burr and his colleague Frances Burr work with maize and also cotton. They learned how seed-storage proteins are made, characterized transposable genetic elements and used them to isolate regulatory genes, and developed molecular genetic markers and advanced mapping populations for plants. Burr also served as the coordinator for the international effort to sequence the rice genome. — John Galvin

The Bulletin March 11, 2005

Calendar

of Laboratory Events

- The BERA Sales Office is located in Berkner Hall and is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347; or Chris Carter, Ext. 2873.
- Additional information for Hospitality Committee events can be found at the Recreation Bldg. and at the laundry, both located in the apartment area.
- Contact names are provided for most events for more information.
- Calendar events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

— EACH WEEK —

Weekdays: Free English for Speakers of Other Languages Classes

Beginner, Intermediate, and 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 Gospel Choir

5:15-7 p.m. Berkner Hall. All faiths are welcome. www.bnl.gov/bera/activities/choir/.

Mondays & Wednesdays: Pilates Mon., Noon-1 p.m. in the Rec. Hall; Wed.,

5:30-6:30 p.m. in the Rec. Hall. Christine Carter, Ext. 5090.

Mon., Tues., & Thurs.: Kickboxing

\$5 per class. Mon., noon-1 p.m. in the gym; Tues., 5:15-6:15 p.m. in the gym; Thurs., noon-1 p.m. in the gym; Thurs., 5:15-6:15 p.m. in Brookhaven Ctr. North Room. Registration is required. Christine Carter, Ext. 5090.

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

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

Tuesdays: Welcome Coffee

10-11:30 a.m., Rec. Hall. First Tuesday of every month is special for Lab newcomers and leaving guests. Cindy Ottemann, 849-2646.

Tuesdays: BNL Music Club

Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846. Tuesdays: Jiu Jitsu Club

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

Tuesdays: Toastmasters

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

Tuesdays & Thursdays: Aerobics

5:15-6:30 p.m., \$5 per class or \$40 for ten classes. Rec. Hall. Pat Flood, Ext 7886.

Tuesdays & Thursdays: Aqua Aerobics

5:15-6:15 p.m. Eight-week session. \$20 to attend once a week; \$40 to attend twice a week.

Tuesdays & Thursdays: Jazzercise Noon-1 p.m., Rec. Hall. Preregistration is required. Christine Carter, Ext. 5090.

Tues., Thurs., Fri.: Upton Nursery School 8:30-11:30 a.m. Rec. Hall. Two- and threeday program avail. 727-8082 or Ext. 5090, for information.

Tues., Wed. & Thurs: Rec Hall Activities 5:30-9:30 p.m. General activities, large-screen TV, ping pong, chess, games, and so-cializing. Christine Carter, Ext. 5090.

Wednesdays: On-Site Play Group 10 a.m.-noon. Rec. Hall. An infant/toddler drop-in event. Parents meet while children

play. Kati Petreczky, 821-4131.

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

Wednesdays: Yoga

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

Wednesdays: Open Chess Night 5-8 p.m., Rec. Hall. Christine Carter, Ext. 5090.

Wednesdays: Dance Lessons 5:15-8 p.m. Brookhaven Cntr., North Room. BNL Ballroom Dance Club hosts lessons, beginner to adv. John Millener, Ext. 3853.

Thursdays: Reiki Healing Class Noon-1 p.m., Bldg. 211 Conference Rm. Nicole Bernholc, Ext. 2027.

*Thursdays: FreshDirect Delivery

3:30-5:30 p.m., Berkner Hall parking lot.

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

Fridays: BNL Social & Cultural Club 6-9 p.m., North Ballroom, Brookhaven Ctr., dance lessons, 9-11:30 p.m. general dancing. Rudy Alforque, Ext. 4733, rudy@bnl.gov.

- THIS WEEKEND -

Saturday, 3/12

*Hospitality Bus Trip to Manhattan

9:30 a.m. The Hospitality Committee sponsors a bus trip to Manhattan. Adults, \$10; children 2-12, \$5; cash payment in advance only. See notice at left. Contact Hanna Herman at hania herman@yahoo.com, or 849-2249.

In Memoriam, Edward Koropsak

dward "Ed" Koropsak, a senior tech-Enical specialist in the Collider-Accelerator Department's (C-AD) Controls Division, died on February 16, 2005. He was 43.

Noted Bill Venegas, Koropsak's supervisor, "I worked with Ed for about 15 years, most of that time was as a technician and then for the last five years as his supervisor. He could be counted on to get the job done, be it installing new electronics or trouble shooting the old systems that we have. The greatest loss for the C-AD Controls Division will be his troubleshooting skills. Over time, as other technicians and engineers have left the Lab, Ed was given the job of learning their systems. He never complained that he was getting too much work; he just picked up the jobs and started to learn them.

"I counted on Ed to train any new technicians that came into the group," continued Venegas. "Comments made by technicians and engineers still at the Lab, as well as those that have left, were that he always had time to answer their questions, even when he was busy working on other things. He really seemed to



enjoy helping others. His skills and his kindness will be missed by everyone in C-AD."

When Koropsak joined BNL on January 23, 1989, he was named Principal

Technician in the then Accelerator Development Department. In October, he moved to the Alternating Gradient Synchrotron (AGS) Department. Four years later, in June 1993, he joined the Relativistic Heavy Ion Collider Project, which combined with the AGS as C-AD in 1999. In January 2001, he was promoted to Senior Technical Special-

Comments from coworkers who expressed their thoughts about Koropsak included such descriptions as: "Mr. Dependable," "valued for his warmth, integrity, and skill," "a good friend," "a great guy," and "a true gentleman and an esteemed colleague, whose absence is profound." Friends knew him as an avid fisherman who loved the outdoors — also as a founding member and the treasurer of the Smithpoint Fish &

Ed Koropsak, a resident of Center Moriches, is survived by his wife Jane of BNL's Community, Education, Government and Public Affairs Directorate;

his mother, Frances, and four sisters, Elizabeth, Cindy, Karen, and Kristine, all of — Liz Seubert New Jersey.

Spring Into Color, 3/21

All the Lab community is invited to join a new, 10-week healthy eating and exercise plan called Spring into Color, organized by Michael Thorn of the Human Resources & Occupational Medicine Division's Health Promotion program. Spring into Color focuses on two goals:

- Eating five or more servings of colorful fruits and vegetables each day
- Increasing participants' current activity level to 30 minutes of moderate activity on at least five days a week. Those who are already active may prefer to set their own personal goals for participation in the program.

Those who register will receive a log sheet to record progress during the program. If you join in, at the mid-point and at the end, you will submit your point totals. If you complete the program, submit totals and fill in the post-program evaluation, you will be entered into a raffle.

Throughout the 10 weeks, articles will be posted online with information on the healthful benefits of colorful fruits and vegetables and moderate activity.

To register, complete the form sent to each employee and return it to Michael Thorn, Bldg. 490/OMC, or e-mail mthorn@bnl.gov.

One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Tuesday, March 22; and Tuesday, March 29, to answer employees' questions about your financial matters. The consultant will help you:

- Understand the importance of protecting your assets against inflation
- Find the right allocation mix for you
- Learn about TIAA-CREF retirement income flexibility
- Compare lifetime income vs. cash withdrawal options.

For an appointment, call Kathy Murphy, (866) 842-2053, Ext. 4625. (Note: not the on-site Ext. 4625.)

Brookhaven Retired Employees Association (BREA) News Talk on Retirement Investment Strategies, 4/8

BNL retiree Frank Federman, a Brookhaven Retired Employees ssociation (BREA) member and a registered financial advisor, will speak on "Investment Strategies During Retirement" at Berkner Hall on Friday, April 8, at 11 a.m. All are welcome to attend.

Federman notes that "Retirement for many people marks the end of a journey; I will discuss the financial journey beyond the point of retirement. This discussion will focus on the retiree's new goals and the choices available to enable their realization."

Tax Help for Visiting Foreign Nationals Noon Workshop 3/16

The Quality of Life/BERA/Recreation Office will present a workshop on "Tax Assistance for Visiting Foreign Nationals," Wednesday, March 16, at noon in the Recreation Hall, Bldg. 317. The presentation will be given by Mark Israel, Fiscal Officer, and Deborah Johnson, Director of Internal Audit & Oversight. Advanced registration is required. Contact Christine Carter, Ext. 5090.

Reimbursement Account Deadline Last Month to Submit 2004 Expenses

According to the Internal Revenue Service, contributions to health care or dependent day care accounts not used by the end of the calendar year will be forfeited. Also, all claim forms for expenses incurred in 2004 must be submitted by March 31. So, if you used reimbursement accounts, submit 2004 claims on time.

Helene Benveniste



Helene Benveniste, Medical Department Chair and past Associate Laboratory Director for Life Sciences, has conducted extensive research in the area of multi-modality imaging, MRI microscopy, and brain and maternal-fetal imaging.

Before joining the Lab in October 2001, Benveniste held professorships in anesthesiology, neurobiology and radiology at Duke University.

She is currently also Professor of Anesthesiology at Stony Brook University. Last December, she was elected to the Board of Directors for the National Space Biomedical Research Institute (NSBRI). The NSBRI, funded by the National Aeronautics & Space Administration, is a consortium of researchintensive biomedical institutions led by Baylor College of Medicine that study the health risks related to long-duration space flight and develop countermeasures to mitigate the risks. NSBRI's research and education program takes place at more than 70 institutions across the United States.

"Dr. Benveniste's extensive research background will be a valuable contribution to the board," said Bobby Alford, NSBRI board chairman and chief executive officer.

Benveniste has served on the National Institutes of Health Study Section in Neuroinformatics since 1999 and the American Hospital Association Brain National Study Group since 2000. She is certified by the American Board of Anesthesiology. Benveniste received her undergraduate degree in math and physics from Katedralskolen in Denmark, both her medical degree and doctoral degree from the University of Copenhagen, and completed her fellowship and residency at Duke. — Laura Mgrdichian Note: See story on research directed by Benveniste, page 1.

Correction

The Bulletin regrets that in the March 4 issue, the In Memoriam notices for Richard Wiswall, Jr. and James Egan incorrectly notes that they were members of the Nuclear Energy Department. They were members of the Nuclear Engineering Department.

Arrivals & Departures

Arrivals

Dongfeng Liu NSLS David Moreels Biology **Departures**

Azael Villanueva Chemistry

Easter Egg Hunt, 3/26

All children are invited to join the Hospitality Committee's annual Easter Egg Hunt on Saturday, March 26, at 11 a.m. in the Recreation Bldg. Children should each bring 15 plastic eggs filled with soft candy or small toys, and their own Easter basket. Children will hunt for eggs and participate in springtime games and crafts. Parents are asked to bring a healthy snack to share. For more information, contact Cindy Ottemann at cjottabb@ optonline.net or 849-2646.

Native American Cookbook in BERA Store

Stop by the BERA Store in Berkner Hall to pick up a copy of Wisdom of Elders, a 70-page, soft bound cookbook filled with American Indian food recipes, tribal profiles, methods for preparation, and colorful ideas for menu planning. All proceeds go to the National Society for American Indian Elderly. For more information, contact Kate Durnan, (520) 383-6075, kated@todhs.com.

Getting to Know Your Lab!

The New, 9.4 Tesla Micro-MRI

n the third Friday of each month, employees gather at noon in Berkner Hall lobby where they are greeted by Elaine Lowenstein, Tour Program Coordinator in the Community, Education, Government and Public Affairs Directorate, and are taken by bus for a tour of some on-site place of interest.

Friday, January 21, was the day when the group visited the new Micro-MRI located in the Medical Department. The group was greeted by Bill Gunther of the Life Sciences Directorate, who explained some of the wonders of the new instrument, which is the latest addition to the cuttingedge instruments of the Lab's Center for Translational Neuroimaging, funded by the New York State Office of Science, Technology, & Academic Research; the Office of National Drug Control Policy; Stony Brook University; and Brookhaven Lab. This 9.4 tesla imaging tool is being devoted to non-invasive, small-animal brain-imaging research, mainly using mice and rats, to uncover the mechanisms underlying drug addiction, Alzheimer's, autism, and other diseases of the brain.

As members of the group peered through the window protecting the powerful magnet, Bill Rooney of the Chem-

In front of the window protecting the new Micro-MRI Facility in Bldg. 490, a group of employees on a "Get to Know Your Lab" lunchtime tour learn from Bill Rooney, Medical Department, about some of the research being performed and planned at the extremely powerful, 9.4 tesla magnet, 5 which can be seen

through the open door. istry Department talked about some of the research he and colleagues are performing and planning there: characterizing the neurological basis for diseases such as Alzheimer's, autism, and Parkinson's; developing improved animal models and imaging methods for the study of brain diseases; and

addicted to drugs. In all too short a time, the lunchtime tour is over: the group gets back into the Lab vans and is delivered to Berkner Hall's doorstep at 1 p.m. as promised.

investigating how animal

brains change as they become

The next "Get to Know Your Lab" tour will be at the National Synchrotron Light Source on Friday, March 18 (see notice at right). All are welcome!

— Liz Seubert

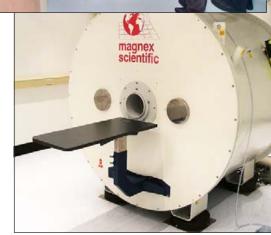


Close-up of the new, 9.4 tesla Micro-MRI magnet, part of **BNL's Center for Translational** Neuroimaging, that is located in Bldg. 490.

Your

Know

10



Lights On at the NSLS

On Friday, March 18, the Employee Lunchtime Tour will visit the National Synchrotron Light Source (NSLS) to hear Lisa Miller give an overview of research at several of the beam lines and talk about the proposed NSLS II. The group will meet at the upper lobby of Berkner Hall at noon to travel by shuttle to the NSLS and return by 1 p.m. For more information, call Elaine Lowenstein, Ext. 2400.

Jack's Waterfall in Concert, 4/1 **Leslie Mendelson Opens Show**

Tack's Waterfall, a local band that plays a mixture of blues, pop, jazz, folk, gospel and global music, will appear in concert at Berkner Hall on Friday, April 1, at 8 p.m. Singer/songwriter Leslie Mendelson, who blends R&B with country, folk, and soul music, will open the show. 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.

Founded in 1998 by Jack Licitra, Jack's Waterfall has appeared at the B.B. King Blues Festival, the New Jersey Folk Festival and the Riverhead Blues Festival. Licitra has toured the U.S. as a member of the Kerry Kearney Band, opening for such acts as the Allman Brothers and the Dickie Betts Band. The current edition of Jack's Waterfall includes Licitra on keyboards, Joe Lostritto on guitars, Jerry McDonald on upright bass, Fred Golik on drums, and Cindy Lopez on backing vocals. With three CDs to their name, the group plays music that has been called "inspirational," "Zen," "emotional," and "energetic."

A native Long Islander and a one-time member of the R&B ensemble Mother Freedom, Leslie Mendelson now, as a Manhattan resident, plays the city scene singing about everyday life. A prolific songwriter who gains inspiration from the Greenwich Village Songwriter Exchange, Mendelson regularly performs her playful compositions on guitar and piano.

Tickets for the concert cost \$10 each in advance and \$15 each the door on the day of the show. They may be purchased at the BERA Sales Office, weekdays, 9 a.m.-3 p.m., cash or check only, or via credit card through Ticketweb.com.

Come Sky-Gaze! View Mercury, Saturn, Moon, 3/16

The BERA Astronomical Society invites all the Lab community to an observation night on Wednesday, March 16, at 5:30 p.m. outside the Brookhaven Center. Weather permitting, telescopes will be set up for viewing Mercury, Saturn, and the Moon. Come and get to recognize these fascinating entities in the sky or share your knowledge with others who are less expert. All are welcome. For more information, contact Rick Jackimowicz, rickj@bnl.gov,

Defensive Driving Classes, 4/30, More

The six-hour defensive driving course on Saturday, April 2, 9 a.m.-3:30 p.m., in Berkner Hall, Room B is now full. More classes are scheduled for April 30, June 11, and August 20. The course is open to BNL, BSA and DOE employees, BNL facility-users, and their families, at \$30 per person. To register, send a check made payable to NYSTA to: NYSTA, in care of Don Kelley, P.O. Box 185, Selden, NY 11784. Write the course date on the check and include your phone number in case you need to be contacted.



BSA Noon Recital, 3/23

The BSA Noon Recital on Wednesday, March 23, in Berkner Hall, will feature the Synergy Brass Quintet.

All are welcome to this free recital, sponsored by BSA and open to the public. Visitors of age 16 and over must carry a photo ID.

On-Site Service Station At Your Service

When did you last change the oil in your vehicle? The onsite station, Upton Industries, Inc., will be glad to change oil, check the battery, provide NYS vehicle inspections, and perform all mechanical repairs, while you are at work. For more information, call Ext. 4034.

Service Anniversaries

The following BNL employees celebrated service anniversaries during February 2005.

30 Years Carl Anderson Life Sciences

Sydell Lamb	Biology
25 Years	
Lois Caligiuri	Chemistry
Jean Ramirez	S&H Svcs.
James Mills	Plant Eng.
Robert Geib Ctr	rl. Fab. Svcs.
Carl Czajkowski	NNS

20 Years

Gregory Condemi Rad. Ctrl. Walter Mangel Biology

10 Years

Roy Lebel	ESH&Q
Weimin Zhou	ES&T
Jeffery Mitchell	Physics
Donna Pfeiffer	Facilities & Ops.
Anthony Millet	Facilities & Ops.
Samuel Hoblit	Physics
James Pearsall	ITD
Patricia O'Grady .	C-A

Camera Club Meeting, 3/22

"Fine art black and white darkroom printing has become a rare skill," says Ripp Bowman, Camera Club president, "There is a big difference between darkroom printing and a digital print." He invites all who are interested in this topic to a meeting on the use of the club's black and white darkroom facility, noon-12:45 p.m. on Tuesday, March 22, in Berkner Hall, Room D. For more information, call Bowman, Ext.

Summer Camp Expo

On Thursday, March 17, from 11 a.m. to 1:30 p.m., in Berkner Hall, several Long Island summer camps will provide facility and registration information to BNLers and will discuss their programs and "Counselor-in-training" opportunities for teens. For more information, contact Liz Gilbert, Ext. 2315 or gilbert@bnl.gov.



Parent Volunteers

Parent volunteers are needed to help prepare for "Take Our Daughters and Sons to Work Day," which will be held on Thursday, April 28. Contact Susan Foster, Ext. 2888 or foster@ bnl.gov for more information.

Calendar

(continued)

— WEEK OF 3/14 —

Wednesday, 3/16

*Tax Assistance for Foreign Nationals

Noon-1 p.m., Recreation Hall in the apartment area. A workshop on tax assistance for foreign nationals. See notice, left. Advanced registration required. Contact Christine Carter, Ext. 5090.

*402nd Brookhaven Lecture

4 p.m., Berkner Hall. Ben Burr of the Biology Department will talk on "Genetic Engineering: What's the Fuss?" All are welcome to this free lecture, open to the public. See also story, page 1

*View Mercury, Saturn, Moon

5:30 p.m. outside the Brookhaven Center, weather permitting. The BERA Astronomical Society hosts event to view Mer-cury, Saturn, and the Moon from telescopes set up on site. All are welcome. See notice at left. For more information, contact Rick Jackimowicz, rickj@bnl.gov,

Thursday, 3/17

Monthly Meeting of the Brookhaven Advocacy Council - Open Session

12:30 p.m., Berkner Hall, Room C. All welcome. See also www.bnl.gov/bac/.

*Summer Camp Expo

11 a.m.-1:30 p.m., Berkner Hall. Several Long Island summer camps will discuss their programs and "Counselor-intraining" opportunities for teens. Liz Gilbert, Ext. 2315 or gilbert@bnl.gov. See also notice below, left.

Friday, 3/18

*Employee Lunch Time Tour — NSLS

Noon, Berkner Hall lobby. Group meets to be taken to the National Syn chrotron Light Source to learn about research there. Return to Berkner by 1 p.m. All are welcome.

-WEEK OF 3/21-

Tues. &Wed., 3/22-23

'Books Are Fun' Book Fair

10 a.m.-2 p.m., Berkner Hall Lobby. Save 20 to 70 percent off the retail price of a large selection of books at the "Books Are Fun"

Wednesday, 3/23

*BSA Noon Recital

Noon, Berkner Hall. The Synergy Quintet Brass Ensemble will perform at the next BSA Noon Recital. All are welcome to attend this free concert.

— WEEK OF 3/28 —

Monday, 3/28

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 regular business, committee reports, and the president's report.

Friday, 4/1

*Jack's Waterfall in Concert

8 p.m. Berkner Hall. Jack's Waterfall band, with Leslie Mendelson to open the show, will play blues, pop, jazz, folk and gospel music. See notice at left. Buy ticket in advance at the BERA Store in Berkner Hall at \$10 or for \$15 at the door.

Thursday, 4/7

Cycletrons Motorcycle Club Meeting

5 p.m., Brookhaven Center. BNL's Motorcycle Club meets on the first Thursday of each month. All are welcome. For more information, contact Frank Dusek, Ext. 2022, dusek@bnl.gov. Week of 4/25

Friday, 4/8

*BREA Talk on Retirement Investment

11 a.m., Berkner Hall. Sponsored by the Brookhaven Retired Employees Association (BREA), BNL retiree Frank Federman will speak on "Investment Strategies During Re-tirement." All are welcome. See also notice on page 2.

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

BNLers Sponsor Two Events For Tsunami Victims Relief

Benefit Concert

The BNL Music Club members, who sponsored a very successful Tsunami Benefit Concert on Saturday, February 26, thanks all those who attended and all who generously volunteered their time and efforts, including WUSB for announcing this project throughout the week; Chris LaPorta for recording the promo that was played; Ray Dumont for coming in off his vacation to run the sound; and Marty and Evelyn from FLIK. A donation of \$1,340 is being made to the American Red Cross Disaster Relief Fund.

Says Joe Vignola, Music Club President, "A special thanks to the event organizer Philip Hayde and all the musicians: the Ryu Shu Taiko drummers, Caitlyn Amanda and Henry Diaz, Larry Hunter, Jim Dexter and The Chaparrals.



The Chaparrals

Potluck Dinner-Dance

A "Tsunami Victims Potluck Dinner-Dance" was held on Friday, February 25, at the Brookhaven Center. The public event was a joint effort coordinated by Rudy Alforque, and sponsored by these BERA clubs: Social & Cultural Club, Asian-Pacific American Association, Ballroom Dance Club, Indo-American Association, Body-Building Club, Hispanic Heritage Association, and African-American Culture Club; the BNL English for Speakers of Other Languages; and the Hospitality Committee. About 70 people — some of whom are pictured below — came to share sympathy to the tsunami victims while enjoying an evening of good dancing and excellent potluck food. Some who could not attend still sent in donations. Total proceeds from the event was \$1,600, which was donated to the UNICEF Tsunami Relief Fund. All the sponsoring groups wish to thank all those who supported the event.



Classified Advertisements

Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present employees within the Laboratory; and (3) outside applicants. In keeping with the Affir mative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. Each week, the Human Resources Division lists new placement notices, first, so employees may request consideration for themselves, and, second, for open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people. Except when operational needs require otherwise positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882; call the JOBLINE, Ext. 7744 (344-7744), for a list of all job openings; use a TDD system to access job information by calling (631) 344-6018; or access current job openings on the World Wide Web at www.bnl.gov/HR/jobs/default.htm.

LABORATORY RECRUITMENT - Opportunities for Laboratory Employees

NS2888. PROJECT ENGINEER II (P-7 term appointment) - Requires a BS degree in nuclear electrical or mechanical engineering or health physics and at least six years experience in radiation protection instrument calibration, measurement quality assurance techniques, and in development of radiation protection instrument calibration policies/procedures. Excellent oral and written communication skills are required. Computer skills, specifically in MS Office applications and SQL databases, especially SYBASE, are highly desired. Knowledge of pertinent regulations, DOF orders and industry consensus standards is highly desirable (e.g., 10 CFR Part 830.120, 10 CFR Part 835, ANSI N323A, ISO/IEC17025. Under general direction, will be responsible for implementing and maintaining a measurement quality assurance program that ensures compliance of

the Division's Instrument Calibration Program to DOE regulations, prime contract requirements and to enable the RCD to achieve Health Physics Society calibration laboratory accreditation. Will be responsible for planning, budgeting, scheduling, coordinating, and performing phases of the work required to meet this primary responsibility. This work includes development and maintenance of calibration laboratory procedures, performance of routine program self assessments, providing engineering oversight to instrumentation technicians, maintaining traceabilty of all M&TE and radiation calibration standards, calibration of instrumentation, maintaining group training systems, and leading the group quality improvement team. Radiological

OPEN RECRUITMENT – Opportunities for Laboratory employees and outside candidates. WH3735. ASSISTANT LABORATORY DI-RECTOR FOR FINANCE - Requires at least a bachelor's degree in a relevant field (MBA preferred), a minimum of ten years of progressive management experience (preferably in a research environment) and excellent oral and written communication skills. In addition, we are seeking an individual with strong interpersonal skills who will be able to successfully interact with all levels of staff within the Laboratory and those of public agencies. Knowledge of government financial/budgeting processes and governance requirements, specifically those of DOE, is highly desirable. Will provide leadership, direction, and oversight for the financial affairs for the Laboratory, including financial and administrative activities such as financial services, budget, corporate policies, and business systems. Will annually present and justify budgets to the DOE, advise management on the internal allocations of these funds, and provide leadership and implementation mechanisms for financial management systems, including internal control and compliance systems. Individual will function as the CFO and report to the Laboratory Director. Also will serve as an officer of BSA and participate in the Board meetings of BSA. Will coordinate financial and governance matters with the partners of BSA, i.e., Battelle Memorial Institute and Stony Brook University. Will have direct management oversight of a staff of 105 and an operating budget of \$9.3M. Resumes should be sent to Bill Hempfling, (hempfling@bnl.gov), Director of Human Resources, Bldg 185, Upton, New York 11973. Electronic resumes are preferred.

Motor Vehicles & Supplies

00 FORD WINDSTAR SEL - Light blue, loaded, transferable warrantee. 55K mi. \$13,000/neg. Steven, Ext. 3271 or 395-3168. 95 JEEP ORVIS - 4WD, new brakes & rotrs. New front axles. Just tuned & serviced. 88K mi. \$7,000. 255-1431.

95 CHEVY CAVALIER - gd. cond. int/ext, new brakes, gd. tires, eng. runs roughly. \$750. Michele, 642-7442.

95 JEEP WRANGLER - 4-cyl., am/fm cass. Tan hard top, black body. Sound bar. Runs well. 139K mi. \$3,000/neg. Sachin, Ext. 2197. 93 NISSAN MAXIMA - 6-cyl., a/t, 4-dr., leather, Bose cd/stereo, a/c, all pwr., new parts. \$2,500. Paul, Ext. 7644 or 929-4295. 92 DODGE DAYTONA - 3.0 V6 engine with 30K on rebuilt tranny. New tires, brakes, and tune up. 120K mi. \$950/neg. Sue, 278-3306. 90 SUBARU LEGACY - 4-dr., 4-spd. automatic, all power, runs very well, very good on gas. \$900/neg. John, 878-6417.

89 TOYOTA CAMRY - Automatic trans., runs good. \$600. 929-5781.

88 BUICK REATTA - Collectible, 2-seater sport coupe, loaded, great condition. call Evenings. \$5,500. Ben, 698-6436.

Boats & Marine Supplies

ZODIAC - 2001 Touring S Mark 2C, 12.5', console, 30 hp Johnson outboard, trailer, new cond. \$4.500. Richard, Ext. 7258.

Furnishings & Appliances BED - full size, excel. cond., 1.5 yrs. old,

\$250 obo Triso Ext 7943

new cond. \$4,500. Richard, Ext. 7258.

Furnishings & Appliances

BEDROOM - Queen frm., armoire, night stand, dbl. ch- of-drawers/mirror, pine. e-mail pics. \$250 neg. Joe, Ext. 5741 or 929-0789. MATTRESS - Evenflo Infinite Innerspring for crib. Like new, was \$70, asking \$30.

Gene, Ext. 7113.

MICROWAVE OVEN - Large capac., old, working well. Dk. wood color. \$10. Ext. 4213.

REFRIGERATOR/FREEZER - Whirlpool, 26 cu. ft, side by side, white, water & ice in door, \$100. Tom, Ext. 3085 or 744-4535.

SKATING BOOTS - Riedell's, white, 13.5old girl's. Used twice, original box, asking \$25. Gene, Ext. 7113. SOFABED - floral print, roses & blue ribbons

on beige background, mattress still in plastic, \$50. Beth, Ext. 3372 or 821-3921.
WASHER AND DRYER - Sears Kenmore,

hardly used, sm. washer, lg. dryer, \$125, neg, Call after 7 p.m. 331-3205. WASHER AND DRYER - Hotpoint washer,

Sears dryer, working well, \$60/both. \$40/each. 444-5576.

Audio, Video & Computers

CD CHANGER - Alpine 6-disc changer. Works well, w/any car radio, FM Modulr. & remote. 2 yrs. old, \$100. Ext. 7465 or 828-1768.

COMPUTER REPAIR - Certi., exper. technician. Hardware repair & upgrades. Spyware/virus removal. Dan, Ext. 928-8389.

DVD/VIDEO PLAYER/RECORDER - Toshiba SD-V392SU, less 1 year old, used infrequently. \$60. Ext. 3272 or 744-5762.

PALM TUNGSTEN T3 - Like new, comes w/1 leather and 1 metal case, \$250. Chuck, Ext. 4081 or 917-664-6707.

Sports, Hobbies & Pets

BOARD GAMES - Several for boys and girls. All new in orig. boxes, \$5 each. Ext. 7113. BUTTONS - Matching sets, diff. colors & varieties. Asking \$10. Barbara, Ext. 3431. MOUNTAIN BIKE - Trek, 16". Shifter Shimano 3x7 speed. Used less than 10 times. \$250. Lock+basket avail. 338-3060.

PLAY TENT - Ikea indoor/outdoor tent with Velcro opening. In original packaging, 5'x 5'x 5'. Unused. \$10. Gene, Ext. 7113.

Tools, House & Garden

CHAINSAW - Stihl model 021, excellent condition. \$250. 921-5189.

RADIAL ARM SAW - Craftsman 10", computerized, on table bench, w/drawers. You pick up Miller Place, \$50. Jim, 821-2558.

WINDOWS - Anderson, (2) Series 400 TW2432 \$100; (2) Series 400 TW2642 \$140. Both new, in boxes, w/screens. Ed, Ext. 3050.

Miscellaneous

FLASHING SHAMROCK PINS - for St. Patrick's Day. Mike, Ext. 5262.

MATH TUTORING - Grades 1-9, all topics, homework help, test preparation, bring a friend, 2 for 1 discounts. 516-383-6209. SEWING MACHINE - Touch & Sew. older

STROLLER - Graco deluxe. 4 swivel wheels, adjustable handle. Excellent condition. Was \$140, asking \$60. Gene, Ext. 7113.

model but excellent condition. Includes cabinet, \$100. Bonnie, Ext. 2885.

TICKETS - 4 tickets for *Good Vibrations* on Broadway, 3/8, 7 p.m. Willing to split up tickets, \$100/pair. Ext. 4138.

Free

DISHWASHER - Magic Chef, about 10 yrs. old, almond/black, works well. Ext. 7746 or 580-2940.

KITCHENETTE - sink & faucet w/ countertop cabinet, white. You take it. 444-5576. VCR - Zenith, works well, looks good. Peggy, Ext. 3131.

Wanted

APARTMENT TO RENT - in Bellport, B'haven Hamlet, or E. Patchogue, excel. references. Peter, Ext. 2879 or 806-9257. DONATIONS - For Thee Island Inn Soup

Kitchen, Middle Island. Donations are down, food is short. Anyone interested in helping may send a check, payable to Thee Island Inn, to B. Royce, Bldg. 134C, or to Thee Island Inn, P.O. Box 986, Middle Island, NY 11953-0986. Ext. 2098, or royce@bnl.gov.

LAKEFRONT HOUSE - or cabin to rent on a lake in summer for a week. Recommendations welcome. Ext. 4026 or 872-8966.

LAPTOPS - Will pay cash for used or nonfunctioning laptops. Ext. 3928 or 678-8502. TREADMILL - reasonably priced, pref. compact sized. Betty, Ext. 3562 or 758-2653.

TV - used, in good cond. Zhong, Ext. 4375.

For Rent

CENTER MORICHES - Waterfront, 85 ft bulkhead, 2-bdrm. house, 2-car garage, .5 acre, heat, electric, and water included. Security, credit chk. \$1,700/mo. Alan, Ext. 5854. E. YAPHANK/N. SHIRLEY - 2 bdrm., eik

E. YAPHANKIN. SHIRLEY - 2 bdrm., elk W/sliders to pvt. deck, combo l/r, d/r, full bath, new carpets/paint, pvt. ent. drway., cable & all util. incl. \$1,500/mo. Robert, Ext. 4669.

EAST PATCHOGUE - 3-bdrm. house, 2 bath, kit., d/r, l/r, fp, cac, finished bsmt., gar. deck, no pets, + util., immed. \$2,200/mo. 475-2068.

MEDFORD - 1-bdrm. bsmt. apt, clean, bright, v.g cond. Tile bath, sep. therm, inc. util. Avail. 4/1, 1 mo. sec. No smoking/pets. Most suitable for 1, 2 OK. \$800/mo. Betty, Ext. 3562 or 758-2653.

PATCHOGUE - Brand new 3-bdrm. house, full bath, central air, hard wood & ceramic floors, full basement, attic space, IGS, \$1700 +util., 1 mo. sec. \$1,700/mo. Gina. Ext. 2271.

ROCKY POINT - 1-2 bdrm., 1 bath, no pets, 15 min to Lab. \$1,075/mo. John, Ext. 4028.

ROCKY POINT - 1 bdrm., near the water (sound), 10 mi. to BNL, month to month + dep., Ir/dr, bdrm, bath, priv. ent., parking, single pref., util incl. \$800/mo. Ext. 4992 or 849-3414

YAPHANK - 2-bdrm. house, 1 bath, EIK, LR, den/office, covered porch, W/D, 2 months security. \$1,500/mo. John, 513-1610.

ALEXANDRIA, NH - Enjoy Newfound Lake, lake view, beach w/swim raft, pool, tennis, basketball, clubhouse, hiking, sleep 6, have pics. \$1,050/mo. Ext. 4188 or 806-3598.

MYRTLE BEACH, SC - 2-bdrm. (4 beds), 2.5 bath Townhouse on golf course in Little River, SC. Community pool. \$491 - \$813/week or \$700 - \$1200/month \$491/mo. 472-4994.

For Sale

EAST MORICHES - 3-bdrm. ranch, 2 bath, l/r, d/r, den w/fp, full bsmt, 1/2 acre. new roof, windows, siding. Beach, boating and docking rights. \$459,990. 878-5449.

MILLER PLACE NORTH - 2-bdrm., 2 full bath, jacuzzi, l/r, d/r, cath. ceilgs., hrdwd. flrs., full bsmt. w/ht., igp, new liner/patio, 1.5 gar. fenced. mint. \$389.900. 642-7442.

PORT JEFFERSON STATION - Hi ranch, 1 acre, 5 bdrm., 3 bath. \$489,000/neg. Victor. Ext. 2271.

Community Involvement

BARN SALE - Temple Beth Emeth barn sale Sunday, March 13, 10-3 p.m., 52 Mt Sinai Ave, Mt. Sinai. For more information, e-mail kramer22@optonline.net

In Appreciation

Thank you to my friends at BNL and the Information Services Division for your compassion and kindness shown at the unexpected passing of my husband, Steven Hornstein, on 2/1/2005. — Betsy Schwartz

Very special thanks to all in the Nonproliferation & National Security Dept. who gave food, toys, treats, blankets & towels for the Have a Heart Brookhaven Animal Shelter Drive — 4 full boxes & a Volvo wagon filled twice! — Sandy Foster

To friends and co-workers of Paul Akins: We appreciate the overwhelming support and concern shown to our family during this most sad time in our lives. Paul will definitely be missed by all, but I am so happy that all of you got to know him and love him for the man he was. May God bless and keep you all. — Louise, Timothy, and all the Akins family.

Women's History Month Events At BNL

March celebrates National Women's History Month. This year's theme is "Women Change America." A Women's History Month display in Berkner Hall lobby during March, celebrating the role of women in transforming culture, history and politics in the U.S.

In addition, the Lab community is invited to the following events, all in Berkner Hall, from noon to 1 p.m. on the date stated:

Fridays, 3/11, 3/18, 3/ 25, lobby - Book Raffle

Wednesday, 3/16, Room D - BNL's Toastmasters International group will talk on "Public Speaking Training"

Thursday, 3/31, auditorium - Kathy Martinez, a disability management consultant who has been blind from birth, will talk on how leading edge corporations successfully accommodate customers with disabilities and give case histories of her work in this field.

For more information, call Sol Rosario, Ext. 6253.

Book Fair, 3/22 & 23

Save 20 to 70 percent off the retail price of a large selection of books at the "Books Are Fun" Book Fair on Tuesday & Wednesday, March 22 & 23, in Berkner Hall lobby, 10 a.m.-2 p.m. All are welcome.

Bus Trip to NYC, 3/12

The Hospitality Committee invites all on a bus trip to Manhattan on Saturday, March 12, leaving the Recreation Hall in the apartment area at 9:30 a.m. and leaving the city at 5 p.m. The cost for adults is \$10, children 2-12, \$5; payment, in cash only, must be in advance. To arrange payment, contact Hanna Herman at haniaher man@yahoo.com or 849-2249.

