

Mei Bai Awarded Early Career Prize For Accelerator Research Achievements

The Asian Committee for Future Accelerators and the organizing committee of the 2010 First International Particle Accelerator Conference (IPAC'10) have awarded Mei Bai, a scientist in the Collider-Accelerator Department, a prize for her significant and original contributions to the field of accelerator research during her early career. She will receive the prize, which consists of 300,000 Japanese yen (about \$3,000) and a framed certificate, at IPAC'10, which will be held in Kyoto, Japan, May 23 - 28.

"I am very honored to receive this prize," Bai said, "but keeping Brookhaven's accelerators running smoothly for polarized proton experiments is really a team effort. I've had the privilege of expanding my understanding of accelerators with the help of many knowledgeable and creative colleagues at the Laboratory. This award is as much theirs as it is mine."

Bai was cited "for her significant contributions to spin dynamics and polarized proton



Roger Stoutenburgh D0840306

acceleration in circular accelerators — in particular AGS [the Alternating Gradient Synchrotron] and RHIC [the Relativistic Heavy Ion Collider], and to successful polarized proton beam collisions at 500 GeV [giga electron volts] centre of mass."

In the 1990s, Bai and collaborators devised a way to keep protons in an accelerating beam "polarized," or all spinning with their axes in the same direction. The technique was successfully demonstrated at BNL's AGS, an accelerator that is a key part of the RHIC complex. Physicists from around the world study polarized protons at BNL's RHIC to determine the answer to a fundamental question — how protons get their spin, an intrinsic property of the particle that is not completely understood.

See *Mei Bai* on pg. 2

BWIS Talk on Structural Biology Applications in Drug Design, 4/14

Vivian Cody, principal research scientist at the Hauptman-Woodward Medical Research Institute, Inc., and professor in the School of Medicine's Structural Biology Department at the State University of New York (SUNY) at Buffalo, will give a talk on "Applications of Structural Biology in Drug Design," on Wednesday, April 14, from 4 to 5 p.m. in the Hamilton Seminar Room, Bldg. 555. All the BNL community is invited to the talk, which is sponsored by Brookhaven Women in Science.

Cody will discuss her studies of enzyme-drug complexes to design compounds that have potential for treating AIDS-related pneumonia, cancer and thyroid disease. Determining the three-dimensional structure of biological macromolecules can provide researchers with important information on how they function. Researchers use this data to design drugs that attack pathogens that cause disease.

After earning a Ph.D. in chemistry from the University of Cincinnati in 1969, Cody was a postdoctoral fellow at the University of Missouri,



Vivian Cody

1969-1970, and at the Hauptman-Woodward Medical Research Institute, Inc. (formerly the Medical Foundation of Buffalo), 1970-1972. She moved through the ranks to become the principal scientist at the institute in 2001. She

joined SUNY Buffalo as an associate professor of medicine in 1979, and in 2001, she had risen to her current position.

Cody has won numerous awards for her work, including the SUNY Buffalo Sustained Achievement Award in 2005. A year earlier, she received both the Women of Achievement Award from the Association of University Women and the Women of Distinction honor from the Erie County Commission on the Status of Women. She was also recognized with the YWCA Leadership in the Professions Award in 2002. Cody is a member of Zonta International, a service organization to improve the status of women, and is a member of the Zonta Club of Buffalo.

For more information about the talk, contact Kathy Walker, kwalker@bnl.gov, or Vivian Stojanoff, stojanof@bnl.gov.

— Diane Greenberg

Physics Begins at the Large Hadron Collider

The Large Hadron Collider (LHC) has launched a new era for particle physics. On March 30 at 1:06 p.m. Central European Summer Time (CEST) at CERN in Geneva, Switzerland, the first particles collided at the record energy of seven trillion electron volts (TeV). These collisions mark the start of a decades-long LHC research program, and the beginning of the search for discoveries by thousands of scientists around the world.

"Today's first 7 TeV collisions are a great start for LHC science," said Dennis Kovar, Associate Director of Science for High Energy Physics at DOE. "We eagerly anticipate the work of the world's physicists as they begin their search for dark matter, extra dimensions, and the ever-elusive Higgs boson."

The March 30 proton collisions were recorded by the LHC experiments' particle detectors, known by their acronyms: ATLAS, CMS, ALICE and LHCb. While the LHC accelerator brings the protons up to their maximum energy and steers them around the 16-mile ring into collision, the experiments use massive particle detectors to record and analyze the collision debris.

"The LHC experiments are the world's largest and most complex scientific instruments, and scientists from American universities and laboratories have made vital con-



Roger Stoutenburgh D2851208

tributions to each of them," said Edward Seidel, Acting Assistant Director of the National Science Foundation's Directorate For Mathematical and Physical Sciences. "We wish all the LHC scientists success in their quest to solve some of the most profound mysteries of our universe."

More than 1,700 scientists, engineers, students and technicians from 89 American universities, seven DOE national laboratories, and one supercomputing center helped design, build and operate the LHC accelerator and its four massive particle detectors. American participation is sup-

ported by the DOE Office of Science and the National Science Foundation (NSF).

Now, the real work begins for the LHC teams. Over the next 18 to 24 months, the LHC accelerator will deliver enough collisions at 7 TeV to enable significant advances in a number of research areas. As data begins to pour from their detectors, more than 8,000 LHC scientists around the world will sift through the flood in search of the tiny signals that could indicate discovery.

BNL and Fermi National Accelerator Laboratory are the...

See *LHC Collisions* on pg. 2

Switchable Nanostructures Made With DNA Opens possibility of responsive 'nanomachines' for applications in energy and data storage

Scientists at BNL found a new way to use a synthetic form of DNA to control the assembly of nanoparticles — resulting in switchable, three-dimensional and small-cluster structures that might be useful, for example, as biosensors, in solar cells, and as new materials for data storage. The work, published in *Nature Nanotechnology* 5, 116 - 120 (2010), first appeared online on December 20, 2009. The research was funded by the DOE Office of Science, by a Laboratory Directed Research & Development grant, and a Goldhaber Distinguished Fellowship.

BNL's Center for Functional Nanomaterials team, led by Oleg Gang, included Dmytro Nykypanchuk and William Sherman; Mathew Maye, now at Syracuse University, and Mudalige Kumara, now in Arkansas with the Food & Drug Administration. The scientists refined techniques to use strands of artificial DNA as a highly specific kind of Velcro, or glue, to link up nanoparticles. Such DNA-based self-assembly holds promise for the rational design of a range of new materials for applications in molecular separation, electronics, energy conversion, and other fields. But none of these structures has had the ability to change in a programmable manner in response to molecular stimuli — until now.



Roger Stoutenburgh D2820310

Oleg Gang (seated), William Sherman (left), and Dmytro Nykypanchuk

"Now we're using a special type of DNA-linking device — a kind of 'smart glue' — that affects how the particles connect to make structures that are switchable between different configurations," says Gang. This reliable, reversible switching could be used to regulate functional properties — for example, a material's fluorescence and energy transfer properties — to make new materials that are responsive to changing conditions, or to alter their functions on demand.

Such responsiveness to changes in environmental conditions and the ability to adopt

new forms are hallmarks of living systems. In that way, these new nanomaterials more closely mimic biological systems than any previous nanostructures. Though far from any form of truly "artificial life," these materials could lead to the design of nanoscale machines that, at a very simple level, mimic cellular processes such as converting sunlight into useful energy, or sensing the presence of other molecules. Responsive materials would also have benefits in the field of optics or to produce regulated porous materials for molecular separations, Gang says.

See *Nanostructures* on pg. 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.
- Events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

— REGULARLY —

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make friends. See <http://www.bnl.gov/esol/schedule.asp> for schedule. Jen Lynch, Ext. 4894

Mondays & Thursdays: Kickboxing

\$5 per class. Noon–1 p.m. in the gym. Pay as you go. Ext. 2873.

Mon., Tues., Thurs., & Fri.: Tai Chi

Noon–1 p.m., B'haven Cntr N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov.

Tuesdays: Zumba

Tuesdays, noon–1 p.m. Gym. Registration is required. Ext. 2873.

Tuesdays: Knitting Class

2–4 p.m. Rec. Hall. All levels of skill. Free. Ext. 5090 for information.

Tuesdays: Toastmasters

Two monthly meetings: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Rm 160. Guests and visitors welcome. <http://www.bnl.gov/bera/activities/toastmasters/>.

Tue., Wed., & Thurs.: Rec Hall Activities

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

Tuesday & Thursday: Aqua Aerobics

5:30–6:30 p.m., Pool. Registration is required. Ext. 2873.

Wednesdays: On-Site Play Group

10 a.m.–noon. Apartment area playground. Infant/toddler drop-in event. Parents meet while children play. Ext. 2873. See also <http://www.meetup.com/BNL-Playgroup/>

Wednesdays: Ballroom Dance Class

Classes at 5:15, 6:15, and 7:15 p.m., based on experience. N. Ballroom, B'haven Center. Donna Grabowski, Ext. 2720.

Wednesdays: Yoga

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

1st Wednesday of month: LabVIEW

1:30–3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304, or Terry Stratoudakis, (347) 228-7379.

Thursdays: BNL Cycletrons Club

5 p.m., Brookhaven Center. First Thurs. of month. Tim Devine, Ext. 2350.

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. Ext. 2873.

Fridays: Family Gym Night

5–8 p.m. Family gym activities. Free. Ext. 2873.

TIAA-CREF Counseling
A TIAA-CREF consultant will visit BNL on Thursday, 4/15; Tuesday, 4/20; and Wednesday, 4/28. For an appointment, call 1-800-732-8353 or go online at <http://www.tiaa-cref.org/bnl> and select “set up a meeting.”

Fidelity Counseling
A Fidelity representative will be on site on Friday, April 23, and Friday, May 7. Sessions will be for approximately half an hour. For an appointment, call 800-642-7131, weekdays, 8 a.m. – midnight, or go to <http://www.fidelity.com/atwork/reservations>.

Arrivals & Departures	
— Arrivals —	
Benjamin Babst	Medical
Christine Caruso	Info. Tech.
Scott Giangrande	Env. Scis.
Massao Gohdo	Chemistry
Brian Holub	NSLS-II
James Kelly	C-AD
Christoph Lehner	Physics
Xinhui Lu	CMP&MS
Geetha Narayan	C-AD
Xianbo Shi	NSLS II
Leroy Smalls	Info. Tech.
Steven Wood Jr.	TC&P
Tomer Zidki	Chemistry
Qin Yao	Medical
— Departures —	
Donald Bastedo	C-AD
Jin Zhu Chen	Medical
Marvin Schofield	CMP&MS
Ralf-Christian Seidl	Physics



Upcoming BSA Distinguished Lecture
A. Valery Rubakov, Russian Academy of Sciences, will speak on Extra Dimensions in Space, 4/27. See story in next week's Bulletin, or www.bnl.gov/bnlweb/pubaf/pr/newsroom.asp.

LHC Collisions from pg. 1
...host labs for the U.S. groups participating in the ATLAS and CMS experiments, respectively. Scientists from American universities and laboratories, who comprise more than 20 percent of the ATLAS collaboration and 35 percent of CMS, have played major roles in the construction of both detectors, and join thousands of international colleagues as they operate the detector and analyze the collision data that will be collected in the coming years. In addition, Lawrence Berkeley National Laboratory is the host lab for U.S. groups participating in ALICE, with American scientists contributing 10 percent of the ALICE collaboration.
The U.S. is also home to major national and regional computing centers that, as part of the Worldwide LHC Computing Grid, enable scientists in the U.S. and around the world to access the enormous amount of data generated by the LHC experiments. BNL and Fermilab, host to major “Tier-1” computing centers, are the first stop in the U.S. for data from the ATLAS and CMS experiments, respectively. The data are further distributed to smaller NSF and DOE-funded “Tier-2” and “Tier-3” computing centers across the country, where physicists will conduct the analyses that may lead to LHC discoveries.

Nanostructures from pg. 1
“Our hope is that the ability to induce post-assembly reorganization of these structures by adding DNA or other molecules as external stimuli, and our ability to observe these changes with nanometer resolution, will help us understand these processes and find ways to apply them in new kinds of nanomachinery in which the system's functionality is determined by the nanoparticles and their relative organization,” says Gang.
Future studies will make use of precise imaging capabilities, such as advanced electron microscopy tools at the CFN and higher-resolution x-ray techniques that will become available at Brookhaven's new light source, NSLS-II, now under construction.
Brookhaven Science Associates, which manages BNL, has filed patent applications related to this work. For information about these patents and licensing opportunities, contact Kimberley Elcess, elcess@bnl.gov, 631 344-4151.
For a full version of this story, see http://www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1042.
— Karen McNulty Walsh

Housekeeping Guidelines Update

After several people were injured on site because previous work and clutter had not been properly cleaned up, in January of 2010 Brookhaven Lab began focusing on good housekeeping as a way to ensure a safer work environment. During the past three months, work crews have swept through eight different buildings on site, and as they worked, they noticed ways to improve the Lab's housekeeping guidelines.
“We revised the guidelines as we learned from experience while cleaning out the first eight buildings,” said Peter Pohlot, manager of the ongoing housekeeping project and a member of the Lab's Environmental Protection Division. “This has truly been a team effort.”
Each building's housekeeping team consisted of a building manager; an environmental, safety, and health coordinator; a safety representative; and an environmental compliance representative; as well as



An example of the clutter that housekeeping teams have been addressing.
members of the Procurement & Property Management Division and the Facilities & Operations Directorate.
“We pulled a lot of materials out of these first eight buildings. Antiquated and defunct equipment was thrown out, but we also uncovered some usable equipment,” added Pohlot. “Still, don't forget that the main reason for these housekeeping guidelines is to keep areas in a manner that keeps people from getting hurt.”
The Lab's housekeeping guideline, containing recommendations for maintaining general areas, storage areas, laboratories, industrial areas, and construction areas, is available at <http://www.bnl.gov/esh/shsd/WordDocs/BNLHousekeepingGuideline.doc>.
— Joe Gettler

Mei Bai from pg. 1
Bai and collaborators found that adding a radio-frequency (RF) dipole magnet to an accelerator could counteract the effect of focusing magnets that interfere with the polarized protons' alignment. Like a child pushed on a swing, the protons are pushed, or “kicked,” as they speed through the accelerator at nearly the speed of light. This kick destroys their natural alignment, but the kick from the RF dipole produces a frequency that keeps the protons' spin aligned, both horizontally and vertically, which is necessary for experiments.
Recently, Bai has focused on the RHIC polarized proton

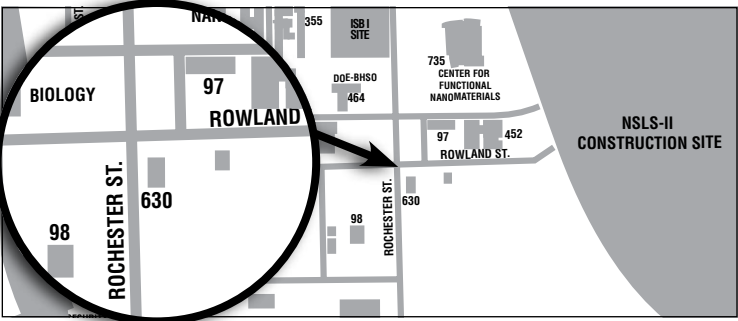
program. In 2004, 2005 and 2009, she was the RHIC polarized proton run coordinator, requiring her to make sure that all systems are working at optimum level in the accelerator, which is the world's largest dedicated to nuclear physics. “As a run coordinator, it was my daily duty to coordinate all of the operations to deliver a polarized proton beam that met the requirements of the experiments,” Bai said. “I was also responsible for organizing the efforts to troubleshoot when problems developed. During that time, I was on call 24 hours per day. It was tough, but fun, and a very rewarding experience.”
Bai earned a bachelor's degree in engineering from the University of Electronic Science & Technology of China, Chengdu, China, in 1989; a master's degree in physics from the University of Science and Technology, Hefei, China, in 1992; and a Ph.D. in physics from Indiana University in 1999. She joined BNL in 1999 as a research associate in the RHIC Accelerator Physics Group, was promoted to associate scientist in 2001, and to scientist in 2004. Bai was the recipient of the American Physical Society's Outstanding Doctoral Thesis Research in Beam Physics Award in 2000.
— Diane Greenberg

Celebrate Earth Week: Office Supply Swap, 4/19–20

As part of the Lab's Earth Week celebrations taking place this year during the week of April 19, the annual Office Supply Swap will be held on Monday and Tuesday, April 19 and 20, from 11 a.m. to 1 p.m. in Berkner Hall lobby.
Clean your offices, supply closets, and conference rooms of items that are no longer used, but are still in good condition — and bring them to Berkner on April 19 and 20 to be recycled. One exception — no bar-coded items may be swapped. Even if you have nothing to bring, stop by Berkner and take away any item you want for free. In the past, paper, notebooks, pads, pens, pencils, folders, binders, calculators, staplers, 3-hole punches, computer related accessories, etc., were all recycled for use within the Lab. So: clean house, minimize waste, help the recycling effort, and get things for free — a win-win-win-win!
BERA Spring Fling! 4/23
Enjoy DJ Dancing at the Brookhaven Center North Room, 6-11 p.m., on Friday, April 23. Tickets (150 limit) are available for \$5 each at the BERA Store in Berkner Hall. For more information, call Kevin Hester, Ext. 2953, or Charles Gardner, Ext. 5046.



Planning the June 9 event are the BREA Lunch Committee: (seated, from left) Carol Kramer, Ronnie Evans, and Martine O'Connor; (standing, from left) Dave Cox, Eena-Mai Franz, Sonja Santos, and Arnie Peskin.
BREA Luncheon – Join in the Fun, 6/9
The big event of the year for Brookhaven retirees is back. Be sure to reserve Wednesday, June 9, for the Brookhaven Retired Employees Association (BREA) annual get-together luncheon. It will be held at the Bellport Country Club, an old favorite, and will feature a four-course meal with starter, salad, choice of entrées, dessert, coffee or tea, and unlimited wine, beer or soda — all for only \$35! Pass the word around to all your friends and acquaintances to join in the fun. All retirees, whether BREA members or not, and also soon-to-be retirees are cordially invited to attend. This is a great opportunity to get together with a group of old



Intersection of Rochester and Rowland Streets To Close Later in April for NSLS-II Work

Later in April, the intersection of Rochester and Rowland Streets and Rowland Street from the intersection east to the NSLS-II site will be closed as crews install new chilled water lines for the future NSLS-II facility.

The intersection is expected to remain closed for two to four weeks. During that time, the Upton service station (Bldg. 630), Chilled Water Plant (Bldg. 600), and Receiving Warehouse (Bldg. 98) will be accessible from Rochester Street south of the intersection. A detour from Rochester Street around the intersection — utilizing the western portion of Rowland, South Pennsylvania, and Harvard Streets — will be available, though large vehicles should plan to use alternate routes.

After the intersection reopens, the portion of Rowland Street east of Rochester Street will remain closed for an additional one to three months.

The Lab community will be notified once an official start date has been determined and all are asked to avoid the area and obey all safety personnel as well as posted barricades, warnings, and signs when the work begins.

For more information, contact Tom Joos of the NSLS-II Project, Ext. 7707.

Celebrate National Library Week, 4/12–16

The Research Library staff is pleased to invite the BNL community to an Open House at the Research Library, Bldg. 477, to celebrate National Library Week. Come learn about all the library resources available to you and the new Library website featuring a fresh new look and improved navigation and content tools.

The following special events of interest are scheduled:

- Mon., 4/12 12:30 – 1:30 p.m., Berkner Hall, Room B
Talk by F. Cruthers from Safari Books Online
- Tue., 4/13 2 – 3:30 p.m., CFN, Bldg. 735, 2nd fl, Large Seminar Room, Web of Science & EndNote Web, talk by D. Sechler from Thomson Scientific
- Wed., 4/14 10 a.m. – 3 p.m. Research Library: Open House and Introduction to the Library's new Website
- Thu., 4/15 10:30 a.m. – noon, Bldg. 510, Small Seminar Room
American Physical Society, (APS) "A look into possible journal future," R. Kelly, S. Mitra of APS
- Fri., 4/16 10 a.m. – 3 p.m. Research Library: Open House and Introduction to the Library's new Website

For more information, call the Research Library, Ext. 7761 or Ext. 3483.

Brookhaven Advocacy Council Needs Members: Stop By, Learn More, 4/16

If you are a good listener who can maintain confidentiality, remain impartial, and base your judgment on fact rather than emotion, consider becoming a Brookhaven Advocacy Council (BAC) member.

BAC members have the opportunity to participate in establishing an atmosphere of trust between BNL management and its employees. Are you willing to devote time and energy to ensure that everyone equally enjoys the quality of life that BNL offers? If your answer is yes, there may be a seat for you on the BAC.

The BAC is a key component of BNL's system of ensuring a respectful, fair and equitable workplace. The members advise and make recommendations to the Lab Director on resolving employee/guest/user concerns or issues that are brought to the BAC's attention. The BAC functions independently of the Human Resources & Occupational Medicine Division, reporting directly to the Lab Director.

Members of the BAC will host a table in Berkner Hall lower lobby on Friday, April 16, 11 a.m. – 1:30 p.m. To learn more about the BAC or if you are interested in becoming a member, stop by and speak with the members, or visit <http://www.bnl.gov/bac>.

ASAP Talk on Intellectual Property, 4/22

The Association of Students and Postdocs (ASAP) invite all students and postdocs at the Lab to attend a talk on intellectual property on Thursday, April 22, at 6:30 p.m. in the ASAP lounge (Bldg. 462). Speakers from the Lab's Office of Technology Commercialization and Partnerships include Chief Intellectual Property Counsel Dorene Price and Principal Licensing Specialist Kimberly Elcess.

The Office of Technology Commercialization and Partnerships will provide refreshments.

Play Golf! 4/19

To kick off spring, the BERA Golf Association will host an outing at the Pine Hills Country Club in Manorville on Monday, April 19. The outing will cost \$55, which includes greens fees, a golf cart, and \$10 towards prizes. An 18-hole scramble format will be used during the outing. All golfers are welcome. For more information or to sign up for the outing, contact Nick Franco at Ext. 5467 or at franco@bnl.gov. Visit <http://www.bnl.gov/bera/activities/golf/> for details and to pre-register (BNL on-site access only).



Ngo Tra My (left), playing the Dan Bau, and Nguyen Thanh Thuy



Musicians From Vietnam To Perform, 4/28

Nguyen Thanh Thuy, playing the Dan Tranh, and Ngo Tra My, playing the Dan Bau, are two prize-winning musicians from Vietnam who will give a recital on Wednesday, April 28, at noon in Berkner Hall. Sponsored by the Lab's Asian Pacific American Association and the Diversity Office, 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 Dan Tranh is one of the most popular and romantic musical instruments in Vietnam. With from 17 to 22 strings, it is the smallest yet versatile member of a family of board-zither-like instruments in the Far East. The Dan Bau is a Vietnamese monochord, a traditional one-string musical instrument. Played solo, it is central to Vietnamese folk music, a genre still popular today in the country.

Nguyen Thanh Thuy and Ngo Tra My, in addition to having successfully raised awareness of these Vietnamese instruments through their acclaimed performances at home and abroad — from Australia, China, Japan, and Russia, to Denmark, France, and the U.S. — both teach classes in Vietnamese musical instruments at the Vietnam National Academy of Music. Nguyen Thanh Thuy is active in traditional and experimental fields of music and currently performs with musicians in Scandinavia in the summer. Ngo Tra My serves as a visiting teacher of Vietnamese instruments for several months a year in the Malmo Academy of Music in Sweden. Both musicians have recorded many successful CDs as soloists and in orchestra. — Jane Koropsak

AdoptaPlatoon Is Collecting During April: Sunblock, Baby Powder, Powdered Drinks

The Brookhaven Veterans Association's AdoptaPlatoon team is collecting the following items in April to be sent to a platoon currently serving in Afganistan: sunblock, baby powder, and individual packets of powdered drinks on the go. Drop items off in Bldg. 490, the Clinic, Bldg. 400 lobby, Bldg. 488 lobby, Bldg. 510, Physics Library (2nd. floor). Please send monetary donations to: BVA, PO Box 671, Upton, NY 11973-0671. Thank you.

Take Our Daughters & Sons to Work, 4/22

Brookhaven Lab will again be welcoming Lab children in "Take Our Daughters and Sons to Work Day" on Thursday, April 22.

If deemed safe, with supervisory approval, the girls and boys will spend the morning with their parent in their workplaces and then at lunch. An afternoon program will be available to the first 100 registered participants only. Register in advance to participate in the afternoon program, which is open to children of BNL employees and guests only. If you have a child between the ages of nine and 12 and would like to take advantage of this opportunity, please register by April 16 (see below). The afternoon program will consist of the following:

- Noon – 12:45 p.m. Parents and children lunch on their own in the Cafeteria
- 12:45 – 1 p.m. Berkner Hall Lobby – check in/registration for afternoon program
- 1 – 1:05 p.m. Berkner Hall Auditorium – Introduction by Ernie Tucker, Human Resources & Occupational Medicine Division
- 1:05 – 1:10 p.m. Welcome – Sam Aronson, Laboratory Director
- 1:10 – 1:20 p.m. Board buses, leave Berkner Hall for tours
- 1:20 – 2:55 p.m. Tours of Firehouse and Science Learning Center
- 3 – 4:45 p.m. Swim and Gym Time (please bring bathing suit, towel and sneakers)
- 4:45 p.m. Parents pick up children at Pool, end of program.

Please be reminded that safety must be a priority throughout the event. The children will be accompanied by chaperones on all tours and the designated swim/gym time will be supervised. Please keep in mind that minors may not visit a Lab facility that exposes them to radiation, chemicals, or other potentially hazardous situations. If a visit to your workplace might involve exposure to these conditions, consult with your ESH Coordinator or Facility Representative to determine if such a visit is allowable. If it is not, you should arrange for a "host parent" to cover the morning portion of the day.

Registration: To register on line, go to the Human Resources Homepage, <http://www.bnl.gov/HR/> and click on "Take our Daughters and Sons to Work Day" in the right column. Follow the prompts and submit your form. For those of you who do not have access to a computer, please fill in the registration form on the back of the memo on this topic sent to all employees and guests and return to Leesa Allen, Bldg. 400B, no later than April 16.

CALENDAR

Friday, 4/9

Communicate Science With Alda

9 a.m.-4 p.m. Berkner Hall. Alan Alda is keynote speaker in a program on improving science communication.

— WEEK OF 4/12 —

Monday, 4/12

*National Library Week at BNL

12:30-1:30 p.m. Berkner Hall, Room B. Talk by F. Cruthers on Safari Books Online. See at left.

Pegram Lecture I : Dark Energy

4 p.m. Berkner Hall. Christopher Stubbs, Harvard University, will give a talk on "Dark Energy: A Crisis for Fundamental Physics." All are invited to this free lecture, open to the public. Visitors to the Lab of 16 and older must carry photo I.D.

Tuesday, 4/13

BREA Meeting

1-2:30 p.m. Research Support Bldg. 400, Conference Room 1. Brookhaven Retired Employees Association meeting. All retirees welcome.

*Web of Science, EndNote Web

2-3:30 p.m. CFN, Bldg. 735, 2nd. fl., Large Seminar Room, Talk by D. Sechler of Thompson Scientific. See Lib. Wk, left.

Pegram II : Gravitational Effects

4 p.m. Berkner Hall. Christopher Stubbs, will talk on "Searching for Novel Gravitational Effects." All are invited to this free lecture, open to the public. Visitors to the Lab of 16 and older must carry photo I.D.

Wednesday, 4/14

*Research Library Open House

10 a.m.-3 p.m. Research Library (RL) staff welcome all as part of the National Library Week celebration; learn about the new RL website.

*Talk: Structural Biology

Applications in Drug Design

4 p.m. Hamilton Seminar Room, Bldg. 555. Vivian Cody, Hauptman-Woodward Medical Research Institute, Inc., and SUNY at Buffalo will talk on "Applications of Structural Biology in Drug Design." All are welcome to this free talk sponsored by Brookhaven Women in Science. Visitors to the Lab of 16 and older must carry photo I.D. See pg. 1.

Thursday, 4/15

*An APS Look Into Journal Future

10 a.m.-noon. Physics, Bldg. 510, Large Seminar Room. American Physical Society's R. Kelly and S. Mitra talk on "A look into possible journal future." See Lib. Wk., left.

Friday, 4/16

*Research Library Open House

10 a.m.-3 p.m. Research Library (RL) staff welcome all as part of the National Library Week celebration; learn about the new RL website.

*'Spider' John Koerner, Guitarist

8 p.m. B'haven Center. See pg. 4.

— WEEK OF 4/19 —

Monday, 4/19

Start of Earth Week Celebrations

(More details next week)

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.

Wednesday, 4/21

456th Brookhaven Lecture

4 p.m. Berkner Hall. Allen Orville, Biology Department, will talk on "Getting More From Less: Correlated Single-Crystal Spectroscopy and X-ray Crystallography at the NSLS." All are welcome to this free lecture. Visitors to the Lab of 16 and older must carry photo I.D.

Classified Advertisements

Placement Notices

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

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

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

PHYSICIST (Particle Tracking Codes) – Requires a Ph.D. in physics with at least five years' experience in developing and running state of the art particle tracking codes. Should have a demonstrated knowledge of high order particle tracking codes consistent with understanding the RHIC dynamic aperture and estimating spin depolarization due to resonances. Must be willing to perform simulations in support of the RHIC polarized proton program and will support particle and spin tracking studies for the AGS and RHIC. Under the direction of M. Blaskiewicz, Collider-Accelerator Department. Apply to Job ID #15285.

ASSOCIATE PHYSICIST (Experimental Accelerator Physics) – Requires a Ph.D. in physics with at least three years' experience in experimental accelerator physics emphasizing instrumentation or radio frequency technology. Will support the commissioning and initial operation of the new 56 MHz superconducting RF cavity for RHIC and should be very skillful in obtaining RF and beam dynamics data from oscilloscopes, spectrum analyzers and network analyzers. Using such data, is expected to provide quantitative input to design engineers and technicians. The position is in support of the RHIC program as a fundamental component of the ongoing luminosity upgrade. Under the direction of M. Blaskiewicz, Collider-Accelerator Department. Apply to Job ID #15284.

MANAGER, STATE & LOCAL GOVERNMENT RELATIONS (M-1) – Requires a minimum of a bachelor's degree in political science, communications, or closely related field, and 15 years of progressively responsible related professional work experience in community, government, or similar arena. Master's degree is highly desirable. Must possess expertise gained from having worked with government legislative or executive offices and have proven excellent relationships with elected and government officials on a state and local level. Understanding the NYS legislative and budget processes is a plus. Management experience and a demonstrated ability to establish and cultivate relationships with a wide variety of stakeholders are necessary, including demonstrated consensus-building and crisis management skills. Requires excellent interpersonal and presentation skills and the confidence to coach senior leadership and work effectively on cross-functional teams. Must be a team player. Proven leadership, mentoring and people skills and high ethical standards needed, with a capacity to work in a collaborative work environment. Must have excellent written and oral communication skills and the ability to understand and adapt to different stakeholders. Must be well-organized, have the ability to formulate and carry out both short and long range strategies while attending to details. Responsible for contributing to all community relations activities, including regularly interfacing with a diverse group of organizations, agencies, and thought leaders including local and State government officials and staff. Will utilize expertise gained from having worked with government legislative or executive offices. Will be expected to gain a broad understanding of the Laboratory's research and discoveries and connect them to the interests of key opinion leaders. Will develop, manage and implement comprehensive communications and stakeholder engagement plans based on industry best-practices that are aligned with and support the Laboratory's priority programs, including those related to new key initiatives. Will provide input to senior management in areas of responsibility, as well as conduct substantive analysis for issues that pertain to the Laboratory. Will support community relations activities including issues management. Will participate in strategic community engagement and communications planning and contribute to the development and implementation of CEGPA's business plan. Reports to the Manager, Community Relations, and supports the ALD, CEGPA on related governmental issues. Community, Education, Government and Public Affairs. Apply to Job ID #15269.

ADVANCED TECHNOLOGY ENGINEER/ Linux Systems Administrator (I-7) – Requires a master's degree with a minimum of three years of experience or a bachelor's degree with a minimum of five years of relevant experience, preferably in computer science or related discipline. Must have significant prior experience with large, Linux-based clusters and kernel-level knowledge of RedHat Linux operating systems. Working knowledge of shell scripting, Perl/Python scripting, familiarity with the I/O characteristics of Linux-based systems, virtualization (vmware or xen) software, web-based languages and MySQL is essential. Working knowledge of open-source batch (condor, sge, pbs, etc) software is desirable. The ability to work autonomously on a daily basis in a collaborative environment with time-sensitive deadlines is essential. Responsibilities include managing the Condor-based batch system, assisting with the operational responsibilities in the RACF Linux Farm, taking a leading role in monitoring Linux Farm performance and throughput, participating in the evaluation of new technologies, and contributing to the general support services in the facility. This position will support the computing needs of the RHIC and USATLAS physics programs. Physics Department. Apply to Job ID #15267.

TECHNOLOGY ENGINEER/LINUX SYSTEMS ADMINISTRATOR (I-6) – Requires a bachelor's degree with a minimum of three years of relevant experience, preferably in computer science or related discipline. Must have prior experience with Linux-based clusters and kernel-level knowledge of RedHat Linux operating systems. Working knowledge of shell scripting, Perl/Python scripting, familiarity with the I/O characteristics of Linux-based systems, virtualization (vmware or xen) software, web-based languages and MySQL is essential. The ability to work autonomously on a daily basis in a collaborative environment with time-sensitive deadlines is essential. This position requires physically demanding work occasionally, and the applicant must demonstrate the ability and willingness to perform these tasks. Responsibilities include assisting with the operational responsibilities in the RACF Linux Farm, addressing user community requests, carrying out hardware/software installation & upgrades, taking a leading role in the evaluation of new technologies for the Linux Farm and contributing to infrastructure support services in the facility. This position will support the computing needs of the RHIC and USATLAS physics programs. Physics Department. Apply to Job ID #15268.

SECURITY POLICE OFFICER – Education/experience requirements: AAS in criminal justice plus relevant working experience, or several years' police or security experience, or military security background. Medical/physical requirements: Pass a physical examination (including drug/alcohol screening) and a psychological examination; must run one 1/2 mile in 4.40 minutes and run 40 yards prone-to-running dash in 8 seconds. (This standard must be completed successfully on an annual basis.) Security clearance requirements: Must undergo and receive a favorable disposition in a preliminary background investigation (criminal, credit, prior employment, etc.); must be able to obtain a Q-level security clearance which requires that you: be a US citizen; have no felony convictions or other serious offenses; have an honorable discharge from military, if served (must provide DD-214). Other requirements: must have valid driver's license and good driving record; qualify with a handgun and sub-machine gun during training; pass an annual physical examination; successfully complete the Security Police Officer training program (out of state travel may be required); may be required to train during non-standard working hours and work varying shifts; must become a member of the Suffolk County Security Police Association; subject to random drug screening. Security Police Officers staff Brookhaven National Laboratory 24 hours per day and 7 days per week. Be prepared to work weekends and holidays. Laboratory Protection Division. Apply to Job ID #15286.

Motor Vehicle & Supplies

05 HARLEY DAVIDSON SUPER GLIDE CUSTOM – 7.8K mi. black extra chrome, plus many options. \$8,000. 516-810-1406.

03 FORD F 250 – Super Duty – 59K mi. Clean truck 5.4, pwr wdws, lcks, spryd liner, fliding bd cvr, a/t start. \$14,000 neg. 804-7501.

94 BUICK PARK AVENUE – 106K mi. vg. cond. Always garaged. Lots of new parts, brakes, tires etc. \$2,150 neg. 929-0668.

91 HYUNDAI EXCEL – 150K mi. a/t red, clean, runs well. \$1,350 neg. 979-7043.

CONE AIR FILTER – high flow w/metal air intake tube can be adapted to fit most vehicles, \$50. 979-7043.

89 VOLVO 240DL WAGON – for parts or repair, gd tires, spare 'O2 sensor & fuel pump, Thule rf rock, make offer. 929-6189.

Marine Supplies

ANCHOR – 16 lb Fluke Stylem, email for pic, ask/\$15. Bob, magnum@optonline.net.

Furnishings & Appliances

ABSTRACT PRINT – professionally framed, 46 x 12" w x 34.5" h, peach frame, white mat, like new, \$35. Joe, 281-4459.

AIR CONDITIONERS – 2, window, White-W'house, 6000 Btu/hr & 8000 Btu/hr, perf. mechan; torn side curtain, \$50/ea. 513-6074.

APPLIANCES – kit refrig/\$100; natural gas oven/stove/\$75/both in gd working cond. Don, Ext. 2253, 821-3320.

BOOKCASES – white laminated 72"L x 28"W x 11-1/2"D, \$30; 29"L x 28"W x 12"D, \$25. Doris, 979-7043.

CHAIRS – 8 captains chairs for d/r table, \$120. David, Ext. 5460 or kirby@bnl.gov.

CHILD/TEEN BUNK+DESK BED – wood, desk pull out bed, \$500, pix avail. Ron, 379-0742 or rrje4019@msn.com.

CHILDREN'S FURNITURE, WOOD – bunk bed frames/\$10; desk/\$20; 2 IKEA end table/cabinets/10/ea, pics avail. 821-3320.

DINING ROOM TABLE – 68X42 plus 2/12" leaves, Tttal 92" Mediterr. w/formica top \$150. David, Ext. 5460 or kirby@bnl.gov.

KITCHEN TABLE W CHAIRS – 42" round plus 12" leaf, maple top, black iron legs, 4 mtchg swivel chairs, \$125. Ext. 5460.

LEATHER SECTIONAL – tan leather, excel cond, incl recliner, ask/\$350. 848-1022.

REFRIGERATOR – GE, s-by-s, SS, 22 cu ft, 67x34x32, ice&water disp, \$200/obo u-pic-up. Ext. 2225 or tsang@bnl.gov.

SINGER VACUUM – small upright, v/light, also is a portable vacuum when separated from upright/\$15. 281-4459.

TWIN MATTRESS & PLATFORM – Hand-made platform, white. Gd cond. \$50obo. Pick-up 2 mi away, or from Lab. Ext. 5753.

WALL CLOCK – Quartz Heirloom, oval, light oak trim, gold numbers, 10.5" W, 12" H, like new \$15. 281-4459.

WINE COOLER/REFRIGERATOR – Haier 42 bottle, 40"x24"x22", thmostt, lock/key, glass dr, pics, ask/\$200. pizzulli@bnl.gov.

Audio, Video & Computers

AMPLIFIER – MTX 280 watts W/MTX box, 2/10" woofers one not working, 2/tweeters \$50. Doris, 979-7043.

COMPUTER – Dell Optiplex GX260, Intel Pentium 4 at 2.4 GHz, 40 Gb HD, CD/DVD dr, Windows, more. \$75. Peter, Ext. 2913.

MACINTOSH 6400 COMPUTER – incl AVID Cinema video edit hardware/software, 40 GB HD, much more, \$250. 821-3320.

NORTON 360 V3.0 – for 3pc, CD only, no box, License code gd for 1-yr subscription, \$25. Ext. 3485.

PHOTO & NEGATIVE SCANNING – 35mm slides, photos, negatives converted to DVD. Music slideshows avail, Pt Jeff. 928-6469.

Sports, Hobbies & Pets

BMI WEIGHT MACHINE – home gym, gd cond, \$150, pics avail. Ext. 5658, 610-2285.

GUITAR AMP: 100W TUBE – Peavey half stack, 100W head w/EL34s, 4-12" bottom, like new. Mark, Ext. 2599.

FIGURE SKATES – Ladies' w/blades, 2yr old, Riedell sz 2-1/2 w/John Wilson Majestic MRZAL blades, guards, \$80/obo. Ext. 2225.

LITTLE TYKES HOUSE \$25, – kids bike seat for adult bike \$10, carry baby swing \$10, hiking backpack for toddler \$20. 258-4607.

WETSUIT SET – Men's sz med, 7mil, not used in salt water, w/ 2-pc suit, mask, boots, fins, pic avail, \$125. moloughlin@bnl.gov.

WOODEN SWING SET – slide, swing, rings, and trapeze. pics avail, you move, \$100. Donna, Ext. 2716, 878-2425.

Tools, House & Garden

MACHINE TOOLS – Logan 10" lathe, 20" MSC Vert. Miller, Atlas Horiz. Miller, Benchmaster VertMiller. Mark, Ext. 2599.

TROY BUILT ROTOTILLER – older, Pony Model Carberator needs cleaning, needs tire tubes. \$125, call eves. 886-1591.

WAGNER POWER PAINTER – Paint Crew type paint sprayer. Used once in 04 to paint a garage. \$50. Keith, Ext. 3514.

Car Pool

PLAINVIEW – established 3-person car pool meeting in Plainview looking for 4th person, 8-4:30. Ron, Ext. 6068.

Community Involvement

CLOVIS POINT VINEYARD – Fri., 4/30, 5:30-7:30 pm - to benefit Leukemia & Lymphoma Society: light fare, \$25pp. Email or call for flyer. Lisa, 807-8334 or Lazzato@optonline.net.

Miscellaneous

BRASS CANDLESTICKS – size adjustable, Indian Motif 35-1/2"h, \$25/ea. Doris, 979-7043.

COLEMAN – PowerChill Hot/Cold Thermoelectric Cooler/\$50. Donna, Ext. 2716, 878-2425 or storan@bnl.gov.

DUVET COVERS – twin, 1/ea navy/med blue/red, \$10/ea. 878-2425.

LENEX VASE – 6" L, \$15. 979-7043.

MINK COAT – full length, size M/8-10, excel cond, ask/\$450. Linda, Ext. 7187, 516-607-3549 or niksa@bnl.gov.

PORTABLE GARAGE – 14'wx14'hx 26'L hse, heavy industrial grade, assembled once, 10 oz canvas, p/\$2500, ask \$1750. 655-4924.

SWIMMING POOL – 3 yrs old, excel cond, 21' round, 4.5'h, You take down, filter, ladder, extras, ask/\$900. Ext. 5169.

Happenings

DINNER/SHOW OUTING – Sat, 10/16, "Joseph," Sight & Sound Theatre, PA. Dinner at Good n Plenty, \$115pp. Discounts for teen, child. \$60 dep due by May 7. Kim, 399-3098 or khayes@bnl.gov.

'Spider' John Koerner Plays BNL, 4/16

Legendary folk musician "Spider" John Koerner will perform on Friday, April 16, at 8 p.m. at the Brookhaven Center. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab 16 and older must bring a photo I.D.

Koerner began playing folk music in 1958 with a borrowed guitar and a Burl Ives songbook. Over the past 50 years, he has performed as a solo artist, and, with a variety of legendary partners, including Dave Ray, Tony Glover, and Bob Dylan. Koerner has been credited with shaping the path of American country blues and folk music.

Carrying a wide array of songs in his portfolio, Koerner began recording music in the 1960s. In 2001, his recording, "A Nod to Bob" was released in tribute to Dylan for his 60th birthday.

In 2008, the Boston Globe acknowledged Koerner with a review that described him as "defying his years with a ramshackle demeanor (all gangly arms and legs and tucked-in flannel shirt) and the true essence of hootenanny — spirited, communal, and completely off the cuff."

Koerner has a passion for astronomy and has reconstructed telescopes in Arizona, Minnesota, New England, Mexico, and Zimbabwe. Also, when he isn't busy playing guitar, he spends his free time boat building. He resides in Minneapolis, Minnesota.

Guitar and Harmonica Workshop, Saturday, 4/17

In addition, on Saturday, April 17, at noon, at the Lab, Koerner will offer a 12-string guitar and harmonica workshop. The cost is \$35 person and is limited to ten participants. Tickets for the concert are \$15 in advance and \$20 the day of the show. Buy tickets at the BERA Store or at <http://www.ticketweb.com>. — Jane Koropsak



GREASE WITH A TWIST! – Springs Community Theater presents GREASE with a twist, April 9,10,16,17 @8pm and 11,18 @2pm. John Drew Theater @ Guild Hall, EHampton, Info avail @ Theatermania.com. Glenn, 344-7477.

JANE SETLOW REMEMBRANCE – Sunday, April 25, Sea Basin Restaurant, Rocky Point. For details contact Biology Admin Office. Kathy, Ext. 3415, folkers@bnl.gov.

YVETTE, BOB & BRIAN PERFORM – Yvette Malavet-Blum will sing a concert at Connequote Library, Bohemia, Sun 4/11, 2 pm, Free, open to public, Title: "Time Together w/Time to Spare". Yvette, Ext. 5591 or malavet@bnl.gov.

Farewell Gathering

ALLEN GOLAND – Friends will gather on Sat., May 1, 2 p.m., for arranged and impromptu talks at a Memorial event for Allen Goland. Snyder Seminar Rm, Bldg. 911. All welcome, no reply needed. goland@us.ibm.com.

Free

FREE MULCH – wood chips u pic up. Roger, Ext. 4084 or rdavis@bnl.gov.

TOY JEEP – Children Elect. Jeep, yellow-red-black color, size 48x32x36", needs new battery, u-pic-up. Thomas, Ext. 2225.

Yard & Garage Sales

TEMPLE BETH EMERTH BARN SALE – Sun 4/13, 10a-3p, 52 Mount Sinai Ave, Mt. Sinai, NY, clothes \$5/bag, games, books, toys, sm appli, kit, more. 744-8632.

Wanted

DONATIONS OF DOG/CAT FOOD – For pets of struggling families/elderly. Donations to be given to local food pantries. If you can also help w/collecting call. Kathleen, Ext. 3161 or kratto@bnl.gov.

KAYAK TRAILER – looking for sm trailer to carry 1-2 kayaks that connect to auto trailer hitch. Sue, Ext. 4931, 775-8160.

NEW/GENTLY USED CLOTHES – Spring/summer clothes, all sizes, children's books, toys to be donated to 76 families living in a shelter. Laura X4027, lbucse-mi@bnl.gov and Kathleen, Ext. 3161 or kratto@bnl.gov.

TRAINING WHEELS FOR BIKE – needed for a sm boys' bike, please email. Dorothy, Ext. 2585 or dorothyd@bnl.gov.

TREE STUMP REMOVAL – Need help in removing a tree stump in front yard. Thanks. Sabine, Ext. 4340, 433-2902.

For Rent

KISSIMMEE, FL – Timeshare avail, June – Dec 2010, 2-bdrm unit, sleeps 8, in Orlando, 15 mins to Disney World, www.calypsocay.com for pics. \$1,050/wk. Ext. 5894.

BELLPORT – 1 bdrm, 1 bath apt, heat/hot water incl, 1st/last month rent plus sec. Refs req. Nr. beach, shops. \$1,075/mo. Sarah, 521-5301 or sarsie75@hotmail.com.

CALVERTON – 1 bdrm bsmt apt, sep ent. 10 mins to Lab. \$800/mo. 516-903-4783.

FARMINGVILLE – furn bdrm in lg house, share bath, kit, l/r, d/r, incl cable, wifi, phone, elec. \$450. Ben, 513-8275 or benonium@gmail.com.

HUNTINGTON STATION – 4 bdrm. Duplex: l/r + fpl., d/r, eik, 2 fl bath. 2 flrs, fl bsmt., 2 car gar. Pets ok. Refs+credit check. Heat incl., +utils. 2 mo sec. \$2,500/mo. 258-5089.

MASTIC – 1 bdrm, eik, full bath, den, own ent/ drway, 1 mo sec, no smkg/pets, 10 min to Lab, all incl. \$850/mo. joe mondi, Ext. 3499, 219-7241.

MILLER PLACE – Share lg furn col. house in prof resid area 8 mi to BNL, fenced backyd/ grill, full kit, own bdrm, int/tv/ac/heat incl, responsible non-smkr. \$700/mo. 744-8386.

PATCHOGUE – studio apt, waterfront, great location, boat slip avail, incl heat/ elect sec deposit required, no pets. \$975/mo. 447-1234.

RIDGE – new apt, 1 bdrm, lr, kitchenette, BR w/walk-in closet & full bath. Priv entr. No smkg/pets. Refs needed. \$950 all. 1 mo sec. Avail 5/1. \$950/mo. 924-0027.

SHOREHAM – studio apt, furn or unfurn, clean, newly painted, eik, walk/n/closet, new bath, all util/cable incl, no smkg, plus sec. \$875/mo. 849-2593.

SOUND BEACH – immac grnd lvl studio in legal 2 fam, full kit, full bath w/tub, sep ent & therm., new carpet/paint, no smkg/ pet, suit. for 1. \$800/mo. 516-650-3852.

For Sale

FLANDERS, PECONIC BAY – Waterfront, deepwtr dock, bulk heading, dded beach rts, new renov, cath ceilg, 3 bdrm, jazzi, heatw/ac, dec, \$499,000. Dejan, Ext. 3078.

MIDDLE ISLAND – Brick Cape, 4 bdrm, 2 new bath, l/r w/f/p, oak flrs, eik, d/r, full bsmt, new roof, windows, elect, deck, h'cap access, half acre, \$275,000. 516-448-3793.

RIDGE – 1 mi to BNL, price reduced to sell. 3 bdrm, 2 full bath, 7 rm ranch with 3 skylights, full bsmt, lg deck, 0.71 acres. \$329,000. Sophie, 917-294-6629.

ST. JAMES – Condo, Fairfield, 55+ gated comm, 2 br. 2 full bath, nr Lake Grove Shopping Ctr, gar, clubhouse, tennis courts, pool. \$300,000 neg. 281-4459.

In Appreciation

Thank you to all my friends & co-workers for your kind expressions of sympathy on the loss of my mother-in-law. Our family sincerely appreciates your thoughts, prayers, & efforts.

— Deborah Doyle