

## Using Plants To Help the Environment *Northeast Phytotechnology Research Consortium Proposed*

On April 16, three scientists from the Biology Department: Daniel (Niels) van der Lelie, Safiyh Taghavi, and Lee Newman, met at BNL with Guy Lanza of the University of Massachusetts, Charles (Mike) Reynolds of the Army Cold Regions Research & Engineering Laboratory, and Jason White of the Connecticut Agricultural Research Station to start the Northeast Phytotechnology Research Consortium.

Phytotechnology is defined by the group as using plant-based technologies to deal with environmental issues. This includes phytoremediation, or cleaning environmental pollutants using plants, carbon sequestration, biomass for biofuel production, and plants for environmental risk assessment.

Now, van der Lelie and Taghavi, who have extensive experience in plant/microbe interactions, and Newman, a

leader in phytoremediation who additionally is Co-Editor-in-Chief of the *International Journal of Phytoremediation*, met with Lanza, Reynolds, and White, all experts in different areas of phytotechnologies. The group hopes to harness their particular expertise to address issues such as understanding how plants can address environmental challenges or adapt to changing environmental conditions. This knowledge can

be exploited to improve environmental restoration, carbon sequestration, sustainable production of biofuel feedstocks on marginal soils, or to understand the fate of nanomaterials in the environment.

Said van der Lelie, "Plants can fulfill a central role to address many of DOE's mission needs in energy production and environmental stewardship." — Liz Seubert (See also related story below.)



In a Biology Department greenhouse are: (from left) Jason White, Connecticut Agricultural Research Station; Charles (Mike) Reynolds, Army Cold Regions Research & Engineering Laboratory; Daniel (Niels) van der Lelie, Safiyh Taghavi, Sebastien Monchy, and Lee Newman, all of BNL; and Guy Lanza, University of Massachusetts.

Roger Stoutenburgh D3780409

## Senator Gillibrand Visits Brookhaven



Roger Stoutenburgh D3040409

U.S. Senator for New York Kirsten Gillibrand paid a first-time visit to Brookhaven Lab on April 17. At the Center for Functional Nanomaterials (CFN), Senator Gillibrand learned about various projects related to energy and got a close-up look at sophisticated instruments used in the development and understanding of nanoscale materials, including a tool (pictured above) to analyze the surfaces of catalysts. In the photo above, accompanying the Senator were: (from left) CFN Director Emilio Mendez, Associate Laboratory Director for Basic Energy Sciences Jim Misewich, and Brookhaven Town Supervisor Mark Lesko. While on site, the senator also toured the National Synchrotron Light Source and the Relativistic Heavy Ion Collider. In the photo below, Gillibrand, accompanied by Lab Director Sam Aronson (second from left) and U.S. Representative Tim Bishop (right), is interviewed by Drew Scott (left) of News12 Long Island.



Roger Stoutenburgh D3540409

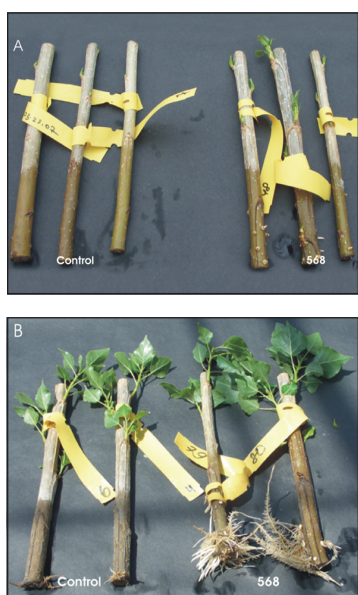
## Scientists Identify Bacteria That Increase Plant Growth *Findings have implications for increasing biomass for the production of biofuels*

Through work originally designed to remove contaminants from soil, scientists at BNL and their Belgium colleagues at Hasselt University have identified plant-associated microbes that can improve plant growth on marginal land. The findings, published in the February 1, 2009, issue of *Applied and Environmental Microbiology*, may help scientists design strategies for sustainable biofuel production that do not use food crops or agricultural land.

This study was funded by the Office of Biological & Environmental Research within DOE's Office of Science, by BNL's Laboratory Directed Research & Development Fund, and by the Flanders Science Foundation and the Institute for the Promotion of Innovation by Science and Technology in Flanders, both in Belgium.

"Biofuels are receiving increased attention as one strategy for addressing the dwindling supplies, high costs, and environmental consequences of fossil fuels," said lead author Daniel (Niels) van der Lelie of the Biology Department, who leads the Lab's biofuels research program. "But competition with agricultural resources is an important socioeconomic concern."

Ethanol produced by fermenting corn, for example, di-



Poplar plants 1 (A) and 10 (B) weeks after being treated with endophytic bacteria (strain *S. proteamaculans* 568) compared with control plants. The inoculated plants show increased root and shoot formation, particularly after 10 weeks.

verts an important food source — and the land it is grown on — for fuel production. A better approach would be to use non-food plants, ideally ones grown on non-agricultural land, for biofuel production.

Van der Lelie's team has experience with plants growing on extremely marginal soil — soil contaminated with heavy

See *Plant Growth* on pg. 2

## BNL Receives Small Business Administration Award

BNL has been selected to receive the Small Business Administration's Dwight D. Eisenhower Award of Excellence — Research and Development Category. The award recognizes large prime contractors that have excelled in using small businesses as suppliers and subcontractors. The Lab will receive the award during a celebration of National Small Business Week, to be held in Washington, DC, May 17-19.

"I am gratified that the Small Business Administration has recognized the Laboratory with this award," said Jill Clough-Johnston, BNL's Small Business Liaison Officer. "Small businesses represent more than 99 percent of all employers and provide up to 80 percent of net new jobs. BNL's Office of Procurement & Property Management actively pursues relationships with small businesses to provide them with subcontracting opportunities at the Lab."

Specifically, BNL's Small Business Program connects procurement specialists at the Lab with small businesses that offer high-quality goods or services on time and at a fair and reasonable price. The program strives to enhance the small business community by supporting recognized superior performers and offering guidance and support to help grow the small businesses that meet the Lab's needs.

In fiscal year 2008, BNL's ap-



Jill Clough-Johnston

Roger Stoutenburgh D2710403

proximately \$530 million budget included over \$175 million for procurement of supplies and services. The Lab purchased architectural and engineering services, computers and computer maintenance, construction and construction materials, office supplies, pharmaceuticals and biological agents, electronic equipment, recreational equipment, research and development services, safety equipment, transportation, testing

services, and training services.

During the last five years, BNL has exceeded the subcontract procurement goals set by DOE for most categories of small businesses. For example, in fiscal year 2008:

- 60.09 percent of the Lab's subcontracts were made with small businesses, exceeding the goal of 46.4 percent
- 9.28 percent of subcontracts went to small disadvantaged businesses, exceeding the goal of 6.3 percent
- 14.4 percent of subcontracts were given to women-owned businesses, well over the goal of 5.8 percent
- 4.63 percent of subcontracts were negotiated with historically underutilized businesses, well over the goal of 3 percent.

Outreach strategies are currently employed to increase subcontracts with veteran-owned, and service-disabled veteran-owned businesses.

— Diane Greenberg

## Small-Business Showcase, 4/28

*Featuring Service-Disabled, Veteran-Owned Small Businesses that provide goods, services to the Battelle Family of Labs*

All are invited to attend a one-day showcase for Service-Disabled, Veteran-Owned Businesses (SDVOB) on Tuesday, April 28, in Berkner Hall, 9-10:50 a.m., and in the Brookhaven Center, 11 a.m.-3 p.m. BSA and BNL are hosting this one-day event to thank and showcase the proven and reliable SDVOB suppliers currently providing goods and services to the Battelle Family of Labs. Potential users of goods and services at BNL are particularly requested to meet with these suppliers, who may be able to provide for future requirements at BNL.



### Meditation, Talk: ‘Achieving Peace’ Today, 4/24

Today, Friday, April 24, Dayamrita Chaitanya, a disciple of Mata Amritanandamayi, or Amma, will give a talk on “How We Can Achieve Peace” and lead a group meditation, 5-6:15 p.m. in the Recreation Hall. The talk will be preceded at 4 p.m. by an informal social gathering with refreshments, and followed, 6:30-7:30 p.m., by meditation, prayers, and chants for peace. Sponsored by BERA, the Asian Pacific American Association, and the Indo American Association Yoga Club, the event is free and open to the public. Visitors to the Lab age 16 and older must bring a photo ID.

Amma is widely regarded as one of the world’s foremost humanitarian leaders. Dedicated to alleviating suffering through personal outreach, she has won international recognition and awards, including the 2002 United Nations Gandhi-King Award for Non-Violence. She now helps those in need through a network of charitable organizations.

Dayamrita is one of Amma’s senior disciples who has helped spread her teachings of love and compassion for 25 years. For the past 15 years, he has been manager of Amma’s activities in the U.S., Canada, and Latin America.

For more information, see: [www.ammany.org/events/dayamrita-090219.php](http://www.ammany.org/events/dayamrita-090219.php).

### BSA Noon Recital, 5/6 Flute, Piano, Clarinet

Performing at the BSA Noon Recital on Wednesday, May 6, in Berkner Hall, will be ETA3, a classical trio comprising flutist Emily Thomas, pianist Tomoko Nakayama, and clarinetist Alexey Gorokholinsky. ETA3, which was formed at The Juilliard School during spring 2006, is named after a luminous and spectacular star-forming Nebula in our galaxy and also initializes the first letter of each musician’s first name. The Trio was recognized by Juilliard as one of three prominent emerging chamber music groups of 2006, leading to their Alice Tully Hall debut.

Sponsored by BSA, the managers of BNL, noon recitals are free and open to the public. Visitors to the Lab of 16 and over must carry a photo ID.

### Arrivals & Departures

- Arrivals —
- Andrew Fox....Maintenance & Fab  
Stephen Kowalski.....NSLS-II  
Cathleen Ostrick...Director's Office  
John Plante.....Business Systems  
Erika Reyes.....Director's Office  
Guimei Wang .....NSLS-II
- Departures —
- Ravindra Bhide...Energy Sci & Tech  
Mary Heinrich .....ITD  
Konstantine Kaznatcheev ...NSLS-II  
Rosalie Lawrence .....Fiscal  
Pamela Mansfield .....ITD

## Center Moriches Students Take Top Honors at BNL’s Maglev Contest

Center Moriches Middle School students were the champions of the annual Maglev Contest held on April 1 at BNL, earning six out of a total of 21 prizes. Longwood Junior High students were the second-place winners with three prizes.

BNL scientists Gordon Danby and James Powell, now retired, invented Maglev — the suspension, guidance and propulsion of vehicles by magnetic forces — and patented it in 1986. As honored guests at the contest, Danby and Powell were happy to be in the midst of the students’ enthusiasm.

“I envy you because you are at the beginning of this transport system,” Powell said. “Our goal is to have a transcontinental railroad in May 2019. Twenty years from now, you’ll even be able to travel in space

for just a few thousand dollars, since Maglev allows people and things to be launched cheaply into space.”

One hundred eighty students from 12 Long Island middle schools entered the contest, in which they were required to design and construct model Maglev vehicles according to engineering specifications within their choice of six categories: electrified track, wind power, gravity, self-propelled, futuristic, and scale-model design. Judging was based on speed, efficiency, the appearance of the vehicles, and the students’ written design process.

Albert G. Prodel Middle School, East Northport Middle School, Northport Middle School, Great Neck South Middle School and Mineola Middle



Roger Stoutenburgh D1460405

Center Moriches students captured all three places in the “Self-Propelled, Balloon” category. Standing are: (from left) Maria Dikeakos, DOE On-Site Office, Nick Tyson (3rd place), Ariana Monaco (1st place), Annie Munroig (2nd place), and Bernadette Uzzi, BNL, the contest coordinator. Seated are Maglev inventors James Powell and Gordon Danby, retired BNL scientists.

School each won two prizes. Alfred G. Berner Middle School and Robert Moses Middle School each won one prize. All winning students received trophies. — Satya Shanmugham



With their teacher Richard Yngstrom are 2009 Model Bridge Building Contest top three winners (from left) Kevin Henderson, Cathy Chan and Dominick Raimondi.

## Patchogue-Medford Students Sweep BNL’s Bridge Contest

Patchogue-Medford High School students won the top three spots in BNL’s 2009 Model Bridge Building Contest. Over 70 high school students from eight Suffolk County schools entered the competition, for which they designed and built model basswood bridges with the goal of making the lightest bridge that held the most weight.

Cathy Chan took first place with a bridge that weighed 24.86 grams and held 97.5 pounds, 1,778.96 times its own weight. Chan also won the aesthetic prize for designing the most attractive bridge.

Dominick Raimondi placed second with a bridge that weighed 29.19 grams and held 111.6 pounds, 1,734.18 times its weight. Third-place honors went to Kevin Henderson, whose bridge weighed 19.82 grams and held 72.21 pounds, 1,652.56 times its weight.

BNL’s Office of Educational Programs coordinated the Model Bridge Building Contest. The first- and second-place winners are eligible to enter the 2009 International Bridge Building Contest, which will be held in Bellingham, Washington on April 25.

— Diane Greenberg



Eric Forsyth aboard his yacht, Fiona

### Earth Week Talk by Forsyth, Today, 4/24 ‘Challenges Facing Renewable Energy’

At noon today, as part of the Lab’s Earth Week celebrations, retired BNL engineer Eric Forsyth will talk on “The Challenges Facing Renewable Energy — Retooling America to Eliminate the Use of Fossil Fuel.” All the Lab community is welcome to attend this free talk, to be held in Berkner Hall.

Forsyth takes the view that replacing the fossil-fuel economy of the US with alternative energy sources will be the largest engineering undertaking ever attempted, with a seismic shift needed in the way energy is generated and used. He will explain that the conversion will take many decades and will propose the essential need for a timeline for the introduction of alternatives as fossil-fuel resources dwindle.

### 40th National Training Program BNL 2009 Seeks FEW Conference Participants

The national organization of Federally Employed Women (FEW) will sponsor the annual National Training Program (NTP) the week of July 20 – July 24 in Orlando, FL.

The FEW NTP offers workshops covering subjects in areas such as: career management, technology and technical skills, personnel, equal opportunity and diversity issues, and work, family and health issues. These high-quality workshops are well run and relatively inexpensive when compared to other training courses. This training program is very popular with women who have attended because of the quality of the classes.

Requests to attend the program should be directed to departmental managers/supervisors. All managers and supervisors are encouraged to rotate this professional development opportunity as widely as possible within their departments, division or work groups. This year’s FEW coordinator is Susan Wong of the Information Technology Division, who is available to answer any questions pertaining to the FEW conference, Ext. 7988 or [sge@bnl.gov](mailto:sge@bnl.gov).

**Plant Growth** from pg. 1  
metals and other industrial chemicals. In prior research, his group has incorporated the molecular “machinery” used by bacteria that degrade such contaminants into microbes that normally colonize poplar trees, and used the trees to clean up the soil. An added benefit, the scientists observed, was that the microbe-supplemented trees grew faster — even when no contaminants were present.

“This work led to our current search for bacteria and the metabolic pathways within them that increase biomass and carbon sequestration in poplar trees growing on marginal soils, with the goal of further improving poplar for biofuel production on non-agricultural lands,” said first author Safiyh Taghavi.

#### Current Study

In the current study, the scientists isolated bacteria normally resident in poplar and willow roots, which are known as endophytic bacteria, and tested selected strains’ abilities to increase poplar growth in a controlled greenhouse environment.

The scientists identified 78 bacterial endophytes from poplar and willow. In particular, poplar cuttings inoculated with *Enterobacter*

*bacter sp.* 638 and *Burkholderia cepacia* BU72 repeatedly showed the highest increase in biomass production — up to 80 percent — as compared with non-inoculated control plants. Also, plant cuttings that were allowed to root in the presence of selected endophytes grew roots and shoots more quickly.

The analysis of genes and metabolically important gene products from endophytes resulted in the identification of many possible mechanisms that could help these microbes thrive within a plant environment, and potentially affect the growth and development of their plant host. These include the production of plant-growth-promoting hormones by the endophytic bacteria that stimulate the growth of poplar on marginal soils.

The scientists plan to conduct additional studies to further elucidate these mechanisms. “These mechanisms are of prime importance for the use of plants as feedstocks for biofuels and for carbon sequestration through biomass production,” van der Lelie said.

For more detail on this research, including a videotaped interview with van der Lelie, see [http://www.bnl.gov/bnlweb/pubaf/pr/PR\\_display.asp?prID=874](http://www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=874).

— Karen McNulty Walsh

### LIANS Dinner Meeting, 5/5

At the next dinner meeting of the Long Island Chapter of the American Nuclear Society (LIANS), on Tuesday, May 5, the invited speaker will be Edward Sierra of BNL’s Quality Management Office, who will talk on “Nuclear Renaissance: Training and Education.” Sierra, who attended the February ANS Conference on Nuclear Training and Education in Jacksonville, Florida, will present topics covered at the conference. The LIANS meeting will be held at South Shore Restaurant, 388 Medford Ave., Patchogue, (631) 475-7926. Complimentary appetizers/cash bar will start at 6 p.m., dinner at 7 p.m., and Sierra’s talk at 8 p.m. The cost is \$25/person. To reserve, leave a message with Arnie Aronson, Ext. 2606, by Monday, May 4.





Many BNL owners of hybrid vehicles gathered last Thursday, April 16, to prepare for the Lab's Earth Week celebrations.

# Would You Drive a Hybrid?

It was Ivan So's conscience that led to him to a Toyota Camry hybrid-electric car in 2007, when gas prices averaged more than \$3 per gallon in New York State. "I felt guilty about driving my SUV, so I bought a hybrid," said So, who works at the National Synchrotron Light Source.

The high cost of fuel and awareness of greenhouse-gas emissions have convinced more than 30 BNLers to start driving hybrid vehicles. Those BNLers brought in their cars recently for the above photograph, part of the Lab's Earth Day recognition of hybrid drivers. Some of the vehicles will be on display at lunchtime today, April 24, in Berkner Hall parking lot.

"My husband and I got our

first [Toyota] Prius in 2000," Director's Office staff specialist DJ Greco said. "We did it for the environment. We didn't care about the cost of gas because it was still cheap then."

With more hybrid models on the market each year, environmentally and cost-conscious drivers have more vehicles to choose from. Jeff Williams, the BNL Employee Transportation Coordinator, said the Lab will continue to add more hybrid vehicles to its fleet, including "plug-ins."

"This isn't just a phase," Williams said. "There is a better cost-benefit relationship to driving a hybrid with vehicle prices coming down."

Even with the recently re-



BNL's Sam Aronson (right) and Peter Bond with their hybrid vehicles

ported concerns about safety in smaller vehicles, drivers say they feel safe in their hybrids.

"The SUV is better for the rain and snow, feels more sturdy, and has more metal, but I still feel safe in my Camry," So said. "It is a lot quieter than the SUV, and it makes no sound when I'm stopped because it's running on battery power. It feels very different."

But Greco warned that a quiet car is not always a good thing.

"You have to be careful in parking lots," she said. "It's so quiet that people don't know you're coming, especially little kids. And you don't want to beep your horn, you know?"

— Satya Shanmugham

# Meet Glen Meyerowitz... Before He Sets Off for Two National Science Fairs

Homework, picking-a-college, finals, graduation, volunteer work, detecting high-energy cosmic rays — senioritis hasn't gotten the best of Glen Meyerowitz of Northport High School and a former Simons Summer Research Fellow at Stony Brook University (SBU). Now, Meyerowitz, who is also a student researcher at BNL, is preparing to present his award-winning research on high-energy cosmic rays at two prestigious science fairs: the Junior Science & Humanities Symposium (JSHS) and the Intel International Science and Engineering Fair (ISEF).

After winning first place at the Long Island JSHS on March 14, Meyerowitz was among 250 high school students invited to present his research at the National JSHS in Colorado Springs, Colorado, April 29-May 3. Then, because he won the Physics and Engineering category at Long Island Science and Engineering Fair (LISEF) on March 23, he will join 1,500 high school students representing 50 countries for ISEF in Reno, Nevada, May 10-May 15.

"It's a lot of fun to present my work," said Meyerowitz. "People ask questions and that drives me to learn more myself." Meyerowitz has already had some presentation practice when he was named a semi-finalist in the 2009 Intel Science Talent Search Competition.

Little is known about the high-energy cosmic rays that Meyerowitz first began hunting in December of 2007 with his mentor, BNL physicist Helio Takai. It is likely that the high-en-



Glen Meyerowitz (right) with his mentor, Brookhaven physicist Helio Takai

ergy particles originate in places such as black holes, but it is unclear how they are produced and then accelerated. Just one of these rare cosmic particles is estimated to reach each square kilometer on Earth per century.

To detect these particles, Meyerowitz sifts through quantities of data collected by a radar antenna in the courtyard of the Physics building. The antenna is part of the Mixed Apparatus for Radar Investigation of Atmospheric Cosmic-rays of High Ionization (MARIACHI) Project, a collaboration between BNL, SBU, and ten Long Island high schools.

Meyerowitz filters through the MARIACHI data using a laptop computer to connect to a server, which allows him to work anywhere there is Internet access, in-

cluding his bed. He writes his own computer programs to identify cosmic rays within the data using languages learned in school, such as C++ and Java, and R, a statistical computing language that he taught himself. Meyerowitz also uses the same laptop to connect with other budding high school scientists and researchers through the LISEF group on Facebook.

"Glen remains very focused on what he is doing and carries out his work with great care and attention to detail," commented Takai. "Although his future is hard to predict, he is a student with an enormous potential and will do well in any area, particularly in science and technology."

However Meyerowitz finishes next month at JSHS and ISEF, BNLers will be rooting for him.

— Joe Gettler

## BERA IAA Invitation: Celebrate Holi, 4/26

The BERA Indo American Association invites all to celebrate the Holi/Spring festival 2009, to be held this Sunday, April 26, 3-5 p.m. at Berkner Hall. The colorful Holi festivities weave dances, skits, and instrumental music into a display of rich culture. Find more information and register for this free event by today, April 17, at <http://www.bnl.gov/bera/activities/iaa/holi2009> or contact Piyush Joshi, [joshi@bnl.gov](mailto:joshi@bnl.gov), Ext. 3847.

## Defensive Driving Course In Two Parts, 4/27 & 30

A six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on Monday and Thursday: April 27 and 30, in the Brookhaven Center South Room, 6-9:15 p.m. The course is open to BNL, BSA, and DOE employees, facility-users, and their families, at \$38 per person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message with your phone number. For more information, call Sarah Wiley, Ext. 4207.

## TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Tuesday, May 5, Thursday, May 21, and Friday, May 22 to answer employees' questions about understanding the importance of protecting your assets against inflation, finding the right allocation mix, learning about TIAA-CREF retirement income flexibility, and comparing lifetime income vs. cash withdrawal options. For an appointment, call 1-800-732-8353.

## BERA's APAA Helps Celebrate APA Heritage Month at SBU, 5/9

BERA's Asian Pacific American Association is a sponsor of the "Asian Pacific American Heritage Month" celebration at the Charles B. Wang Center at Stony Brook University, on Saturday, May 9, 1-8 p.m. The program will feature cultural dances and musical and vocal performances, arts and crafts displays, a tea ceremony, and more. Admission is free from 1 to 6 p.m. The Wang Center theater seating opens at 3:30 p.m. and is first come, first serve. For information, see [http://scaaab.org/yahoo\\_site\\_admin/assets/docs/Asian\\_Pacific\\_Heritage\\_Month\\_0213.43125137.pdf](http://scaaab.org/yahoo_site_admin/assets/docs/Asian_Pacific_Heritage_Month_0213.43125137.pdf).

## Cafeteria Closed on 5/2

To accommodate BNL's Annual Elementary School Science Fair, Berkner Hall Cafeteria will be closed on Saturday, May 2. The Center Club in the Brookhaven Center, Building 30, will be open 7:30 a.m.-2 p.m., with continental breakfast in the morning and cold sandwiches at lunchtime.

## Local Baseball Fans, Take Note

LI Ducks tickets at \$10 each are on sale at the BERA Store in Berkner Hall, Ext. 3347, open weekdays, 9 a.m. to 3 p.m.

## Wanted: Donations for Prom-goers, Tots

Brookhaven Town Interface (BTI) is collecting new make-up, hair accessories, and jewelry for high-school students' upcoming proms. BTI is also collecting new duffel bags, backpacks, and suitcases for its Totes for Tots program and foster children. A small new comfort toy would also be appreciated. Drop off your donations at Staff Services in Building 400. For more information, call Ext. 5090 or go to <http://www.brookhaven.org/OfficeoftheSupervisor/YouthBureau/tabid/66/Default.aspx>.

## CALENDAR

### — THIS WEEKEND —

#### Friday, 4/24

##### \*Hybrid Vehicles on Display

10 a.m.-2 p.m. Berkner Hall parking lot. Both new vehicles shown by vendors and some vehicles currently owned by BNLers will be on display. See article at left.

##### \*Earth Week Talk by Eric Forsyth

Noon. Berkner Hall. Retired BNL engineer Eric Forsyth will talk on "The Challenges Facing Renewable Energy — Re-tooling America to Eliminate the Use of Fossil Fuel." All the Lab community is welcome to this free talk. See notice, pg. 2.

##### \*Talk, Meditation: Achieving Peace

4-7:30 p.m. Recreation Hall. Dayamrita Chaitanya will talk on "How We Can Achieve Peace," and lead a group meditation, 5-6:15 p.m. All are welcome. Visitors to the Lab of 16 and over must carry a photo ID. See details, pg. 2.

#### Sunday, 4/26

##### \*Celebrate Holi Spring Festival

3-5 p.m. Berkner Hall. BERA Indo American Association invites all to a free cultural program to celebrate Holi. Reserve by 4/17. See notice above, left.

### — WEEK OF 4/27 —

#### Monday, 4/27

##### 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.

##### \*Defensive Driving, Part I

6-9:15 p.m. Brookhaven Center. See notice at left.

#### Tuesday, 4/28

##### \*Small-Business Vendor Showcase

9-10:50 a.m. Berkner Hall lobby; 11 a.m.-3 p.m. Brookhaven Center. BSA and BNL host service-disabled veteran-owned small businesses that reliably provide goods, services to Battelle's family of Labs. All are invited, especially potential Lab users of these goods and services. See related story, pg. 1.

#### Wednesday, 4/29

##### St. Joseph's College Programs

11 a.m.-2 p.m. Berkner Hall lobby. St. Joseph representatives will explain the wide variety of degrees for undergraduates and graduates, and other credit-bearing certificates that are offered by the College. For more information, see <http://www.sjcnj.edu> or contact Theresa Saladino, [tsaladino@sjcnj.edu](mailto:tsaladino@sjcnj.edu).

#### Thursday, 4/30

##### Bariatric Surgery Presentation

Noon-1 p.m. Berkner Hall, Room B. As part of the Employee Health Program's "Spring Awakening," James Sapala, Medical Director of BNL's new Bariatric and Wellness Program, will discuss the obesity epidemic, the history of weight loss surgery and available surgical options. To register, contact Michael Thorn, [mthorn@bnl.gov](mailto:mthorn@bnl.gov) or Ext. 8612.

##### \*Defensive Driving, Part II

6-9:15 p.m. Brookhaven Center South Room. See notice at left.



## 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/](http://www.bnl.gov/HR/jobs/).

To apply for a position, go to [www.bnl.gov](http://www.bnl.gov). Select "Job Opportunities," then "Search Job List."

### LABORATORY RECRUITMENT - Opportunities for Laboratory Employees:

**LABORER (LG-3)** - Performs wide variety of manual labor tasks on roads, grounds or building maintenance. May perform unskilled tasks assisting mechanics. Operates such equipment as power lawn mowers and pneumatic tools. Submit an Employee Transfer Form to Diana Hubert in Human Resources, Bldg. 400B.

**OPEN RECRUITMENT** - Opportunities for Lab employees and outside candidates.

**POSTDOCTORAL RESEARCH ASSOCIATE - STRUCTURAL BIOLOGY, BIOCHEMISTRY (reposting)** - Requires a Ph.D. in structural biology or biochemistry. Experience in X-ray crystallography, protein engineering, and analytical biochemistry is preferred. Will explore the structure-function relationship for the enzymes or enzyme complexes involved in lignocellulosic biosynthesis and in the related secondary metabolisms. Under the direction of C.-J. Liu, Biology Department. BNL policy states that Research Associate appointments may be made to those who have received their doctoral degrees within the past five years. Apply to Job ID #14649.

**SENIOR SCIENTIST - INTERNATIONAL SAFEGUARDS** - Requires a Ph.D. in physics, nuclear engineering, or other relevant degree. Must have five to ten years' experience as a supervisor or experience in a managerial role and must have in excess of 15 years of experience in international safeguards or related areas. Experience working in the International Atomic Energy Agency Safeguards Department or U.S. government senior position in nuclear nonproliferation is highly desirable. Candidate will be fully cognizant of international safeguards treaties, agreements and protocols, have a working knowledge of safeguards goals and objectives, and understand the methods of safeguards systems implementation and IAEA safeguards activities in safeguarded facilities and states. Familiarity with radiation sources as potential threats and associated recovery programs is also desirable. Must be able to obtain and maintain a DOE "Q" clearance. Should be an international safeguards expert who will lead and expand the program in developing innovative technical approaches for safeguarding nuclear materials under the Nonproliferation Treaty and the Additional Protocol. Under the direction of J. Indusi, Chair, Nonproliferation & National Security Department. Apply to Job ID #14833.

**TECHNICAL RESEARCH ASSOCIATE (T-6)** - Will provide technical support to the NSLS department in the area of RF and Power Systems Group Equipment and NSLS and SDL Operations. Job duties include fabrication, testing, installation, upgrade, troubleshooting, repair and maintenance of equipment managed and operated by the NSLS RF & Power Systems Group. Will work on a project-level, working with engineers on system development and equipment builds and using considerable design latitude in the performance of these project assignments. Responsibilities will include work control and making decisions about work planning for the project. May also direct the work efforts of other technical support personnel. Additional duties include off-hour emergency call-in repairs in support of NSLS Operations. All work will be performed in a manner consistent with BNL and NSLS safety and quality assurance guidelines and regulations. Will have an AAS degree in electronic technology or equivalent, plus extensive job-relevant training, and ten years of relevant experience. Must demonstrate a thorough understanding of analog and digital circuitry and ability to troubleshoot using standard test equipment such as function generators, oscilloscopes, multi-meters, network analyzers etc. Must also have good communication skills and an ability to work from verbal instructions and written test procedures and schematics. Must be self-motivating, work well under minimal supervision, and consistently demonstrate a high degree of initiative and judgment when performing or directing a

wide variety of highly skilled technical assignments in support of the engineering and technical staff. Experience with high power RF systems including klystron modulators, high voltage power supplies, DC or pulsed accelerator magnet systems is a plus, as is prior experience working with PLCs and FPGAs, National Synchrotron Light Source. Apply to Job ID #14830.

**ADMINISTRATIVE SERVICES ASSISTANT (A-2)** - for the National Synchrotron Light Source (NSLS) User's Office. Will provide administrative support and have extensive interaction with the NSLS user community and staff. Main responsibilities will include reviewing Guest Information System (GIS) submissions, monitoring and confirming user training, monitoring training exams, issuing personal dosimeters and ID badge encoding. Primary duties will also include database maintenance, performing publication searches, updating and monitoring list serves; inputting and maintaining data for the department planner, science highlights and tours; and data entry and tracking for experiments and internal training. Additionally, will assist with coordination of major NSLS activities such as annual Users' Meeting, workshops, Summer Sunday, and other outreach functions, and handle non-routine office matters on a daily basis. AAS degree in a business field plus at least two years' relevant experience required. Experience at BNL in a similar role is desirable. Should possess basic database development and maintenance skills, with proficiency in MS Access, Word and Outlook and experience using PeopleSoft. Strong analytical, communication and interpersonal skills are also required, as well as the ability to work independently within established procedures. The ability to manipulate and analyze data as directed by the manager of Information, Outreach, and User Administration is highly desirable. Knowledge of BNL policies and procedures, and experience with the Brookhaven Training Management System and reviewing GIS requests for Laboratory appointments are preferred qualifications. A clear understanding of acceptable working INS documentation and all supporting documents associated with work-type visas is required. National Synchrotron Light Source. Apply to Job ID #14832.

**ADMINISTRATIVE SERVICES ASSISTANT (A-2)** - Requires a high school diploma with formal secretarial or office administration training or equivalent, plus four years extensive in-house payroll processing work experience. A bachelor's degree in a business field with coursework specifically related to the position requirements will be considered to offset qualifying experience. Must be proficient in web-based tools and Microsoft Office applications (Outlook, Word and Excel) as well as possess strong communication and organizational skills. Knowledge of BNL's policies and tools; including PeopleSoft HR is highly desirable. Candidate will be expected to: input and extend time and attendance records and to ensure compliance with applicable Lab policies as well as three bargaining unit contracts; interface with and supply information to internal and external auditors and customers; maintenance and analysis of various payroll deductions as well as updating and maintaining employee payroll database information. Must regularly exercise a high degree of discretion and judgment and perform multiple tasks in a fast-paced office environment. Fiscal Services Division. Apply to Job ID # 14829.

**SURVEY AND ALIGNMENT TECHNICIAN (T-4, reposting)** - Requires an AAS degree in electro/mechanical technology or equivalent and a minimum of six years of relevant experience. Previous experience in an accelerator or light source facility and working knowledge of PC software such as Spatial Analyzer, StarNet, ME5000, Autocad, Inventor, Word and Excel is desirable. Must have a strong background and demonstrated competence in the use of modern survey tools (laser trackers, CMM arm, mekometers, optical tooling) and data analysis. Must have a high degree of initiative and judgment, and must be able to plan, coordinate and perform technical assignments under general direction. Responsibilities include participating in the precision alignment of girder-magnet assemblies using laser-tracker-based survey and alignment techniques as well as planning implementing and integrating various survey operations during and after the construction phase. Will assist in setting up primary and secondary survey networks for the NSLS-II facility. National Synchrotron Light Source II. ERAP ELIGIBLE \$1,000.00. Apply to Job ID #14821.

**TECHNICAL SPECIALIST OR SENIOR TECHNICAL SPECIALIST (T-2/T-3)** - Will provide technical support to the NSLS department in the area of RF and Power Systems Group Equipment and NSLS/SDL Operations. Under general technical direction, and with considerable latitude for the exercise of initiative and judgment, will perform a wide variety of highly skilled technical assignments in support of the engineering and technical staff, including the fabrication, testing, installation, upgrade, troubleshooting, repair and maintenance of equipment managed and operated by the NSLS RF and Power Systems Group. All work will be performed in a manner that is consistent with BNL and NSLS safety and quality assurance guidelines and regulations and will include off-hour emergency call-in repairs in support of NSLS Operations. The applicant

must possess and demonstrate a thorough, working knowledge of both analog and digital electronics, competence with standard test equipment, and ability to understand and work from schematics, sketches and verbal instructions. Experience with high power accelerator magnet power supplies, pulsed magnet or RF systems is a plus, as is prior experience working with PLCs and FPGAs. AAS degree in electronic technology or equivalent experience required plus at least 4 to 6 years of relevant experience in performing complex tasks. The candidate will be hired at the T-2 or T-3 level commensurate with the amount and relevance of experience and demonstrated ability to use initiative and judgment when solving technical problems. National Synchrotron Light Source. Apply to Job ID #14831.

### Motor Vehicles & Supplies

06 YAMAHA RAPTOR - Raptor 350, mint, barely used. white/black, pics avail. \$3,000 neg. 681-7711, sdwac1@yahoo.com.  
05 TOYOTA COROLLA CE - 47K mi. 4cyl, 4dr, ac, p/w, p/s, p/l, p/b, abs, new brakes, am/fm cass, 100k warr. \$11,000. 821-3368.  
05 FLEETWOOD PROWLER - 32' Travel Trailer, bath, qu. bedrm, sleeps 10, tow hitch, bars incl. AC/heat, more. \$15,500. 807-9916.  
05 CHRYSLER 300 TOURING - 82K mi. a/t, pw, ps, abs, 6cyl, cd, lthr int, many extras. \$9,500 neg. 929-4978, mjulian@bnl.gov.  
02 DODGE NEON - 81.5K mi. 4-prong Bosch spark plug, rec oil change w/5W30, \$1,500 neg. 745-6520, grottlicelli@bnl.gov.  
99 AUDI A4 - euro sport ed, 30 mpg, silver, lthr heat seats, BOSE sound sys, new tires, timing belt, clutch. \$5,800. 786-5008.  
96 CHEVY LUMINA LS - 90K mi. Good Condition. \$1,200. 874-3606.  
94 FORD F150 - 180K mi. Full sz pickup 6 cyl., a/t. New starter, bed liner, some rust \$1,500 neg. Dennis. Ext. 4028, 375-8519.  
WHEELS/TIRES - Bridgestone Turanza, P205/55R16 89H, hubcaps/lug nuts, new take-offs from '08 Civic LX, \$200. Ext. 4994.

### Boats

23' SUNRUNNER 230SB - 1984 midcabin family cruiser Volvo/penta 225hp i/o fwc \$3,975 neg. 457-3171, hoogsteden@bnl.gov.  
SAILBOAT - Catalina 22, vg cond, w/ motor, trailer, dinghy \$2300 neg. Possible Storage. Peter, Ext. 7657, 740-0754.

### Furnishings & Appliances

ARMOIRE & PLATFORM BED - Armoire, black lacquer finish, mirror front, \$75; queen platform bd w/drawer, \$75. 751-4539.  
CHEST FREEZER - 5 cu. foot chest freezer. \$50. 909-1498. Tom, Ext. 4440.  
GLIDER CHAIR - Natural wood w/beige fabric, ask/\$50, excel. cond. Ext. 3924.  
PINE DESK - Girl's, with hutch. (2 pcs). Excel. cond., Brushed white stain; 42" W x 21" D x 81" H. \$100. Chris, Ext. 2593.

### Audio, Video & Computers

IMAC G3 COMPUTER - 400 mhz, wifi, 1GB, 30 GB hd, MS Office for MAC, more \$300 OBO. 821-3320 or dlynch@bnl.gov.  
PHOTO & NEG SCANS - www.pictureperfectscans.com, corrects & converts to DVD. DVD Music slideshows avail. 928-6469.  
ROUTER - Netgear Wireless-G Router Model WGR614, 4 wired ports. \$10. Ext. 5694.

### Sports, Hobbies & Pets

GO-PED - Motorized scooter. 2-stroke, runs well, fast. Paid \$350, asking \$150. Ext. 7235, 286-1018 or fitz@bnl.gov.  
NIKON ZOOM LENS - 80-200 f/2.8, works w/dig. & 35mm Nikon cmras, under 4yr, Nkn warr. new/\$1200, ask/\$799. 591-1390.

### Tools, House & Garden

COLEMAN GENERATOR 1850 - Powermate, grt cond, runs to 7 hrs, 2-120V outlets, 70lbs, \$300/neg. Ext. 7132, asweet@bnl.gov.  
PICKUP TRUCK CRANE - Central Hydraulics, 1/2 Ton Capacity, \$50. Gordon, Ext. 3586, 369-5815 or corbin@bnl.gov.  
POOL FILTER - unused, Hayward Perflex Exc-Cycle D.E., EC50AC w/ 1-1/2 HP pump. \$600/neg., w/AquaPerl filter media. 793-4551.

### Yard & Garage Sales

MEDFORD - Multi family, Sat & Sun 4/25-4/26, 9am-3pm(both days). Off Woodside ave, East of Hospital Rd. Ext. 5294.

### Miscellaneous

1996 SUNLINE TRAILER - 24', 5 new tires new mattress, electric jack, extras. slps 4, \$5,500 obo. 924-5187, mabe324@yahoo.com.  
BRITAX ROUNABOUT CARSEAT - \$50. Ext. 3008 or ddaniels@bnl.gov.  
COMPUTER - AMD Opteron, 2GB Ram Dual 320GB h/ds, 20.1 wide scrn, Vista Home Premium \$500. mark, 902-8188.  
DRESSES (PROM) - sz 5/6, Morgan & Co. 1-pink 1-black \$60 ea; sz M City Triangle green/blue \$40 have pics. Tom, 909-1498.  
EYEGLASS FRAMES - for prescriptions, Babyphat, brown w/rhinestones, brand new w/tags, paid \$140, ask \$75. 445-4027.  
GUITAR AMPLIFIER - Fender Cyber-Deluxe, w/ 64 presets, 65w w/1-12", Celestion G12T-100 speaker, \$275. Tom, Ext. 7805.  
PORTABLE DOG PEN - Galvanized chain 10x10 6 ft high \$225.00. Jeff, 806-6001.  
SALT WATER SOFTENER - super salt, extra course crystals w/rust remover, 9-40lbs bags, b/o. Jerry, Ext. 2950, 949-3305.

### Free

14" COLOR TV - works fine, no remote. Ext. 2159.

Liz Seubert, editor  
Joe Gettler, staff  
Roger Stoutenburgh, photographer



*BERA Camera Club  
cordially invites all to  
attend a Photoshop-photo  
retouching clinic featuring  
instructor Yvonne Berger.*

*Learn to remove blemishes, soften  
wrinkles, take 50 lbs. off your  
subject, create collages, and more.*

*This free clinic will be held on the  
28<sup>th</sup> of April from 5:15 - 7:15 p.m.  
in Berkner Hall's Room B.*

*RSVP: Ext. 4672*

## Blues Musician, Storyteller Roy Book Binder To Perform, 5/15

Blues musician/storyteller/songwriter Roy Book Binder will perform at 8 p.m. at the Brookhaven Center on Friday, May 15. 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 ID. Tickets, \$15, are sold at the BERA Store, weekdays, 9 a.m.-3 p.m., or through [www.ticketweb.com](http://www.ticketweb.com); they will be \$20 at the door.

In the 1960s, Book Binder learned his craft from the legendary blind street singer Reverend Gary Davis. Since then, he has performed with many prestigious musicians and groups including Bonnie Raitt, Hot Tuna and J.J. Cale. A few years ago, the PBS Emmy Award-winning series "Arts Across America" joined him on the road, documenting his colorful career in a segment titled "Keeping Traditions Alive." Book Binder has been guitar picking, singing country blues, and telling stories for more than 40 years, but in his most recently produced albums he returns home to the traditional melodies at the root of folk and blues.

— Jane Koropsak

For more information on Roy Book Binder go to: <http://www.roybookbinder.com/> or <http://www.bnl.gov/bera/activities/music>.

2 YEAR OLD GERMAN SHEPHERD - AKC, Microchipped, housebroken; Sweet personality; not good w/cats. 298-7588.  
GAMES, PUZZLES, YARN - 929-3251.

### Happenings

ANNUAL SPRING AUCTION - Today, 4/24, 7pm. Holy Angels Regional School at St. Frances Cabrini, 134 Middle Country Road, Coram, N. Kim, 516-903-2636.  
CHERRY BLOSSOM FESTIVAL - Sat. 4/25, 12-5:30p, Wang Cntr, SBU. Drums, dance, music, crafts, tea. Free exhibits; Performances: \$10 Adults, \$5 Child.  
THEME BASKET AUCTION - St. Andrew's Episcopal Church 9th Annual Auction, East Main Street, Yaphank, Sat., May 2, drs open @ 12:30pm; Admissn \$5. 281-8529.

### Wanted

ADOPT-A-PLATOON - Monetary donations gratefully accepted towards mailing shipments to military overseas. Thank you. Joanne, Ext. 8481 or jrula@bnl.gov.  
PHONE NUMBER - Person interested in my Manhattan Club timeshare. Lost number. Please call. Angela, Ext. 5322.  
RIDE SHARE - Need ride from Tall Oak apartment complex in Moriches to BNL and back home during normal business hours. Jennifer, Ext. 4894 or jlynch@bnl.gov.  
SPONSORS - For participation in 5-mile "Families Walk for Hope" Sat, 5/2. No donation too small; needed by 5/1 for the event. Barbara, Ext. 2098 or royce@bnl.gov.

### Lost & Found

FOUND - reading glasses, black frame, in 460.Ext. 5090 or ccarter@bnl.gov.  
JEWELRY - found sm. snowflake-like necklace charm. Gloria, Ext. 6273.

### For Rent

NAPLES, FL - 2br/2ba fully furn condo, gated golf community. Special off-season rate. April thrgh Dec. 31, 09. \$1,200/mo. Denice, 523-7870 or clara@optonline.net.  
CENTER MORICHES - 3 Bdrm Contempy, 2 baths 1 w/jacuzzi, lge decks, fpl, landscaping w/fish pond, & waterfall, 1 mo. sec & refs a must. \$2,000/mo. 878-6789.  
EAST PATCHOGUE - 1 bdrm., liv./kit combo, priv. ent., waterview, no smkg/pets, quiet, \$950/mo. incl. all. 758-1919.  
JAMESPORT - 1 bdrm apt., full bath, newly painted, flrs redone, l/r w/gas f/p, cac, ceiling fans, v. priv., landscaped prop backing vineyd. \$1,175/mo. 287-8334.  
MASTIC - 1 bdrm, full kit, bath, den, own ent/drwy, for 1 person, all incl 1 mo sec, no smkg/pets. \$850/mo. joe mondi, Ext. 3499, 219-7241.  
MASTIC BEACH - 1 bdrm apt, full bath, l/r, kit., priv. ent. & drway, no smkg/pets, all incl. except cable, sec/refs req'd. \$950/mo. 281-4559.  
PORT JEFF STATION - 3-bdrm. Col., 1.5 bath, l/r, d/r, eik, fin. bsmt w/poss. 4th bdrm, gas heat, weekly lawn service incl., no smkg, avail 7/1. \$1,800/mo. 413-5012.  
ROCKY POINT - 1 bdrm upper unit in Co-op, kit, 1 bath, l/r, balc, nr stores, laundry rm on prem, own prk spot, no smkg/pets, cac. incl. gas/water. \$1,150/mo. 806-5965.

ROCKY POINT - 2-3 bdrm, 2 bath, bi-level house (15 min to Lab). Lge storage shed, quiet n'hood. Gas stove, oil ht. No washer/dryer. Utls not incl. \$1,200/mo. 525-6648.  
ROCKY POINT - 1 bdrm house, .5 bsmt, oil heat, no smkg/pets. \$1,100/mo. 744-8919.  
SHIRLEY - lrg bright 1 br bsmt apt., suit for one, nr. beaches/parks/freeways/lirr/lab; all included, sep. ent. 1 month + 2 months. \$725/mo. Ext. 3846.  
SHOREHAM - share house w/professional, partial furn. bdrms, 7 mi to BNL, int. & tv incl., no smkg/pets, single preferred, 516-380-2650/cell. \$650/mo. 744-3543.  
U.S. OR FOREIGN - Sunterra or Interval International t'share, u pick place/wk, \$900 & up. 900-1498. Tom, Ext. 4440.  
WADING RIVER - new 1 bdrm apt., quiet n'hood, cable, int., all incl. except phone, no smkg/pets. \$950/mo. Toby, 838-5879.  
YAPHANK - priv. home/ent., fully furn. studio for single person, 4 mi. to Lab. cable/int/uttl. incl. \$750/mo. 516-205-6712.

### For Sale

POIPU, HI - 2 props for sale \$9K/ea; Diamond Resort @ Poipu, EOY Odd <http://tinyurl.com/datkdx> & EOY Even <http://tinyurl.com/c7kzt>. \$9,000 neg. Ext. 5322.  
BAYPORT (SOUTH) - Lg 4+ bdrm, 3 bath, 5 yrs old, cul de sac; lg living & fam rooms, kitchen, fpl, sunroom overlooks deck & pond. 5 mins to bay, \$745,000. 338-3046.  
CORAM - L-shaped ranch, 3 Bdrm, 2 bath, central air, new roof, new windows. 20 mins to Lab. \$349,000. 928-3868.  
NY CITY - Manhattan Club - <http://tinyurl.com/cmp2z6> . \$10,000 neg. Ext. 5322.  
PORT JEFF - 2 bdrm, 2.5 bath T/house, eik, l/r w/gas f/p, crown moulding, cac, bsmt., w/d, 1.5-car gar., gym, pool, tennis, walk to LIRR, \$339,000 neg. 516-903-3902.  
PORT JEFF ST. - 4 bdrm, 1.5 bath Col, den w/fp, 3 Vill. SD, 1CG, gas heat, central a/c, IGP, IGS, fenced 1/3a, Andrsn wndws, sun/rm, jaczi, \$415,000 neg. 834-8255.  
RIDGE - 3/4 bdrm, 3 full bath, l/r, fr, d/r, eik, 2-car gar, 0.48 area, nice garden, 8 min to Lab nth gate, \$349,000 neg. 929-1033.  
SHOREHAM - Ranch, newly renovated, 3 bdrm, bath, liv rm, den, wd flrs, kitch/granite counters, ss appls, gar, lge yard, fam n'hood, SWRSD. \$350,000. 258-4607.  
SHOREHAM - 4 bdrm., 2.5 bath Col., frml l/r and d/r, den w/fp, fin. bsmt, 12 x 20 deck, igs, new granite counters, SWRSD, much more, 7 mi to lab. \$499,900. Don, Ext. 2253, 821-3320.  
WESTHAMPTON BEACH - Turnkey Mobile Home, shed, deck, treed lot, 2 mi from Dune Rd & ocean beaches, 1/2 hr to BNL. \$45,000 neg. Marty, Ext. 2521.

### Yard & Garage Sales

MEDFORD - Multi family, Sat & Sun 4/25-4/26, 9am-3pm(both days). Off Woodside ave, East of Hospital Rd. Ext. 5294.

### In Appreciation

To all my friends at BNL: Thank you for your calls and prayers during the time my daughter was missing. She is safe and getting the help she needs. Thank you again.  
— Hugh Rhodus