# Bulletin



Vol. 60 - No. 12 April 14, 2006

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On Tuesday, April 18, at 4 p.m. in Berkner Hall, BNL's RHIC benefactors, led by Renaissance Technologies' Jim Simons, will be feted at a Lab-wide celebration and reception, hosted by Lab Director Praveen Chaudhari. Speakers, in order of the agenda, will include Stony Brook University President Shirley Strum Kenny, Deputy Director of DOE's Office of Science James Decker, Nobel Prize-winning physicist Frank Wilczek, and U.S. Representative Tim Bishop. A reception will follow in Berkner Hall lobby. All are welcome.

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#### **Cerium Oxide Nanotubes Get Noticed**

Chemists and materials scientists often study "nanotubes" — capsule-shaped molecules only a few billionths of a meter (nanometers) in width. In nanotube form, many materials take on useful, unique properties, such as physical strength and excellent conductivity. Carbon nanotubes are the most widely



investigated variety. Now, in pioneering research, scientists at BNL have created and investigated the properties of nanotubes made of a different, yet equally interesting material: cerium oxide.

"Cerium oxide nanotubes have potential applications as catalysts in vehicle emission-control systems and even fuel cells," says Wei-Qiang Han of BNL's Center for Functional Nanomaterials, the lead scientist involved in the work. "But until very recently, they haven't been studied."

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Funded by the Office of Basic Energy

Sciences within DOE's Office of Science, Han and his colleagues are in the midst of research into the structure and properties of cerium oxide nanotubes. As part of this, they have devised a method to synthesize cerium oxide nanotubes of high quality. First, they allow the compounds cerium nitrate and ammonia

hvdroxide to chemically react. Initially, this reaction forms "one-dimensional" nanostructures, such as rods and sheets, made of the intermediate product cerium hydroxide. The intermediate product is then quickly cooled to zero degrees Celsius, which freezes those structures into place. By letting the chemical reaction proceed over a long period of time, a process called "aging," the hydrogen is eventually removed from the intermediate product and a large quantity of the desired end product — cerium oxide nanotubes is formed.

Han explained this synthesis method at the American Chemical Society National Meeting in Atlanta, Georgia, in late March. During his talk, he also discussed his group's recent study — how cerium oxide nanotubes release oxygen ions when immersed in a low-oxygen environment, a process that is critical to the nanotubes' effectiveness as catalysts. To do this, the researchers have used several techniques. These include

"transmission electron microscopy," a very powerful imaging technique, and two x-ray techniques, which they performed at BNL's National Synchrotron Light Source.

"We're interested in studying oxygenatom vacancies in cerium oxide nanotubes because, when combined with their other surface features, these vacancies may make them more functional and effective in the applications mentioned," Han said. — Laura Mgrdichian

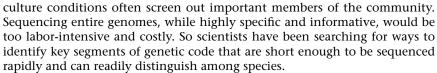
## New Method for Identifying Microbes Genomic "tags" quickly catalog species, Distinguish pathogens from harmless relatives

Scientists at BNL's Biology Department have developed a new, high-throughput technique for identifying the many species of microorganisms living in an unknown "microbial community." The method, described in the March 2006 issue of *Applied Environmental Microbiology*, has many applications — from assessing the microbes present in environmental samples and identi-

fying species useful for cleaning up contamination to identifying pathogens and distinguishing harmless bacteria from potential bioterror weapons. The research was funded by the Office of Biological & Environmental Research within DOE's Office of Science and by BNL's Laboratory Directed Research & Development funds.

"Microbial communities are enormously diverse and complex, with hundreds of species per milliliter of water or thousands per gram of soil," said Daniel (Niels) van der Lelie of Biology, lead author of the study. "Elucidating this complexity is essential if we want to fully understand the roles microbes play in global cycles, make use of their enormous metabolic capabilities, or easily identify potential threats to human health."

Growing cultures of microbes to identify species is slow and error-prone as the



The BNL team — van der Lelie, Celine Lesaulnier, Sean McCorkle, Safiyh Taghavi and John Dunn — has developed just such a technique, which they call "single point genome signature tagging." Using enzymes that recognize specific sequences in the genetic code, they chop the microbial genomes into small segments that contain identifier genes common to all microbial species, plus enough unique genetic information to tell the microbes apart.

For tag sequences that cannot be matched to an already sequenced bacterial genome (of which there are only a couple of hundred), the scientists can use the tag as a primer to sequence the entire attached ribosomal gene. This

gene is about 1,400 geneticcode-letters long, so this is a more time-consuming and expensive task. But since ribosomal genes have been sequenced and cataloged from more than 100,000 bacterial species, this "ribotyping" technique makes use of a vast database for comparison.

"If there's still no match," said van der Lelie, "then the tag probably identifies a brand new species, which is also very interesting!"

In a test with possible applications for identifying *(continued on page 2)* 



#### 414th Brookhaven Lecture

#### Gender, Age in Recovery From Brain Injuries

If you are a young man driving your wife and her parents, be very careful. If you are involved in a serious car accident, you and your mother-in-law are most likely to survive.

This "warning" is one conclusion of Anat Biegon's upcoming 414th Brookhaven Lecture, entitled "Of Boys and Girls and Bumps on the Head." Joanna Fowler of the Chemistry Department, Director of BNL's Translational Neuroimaging Center, will introduce the lecturer.

Biegon, a senior medical scientist in the Medical Department, will detail how research has refined scientists' view of gender differences in the prevalence and outcome of diseases affecting the brain. Although it has been well documented that gender affects the prevalence of disorders such as depression and Attention deficit-hyperactivity

disorder, recent head injury trials suggest that both age and sex affect the likelihood and degree of recovery from injuries to the brain. While girls are more likely to die following a traumatic brain injury than boys, that result is reversed after the age of 50, when men die twice as often.

Everyone is welcome to join Biegon on April 19 at 4 p.m. in Berkner Hall to learn more about this exciting new field of research and what it has revealed about the roles of age and gender in repairing brain injuries. The lecture is free and open to the public. Visitors to the Lab of 16 and over must carry a photo I.D.

Anat Biegon joined BNL in April 2003. Previously, her research had been conducted at institutions that included Lawrence Berkeley National Laboratory, New York University,



and Rockefeller University. She had earned her Ph.D degree in neurobiology at the Weizmann Institute of Science In Israel. Her research focuses on using imaging tools to study the effect of hormonal environment on brain structure and func-

tion in health and disease.

Refreshments will be offered before and after the lecture. Those who wish to join the lecturer for dinner at a restaurant off site after the talk may contact Maria Apelskog, Ext. 3715.

— Kay Cordtz



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#### CALENDAR

OF LABORATORY EVENTS

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

#### EACH WEEK —

#### Weekdays: Free English for Speakers Of Other Languages Classes

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

#### Mondays & Wednesdays: Pilates

Mondays at noon, Wednesdays at 5:30 p.m., both in Rec. Hall. 9-week session, \$60 for once a week, \$70 for twice a week. Registration is required. Christine Carter, Ext. 5090.

#### Mondays & Thursdays: Kickboxing

\$5 per class. Noon-1 p.m. in the gym. Registration is required. Christine Carter, Ext. 5090.

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

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

#### Tues. & Thurs: Aerobics

5:15-6:30 p.m., Rec. Hall. 10 classes for \$40, or \$5 per class, pay as you go. Pat Flood, Ext. 7866.

#### Tues. & Thurs: Aqua Aerobics

5:15-6:15 p.m. \$20 to attend once a week, \$40 to attend twice a week. For more information, call Ext. 2873.

#### Tues. & Thurs: Jazzercise

Noon-1 p.m., Rec. Hall. \$88 for twice-aweek eight-week session, you may use the membership at several Jazzercise locations. Christine, Ext. 5090.

#### Tues. & Thurs.: Ving Tsun Kung Fu

Noon-1 p.m., Brookhaven Center, North Room. \$80/month or \$10 per class, pay as you go. Taught by Master William Moy. Scott Bradley, Ext. 5745 or bradley@bnl.gov.

Tue., Thu. & Fri: Upton Nursery School 8:30 a.m.-noon, Rec. Hall. 2- and 3-day programs available. Kati, 821-4131.

#### Tuesdays: Welcome Coffee

10 a.m-noon, Rec. Hall. First Tuesday of every month is special for Lab newcomers and leaving guests. Lisa Yang, 979-3937.

#### Tuesdays: BNL Music Club

Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846.

#### Tuesdays: Jiu Jitsu Club

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

#### Tuesdays: Toastmasters

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

#### Tues., Wed. & Thurs: Rec Hall Activities

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

#### Wednesdays: On-Site Play Group

10 a.m.-noon. Rec. Hall. An infant/toddler drop-in event. Parents meet while children play. Fang Dong, 871-5362.

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

Wednesdays: Yoga

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

#### Wednesdays: Ballroom Dance Class

Brookhaven Center, N. Ballroom. Instructor: Giny Rae. New series starts 3/15. See notice, page 3. John Millener, Ext. 3853; Madeline Windsor, Ext. 5069.

#### Thursdays: Reiki Healing Class Noon-1 p.m., Bldg. 211 Conference

Rm. Nicole Bernholc, Ext. 2027.

#### Fridays: Family Swim Night

5-8 p.m. BNL Pool. \$5 per family.

#### Fridays: BNL Social & Cultural Club

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

#### Help Children Share the Fun of Science, 4/19

cientists Peter Takacs of the Instrumentation Division and Peter Wanderer of the Superconducting Magnet Division volunteer their time to spread knowledge and share enthusiasm for science with local children. Both serve on the Board of the Long Island Science Center in Riverhead and have been instrumental in the development of the center and its programs.

Takacs and Wanderer, joined by other representatives of the Science Center, will be in Berkner Hall lobby on Wednesday, April 19, 11 a.m.-1 p.m. to share information on this organization.

It all started about ten years ago when Takacs envisioned a local children's science center. At that time, Wanderer was serving on the Board of Directors for the Shoreham High School Science Museum. A short time later, the school was no longer able to support the museum due to a lack of space. Takacs had already found a suitable location for a science museum in downtown Riverhead. So, Takacs and Wanderer, along with some members of

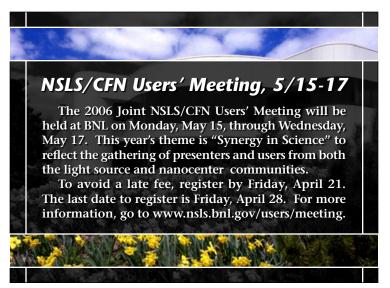
the Shoreham school museum group, formed what is now the Long Island Science Center, located on West Main Street in Riverhead.

Currently, the Science Center has approximately 40 programs. Wanderer says that among the children's favorites are the exhibit on dinosaur dimensions and the interactive program where the children can make 'flubber,' out of ice cream and crystals. "It's a \square fun way to show the kids the 5 changing states of matter," he 喜 said. "They really enjoy themselves.'

Said Takacs, "I enjoy watching the kids have a great time learning science. For me, it's a perfect combination of fun, education and reward. I'm glad to be part of this valuable educational resource for children. We're always looking for new volunteers who have

mechanical or technical skills and enjoy working with kids." The Long Island Science Center offers group tours during the week and is open to the general public on Sundays, 11 a.m.-3 p.m. The organization in non-profit and depends on donations.

For more information on the Long Island Science Center, contact Takacs, Ext. 2824, or Wanderer, Ext. 7687. — Jane Koropsak



#### **New Method for Identifying Microbes**

tacks, the technique also clearly signature tagging, a technique discriminated between closely related strains of Bacillus cereus, a pathogenic soil microbe, and Bacillus anthracis, the bacterial cause of anthrax.

This technique could also help assess how microbial community composition responds to changes in the environment. Such information might help identify which combinations of species would be best suited to, say, sequestering carbon or cleaning up radiological contamination.

This study represents just

agents used in bioterror at- one application of genome developed at and patented by BNL. BNL scientists have also used genome "tags" to identify the sites where regulatory proteins bind to DNA. This research could greatly speed the process of unraveling the role these proteins play in turning on and off certain genes in different types of cells — as well as what might go awry in conditions like cancer.

> - Karen McNulty Walsh *For more information, see www.* bnl.gov/bnlweb/pubaf/pr/PR\_ display.asp?prID=06-21.

#### 'Diabetic Nutrition: Essentials for Life' Two-Part Talk by dietician Amy Shapiro, 4/20

All are welcome to attend "Diabetic Nutrition: Essentials for Life," a presentation to be given by registered dietician and diabetes educator Amy Shapiro, in Berkner Hall, Room B, noon-1 p.m., on Thursday, April 20. Register for the talk by completing the form sent to each employee and returning it to Michael Thorn, Bldg. 490, or e-mail mthorn@bnl.gov.

#### **April is National Volunteer Month**

The Volunteers in Partnership program (VIP), sponsored by ■ Brookhaven Science Associates, seeks to support and acknowledge employees who volunteer in organizations outside BNL.

To celebrate national volunteer month, in an effort coordinated by VIP member April Gray, four BNLers are taking one lunch time each in Berkner Hall lobby over four weeks to provide information on the organization for which they volunteer. The Bulletin is featuring each volunteer a week ahead of the visit.

This week, the focus is on BNLers Peter Takacs and Peter Wanderer and their interest in building up the Long Island Science Center. Previous volunteers have been retiree Bill McGahern, who promotes boating safety through the U.S Power Squadron, and Celeste Tymann, who fund-raises for Big Brothers and Big Sisters of Long Island.

• For more information on the VIP program, contact Barbara Blenn, Ext. 4458, or go to www.bnl.gov/community/vip/body.htm.



BNLers Peter Wanderer (left) and Peter Takacs, (right) and Long Island Science Center representatives Ellen Nardozza (front, left) and Anita Chekijian, will set up an informational display in the Berkner Hall lobby on April 19, 11 a.m.-1 p.m. The Van de Graaff generator shown is just one example of the interactive activities for kids at the center. This machine. a smaller version of the Tandem Van de Graaff used at BNL's Relativistic Heavy Ion Collider, illustrates how static electricity is produced.

**Get to Know Your Lab!** Today, 4/21, Learn About

## The ATLAS Detector

The Employee Lunchtime tour of Friday, April 21, will go to the Physics Department to learn about the ATLAS detector, one of the huge new detectors being prepared for the Large Hadron Collider in Switzerland. BNL has made a substantial contribution to the detector's effort. See a model of one of the largest detectors for this newest nuclear science facility, and hear about the science it is poised to do. The group will meet at the upper lobby of Berkner Hall at noon. and return by 1 p.m. Contact Elaine Lowenstein, Ext. 2400, for more information.



#### Benefit Concert at Brookhaven Lab, 4/29 To Honor WUSB.FM Radio Manager Norm Prusslin

The BNL Music Club will sponsor a benefit concert to honor the career of Norm Prusslin, the founding father of the non-commercial college radio station WUSB 90.1 FM, which is broadcast from the Stony Brook University campus. The concert, which is open to the public, will be held in Berkner Hall on Saturday, April 29, 6 p.m.-midnight. Visitors age 16 and over must bring a photo ID.

Prusslin is stepping down from his position as general manager of the radio station after 29 years of service. An eclectic group of performers will lend their talents at this benefit show, performing bluegrass, blues, reggae, jazz, rock, and alternative music. The performers include: Kerry Kearney, Lil'Toby Walker, Buddy Merriam, Sam Taylor, Jack Licetra, The Others, Jimmy Dexter, John Tabacco, Mary Anne Devine, John Ford of the Strawbs, T-Man and the Aggression, The Center for Hearing and Dizziness, The New Suffolk Blues Project, Mike Soloway, Ted Schreiber, Parrhesia, and special guests. Past and present WUSB radio personalities will be on hand to regale the audience with their best "Norm" stories.

Tickets can be purchased in advance at the BERA Store, www. ticketweb.com, or at the door on the evening of the performance. No seats are reserved. The minimum ticket price is \$10, with \$25, \$50, and \$90 tickets offered for those who wish to make an additional donation to WUSB.FM. All proceeds from the concert will be donated to WUSB.FM. Donations are tax-deductible.

#### Take Daughters, Sons to Work, 4/27

On Thursday, April 27, Lab employees' children of ages 10-15 are invited to participate in the national Take Our Daughters and Sons to Work Day. To register, complete the form sent to all employees and return it to Susan Foster, Bldg. 185, by April 19. 1 For more information, contact Liz Gilbert, Ext. 2315, or gil-

#### Elder Law Seminar, 5/25

bert@bnl.gov.

Join Nancy Burner, former president of the Suffolk County Women's Bar Association and a member of the National Academy of Elder Law Attorneys, on Thursday, May 25, from noon to 1 p.m. in Berkner Hall, Room B, where she will present "The New Deficit Reduction Act: Medicare Part D Prescription Drug, What Else Is New?" Check your mailbox for registration forms. Return completed forms to Michael Thorn, Bldg. 490.

#### Spring Clean at the Office Supply Swap, 4/18

As part of BNL's Earth Week celebrations next week, the annual Office Supply Swap will be held on Tuesday, April 18, 11:30 a.m. - 1:30 p.m. in Berkner Hall lobby.

Take this opportunity to spring clean your offices and supply closets of items that you no longer use, but that are still in good condition. Bring them to Berkner on the 18th to be "recycled." Bar-coded items may not be accepted. 1 To learn more, call Francine Donnelly, Ext. 3381.

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#### You're Invited!

## BREA Plans for Retirees' Get-Together Lunch, 6/6

A Get-Together Lunch Event is planned for BNL retirees and friends on Tuesday, June 6, from noon to 4 p.m., at the Bellport Country Club. The Brookhaven Retired Employees Association (BREA) Lunch Committee members are working to organize the event; they are: (seated, from left) Florence O'Brien, Committee Chair Renee Flack, and Harriet Martin; (standing, from left) Dave Cox and Carol Kramer. Not pictured are: Veronica Evans and Alyce Daly. The committee warmly invites all to join in an afternoon of reminiscence, food, fun, and live music from the Serenaders; \$30 per person includes entrée, dessert, coffee or tea, wine and soda (cash bar available). To reserve your place, send your name, address, phone number, 🚊 e-mail, and names of guests you are bringing, with a check made out to BREA in the amount of \$30 per person, to: BREA, BNL, P.O. Box 5000, 50Bldg. 475, Upton, NY 11973-5000: also, see www.BREA.bnl.gov/. 2



#### 'Writing as Therapy: **Journaling From** The Heart, '5/2

Join BNL's Employee Assistance Program Manager Nancy Lossino on Tuesday, May 2, from noon to 1 p.m. in Berkner Hall, Room B, where she will present "Writing as Therapy: Journaling From the Heart," a talk to include topics such as:

- Talking on paper through journaling
- Life stories & memoirs
- Dealing with the past & painful memories
- Working through procrastination & fear
- Honesty and honoring "Your Story"

Check your mailbox for registration forms. Return completed form to Linda DiPierro, Bldg. 490/OMC or dipierro@bnl.gov.

#### CALENDAR

(continued)

#### - THIS WEEKEND -

#### Saturday, 4/15

#### Hospitality's Easter Egg Hunt

11 a.m. Recreation Hall. The Hospitality Committee welcomes parents and children to the annual egg hunt. Participate in other games, arts, and a raffle. Bring a snack or dessert to share. Bagels, fruits, and drinks will be provided. Contact Petra Adams, 821-9238 or petra@adamsovi.com

#### — WEEK OF 4/17 —

#### Wednesday, 4/19

#### \*BSA Noon Recital

Noon. Berkner Hall. Preview, semi-staged, of Stony Brook Opera's performance of Mozart's *The Marriage of Figaro*. See page 4.

#### \*414th Brookhaven Lecture

4 p.m. Berkner Hall. Anat Biegon, Medical Department, who uses medical imaging for her research on brain injury from trauma and other causes, will talk on "Of Boys and Girls and Bumps on the Head." See page 1.

#### Thursday, 4/20

#### \*Talk on Diabetic Nutrition, Part II

Noon-1 p.m. Berkner Hall, Room B. Amy Shapiro talks on "Diabetic Nutrition: Essentials for Life." See notice at left.

#### Friday, 4/21

#### **BSA Distinguished Lecture**

4 p.m. Berkner Hall. Nobel Laureate Frank Wilczek will talk on "The Origin of Mass and the Feebleness of Gravity.' All are welcome. All visitors to the Lab age 16 and over must bring a photo ID. For more information, see www.bnl.gov/ bnlweb/pubaf/pr/PR\_display. asp?prID=06-32

#### - WEEK OF 4/24 -

#### Monday, 4/24

#### \*30-Minute Film on Nanoscience

4 p.m. Berkner Hall. "When Things Get Small," a film on nanoscience, which will be introduced by Laura H. Lewis, Deputy Director of BNL's Center for Functional Nanomaterials. See above, left.

#### **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.

#### – WEEK OF 5/1 *–*

#### Thursday, 5/4

#### **BSA Distinguished Lecture**

4 p.m. Berkner Hall. Horst Stormer, co-winner of the 1998 Nobel Prize in Physics, will talk on "When the Electron Falls Apart ... and What to Do with the Pieces." Sponsored by BSA, the lecture is free, and open to the public. All visitors to the Lab age 16 and over must bring a photo ID.

#### - WEEK OF 5/22 -

#### Thursday, 5/25

#### \*Elder Law Seminar

Noon-1 p.m., Berkner Hall, Room B. Join Nancy Burner on "The New Deficit Reduction Act: Medicare Part D Prescription Drug, What Else Is New?" See notice on page 2.

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

#### BNL Toastmasters Celebrate 15th Year, 4/18

All are welcome as the BNL Toastmasters Club, member of Toastmasters International and BERA, celebrates its 15th anniversary on Tuesday, April 18, at 5:30 p.m. in Bldg. 463, Room 160, where refreshments, coffee, and tea will be served. Guests and previous members are especially invited to attend this celebration. Established in 1991, the BNL Toastmasters Club is open to all adults both inside and outside the BNL community.

Toastmasters International has more than 8,000 chapters worldwide. The goal of this non-profit organization is to promote effective communication and leadership skills through public speaking. The mission of BNL's Toastmasters Club is to provide a mutually supportive and positive environment in which every member has the opportunity to develop communication and leadership skills, which in turn foster self-confidence and personal growth.

For more information, contact Beth Lin, Ext. 3372, or visit the club's web site at www.bnl.gov/bera/activities/toastmstrs/.

#### Money Management Classes, 4/17, 6/19, 9/18

Teachers Federal Credit Union representatives will present a talk on how to use and manage checking accounts and general money management techniques on three Mondays: April 17, June 19, and September 18, at noon in the Recreation Hall.

For more information about TFCU's on-site services, go to www. bnl.gov/visitorinfo/onsite\_services.asp.

#### Safety Glasses Office to Open Fridays Only

The BNL Safety Glasses Office, which previously has been open on Wednesdays, will open on Fridays instead, beginning on April 14. The place, Bldg. 211, and the hours, 9 a.m.noon and 1-4:30 p.m., remain the same

#### 'When Things Get Small' — Nanoscience Film, 4/24

"When Things Get Small," an award-winning, 30-minute film about nanoscience, will be shown on Monday, April 24, at 4 p.m. in Berkner Hall. Laura H. Lewis, Deputy Director of BNL's Center for Functional Nanomaterials, will give a brief overview of the Lab's nanoscience activities and introduce one of the film's producers and stars, Ivan Schuller, University of California, San Diego (UCSD). Schuller will talk about the film and, after its showing, answer questions from the audience. This free event is open to the public; visitors age 16 and over must bring photo I.D.

#### **Upcoming 'Rise & Shine' Program Events**

- Friday, April 14, noon-1 p.m., Berkner Hall, Room A. Relaxation Response session. A practical session on an excellent technique for relaxing your body and mind.
- Monday, April 17, noon-1 p.m., Berkner Hall, Room C. Guided Imagery. An experiential session to explore the use of guided imagery for relaxation and personal growth.
- Thursday & Friday April 20 & 21. Free Tai Chi classes for beginners. To register, contact Michael Thorn, Ext. 8612.

#### One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Tuesday, April 18; Tuesday, April 25; and Wednesday, April 26; to answer employees' questions about their financial matters.

The consultant will help you to understand the importance of protecting your assets against inflation; find the right allocation mix for you; learn about TIAA-CREF retirement income flexibility; and compare lifetime income vs. cash withdrawal options.

refor an appointment, call Arlene Lyons, (866) 842-2053, Ext. 4629. (Not the on-site Ext. 4629.)

#### Wildlife, Humans — Sometimes They Just Don't Mix Center Club Closed Turkeys Fly, Deer Leap: Vehicles Can Crash

A message from Timothy Green, BNL's Natural and Cultural Resources Manager:

Tt's spring time again and Lthe animals just don't quite relate to human activities. So, it is important that we humans pay attention to what the animals are doing and try to avoid conflicts as much as possible.

The other day an employee was leaving the Lab traveling along the William Floyd Parkway. She noticed several turkeys on the edge of the road and assumed that they would either walk across or stay put. One turkey decided to fly across the road, struck her windshield and shattered it. A slight variation in the flight of the bird could have resulted in much more serious damage and possibly human injury.

This story reflects the unpredictable nature of wildlife. The deer, geese, turkeys, and other animals we see roaming the campus of the Lab provide a serene, 등 soothing aspect that most of 를 us seem to enjoy. However, we do need to remember ಜೆ that wildlife is wild, and in § springtime the behavior of <sup>2</sup>



animals may become more unpredictable, especially geese and turkeys. So, here are a few tips.

If you see wildlife on the edge of the road, assume that it will cross the road. Slow down a little and pay attention to the animals.

If one deer or turkey is crossing the road, you can expect several more to follow.

Geese are now nesting. They will defend their nests and, at the end of April when the goslings hatch, the parents will vigorously defend their offspring. So, give them plenty of room, do not try to approach.

Turkeys are now mating and they pay little attention to anything or anyone, except each other. The courtship display is awesome to watch, but watch from a distance or from a vehicle. Male turkeys may become aggressive if they feel you are a threat.

Finally, enjoy the wildlife, but be aware that they are not tame. Do not feed them, just enjoy them from a safe distance.

## Tuesday Evening, 4/18

Due to a special event taking place in Bldg. 30, the Center Club will be closed for the evening on Tuesday, April 18. The Club will resume normal operation on Wednesday, April 19. For more information, contact Andrew Seelin, Ext. 3024.

## **Arrivals & Departures**

<ul><li>Arrivals –</li></ul>	
Nancy Boyle	
S. David Smith	Medical
<ul><li>Departures -</li></ul>	
Alexander Garnov	.Chemistry
Lin Jia	C-A
Jennifer Kozak	
Peter Smith	Medical

#### **New York Bus Trip**

The Hospitality Committee invites all visitors, guests, and their families, as well as employees, to join a bus trip to New York City on Saturday, May 6. The departure will be at 9 a.m. from the Recreation Hall in the apartment area, and the return from the city at 6 p.m. Reserve with Lisa Yang lisavang@optonline.net. or 878-3937. Pay on Tuesday, April 25 ,and Tuesday May 2, 11-noon at the Recreation Hall. Tickets are: adults, \$10; children 2-12, \$5.

## **BNL Celebrates** Earth Week 2006

Hosted by the Environmental & Waste Management Services Division

For every event you participate in, you will receive a ticket to increase your chances of winning a door prize. Winners will be notified on April 21.

#### **Environmental Displays**

#### April 17 - 21, Berkner Hall Lobby

Check out the displays set up in Berkner Lobby throughout Earth Week. See how used items once destined for the trash can be creatively reused in the Twice is Nice Contest. View the beautiful and interesting wildlife photos taken here at BNL. And don't miss all the wonderful environmental posters created by children from local elementary schools who participated in the annual "Your Environment" art contest.

#### **Environmental Pledge Tree** April 17 – 21, Berkner Hall Lobby

By making small changes to our daily lives, we can help to ensure a good quality living environment for everyone. Come place your pledge leaf on the Environmental Pledge Tree and show your support for environmental stewardship. Pledges cost \$1, \$5, and \$10. Donate \$5 or more and spin the prize wheel. Donate \$10 or more, spin the prize wheel and receive an additional chance for winning a door prize. Donate \$15 or more, spin the prize wheel, receive an additional chance for winning a door prize, and receive a "Brookhaven Wildlife" screen saver disk. All proceeds will be donated to the Foundation for Ecological Research in the Northeast (FERN) and used to conduct research within the Pine Barrens of Long Island.

#### Office Supply Swap

Tuesday, April 18, Berkner Hall Lobby, 11:30 a.m. to 1:30 p.m.

This is a great opportunity to do some Spring cleaning and donate unwanted supplies. Just bring them down to Berkner Lobby by 11:30 a.m. Whether you're swapping and shopping, or just donating, enjoy the acoustic blues, folk, and swing of Dr. Bruce MacDonald and Bob Paulucci.

#### LITM/NuRide Sign-Up

Tuesday, April 18, Berkner Hall Lobby, 11 a.m. to 2 p.m.

Cut commuting costs and reduce air emissions in the environment. Employees, facility users, and guests can sign up for this flexible rideshare service, where they can earn rewards for every ridesharing trip they take.

#### **Environmental Vendor Fair**

Wednesday, April 19, Berkner Hall Lobby, 11:30 a.m. to 1:30 p.m. Learn about signing up for organic vegetables delivered weekly at BNL.

**Green Thumb Farm Display**Thursday, April 20, Berkner Hall Lobby, noon to 1 p.m.

LIPA energy conservation display and earth friendly products display.

**Annual Earth Day Awards Ceremony** Thursday, April 20, Berkner Hall Auditorium, 3:30 to 5 p.m.

Come join us as George Goode presents the 2005 Environmental Stewardship Awards to BNL employees who have demonstrated outstanding contributions in areas of pollution prevention, recycling, waste minimiza tion, energy conservation, compliance, or resource conservation. Also, Jim Tarpinian will present the "Your Environment" awards to local elementary schoolchildren for their posters on protecting Long Island's environment.

#### Hybrid Vehicle Display

Friday, April 21, Berkner Hall, Front Parking Lot, 10 a.m. to 2 p.m. Check out the hybrid vehicle on display from local car dealers. Learn about benefits such as emission reductions, fuel economy, and tax deductions.

#### **Heckscher Spring Festival**

April 22 and 23, Heckscher State Park, 8:30 a.m. to 5 p.m.

Come view the various displays hosted by the NYS Office of Parks, Recreation and Historic Preservation in honor of Earth Day. BNL's Environmental & Waste Management Services Division will be there with interactive displays. Enjoy giveaways, music, food, and entertainment for the children.

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

MK3579. ASSISTANT PHYSICIST - The RIKEN Spin Physics Group seeks an assistant physicist to work on the STAR experiment, focused on the spin structure of the proton and the gluon structure of heavy nuclei. Requires a Ph.D. in experimental nuclear or particle physics and several years' relevant experience. Under the direction of L. Bland, Physics Department.

MK3581. POSTDOCTORAL RESEARCH ASSOCIATES (2 positions) - The RHIC Spin Physics Group at Brookhaven National Laboratory seeks two postdoctoral research associates to work on the RHIC experimental program, one with emphasis on developing the RHIC polarimeters, and a second to work on the STAR experiment, with emphasis on building and commissioning a new large acceptance forward meson spectrometer. Requires a Ph.D. in experimental nuclear or particle physics within the past three years. Under the direction of L. Bland and G. Bunce, Physics Department.

MK4115. POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in nuclear physics or nuclear engineering and a strong interest in low energy nuclear reaction data. In addition, a solid background in nuclear reaction physics with neutrons up to about 200 MeV and a capability of using complex nuclear reaction model codes for nuclear reaction

data evaluations is required. Programming skills and familiarity with physics of neutron resonances, low energy nuclear reaction models (optical, statistical, direct, pre-equilibrium), and mathematical statistical techniques are desirable. Will be involved in analysis of nuclear reaction cross-section and cross-section covariances (uncertainties), including development of evaluation techniques and procedures for the ENDF/B library, www. nndc.bnl.gov/nndc/csewg. Under the direction of P. Oblozinsky, Energy Sciences & Technology Department.

JH3934. ENGINEERING POSITION-RADI-ATION PHYSICIST (P-9/P-10) - Requires an advanced degree (Ph.D. or Master's) in radiation/health physics or engineering or an equivalent combination of education and at least 10 years of experience working as a radiation/health physicist. Extensive work experience in the design of shielding, dosimetry, activation calculations, and radiation safety systems for high-energy particle accelerators, and/or synchrotron radiation facilities is required, together with demonstrated experience in the use of Monte Carlo radiation transport codes for shielding design and radiological studies. Experience in the use of synchrotron radiation shielding codes such as PHOTON and STAC-8 to calculate shielding requirements for beam line hutches, working knowledge of nuclear instrumentation and radiation survey instruments and experience with general operational radiation protection

support the design of the NSLS-II project from a radiological perspective and will report to the NSLS-II Environment, Safety, Security and Health Manager, Responsibilities will include the determination of the required shield thicknesses of NSLS-II accelerators and beam lines, the performance of shielding calculations for all accelerator and beam line enclosures, as well as the determination of the thicknesses of electron, bremsstrahlung and synchrotron radiation stops and potential operating modes and conditions which must be shielded. The individual will also calculate radiation dose rates under various beam loss and shielding conditions and identify required shielding necessary to achieve prescribed design criteria based on BNL ALARA practices and federal regulation. Additionally, the successful candidate will assist in calculating heat loads for critical devices, e.g., beam stops, collimators, etc, as well as the calculation of radiation dose to components and will assist in the design of the Personnel Protection Radiation Interlock Systems. It is also expected that the candidate will participate actively in research and development activities in radiation/health physics in support of overall NSLS-II mission and will publish R&D results and participate actively in professional meetings, and development opportunities in the field. National Synchrotron Light Source-II Project. TB3716. PLUMBER A - Under minimum supervision lays out, constructs or installs, repairs, and maintains water and gas distribution systems, related facilities and auxiliary equipment and equipment utilizing water, gas and heat distribution

programs is necessary. Excellent inter-

personal skills (oral & written) are also required to communicate effectively with

technical and administrative staff, managers, regulatory agencies. Candidate will

## services. Plant Engineering Division.

#### Motor Vehicles & Supplies

04 CROSSROADS CRUISER - 30' trailer, dbl. slide, qu. br, bunks, lots of storage, bath, used 5 times. \$21,500/neg. 924-0139. 03 LINCOLN TOWN CAR - loaded, mint, rag top, 20K mi. \$19,900. Rosalie, 289-5704.

03 TOYOTA AVALON - XL, loaded, 4dr. sedan, beige, leather, immac, CD s/rf, orig. owner, 68K mi. \$14,500/neg. 516-241-4598.

02 CHRYSLER PT CRUISER LTD - a/t, c/c. a/c, p/w, pwr. m/rf, abs, cd, traction ctrl., 65K mi. \$8,900. Robert, Ext. 7859 or 312-6451.

01 VW JETTA - GLX VR6. 5spd. loaded. mint, new clutch, ext'd. warr. 60K mi. \$11,100/neg. Doug, Ext. 2262 or 474-3846. 98 FORD EXPEDITION XLT - 4wd, 5.4L, 3rd seat, Ithr, 6 CD, loaded, white/tan, immac. 117K mi. \$9,700. Ext. 7294 or 886-1417.

97 MERC COUGAR - excel. cond., pearl white, m/roof, V6, auto, power, all options, spotless. \$5,000. Ext. 5665.

96 TOYOTA CAMRY LE - 10/05 tune up, new axel, clean, new fr. tires, hiway mi., gd eng. 94K mi. \$3,725/neg. 315-857-3054. 96 HONDA ACCORD LX - excel. cond., CA

emiss. veh., new Michelin, exhst & batt. 129K mi. \$4,500/neg. khodinov@bnl.gov. 95 FORD BRONCO - XLT 4x4, 5.8L, new

brakes, tires, & reblt trans., vg. cond. 82K mi. \$5,000/neg. Ext. 2262 or 474-3846. 94 CHEVROLET LUMINA - mini van. 112K mi. \$600. Hae-Kyung, 816-0235.

88 MERCURY COUGAR - 2dr, a/c, a/t, c/c, pwr/b/l/s/w/m, excel. must sell. 60K mi. \$2,000/neg. Steven, Ext. 2947 or 466-1925. 65 CHEVY PANEL TRUCK - needs work has been in garage for 20 yrs., 6 cyl., 3 speed. 72K mi. \$1,100/neg. 875-9426. CAR RADIO - Pioneer DEH-P4100 am/fm/

#### cd, w/manuals. \$50. Sergey, Ext. 5682. **Boats & Marine Supplies**

19 ft.' GRADY WHITE TOURNAMENT - 130 hp Yamaha, Magic Tilt trailer, full encl., VHF & DF, sw. pltfm & more, \$7,500. 878-8302.

21' SEASWIRL STRIPER DUAL CONSOLE '03 w/Volvo 270 I/O, <25hrs, warr., trlr., DF, FF, GPS, full cnvas. \$29,000/neg. 987-4281. 21' CAMPION EXPLORER - 2000, <30 hrs

used, hdtop, outbrd., extras, fish finder, trim tabs, \$21,500/neg, 516-24-4598. 22' O'DAY SHOAL DRAFT - 1977, new

electrical, cushions, all accessories. \$3,000/neg. John, Ext. 3108 or 821-2530. 25' CRUISER INC. HOLIDAY 25 - '88, Chev 350, cabin w/kit., sink, hd/shwr, repowrd '05. \$5,000/neg. Ext. 7309 or 466-1925.

27' PEARSON P27 - 1988 sloop w/furler, aft cabin, H&C PW w/shwr, wheel, wing keel, 3'4" draft. diesel. \$17,800/neg. Ext. 2788.

SAIL BOAT - The Slipper 17, Deckhouse Model, incl. trlr & Evinrude 7-1/2 hp., boat has bn garagd. \$3,500. Ext. 7187 or 722-

#### **Furnishings & Appliances**

ANTIQUE SCREEN - white, circa 1930s, half rattan, half paneled. 747-6832.

BABY CRIB, HIGH CHAIR - no mattress for crib, all wood, oversized high chair. Steven, Ext. 7309 or 466-1925.

BABY 'S ITEMS - Peg high chair, Gracco bassinet and swing, SnapNGo strol, Pottery Barn chng tbl, more. 258-4607.

#### BSA Noon Recital, 4/19 Semi-Staged 'Marriage of Figaro'

Stony Brook Opera performers will present a semi-staged preview of Mozart's The Marriage of Figaro in Berkner Hall at noon on Wednesday, April 19. All are welcome to this free public event, sponsored by BSA. Visitors to the Lab of 16 and over must carry a photo I.D. The full opera may be seen at Stony Brook next weekend, with Timothy Long, Conductor, and Andrew Frank, Stage Director.

#### Asian Pacific American Heritage Month Events

Events to be held to celebrate Asian Pacific American Heritage Month include: Saturday, May 6, "Haru Matsuri", a Japanese Spring Festival, 10 a.m. – 4 p.m.; and Friday, May 19, "Taipei Folk Dance Theater" 7:30 p.m., with a 6:30 p.m. reception. Both events are in Berkner Hall: tickets for both are on sale at the BERA Store, Ext. 3347, \$10 adult, \$5 children 12 years and under.

BEDROOM - King size: comforter white/ gray, \$10. Sergey, Ext. 5682.

COUCH COVER - med. blue denim, Ig., fits all styles. \$35. Ext. 7235 or 399-7997. END TABLES - pair for living room, light oak, Queen Ann, 24"wx21"dx19"h, oval. \$50. Frank, Ext. 5920.

FUTON - w/wood frame, Mission-style sofa frame opens to bed 60"x80", excel. cond. \$50. Ext. 3767 or 744-3744.

PIANO - Baldwin Acrosonic uprt w/bench, provincial style, 20 yrs old, gd cond., you pick up. \$400 obo. Ext. 3413 or 399-6947. REFRIGERATOR - KitchenAid. 20 cu. ft., glass shelves. excel. cond., white, \$325.

TODDLER BED - Sleigh-style, med. colored wood, unused, \$50; crib mattress for toddler bed. \$50. Mary, Ext. 3670.

WICKER HEADBOARD - twin sz, \$25; quilt rack, wooden, \$25. Ext. 2716 or 878-2425.

#### Audio, Video & Computers

COMPUTER - cust. pwrhouse, AMD Opteron, 2gb ram, 2x320gb hds, 20" flat widescr., more, \$2,000, Mark, 902-8188.

COMPUTER GAME - Age of Empires Gold Ed., CD-ROM in fctry box, \$5. Ext. 3621. KORG M3R - classic synthesizer module sim. to M1, \$150; game: Age of Empires Gold Ed., CD-ROM in fctry box, \$5. Ext. 3621.

LAPTOP COMPUTERS - Microsoft office 2000 package installed. Call for particulars. \$400. Ext. 3536 or 747-6832.

SPEAKER CABINETS - Fisher, walnut w/ blck cloth rmovbl face, 18"w, 15"d, 32"h, 15" wfer, 6" mid-rnge, 4" h. \$50. Ext. 5920. X-BOX GAMES - Max Payne 2 - The Fall of Max Payne and Grand Theft Auto, \$10/ ea. Donna, Ext. 2716 or 878-2425.

#### Sports, Hobbies & Pets

LACROSSE EQUIPMENT - helmet, shoulder pads and gloves, used 1 yr., excel. cond. \$75/all. Ext. 2531 or 875-9493.

SHIH TZU PUPPY - male, 4 mos. old, blk & white, very affec., all shots, vet checked, owner heartbroken. \$800. Jenn, Ext. 5922.

#### Tools, House & Garden

LAWN MOWER - Scag w/32" blade, walk behind. \$2000. Mary, Ext. 3670.

UMBRELLA - 6' Budweiser, red & white, brand new. Sue. Ext. 7235.

#### Miscellaneous

1800s ESTATE PIN - brooch from estate sale in England, unique shape and stone in center. Ext. 3536 or 747-6832.

DOLL ACCESSORIES - Canopy style crib, double stroller and pram style stroller, \$10/ea. Donna, Ext. 2716 or 878-2425. TELESCOPE MEADE ETX-90EC - 4" dia w/

elctnic cntrllr, Maksulov-C/grain, 1250mm xf/13.8, 8x21mm fndr scope. \$250. 874-3478.

CHRISTMAS TREE - 7' artificial, Ext. 2492. PUPPIES - 6 puppies need a loving home, they are 2-1/2 month-old mix pups, you pick up. Linda, 591-1781.

#### Wanted

APARTMENT/HOUSE RENTAL - for month of May, Three Village area, 2 adults, nonsmokers, no pets. Ext. 3717 or 928-3205.

DONATIONS - for M.I. Soup Kitchen, send checks payable to "Thee Island INN" c/o. B. Royce, Bldg 134C. Barbara, Ext. 2098. RESEARCH SUBJECTS - Seeking people

with both hypothyroidism & symptoms of sadness/depression. Contact hypostudy@ aol.com. Laura or Christine, Ext. 4660.

WEIGHTLIFTING EQUIPMENT - free weights, benchs, etc. Ext. 7009 or 471-7479.

#### For Rent

BOHEMIA - 3-bdrm, I/r, d/r, eik, 1.5 bath., 1st floor of house, util, inc., perfect for family. \$1,850/mo. Mitch, Ext. 5879.

CENTER MORICHES - 2-bdrm. house w/ carport, w/d, new paint, new w/w carpet, near shopping, 1 block to water, no pets/ smkg., util. extra. \$1,300/mo. 878-6016. EAST MORICHES - New, grd. Ivl. apt., 1

bdrm, I/r, kit., bath, hdwd. flrs., clng. fans, cac, heat/own therm., cble, util. inc. pvt. ent. \$965 single, couple \$985/mo. 878-5798.

FARMINGVILLE - 1 lg. bdrm. in house, share bath w/1, full kit., elec incl., avail. 4/1. \$450/mo. Ben, 513-8275.

FLANDERS - newly renovated 2-bdrm. bsmt. apt., 1 bath, all utilities incl., no pets/smkg. \$1,400/mo. 208-6384.

MILLER PLACE - share Ig., non smkg., furn. Col. house in prof., resid. area; fenced deck, tv, cable, cac, internet, own w/w, 14x12 bdrm. 10 mi. to BNL. \$675/mo. 744-8386.

MILLER PLACE - 1-bdrm. apt by the beach, I/r, Ig. eik, full bath, pvt. ent., pvt. parking, util. & cable incl., no pets/smkg., avail 5/1/06. \$1,100/mo. 516-818-9852.

RIDGE - 1 lg. studio, bright & warm, w/full bath, priv. ent. and fenced garden, house apart from owner, park in drway, quiet & safe n'hood. \$700/mo. Zhen, 821-0859.

ROCKY POINT - 1 bdrm. near water (L.I. Sound), I/r, bath., kit., any time lease, 9 miles to BNL, excel., avail. imm. \$950/mo./neg. Necati Aga, 821-3370.

S. SETAUKET - 2-bdrm. apart, 1 bath, kit., a/c, w/d, internet, cable, 9 mi to BNL. \$1,000/mo. Lin, Ext. 4508 or 698-

SHOREHAM - summer rental (Jun-Aug), ranch, 3 bdrms., 1 ba., I/r, den, kit., wash/ dry, 1-car gar., lg. yrd, util. extra. \$1,800/ mo. 258-4607.

WADING RIVER - 2 bdrm., eik, lg. l/r., lg. den, Ig. deck, pvt. pkg., no kids/pets/ smkg. util. extra. \$1,500/mo. 928-9328.

WADING RIVER - new studio, I/r, full kit., lots of storage; pvt. d/way; pvt. ent., pvt. patio w/firepl. & BBQ, 10 min. to BNL; 1 mi to beach, utils incl. \$850/mo. 886-1411.

YAPHANK - 2 bdrm., I/r, kit., full bath, Ig. yd., + util \$1,000/mo. 436-6357.

#### For Sale

CENTEREACH - 4-yr.-old Center Hall Col., 5 bdrm., 2-1/2 baths, eik, great room, d/ r, fin. bsmt., f/p,1st flr laundry, 20 min to Lab, 5 to SBU. \$509,990, 981-2471.

EAST QUOGUE - New 2/2 condo upper unit, 1-car gar., sr. commty, cust closets, 42" cabinets, tiled baths, cac, maint free, excel. cond. \$629,900/neg. 723-0770 eves

MASTIC - Victorian-style built 2003, 3 bdrm. 1.5 bath, lg. arch w/dows, f-bsmt., 20x40 deck, huge back yd., surr. by new const., 15 min. to Lab. \$339,000, 525-4416.

PORT JEFFERSON - historic Victorian in center village, 4 bdrm., 2 bath, 2 l/r, gas f/p, d/r, renov. eik, pool, waterfall, views, attic, gas heat, CAC. \$799,000/neg. 804-4662.

PORT JEFFERSON STA. - hi-ranch, mint+, 3 bdrm., 2 bath, updated kit, I/r, windows, office, fully renov. bath, new roof (w/warr), \$419,999/neg. Ext. 3327 or 331-6725.

SHOREHAM - Dutch Colonial, 4 bdrm., 2 bath, d/r, l/r, lg. fam. rm., wood flrs., new lg. kit., new appli., 1-car gar, igp, fenced yrd., family n/hood. \$510,000 258-4607.

SHOREHAM - n. of 25A, updated L-ranch, 5 bdrm., 3 bath, den w/fp, eik, d/r, l/r, oak flr., full windows, poss. M/D, bch. rights, top sch., 5 min. to BNL. \$435,000. 849-2984.

#### In Appreciation

On behalf of the Lowenstein family, I would like to thank my BNL friends and colleagues for their condolences upon the passing of my father, Siegfried.

With many thanks and appreciation to my friends at BNL who offered prayers and kind words of encouragement during my mother's illness and passing. It has brought much comfort during this very difficult time. - Nancy Concadora & Family

#### **Happenings**

SBU Univ. Cafe, 2 p.m. Sun. 4/23. Show features Tom Russell with Andrew Hardin. \$20, \$15/students. 632-6027 or gpalaia@notes. cc.sunysb.edu.

#### On-Site Services

ENTERPRISE RENT-A-CAR - Stop by the on-site office at Bldg. 355, 50 Brookhaven Ave., to check weekend specials, daily rates. Or call Ext. 4888 or see www. enterprise.com.

VEHICLE SERVICING - The Lab's on-site service station offers oil changes, checkups, NYS inspections, new batteries, tires, timing belts, repairs, etc., while you are at work. Ext. 4034.



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