

Battelle Honors Two BNLers: Radoslav Adzic, Veljko Radeka

Two scientists at BNL — Senior Chemist Radoslav Adzic and Head of the Instrumentation Division Veljko Radeka — were honored by Battelle, the global science and technology company that, together with Stony Brook University, manages BNL. Adzic was recognized as BNL's "Inventor of the Year," and Radeka was chosen for a special lifetime achievement award for his leadership at the Lab and his enabling and supporting key BNL inventions over almost 50 years. Adzic and Radeka were among employees of Battelle and four other national labs it manages who were honored at Battelle's annual recognition event, held this year at the Franklin Park Conservancy in Columbus, Ohio.

Radoslav Adzic

Radoslav Adzic has recently focused his research on developing catalysts to accelerate chemical reactions in fuel cells to generate electrical energy. He holds patents for catalysts containing far less platinum than traditional catalysts, which could greatly reduce the cost and increase the use of fuel cells in electric vehicles and in stationary power applications. Adzic and his team also developed a catalyst that efficiently oxidizes ethanol, which can make it more efficient as an alternative fuel.

"The rising cost of gasoline and concerns about global...

See *Radoslav Adzic* on p. 2



Veljko Radeka

Veljko Radeka joined the Instrumentation Division in 1962, and a decade later, he became head of the division — a title he has retained to this day. Under his leadership, the division has become one of the foremost resources in radiation detector and microelectronics research and development among DOE laboratories.

Radeka and his colleagues developed state-of-the-art detectors and electronics that have had a major impact on many significant experiments in a wide variety of disciplines at BNL and around the world.

See *Veljko Radeka* on p. 2



BNL, SBU Explore Collaborations At First Research Networking Day

About 75 scientists, clinicians and support staff attended the first Stony Brook University (SBU) / Brookhaven National Laboratory (BNL) Research Networking Day held at SBU Medical Center on May 13. The goal of the gathering was to foster future biomedical research collaborations between the two institutions to develop new treatments and technologies that may benefit patients.

The morning event began with remarks from SBU and BNL leaders and followed with a networking breakfast in which scientists from Brookhaven and clinicians from Stony Brook discussed their research with each other. Later, some of the participants viewed and discussed the SBU and BNL research that was the focus of 15 posters displayed in the Stony Brook Medical Center lobby.

New Opportunities

"Scientists at both Stony Brook and Brookhaven perform critical research," said Sharon Nachman, associate dean for research and professor of pediatrics at SBU, who was instrumental in conceiving and



Photo: Jeanne Neville

Clinical Research leaders and event organizers include (from left) Stony Brook University (SBU) Senior Vice President of Health Sciences and Dean of the School of Medicine Kenneth Kaushansky; SBU Associate Dean for Research Sharon Nachman; SBU Assistant Director for Life Sciences, Office of Licensing & Industry Relations Jennifer Hsieh; BNL Deputy Director Doon Gibbs; SBU Vice President for Research John Marburger; and BNL Office of Technology Commercialization and Partnerships Manager Walter Copan.

organizing the event. "This gathering provides opportunities to form new collaborations that might jumpstart the creation of new treatments or medical technologies. We also would like the public to be invested in the research, so we are displaying the posters in the lobby for the entire weekend."

In opening remarks, SBU Senior Vice President of Health Sciences and Dean of the School of Medicine Kenneth Kaushansky, spoke of the opportunities for turning "scientific potential into realized

progress in biomedicine" by combining the expertise and facilities available at both SBU and BNL through collaborations to further research. He indicated that leaders at both institutions have been meeting together over the last several months to explore biomedical research programs, and institute such collaborations.

BNL Deputy Director for Science & Technology Doon Gibbs explained to the participants that the "possibilities for collaborations and...

See *BNL/SBU Collab.* on p. 2

Science Café: Using Science to Solve a Crime, 6/9

Crime novelist Archer Mayor to visit BNL for free book reading, discussion

During a free public event, crime novelist Archer Mayor will detail how his long-standing fictional character detective Joe Gunther finds himself using cutting-edge forensics tools at BNL to investigate a brutal series of murders. Visitors to the Lab age 16 and older must carry photo ID.

At 7 p.m. on Thursday, June 9, in Berkner Hall, Mayor will read excerpts from *Red Herring*, a Vermont-based story that centers around the discovery of single drops of blood found at the scene of three seemingly unrelated murders. Mayor also will explain why, when conventional forensics lead the book's detectives to a dead end, they take their evidence to BNL's National Synchrotron Light Source (NSLS).

In Mayor's book — and in real life — thousands of sci-



entists from around the world visit NSLS every year to use its extremely bright beams of x-ray, ultraviolet, and infrared light to study everything from renewable energy technologies to proteins vital for human life. The NSLS also has been used to investigate forensic mysteries, including the

rapid disappearance of children's fingerprints from surfaces and the prevalence of lead poisoning in ancient cultures.

During the June 9 event, BNL researchers will discuss these studies and explore how tomorrow's light sources — such as the National Synchrotron Light Source II, now under construction at the Lab — could be even more beneficial to law enforcement.

A Q&A session will follow.

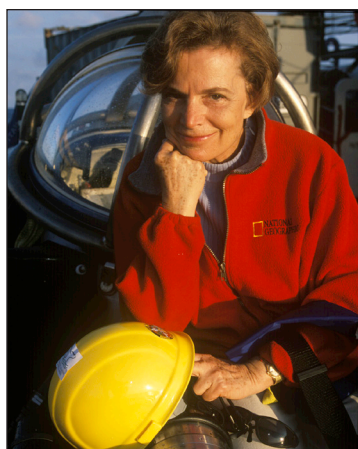
Mayor is the 2004 New England Book Award winner for fiction and a Fellow of the Vermont Academy of Arts and Sciences. Mayor also works as a death investigator for the Vermont State Medical Examiner's Office and as a deputy for the Windham County Sheriff's Department.

— Kendra Snyder

National Geographic's Explorer-in-Residence Sylvia Earle To Talk on 'How Our Fate and the Ocean's Are One,' 6/16

Sylvia Earle, an oceanographer dubbed "Hero for the Planet" by *Time* magazine and a "Living Legend" by the Library of Congress, will give a talk on Thursday, June 16, at 4 p.m. in Berkner Hall. Before her talk, Earle will be available to discuss her work informally with members of the Lab community and the public at 3 p.m. in Berkner Hall, Room C. Sponsored by Brookhaven Women in Science, the talk is free and no registration is required. All visitors to the Lab 16 and older must bring a photo ID.

In her talk, titled "The World is Blue: How Our Fate and the Ocean's Are One," Earle will discuss how oceanic changes that have occurred over the last half



century threaten the existence of life on Earth. According to Earle, overexploitation of the ocean has led to the near extinction of many ocean species, from tiny but essential aquatic

plants to swordfish, tuna, and whales. Half of the world's coral reefs have either died or declined, and toxic pollutants wreak havoc on all aspects of the oceanic food chain. Earle will discuss the strategies that must be taken within the next decade to save the ocean and the planet.

Earle earned her Ph.D. from Duke University in 1966, and she has received 20 honorary degrees. She joined Harvard University as a Radcliffe Scholar in 1967, and she was a research fellow/associate at Harvard until 1981. From 1980 to 1984, she served on the National Advisory Committee on Oceans and Atmosphere, and from 1990 to...

See *Sylvia Earle's Talk* on p. 2



Roger Stoutenburgh D0391210

Members of Brookhaven's Joint Safety Operations Council

JSOC Puts Safety Into Practice

The Joint Safety Operations Council (JSOC) is a component of the union and management effort to improve worker safety at BNL.

Because the type of work performed by the members of the International Brotherhood of Electrical Workers (IBEW) Local 2230 is often delicate and hazardous, they, the Environment, Safety & Health (ES&H) Directorate, and the Facilities & Operations Directorate (F&O) are acutely aware of the risks involved with these jobs. An injury not only impacts a worker's health, but also impacts the Lab overall. Improving worker safety at the Lab is a core component of the Blueprint and a central mission of the IBEW for its members.

For this reason, the union, F&O, and ES&H formed JSOC to provide feedback to management, propose initiatives that improve work procedures, and monitor

trends that impact workers.

JSOC is made up of an equal number of union and non-union representatives who bring experience, expertise, and perspective to the safety conversation. The co-chairs are Ed Nowak, Safety & Health Services Division manager, and Frank Raynor, IBEW Local 2230 member and treasurer. Members of the Council are: John Berry, IBEW; Robert Geib, IBEW; Dan Galligan, BNL union safety representative and IBEW; Bruce Penn, ES&H business operations manager; Ray Costa, F&O operational excellence manager; and Leo Somma, facility complex manager for the north complex.

"JSOC, simply put, is where Lab management and the union are able to come together, with safety as its primary goal," said Raynor, who has been at the Lab for 16 years. "All of us here..."

See *JSOC* on p. 2

Safety Day is Wednesday, 6/8

Come to Berkner Hall from 10:30 a.m. to 2:30 p.m. for the Safety Seminar Series, demonstrations, and frozen treats! Bring your completed Safety Day crossword puzzle, from p. 4 of today's Bulletin, for a chance to win prizes!

Veljko Radeka from p. 1
In addition to his other patents, Radeka holds two patents as a co-inventor of instrumentation related to positron emission tomography (PET), a medical imaging technique that provides information about the body's chemistry. He is the author of 180 publications.
"This award has been made possible by the dedication and hard work of my colleagues in the Instrumentation Division and by the sustained support of this division provided by BNL," Radeka said. — Diane Greenberg

Radoslav Adzic from p. 1
...warming have made my research particularly relevant today," Adzic said. "I am honored that Battelle is recognizing the breakthroughs made by my colleagues and myself, which may lead to applications of fuel cells — a source of clean energy. Fuel cells are a cheaper, more efficient, and more environmentally friendly alternative to the conventional use of fossil fuels."
Battelle also recognized Adzic as "BNL Inventor of the Year" when he first received this honor in 2005. — Diane Greenberg

Scharff-Goldhaber Prize Ceremony, 6/14
The BNL community is invited to attend the 2011 Gertrude Scharff-Goldhaber Prize ceremony on Tuesday, June 14, at 4 p.m. in the Large Seminar Room, Bldg. 510. Established to recognize substantial promise and accomplishment by a woman graduate student in physics, the annual \$1,000 award is administered by Brookhaven Women in Science (BWIS). The prize honors the outstanding contributions of the late nuclear physicist Gertrude Scharff-Goldhaber, who in 1950 was the first woman Ph.D. physicist appointed to the BNL staff, and, later, a founding member of BWIS.
This year's prize will be given to Megan Connors, a Stony Brook University graduate student who is performing research at the Relativistic Heavy Ion Collider's PHENIX detector. She will present a short seminar titled, "Probing the Quark Gluon Plasma with Direct Photon-Hadron Correlations at PHENIX." Refreshments will follow her talk.

Benefits Office Reminder
The birth of a child, adopting a child, or getting married are all exciting life events. Remember to enroll any newly attained dependents in your medical and/or dental programs within 30 days from the date your new dependent is born, adopted, or otherwise becomes eligible for coverage. If you do not enroll your dependent through the Benefits Office within 30 days from the date he/she first becomes eligible, you will be required to wait until the next Open Enrollment Period to enroll him/her. Please call the Benefits Office, Ext. 2877 or 5126, if you have any questions.

JSOC from p. 1
...are focused on safety — but the problems that lead to safety lapses or injuries are not always so obvious. That's what JSOC is designed to uncover."
Raynor said JSOC members are always asking questions. "How can we eliminate risk? How do we do a better job of working out issues that arise during the course of work? These are the questions that guide our meetings," he said. JSOC is also focused on moving major Lab priorities forward, he said. "One of our big goals is to help the adoption of Integrated Facilities Management. It's during times of change, when workers are dealing with distractions, that many injuries occur," Raynor added. "We don't want to simply wait for the incidents and injuries and then react. If we take our concerns to JSOC, we have the opportunity to find solutions before someone gets hurt."
According to Costa, JSOC is not a dialogue between two parties — union and management — but is really a conversation among three groups with concurrent goals.
"This three-way conversation among the IBEW, F&O, and ES&H produces a different balance of ideas and direction," Costa said. "The real power of JSOC is its ability to see the variables in a work environment to give us all a better understanding of issues."
According to Nowak, changing the safety culture is a core part of the Blueprint, the Lab's strategic vision and plan to transform itself into a more competitive resource in the DOE complex.
"The formation of JSOC is an excellent example of how the Blueprint is having a direct impact on the safety culture here at the Lab," he said. "Safety and operations excellence will feed directly

into the Lab's ability to attract the best people and programs. We're creating a culture of continuous improvement by having the ES&H, F&O, and union representatives coming together regularly."
So what are the specific issues JSOC is tackling now? Work planning methods across line organizations is one. The job risk assessment process for new employees is another. The common theme is attention to detail and consistency. When there's a lapse in either, injuries are more likely to follow.
"Every day, people come to me to talk about work issues and concerns," Raynor said. "And I'm not just on the receiving end of these issues. One of my goals is to get good information out there, information that can make a difference in how someone does a job, so the accidents don't occur."
Galligan, who has been with the Lab since 1993 and has been the IBEW 2230 safety representative since 1996, just started the new union safety representative (USR) job in the ES&H Directorate in March. He said he's glad to be in a position to help improve the Lab's safety record.
"The Lab decided to make the position a job classification in the last contract negotiation, which I thought was great, because safety should be full time all the time," he said. "As the USR and a member of JSOC, I see how we're making changes here, how we're moving from the conversation about safety to making changes in the workplace."
Galligan said everyone on the JSOC is fully committed to its mission. "An injury impacts a person's life, and the lives of his or her family members," he said. "This is a serious business we're in."
— Will Safer

Safety makes science possible
at Brookhaven National Laboratory
<http://intranet.bnl.gov/safety>



The 2011 RHIC/AGS Users' Meeting
June 20–24
The RHIC/eRHIC Long Range Plan

This year marks the start of the second decade of the Relativistic Heavy Ion Collider (RHIC) program, and a critical moment in which major decisions about the future of the field must be made. To push the planning process forward, this year's 2011 RHIC/Alternating Gradient Synchrotron Users' Annual Meeting, which will be held from June 20 to 24, will be dedicated to a set of workshops focused on the future science of RHIC and eRHIC — a proposed high energy electron-ion collider at RHIC — and the detectors and machine upgrades needed to bring it about.
June 20 will be devoted to a set of physics workshops on recent heavy ion and spin physics results. Two heavy ion workshops will run in parallel, featuring a wide range of topics, alongside a full day spin physics workshop. Following closely on the important Quark Matter 2011 conference, there will be many new results to show and discuss.
On June 21 and 22, a two-day workshop on the future strategy for RHIC will include overviews of current machine and detector plans, discussion of the long-term future of heavy ion physics at RHIC, the decadal plans of the existing experiments, and discussions of machine and detector options for eRHIC.
Thursday, June 23, will feature plenary talks on experiments from RHIC and the Large Hadron Collider at CERN, Switzerland, other scientific work going on at BNL of interest to the RHIC community, and perspectives from BNL management and funding agencies. All are invited to this day of talks.
The last day, June 24, will feature a panel and user community discussion to start the process of reaching consensus on the optimal RHIC and eRHIC strategy to present at the next Nuclear Physics Long Range Plan.
To register and obtain more information see: www.bnl.gov/aum.



Sylvia Earle's Talk from p. 1
...1992, she was the chief scientist of the National Oceanic & Atmospheric Administration.
Currently explorer-in-residence at the National Geographic Society, Earle founded Deep Ocean Exploration and Research in 1992 to design, operate, support, and consult on manned and robotic sub-sea systems. In 2008, she founded the SEALiance, a not-for-profit foundation committed to the expansion and protection of marine protected areas, and in 2009, together with several partners in the private sector and government, she initiated Mission Blue, a marine conservation organization.
Earle has led more than 100 expeditions worldwide involving more than 7,000 hours of underwater research. She led the first team of women aquanauts during the Tektite Project in 1970, and she holds a depth record of 1,000 meters for solo diving. From 1998 to 2002, Earle led the Sustainable Seas Expeditions, a program to study the National Marine Sanctuary System sponsored by the National Geographic Society. She is the author of over 175 publications on marine science and technology, and she has lectured in more than 80 countries. She serves on numerous boards, foundations, and committees related to marine research, policy, and conservation.
Earle is a fellow of the American Association for the Advancement of Science, the California Academy of Sciences, the Marine Technology Society, and the World Academy of Arts & Sciences. She has been awarded more than 100 national and international honors, ranging from the U.S. Department of Interior Conservation Service Award in 1970 to the TED Prize in 2009.
— Diane Greenberg

BNL/SBU Collab. from p. 1
...for breakthroughs are really high." He mentioned that there are 20 joint appointments between SBU and BNL, as well as several joint institutes, including the Advanced Energy Center, the New York Center for Computational Sciences, the Joint Photon Sciences Institute, and the Center for Science and Technology. He added that there is a new push to commercialize technologies discovered at BNL, and collaborations between SBU and BNL can help to move research "from discovery to deployment."
SBU Vice President for Research John Marburger, who is also a physics professor at the university and was a former director at BNL spoke of the need for action. "The kinds of programs that we envision require individual researchers to participate," he said. "We can't do it all from the top down. Today you can see what opportunities exist for you."
Creating new technologies
Both SBU's Office of Technology Licensing & Industrial Relations (OTLIR) and BNL's Office of Technology Commercialization and Partnerships (OTCP) played a significant role in bringing about the networking event.
OTLIR Assistant Director for Life Sciences Jennifer Hsieh, said, "It's great to bring clinicians and scientists together to carry on a common vision of creating technology for medical applications. It's important to leverage the expertise from both institutions for the most productive outcome."
And OTCP Manager Walter Copan suggested, "Sometimes new collaborations can find new sources of funding for research." He added that BNL has many biomedical technologies under development or ready for licensing, including new applications for pharmaceuticals.
From bench to bedside
The posters on display featured aspects of translational medicine, which has the goal of bringing scientific discovery from the bench to the bedside. The research poster titles were varied, including findings and/or technologies related to diagnosing or treating addiction, brain aneurysms, brain tumors, cervical cancer, head and neck cancer, and obesity, among other health-related findings.
In their poster called "Brain Imaging and Obesity," BNL's Gene-Jack Wang and Peter Thanos described their findings after examining the brain chemistry and metabolism of both obese human subjects and those of normal weight. Over the course of many studies using various medical imaging methods, including positron emission tomography, they determined that compulsive overeaters share many of the characteristics of drug addicts, including significant changes in the signaling of dopamine, a brain chemical associated with pleasure and reward.
SBU's Miriam Rafailovich and Rafael Davis displayed a poster titled "Optimizing the Treatment of Neuropathies and Targeting Tissues with Botox Injections" in which they described a non-invasive technique to measure the movement in facial skin, which is attached to muscles. The technique can effectively be used to pinpoint when and where wrinkles will appear, and therefore can be used to determine the optimum dosage of BOTOX injections, and monitor them. Also, it is useful for treating nerve disorders such as Bell's palsy and acoustic neuroma, a benign tumor of the nerve that connects the ear to the brain, as well as monitoring recovery after facial surgery.
— Diane Greenberg

From Glorious History Grows Glorious Science

As we make plans to celebrate Memorial Day, it is appropriate to remember the sacrifices made by men and women serving our country in the military. It is also a time to remember those who have served before them, and to recall the rich history of the site of Brookhaven National Laboratory — originally Camp Upton during World Wars I and II (WWI, WWII).

The beginning and end of Camp Upton

Camp Upton was built in 1917 as an induction center where WWI soldiers were trained as part of the American Expeditionary Force heading off to Europe. New recruits arriving at the camp formed the legendary 77th Battalion, nicknamed the “Statue of Liberty Division.” Among those early Camp Upton recruits was renowned songwriter Irving Berlin. In addition to many other notable plays and songs, Berlin penned the play *Yip, Yip, Yaphank* and the songs *God Bless America* and *Oh, How I Hate to Get Up in the Morning*. The 77th Battalion gained recognition for valor, particularly in the battle at Argonne Forest in France in 1918. The Battalion is one of the most decorated military units in history, its members having received six Medals of Honor, 19 Distinguished Crosses, and 335 Silver Stars.

In 1921, three years after WWI ended, Camp Upton was deactivated. Through public auction, most items from the camp were sold, including many buildings, which were relocated. Interestingly, some WWI Camp Upton buildings still stand today, speckling the landscape of Long Island. According to a story in *The Suffolk Times*, a Camp Upton cottage is home to the Clark family in Jamesport. At the Northville farm of David Wines, a Camp Upton horse barn served as a henhouse and is currently under renovation for future use as a milking shed.

Beginning in 1934, the Civilian Conservation Corps (CCC) reforested the site and it was



In front of an original Camp Upton building, now located at St. Frances Cabrini Church in Coram, are church staff (from left), Reverend Donald Baier, current pastor; Alica Fazio, business administrator; and Christine Fogarty, director of outreach services. The building, relocated from Upton to the church grounds in 1959, served as the first rectory. Today, it serves as a busy outreach center.



Moving Day in 1947. Over the years, several Camp Upton buildings were relocated, some on site, others to different towns on Long Island.

renamed the Upton National Forest. It remained dormant until 1941 when it once again was brought to life as an induction center for WWII soldiers. The camp was expanded and converted to a convalescent and rehabilitation hospital in September 1944. Basketball courts (currently the location of the Lab’s carpenter shop), bowling alleys, a swimming pool, and tennis courts were added to serve as recreational therapy for recuperating soldiers. By 1945, WWII had ended and Camp Upton was officially declared surplus. However, it was not dismantled this time. The camp was converted into a research center for the peaceful uses of atomic energy.

In January 1947, the nation witnessed the birth of BNL. Camp Upton had completed its service to the nation.

Old Camp Upton building turns rectory

In March 1959, when BNL had been in existence for 12 years, additional Camp Upton buildings were placed on a surplus list. Looking for a rectory, the pastor and parishioners at Saint Frances Cabrini Church in Coram saw this as a golden opportunity.

“We did not have a rectory on church grounds,” said Reverend Donald Baier, the current pastor of the church. “Our church history tells us that the building was hoisted onto a truck and driven through the woods and on narrow roads before reaching its destination. When it arrived, it needed renovation. In July 1959, with the hard work of parishioners, the renovations were complete, and we opened the doors of that surplus Camp Upton building to serve as our first rectory.”

Today, the building is a busy outreach center housing a food pantry, donated children’s clothing and books, and counseling offices.

“We have assisted many people in dire need during difficult times,” said Reverend Baier. “The building still serves a meaningful purpose.”

The 77th Battalion bids farewell

In 2008, soldiers of the famed 77th Battalion revisited BNL, this time for a very different mission. Hosted by the Lab’s Veterans Association, soldiers from the 77th U.S. Army Regional Readiness Command conducted the “Casting of the Colors,” a ceremony marking the retirement of the 77th Infantry Division that had started its distinguished 91-year military history on the Lab site. Once again, the parade field in front of the Brookhaven Center — the CCC and WWII era Camp Upton Officers Club — was filled with soldiers in uniform marching in formation under an American flag, halting their cadence to listen to the echo of “Taps” played by a lone bugler. The ceremony concluded with a thunderous 21-gun cannon salute honoring those who served in the 77th Battalion and all military personnel. The battalion flag was formally retired. It now rests at the Center of Military History in Washington, D.C.

History marches on

The old stories of Camp Upton and the contributions of the soldiers who were inducted and rehabilitated here will always be remembered. Now, the Lab’s outstanding scientific achievements, which span more than six decades and include seven Nobel Prizes, continue to play an important role for the nation. On the 5,265-acre site of a once-upon-a-time army camp, BNL has earned prominence for its world-class scientific accomplishments and for its passion for discovery — important attributes leading to tomorrow’s history.

— Jane Koropsak



Earth Week Pledge Tree Results, Winners

During Earth Week, which was celebrated at BNL April 25-30, pledges made at the 2011 Earth Week Pledge Tree helped to collect \$1,589 for the Foundation for Ecological Research in the Northeast (FERN) to support research in the Upton Ecological & Research Reserve. Members of the Lab community who participated in Earth Week activities at Building 400/Support Services, Berkner Hall, or online with the Sustainability Quiz were automatically entered to win prizes, including a new 21-speed Diamondback Sorrento Mountain Hardtail bicycle, solar lights, a bird feeder, a garden basket, or a gift bag containing a canvas lunch bag, Frisbee, coffee mug, letter opener, and pens. Congratulations to Ed Stein, of Condensed Matter Physics & Materials Sciences, grand prize winner of the bicycle. Other prize winners pictured are: (from left) Larry Margulies, Photon Sciences (PS); Robert Lockey, Collider-Accelerator; Marge Hughes, Diversity; Kathy Schwager, Environmental Protection; Janet Schlock, Procurement & Property Management (PPM); Jessica Wilke, Quality Management. Not pictured are: James Desmond, Budget; Jennifer Higbie, Environmental Protection; Donna King, PPM; Kim Kisslinger, Functional Nanomaterials (CFN); Ivy Olberding, PS; Carol Shea, Waste Management; Qin Wu, CFN. To learn more about Earth Week 2011 and to see a slideshow with more pictures go to www.bnl.gov/earthweek.

Calling All Retirees! BREA Get-Together Luncheon Draws Near, 6/15

All BREA members are invited to join in the Brookhaven Retired Employees Association (BREA) get-together luncheon at the Bellport Country Club on Wednesday, June 15. Enjoy appetizers, starter, salad, choice of entrées, dessert, coffee or tea, and unlimited wine, beer or soda — all for \$37. Non-members may join at the door for \$10. Reserve by sending a note to: BREA, BNL, Bldg 421, Upton, NY 11973-5000, with a check for \$37 per person (made out to BREA). Include your name (and spouse/guest name), address, and phone no. For more information, call Martine O’Connor at 631-286-9725.

Talk on ‘Physics and Consciousness,’ 6/3

On Friday, June 3, at noon, in Berkner Hall, Swami Pavitrnananda, head of the Sree Gangnath Mahavev Ashram in Gujarat, India, will talk on “Physics and Consciousness.” All are welcome to attend this free talk. Pavitrnananda will discuss how modern quantum physics theories compare to the Vedanta school of Indian philosophy, delving into the concepts of real and unreal. Vedanta teaches that one Brahma — the Ultimate one beyond human comprehension — manifests itself as our world, which is real or unreal to us depending on the state of our consciousness. When quantum physics introduces the uncertainty principle, it approaches the realm of Vedantic metaphysics.

Pavitrnananda’s educational background includes a degree in electrical engineering from the National Institute of Technology, Bhopal, India, and Master’s degrees in Indian philosophy from Sanskrit University. He became interested in studying modern physics theories, drawing on his knowledge of quantum physics and the ancient Vedanta concepts of Reality and Consciousness to show their compatibilities, the subject of his doctoral thesis at Vinova Bhav University, Jharkhand, India. He has made prior presentations on this topic in both Indian and USA universities.

CALENDAR

Today, Friday, 5/27

Memorial Day Ceremony by BVA

Noon. Brookhaven Center, under the flag. The Brookhaven Veteran’s Association will conduct a Memorial Day Ceremony, with speaker and guest of honor Tom Bergin, Chaplain of the Suffolk County American Legion. All are welcome.

— WEEK OF 5/30 —

Monday, 5/30

Memorial Day, Lab Closed

No Bulletin on Friday, 6/3

Thursday, 6/2

Elder Law and Medicaid Updates

Noon-1 pm, Berkner Hall, Room B. Talk by Nancy Burner, Elder Law Attorney. To register, contact Michael Thorn, mthorn@bnl.gov or Ext. 8612.

Friday, 6/3

Costco Membership Drive

11 a.m.-2 p.m. Costco, a wholesale warehouse firm carrying brand-name merchandise at discount prices, offers discount memberships to BNL employees.

*Talk: Physics & Consciousness

Noon. Berkner Hall. Swami Pavitrnananda, head of the Sree Gangnath Mahavev Ashram in Gujarat, India, will talk on “Physics & Consciousness.” All are welcome. See notice below.

— WEEK OF 6/6 —

Monday, 6/6

Festo Corp Mobile Display Unit

10:30 a.m. Berkner Hall parking lot. In huge “Expotainer” see electric drives, motors and controls, a new tripod robot, high-speed camera, all sorts of valves, much more.

Tuesday, 6/7

*Plant Swap Outside Berkner

See notice below.

Wednesday, 6/8

*Safety Day — All Welcome

10:30 a.m.-2:30 p.m. Berkner Hall lobby. Vendors, demos, hands-on activities, health assessments. Safety seminar series: “Preventing falls,” 11 a.m., 1 p.m.; “Equipment lock-out/tag-out,” 11:20 a.m., 1:20 p.m.; “Laceration prevention,” 11:40 a.m., 1:40 p.m.; “Materials handling,” noon, 2 p.m. Also, “Enter the Smoke House!” to see what it’s like to be trapped in severe smoke conditions (using stage fog). Giveaways, ice-cream. See crossword puzzle, p.4.

Thursday, 6/9

*Science Café: Crime Novel Uses

NSLS Forensics to Solve Crime

7 p.m. Berkner Hall. Science Café. Crime writer Archer Mayor “used” forensics tools at the NSLS to investigate a brutal murder in his novel, *Red Herring*. Readings, discussions with BNL researchers, Q&A. All are welcome to this free event. open to the public. Visitors to the Lab of 16 and older must carry a photo ID. See p.1.

BERA Update

Splash Splash opens on Memorial Day weekend, May 28. Discounted tickets are available at the BERA Store in Berkner Hall, weekdays, 9 a.m.-3 p.m. Or buy “etickets” online. For information go to www.bnl.gov/bera/recreation/events.asp.

Plant Swap, Tuesday, 6/7

Come to Berkner parking lot at noon for garden talk and to share and swap plants. For more information, contact ccarter@bnl.gov or Ext. 5090

Arrivals & Departures

— Arrivals —

Nicholas Risi..... Photon Scis

— Departures —

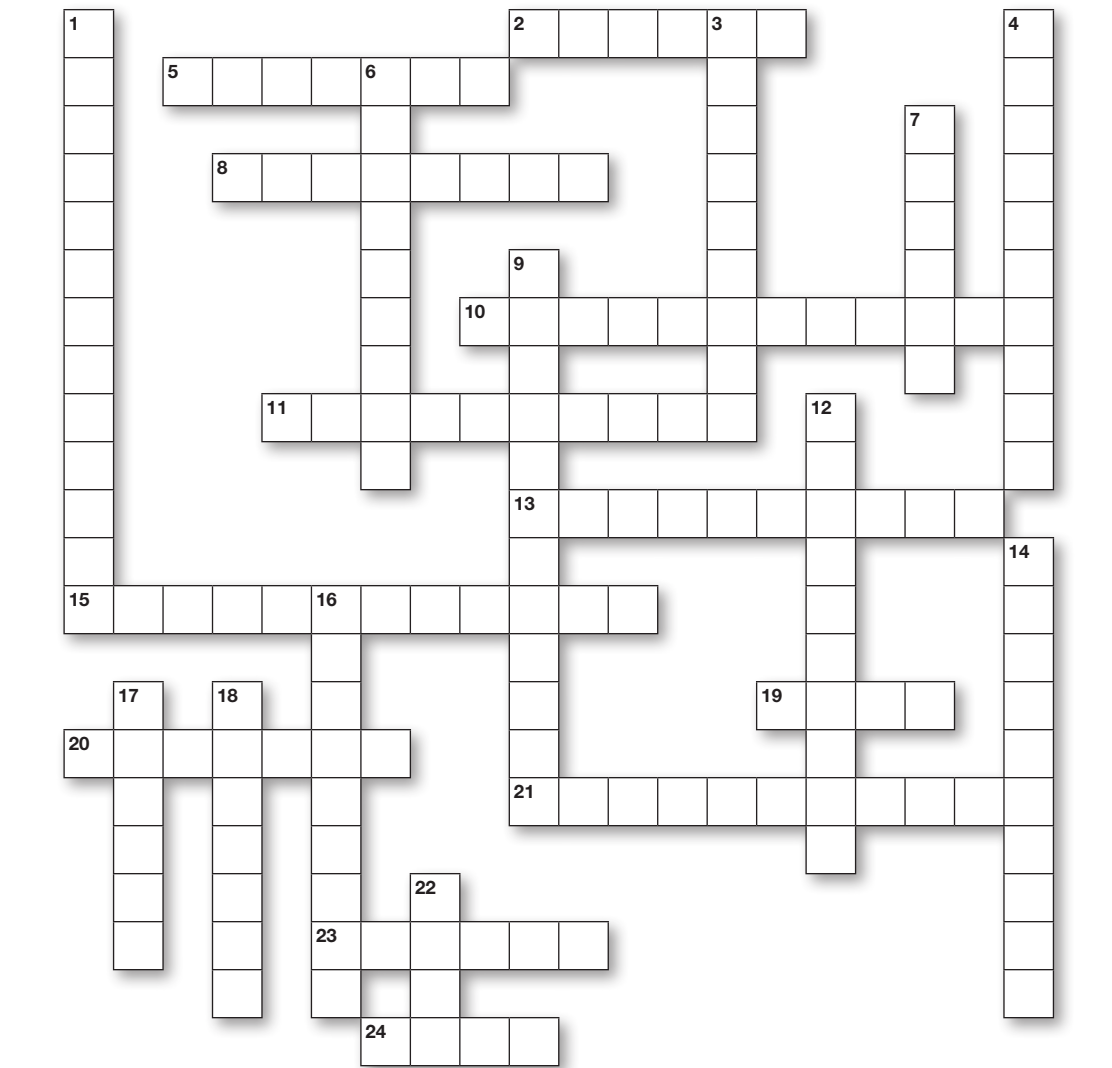
Thomas Kim..... Photon Scis

Katherine McCabe.... Photon Scis

Carol ParnellDirector’s Office

Crossword Puzzle for Safety Day, June 8

Bring your completed crossword puzzle to Safety Day at Berkner on June 8, 10:30 a.m. – 2:30 p.m. You can win a prize, get a hands-on safety demo, and more!



Across

- 2 Liquid nitrogen can cause an ____ deficiency hazard.
- 5 Spread this outside in the winter to prevent slipping.
- 8 A type of personal protective equipment (PPE) used to control exposure to noise
- 10 When you hear an ____ site alarm, evacuate the BNL site using the most direct route, or as instructed by emergency response personnel.
- 11 This reaction releases energy in the form of heat or light. It is opposite of an endothermic reaction.
- 13 A document used to establish work controls necessary for mitigating hazards during planned work
- 15 A method used to control workplace stressors so PPE does not have to be worn
- 19 A major engineering control used in almost all labs
- 20 ____ poisoning is prolonged or repeated exposures of a duration measured in days, months, or years. Example: lead poisoning
- 21 A class of chemicals that can cause an allergic reaction
- 23 A ground fault interrupter must be ____ before use.
- 24 A government agency responsible for workplace safety

Down

- 1 This PPE is required for entry into a chemical laboratory.

- 3 Employees should contact a health and safety representative for this type of evaluation, if suffering from any musculoskeletal disorder such as pain in the arms, wrist, neck, etc.
- 4 A common route of exposure for a chemical hazard
- 6 This may result when mixing organic compounds with piranha etch solution.
- 7 You must wear this PPE when riding a bicycle at BNL.
- 9 All electrical equipment at BNL must be approved by this nationally recognized testing laboratory.
- 12 This type of chemical will ignite spontaneously with air at a temperature of 130 degrees Fahrenheit or below.
- 14 ____ are substances that cause visible destruction or irreversible alteration in tissue at the point of contact. Example: sulfuric acid
- 16 ____ are materials that cause inflammations as well as reddening and swelling of the eyes, skin, nose, and respiratory system. Example: ammonia
- 17 This is the speed limit in miles per hour on site unless otherwise posted.
- 18 ____ /TAGOUT: a specific practice and procedure that protects workers from injuries because of the unexpected energization or startup of machinery and equipment or the release of energy during operations
- 22 An information document provided by the manufacturer or importer of hazardous chemicals. It provides safety and health-related information.

Classified Advertisements

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

LABORER POSITIONS (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. Site Resources Division Please submit Transfer Request form to Diana Hubert, Human Resources & Occupational Medicine Clinic, Bldg. 400B Please apply to Job ID # 15784.

Motor Vehicles & Supplies

10 ACURA TSX – 5.428K mi. mint, blk lthr, 4D, 4cyl VTEC 2.4l, v/low mi, reg gas, always hand washd. \$25,500. 264-2421.

06 TOYOTA PRIUS – 130K mi. leather, back up camera, navigation, new tires. \$11,000. Chris, Ext. 8612.

06 KAWASAKI VULCAN 500CC – 6.3K mi. rebuilt carbs, runs v/gl red/blk, pic avail, w/sm helmet. \$2,300. thyberg@bnl.gov.

05 SUBARU IMPREZA 2.5 RS WAGON – 62K mi. awd, 5spd, a/c, p/s, p/b, maint. recds, non-smkr, \$10,600. Ext. 4211, 286-3681.

03 HYUNDAI SANTA FE – 99.3K mi. wh. SUV, leather, s/roof, a/c, heatd fr seats, new tires/brkes/tmg belt, \$5,750 neg. Ext. 8219.

MOTOR HOME – '98 Newmar Kountry Air, diesel, 40ft, fully equip, 1 sideout, 50K mi, \$40. Bob, 289-1834.

RIMS WITH TIRES – 4 - 17" Cobra Rims M-1007-G178, v/gd cond w/245 40" tires, 1 yr old, \$700. Ext. 3217.

SADDLEBAGS – Nelson-Rigg SB-900 Touring bags, 35 liter cap ea, v/gd cond, ask/\$40. Michael, Ext. 5423.

WINTER TIRES – Two 205/70/14. \$50 for the pair. Razvan, Ext. 5806.

YAMAHA MOTORCYCLE – '03 1600 Road-

star, low mi, new Metzler 880 tires, much more must sell, ask/\$6300. 872-5074.

Boats & Marine Supplies

25' CAPE DORY 25' – '78, Tohatsu 6 hp lg shaft '07, new sails '09, ready to sail. \$4,000 neg. 246-9294 or rossum@bnl.gov.

12' WILDERNESS SYSTEMS TSUNAMI 120 – Kayak, used few times, perfct cond, moving sale, access incl. \$700 neg. Ext. 3004.

Audio, Video & Computers

51 – Std def TV w/built-in spkrs, about 300 lbs, 5'h x 4'l x 3'w, pick up from Ronkonkoma, ask/\$250. Frank, Ext. 2597.

CAMCORDER CANNON – 20 Memorex disc, used once, org/\$380, ask/\$150. Eileen, 284-3956 or eptsmiles@aol.com.

DELL 17" MONITOR – excel cond, w/pwr & computer cables, \$20/obo. Sal, Ext. 7254.

KENWOOD HOME STEREO SYSTEM – incl receiver, CD Player, tuner, duel cass deck & 2 spkrs, \$100. 678-3299.

LAPTOP – non-working, good for parts, Dell Inspiron 1501, \$15. Karl, Ext. 3116.

SAMSUNG – 55' 1080p LED TV <http://tinyurl.com/4d8ez87>; w/free int, tv stand, <http://tinyurl.com/5tcrbyg> \$1,800. 655-7605.

Furnishings & Appliances

AIR CONDITIONERS – 5000 Btu, 3 windows units, all in gd shape, elect controlled w/remotes, \$50/ea. John, Ext. 7939.

DINING ROOM – Briana Buffet,4/blk



Roger Stoutenburgh b3a05t1

When Is a Cloud Not a Cloud?

This photo by Roger Stoutenburgh shows why so many people are experiencing a tough allergy season, says Lab Cultural & Natural Resources Manager Tim Green. Heavy winter snows provided abundant moisture triggering extra heavy pollen production. The good thing is, he adds, “Summer is right around the corner.” Then, says Bulletin Editor Liz Seubert, we can all complain about the heat n’ dust instead...

chairs, all pads for tbl, 42"x 78"x 32" w/18" leaf, nat color, \$1200, pics avail.284-3956.

DRESSER – light wood, gd cond, \$45. Jennifer, Ext. 4894.

END TABLE W/ 2 DRAWERS – med oak-ish color, ok cond, \$40; 26" TV (I believe) not flatscreen, \$40. Jennifer, Ext. 4894.

KITCHEN TABLE & CHAIRS – Lt Maple w/ leaf, 60" x 36", 4 Spindle back chrs, mint cond/\$300. 678-3299 or dgordon@bnl.gov.

POWER RECLINING BED – kg sz. Hd & foot pwr, vibrates, sep. contr ea. side. Firm matr. U pick up ESetkt. \$250. Ext. 5806.

SEWING CABINET, – practically brand new, walnut; 4 white solid oak school chairs, b/o. 732-2472.

Lost & Found

FOUND GLASSES – in prkg lot betw bldgs 490 & 400, Call the Clinic, 344-3670.

FOUND – Motorola phone in Blackberry case, red memory stick w/white tape, brown reading glasses in brown case. Ext. 5090.

Tools, House & Garden

LAWN MOWER – Craftsman, v/nice cond, \$65. Joe, Ext. 3783, 487-1479.

ORNAMENTAL GRASS – shorter variety, will grow about 3.5 -4' tall, dark green, several avail, \$4/pot. Sabine, Ext. 4340.

RADIAL ARM SAW – Craftsman Electronic 10" w/2 dr cabinet, grt cond, \$250/obo. Gary, Ext. 7779 or gstevens@bnl.gov.

SLIDING GLASS DOOR – wood trim interior, track needs repair, \$50/obo. Karl, Ext. 3116.

Sports, Hobbies & Pets

50 GAL AQUARIUM W/CABINET – all glass 18"x48"x24" wood cab, Fluval Filter, many extras, ask/\$175. 872-5074.

CONCEPT 2 INDOOR ROWER – Model D, PM3 details at concept2.com/us/indoor-rowers \$700. Ext. 6399, bhenevel@bnl.gov.

EXOTIC GOLF CLUBS – various woods & hybrids, all less than 1/season old, take one take all, reasonable offers. Ken, Ext. 3124.

LOOM – 48" 8-harness loom, oak, v/gd cond, make offer. Sam, 258-8028.

TREADMILL – Sears ProForm 590QS, works well, pick up Miller Place, photos avail, ask \$175. Phil, Ext. 5669.

WETSUIT – Youth size 12, pd\$110, ask/\$55. Lynda, Ext. 7235 or fitz@bnl.gov.

Miscellaneous

CHICKEN COOPS – 2, 1'x2'x3',never used for animals, 1/\$35, 2/\$60, oak slats, plywd base, use for kids' stuffed toys, etc. 834-0215.

HAPPENINGS – K of C 3rd Classic Car Show, 6/12/11, 10a-4p, \$3 to walk in, \$10/car to show (1st-3rd places) Sts. Peter & Paul Church Field, Wading River Rd, Manorville. 827-1864.

TOYS – rocking horse/\$15, Playskool walk-n-ride/ \$5, Safety1st stroller/\$15, all gd cond. JS, 344-4290.

Yard & Garage Sales

HAMPTON BAYS – Multi-family, to benefit Peconic Bay Zonta, 5 Emerson Crt, May 28, 8:30 a.m. to 3 p.m., rain date May 29. Diane, Ext. 2347 or greenb@bnl.gov.

RIVERHEAD – MOVING - RAIN or SHINE - 5/20 & 21, 9 am, household items, 33 Nadel Dr, Riverhead. Barbara, Ext. 5656.

SHOREHAM – Multifamily yard sale 6/4 & 5, 9:30 a-3p. Shoridge Hills n'hood, from Harvard or Valentine Rd. 744-8632.

Happenings

CAR SHOW FUNDRAISER – Miller Plc/ Mt. Sinai Histor. Soc. Car Show Sun, 6/12, N. Country Rd, Raffles, music, tours, great cars! \$6pp, kids under 12 free. Ext. 5090.

PLANT SWAP – Atten: BNL gardeners! Come to Berkner 488 parking lot on Tues, June 7, noon, for garden talk & to share & swap plants. Ext. 5090, ccarter@bnl.gov.

Wanted

ARTIFACTS ON NEVADA – postcds, pics, maps, etc. for sch. proj. due 5/31 for State report. Bldg 911A. Nina, Ext. 5894.

FIREARMS – I will pay fair \$\$, new or old. Joe, Ext. 3783, 487-1479.

METS TICKETS 5/29 – Looking for 4 tickets to this Sunday's Met game. Charlie, Ext. 4736 or ccardone@bnl.gov.

NINTENDO DS GAMES – that your kids don't play anymore, low price. Ext. 3621.

NONWORKING LAPTOP – nonworking flat screen monitor and TV. Pierrot, Ext. 2589, 730-6184 or pierrot@bnl.gov.

OLD COMIC BOOKS – Cash pd for comics from 40's-80's, mostly superhero fr. Marvel & DC. Jesse, Ext. 2122.

REFRIGERATOR – full size, gd working refrig needed for lunches in on-site coffee room, will remove for free. Ext. 7861.

For Rent

AQUEBOGUE – 3 lvl 3000sq ft condo, 3.5 ba, 2 kitchs, 2 car gar, 3 zne basebrd heat, walk on priv beach, hot tub, deck & patio, heatd pool, more. \$2,400/mo. Ext. 5101.

MASTIC – 3 bdrm hse, 2 full ba, forml l/r, d/r, f/p, fully equip new eik, new carpets, quiet, 7 min to BNL, walk to McD's, Subway, Kohls, 7/11, Pizza. \$1,750/mo neg. 335-4907.

MASTIC BEACH – 2 bdrm, l/r, eik, 2.5 gar, deck, fen in yd on quiet block, elect/ water incl, sm pet o.k, +/sec. \$1,300/mo. Kenny, 775-6003 or aichroth@bnl.gov.

MILLER PLACE – share lg fully furn home, cac, wireless/wired int, TV, own bdrm, all incl, responsible non-smkr. \$700/mo. 275-0866.

NORTH CORAM – 3 bdrms, 2 ba, 2 car gar, use of backyd/pool, avail 7/1, plus util. \$2,400/mo. Marcia Carter, 466-4183.

PORT JEFFERSON – moving, need tenant, lg 1 bdrm apt, by Mather Hosp., no maint. fees, Wlk-in closet, w/d inside, avail July. \$1,225/mo. Ext. 3004, gcmoving@gmail.com.

RIDGE – 1 bdrm apt 5 min to BNL, w/ brand new leather furn, elec, a/c, int TV, kitch, everything avail, enjoy June & July. \$1,200/mo neg. 344-2309 or gul@bnl.gov.

ROCKY POINT – 1 bdrm apt sep ent, full kitch/ba, new carpet/paint, pets welcome, walk to beach, approx 10 mi to Lab. \$1,100/mo. Nelly, Ext. 8104, 603-7209.

SHIRLEY – main flr, 1 bdrm apt, pvt ent, lr/kit cmbo, granite, new appl, full ba, hrdwd flrs, off st pkg, no smkg/pets, single pers, crdit chck 1st & last sec, \$1,000/mo/all. 848-6353.

SHOREHAM – Walk to beach, 1 lg bdrm apt w/office area, pvt ba, kit/lr cmbo, pvt ent w/ Fr. drs, drway prkg, mins to BNL, cac/heat/ elec/cable/web. \$900/mo. 849-6121.

SHOREHAM – share a hse w/professional, lg rm w/ furn/TV/int/elect, etc, all incl, 7 mi from BNL, avail now. \$675/mo. 578-0108 or gg19582003@gmail.com.

SPEONK – immac, 3 bdrm ranch, 1 ba, part fin bsmt, w/d, cac, deck, lg fen bkyd, cul de sac, 15 min to lab, 10 min to beach. \$1,800/mo neg. Lauren, Ext. 2289.

WESTHAMPTON – 3 bdrm, 1.5 bath, Westhampton SD, beaches, 20 mins or less to Lab. \$1,500/mo neg. Chris, Ext. 7945.

YAPHANK – 2 or 3 bdrm condo, eik, 1 & 1/2 ba, lvg rm, eik, fin. basemt, lgg, tennis/ bsk'ball courts, lndscping, snow removal. 3 mins to BNL. I mo. sec. \$1,500/mo. 988-8233.

For Sale

AQUEBOGUE – 3 lvl 3000sq ft condo, 3.5 ba, 2 kitch, 2 car gar, hot tub, walk on priv beach, 3 zn bsebrd heat, heated pool, tennis, extras. \$700,000. Ext. 5101.

BAYPORT – Grt. S. Bay area, 2,300 sq.ft cmbo, nr.1 acre, wooded, priv, 3 bdrm, 2+half ba, den, lr/dr, kit, util rm, scmd porch, carport. \$2,300/mo. or \$585,000. 617-332-6264.

CENTER MORICHES – 2 acre mini farm, borders 25 acre farm, secluded, can hold mortgage if needed. \$180,000 neg. 878-1178 or murdock381@hotmail.com.

LAKE RONKONKOMA – 5 bed 3.5 ba Col., fin bsmt, sprklr sys, cac, new PVC Fence; new carpeting, light fixtures; stainless steel appli, \$399,999 neg. Ext. 3008.

S. SETAUKET – Pristine 3 bdrm, 1 ba ranch, Three Village SD, CAC, new kitch, ba, w/d, windows, siding, drway & roof, Patio, priv yd, igs. \$324,505 neg. awund@bnl.gov.

SHOREHAM – 3 bdrm, 1.5 bath Col., den w/fp, new stove, w/d, lge wood shed, deck, 10 mins from Lab. \$369,000. Andrea, 278-9798 or dreashouse@aol.com.

In Appreciation

Sincere thanks and appreciation to all my BNL friends and colleagues for your expressions of sympathy and outpouring of support during the passing of my father, George Berry.

– Leesa Allen