Bulletin



Vol. 64 - No. 18 May 21, 2010

Watching the Tug of War Between

Structure & Superconductivity

Like Clark Kent, who often forgoes his social life to become Superman, materials that become superconducting must sacrifice at least one of their natural properties to attain the ability to transfer electric current with zero resistance. At BNL's National Synchrotron Light Source (NSLS) and Center for Functional Nanomaterials (CFN), a team of researchers has explored this internal conflict in a class of ironbased superconductors, materials that could be used to develop energy-saving applications such as high-efficiency power lines.

Relatively new to the field of superconductivity, iron-based materials are now world-famous for their frictionless transport of electrons at "high" temperatures — above about 50 Kelvin, or -190 degrees Celsius.

"Iron-based superconductors have the second highest transition temperature that anyone knows about, a characteristic that's very important if we want to use them for practical applications," said Princeton University researcher Robert Cava, "All as-



Yimei Zhu (left) and Jing Tao, both of BNL, work with Tyrel McQueen and Anthony Williams, from Princeton University; Peter Stephens, from Stony Brook University; and Vadim Ksenofontov, Frederick Casper, and Claudia Felser from Johannes Gutenberg University in research led by Princeton's Robert Cava.

pects of research on these materials are now under way. Our part of the picture is to try and understand why they're superconducting in the first place."

Cava and his team of Tyrel McQueen and Anthony Williams, Princeton; Peter Stephens, Stony Brook University; Jing Tao and Yimei Zhu, BNL; and Vadim Ksenofontov, Frederick Casper, and Claudia Felser, Johannes Gutenberg University, in Germany, focused their investigations on iron selenide...

See Superconductors on pg. 3

Mort Rosen cnd-54488



2010 Joint NSLS & CFN Users' Meeting, 5/24-26

All are invited to the plenary session, 5/25, with keynote speaker William Brinkman, Director of the DOE Office of Science

The annual Joint National Synchrotron Light Source (NSLS) and Center for Functional Nanomaterials (CFN) Users' Meeting will be held next week, from Monday through Wednesday, May 24-26. New research results and advances in experimental capabilities in synchrotron radiation and the nanosciences will be highlighted.

This year's theme will focus on "Climate Change" and how synchrotron-based research and nanoscience will impact understanding and mitigation of potential global effects.

The Tuesday main meeting and plenary session is open to all without registration. William F. Brinkman, Director of the DOE Office of Science, will give the keynote address in Berkner Hall at about 10 a.m. Also included will be scientific talks; updates from DOE Basic Energy Sciences program managers; and overviews from BNL's Director Sam Aronson; Steve Dierker, Light Sources; Chi-Chang Kao, NSLS; and Emilio Mendez, CFN. For more information and the agenda, see: http://www.nsls.bnl.gov/users/meeting/page.aspx?id=home.

CFN Graphene Research Most Cited in Field Research conducted at the CFN by two BNL scientists has won a major scientific popularity contest

A paper published two years ago in *Nature Materials* by Eli Sutter and Peter Sutter, from Brookhaven's Center for Functional Nanomaterials (CFN), and Jan Ingo-Flege, a former CFN postdoc now at Bremen University, Germany, is now the most cited publication in the field of epitaxial graphene — an intriguing form of carbon that is just a single atom thick. According to Thomson Reuters Essential Science Indicators, the paper has been referenced in scientific articles more than 120 times since it was published in May 2008, making it the most cited study in its field.

Graphene is flexible, highly transparent, and has outstanding electrical properties, making it a strong contender for the next generation of computers, digital displays, sensors, and solar cell contacts. The simplest way to produce the material is to peel off single sheets of graphene from graphite — a material consisting of many graphene layers and most commonly found in pencils — with pieces of tape. But this method results in small, jagged flakes that are not useful for most applications.

The CFN group was the first to show that metal substrates (in this case, ruthenium) can be used to grow high-quality graphene over very large areas, thousands of times larger than the pieces made with the "Scotch Tape" method.

Read more about the researchers' influential



paper, in their own words, at the *ScienceWatch* website, *http://sciencewatch.com/dr/fmf/2010/10mayfmf/10mayfmfSuttET/.* — Kendra Snyder

Original publication

P.W. Sutter, J-I Flege, E.A. Sutter, "Epitaxial Graphene on Ruthenium," *Nature Materials*, 7, 406-411 (2008). doi:10.1038/nmat2166

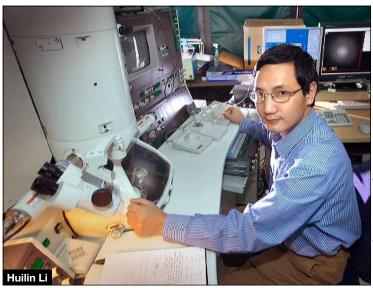
Eight BNL Scientists, Including Guangyong Xu, Are Granted Tenure

Brookhaven Science Associates (BSA) granted tenure effective December 1, 2009, to eight Brookhaven scientists. This week, the Bulletin is featuring the contributions of Guangyong Xu, summarized below.

Guangyong Xu, in the Condensed Matter Physics and Materials Science Department (CMPMS), received tenure for his original and creative application of neutron and x-ray scattering techniques to the study of complex materials.

"Guangyong has made outstanding contributions on a broad range of topics, from quantum spin fluids to hightemperature superconductors to relaxor ferroelectrics," said Peter Johnson, CMPMS Chair. "He is an exceptional scientist and one of the top young neutron scatterers in the country, with the intelligence, creativity, skills, and experience necessary to advance the energy-related research that is crucial to the Lab's and the nation's future."

See Guangyong Xu on pg. 2



New Details of Tuberculosis Protein-Cleaving Machinery Could Aid New Drug Design

Scientists looking for new ways to fight tuberculosis (TB) have their sights set on a structure essential to the bacterium's survival. Disabling this structure could kill the microbes in the infected host and thwart TB infections. In a study appearing online May 11, 2010, in EMBO I, the journal of the European Molecular Biology Organization, scientists from BNL, Stony Brook University (SBU), and Weill Cornell Medical College (WCMC) describe new features of how this structure, known as a proteasome, is put together and how it works. These details could assist researchers working to develop anti-TB drugs.

"Mycobacterium tuberculosis, the bacterium that causes TB, infects one person in three worldwide, so finding new ways to battle this pathogen is a major public health priority — particularly in developing nations where active TB infections are endemic," said study co-author Huilin Li, a BNL biophysicist and associate professor at SBU. Other researchers on the team were Dongyang Li, Hua Li, and Tao Wang, all of BNL; Hong Pan of SBU, and Gang Lin of WCMC.

Earlier studies by Li and his collaborators revealed important structural details of the *Mycobacterium tuberculosis* proteasome, a piece of cellular machinery that carves up unwanted or damaged proteins, allowing the bacterium to evade a key defense of the human immune system. The researchers have even identified small molecules that might be incorporated into drugs to inhibit the proteasome.

"The primary aim of this new study was to look at how the proteasome, comprised of 28 proteins, is constructed," said Li.

See Anti-TB on pg. 2

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Earth Week 2010 at BNL: Some Highlights

"Earth Week, April 19-23, was a great success," said Jason Remien of the Environmental Protection Division (EPD), who coordinated the effort with many other EPD and Lab volunteers.

EPD thanks everyone who volunteered their time and for all the generous donations. Pledges from the Environmental Pledge Tree totaled over \$2,700 and were donated to the Foundation for Ecological Research in the Northeast, known as FERN. Pledges this year focused on helping BNL meet its goals toward conserving energy and reducing the Lab's carbon footprint.

Other highlights of Earth Week included: approximately 250 employees took the Earth Day Quiz and 10 winners received prizes; the Environmental Vendor Fair drew many attendees, who appreciated the great giveaways; the Of-

fice Swap helped employees clean up space, and whatever was not swapped was recycled; the hybrid vehicle display was informative and well attended; and six local elementary schools participated in the annual "Your Environment" art contest.



Guangyong Xu from pg. 1

Xu's contributions are most widely recognized in the area of relaxor ferroelectrics, a class of materials with interesting physics as well as important practical applications. He has made seminal discoveries using neutron scattering and highly original x-ray scattering experiments regarding the structure and dynamics of relaxor ferroelectrics, promising important practical applications for electronics-based technologies.

Xu earned his Ph.D. in 1999 om Johns Honkins University and joined Brookhaven's Neu-

Physics Department in 2002 as an assistant physicist, becoming an associate physicist in 2004. In 2006, he was promoted to physicist after the Neutron Scattering Group migrated to the new CMPMS Department. Between 2003-08, Xu published 48 articles, 21 of which he was first author, including two letters in Science, one in Physical Review Letters, four in Applied Physics Letters, and two articles in Nature Materials. For these 21 papers, the average number of citations is more than 21 per paper; the quality and significance

tron Scattering Group in the

of Xu's work is now recognized both nationally and interna-— Tianna Hicklin tionally.

In addition to Xu, the other BNL scientists who received tenure are Mei Bai, Collider-Accelerator Department; Alexander Bazilevsky, Physics Department; Richard Ferrieri, Medical Department; David Jaffe, Physics Department; Ferdinand Willeke, National Synchrotron Light Source II; Guangyong Xu, Condensed Matter Physics and Materials Science Department; Hua-Gen Yu, Chemistry Department; and Anatoli Zelenski. Collider-Accelerator Department.

But in bacterial proteasomes, the seven end proteins are identical. "The question has been how the same protein sequence takes on the necessarily different conformations in order to seal the central pore," Li said.

Images taken by the scientists using x-ray beams at the NSLS reveal an asymmetric and tightly closed gate structure at the seven-fold symmetrical entrance. The scientists also snapped additional images showing that the gate structure retains some flexibility.

out how to reduce the flexanother strategy in developing proteasome-targeting anti-TB

drugs." These new approaches are particularly attractive because the differences in assembly and gating mechanisms between human and TB proteasomes are more significant than the differences in the enzyme active sites that have been primary targets for drug development. As a result, drugs designed to inactivate these aspects of the TB proteasome would be less likely to also inhibit proteasomes in human cells.

This research was funded by a grant from the National Institutes of Health and by BNL's Laboratory Directed Research and Development program. The NSLS at BNL is supported by the DOE Office of Science.

— Karen McNulty Walsh

BERA Services, Trips, Events Tues. 7/27 - Mets vs. Cardi-

Borrow-a Bike-Program for those without a car. http://www. bnl.gov/bera/recreation/bicycle.asp. For information, call Ext. 8481.

Fri., 6/4 - Annual Plant Swap, Berkner Parking lot, noon-1 p.m. Bring something from your garden to share if possible! Ext. 5090 for information.

METS games for 2010 - will be sold Fri., 6/4 from 9 a.m. at the BERA Store. 2 tickets per person, per game for first week of sales, all for age 21 or older, or accompanied by parent.

reserved Section 521, \$38 each. Sat., 6/11 - Atlantic City Resorts Casino. Depart Brookhaven Center 9 a.m., depart Resorts 8 p.m. \$25 per person (21 and older only), with a \$20 slot play for each person. Buy your ticket soon, 52 places

nals: Leave BNL 4 p.m. for 7:05

p.m. start, leave after game, no

later than 11:30 p.m. Promenade

Fri. 8/13 - Mets vs. Phillies:

Leave BNL 4 p.m. for a 7:05

p.m. start, leave after the game,

no later than 11:30. Promenade

reserved Section 521, \$43 each.

Sat. 7/10 - Promises Promises at the Broadway Theater (Broadway between W52 & W53). Coach will leave BNL 9 a.m. for 2 p.m. show, leave NYC at about 4:30 p.m. 55 tickets. \$116 per person.

on the bus only.

Sun. 7/25 - Addams Family **Show**, Lunt Fontanne theater (205 W. 46 St.), leave BNL 10:30 a.m. for 3 p.m. show, leave after show about 5:30 p.m. 55 tickets, \$107.

Discount tickets for SPLISH SPLASH - \$24/\$30 at the BERA store, or buy online for another \$1 off. BNL code: 2010106.

Want to join in the social scene at BNL with people interested in sports, discussion, travel, camping, and much more? See www.bnl. gov/bera/recreation/clubs.asp.

Anti-TB from pg. 1

The scientists used the National Synchrotron Light Source (NSLS) — a source of intense x-ray, ultraviolet, and infrared light — and a cryo-electron microscope to take molecular-level snapshots of the proteasome at various stages of assembly. The studies revealed important intermediate steps and changes in the shapes of the components making up the completed structure.

The snapshots also reveal how one component in particular can inhibit the assembly process.

"Such detailed understanding of the assembly process might suggest novel approaches for developing anti-TB drugs by preventing the maturation of the proteasome," said Li. "This would be an alternative to the traditional approach of inhibiting the activity of the mature proteasome."

The researchers were also curious to find out how the Mycobacterium tuberculosis proteasome keeps the entrance to the protein-cleaving chamber shut.

"The fully constructed proteasome is literally a death chamber for cellular proteins, so the passage to the chamber has to be safely closed, and open only when necessary," Li explained.

Higher-level organisms, such as humans or yeast, also have gate-closed proteasomes to degrade unwanted proteins. In these cases, the gate closure mechanism is known and straightforward: Each of the seven end proteins is different, and they can assume different conformations, or shapes, to open and close the gate.

"This flexibility may be key to opening the gate to allow entry to proteins that need to be degraded," Li said. "Figuring ibility, and thus keep the gate permanently shut, could be yet

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RHIC/AGS Users' Meeting, 6/7-11

The annual Relativistic Heavy Ion Collider (RHIC) and Alternating Gradient Synchrotron (AGS) Users' Meeting will be held at BNL from Monday to Friday, June 7-11.

Five parallel workshops will be held on Monday and Tuesday, June 7-8. A special symposium, organized with the National User Facility Organization, will be held on June 9, focusing on education and outreach. A plenary session on the morning of June 10 will feature highlights from Run-10 at RHIC and future perspectives from DOE and National Science Foundation funding agencies.

To register and obtain more information, please go to: http://www.bnl.gov/rhic_ags/users_meeting/default.asp.

BNL's 90-50-10 Celebration, 6/10 & 11

On June 10 and 11, all are invited to attend a celebration entitled "90-50-10" to celebrate the 90th birthday of Ernest Courant (of "strong focusing" fame), the 50th anniversary of the startup of the Alternating Gradient Synchrotron (AGS, home of three Nobel Prizes), and the 10th anniversary of first collisions at the Relativistic Heavy Ion Collider (RHIC). For more information, go to: http://intranet.bnl.gov/memo/mm.asp?IssueId=172&StoryId=2.

Talk: 'What's a Parent to Do?' 6/14 Helping our children in career development

On Monday, June 14, at noon, Malka Edelman of the National Career Development Association will present "What's a Parent to Do?" in Berkner Hall. Topics will include roles as parents, empowerment and self-advocacy skill building, and information on resources and useful websites. All the Lab community is invited to this free talk. Please register by sending in your name and email or bldg. address to Linda DiPierro, Bldg. 490 or dipierro@bnl.gov.

Fidelity One-on-One Consultations

A Fidelity representative will be on site on Monday, June 7; Thursday, June 24; and Thursday, July 15, to answer employee's questions about financial matters in half-hour sessions. The consultant will help you with general questions about Fidelity fund choices, the right allocation mix, and retirement and financial counseling. For an appointment, call 800-642-7131 (weekdays, 8 a.m.–midnight EST) or go online at http://www.fidelity.com/atwork/reservations.

TIAA-CREF One-on-One Consultations

A TIAA-CREF consultant will visit BNL on Wednesday, June 2; Tuesday, June 8; Wednesday, June 9; and Tuesday, June 15, to answer employees' questions about financial matters. The consultant will help you: understand the importance of protecting your assets against inflation, find the right allocation mix, learn about TIAA-CREF retirement income flexibility, and compare life-time income vs. cash withdrawal options. For an appointment, call 1-800-732-8353 or go to http://www.tiaa-cref.org/bnl and select "set up a meeting."

Superconductors from pg. 1

...a material made from conducting layers of iron and selenium. In recent years, scientists have explored numerous aspects of the underlying physics of ironbased superconductors, often making connections to the material's structure or innate magnetism. But the exact relationships between these properties were unclear.

"In order for superconductivity to exist, it must arise as the winner in a tug of war between different physical properties," Cava said. "The research community has known that magnetism competes with superconductivity in the iron superconductors, but no one had a good idea of how crystal structure competed."

Cava's group compared the structures of superconducting and non-superconducting iron selenide using two different types of tools: powerful beams of x-rays at the NSLS and a suite of advanced microscopes at the CFN. At NSLS beamline X16C, the researchers used synchrotron x-ray powder diffraction to provide "snapshots" of the materials on the order of hundreds

of nanometers. They combined that data with images taken with transmission electron microscopy and electron diffraction, resulting in resolution an order of magnitude higher than the x-ray technique.

"We needed both of these sophisticated techniques to really understand what was going on here," Cava said, adding that the findings weren't as straightforward as expected.

Among the results, which were published in the July 31, 2009 edition of *Physical Review Letters*, the group showed that the superconducting form of iron selenide can be distinguished from the non-superconducting form by a change in its structure. The superconductor gains its power by giving way to a slight structural "distortion," and the non-superconductor holds strong.

The researchers also showed that this unique structural change is unrelated to magnetism, as hypothesized in the past. The material's fundamental bonding — the bonding between atoms — stays the same while the angles between the bonds change, similar to the expansion



With U.S. Secretary of Energy Steven Chu (left) are students in the R.C. Murphy Jr. High School team who took fifth place in the 2010 National Science Bowl: (from left) Harrison Li, Akilesh Tangella, Yifan Wang, Daniel Redlinger, Raymond Yin, and their coach Patrick McManus.

R.C. Murphy Junior High School Of Stony Brook Takes Fifth Place In DOE's National Science Bowl

Students from R.C. Murphy Junior High School in Stony Brook placed fifth in the DOE National Science Bowl, competing against 37 middle school regional champions nationwide. The team received a cash prize of \$1,000 for its school's science department.

In March, the R.C. Murphy team took first place competing against 20 teams from 13 Long Island middle schools in the Regional Middle School Science Bowl at BNL — the second consecutive year that the school took first place in the contest. The Science Bowl is a fast-paced question-and-answer tournament designed to test students' knowledge of life sciences, physical sciences, earth sciences, mathematics, and general science. DOE funded the winning team's all-expense-paid trip to Washington, D.C. to participate in the national contest, held April 29 to May 4.

First Lady Michelle Obama asked the bonus questions in the championship middle school match, which ended with the Albuquerque Academy in New Mexico taking first place. The First Lady also spoke to the more than 500 students and 100 teacher/coaches in attendance about the importance of science education to the nation's economic and technological future.

Energy Secretary Steven Chu congratulated all the students who reached the final stage of the competition, adding, "They represent the next generation of scientific leaders, and can be rightly proud of what they have accomplished."

DOE created the National Science Bowl in 1991 to encourage students to excel in mathematics and science and to pursue careers in these fields. More than 200,000 students have participated in the National Science Bowl over its 20-year history. — Diane Greenberg

BSA DISTINGUISHED LECTURE

BERKNER HALL

All are invited to attend the next BSA Distinguished Lecture, which will feature John Ellis, a theoretical physicist from CERN. His talk is titled "Answering Gauguin's Questions: Where Are We Coming From, Where Are We Going, and What Are We?" and it will be begin at 7 p.m. on Wednesday, May 26, in Berkner Hall.

of a baby gate. Unlike a gate, the angles only change by a few degrees — still enough, though, to give birth to superconductivity.

But the real surprise is that this structural change actually exists in both the superconducting and non-superconducting forms of the material, just on different scales and with different effects.

"This distortion can still be found in the non-superconducting material, but it's only present over tens of atoms," Cava said. "In the superconducting material, it's present over very long distances. This detail was hidden until we were able to take a really close look at the materials. The challenge now is to figure out over what distance a crystal structure has to be distorted in order to affect its properties."

Next, Cava's group will try to resolve the structure-superconductivity relationships within other iron-based materials.

"By showing the scientific community this clear example, we hope to inspire them to think about manipulating this phase transition," he said.

— Kendra Snyder

Service Anniversaries

The following employees celebrated a service anniversary during January:

35 Years —	
Brian Oerter	C-AD
Dennis Carlson	NSLS
- 30 Years -	
Ady Hershcovitch	C-AD
Phyllis Tinsley-Smith	Biology
John Klug	NSLS
Peter Stelmaschuk	M&FS
Charles Finfrock	NNS
- 25 Years -	

– 20 Years –

Vladimir Zajic	C-AD
Eileen Matz	Biology
Stephen Kramer	NSLS-II
Ernest Tucker	HR/OM
Michael Pankowski Site Services	

10 Years —

Minfang Yeh	Chemistry
Michael Dooling	Finance
Marvin Schofield	CMP&MS
William Anderson	PPM
Christopher Cacace	.Rad. Contr.
Richard MullerS	ite Services

Camera Club Meeting, 6/10

Calling all camera bugs! The Camera Club will meet on Thursday, June 10, in Berkner's Room D at noon. For those that edit in Photoshop or Lightroom, Mark Parsons will review the NIK suite of photo enhancement tools with a demonstration of the time saving features. For more information, contact Joe Gettler, Ext. 3584, <code>igettler@bnl.gov</code>.

CALENDAR

- WEEK OF 5/24 -

Monday, 5/24

*NSLS/CFN Users' Meeting Starts 7 a.m. Berkner Hall, Room D.

9 a.m. Bldg. 510. Start of workshops, meetings. See agenda at http://www.nsls.bnl.gov/users/meeting/agenda.aspx.

IBEW Meeting

Registration starts.

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.

Tuesday, 5/25

*NSLS/CFN Users' Plenary Session

9 a.m. Berkner Hall. The Lab community is warmly invited; no registration is needed. Includes keynote speech by William F. Brinkman, Director of the DOE Office of Science, and updates from DOE Basic Energy Sciences program managers as well as from the BNL Director and others. See pg. 1 and http://www.nsls.bnl.gov/users/meeting/agenda.aspx.

Wednesday, 5/26

*NSLS/CFN Users' Workshops

Registration required. See link to agenda, above.

*BSA Distinguished Lecture

7 p.m. Berkner Hall. John Ellis of CERN, Switzerland, will talk on "Answering Gauguin's Questions: Where Are We Coming From, Where Are We Going, and What Are We?" All are welcome to this free talk, open to the public. Note unusual time. Visitors to the Lab of 16 and older must carry a photo I.D.

Friday, 5/28

BVA Memorial Day Ceremony

Noon. By the flag at the Brookhaven Center. The Brookhaven Veterans' Association will salute the armed forces, especially those on active duty who are related to BNLers, in a Memorial Day Ceremony. All are welcome to participate.

*Employee Lunchtime Tour

Noon. Berkner Hall lobby. Meet the group to be taken to the Biology greenhouses to learn about green energy production. All are welcome. No reservations. Back by 1 p.m. See pg. 4.

- WEEK OF 5/31 -

Monday, 5/31

Memorial Day

The Lab will be closed in honor of Memorial Day. No Bulletin on Friday, June 4.

Friday, 6/4

*BERA's Annual Plant Swap

Noon-1 p.m. Berkner parking lot. Bring plants to swap.

WEEK OF 6/7

Monday-Friday, 6/7-11 *RHIC/AGS Users' Meeting

See notice, above left.

Wednesday, 6/9

*Education, Public Outreach

9 a.m.-5 p.m. Berkner Hall. Special Symposium sponsored by the RHIC & AGS Users' Executive Committee and the National User Facility Organization (NUFO). All are welcome. See agenda at http://www.bnl.gov/rhic_ags/users_meeting/agenda/symposium_wed.asp

Thursday, 6/10

*RHIC/AGS Users' Plenary Session *90-50-10 Celebration

All welcome. See above, left.

Arrivals & Departures

- Arrivais -	
Lequisha Caccavale	HR/OM
James Green	CEGPA
Scott Moeller	Medical
Ana Toldo	HR/OM
Departures —	

Javier Castro-Barba CFN

Attracting Top Talent

Since BNL has frequent postings of new positions, note a new feature on the Lab website. Prospective internal and external candidates can log into the BNL career site, http://www.bnl.gov/hr/careers, click latest job postings, select a job category and click "Send me email notifications on jobs." Using this method only once, candidates receive automatic alerts each time a new position is posted in the selected areas of interest; the alerts contain a full description of the position(s) and a direct link to the application page for the specific opportunity.

The tool is also beneficial for employees who wish to participate in the Employee Referral Award Program (ERAP), in which specific positions are tied to an award of \$500 or \$1000, contingent upon non-exempt or exempt level roles, respectively, as announced in the job description. The program, started in 2002, was used sporadically in its infancy; however, that has changed. Approximately 10 ERAP hires have been made in the past 18 months. Check for yourself.

Change in Placing of BNL Job Ads

Effective May 1, Human Resources (HR) advertises most positions available at BNL only on the HR "Jobs" webpage: http://www.bnl.gov/HR/careers. These positions are no longer advertised in the Bulletin. This change to essentially an all-web-based process allows immediate, real-time posting of positions and aligns BNL's job posting policy to that of other labs and organizations. Union positions will continue to be advertised in the Bulletin, as may certain other positions that are identified by HR and hiring managers as appropriate for the Bulletin readership (specifically, but not limited to, those jobs open to Lab employees only). Remember, look on the HR jobs webpage at http://www.bnl.gov/HR/careers for most jobs available now at BNL.

Classified Advertisements

Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible employees within the Laboratory: and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. 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/s

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

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

METAL WORKER MAINTENANCE WORK-ER (LG-10) - Requires 10 years of industrial experience demonstrated by completion of an apprenticeship program, continuing education, and/or work experience. Under minimum supervision constructs, modifies and installs a variety of metal equipment needed for BNL infrastructure, such as sinks, gutter, ventilating hoods, stands, hangers, etc. Lays out own work, makes own patterns working from physical dimensions of building or works from prints, sketches or verbal instructions. Sets up and operates machine tools and tinsmithing machines, and also performs bench work, in the fabrication and finishing of metal or associated products. Performs layout, preparation, measurement, assembly and installation. Performs necessary brazing, welding, and silver soldering incidental to the job. Makes own templates, sharpens tools, operates conventional and CNC machines, and performs maintenance incidental to operation of machines. Maintenance & Fabrication Division, Apply to Job ID # 15357. HAZARDOUS WASTE MANAGEMENT

HAZARDOUS WASTE MANAGEMENT TECHNICIAN - Requires an AAS in chemistry, physical sciences, or equivalent experience. Responsibilities include but not limited to the pick-up, packaging, transportation, storing and bulking of hazardous and radioactive wastes. Additional responsibilities include completing and maintaining certifications required for the operation of the Waste management Facility. Ability to operate handling equipment and obtain a DCL. Environmental & Waste Management Services Division. Apply to Job ID #15369.

CARPENTER (LG-9, term, six and a half months) - Under minimum supervision lays out, constructs, modifies and maintains buildings and component parts from construction drawings, rough sketches or verbal instructions. Works with wood, wood substitutes and combination materials and flooring, roofing and wall materials. Uses hand, portable and fixed tools common to building construction trades. Installs cabinets, door frames, window glass, interior finishes and hangs doors. Performs roof surveys. May perform Cabinetmaker duties as required. Apply to Job ID #15375.

Motor Vehicles & Supplies

07 TOYOTA YARIS SEDAN - 33K mi. 5spd, great gas mi, cd/mp3 input, well maint. \$9,999. Tom, Ext. 4030.

02 HONDA CIVIC EX – 171K mi. rem start, m/roof, rr spoiler, a/t, a/c, new cat. cnvrtr, batt. t.belt, more, \$4,000. Thomas, Ext. 5740. 01 HONDA CIVIC LX – 78.5K mi. 4 cycls., 4 drs, a/t, a/c, p/w, p/m, am/fm/cd, airbags, inspectd. \$5,200 neg. Ext. 4121. 99 JEEP WRANGLER – 170K mi. 5 spd. 6

neg. Kenneth, Ext. 7268, 312-6796.

99 GMC SONOMA – 125K mi. Std cab, 5-spd, am/fm/disc, tonneau cover, bedliner, runs well. \$2,200 neg. Ext. 2015, 872-8965.

98 MERCEDES BENZ ML320 – 93K mi. silver, new tires/brakes, excel cond.

cyl, a/c, c/c, winch, extras, bk/blk. \$5,900

93 FORD MUSTANG GT – 36K mi. 5.0, a/t, orig mi, always gar, stock/orig nice cond. \$4,000 neg. 428-4149.

\$6,500. Mark, 960-2676.

92 SAAB 9000S HATCHBACK - excel cond. \$1,250. Suh-Urk, Ext. 3885.

TIRES – 4, P195/70R 14 on chevy cavalier rims, 225. Kevin, 882-0519.

Boats & Marine Supplies

26' PEARSON #824 - '74, w/5 stands, mooring ball/chain, mring mushroom anchor, orig sails. \$600 neg. Mike, 476-5810.
26' WELLCRAFT NOVA SPYDER - '87 spd boat, twin 350 merc's, w/tandem trailer. \$4,500 neg. Bob, 235-9405.

15' JY JY15 - clean boat on custom trailer, ready to sail! in Shoreham. \$1,500. John, Ext. 3414, 356-4299 or shanklin@bnl.gov.

SEA KAYAK – Wet Willy Spirit, 17"x24", wd deck 13.5"h, carbon/kevlar hull, Seward Rudder Syst, 59/lbs, \$2,500/neg, 281-7873.

Car Poo

BELLMORE/EAST MEADOW – looking to carpool from Bellmore/East Meadow area 3-5 times/wk, 8:30a to 5p. Ext. 2995.

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

Furnishings & Appliances

AIR CONDITIONERS – carrier, 10,000 Btu/\$60; 5,000 Btu/\$40, through the wall. 751-4539.

CHILD/TEEN BUNK+DESK BED – all wood, desk pull out bed lists/\$1,659, ask/\$450, Ron, 379-0742.

CHINA CABINET – Ig 2/pc w/glass drs, up and down drawers for storage. Bob, Ext. 3903.

COMPUTER/ LAPTOP TABLE – sm maple colored table w/silver legs, portable, pics avail, \$30. Nina, Ext. 5894.

DISHWASHER - Stainless steel interior, works, b/o. Karl, Ext. 3116.

DOUBLE DRESSER - solid natural pine, 6 drawers, matching mirror, excel quality, \$185. hoffman1@bnl.gov.

DRYER - Sears Kenmore, 80 series, natural gas, white, works v. well, \$125/u pic up, E/Setauket. John, Ext. 5828.

HEADBOARD – Victorian, ivory w/antique brass fittings & porcelain finials, Q/sz, mtching ftboard incl, \$200. hoffman1@bnl.gov.

ing ftboard incl, \$200. hoffman1@bnl.gov. HIGHCHAIR – Fisher Price, gd cond, ask/\$35, 398-9060.

KITCHEN TABLE & CHAIRS – all maple table w/4 spindle back chairs & leaf, great cond. 678-3299 or dgordon@bnl.gov.

MICROWAVE – GE, nlack, over the range, \$60. 751-4539.

OAK ENTERTAINMENT CENTER – solid oak, 6'w,4'L 2'd, holds 30" tv, horiz measure, storage \$75. Richard, Ext. 3932. REFRIGERATOR – Whirlpool, white, 17.6

cubic ft, frost free, built in ice maker, re-

versible dr swing. Fred, Ext. 5319.

SOFA BED – w/slip cover. Bob, Ext. 3903 or chrien@verizon.net.

SOLID CHERRY DRESSER – Davis Cabinet Co. sep wall mirror; orig owner, 7 Eng. dovetail drawers; photos, price neg. Ext. 4931.

Audio, Video & Computers

KILLZONE2 FOR PS3 – brand new, never used, still wrapped, \$30. Guillaume, Ext. 8215 or grd@bnl.gov.

NETGFAR 802.11N ROUTER GIGALAN

NETGEAR 802.11N ROUTER GIGALAN – Model:WNR3500 V1, router like new, work perfectly, ask/\$40. Yue, Ext. 3694 or yhao@bnl.gov.

Sports, Hobbies & Pets

2001 KOUNTRY COMFORT RV - 36' – custm Ltd Ed lux., w/d, 2 slide outs, couches/loveseat, more, low mi, mint, \$9,950. Ext. 3005. BOY'S BICYCLE – 26" boy's bicycle, excel cond, w/tire pump. Bob, Ext. 3903. CRESS ELECTRIC KILN – FX-23P – 240

VAC, 26 A, Cone 10 (2350 F), octag 18"d, w/ shelves, posts, timer, more, \$300. 744-7052. EXERCISE BICYCLE – Ross, old-style, but little used, in gd cond, \$25. 878-0898. SURF CASTING ROD – Rod only, AlphaX

graphite 10' rod, ask/ \$75/obo. Ext. 5864.

TENNIS RACKET – Prince, Impact Ti, Force 3, excel cond, \$25. Eli, Ext. 7179.

TREADMILL – Horizon Evolve, folds to 10", 2 progs, 1-6 mph, shows time, spd, dist, cals, pics, ask/\$350. Ext. 6387.

Tools, House & Garden

BABY/PET GATE, VACUUM - Evenflo 30-50" expding gate, \$20; Kirby G4 vac.w/all parts/book, works, heavy, \$50. Ext. 7114.

PERENNIALS – Iris, shasta daisies, cone flowers, hosta, hydrangea, lily of the valley, \$4/plant. Beth, 905-8222.

POOL LADDER & CHEMICALS – Stainless steel, for agp, \$50/all. Karl, Ext. 3116.

POWER TOOLS – 8" Sears table saw, bench grinder, elect hand drill. Bob, Ext. 3903 or chrien@verizon.net.

Miscellaneous

2007 QUAD - Yamaha Raptor 700R 5 spd, low hrs, excel cond, ask/\$5500. Rich, Ext. 4520, 331-8159 or doulos@bnl.gov.

BON JOVI TICKETS – 5/27/10 New Meadowlands Stadium, section 128, row 11, seats 9 & 10, \$390 pr. 516-527-4902.

GPS – Jensen, "Touch & Go", portable & car navigator, in orig pkg. 928-5185.

LUCCHESE COWBOY BOOTS 1883 – new, red, sz 7/N fit, purchased in Sheplers, pic. maryc@bnl.gov. Mary, Ext. 3927.

COMPUTER PARTS – Dell mon, keybrd mouse, excel cond, all/\$100/obo. Schwinn Ellipticl Machine 430, ask/\$400. Ext. 8593. SPRINKLERS – poly pipe and sprinklers repair, complete installations, spring startups. Michael, 284-2277.

TODDLER PLAYGROUND SET - 2 slides, playhouse and tunnel all in one, pics avail, \$200. Nina, Ext. 5894.

Yard & Garage Sales

MEDFORD – Sat 5/22 9a-4p, Toddler playgrnd set \$200/neg, electric stove/\$260, toys, girls' nwbrn -7 yrs, more. Nina, Ext. 5894. PATCHOGUE – Sat, 5/15, 8a-3p, 107 Austin St, No early birds! storan@bnl.gov.

ROCKY POINT – 54 Westchester Dr. Sat 5/22 8a-5p RAIN OR SHINE! Follow posted direction signs. 767-9755.

Happenings

CATCH OF THE DAY FUNDRAISER – for SAVES (Spay Alter Vaccinate Every Stray) animal fundraiser. Vineyard Caterers in Aquebogue. Dinner, Chinese Auction, 50/50, Tickets \$45, June 4. Heather, Ext. 4138.

CRUISE - 7-Day Caribbean Carnival Cruise, Apr 10/2011 to Cayman Islands, Cozumel, Isla Roatan & Belize w/2 fun days at sea. All for \$789. 72pp dbl occup balcony. Call for details. Kim, Ext. 7465, 399-3098 or khayes@bnl.gov.

YANKEES VS ORIOLES IN BALT, MD – Sept 18-19 incl R/T coach trans, hotel/breakfast/game ticket/\$100 non-refundable deposit due by June 3rd; bal due by July 2nd; contact x4887 or. Joann, Ext. 7459, 457-3797 or giambalvo@bnl.gov.

Farewell Gathering

GERRY VAN DERLASKE – Please join us in wishing Gerry a wonderful retirement in Arizona on 6/21 at the Miller Beach Surf Club. \$45/pp inc all. Look for flyer.Contact Tony, Ext. 7637 or. Joann, Ext. 7459.

JOHN TAYLOR – Please join us in wishing a wonderful retirement to John! 6/17, \$30 inc gift + BBQ @ BNL Ctr,cash bar, 5-7pm. Look for flyer + RSVP by 6/10. Mary, Ext. 3927 or maryc@bnl.gov.

Free

TOSHIBA 57 – 8 yr old TV needs 2 replacement convergence IC's, Details avail. Richard, Ext. 5684 or jonesr@bnl.gov.

Wanted

DONATIONS OF DOG/CAT FOOD - For pets of struggling families/elderly. Collection bins are in Bldgs: 134, 400, 725, 901, 902. Donations given to local food pantries. Kathleen, Ext. 3161, kratto@bnl.gov.

Employee Lunchtime Tour, 5/28 Green Plants for Green Energy Technology

At the next Employee Lunchtime Tour on Friday, May 28, the Lab community is invited to learn about the current research of using poplar trees and other plants for green energy production. Lee Newman of the Biology Department will discuss her research and show the plants she works with. The group will meet at Berkner Hall upper lobby at noon to be taken to the greenhouses and return by 1 p.m. No registration is necessary.



Intersection of Rochester and Rowland Streets To Remain Closed

The intersection of Rochester and Rowland Streets and Rowland Street from the intersection east to the NSLS-II site has been closed for crews to install new chilled water lines for the future NSLS-II facility.

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

A diagram illustrating these new traffic patterns is online: http://www.bnl.gov/today/story.asp?ITEM_NO=1828.

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

The Lab community will be notified as soon as the official start day for the road closure is determined. Please obey all safety personnel as well as posted barricades, warnings, and signs while the project continues and pedestrians and bicyclists are asked to avoid the area.

HOUSE/CONDO/APT – to rent/sublet, 2 bdrm or more, furn preferred, until 1/31/11. Jihyun, Ext. or jfkom1@naver.com.

NEW/GENTLY USED CLOTHING – All sizes, also children's books and toys to be donated to 76 families living in a shelter. Laura X4027, lbuscemi@bnl.gov and-Kathleen, Ext. 3161 or kratto@bnl.gov.

Lost & Found

LOST WATCH - If anyone found a Movado ladies watch w/black band, pls call. Thank You. Pat, Ext. 2539.

For Rent

KISSIMMEE, FL - T/Share: June-Dec, 2-bdrm unit, slps 8, may split for 4 @ \$500/wk or 8 @ \$1000/wk, Orlando, 15 mins to Disney World, Nina, Ext. 5894.

FARMINGVILLE – furn 1st flr bdrm in lg house, share bath, l/r, d/r, kit, incl wifi/cable/phone, elec. \$495/mo. Ben, 513-8275 or benonium@gmail.com.

MANORVILLE – 1 bdr apt, full bath, prv ent, v/quiet, 9 mi to Lab, util incl, single only, no smkg/pets. \$800/mo. Ext. 3849, 591-1315.

MASTIC – 1 bdrm gar apt, eik, incl all util and cable, avail now. \$900/mo. 772-8251.

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

MILLER PLACE – share furn Col. house w/cac, prof resid area, 8 mi BNL, own bdrm, full kit, fencd bckyrd, deck/grill, int/tv, all incl. Responsib non-smkr. \$675/mo. 744-8386.

PORT JEFF STATION – 12'x 13' room in shared hse w/3 grad students, maid, d/w, w/d, 15 min frm BNL & SBU. \$505/mo. Stephen, 404-797-1314.

S. SETAUKET – Spac house in excel cond, 3-4 bdrm, eik, l/r, fmr, d/r, 2 full baths, lg yd, no smkg/pets, Three Vill SD. \$2,600/mo. Al, 278-4241 or blue55ag@gmail.com.

SHIRLEY – clean studio apt, 2 mi to beach, near train and bnl, perfect for single, semi furn, incl util, basic cable and wifi. 1 mo sec please. \$675/mo. 655-3731.

SHIRLEY – Room w/microwave, kitnet,l/r combo, private bath/ent, no smkng/pets. 14 mins. to Lab. Close to stores, beach, LIRR. \$550/mo. 1mo.sec. 344-4324.

SHIRLEY – 2bdrm grd level furn apt, 2 mi to Lab, cable/int/elec/heat/water incl, starting in July, no smkg/pets. \$1,100/mo neg. Tomasz, Ext. 7448 or tomw@bnl.gov.

SHOREHAM – spacious, clean 1 bdrm furn studio apt, sep ent & thermo, full bath, kit, patio, big yd, cable TV, no smkg/pets, 7 min to Lab, avail now. \$775/mo neg. 747-3495.

For Sale

FLANDERS - Peconic Bay, w/front, deepwater dock, bulk heading, dded beach rights, new renov contemporary, cath. c/ ling, 3 bdrm, 2 ba, Jacuzzi, 2-way heating/ ac, nat gas, lg deck. \$499,000. 929-0596.

ROCKY POINT – 10 rms, 4 bdrms, 3 bath, eik w/granite cntrtops, l/r w/fp & wet bar, d/r, fin bsmt, a/c, 2-car gar, 42x12' deck, igp, igs, 0.92 acres. \$459,900 neg. 744-7052.

S. PATCHOGUE – v/lg 3 bdrm ranch, 1 block from Bay, cac, eik, newly renov, l/r, for d/r, den, full bsmt on .5 acre. \$339,900 neg. Jim, Ext. 4705, 929-4978 or mjulian@bnl.gov.

Services

A complete list of services available from fellow BNLers and their family members — carpenters, chefs, electricians, personal trainers, photographers, tutors, weekend elder caretakers, and more — is available in the PDF version of this week's Bulletin at www.bnl.gov/bnlweb/pubaf/bulletin/default.asp. Those who do not have access to the Internet can pick up a copy upstairs in Bldg. 400 or request a printed copy of this list by calling (631) 344-2346.

Need a Car From On Site? Try Enterprise Rent-a-Car, right in Bldg. 400 lobby

Enterprise Rent-a-Car has a desk in the Research Support Building, Bldg. 400, where you can hire a vehicle for part of a day, a full day, a weekend, or longer. It's convenient! The rate for a compact car, 11 a.m. to 4 p.m., or 4 p.m. to 9 a.m. is \$35, for a midsize, \$40. You can also get one-way rentals to McArthur, JFK, and LaGuardia airports with no mileage or extra drop-off charge. Check out other possibilities. The desk is open 9 a.m.-1 p.m. and 3-5 p.m., or contact Ext. 4888 or Enterprise@bnl.gov.



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Bldg. 134, P.O. Box 5000 Upton, NY 11973-5000 phone: (631) 344-2345 fax: (631) 344-3368 e-mail: bulletin@bnl.gov Services

Services are neither screened nor recommended by the Bulletin.

#1 TUTOR MATH - Mathematics & SAT, Physics, Science, Electronics, Test Preparation, Special Projects, Practical Internet, All Grade Levels, For Top Results call. 344-3588.

35MM SLIDE SCANNING – www.pictureperfectscans.com scans & color corrects 35mm slides, photos, negatives & converts them to DVD. Music slideshows avail, Port Jeff. Dianne, 928-6469.

A+SINGER W/DUO – Swinging Singer w/piano/guitar and percussionist. Performing in LI & Manhattan since 1992, weddings & events. Good Prices. Yvette, yvette@yvettemalavet.com.

A1 SPRINKLERS - complete lawn irrigation service, Spring start ups, new installations, repairs, pipe pulling, free estimates, quality work. Michael, 284-2277.

ADULT CARE GIVER - Certified in: PCA, HHA & CNA Available Weekday Nights and Weekend Nights . Christy, 682-2471.

AIRPORT SERVICE – we go to all airports and nyc lab discounts call ask for tony. 589-5555.

ALL PHASES HOME & YARD WORK - No job too large or small, reasonable rates to schedule an estimate call . Theresa, 714-1629.

AMAZING FONDANT CAKES – Artist/ chef creates 3 demensional cakes that are works of art. order now for the holidays great centerpieces. mike, 775-7247 or mmicari28@yahoo.com.

AUTOMOTIVE SERVICE – all makes & models, 30 yrs dealer exp, factory trained, professional, Ref avail, drop off in the AM pickup in the PM.10% lab discount. Bill, 681-3061.

BABY SITTING – college student home for summer w/9yrs experience from new-born-12yrs of age. Carolynn, 613-514-

BABY/PET SITTER & DOG WALKER – 14 yrs experience w/newborns & older as well as special needs. BS in Animal Behavior from Purdue University. Ref avail. Sarah, 603-6114 or sarahrseiler@gmail.

BABYSITTER – Experienced, responsible, 16 year old will babysit evenings and weekends in your home. Miller Place/Rocky Point/Mt. Sinai area. 806-6378.

BABYSITTER - Experienced & responsible 26yr old BNL Admin Assit avail to watch your children wk/nights/wkends. I have much experience and references available immediately. Michelle, 767-9755 or mscaduto@bnl.gov.

BABYSITTER/MOTHER'S HELPER – 14 yr old Longwood Honor Student with Babysitting Certification available to watch your child(ren). Your home or mine: nights-weekends-summertime-school breaks. Alexis, 924-6395.

BABYSITTING/HOUSEKEEPING – experience woman will babysit and give TLC to your child, day/evening avail; will clean your house to meet your standards. 874-4049.

BRICKWORK - Spring is near, reset your existing walk or patio to look brand new, BNL discount, no job too small, call for free estimate. Tony, 736-7942.

C&S HOME IMPROVEMENTS – Restorations and renovations including windows, cust woodwork, siding, crown moldings, doors, floors, kitchens, extentions, baths, dormers, Lic & Ins'd. Rob Berry, 714-4654.

CAR DETAILING - make your car look its best, ALL phases of detailing, incl headlights, carpets, super wax, more! call for an appt. CHRIS, 960-6243.

CAREGIVER – Nurse available to take care of elderly/sick, 10 yrs experienced, references, own car. Janina, 283-0561.

CARPENTER/CONTRACTOR – General Contracting, Home Improvements and Maintenance on Large and Small Jobs. 30 yrs Experience, Excellent References, Reliable, Licensed and Insured. Tony, 727-6550 or agkas@hotmail.com.

CARPENTER/CONTRACTOR – All phases of home improvements. Specialize in custom kitchens, tile work. Landscape ponds and decks. 25 yrs exper. refs, pics avail, Lic/insured. Ray, 654-1970.

CARPENTRY – int/exterior work, built-in cabinets, entertainment centers, all types of moldings, raised paneling & more, see pics on www.RCcustomwoodwork.com, best job absolute lowest price. Rick, 236-3677 or Rickchick3rd@yahoo.com.

CERTIFIED TEACHER – Available to tutor Elementary Ed. up to grade 6 and Literacy (Birth-12th grade); flexible schedule. \$35.00/hr. Refs furnished upon request. Call Agnes. 516-526-9091.

CHILDCARE – High School student available for after school, weekend, summer childcare, all hours, lab vicinity, Manorville area, experience with young children. Mom works at lab. Nicole, 672-5981.

COMPUTER REPAIR/CONSULTANT – COMPUTER SERVICES, ALL – Home & business specialist. New system set ups, tune-ups, virus control, lessons from cert. business teacher. Plenty of references, reasonable rates. Jim, 821-2558.

COMPUTER SERVICES - Repair|PC Tune Ups|Virus Removal, Remote Support or Onsite Support for all of Suffolk & Nassau Counties. Reasonable rates, Why Call a Geek? When You Can Call a Hero!. Tom McCabe, 888-443-7683 or tom@herotechs.biz.

CUSTOM DESIGNS & WOODWORKING – State-of-the-art cabinetry design, Interior Design, Color Consulting, and Window Treatments. Over 12yrs experience. Browse our website at http://woodbinge.com/. Michael Paluck, 929-5480 or woodbinge@optonline.net.

CUSTOM PAINTING - all types of paint, spackle, business or residential, Lab discount. Billy, 834-2945 or kawibp@hotmail.com.

CUSTOM QUILLING – Turn your keepsakes; Wedding invitations, Birth & confirmation announcments, Bar/Bat Mitzvah and more, into works of art to display. Unique Wedding/Shower gift idea. Carol, 727-7227

D J MUSIC ENTERTAINMENT – all occassions weddings graduations sweet sixteens birthdays ect. budget rates. wade, 516-807-3438.

DAY CARE – The Learning Experience, brand new facility in Mount Sinai, all BNL employees recieve 10% off tution, 6wks-6yrs old. John, 476-8700.

DEFENSIVE DRIVING COURSE - Take a New York DMV approved course online: http://www.lidrivesafe.com, For more information or a traditional classroom schedule call Ed Sierra at 631-821-1013 . esierra@bnl.gov.

DISC JOCKEY – Guaranteed to have every song you want to hear,customers can submit a special playlist for their occasion. Satisfaction guarantee!Available for all occasions. Affordable Rates. Michael, 719-492-8229 or mcross@bnl.gov.

ELDERLY CARE – wkends, 24 yrs experience, live in/out, BNL Employee. Susan, 384-3147.

ELECTRICIAN - replace defective switches and outlets, upgrade service equipment, run additional circuits, lighting. Steve, 758-7002.

ELECTRICIAN - 11 years experience, no job too big or too small, reasonable. Aaron. 905-1696.

EXPERT WRITING COACH - Fiction, poetry, college applications, term papers, SAT essays: Published author/poet works with students at all levels, including gifted. \$60/hr. References. Orel Protopopescu, 473-4375 or orelprotopopescu@gmail.com.

FITNESS AND NUTRITION – FOCUS ON YOURSELF FOR A CHANGE. Experience a progressive fitness methodology which guarantees YOU success, customized for YOUR body and lifestyle. On location or in home. Jean, 707-2029 or tully_jean@vahoe.cm

FRENCH CLASSES - for children and adults (3-99 yo) on Sundays in Stony Brook University. Registration: http://www.schoolplusstonybrook.org/. 615-4215 or schoolplus_sb@yahoo.com.

GLUTEN FREE BAKING - The holidays are right around the corner! Place your order now! Pies, cookies, cakes, brownies ect. anything you need all GLUTEN FREE!. Amanda, 926-4384.

GUITAR INSTRUCTION – expert, patient, professional w/music degree and 30+ yrs of experience, inquiries invited. Reid Alburger, 286-0377.

HAIRCUT - 10% discount on all hair services for bnl employee and family, 145 Middle Country Rd, Pinewood Commons. Kim, 775-8585.

HAIRSTYLIST - full head hair weave; hair extensions/100. Cynthia, 803-2923.

HOME CAREGIVER/COMPANION – Mature, dependable, experienced in providing a caring, safe environment for your loved one, evenings, overnight, ref. avail. Paula, 834-6956.

HOME CLEANING – Home Cleaning Service: local long-islander with several generations of experience in cleaning homes; free estimates for cleaning, or routine errands for sick and elderly. I have a valid NYS driver's license as well as excellent references. Phone 878-7904; (cell) 631-514-4142. 878-7904.

HOME IMPROVEMENT – All phases of home improvement, doors, windows, roofing, siding, power washing, painting, and decks. Licensed & Insured. Free Estimates. Joe, 889-2047.

HOME IMPROVEMENTS – HOME IMPROVEMENTS – Meticulous, if your home needs work or repairs, large or small, call Anthony, Lic./insured, lab references. 312-2670.

HOME REMODELING – siding/roofing/ windows/kit., fin bsmts, trim work etc, 15yr exp,Lic/lns, attention to detail is 1st priority, BNL discounts. Ronald, 804-

HOME/BUSINESS CLEANING SERVICE - Experienced Local Cleaning Person to CLEAN HOME or BUSINESS. Reasonable Rates! Will do windows & light yard clean-up. Lisa, 909-1928 or misterplaia@ yahoo.com.

HOUSE CLEANING – 15yrs experience. References available. Lab discount. Weekly, Bi-weekly or one-time cleaning, guaranteed satisfaction. Robyn, 804-6295.

INCOME TAX PREPARATION – Full accounting and tax services for businesses and individuals, personalized service at affordable rates, at your home or my office, 2042 North Country Rd., Wading River. Tomassa Rosini, CPA, 886-1545.

J.P'S GOLD PALACE - Buy & Sell Diamonds & Precious Metals. 828-5126.

JEWELERY - All BNL employees recieve free verbal apprasial, free watch batteries and Jewelry cleaning, also get 20% off all Jewelery sales, excluding certifed Diamonds. Salvatore, 259-2100 or jfalzone@bnl.gov.

LAWNING & ROTOTILLING - please call for more info. Bill, 395-0414 or rizzitel-low@yahoo.com.

LOCAL DRIVEWAY PLOWING - call for estimate. Steve, 404-8109.

MASSAGE THERAPIST - PROFESSION-AL MASSAGE - Massages by Jamie. Specializing in Swedish, Amma, Stone and Pre-Natal. LMT will come to you, discount to BNL employees. Jamie, 294-6944

MATH AND SCIENCE TUTOR - College graduate will tutor all levels of Math & Science through high school. David, Ext. 4705, 220-7547 or mjulian@bnl.gov.

MUSIC LESSONS – All levels of Trombone, jazz improvisation, beginner trumpet and french horn lessons provided by experienced graduate level music student. David, Ext. 4705, 220-7547 or mjulian@bnl.gov.

MUSIC LESSONS - Flute and saxophone lessons, \$20/half hr or \$30/hr. Jenn, 806-6378.

OFF THE TOP TREE SERVICE – All phases of tree work Licensed/Insured free estimates, 957-6750 or. 516-797-1080.

PAINTING/POWER WASHING - Painting/ Staining/Specialty Finishes, Trim Work & Power Washing, free estimates, great prices, great work, honest and reliable. . Tom Kramer, 300-7274 or Diamond0124@ aol.com.

PARTY/EVENT SERVICE - Private Waitress-Several years experience in Service, Hotel Hospitality, Mgmt. Graduate of Culinary & Restaurant Mgmt Degree. Energetic,Reliable,Professional.Works w/all budgets. Danielle, 805-861-0038 or buldan85@gmail.com.

PERFECTION PLUS PAINTING – Sit back and relax. Help is on the way. Over 40 years experience. One on One free estimate. No pressure sales. References available on request. BNL discount. Bill Struss, 764-4755.

PERSONAL FITNESS TRAINER

– E.Setauket; Individually designed programs to meet your goals. Improve strength, conditioning, lose weight. knowledgeable, experienced. Reasonable rates. Bring a friend. Cory. 278-9076.

PERSONAL TRAINING - Only BERA sanctioned trainer, provide personal improvement routines and training, AFFA certified, motivational, sensitve, reasonable individual/couple rates, Get fit NOW!. Claire, 255-9333 or rhosereo@optonline.net.

PHOTOGRAPHER & SERVICES – Freelance photography, all occasions. Family portraits, automobiles. Old Photo restoration. Negative & slides scanned to digital. 25 years experience. Rick, 874-4017.

PHOTOGRAPHIS ARTIST – Digital Event Photography; 42 years experience, Photo resotration, Member NAAP; photoshop trained/experienced, I love to make your images pop; priced to suit call/email for in. Ron, 284-6008 or reoimages@optonline.net.

PINSTRIPING HAND PAINTED - Old school hand painted pinstriping, boat/custom lettering, airbrush, since 1990. Dominick, 576-5195.

POWERWASHING - houses, decks, driveways, stain, and more, very reasonable prices, 821-6336. Tony, 345-0865.

PROFESSIONAL MASSAGE – Massages by Jamie. Specializing in Swedish, Amma, Stone and Pre-Natal. LMT will come to you, discount to BNL employees. Jamie, 294-6944.

SCHOOL DRUG, SMKG. PREVENTION – Riverhead Comm Awareness Program, Inc needs Adult Volunteers to help teach our 09-2010 Pulaski St School Drug and Alcohol Prevention Program, call for details. Marilyn, 727-3722.

SCIENCE AND LANGUAGE PROGRAM – For children ages 3-15 at Stony Brook University. The school offers: Math, Physics, Art, Russian, English and French languages. http://www.schoolplusstonybrook.org. 615-4215 or schoolplus_sb@ yahoo.com.

SHEETROCK/SPACKLE/PAINT - free estimates. John, 563-6596.

SNOW PLOWING – local, exits 62-66, call for estimate. paul, 978-6008.

SPACKLING – custom taping; sheetrock, dustless sanding, painting, "Your satisfaction is my reward." Call for free estimate. Joe, 767-7785 or joze34@msn.

SPANISH TUTOR – High School Spanish Teacher will tutor in the North Shore area. Always successful & professional, ESL students are also welcomed. 312-2671.

STUMPS REMOVED-LAND CLEARING – Stumps properly removed w/the soil re-compacted and graded for plantings. using JD-450 with custom rake, \$160/hr. Tom, 878-1060 or thomasmuller@opton-line.net.

SWIMMING POOL SERVICES – Experienced professional for your swimming pool openings and services. Weekly pool cleaning service, maintenance and repairs. Call for more information and estimate. Dominick, 926-2010.

TICK SPRAYS AND LAWN CARE - Professional tick sprays and lawn care, provided by MK Lawn care and Landscape Maintenance. Mark Kozakiewicz, 987-4445.

TRAVEL SERVICES – Free concierge service for travel arrangements worldwide: accomodations, entertainment, tours and cruises available. Best prices! Certified, licensed and insured travel agent. Marie E. Lemmon, 772-1234 or Marie@ TheMagicForLess.com.

TUTOR - NYS Certified Earth Science Teacher. \$50/hr. Edward, 821-1013.

TUTOR – NYS general ed, special ed, and literacy certified teacher, up to grade 4, reading and/or math focus, available evenings. \$55/hr. 922-1310.

TUTOR – Mathematics teacher certified levels 7 thru 12, come to home or library. 827-2767.

TUTOR – Certified Teacher avail to tutor Elem Ed up to grade 6 and Literacy; birth-12th grd; flexible schedule, \$35/hr, Refs furn upon request. Agnes, 516-526-9091.

TUTOR MATHS AND SCIENCE – Stony Brook Engineering PhD student with impressive transcript. Can tutor maths and science from middle school to college level. Ref avail, competitive rates. 516-474-6300.

TUTOR/READING - Now accepting new students! Certified teacher experienced in literacy and special education (grades pre k-6). East Patchogue area. Excellent references. Brandi, 872-2002 or brandi. decaro@tmo.blackberry.net.

TUTORING – Math and Science for \$40/ hr, Port Jeff/Smithtown area. 624-0494.

WATCH BATTERIES – drop off at lunch, next day return, starting at \$5, Lithium higher, no Swiss Army. 599-1859.

WEEKEND ENRICHMENT PROGRAM - Science and Language School for children 3-15 years old. Math,Physics,Art,Rusian,English, online registration: schoolplusstonybrook.org. 615-4215 or schoolplus_sb@yahoo.com.