



Goldman Appointed BNL's General Counsel

Roger Stoulenburgh D231208

Michael Goldman, who has 31 years of experience as an attorney for BNL, has been named General Counsel for the Laboratory. He succeeds Gregory Fess, who left the Laboratory in June 2008.

In his new position, Goldman is responsible for the legal issues that are part of the Lab's business, including offering expertise on contracts. One of two full-time attorneys employed by BNL, Goldman specializes in human relations and contracts and procurement law as they pertain to Lab operations. He also oversees the negotiations and litigation required for lawsuits against the Lab.

In addition, Goldman serves as Secretary for Brookhaven Science Associates (BSA), the company that manages Brookhaven Lab for DOE. He is responsible for ensuring that BSA is in compliance with its contract with DOE.

"Lawyers are sometimes viewed as obstructionists, creating hurdles to prevent the objective that the client wants to accomplish," Goldman said. "Conversely, I take pride in helping the Laboratory management to smoothly and efficiently accomplish their business objectives, consistent with the law."

Michael Goldman received his undergraduate degree from

See *Goldman* on pg. 2

Kao Named Founding Director Of New Photon Science Institute

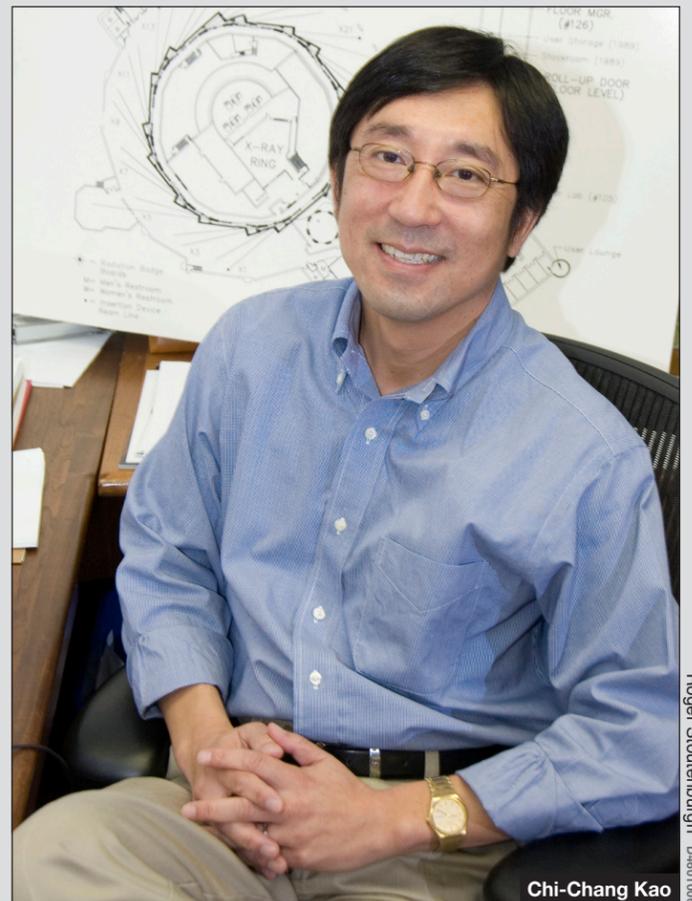
Research to address energy challenges, advance medical and environmental studies

Chi-Chang Kao, a physicist and leader in synchrotron light research, has been named founding Director of the Joint Photon Sciences Institute (JPSI) at BNL.

JPSI is an interdisciplinary research institute meant to exploit the properties of advanced light sources to address challenging problems in science and technology, including the development of renewable, alternative energy sources and new drugs and medical treatments. It will especially benefit from the unprecedented capabilities of the National Synchrotron Light Source II (NSLS-II), a proposed scientific user facility that would produce x-rays more than 10,000 times brighter than the Lab's current light source, the NSLS.

A partnership between DOE and New York State, JPSI will be located just steps away from NSLS-II and its high-tech neighbor, the Center for Functional Nanomaterials. The building will contain specialized state-of-the-art laboratories for turning novel ideas into scientific instruments. The institute will support interdisciplinary teams of visiting and resident researchers working on various themes in photon sciences, including, energy, microelectronics, and health, life, and environmental sciences.

In his new role, Kao will be responsible for developing



Chi-Chang Kao

Roger Stoulenburgh D4601006

the scientific programs within JPSI as well as for overseeing the construction of the building. He also will continue to serve as Chair of the NSLS, a job he has performed for the last three years.

"JPSI will create an environment where collaborative teams of university faculties and their graduate students,

staff from Brookhaven and other national labs, and research and development specialists from industry will interact to solve some of the nation's most critical scientific and technical problems," Kao said. "I'm excited to help create this innovative center and nurture the groundbreaking ideas

See *Kao* on pg. 2

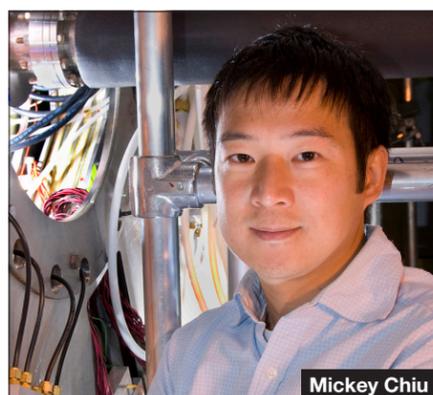
Two Brookhaven Physicists, Chiu and Davoudiasl, Receive Presidential Early Career Awards for Scientists, Engineers

Two BNL physicists — Mickey Chiu and Hooman Davoudiasl — were among 68 researchers honored at a White House ceremony in December 2008 as recipients of the prestigious Presidential Early Career Award for Scientists and Engineers.

The Presidential Award is the highest honor bestowed by the U.S. government on outstanding scientists and engineers who are beginning their independent careers. Nine federal departments and agencies support the honorees, and DOE's Office of Science and the National Nuclear Security Administration (NNSA) provided funding for the work of eight of the award recipients. Each Presidential Award winner received a citation, a plaque, and a commitment for continued funding of their work from their agency for up to five years.

"These awards recognize some of the outstanding people affiliated with the Department of Energy whose extraordinary talents are discovering the solutions to power and secure America's future," Secretary of Energy Samuel W. Bodman said. "Each honoree has made a unique contribution to fulfilling the Department's mission and to enhancing scientific knowledge at large. I am proud of the awardees and appreciative of their efforts."

Chiu and Davoudiasl were among seven DOE scientists honored at the White House who were also honored with DOE's Office of Science Early Career Sci-



Mickey Chiu

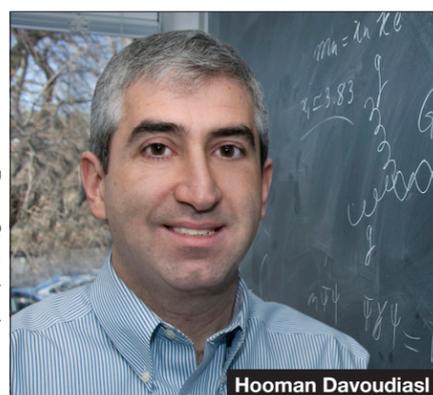
Roger Stoulenburgh D2311208

entist and Engineer Award at a ceremony at DOE headquarters in Washington, DC. An NNSA engineer was also presented with an award from her agency at the ceremony.

Mickey Chiu

Chiu performs experiments at BNL's world-class accelerator, the Relativistic Heavy Ion Collider (RHIC), to study many different aspects of quantum chromodynamics (QCD), a theory that describes the interactions of subnuclear particles. He studies these interactions at a RHIC detector known as PHENIX, which is used for research by more than 500 physicists from throughout the world.

Chiu, whose research is funded by DOE's Office of Nuclear Physics within the Office of Science, led the development of a PHENIX upgrade, which has extended the detector's range so that more particles from



Hooman Davoudiasl

Roger Stoulenburgh D1871208

RHIC's collisions of polarized protons — protons spinning in the same direction — are captured. The upgrade enables many unique measurements in PHENIX that might lead to a richer understanding of the substructure of protons.

Chiu was also honored for mentoring graduate students in building advanced instrumentation.

Chiu earned a B.A. in physics from Bowdoin College in 1996 and a Ph.D. from Columbia University in 2004. From 1998 to the present, he has been a member of the PHENIX Collaboration. He went to the University of Illinois at Urbana-Champaign for a two-year term as a postdoctoral research associate in 2004, and, in 2006, he came to Brookhaven Lab as an assistant scientist. He was promoted to associate scientist in 2008.

Hooman Davoudiasl

Funded by DOE's Office of High Energy Physics within the Office of Science, Davoudiasl's research is concerned with new theories that go beyond the Standard Model of particle physics, a theory that explains microscopic particle interactions. Mounting evidence from data suggests that this framework needs to be extended. One theoretical problem — often called the "hierarchy problem" — is the puzzling extreme weakness of gravity compared to the subatomic forces governed by the Higgs boson. The Higgs, which is the only missing part of the Standard Model, provides masses for fundamental particles within the theory's framework.

Models with extra dimensions have been proposed to address the hierarchy problem. One class of models employs a warped fifth dimension and predicts that a sequence of particles with ever-increasing masses should appear, possibly within the reach of the Large Hadron Collider at CERN, the European particle physics laboratory in Switzerland. Such a "tower" of particles, if observed, would represent echoes of gravity in the warped extra dimension.

In addition, Davoudiasl was honored for providing guest lectures for graduate students as well as organizing international conferences.

Davoudiasl earned a B.S. in physics See *Presidential Awards* on pg. 2

CALENDAR OF LABORATORY EVENTS

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area.
- The Recreation Building #317 (Rec. Hall) is located in the apartment area.
- Contact names are provided for most events for more information.
- Events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

— EACH WEEK —

Weekdays: Free English for Speakers Of Other Languages Classes

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

Mondays: BNL Social & Cultural Club
Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov

Mondays & Wednesdays: Pilates
12:15-1:15 p.m. Monds.; 5:15-6:15 p.m. Mon. & Wed. Rec. Hall. \$65/once/wk, Ext. 5090

Mondays & Thursdays: Kickboxing
\$5 per class. Noon-1 p.m. in the gym. Registration is required. Ext. 8481

Mon., Thurs., & Fri.: Tai Chi
Noon-1 p.m., B'haven Cntr N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov

Tuesdays: Hospitality Coffee
10:30 a.m.-noon, Rec. Hall lounge. Restarts 9/9. All welcome. Ext. 5090

Tuesdays: BNL Music Club
Noon, B'haven Center, N. Room. Come hear live music. Joe Vignola, Ext. 3846

Tuesdays: Knitting Class
2 p.m. Rec. Hall. All levels of skill. Ext. 5090 for information

Tuesdays: Jiu Jitsu
6:30-7:30 p.m. Gym. All ages, 6 yrs. to adult. \$10/class, pay as you go. Tom Baldwin, Bldg. 452, Ext. 4556

Tuesdays: Toastmasters
1st & 3rd Tuesday of month, 5:30 p.m., Bldg. 463, Rm 160. Guests, visitors welcome. www.bnl.gov/bera/activities/toastmasters/

Tue., Wed. & Thurs.: Rec Hall Activities
5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090

Tue., Thurs. & Fri.: Ving Tsun Kung Fu
Noon-1 p.m., B'haven Center, North Room. Taught by Master William Moy. Scott Bradley, Ext. 5745, bradley@bnl.gov

Tuesday & Thursday: Aerobic Fitness
5:15 p.m., Rec. Hall. 10 classes for \$40 or \$5 per class. Pat Flood, Ext. 7866, flood@bnl.gov

Tuesday & Thursday: Aqua Aerobics
5:30-6:30 p.m., Pool. Starts Tues., 9/9; Thurs., 9/11. 8-wk session, \$20/once/wk, \$40/twice/wk. Mail chk to BERA.

Wednesdays: On-Site Play Group
10 a.m.-noon. Rec. Hall. Infant/toddler drop-in event. Parents meet while children play. Restarts 9/10. Petra Adams, 821-9238

Wednesdays: Ballroom Dance Class
B'haven Center, N. Ballroom. Instructor: Giny Rae. Starts September 12 and 19. Ext. 3845

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

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

Wednesdays: LabVIEW
1:30-3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304

Thursdays: BNL Cycletrons Club
Noon-1 p.m., First Thurs. of month. Berkner, Rm. D. Toni Hoffman, Ext. 5257

Thursdays: Reiki Healing Class
Noon-1 p.m., Call for location. Nicole Bernholz, Ext. 2027

Fridays: Family Swim Night
5-8 p.m. BNL Pool. \$5 per family

Fridays: Family Gym Night
5-8 p.m. Family gym activities. Free

Fridays: BNL Social & Cultural Club
Noon-1 p.m., B'haven Center, S. Room, free beginners dance lessons. 7-11:30 p.m. N. Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov

Kao from pg. 1
and the bright new generation of scientists and engineers that will grow from it."

JPSI will also be a center within Stony Brook University, integrating graduate and undergraduate educational programs and providing a focal point for faculty research both within Stony Brook and outside by coupling to other New York State institutions. The institute will be overseen by a Governing Board, co-chaired by Doon Gibbs, BNL's Deputy Director for Science & Technology, and Eric Kaler, Stony Brook's Provost.

"In addition to being a great scientist, Chi-Chang is also a great leader, able to stimulate new ideas and connect people who have never worked together before," Gibbs said. "He is an excellent choice to lead the development of this unique and important center."

Kao earned a bachelor's degree in 1980 from National Taiwan University and a Ph.D. from Cornell University in 1988, both in chemical engineering. Shortly after, he joined BNL as a postdoctoral research assistant at the NSLS. His research focuses on the development of new experimental techniques using synchrotron radiation, and their applications to condensed matter physics and material sciences.

In 1997, Kao received tenure as a BNL physicist and he was promoted to senior physicist in 2001. Named NSLS Deputy Chair in 2005, he was appointed NSLS Department Chair in 2006. Kao is also an adjunct professor in the Department of Physics & Astronomy at Stony Brook University and a fellow of the American Physical Society.

— Diane Greenberg

Retirees Meet, 1/14

The Brookhaven Retired Employees Association (BREA) will meet in Berkner Hall, Room D, on Wednesday, January 14, at noon. All are welcome.



Joseph Rubino 01881208

Blood Drive Donors: Thanks!

At the BNL Blood Drive held on December 9, 144 units were donated by generous BNLers. Thank you all for a priceless gift.



Joseph Rubino 02211208

Gary Welch Named On-Site Physical Therapist



Roger Shoulenburgh 03811018

The Occupational Medicine Department (OMC) has named Gary Welch as BNL's on-site physical therapist. He will provide physical therapy services for Lab employees free of charge; no insurance or co-payment is required.

Joe Falco, OMC manager, said, "Based on a survey of BNL employees that we took in March 2008, it was apparent that physical therapy (PT) services on site would be feasible and cost-beneficial. Offering these services is a win-win situation for employees and the Lab. Employees have the convenience of getting PT on site with no co-payment. The Lab benefits through cost-savings for medical expenses and greater productivity, since employees do not have to travel off-site to get the service during the workday."

The OMC has refurbished an area in Bldg. 490, making it a fully equipped physical therapy center. Welch will be available four days a week to employees who have occupational injuries or personal medical conditions that require PT. A personal physician's prescription is required, or, in the case of occupational injuries, a prescription from an OMC physician must be provided to be eligible for on-site PT.

Welch is familiar with BNL, since he has performed pre-employment screenings and job-site analyses for the Lab over the past four years. "I like the

dynamics of how well everyone gets along here and how efficiently everyone works together," Welch said. "I'm looking forward to working with BNL employees in the new, state-of-the-art PT facility here."

Welch received a B.S. in physical therapy and a DPT from Stony Brook University (SBU), in 2000 and 2006, respectively. From 2000 to 2006 he was a staff physical therapist at St. Charles Hospital Outpatient Rehabilitation Network in Patchogue. He then opened Spectrum Physical Therapy in East Patchogue in 2006, where he now works part-time but still remains in charge of the staff. His wife, Melissa Welch, also a physical therapist, has taken over many of the responsibilities of the business since Welch came to BNL.

Welch has also taught St.

Charles PT staff advanced manual therapy techniques, including mobilization and manipulation of the spine. Since 2006, he has been an adjunct professor at SBU, where he teaches doctoral students manual and manipulative therapy of the spine, a course that he developed.

In addition, Welch has taken numerous continuing education courses, and he is both a certified functional- and certified orthopedic-manual therapist. Manual therapy is a hands-on approach to PT that can reduce or eliminate pain, joint stiffness, and sprains or strains of muscles, tendons and ligaments. In the October 2008 issue of the professional journal, *Advance for Physical Therapists & PT Assistants*, Welch was named "PT Practitioner of the Year." He is the publication's first award-winner to be nominated twice — by two patients who praised his excellent service.

Before deciding to become a physical therapist, Welch served in the U.S. military for 10 years. He specialized in helicopter mechanics and aviation electronics, and he was an aircrew member who later flew Huey helicopters.

Welch is a member of the American Physical Therapy Association and the American Academy of Orthopedic Manual Therapists.

For a PT appointment, call the OMC at Ext. 3328.

— Diane Greenberg

Arrivals & Departures

— Arrivals —

- Oluwafemi Bamgbose C-AD
- Leonard De Santo C-AD
- Kathleen Didie Budget
- Andrei Fluerașu NSLS II
- Yunseok Jang CMP& MS
- Ki Hyun Kim NNS
- Lee Newman Biology
- Gang Wang C-AD

— Departures —

- Dean Connor NSLS
- Frank Kito Biology
- Natalia Medvedeva Medical
- Marshall Newton Chemistry
- Luping Qian Biology
- Martha Simon Biology
- James Trombacco EWMS
- Suntao Wang NSLS

Vanguard Retirement Counseling, 1/29

On Thursday, January 29, you may meet one-on-one with a licensed retirement planning counselor from Vanguard for an in-depth consultation, in the Human Resources Office, in Bldg. 400B. Go to www.meetvanguard.com or call 1-800-662-0106, Ext. 14500 to schedule your session. Financial questions you might want to discuss include: How much should I save for retirement? Am I saving enough? How do I choose the right investments? Can I afford to retire when I want to? The 45-minute session is free, and you do not have to be invested in Vanguard to meet with a counselor. Your spouse or partner is welcome to attend your meeting. Appointments are available from 8:45 a.m. through 4:30 p.m.

Presidential Awards from pg. 1
from the Massachusetts Institute of Technology in 1993, an M.S. in physics in 1995 and Ph.D. in theoretical physics in 1998 from the California Institute of Technology. In 1998, he became a research associate at the Stanford Linear Accelerator Center, and, in 2001, he joined the Institute of Advanced Study in Princeton, New Jersey, as a postdoctoral researcher. In 2004 he became an assistant scientist at the University of Wisconsin-Madison, and, in 2006, he joined Brookhaven as an assistant physicist. He was promoted to associate physicist in 2008.

— Diane Greenberg

Goldman from pg. 1
Wesleyan University in 1966 and his J.D. from Columbia University School of Law in 1969. He then worked for several small law firms in Manhattan, served as house counsel for two small public companies, and was in private practice before joining Brookhaven Lab in 1977 as Associate Counsel. He was promoted to General Attorney in 1982, Laboratory Counsel in 1986, and Deputy General Counsel in 1998. In June 2008, he became Acting General Counsel, the position he held until he was named General Counsel in November 2008.

— Diane Greenberg

Call for Technology Maturation Funding Proposals

Deadline for receiving proposals: February 2

BNL's Office of Intellectual Property (OIP) is now soliciting proposals for the Technology Maturation (TM) awards that will begin in Fiscal Year 2009 (FY09). Funding for new TM projects is expected to begin in June 2009. It is important to note that for FY09 there will be just one single call for proposals for TM funding. The purpose of the TM Program is to facilitate technology transfer from BNL to the private sector. OIP anticipates funding projects aimed at moving research from the "proof of concept" stage to a degree of development sufficient to support pilot-scale operations. The TM program will fund late-stage research that can be transferred to a partner at the end of the funding period.

For more details, including the TM program review procedures and criteria, see: <http://www.bnl.gov/techxfer/>. For more information, contact the Office of Intellectual Property, oiopsr@bnl.gov, Ext. 3035, or Ext. 4151.

CIGNA Representative

A CIGNA Healthcare representative is available as needed in Human Resources, Bldg. 400, or by phone to assist with claims issues you have been unable to resolve yourself through CIGNA's Customer Service number (1-800-CIGNA24). Mary Beth Kivlen will be available by appointment only. You will need to provide all pertinent documentation. To schedule, call the Benefits Office, Ext. 5126.



Roger Stoutenburgh 00010109

Associate Vice President for Brookhaven Affairs Michael Marx (left) greets Lab Director Sam Aronson (right) at Stony Brook's new on-site Office of Brookhaven Affairs in Bldg. 460.

Benefits at Stony Brook for BNLers

As the doors open for Stony Brook University's (SBU) new on-site Office of Brookhaven Affairs in Bldg. 460, Michael Marx, SBU's Associate Vice President for Brookhaven Affairs, announced several benefits at SBU available to all BNL employees. BNL is managed for DOE by Brookhaven Science Associates, a limited-liability company formed by partners Battelle and SBU.

"I am very excited to offer BNLers access to some of the great things going on at Stony Brook. We hope these opportunities will strengthen relationships between Stony Brook and BNL as we further the world-class science being done at these closely linked research institutions," Marx stated.

The benefits include:

- Staller Center for the Arts: \$3 discount on ticket price (two tickets per BNL ID)
- Seawolves/Athletic Events: 40 percent off ticket price (two tickets per BNL ID)
- Library Collections: borrowing privileges with BNL ID
- Wellness Center: 40 percent off subscription rate with BNL ID
- Sports Complex: \$75 per person per year; \$150 per family of four per year. Includes access to track, open basketball court, racquetball court, squash court, weight room, and pool (when not used for classes)
- Parking: may purchase garage passes; BNL tag may be used in faculty/staff free parking lots

SBU's Office of Brookhaven Affairs is led by Provost and Vice President Eric Kaler. He replaced retiree Bob McGrath in 2007, and in 2008, he appointed Michael Marx as the Associate Vice President for Brookhaven Affairs. Marx, a physics professor, completed his thesis at BNL's Alternating Gradient Synchrotron and has collaborated with Lab scientists for more than 40 years. He continues to explore new avenues to build closer relationships between BNL and university scientists and staff.

Marx and Stony Brook's Office of Brookhaven Affairs welcome new ideas and suggestions that will help connect those at BNL and Stony Brook. Marx can be reached at 631-632-8102 or Michael.Marx@StonyBrook.edu.

BWIS Super Salad Lunch, Re-Gift Exchange, 1/15

On Thursday, January 15, at noon, in the Large Conference Room on the third floor of Building 1005, Brookhaven Women in Science (BWIS) will hold a Super Salad Luncheon and Regift Exchange. At this annual social event, you can mix with BWIS members, enjoy a healthy lunch, and pass on an unwanted Christmas gift. All members and those interested in becoming members are encouraged to attend.

BWIS provides the greens for a salad, and each attendee con-

tributes a salad ingredient, e.g. tomatoes, cucumbers, croutons, nuts, olives, peppers. A gift exchange follows: Those who wish may contribute an unwanted, rewrapped Christmas gift, and receive one in exchange.

If you plan to attend, respond to Stephanie Lamontagne, stephl@bnl.gov or Ext. 7141, to discuss which salad ingredient you would like to contribute. To ensure that the selection of ingredients is varied, you may be asked to choose an alternate ingredient.

'Gathering of the Slides' Featuring Kerry Kearney Band, 1/24

The seventh annual "Gathering of the Slides," a blues concert featuring the Kerry Kearney Band, Frank Celenza's Hawaiian Posse, and Danny Doll, will be held on Saturday, January 24, at 8 p.m. in Berkner Hall. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab age 16 and over must bring a photo ID.

Kearney returns for the seventh year performing his brand of Blues and Americana slide guitar that he calls "Psychedelta." Band members include Kearney on guitar, Frank Celenza on bass, Eileen Murphy on drums, and Charlie Wolf on harmonica. In addition, Celenza's own band, Hawaiian Posse, will perform original ukulele tunes in a traditional style. Danny Doll will round out the show, playing acoustic finger picking American roots music.

Tickets are \$15 in advance and \$20 at the door. Some Golden tickets are available at \$30. Golden tickets come with dinner, a meet-and-greet with the band, and a limited-edition signed poster of the event. Tickets can be purchased through www.ticketweb.com or by calling 631 344-3846. Advance ticket purchase is recommended because "Gathering of the Slides" concerts have been sold out in the past.

BSA Noon Recital, 1/14

On Wednesday, January 14, duo pianists Jiayin Shen and Michael Berkovsky will present an entertaining program entitled "Dancing on the Piano," which will include works by Moszkowski, Mozart, and Ravel. Shen made history as the youngest student ever admitted to the Central Conservatory of Music in Beijing, China, and she now performs around the world to high acclaim. Berkovsky made his New York debut at Avery Fisher Hall after winning Juilliard's concerto competition. He has won numerous awards, including the 2007 Yale Gordon Competition.

BSA recitals are free and open to the public. Visitors to the Lab of 16 and over must carry a photo ID.

LIANS Dinner Meeting, 1/15

Joint Meeting with the Long Island Chapter of ASM International

The next dinner meeting of the Long Island Chapter of the American Nuclear Society (LIANS), on Thursday, January 15, will be held jointly with the Long Island Chapter of ASM International. The invited speaker will be Adam Hutter of the Environmental Measurements Laboratory (EML) who will talk on "History of EML and its Changing Role as a Department of Homeland Security Facility." The meeting will be held at South Shore Restaurant, 388 Medford Ave., Patchogue, (631) 475-7926. Complimentary appetizers/cash bar will start at 6 p.m., dinner at 7 p.m., and Hutter's talk at 8 p.m. The cost is \$25/person. To reserve, leave a message with Arnie Aronson, Ext. 2606, by Wed., Jan. 14.

Defensive Driving Course in Two Parts, 1/26 & 29

The next six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on Mon. and Thurs., Jan. 26 and 29, in the Brookhaven Center South Room, from 6 to 9:15 p.m. The course is open to BNL, BSA, and DOE employees, facility-users, and their families. The cost is \$38 per person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message. Include your phone number. For more information, call Sarah Wiley, Ext. 4207.

Portfolio Preparation: SCCC Course To Be Offered on Site

Suffolk County Community College (SCCC) will offer a course on Portfolio Preparation, on site, for the spring 2009 semester. This course helps individuals who are choosing a degree program and earning life experience credits towards that degree, especially for those new to SCCC or who have recently started taking courses. A minimum of 12 students is needed to run the course.

COL120 - Portfolio Preparation - 1 credit
Provides adults with a vehicle for identifying and demonstrating college-level learning achieved outside the classroom. Students are provided with necessary information and techniques for choosing a degree program and preparing a portfolio that describes and documents the learning. The portfolio may then be presented to the faculty for evaluation.

Employees who take college courses may apply for tuition assistance. BNL offers tuition advances or reimbursements at 75 percent for undergraduate courses. For more information, contact Starr Munson, munson@bnl.gov or Ext. 7631.

Forsyth Shows Video of Sailing Trip To Greenland's West Coast, 2/4

The Brookhaven Retired Employee Association (BREA) is sponsoring a video showing of BNL retiree Eric Forsyth's latest adventure: his recent sailing trip to the west coast of Greenland. Forsyth will present the video and add comments at noon on Wednesday, February 4, in Berkner Hall. All are welcome to this free fun event.

BERA Store Has Trip Tix: See www.bnl.gov/bera/
Skate in NYC, 1/31 or see NY Knicks game, 2/4, 7:30 p.m. Join in!

Service Anniversaries

The following employees celebrated service anniversaries during October 2008:

- 45 Years -
Dieter Zantopp..... C-AD
- 35 Years -
Joseph Wall Biology
- 30 Years -
Toni Hoffmann..... Business Sysys.
Kenneth Sullivan..... ES&T
Kevin Yachnik Eng./Utils.
Dorothy-Jean Greco..... Finance
- 25 Years -
Brent Nelson..... C-AD
Trevor Sears..... Chemistry
James Higgins III ES&T
- 20 Years -
Hung Sui Lee Chemistry
Pierrot Bichoneau..... Physics
Darlene Peragine HR&OM
Patricia Flood Info. Services
John O'Hara..... ES&T
John Strahmann EWMS
Paula Pozzoli Staff Services
Edwin Losee NSLS
Lino Miceli..... NSLS-II
Ioannis Marnaris C-AD
Thomas Wozniak C-AD
- 10 Years -
Ramon E. Arcilla, Jr. ES&T
Raju Venugopalan..... Physics
William Kilgore..... Physics
Matthew Ceglia..... C-AD
Francesco Lanni Physics

The following employees celebrated a service anniversary during November 2008:

- 40 Years -
Warren Hirzel C-AD
- 35 Years -
Robert W. Callister, Jr... Site Servs.
Jerry Hobson Site Servs.
- 30 Years -
Kathleen Barkigia Pol./Str. Ping
Bruce Gibbard Physics
Robert Meier..... NSLS-II
Heather Hartmann C-AD
- 25 Years -
Mary Ann Maggio.... Business Sys
Cheryl Conrad..... S&HS
Marsha Belford CEGPA
Arthur Anderson Site Servs.
- 20 Years -
Lyn Fontaine Fac. Ops.
Thomas Godzieba Maint/Fab
David Phillips C-AD
Brenda Riddle Business Sys.
Scott Bell NSLS-II
Joseph Muratore Magnet
Keith Lally ITD
Edward Durham..... Site Servs.
- 10 Years -
Ronald Schroeder..... C-AD
Michael Rau Maint/Fab.
Cecilia Sanchez Hanke NSLS
Cheryl Henderson..... Fac. Ops.
Peter Pohlott..... EWSD

CALENDAR

— WEEK OF 1/12 —

Wednesday, 1/14

***BSA Noon Recital**
Noon. Berkner Hall. Duo Pianists Jiayin Shen and Michael Berkovsky. All are invited to this free concert, open to the public. Visitors to the Lab of 16 and over must carry a photo ID. See notice at left.

***BREA Retirees Meeting**
Noon. Berkner Hall, Room D. All are welcome.

Thursday, 1/15

***BWIS Super Salad Lunch**
Noon. Bldg. 1005 Large Conference Room, 3rd floor. See notice at left.

— WEEK OF 1/19 —

Monday, 1/19

Martin Luther King Jr. Day
The Lab is closed for a Floating Holiday taken in honor of Martin Luther King Jr. Day.

No Bulletin will be published on Friday, 1/23.

Wednesday, 1/21

445th Brookhaven Lecture
4 p.m. Berkner Hall. Alexander Bazilevsky of the Physics Department will talk on "Do Gluons Carry Proton Spin? Toward Resolving the 'Spin Crisis.'" All are invited to this free talk, open to the public. Visitors to the Lab of 16 and over must carry a photo ID.

Saturday, 1/24

***Gathering of the Slides Concert**
8 p.m. Berkner Hall. Kerry Kearney Band, Frank Celenza's Hawaiian Posse, and Danny Doll, sponsored by the BNL Music Club. All are welcome. Tickets are \$15 in advance, \$20 at the door. Visitors to the Lab of 16 and over must carry a photo ID. See notice at left.

— WEEK OF 1/26 —

Monday, 1/26

IBEW Meeting
6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, and the president's report.

***Defensive Driving, Part I**
6-9:15 p.m. Brookhaven Center. See notice at left.

Wednesday, 1/28

BSA Noon Recital
Noon. Berkner Hall. Kitka Musical Group. All welcome.

Thursday, 1/29

***Defensive Driving, Part II**
6-9:15 p.m. Brookhaven Center. See notice at left.

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



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Classified Advertisements

Placement Notices

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.

POSTDOCTORAL RESEARCH ASSOCIATE: MEMBRANE PROTEIN CRYSTALLOGRAPHY – Requires a Ph.D. in biochemistry or biophysics, with experience in protein structure determination by x-ray crystallography, to study a class of metal transporters. This challenging and rewarding project is ideal for career development in membrane protein structural biology (for more information on research program <http://www.biology.bnl.gov/structure/fu.html>). We use a multidisciplinary approach of molecular biology, biochemistry, biophysics and x-ray crystallography to explore novel metallochemistry employed by membrane transporters (see *JBC* (2004) 279:12043; *Science* (2007) 317:1746; *Science* (2000) 290:481). NSLS offers an outstanding environment for x-ray crystallography. Under the direction of D. Fu, Biology Department. BNL policy states that Research Associate appointments may be made to those who have received their doctoral degrees within the past five years. Apply to Job ID #14711.

POSTDOCTORAL RESEARCH ASSOCIATE: SURVEY & ALIGNMENT (One-Year Term) – Requires a Ph.D. in an engineering discipline with graduate level courses or research experience in metrology, alignment and network analysis. Survey and alignment experience in a light source facility is highly desirable. Hands-on experience with laser trackers, inclinometers and theodolites is required. Major responsibilities include: updating primary and secondary survey networks for the NSLS-II site; updating network error analyses, developing procedures and databases for survey and alignment of the NSLS-II accelerator and beamline components with laser trackers, and participating in the ongoing R&D for the precision alignment of the girder-magnets assemblies. Will report to the NSLS-II Mechanical Engineering Group Leader. National Synchrotron Light Source II. Apply to Job ID #14710.

ASSOCIATE PHYSICIST (S-2): X-RAY OPTICS R&D BEAMLINE (reposting) – The X-ray Optics R&D Beamline Associate Physicist will work under the direction of the Inelastic X-ray Scattering Group Leader and assist refurbishing and the operation of an existing x-ray beamline at NSLS to be dedicated to the testing and characterization of x-ray optics relevant for the NSLS-II Project. Will work closely with the research group focused on developing x-ray optics for achieving the 0.1meV energy resolution goal. Requires a Ph.D. in physics or related discipline, plus at least five years of post-doctoral experience using synchrotron x-ray beamline optics and instrumentation. Must have excellent written and oral communication skills and be able to interact effectively with a diverse group of scientists, technical staff and users. Knowledge and experience with Shadow ray tracing is preferred, as well as prior experience in the construction or operation of a synchrotron x-ray beamline and/or in x-ray optics. National Synchrotron Light Source II. Apply to Job ID #14662.

MATERIALS SCIENCE RESEARCHER (P-8) – Responsibilities include the set-up and operation of a state-of-the-art crystal fabrication lab as part of the R&D effort to develop x-ray optics for achieving the 0.1meV energy goal. Reporting directly to the Inelastic Beamline Group Leader, will work closely with the research group in the design and fabrication of the x-ray optics. Requirements include bachelor's degree in material science or related discipline plus 10 years of relevant experience in x-ray crystal optics fabrication, including cutting, polishing and chemical etching of high-quality silicon crystals. Must have excellent written and oral communication skills and interact effectively with a diverse group of scientists, technical staff and users. Preferred requirements include a Master's degree in material science or a related discipline, experience in supporting synchrotron x-ray beamline optics development, and experience using state-of-the-art instrumentation including high-precision diamond wheel dicing saw for crystal fabrication. National Synchrotron Light Source II. ERAP eligible \$1,000. Apply to Job ID #14709.

ELECTRICAL RESEARCH ENGINEER II (P-7) – Requires bachelor's degree in electrical/electronic engineering with minimum seven years of engineering experience in analog circuit design and layout, amplifiers, construction techniques, PLC controls, and digital signal processing. Experience with particle accelerator systems, beam instrumentation, RF systems, and high voltage power supplies is a plus. Will assist in design, component selection, specification, construction, testing, and commissioning of components and systems for a proton LINAC and heavy-ion beam source. This will include system design and modeling, evaluation of prototypes, construction and installation of equipment, acceptance tests, commissioning and operations, upgrades, and system improvements. Will also assist in the direction of technicians during all phases of construction, commissioning, and equipment operation. Excellent written and verbal communication and good interpersonal skills are required to interact with a diverse group of engineers, scientists,

and technical staff. Will report to the C-AD LINAC/EBIS systems Group Leader. Collider-Accelerator Department. ERAP eligible \$1,000. Apply to Job ID #14712.

DISTRIBUTED NETWORKS ARCHITECT (I-9, two positions) – Requires a BS in engineering, computer science, or physics, or equivalent experience and a minimum of 10 years' experience in system architecture, project engineering, control system design, implementation, integration and operation. Programming skills in C, C++ or Java and knowledge of instrumentation is required. Should have superior analytical and problem-solving skills and considerable experience functioning in a lead designer role. Strong communication skills and ability to work effectively with a diverse group of scientists and engineers critical. Responsibilities include: working on a team to design, develop, and deploy accelerator global systems including distributed networks for computers, instrumentation and global timing system; gathering communication requirements from diagnostics and protection systems; design and evaluation of hardware architectures to control these subsystems; and test, installation, integration, monitor and operational support. Experience in accelerator subsystem control and beam steering is highly desirable, and experience using the EPICS control tools and control theory, model-based control and knowledge of PLC programming. Reports to the Controls Group Leader, NSLS-II Project. National Synchrotron Light Source II. ERAP eligible \$1,000. Apply to Job ID# 14704.

CONTROLS SYSTEMS ARCHITECT (I-9) – Requires BS in engineering, computer science, or physics, or equivalent experience and a minimum of 10 years' experience in applying control system tools to large facilities in the research field. Experience managing large code bases, documentation, regression testing, software version tracking, training, and software development environments for large projects is required as well as programming skills in C, C++ or Java. Knowledge of instrumentation, UNIX, LINUX, and RTOS is required. Experience in the EPICS control tools and control theory is highly desired as is knowledge of scripting languages, model based control, and PLC programming. Responsibilities include working on a team to design, develop, and deploy EPICS-based control systems for a large user facility, and participating in the EPICS collaboration to maintain and extend EPICS core components for NSLS II and the EPICS collaboration. Should have superior analytical and problem-solving skills with considerable experience functioning in a lead developer role. Strong communication skills and the ability to work effectively with a diverse group of scientists and engineers critical. Reports to the Controls Group Leader, NSLS-II Project. National Synchrotron Light Source II. ERAP eligible \$1,000. Apply to Job ID # 14706.

SR. CONTROLS SYSTEMS ANALYST/CONTROLS SYSTEMS ENGINEER (I-5/I-6) – Requires a BS degree computer science, engineering, physics or equivalent and a minimum of one to three years' experience in controls engineering and/or programming. Responsibilities include: working on a team to design, develop, and deploy accelerator subsystem applications including all aspects of the subsystem; gathering requirements, developing new drivers and tools as needed and providing component test, installation, integration, automation and operational support. Should possess sound analytical/problem solving skills, communication skills and ability to work effectively with a diverse group of scientists and engineers. Knowledge of modeling and online simulation, instrumentation, steady state control and transition diagrams, and data acquisition is preferred. Experience or education in hardware design and VHDL is desirable. Reports to the Controls Group Leader, NSLS-II. National Synchrotron Light Source II. ERAP eligible \$1,000. Apply to Job ID# 14705.

CONTROL SYSTEMS ANALYST (I-4, one-year term) – Requires a BS degree in computer science, engineering, physics or equivalent, Master's degree preferred. Programming experience in Java and or C is required. Responsibilities include collecting controls group requirements, documenting the controls group requirements, working on a team to design, develop, and deploy accelerator subsystem applicants. Should possess strong analytical and problem solving skills, strong communication skills and the ability to work effectively with a diverse group of scientists and engineers. Knowledge of modeling and online simulation, instrumentation, steady state control, state transition diagrams, and data acquisition is preferred. Experience with control systems, particularly EPICS and accelerator control is desirable. Reports to the Controls Group Leader, NSLS-II. National Synchrotron Light Source II. Apply to Job ID #14703.

CONSTRUCTION INSPECTION SUPERVISOR – ELECTRICAL (T-6) – Responsible for verification of the general contractor's compliance with contract drawings and specifications for the electrical trades on a large scientific building including the installation of the associated 13.8kV distribution system and a 69kV to 13.8kV substation and responsible for project safety. Duties include conducting daily inspections of the ongoing work; organizing and supervising all electrical testing including medium and low voltage equipment; scheduling of additional electrical inspectors; coordinating construction activity with facility user and support divisions to meet operational requirements; monitoring contractor's progress

and substantiating progress payments; working with project safety engineers to ensure that all project activities are performed safely. A minimum of ten years' experience is needed as a construction inspector for electrical trades on large scale building projects, including medium voltage substations, site utilities, low voltage unit substations, building distribution systems, grounding and lightning protection systems, and lighting systems and their controls. Electrical inspector certification required, preferably IAEI or ICC. Familiarity with NFPA 70E. Must be highly proficient in reading contract drawings and specifications, and must possess excellent verbal and written communication skills. Preferred requirements include construction inspection experience on large commercial projects. Reports to the Assistant Director, Construction Management, NSLS-II. National Synchrotron Light Source II. ERAP eligible \$1,000.00. Apply to Job ID #14689.

TECHNICAL ASSOCIATE I/RF ELECTRONICS TECHNICIAN (T-5) – Requires a technical institute, associate's degree or equivalent in a related scientific or engineering field, considerable job-relevant training, and eight years of in-depth related experience with the design, fabrication and test of RF circuits from low noise, low power passive and active circuits to high power systems. Must be an expert in the operation of RF test equipment including network analyzers, spectrum analyzers, phase noise measurement test sets, power and frequency meters, analog and digital scopes. Experience in the design of RF electronics and the ability to troubleshoot to the board and component level is required. Experience in high voltage power supplies and crowbar circuits design, maintenance and troubleshooting is highly desired. Experience in the design, fabrication and tuning of RF power amplifiers and cavity systems is a plus. Will be required to assemble printed circuit boards and electronic chassis, work on the design, fabrication and test of RF systems for the NSLS-II project ranging in frequencies from DC to 3 GHz and power levels from milli-Watts to 35 MW. National Synchrotron Light Source II. Apply to Job ID #14702.

ELECTRONIC TECHNICIAN/TECHNICAL SPECIALIST (T-2) – Requires an AAS degree in electronic technology plus at least four years of relevant work experience. Must be familiar with electronic test equipment, and experienced in design and construction of custom-built circuits. Good communication skills and the ability to work from electrical drawings are necessary. Should be capable of analyzing and solving system problems. Under minimum supervision will build custom circuits from schematic drawings and assemble chassis using basic mechanical fabrication techniques. Ultra High Vacuum experience or experience with lasers is a plus. Will support Electron Cooling Experiment research personnel with a number of R&D experiments. Collider-Accelerator Department. ERAP eligible \$500. Apply to Job ID # 14713.

INSTRUMENTATION & CONTROLS (I&C) TECHNICAL SPECIALIST (T-2) – Requires an AAS degree in electrical technology or equivalent experience, plus at least four years of relevant work experience including calibration, maintenance, and repair of complex electronic and mechanical control systems. Experience needed in the field of pressure, temperature, level and flow instrumentation, and programmable logic controller (PLC) based control systems. Knowledge of analog/digital electronics, electric motor control and basic computer skills is desirable. Familiarity with the use of standard test and measurement equipment, such as function generators, oscilloscopes, multi-meters, and pressure standards is essential. Basic machine shop skills are a plus. Must be able to repair, modify, and build electrical/electronic systems from schematic drawings and assemble chassis using basic mechanical fabrication techniques. Must be self-motivated, able to work with minimum supervision, and have good communication skills. Must be available to work off hours as required. Collider-Accelerator Department. ERAP eligible \$500. Apply to Job ID #14714.

CLEAN-ROOM TECHNICAL SPECIALIST (T-2, term appointment) – Requires an AAS degree in a scientific or technical field or equivalent capabilities, plus at least four years of relevant work experience including a minimum of two years' semiconductor device clean-room experience. Requires demonstrated proficiency in lithography and related skills and a sound knowledge of semiconductor processing and processing equipment. Capabilities, expertise and experience in carrying out installation, troubleshooting, and maintenance of clean-room equipment (electrical, vacuum, gas handling and process control) desired. An interest in non-standard device fabrication is a plus. The primary job function is the maintenance of the laboratory and performing device fabrications. Under general technical direction, and with some latitude for the exercise of initiative and judgment, will perform a wide variety of highly skilled technical assignments in support of the scientific and professional staff. National Synchrotron Light Source Division. Apply to Job ID #14715.

Motor Vehicles

09 NISSAN MURANO - white, mint cond., loaded, assume lease w/1.5 yrs remaining, 15,000 mi/yr, \$330/month. 9k mi. Ext. 8611.

02 HONDA ACCORD - 4cyl, excel cond, no accidents, 32mpg, recent inspect, dealer maint. 66k mi. \$7,500. Brian, Ext. 2799.

BNL's ERAP Goes Paperless

BNL's Employee Referral Award Program, known as ERAP, rewards Lab employees with either \$500 or \$1,000, according to the job, if they refer someone to fill an open job position at the Lab that has been deemed ERAP eligible. Previously, when an employee referred a candidate for a job opportunity at BNL — for those jobs eligible for an ERAP award — the employee filled out a form and submitted it with the potential new employee's resume to the Human Resources & Occupational Medicine Division.

Because all job applicants now apply on-line through the Candidate Gateway system, the procedure has changed.

Now, candidates apply for positions online are prompted to input the name of the BNLER who referred them to the job, if that was the case. If the applicant does not include the referring BNLER's name in the on-line system, the BNLER will not be eligible for the award. So, if you are a referring employee, remind your friends and family to include your name in their on-line application process. If you have any questions about this change, contact Nancy Sobrito, Employment Manager, Ext. 7996.

Hawk Eyes Bldg. 515 Courtyard

Sheryl Gerstman of the Information Technology Division (ITD) captured this photo of a sharp-shinned hawk in a tree in the Bldg. 515 courtyard. She knew it was a hawk, but consulted coworker Mary Lynn Heinrich, also of ITD, who is an avid bird-watcher. Heinrich quickly identified the bird, which can be observed during its regular visits to the courtyard.

Gerstman, who enjoys photography as a hobby, will be looking out for more birds and other wildlife around the Lab site to snap. Portraits,



landscape, and animals are among her favorite subjects. —Jane Koropsak

Cafeteria Raffle: Super Bowl Party Package for Ten

Visit BNL's Cafeteria to get raffle tickets for a Super Bowl Party Package for ten, with buffalo chicken wings, BBQ'd ribs, heros, two salads, chips, sodas, cookies, and all paper goods. Play as many times as you like: no purchase is necessary. Nyarsons Food Service is offering the raffle: two winners will be drawn on January 23.

01 ACURA 3.5RL - metallic green, recent brakes and tires, clean, always gar. 43K mi. \$13,800/neg. David, Ext. 7484.

98 HONDA ACCORD EXV6 - excel cond, dk grn., a/t c/c, a/c, p/w, cd, am/fm, abs, autolock, loaded, pwr sunroof, leather seat 106 mi. \$5,100. 413-2443.

98 ACURA INTEGRA - 4cyl, 2dr, 5spd, a/c pb/ps/pl/pam/fm/CD, abs cruise hatchback, dk green, 26-34mpg. 150K mi. \$3,100. Jim, Ext. 2432 or 821-9178.

98 HONDA CIVIC - red, 4dr, 4spd-a/t, AM/FM/CD, a/c, p/w, p/l. Runs well, gd cond. 93K mi. \$4,000/neg. Ext. 3748 or 766-2349.

Furnishings & Appliances

CURIO CABINET - oakwood, 4 shelves w/light, 6' 8" x 28" w x 15" d, \$150. 790-6431.

GAS COOKTOP & RANGE HOOD - biscuit color, 24" gas Verona cooktop; matching 30" range hood. \$50/ea. 473-3604.

LIGHT BATH FIXTURE - 4, new in box from Costco, ask/\$50/obo. Ext. 5864.

LIGHT FIXTURES - 18" diam white frosted ceiling light, \$2/ea, 3/lamp halogen ceiling fixtures w/xtra bulbs \$25/ea. 473-3604.

Audio, Video & Computers

INKJET PRINTER - Canon i860 w/8 ink cartridges, incl. photo paper tray, gd working cond, \$50/obo. Michael, Ext. 2550.

RECORDS - 33 1/3, approx. 100, \$100/all or \$1/ea. Maryann, 790-6431.

TELEVISION - 32" SONY Wega, in excel. cond., free DVD player incl. \$200/obo. Aaron, Ext. 3527.

TOSHIBA 20" FLAT SCREEN TUBE TV - Few years old. 60\$ obo. Jim, Ext. 7460.

TOUCH SCREEN MONITOR - ELO Touch Systems Entuitive 21" CRT, b/o. 924-4251.

TV - Sanyo DS20930 20" flat screen, manu. date: July 2004. Gd working cond. \$50/obo. Michael, Ext. 2550 or 744-7360.

Sports, Hobbies & Pets

KIDS' SKI BOOTS - 2 pr., Head Carver X3, 3 buckle, sizes 23.5, 26.5, \$20/ea, 1 pair Nordica rear-entry, US 6.5, \$10. Ext. 2194.

NORDIC TRACK SKI MACHINE - incl. monitor, black skis and frame, v/gd. cond., \$50. Lawrence, Ext. 7460.

Tools, House & Garden

CIRCULAR SAW, B&D - 7 1/4" w/3 blades, 2 are new, combo, plywood, carbide, \$30; B&D Inflator 200 deluxe, \$10. 949-7412.

Miscellaneous

3 MARY POPPINS TICKETS - Broadway, Mar. 28; 8 p.m. Cntr Orchstr, Rm B 105-107. \$121.50 tickets @ \$100 ea. Joyce, Ext. 4229.

Car Pool

GRACE CT., MORICHES - Need a ride from 8 a.m./4:30 p.m. Will pay for gas. Mon.1/12. 7 Grace Ct. Moriches. Tushar, Ext. 4660 or 339-309-9300.

Community Involvement

BARN SALE - Temple Beth Emeth benefit, 52 Mt. Sinai Av, Mt. Sinai. Clothes, toys, books, electronic, kitchen, more. Call Carol, 744-8632.

NEW YEAR CONCERT - Free, Sat. Jan. 13, 2 pm, Mastic-Moriches-Shirley Community Library. Bach & Reich works. Jeff, Ext. 5587.

Happenings

NEW YEAR SPLENDOR - best Chinese New Year splendor in Radio City, 1/24 & 1/25, gorgeous, beautiful, inspired, nysplendor.com. George, Ext. 4033.

Free

CELL-PHONE - lg Chocolate, Verizon wireless w/15% BNL employee discount, take over contract. Ext. 3387 or 245-5297.

Wanted

APT. FOR 2 ADULTS - 1-2 rms, all inc., Shirley area. Esther, Ext. 3260 or 399-4509.

NEED PERSON TO SHOVEL SNOW - home drwy in Flanders, Rvhd area. Vanette, Ext. 7991 or 208-1131 after 5 p.m.

For Rent

BROOKHAVEN HAMLET - Cottage for one or couple in wildlife refuge. Two bdrms, galley kitch., tiled bthrm w/shower, w/d, wifi, cable & elec \$1,200/mo. 286-5870.

EAST PATCHOGUE - 1 bdrm. grd. level apt, w/waterview, kit/l/r combo, 1 full bath, single person, no smkg/pets, very nice, price incl. all. \$950/mo. Janet, 475-4930.

FARMINGVILLE - furn. bdrm in lg house, full kit., l/r, d/r, share bath, incl. cable, wifi, phone. \$495/mo. Ben, 513-8275.

RIDGE - lg. 1 bdrm, bath, 7 min. to Lab, heat and a/c, all util. incl., w/d, cable, pri. ent. & drway. \$1,125/mo. Marie, 236-9114.

SHIRLEY - lg 1 br bsmt, all incl., suitable for 1; sep. ent.; close to parks & freeways, 2 mos rent, no smkg/pet. \$725/mo. Ext. 3846.

For Sale

SHOREHAM - 4 bdrm., 2.5 bath Col., f/ml l/r and d/r, den w/fp, fin. bsmt, 12 x 20 deck, igs, new granite counters, SWRSD, much more, 7 mi to Lab. \$499,900 Don, Ext. 2253 or 821-3320.

In Appreciation

To all our friends and co-workers: Thank you for your kind expressions of sympathy and support following the passing of my mother. —Leroy & Mary Durham

To my BNL family: Thank you for your warm and wonderful good wishes. They have been a great lift to me in recovering from my recent surgery. Thank you all. — Ralph Garappolo