Bulletin



October 10, 2008

Lab Reorganizes Staff, Functions **Of Facilities & Operations Directorate**

The Facilities & Operations (F&O) Directorate has been reorganized to improve services to its customers and to better focus on supporting the strategic direction of the Laboratory.

BNL's broad mission is to produce excellent science in a safe, environmentally sound manner with the cooperation of its many communities. F&O contributes to this mission by providing a safe, reliable infrastructure with minimal environmental impact for the Lab, carrying out crafts and fabrication services, and protecting employees and guests, property and national security.

"This reorganization began over six months ago, when three teams of F&O managers, with input from our customers, started to design the new structure in three main categories: protection, modernization, and operations," said Lanny Bates, Assistant Laboratory Director for



F&O. "We then went through an extensive, competitive effort to staff these service areas, with a strong focus on team performance. We now have a more efficient management structure. I believe these changes will enhance our ability to align the support and research functions of the Laboratory."

See Reorganization on pg. 2



441st Brookhaven Lecture, 10/15

'Molecular Sleds' and More — Novel Antiviral Agents via Single Molecule Biology

Vaccines are effective against viruses such as polio and measles but vaccines against other medically important viruses may be impossible to obtain. For example, HIV and flu viruses change their genetic makeup each time they replicate, so that the immune system cannot recognize all the variations. Hence the importance of developing new antiviral agents, which are compounds that inhibit virus replication.

To learn about antiviral agents, and in particular, the breakthrough work in this field being done in Walter Mangel's lab in the Biology Department, join Mangel as he gives the 441st Brookhaven Lecture, entitled, "'Molecular Sleds' and More — Novel Antiviral Agents via Single Molecule Biology." Mangel will give the lecture at 4 p.m. on Wednesday, October 15, in Berkner Hall. Refreshments will be on hand before and after the talk. All are invited to this free lecture, which is open to the public. Visitors to the Lab of 16 and over must carry a photo I.D.

While Mangel and his team are interested in several new antiviral agents, he chose as the model system for the project the human adenovirus, which

is involved in flu-like epidemics, viral pink eye, blindness, and obesity. Millions each year die of adenovirus-induced diarrhea, mostly in the third world, and adenovirus is deadly in opportunistic infections in immunocompromised patients, especially those with AIDS. Almost everyone has been infected with one of the more than 50 different serotypes of adenovirus.

As the target for the new antiviral agents, the team uses the adenovirus proteinase (AVP), an enzyme needed for virus replication. Inhibiting the proteinase will inhibit virus replication. Mangel now has a promising candidate drug that is being sent to the National Institutes of Health (NIH) for testing as an antiviral agent. The new drug binds to two different sites on the proteinase, inhibiting the enzyme by binding to either site. This, says Mangel, could be the first antiviral agent to which drug resistance may not be able

Mangel will describe the journey "full of surprises" that led his lab to find this drug. Their most recent discovery is that in the virus particle, AVP slides along the viral DNA via See Lecture on pg. 2

Of Federal Laboratory Consortium
For the first time, BNL hosted more easily solve problems ogy representative the Northeast regional meeting of the Federal Laboratory Consortium for Technology Transfer (FLC). This year, more than 20 people from federal agencies and laboratories attended the biannual meeting, including representatives from DOE and the Department of Homeland Security (DHS).

Organized in 1974, the FLC is a nationwide network of federal laboratories that provides a forum to develop strategies and opportunities for linking federal laboratory technologies with the marketplace. More than 250 federal laboratories and agencies are members of the FLC, which is divided into six regions across the nation.

"Our meeting was very successful at developing relationships among technology transfer professionals in the Northeast so that we can

and create partnerships among labs, academia and businesses," said Mike Furey, BNL's Manager of Research Partnerships and Sponsored Research and the coordinator of the FLC meeting.

Joining the participants of the Northeast regional meeting of the Federal Laboratory Consortium for Tech-

nology Transfer (FLC), are (first at left) Lori-Anne Neiger and (second from right) Mike Furey, both from

BNL's Office of Intellectual Property and Sponsored Research; (first at right) David Koegel, DOE Office of

Science, Laboratory Management; and (fourth from right, front row) Dorry Tooker, former BNL Manager of

BNL Hosts Northeast Regional Meeting

Technology Outreach and currently President of the FLC's Northeast Alumni Group.

Among the highlights of the meeting were an update on DOE technology transfer activities provided by David Koegel, DOE Office of Science, Laboratory Management, and a talk in which Jay Fraser, President of Tracer Detection Technology Corporation in San Antonio, Texas, discussed his technology transfer experiences with national laboratories, including BNL. John Heiser and Arthur Sedlacek, both researchers in the Environmental Sciences Department, helped the company to develop a light detection and ranging (lidar) sensor for detecting perfluorocarbon tracers.

DHS Science and Technol-

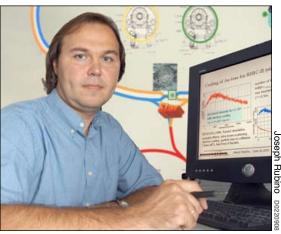
ogy representative Mitch Erickson gave an overview of work performed in the Northeast region's DHS laboratories, and Bruce Harper, DHS, gave a talk, titled, "What Exactly are they Doing at Plum Island?"

The conference participants also toured some of the Laboratory's major facilities, including the Center of Functional Nanomaterials and the National Synchrotron Light Source. David Schlyer, Medical Department, gave a talk for the group on BNL's Center for Translational Neuroimaging, where brain-imaging tools, such as positron emission tomography, help scientists to "see" how the brain works at the cellular level. This information has led to significant progress in understanding addiction, eating disorders, attention deficit disorder, and neurodegenerative disorders.

— Diane Greenberg

Five BNL Scientists Awarded Tenure

BSA granted tenure effective August 1 to Michael Blaskiewicz, Collider-Accelerator Department (C-AD); Jamie Dunlop, Physics Department; Alexei Fedotov, C-AD; Etsuko Fujita, Chemistry Department; and Huilin Li, Biology Department. The Bulletin is giving a description of the accomplishments of each of the five scientists. The series started with Blaskiewicz and Dunlop on October 3 and continues with Fedotov and Fujita below.

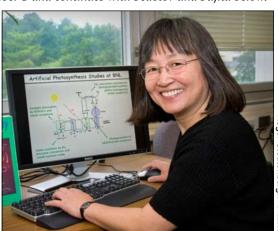


Alexei Fedotov

Alexei Fedotov has received tenure based on his important contributions to the Lab's Collider-Accelerator Department. Fedotov is known for his rigorous particle accelerator theories and experiments that were successfully applied at Oak Ridge Laboratory's Spallation Neutron Source (SNS) and are now being used to develop electron cooling for Brookhaven's Relativistic Heavy Ion Collider (RHIC) and the future, electron-ion collider eRHIC.

"Dr. Fedotov has established himself as an outstanding accelerator physicist whose original scientific work and leadership are internationally recognized," said Collider-Accelerator Department Chair Derek Lowenstein. "His work on electron cooling of RHIC established the feasibility of luminosity [collision rates] enhancement for RHIC and eRHIC. He deserves recognition for his initiative, creativity, team spirit, and productivity."

Fedotov joined BNL in 1999 to help design the SNS accumulator ring, a neutron-producing particle accelerator. From 2001-2003, he led the SNS Ring Beam Dynamics team analyzing interactions See Fedotov on pg. 2



Etsuko Fujita

Chemist Etsuko Fujita has received tenure for her outstanding contributions to BNL's energy research. In particular, she was recognized for her work in the catalysis of carbon dioxide reduction and solar energy-to-fuel conversion, or artificial photosynthesis. "Etsuko Fujita is best known as a fearless, flexible, and extraordinarily talented experimentalist," said Chemistry Department Chair Alex Harris. "She has directed her research to the very challenging task of storing solar energy in the form of chemical fuels, catalytically produced from common low-energy substances such as carbon dioxide and water."

Harris pointed out that national concerns over energy security and rising carbon dioxide levels from fossil fuels have focused attention on the need for viable alternative renewable energy sources. "Solar energy conversion to fuels would provide the advantage of a renewable solar energy source while retaining the critical advantages of storage and transportability of chemical fuels," he said. "The processes that Dr. Fujita is pursuing are

See Fujita on pg. 2

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Fedotov from pg. 1

that would affect and limit beam intensity. Fedotov's efforts to mitigate these interactions helped produce the most intensely pulsed neutron beams in the world.

Since 2003, Fedotov's work has been crucial in developing an electron cooling technique for planned future RHIC endeavors. Electron cooling employs cold electrons traveling along RHIC's ion beams to transfer thermal energy, or heat, away from the warm particles of the ion beams. This energy transfer cools the ion beams, which increases the density of particles in each ion beam and leads to increased collision rates. Fedotov's work with theories, experiments, and simulations was instrumental in establishing an accurate description of the cooling process using a magnetized electron beam. More recently, Fedotov has worked to develop a non-magnetized cooling approach that is less expensive and more robust than earlier versions.

Fedotov earned his undergraduate and Masters degrees from Novosibirsk State University in Russia while working as a research assistant at Budker Institute for Nuclear Physics in Novosibirsk and as a visiting scientist at Stanford Linear Accelerator Center. He earned his Ph.D. at the University of Maryland in 1997 and worked there as a research associate before coming to BNL in 1999. He was appointed physicist in 2003 and was awarded a continuing appointment in 2005.

— Joe Gettler

Fujita from pg. 1 conceptually the same processes that green plants, and some photosynthetic microbes, use to harvest and store solar energy."

Fujita earned her B.S. at Ochanomizu University in Japan, in 1972, and her Ph.D. at Georgia Institute of Technology, in 1976. She came to BNL that same year as a research associate in the Department of Applied Science. She later joined the Chemistry Department, in 1986, bringing the Inorganic Photochemistry Group, now merged with the Radiation Chemistry Group, the benefit of her experimental expertise and broad knowledge of macrocycle chemistry and physical methods. Over the years, her research has evolved to focus on inorganic catalysts and photocatalysts for carbon dioxide reduction and water splitting reactions with the goal of solar energy conversion to fuels.

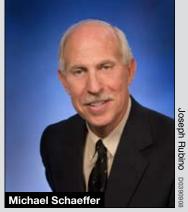
Harris strongly recommended her promotion to tenure, Lecture from pg. 1 concluding that "Fujita has made highly significant contributions to solving a problem of great scientific and practical importance. The vitality of her research program is apparent from the new creative directions she has taken and her success in building promising new renewable energy programs at the Laboratory." Kay Cordtz

CIGNA Representative

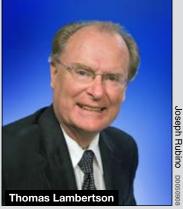
A CIGNA Healthcare representative is available as needed in Human Resources, Bldg. 400, or by phone to assist with claims issues you have been unable to resolve yourself through CIGNA's Customer Service number (1-800-CIGNA24). Mary Beth Kivlen will be available by appointment only. You will need to provide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

The Facilities And **Operations** Directorate's **Division Managers**



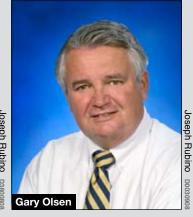












Reorganization from pg. 1

Bates oversees an annual budget of about \$80 million and approximately 530 employees in the F&O Directorate at Brookhaven Lab, a 61-year-old facility that includes more than 350 buildings on its sprawling 5,300-acre campus. Home to six Nobel Prizes, the Laboratory is world-famous for its scientific research.

The F&O Directorate has been reorganized into the following divisions:

Laboratory Protection Division, Managed by John Amabile

This division, formed to consolidate all protective and response functions into a single, cohesive and efficient organization, includes the former Safeguards & Security and Emergency Services Divisions. Amabile served in the U.S. Army from 1982 to 2002, earning a B.A. in general studies and management from Columbia College, Missouri, in 2001. He held management positions for Wackenhut Services Incorporated, a security services contractor, and for the Disneyland Resort in Anaheim, California, before he joined Brookhaven Lab as Manager of Safeguards & Security in 2006.

Modernization Project Office, Managed by **Michael Schaeffer**

This office coordinates all engi-

neering, construction and projectcontrol functions, and it will be the Laboratory's center for project management. This group is responsible for leading Brookhaven's efforts in facilities' modernization, including a proposed \$300-million plan for improving the Lab's infrastructure. Schaeffer earned a B.S. in architecture from Kent State University, Ohio, and worked for a major architectural and engineering firm in Manhattan before joining Brookhaven Lab in 1977. After holding several engineering positions at the Lab, he moved through the ranks to management in 1994.

Maintenance & Fabrication Services Division, Managed By Leo Somma

This division combines the former Central Fabrication Division — responsible for manufacturing mechanical components and assemblies in support of the Laboratory's mission — with mechanical, electrical, and building service groups. Somma earned a B.S. and an M.S. in engineering, both from Polytechnic Institute of New York, and an MBA from Dowling College. He worked in engineering positions at the former Long Island Lighting Company's Shoreham Nuclear Power Station before joining Brookhaven Lab in 1989 as a shift supervisor for the High Flux Beam Reactor. He held several management positions at

the research reactor, which closed in 1999, and, most recently, he was Superintendent of Maintenance and Services at the Laboratory.

Site Services Division, Managed by Thomas Lambertson

This division includes custodial services, roads and grounds, rigging, and heavy equipment machine operations. Lambertson joined the Laboratory in 1979 as an experimental machinist, and he worked his way up to several supervisory positions in the Central Shops Division and manager of Central Fabrication Services Division before assuming his current role. He completed numerous training courses in management and safety.

Energy & Utilities Division, Managed by Ed Murphy

This division focuses on issues related to energy management, conservation, utility infrastructure, and the continued expansion of utility systems to meet the Laboratory's future needs in computing and facility growth. Murphy received a B.S. in mechanical engineering and an M.S. in energy management, both from the New York Institute of Technology. After working in private industry, he joined Brookhaven in 1979 as a project engineer. He moved through the ranks to assume several management positions, including Manager of the Plant Engineering Division. **Staff Services Division, Managed by Jeffrey Swenson**

This division, which remains unchanged, is responsible for housing, travel and transportation, interoffice mail delivery, cafeteria and catering services, conference services, and recreation and quality of life services. After earning a B.A. in sociology and anthropology from Lycoming College, Pennsylvania, Swenson worked as a hotel manager for Inn America Corporation. He joined Brookhaven Lab as the Housing Supervisor in 1992, becoming Manager of Staff Services in 2002.

Facilities Operations Office, Headed by Gary Olsen

This office addresses key issues in work planning, maintenance engineering, service-delivery models, and annual facility-work plans. Olsen earned a B.S. in industrial engineering from the New York Institute of Technology and an M.A. in occupational safety from New York University. He worked in the insurance industry before becoming Manager/Director of corporate services at Eaton, a defense electronics company, in 1983. He moved to Symbol Technologies, Inc., (currently Motorola) as Director of U.S. Corporate Services in 1996, and, in 2001, became the company's Vice President of International Corporate Services. — Diane Greenberg

one-dimensional diffusion. searching for its substrates. It slides on pVIc, an 11 amino acid "molecular sled" that can slide by itself or carry with it other molecules as cargo. These experiments are being done in collaboration with Sunney Xie's lab at Harvard University where 5 the team has obtained real-time movies of single molecules of the molecular sled sliding along DNA for more than five seconds and traversing more than 30,000 base pairs.

Research Applications

Although the project is close to fulfilling its initial objective, what has been learned will soon be used in other projects. The technology to find drugs against adenovirus is being used to find drugs against SARS and bird flu and will soon spin off into drugs to fight Chlamydia and plague. The new concept of a "molecular sled" is being patented by



BNL. A company funded by Battelle Ventures is interested in the technology to map whole genome-modification patterns in DNA. Molecular sleds carrying different cargos on nanowires of DNA could have important uses in nanotechnology.

Walter Mangel joined BNL's Biology Department in 1985. He earned an A.B. degree in philosophy and a Ph.D. in biophysics from the University of Illinois, Urbana-Champaign. He was a postdoctoral fel- In Memoriam low in molecular biology at the University of California, Berkeley, and in cell biology at the Imperial Cancer Research Fund Laboratory in London.

Mangel's background has enabled him to take advantage of the unique range of investigative facilities at BNL. He has published papers from work done at more than eight different National Synchrotron Light Source beamlines; in 1990, he and Venki Ramakrishnan, then at BNL, published in Science a highly cited paper from work done at the High Flux Beam Reactor. Three of his papers, on the DNA melting reaction in transcription, recently became Journal of Biological Chemistry Citation Classics. He has four patents and three more pending. His antiviral research program at BNL has been supported by DOE and, for the past 20 years, by — Liz Seubert

Harry Maile, who joined BNL as a Photography clerk A on September 22, 1947, and retired as a senior technical supervisor of the Photography & Graphic Arts Division on September 30, 1982, died on September 4, 2008. He was 88.

Frank Short, who came to BNL as a senior designer on March 1, 1967, and retired from the National Synchrotron Light Source Department on August 31, 1987, died at 80 on September 23, 2008. He also worked as a guest senior designer, 1987-90.

Obituary Page on the Web

An online Obituary Page at www. bnl.gov/bnlweb/pubaf/bulletin/ obit.asp supplements In Memoriam notices in the printed paper. All are invited to send in memories of BNL colleagues or family members. Contact Liz Seubert, lseubert@bnl.gov or Ext. 2346.

The Bulletin October 10, 2008

HEALTHFEST NEWS

Monday (10/13)	Tuesday (10/14)	Wednesday (10/15)	Thursday (10/16)	Friday (10/17)
	Massage Day 10-minute massage Time: 11 a.m2 p.m. Location: Berkner Hall Room B	Seminar: Arthritis Time: Noon-1 p.m. Location: Berkner Hall Auditorium	Advanced Table Tennis Tournament Time: 5 p.m. Location: Bldg. 317	Fitness Run* 5 kilometers (3.1 miles) Time: Noon–1 p.m. Location: Outside Bldg. 463
Monday (10/20)	Tuesday (10/21)	Wednesday (10/22)	Thursday (10/23)	Friday (10/24)
Free Trial BERA Classes (all week) For more information, go to www.bnl.gov/bera	Open House Location: Gym, Pool, and Weight Room Time: 11:30 a.m.–1:30 p.m.		Healthfest Fair Displays, screenings, raffles, drinking water taste testing, and home-water sample testing: 10:30 a.m1:30 p.m. Location: Bldg. 400 Lobby	* Fitness Run Rain date: 10/24



REGISTER FOR HEALTHFEST EVENTS

Register online for the events at http://intranet.bnl.gov/healthfest/. If you do not have computer access, contact

Michael Thorn, Ext. 8612 to register. We encourage you to participate in the Healthfest events. You will receive a Healthfest T-shirt at the athletic events, first-come, first-served.

Service Anniversaries

The following employees celebrated a service anniversary during June 2008

- 35 Years -		
linor Adams	Int.	Α

Joyce Moore......Radi. Contr.

- 30 Years
Edward Baker......CFN

Diane Hatton.....NSLS-II

- 10 Years -

Michael Bryant....... Plant Eng.
Lorraine Collins...... Plant Eng.
Cyrena Condemi..... Intel. Prop.
Adrienne DeBoard Env. Scis.
Joseph Famiglietti C-AD
Michael McGuigan Comp Sci.
Tina Trotman Plant Eng.

Camera Club Meeting, 10/15

The Camera Club will meet on Oct. 15 in Berkner Hall's Room C from noon to 1 p.m. Members will discuss an after-work demonstration featuring a professional artist who excels in matte cutting, mounting, and framing photographs. Attendees will also plan a trip to the NYC Photo Expo. Members should bring unframed prints to display at BNI's employee art show next month. For more information, contact Ripp Bowman, Ext. 4672.

Disability Awareness, 10/21 Game raises awareness of people's differing abilities

To mark National Disability Awareness Month this October, on Tuesday, October 21, the Diversity Office, in partnership with the National Business Disability Council (NBDC), will bring a culture-sharing event to Berkner Hall. For one hour, from noon to 1 p.m., NBDC will transform Berkner auditorium into a studio where a "Who Wants to Be a Millionaire?" game will be used as a vehicle to raise awareness regarding people's differing abilities. The contestants will be challenged with questions that focus on effective interactions with individuals who have different abilities in hearing, vision, speech, and mobility.

All are encouraged to come and experience this group learning activity that promises to be fun yet informative. Training credit will be given for this event, so be sure to sign the training roster. For more information, contact Senior Administrative Services Assistant Tiffany Minter, Ext. 6253.

Arrivals & Departures

- Arrivals - Ana Akrap CMP&MS William BaltzITD Jeffrey Chinga.....ITD 2 Nicole Chiu ... Safety & Hlth Srvcs ਤ੍ਰ Mary Chuc Safety & Hith Srvcs Kevin Dusling..... Physics Jason Federico.....ITD Ryan Golinski.....ITD Lester HartITD Taku Izubuchi...... Physics David Lacina..... ES&T Michael Ojeda.....ITD Robert RiccobonoITD Anthony Saunders.....ITD Amy QuinnITD Ruth Van de Water..... Physics Jeanmarie Volkman P&PM Sean WachterITD Kerry ZendzianDirector's/GUV

Departures –

Thomas Muller..... Physics

BERA Trips: Buy Tickets at BERA Store

Doctor Atomic, Sat., Nov. 8. Metropolitan Opera, *Doctor Atomic*, an opera about the development of the atomic bomb. 1 p.m. matinée. Orchestra Rear \$130/person, Balcony \$90. The Graduate Center in NYC offers related talks in Oct. For list, contact lseubert@bnl.gov or Ext. 2346.

Radio City Music Hall, Sun., Dec. 7. Holiday extravaganza, \$85. Coach will leave BNL at 8:30 a.m. for 11:30 matinée, leave NYC at 5 p.m. **NYC Do As You Please Trip**, Sun., Dec. 14. Leave BNL 9 a.m., leave NYC 5 p.m. \$10/person. Under 2 yrs with no seat, free.



End-of-Summer Carnival At BNL's Child Development Center

The leaves are falling, and where did summer go? One vivid memory is captured in this glimpse of the annual end-of-summer carnival held at the Child Development Center (CDC) on site, this year on August 28. Games, treats, face painting, and bouncing made a red-letter event for the 112 children attending the Center. The CDC offers a day-care program for children between the ages of six weeks to five years whose parents are BNL employees, guests or contractors. For more information, see www.bnl.gov/HR/CDC/ChildDevCntr.asp.

CALENDAR

Friday, 10/10

*Healthfest Mountain Bike Ride

Noon-1 p.m. Gazebo by the ball fields. 5- or 8-mile routes. Bring your own mountain bike and helmet. For registration and other information, see notice at left.

- WEEK OF 10/13 -

Wednesday, 10/15

*Healthfest Seminar: Arthritis

Noon-1 p.m. Berkner Hall. All are welcome to this talk on various types of arthritis, as well as treatments and prevention. See notice, left.

441st Brookhaven Lecture

4 p.m. Berkner Hall. Walter Mangel, Biology Department, will give this Brookhaven Lecture, on "'Molecular Sleds' and More — Novel Antiviral Agents via Single Molecule Biology." All are welcome to this free public talk. Visitors to the Lab or 16 and over must carry a photo ID. See pg. 1.

Friday, 10/17

*Healthfest Fitness Run

Noon-1 p.m. Outside Bldg. 463. 5 km (3.1 miles). Register with Michael Thorn. See notice, left.

Saturday, 10/18

*Rhythm, Blues Concert

8 p.m. Berkner Hall. BNL's George Bostick and Blues House, surviving members of The Moroccos, and other distinguished blues performers will perform. Tickets are \$15 in advance, \$20 on the day of the show. Buy them at the BERA Store or www. ticketweb.com. See pg. 2.

- WEEK OF 10/20 -

Tuesday, 10/21

Disability Awareness Event

Noon-1 p.m. Berkner Hall. Sponsored by BNL's Diversity Office and the National Business Disability Council. Watch a fun, informative quiz game that raises awareness of people's differing abilities. See notice at left.

Thursday, 10/23

*Healthfest Fair

10:30 a.m.-1:30 p.m. Bldg. 400 lobby. Displays, screenings, raffles, drinking-water taste testing and home-water sample testing. All are welcome.

Friday, 10/24

*Celebrate Video Game's 50th!

11 a.m.-2 p.m. Bldg. 400 lobby. All are invited to a 50th anniversary celebration of BNL scientist William Higinbotham's design of one of the world's first video games, "Tennis for Two." Play this game, now rebuilt by the Instrumentation Division, and play other video games. Also, tour Instrumentation to see what's going on there now. See notice, pg. 4, and get more details in the Bulletin of 10/17.

- WEEK OF 10/27 -

Monday, 10/27

IBEW Meeting

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

More BERA Trips

Check out the scheduled BERA trips on the homepage at www. bnl.gov/bera/recreation/events. asp, or stop at the BERA Store in Berkner Hall to see what is available. Today, sales start for the NYC trip on Dec. 14, others trips will take in the Rangers, the Knicks, and the *Jersey Boys* show. For the first two weeks of sales, you may buy a maximum of four tickets.

Classified Advertisements

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

LABORATORY RECRUITMENT - Opportunities for Laboratory Employees

SR. PROJECT ENGINEER (P-10) - Requires a bachelor's degree in an engineering discipline or closely related field, master's degree would be typical, and a minimum of 15 years of progressively responsible related work experience including outstanding abilities in project engineering leadership in the design and construction of large scale physics experiments. A minimum of five years as a Project Engineer I or equivalent is necessary. Demonstrated application of advanced project management techniques or certification as a Project Management Professional (PMP) is required, as is attainment of distinction by specific outstanding engineering achievements and/or contributions to the Laboratory through sustained superior level of engineering endeavors. Responsibilities include planning and conducting major engineering projects of unusually broad scope and complexity in the area of High Energy Neutrino Physics experimentation, requiring the formulation and use of advanced approaches and techniques to resolve highly complex and unique problems, and for the supervision and/or oversight of a group of collaboration engineers and scientists involved in such efforts. This candidate must have extensive experience in engineering analysis techniques and the use of Finite Element Analysis (FEA) tools such as ANSYS. As a top project engineering expert, will apply advanced principles to initiate, plan, execute, monitor, control and close project plans. Recommends solutions to the most complex problems where equipment and components utilized are generally commercially available. Responsible for leading and directing cross-functional teams to deliver projects within the constraints of schedule, budget and scope. Will conduct engineering design reviews of project wide design efforts and report findings to project management and funding agency stakeholders. The candidate will report directly to the highest level of project management. Will be involved in the ongoing installation project efforts for the Daya Bay Reactor Neutrino Experiment which is a collaborative effort between the US and China. This will require some international travel for oversight of project experimental installation. Will also lead efforts towards meeting the near term goals of developing a conceptual design report and establishing project management controls and policies for the DUSEL/Long Baseline Experiment. Successful candidates will work with and assist the Electronic Detector Group, Physics Department in meeting these goals. Physics Department. Apply to Job ID #14644.

OPEN RECRUITMENT - Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE Requires a Ph.D. in physics or a related field. A detailed understanding of linear and non-linear beam dynamics including collective effects is essential. Experiences with machine modeling and analysis of large size data are also required. Good programming skill in Fortran and C++ is highly desired, as is familiarity with beam dynamics simulations as well as popular lattice modeling software packages. Strong analytical abilities, understanding of plasma physics, FEL physics and statistics are essential for this position. Collaboration with laboratories in the US and CERN will require travel. The work will involve the experimental and theoretical analysis of problems such as lattice function measurements with an AC dipole, Coherent Electron Cooling, and high gain FELs. Under the direction of M. Bai and V. Litvinenko, Collider-Accelerator Department. Apply to Job ID # 14640.

POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in physics or similar science and an understanding of how modern scientific measurement and analysis techniques can be applied to international safeguards problems. Requires a good understanding of statistical methods and techniques as well as experience with modern instrumentation for data collection and analysis. This position is in support of a number of ongoing and anticipated activities including: review of the legal, political, financial, and technical aspects of the implementation of IAEA safeguards with a view toward identifying key constraints and assessing alternatives to overcome them: review and assessment of U.S. policies and approaches for the implementation of IAEA safeguards at uranium enrichment facilities. including the development of alternative methods and techniques for measurement and verification of the flow of uranium and uranium-235; analysis and improvement of techniques of IAEA data authentication; and training of a next generation of students in the methods of the IAEA in applying safeguards. Under the direction of M. Rosenthal, Nonproliferation & National Security Department. Apply to Job ID # 14641.

CONSTRUCTION SAFETY PROJECT ENGINEER II (P-7) - Requires a BS in engineering, industrial or occupational safety, or other relevant technical discipline, a

working knowledge of 29 CFR 1926, and 10 years of construction site safety experience. Qualification as a scaffold and/or excavation-competent person and/or fall protection qualified person and a CSP are highly desirable; PE license is a plus. (Up to five years of experience may be substituted with above-noted qualifications, certifications and licenses.) Responsibilities will include: reviewing and approving contractor safety plans; participation in design reviews, and reviewing design plans and projects to ensure construction safety requirements are addressed; daily construction site oversight inspection; attending contractor job safety planning meetings and toolbox meetings; monitoring and auditing contractor implementation of safety programs and compliance with state, federal (OSHA) and contractual construction safety requirements, including industrial hygiene monitoring and the proper use of PPE; analyzing, tracking and trending construction site safety performance, preparing weekly/monthly/quarterly job site safety performance statistical reports for Laboratory and Contractor personnel and ensuring actions to improve performance are implemented. Will review and maintain institutional construction policies, standards, guidelines procedures and requirements for conformance with Laboratory objectives and applicable laws, regulations and construction industry best practices; provide technical assistance, interpretation and guidance, and resolve conflicts arising from construction safety policies, procedures and guidelines; be subject matter expert for construction site, scaffold, aerial lift, excavation, fall protection, and construction equipment safety. The chosen candidate will maintain, implement and improve the Construction Safety Program for Brookhaven National Laboratory. Safety & Health Services Division. Apply to Job ID #14645.

ADVANCED TECHNOLOGY ENGINEER/ Linux System Administrator (I-7) - The RHIC/ATLAS Computing Facility (RACF) at Brookhaven National Lab (BNL) operates a large-scale multi-purpose computing facility 24x7, serving a geographically diverse, worldwide scientific community that participate in various projects in which BNL is involved. The major components of the RACF are the 6300-processor Linux Farm, the 3 PB disk storage system, the 7 PB robotic tape storage facility, and the high-availability general computing infrastructure. The systems are connected together by a highspeed, 20 GBps-capable network infrastructure with over 3500 active ports. This position requires a master's degree with three years' relevant experience or a bachelors degree with a minimum of five years of relevant experience, preferably in computer science or related discipline. Prior experience with x86-based systems and kernellevel knowledge of RedHat Linux operating systems are required. Working knowledge of shell scripting, Perl/Python and familiarity with the I/O characteristics of Linux-based systems, virtualization (vmware or xen) software, web-based languages and MySQL are essential. Basic knowledge of opensource batch system (condor, sge, pbs, etc) software and prior exposure to large Linuxbased cluster are desirable. Ability to work in a team-like environment is essential. Responsibilities include daily operations of the RACF Linux Farm, addressing user community requests, carrying out hardware/soft-ware installation & upgrades, participating in the evaluation of new technologies for the Linux Farm, and contributing to the support of general services in the facility. Physics Department. Apply to Job ID #14643.

ADMINISTRATIVE SERVICES ASSISTANT (A-2) - Requires a high school diploma with formal office administration training and four years relevant experience in a contractor, construction or engineering firm environment utilizing project management systems and configuration control processes. Under minimum supervision, provides administrative and office work support for the Modernization Project Office. Responsibilities include complex administrative functions including database development, entry and maintenance; calculation of performance metrics for project management cost and obligation baselines; configuration control of engineering documents; digitizing and microfilming original engineering drawings; preparing web requisitions for processing; maintenance of project files archiving completed projects; purchasing and restocking supplies; copying, collating, and assembling reports and presentations; clean-up and maintenance of the drawing reproduction area; sending out original for reproductions; processing shop drawings; packaging and mailing documents; and other related duties in support of the engineering and design staff. Must possess strong organizational skills and a working knowledge of Microsoft Office Suite applications in particular MS Access Excel and Word. Modernization Project Office. Apply to Job ID # 14642.

Motor Vehicles

06 HONDA MOTORCYCLE - 250CC Rebel, blk 146 mi. \$2,450/neg. Ext. 7484. 04 KAWASAKI VULCAN 2000 - Pips sadelbags pwr. camander-3, new batt., 125 cubic inches, big pwr., mint. 2800 mi. Ext. 4427. 04 DODGE RAM 1500 SLT - Quad Cab 4wd 5.7l Hemi-loaded, 51K mi, \$13,500, 521-

99 HYUNDAI ACCENT L - 4cyl, 5spd, 2dr, hbk, fwd, am/fm cass, 2 sm. dents, nds tires, runs well. 94K mi. \$1,500/neg. 484-0995.

99 DODGE INTREPID ES - v6. 3.2L, a/t, all stand, features + CD & sunroof, new brakes/front tires, gd cond. 82K mi. \$3,800/neg. 617-642-7390.

99 FORD EXPEDITION EDDIE BAUER blk/tan, climate control, 3rd seat, 6pak, cd, recent brakes, excel tires, excel. cond. 8,500 mi. \$5,500. Carl, 929-5781. 99 SUBARU OUTBACK WAGON - gd. cond. except needs new gas tank, 5spd, cass, cd, a/c, awd, p/w, p/l, alarm, heated seats. \$4,000/neg. 874-3652.

98 FORD EXPLORER XLT - V6 a/t, Blue Met, gray Ither, m/roof, all pwr, run boards, privacy glass, new tires, mint. 96K mi. \$4,250. Ext. 5665.

96 FORD F-150 - new tires/batt/alternator, no rust, runs well. \$2,600/neg. 834-

96 CHEV CORSICA - 4cyl, 4dr, p/l p/w, am/fm/cd. 61K mi. \$700/neg. 428-8536. 82 HARLEY DAVIDSON SPORTSTER red, S&S Carb, extra parts, service & carb manuals, gd. cond. \$3,000. Ext. 5456.

23' SUNRUNNER 230SB - mid-cabin fam. cruiser, aftcabin 225hp, volvopenta fwc., galley, head, dockside pwr. full canvas. \$3,000. Bob, Ext. 4867 or 457-3171

Furnishings & Appliances

BABY FOOD - 8 unopened cases of Similac Alimentum Formula ready-to-feed. Exp. date 1 May, 2009. \$34/per case. 413-4407. BAR STOOLS - blk., country style purchased from Plow & Hearth, gd. cond., 3 avail., \$20/ea. Angela, Ext. 7397.

COMPUTER DESK - Bush, w/2 drawers & hutch, 53"w/30"h/30"d; Hutch 51"w/30"h/12"d ask/\$75. Bob, Ext. 4867 or 457-3171.

DINING CABINET - 19"d x62"lx30"h, cherrywood color, \$89; 3/sofa sets, \$110, red color, excel. cond. 751-0517. DINING ROOM SET - 9 pc., excel. cond.,

\$200. John, 543-7065. ENTERTAINMENT UNIT - solid oak, 51"h

x 61"w x 22"d, holds 32" tv, 3 AV components storage under tv, pic. avail., \$250. Chris, Ext. 7365 or 472-3488. FURNITURE - ctry French style desk, lt.

wood w/glass top, \$160; fruitwood coffee table, \$200; 2 Bergere style chairs, \$473, OAK BUREAU - old & solid wood, 3 drwrs, needs work, u pk up, \$25; d/r tble w/2 leaves, oval, gd. cond., \$60. Ext. 7647.

TABLE, CHAIRS - farm table & 4 Sheath Back chairs, ask/\$1500. 749-2051. WALL UNIT - oak, 3 sectional, china cabinet in center, can be sep., excel. cond., \$600/obo. Nancy, 929-4716.

Audio, Video & Computers

ALTO SAXAPHONE - Yamaha YAS-23 in excel cond. \$625/neg. Maryann, Ext. 4705 or 929-4978.

MONITOR - 17", gd. cond., u-pic-up. Pt.Jefferson, \$10. Maurice, Ext. 2159. PRINTER - Epson Stylus 777 color ink jet, \$20. Bill, Ext. 2906 or 929-6189.

Sports, Hobbies & Pets

ALTO SAXAPHONE - Yamaha YAS-23 in excel cond. \$625/neg. 929-4978. ICE SKATES - 2 pr., sz 6, Bauer Elite, little used, excel. \$15/ea. Lloyd, Ext. 5225. POWER TECH WEIGHT UNIT - new cond., 3 sta sys free wt exercises w/500 lbs wts, wt tree/clips, \$1,200/firm. 645-5046. TRIKKE T6 3 WHEEL VHICLE - like new, pink cmbring stand-up-on bike for kids, adults undr 200lbs, \$75, photos. Linda, Ext. 2733.

Tools, House & Garden

B&D CIRC, SAW - 7 1/4"w/3 bldes, 2 nu, 1 cmbo/1plywood/1carbide, \$35; B&D9517 Inflator 200, \$15; ast'd hrdwre. 949-7412. FLAGSTONE PAVERS - about 30, 2'x3', 1-2" thick used flagstone pavers, \$3/ea/ obo. Steve, Ext. 4925.

GREAT DANE MOWER - 52", new blades & Gator blades, grass catcher, 27hp Kawasaki eng., new batt., \$2000. 645-6131. HORSEPOWER 22 - Craftsman, 6.0 rear discharge Rotary lawn mower, like new, \$119. Hong-Bo, 751-0517.

COMPUTER MONITOR - Gateway 17 inch 4:3 aspect ratio, worked fine when last used. Bill, Ext. 2378.

GLUCOSE METER - new. Ext. 3485. PIANO - Melville Clark upright piano w/ stool, needs tuning. David, Ext. 7277.

Lost & Found

KEYS - found south side of bldg.400, 2 Yale keys, tag reads, Garage Door. James, Ext. 7912 or 872-9275. LOST - car key for Honda Accord. Kathleen, Ext. 3161.

Miscellaneous

DIRECT TV DISH - w/2 boxes and remotes, \$75. John, 543-7045. GRACCO QUATTRO TOUR TRAVEL SYS - Kenbrk gray pld ptn w/dk purple strler, SnugRide Inft c/s & s/i/c adjstbl base \$125; matg d/bag \$10. 516-343-2785. PUPPIES - Champion Bloodline Pitbull Terriers, 8 wks old, 484-1809. STOVE - burns wood/coal, Scotia, qd.

cond., b/o. 467-4386.

SWINGSET - plastic, Little Tykes w/ slide clubhouse, fits 6 swings you dismantle, \$125. Lloyd, Ext. 5225.

Celebrate the 50th Anniversary Of 'Tennis for Two'

All are invited to celebrate the fiftieth anniversary of one of the world's first video games, "Tennis for Two." BNL scientist William Higinbotham, a nuclear physicist who had worked on the Manhattan Project and lobbied for nuclear nonproliferation, designed Tennis for Two to "liven up" a 1958 Brookhaven open house.

On Friday, October 24 from 11 a.m. until 2 p.m., come to Bldg. 400 lobby to play Tennis for Two as well as an array of later-day games and take a tour of the Lab's Instrumentation Division, where Tennis for Two was created and new electronic marvels are being designed every day. For more information on Tennis for Two, go to http://www.bnl.gov/bnlweb/history/higinbotham.asp.

Rhythm, Blues, Riverhead Style, 10/18

Rhythm and blues will take over Berkner Hall on Saturday, 10/18, at 8 p.m. BNL's own George Bostick will lead the band Blues House, with Sonny Henderson, lead guitarist from the 1969 Riverhead-based band, The Moroccos, scheduled to appear, as well as other members of The Moroccos, and guests: Ralph Boardman on sax and keyboard, Big Al Allen on sax, Waddie Bolling on drums, Melvin Robinson on guitar, and Curtis Highsmith and Dave Mann on vocals. The event is open to all. Tickets are \$15 at the BERA Store or www.ticketweb.com; \$20 at the door.

Flu Vaccines Now Available at Clinic

The Occupational Medicine Clinic offers the influenza (flu) vaccine to all full-time and part-time-eligible Lab employees now through Friday, October 24. Shots will be given at the Clinic, Bldg. 490, according to last name, during the following times:

Last Name Time Last Name T - Z = 1 - 2:30 p.m.9:30 – 10:45 a.m. H - M10:45 - 11:45 a.m. N - S = 2:30 - 4 p.m.

Please wear a short-sleeve shirt to receive a flu shot and do not ask to change a scheduled time. For those who cannot attend scheduled times, flu shots will still be available through December, or until the Clinic runs out of vaccine supplies. Retirees, students, contractors, guests and employee family members should obtain shots from their personal physicians. For more information on the flu vaccine, call to speak with a nurse, Ext. 3670.

Next May, Cruise With BERA to Bermuda

The five-day cruise leaves from Bayonne, NJ, Saturday, May 23, 2009, and returns on Thursday, May 28. Prices, from \$1,690 to \$3,490 per double occupancy, include travel insurance, port fees, fuel charges. A \$200 deposit per double occupancy is required at booking. Book before mid-October; prices are expected to increase. Call Joann Giambalvo, Ext. 7459, for more information or see www.bnl.gov/bera/.

What's New at the Cafeteria?

Packed Meals for Home, Vegan Recipe Contest

Packed Meals: Too tired to cook after work? The BNL Cafeteria will package any soups, salads, entrees, or desserts for take-out and pick up on your way home. Call Ext. 3541 for more information.

Vegan Recipe Competition: Submit your favorite vegetarian/ vegan recipe with your name & Lab ext. in the suggestion box, middle register. If Nayyarsons uses your recipe, you get a free lunch!

YAMAHA 385 FLUTE - Intermed. level, sterling silver head, open/closed hole, \$400. 807-0457.

Happenings

CARING FOR CAMERON - Sat. Oct. 4 @ 6pm, Sayville Fire Dept. Tickets \$10 advance, \$15 @ door. www.caringforcameron.com, 495-5010. DIVINE PERFORMING ART'S SHOWS

- Traditional Chinese culture - a study in grace, fluidity, balance, inner strength, nyspectacular.com, George, Ext. 4033. SCALLOP DINNER - Cutchogue Methodist Church, Election Day, 5pm, 6pm, 7pm seatings, \$21/adult \$9/child. Bob, Ext. 2451.

Wanted

MASON - reasonable, reliable, for walkway and possibly patio. 516-319-0534. TREADMILL - gd. cond., reasonably priced, delivery requested. Frances, Ext. 3177. VINTAGE VIDEO GAME SYSTEMS - Need to borrow working systems and games for RNI demonstration (see notice rt. of pg.). Will return. Joseph, Ext. 3584.

For Rent

FARMINGVILLE - furn. bdrm, 14'x 16', in Ig house, full kit., I/r, d/r, share bath, incl. cable, wifi, phone. \$595/mo. 513-8275. MEDEORD - 1-2 bdrm, condo, renov. new bath & kit., dw, hvac, w/d, w/w crpet, basic cable incl.; golf course, no smkg/ pets, avail, now, \$1,100/mo, 806-8872. MIDDLE ISLAND - 1 bdrm, lg. remodeled bsmt apt, pvt ent/drwy, incl. all, 10 min to Lab, strictly no smkg/pets, BNL or Stny Brk employee only, \$900/mo, 880-3152. PORT JEFFERSON - spacious 1 bdrm. apt, lg. l/r, kit, bdrm, bath, extra space that can be used for work/storage, landlord not on premises, \$1.025/mo, 338-2298. RIDGE - lakefrnt, apt, Ir/br combo, full bath, eik, grnd lvl, off st. prkg., own therm, cable/int., incl. all, no smkg/pets, ref/sec, \$975/mo, 379-5866/5868. ROCKY POINT - 1 bdrm, house, w/d, 1 blck to beach, 15 min. to Lab, no pets, + util/sec. \$1,000/mo. 744-5282.

ROCKY POINT - 1 brm. apt. quiet area, off st.t prkg, priv. ent/yd., util. incl., non smkr., approx. 15 min to Lab, nr beach/ stores, 1 mo. sec. \$950/mo. 921-8137. SHIRLEY - 1rm, stove kitnet, full bath, sep ent, tv/elect/heat/int, furn all incl., 1mo sec, 5 min to stores/beach/LIRR, no smkg/pets. \$700/mo. Regis, 804-8609/657-3008.

SHIRLEY - bdrm, in house, full kit., I/r, d/r, share bath, elect/ heat incl, 1 mo. sec, no smkg, 8 mi. to Lab. \$590/mo./neg. 335-4907/917-941-4061.

SHIRLEY - 2 bdrm. apt w/1bth, eik, l/r, nr shopping, 7 min to Lab, 1/mo sec. \$1,250/ mo./neg. 335-4907 or 917-941-4061. SHOREHAM - Spacious, clean 1 BR stu-

dio apt, sep. ent., kit. & bath, lg. deck, big yd., sep. therm, avail. 11/1, no smkg/pets; 7 min to lab. \$775/mo./neg. 821-4318. SHOREHAM - studio apt. eik, walk-ncloset, sep. ent., elect/ cable/heat incl, 1 mo. sec, no smkg, 8 mi. to Lab. \$900/mo. 849-2593. \$900/mo. Ext. 4331.

SMITHTOWN/HAUPPAUGE - v/lg. unique studio apt., priv. ent., use of w/d, \$750/ mo. all. Bonnie, 379-5596.

SOUND BEACH - Col. 2 story house, 8 rms, 2 bath, bsmt. w/d, d/w, skylight, 15 min. to BNL, dd-end str. walk to beach, Miller Place SD. \$2,050/mo./neg. 849-3767.

In Appreciation

I am thankful to have friends & co-workers who supported me during mom's illness & passing. The kind words, cards & flowers give me peace. Your donations will help those agencies that gave mom (& me) comfort in the end. - Toni Hoffmann

On-Site Services

SERVICE STATION - Need gas, or to have an oil change, coolant flushing, repairs, done on your vehicle while you are at work? Available on site at the Upton Service Station, Ext. 4034.

ENTERPRISE CAR RENTAL - now in Bldg. 400 lobby. Cars, pick-ups, vans, available for short or long rental. Discounted rates for BNLers. Ext. 4888.



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