the Bulletin

BROOKHAVEN NATIONAL LABORATORY

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RHIC Science, Optimistic Future Celebrated at RHIC & AGS Users' Meeting

The 2006 Relativistic Heavy Ion Collider (RHIC) and Alternating Gradient Synchrotron (AGS) Users' Meeting celebrated RHIC science, a ground-breaking proton-proton run, and an optimistic view towards future facilities and upgrades.

The five-day meeting, held from June 5-9, featured topical science workshops on Monday, Tuesday, and Wednesday, and plenary sessions on Thursday and Friday. The Friday session featured a discussion of the "Spin Crisis in the Parton Model — Past, Present and Future," workshops on a plethora of proposed RHIC and detector upgrades, and talks on non-RHIC research, including AGS experiments E949 and E969.

Roger Stoutenburgh D2970606

Among the speakers at this year's RHIC & AGS Annual Users' Meeting are: (front row, from left) Barbara Jacak, Stony Brook University (SBU); Jeong-Hun Lee, BNL; John Hill, Iowa State University; Sam Aronson, Interim BNL Director; Peter Bond, BNL Deputy Director for Science & Technology; Krishna Rajagopal, Massachusetts Institute of Technology; (middle row, from left) Dennis Kovar, DOE's Office of Science Associate Director for Nuclear Physics; Brant Johnson, BNL; Brad Keister, National Science Foundation Program Director for Nuclear Physics; Peter Steinberg, BNL; (back row, from left) Daniel Magestro, Ohio State University; Angela Melocoton, BNL; and Abhay Deshpande, SBU.

During the main plenary session on Thursday, June 23, the morning-session speakers presented the latest operations and detector results from both heavy-ion and polarized-proton collisions. John Hill, incoming Chair of the RHIC & AGS Users' Executive Committee (UEC), opened the afternoon session by introducing BNL Interim Director Samuel Aronson. Aronson's first task was to announce the two winners of the RHIC & AGS Thesis Award Competition, which is held each year to recognize the most outstanding theses related to research conducted at the RHIC, AGS, NASA Space Radiation Laboratory, Tandem, or Accelerator Test Facility.

The first of this year's winners was the University of Barcelona's Ubaldo Iriso Ariz, whose thesis focused on the formation of electron clouds in RHIC. These clouds severely limit the performance and intensity of the machine, and, in 2001, caused intolerable pressure rises inside the vacuum chamber during the first attempts to fill RHIC with high intensity heavy ion beams. The work in Ariz's thesis encompasses a comprehensive approach to understanding beam-induced pressure rises in RHIC.

The second award went to Stony Brook University's Anne Sickles, who worked at PHENIX to determine angular correlation measurements using charged particles, protons or pions. Her goal was to study the origin of an enhanced baryon/meson ratio observed in heavy ion collisions. Sickles' results were surprising, continue to be a topic of very active discussion in the field, and have cast serious doubt on the proposed theoretical explanation of other observations at RHIC.

Aronson then gave his main address. He reviewed the Lab's priority initiatives and discussed the gradual shift in

(continued on page 2)

UEC Election Results

Outgoing RHIC/AGS Users' Executive Committee (UEC) Chair Brant Johnson and incoming UEC Chair John Hill announced the results of the annual UEC elections as follows:

Chair Elect: Rene Bellwied, Wayne State University

Three-year term UEC Members: Helen Caines, Yale University; Jim Sowinski, Indiana University; and Charles Whitten, UCLA

Student/Postdoc Members: Sarah Campbell, Stony Brook University, and Christine Natrass, Yale University

DOE Reviews BNL's LDRD Program

The purpose of the Laboratory Directed Research & Development (LDRD) Program is to promote the conduct of highly innovative and exploratory research that fits into the mission of the Laboratory and is consistent with the goals of DOE. Each year, DOE conducts a review of the LDRD program at one of its Labs, and this year, on May 24 and 25, DOE reviewed the BNL program. Attendees, pictured at right, included Acting Director for Laboratory Policy & Infrastructure John LaBarge (front, left), who oversees the program for DOE's Office of Science, and representatives from the DOE Brookhaven Site Office (BHSO) and the LDRD programs at other national science laboratories and their respective DOE area offices. J. Patrick Looney, BNL's Assistant Laboratory Director for Policy & Strategic Planning, presented an overview of the Lab with a focus on the science that has flourished as a result of LDRD support. Leonard Newman, LDRD Program Scientific Director, gave an overview of the LDRD process of solicitation, selection, and management of LDRD projects; and Nand Narain, BHSO, talked on the DOE oversight process. Doon Gibbs, Associate Director for Basic Energy Sciences, after highlighting the importance of LDRD support that was of key assistance in establishing the Lab's Center for Functional Nanomaterials, discussed the research projects that will be pursued there. Overviews of several selected research programs that had benefited from LDRD support were presented, with research highlights from Micro-MRI, lattice QCD, protein lipid membranes, semiconductor gamma ray detectors, and high temperature superconductors. After the presentations, the attendees toured the Magnet Division and the RHIC control room. The second half-day was devoted to the business of the LDRD program, with a focus on how to comply with the DOE Orders pertaining to LDRD funding.

Joseph Rubino D4010506

416th Brookhaven Lecture, 6/21

Molecular Design of a Metal Transporter

About four billion years ago, when life was first structured behind a membrane, ancient cells were built upon two components: DNA and proteins. But the changing of the earth's primitive reductive atmosphere to the present oxidative one caused the release of metals into the life system. The introduction of these reactive elements allowed new cellular functions to develop, yet brought the risk of metal stress that is still the source of many of today's diseases. For example, just two to three grams of zinc exist in the entire human body, yet this metal plays a crucial role in cell growth and division, protein and DNA synthesis and many other cellular processes. When this optimal physiological level is not maintained, there can be repercussions to the body.

As a result, cells have developed metal transporter systems to keep cellular metals under strict homeostatic controls. Metal transporters are proteins residing in membranes that keep the amount of zinc and other metals in check by selecting a nutritional metal ion against a similar but toxic one several orders more abundant and then moving the bound metal ion across the membrane.

It is not known how a transporter protein can achieve this remarkable metal selectivity, but that is one of the questions biologist Dax Fu of the BNL Biology Department will address when he gives the 416th Brookhaven Lecture ,"Molecular Design of a Metal Transporter," at 4 p.m. on Wednesday, June 21, in Berkner Hall.

Fu obtained his Ph.D. in biomedical sciences from the Mayo Graduate School of Medicine in 1996. He completed postdoctoral training at the Johns Hopkins School of Medicine and the University of California, San Francisco, Medical School. Fu joined BNL in 2001 and he holds a joint appointment as an assistant professor in the Department of Pharmacological Science at Stony Brook University. Fu's BNL group studies the functions of metal transporters in a structural context to understand the molecular design of a functioning metal transporter.

Refreshments will be offered before and after this free talk, which is open to the public. Visitors to the Lab who are 16 and older must carry a photo ID.

— Kendra Snyder

Roger Stoutenburgh D3970502

Dax Fu

RHIC & AGS Users' Meeting

(cont'd)

BNL's primary research focus from high energy and nuclear physics to basic energy sciences, with the construction of Center for Functional Nanomaterials (CFN) and promising outlook for National Synchrotron Light Source II. "BNL's science has historically been dominated by high energy physics and nuclear physics, and is now becoming more balanced," he said. "I think that is a strength — we are seeing many more collaborations between physicists and basic energy sciences researchers."

Roger Stoutenburgh D2980606

Thesis Award winner Ubaldo Iriso-Ariz (left) and Interim Laboratory Director Sam Aronson

Roger Stoutenburgh D2960606

Thesis Award winner Ann Sickles (left) and Interim Laboratory Director Sam Aronson

Roger Stoutenburgh D2940606

Poster Award winner Jeffery Wood (left) and Peter Bond, Interim Deputy Director for Science & Technology

However, Aronson reassured the crowd, "High energy and nuclear physics will continue to be a big part of BNL's research picture." He is optimistic about the proposed QCDLab's becoming a reality, he said, with RHIC-II (detector and luminosity upgrades) looking more likely, based on current budgets, and e-RHIC (adding an electron cooling ring) "further down the road technically, politically, and resource-wise, in our view . . . To succeed, our focus has to be on building the science case, building consensus in the nuclear physics community, and building the QCD user communities. Building the hardware — that's the 'easy part.'"

Next, DOE Office of Nuclear Physics (NP) Director Dennis Kovar talked about DOE support of the physical sciences and its importance to U.S. leadership. He reviewed the budget struggles of the past two years, and said that FY07 looks much better because "the [nuclear physics] community did a very good job of identifying what opportunities would be lost and why there was a compelling case for additional funding."

The future appears even brighter, Kovar said, because the administration's American Competitiveness Initiative and associated increased funding for the Office of Science will likely allow NP to implement a "world-class" program. "I think there is a very strong case that the technologies and the knowledge and the trained workforce that come out of our program are very important for the nation's long-term competitiveness," he said.

Kovar said that priorities in DOE's 10-year plan for physics include implementing detector and luminosity upgrades at RHIC and developing a plan for the U.S. to remain among the leaders in astrophysics research. He added that another DOE priority is to develop a facility "early in the next decade" that will provide exotic beam capabilities and complement other facilities, and added that the budget outlook over that time period is positive.

"This projection is very nice, but it remains to be seen if Congress will appropriate it," he said. "A very strong case has to be made as to what science we are going to be able to do, what the impact of that science will be, and how it competes with priorities in other scientific fields and across the government. The community is going to have to be involved to make that case. "

After Kovar, DOE Program Manager for Heavy Ion Nuclear Physics Gulshan Rai highlighted key DOE investments at BNL/RHIC planned for the mid term, including construction of the PHENIX silicon vertex tracker and the STAR time-of-flight barrel, construction of the Electron Beam Ion Source (EBIS), an increased investment in RHIC accelerator and detector R&D, and participation in the Large Hadron Collider heavy-ion program.

Brad Keister, National Science Foundation (NSF) Program Director for Nuclear Physics, discussed NSF's nuclear physics program and the status of several NSF collaborations with laboratories and universities. He reviewed the budget struggles of 2005 and 2006, and said that the physics funding outlook for FY07 was better by about six percent. Keister also reviewed the NSF budgeting process and how researchers can write proposals and apply for funding.

BNL Interim Deputy Director Peter Bond took the stage next to announce this year's poster session winner: Jeffrey Wood of the University of California at Los Angeles (UCLA). Wood's poster was on "Polarimetry at the Brookhaven AGS Using Proton-Carbon Coulomb-Nuclear Interference."

Bond then spoke about the future of high energy and nuclear physics at BNL, including what BNL and the user community must do to make QCDLab a reality.

"When completed, it really would be a spectacular machine, a phenomenal facility for the study of QCD," he said. "We need to collaborate with JLab on the science case, face competition from other DOE offices for funding, and address pressures in many other areas. You also want to keep the cost as low as you can so you have a good chance for funding."

Bond hopes the community will make progress at the "Workshop on Future Prospects in QCD at High Energy" meeting at BNL from July 17 to 22. "That's where the experts must make convincing cases to each other," he said. "We need the right arguments for DOE, OMB [Office of Management and Budget], and Congress. We need compelling, concise arguments."

The Thursday session concluded with talks on the science case for RHIC II and eRHIC, the "QCD critical point," and a review of UEC election results. Outgoing UEC Chair Brant Johnson said that, in all, the meeting "was indeed a great success. The quality of the scientific talks and the range of topics covered were truly impressive."

Johnson added that, thanks to a generous contribution from BNL management, the UEC was able to support travel expenses for several international speakers in the workshops and plenary sessions. "In particular, we were pleased to have two talks from Elliott Leader of Imperial College, London, who is widely known for, among many other things, coining the phrase "spin crisis," he said.

The meeting's organizing committee: John Hill, Iowa State University (ISU); Johnson; Gary Westfall, Michigan State University; and Susan White DePace, BNL, expressed appreciation to workshop coordinators Mike Lisa, Ohio State University; and Matthias Grosse Perdekamp, University of Illinois at Urbana, Champagne; poster session coordinators Carla Vale, ISU; and Sevil Salur, Yale University; and UEC members. Special thanks went to conference coordinator Angela Melocoton, and to Kelly Guiffreda and Regina Robinson, all three of the Users' Center. Finally, they expressed gratitude to all workshop organizers, speakers, and participants for making this, in their opinion, perhaps the best-ever RHIC & AGS Annual Users' Meeting.

— Peter Genzer

Audit of Environmental and Safety Management Systems, 6/19-23

On June 19-23, an independent auditing organization (NSF-International Strategic Registrations, Ltd.) will conduct an audit of BNL's environmental and occupational safety & health management systems. These management systems, designed to conform to the ISO14001 and OHSAS 18001 standards respectively, are structured systems to assure that environmental impacts and safety risks are identified, prioritized, controlled and ultimately prevented.

A schedule has been developed and shared with Department Points of Contact. The following organizations will be audited:

- Collider Accelerator Department
- Superconducting Magnet Division
- Facilities & Operations
- NSLS
- Basic Energy Sciences Directorate
- ESH&Q Directorate
- Training & Qualifications
- Environmental Management
- Environment, Energy & National Security Directorate
- Physics Department
- Instrumentation Division
- Life Sciences

During that week BNLers may be visited by auditors who will be accompanied by a BNL escort. Auditors may interview staff at all levels, review relevant documents, and ask to see evidence of system implementation.

All employees are expected to know that BNL has an Environmental, Safety, Security and Health Policy (see www.bnl.gov/eshq/ESSH.asp). BNLers are not required to memorize the policy, but you need to be aware of how the policy commitments affect your job. Additionally, you should be aware of:

a) the importance of conformity with the ESSH policy;
b) the environmental, health and safety impacts, actual or potential, of their work activities and the benefits of improved personal performance;
c) their roles, responsibilities, accountabilities and authorities; and
d) the potential consequences of departure from specified procedures.

If you have questions about the audit or would like assistance preparing for it, please contact George Goode, Ext. 4549, goode@bnl.gov (Environmental Management System) or Jim Tarpinian, Ext. 8370, tarpinian@bnl.gov (Occupational Safety Management System).

Additional Department/Division Contacts:

George Goode, EMS Management Representative, Ext. 4549; John Selva, EMS Program Manager, Ext. 8611; Jim Tarpinian, OHSAS Management Representative, Ext. 8370; and Pat Williams, OHSAS 18001 Program Manager, Ext. 8211

EMS/OSH Management Reps:

Labwide: George Goode, Ext. 4549; C-AD&SMD: Ed Lessard, Ext. 4250; Physics: Ronald Gill, Ext. 3987; IO: Robert DiNardo, Ext. 4204; Life Sciences: Ann Emrick, Ext. 5756; NSLS: William Casey, Ext. 4654; BES: John Taylor, Ext. 7005; EENS: Patricia Carr, Ext. 7192; F&O: William Chaloupka, Ext. 7136 / Raymond Costa, Ext. 8227; ESHQ: Deborah Bauer, Ext. 5664 / Robert Selvey, Ext. 3066; and EM: Keith Klaus, Ext. 6399;

Environmental Compliance Representatives (ECRs):

Deborah Bauer, BES, NSLS, ESHQ/DO, Ext. 5664; Steve Ferrone, Med, Bio, EENS, Ext. 5531; Melvin VanEssendelft, C-AD, SMD, Ext. 2905; Peter Pohlot, F&O, Ext. 5660; and Keith Klaus, IO, Physics, EM, PPM, Ext. 6399

Service Anniversaries

The following employees celebrated service anniversaries during February 2006.

40 Years

John Gould ..... C-A

30 Years

Jerome Quigley..... PPM
Susan Duffin ..... Physics

25 Years

Pooran Singh ..... NSLS
Leonard Mausner ..... Medical

20 Years

Giuliano De Grassi..... ES&T

10 Years

Garry Hubbard ..... C-A
Robert Edwards..... C-A
Elaine Dimasi ..... NSLS
John Young ..... Rad. Ctrl.

Arrivals & Departures

— Arrivals —

Michelle Barsalona-Orlando.. Medical
Michell Chinea ..... Staff Services

— Departures —

Jin Chai ..... Biology
Brent Gingrich..... C-A
Mark Renner ..... CMP&MS

Weight Watchers

Register for the next Weight Watchers session on Wednesday, June 21, noon-1 p.m., Brookhaven Center. The cost will be $99 for 10 weeks, payable to WeightWatchers. For more information, call Michael Thorn, Ext. 8612.

Service Anniversaries

The following employees celebrated service anniversaries during March 2006.

35 Years

John Nicolellis ..... C-A

30 Years

Francine Donnelly... Waste Mgmt.
David Millener..... Physics
Laurence Milian ..... Env. Sci.
Cleveland Dodge ..... Env. Sci.
Michel Perrier ..... PPM
James Lemley..... NNS

25 Years

Diane Cabelli.....Chemistry
Linda Hanlon..... NNS
Kathleen Walker..... SSD
Sharol Busby ..... SSD
James Johnson ..... SSD
Ralph Vega..... SSD

20 Years

Reinaldo Santiago ..... SSD
Robert Lombardi ..... SSD
Joseph Brennan ..... C-A
Matthias Harrington..... SSD
Arthur Bamonte Jr ..... SSD
Leonard Butera....Facilities & Ops
Michael Fulkerson ..... NSLS
Richard Ruggiero..... Physics
Daniel Carneiro ..... Plant Eng.
Barbara Carreras ..... EENS
Scott Buda ..... NSLS

10 Years

Pavel Nevski ..... Physics
Matthew Kessler..... C-A

Can You Spare a Can? Give to the BNL Food Drive.

Students Get Vocational Training While Helping Red Cross at BNL

Joseph Rubino D1850506

At BNL, the kitchen behind the Medical Department is very busy every day at 6 a.m. when the Red Cross Kitchen sets up meals to distribute to congregate meal programs and homebound seniors in Brookhaven Town. There, Georgia Irving (front, second from left) of the Budget Office and other BNLers regularly volunteer time to help Nancy Garcia (front, third from left), Manager, prepare in the packaging of the food for delivery, as well as help on the serving line. This year, as BNL's representative, Irving has been hosting Longwood High School Pre-Vocational class students who, led by instructor Denise Kneuer, program coordinator, have volunteered one hour a week to help in the kitchen. Each week, the students rotate jobs to learn what is involved in each activity, including, for example, dating canned goods, stocking shelves, wrapping bread, and cupping up desserts.

Says Terrence Buck (back, center) of the Human Resources & Occupational Medicine Division, "These students are from Longwood's pre-vocational program, which introduces students to different career opportunities that may be available to them upon graduation. At this Red Cross station, where so many meals are packed and sent for delivery, they experience how a small industrial kitchen is run." At Longwood's School-to-Career Program at the Senior High School, Buck represents BNL's High School and College Cooperative Program, in which selected students get school credit for an internship with a BNL mentor.

"We're always looking for mentors," says Buck. "It's quite a commitment, but mentors do find satisfaction in this worthwhile effort." If you have an interest in becoming a mentor, contact Buck at tbuck@bnl.gov or Ext. 8715. — Liz Seubert

Lil' Cliff & the Cliffhangers Dance Party, 6/23

Lil' Cliff & the Cliffhangers, a local band, will play Chicago-style and West Coast "jump blues" for a dance party on Friday, June 23, from 7 to 10 p.m. in Brookhaven Center. Sponsored by the BNL Music Club, the event is open to the public. All visitors to the Lab age 16 and over must bring a photo ID. The band consists of Lil' Cliff — Cliff Bernard — on harmonica, Rick Street on bass, Tom DeFranza on drums, and Dennis Phelps on guitar. Lil' Cliff, a baritone, is the lead vocalist, and all band members join in on vocals. The group plays regularly in Long Island clubs and will be featured in the upcoming Riverhead Blues Festival in July. Tickets, at $10 each, can be bought online at www.ticketweb.com or at the BERA Store in Berkner Hall. Call Ext. 5257 for more information.

Fall SCCC Course

The following course will be offered on-site for the fall 2006 semester and will satisfy requirements for most Suffolk County Community College degrees. A minimum of 12 students is required to run the course, so register today.

PC11 – Introduction to Psychology

Principles of human behavior as determined by scientific method. Includes compressed treatment of basic principles of learning, motivation, sensation and perception, and selected topics in physiological psychology, childhood, adolescence and adulthood, human motivation, emotion, behavior disorders and adjustment. No prerequisite, 3 credit hours.

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

Celebrate Gerhart Friedlander's 90th, 7/28

An afternoon of talks, reminiscences by a variety of speakers

BNL colleagues, friends, and family will gather in the Hamilton Seminar Room of the Chemistry Department, Bldg. 555, at noon on Friday, July 28, to celebrate Gerhart Friedlander's 90th birthday. Friedlander, distinguished nuclear chemist and Chairman of Chemistry, 1968-1977, will be honored by a half-day session of reminiscences presented by a variety of speakers.

Joining BNL in January 1948, Friedlander found his principal research interests in nuclear spectroscopy and high-energy nuclear reactions. After his retirement in 1981 he remained active in research, turning his attention to solar neutrinos and spearheading the gallium experiment that eventually became the GALLEX project. From 1992 to 2000 he was Editor-in-Chief of the magazine Science Spectra.

A buffet lunch is also planned as part of the celebration. To register, or for more information, contact Ralph Weston, weston@.bnl.gov or Ext. 4373.

CIGNA Healthcare Rep. at BNL, Mondays

Attention all CIGNA participants: Janet Petgrave from CIGNA Healthcare will be on site in Human Resources, Bldg. 185, every Monday from 10 a.m. to 3 p.m., to assist you with claims issues, by appointment only. Be sure to bring all pertinent documentation to your meeting. For your 30-minute appointment, call Linda Rundlett in the Benefits Office, Ext. 5126.

Independence Day Raffle at Cafeteria

Nayyarsons, the Lab's food service provider, will hold an Independence Day raffle for a grand prize of a $200 American Express Gift Card beginning Monday, June 19. This raffle is open to all BNLers who print their name and phone number on the back of each cafeteria receipt and place it in the raffle box located behind the cashiers. The winning receipt will be drawn on Friday, June 30.

Roll Up Your Sleeve: Blood Drive, 6/20 & 21

To replenish Long Island's blood supply, BNL is holding a blood drive on Tuesday and Wednesday, June 20 and 21, from 9:30 a.m. to 3 p.m. in the Brookhaven Center. Donors must be from 17 to 75 years of age, in good health, and weighing over 110 lbs. Restrictions may apply to individuals from the United Kingdom and Europe. Donors should have photo identification and know their social security number. To learn more about blood donation, check out www.bnl.gov/HR/BloodDrive.

To make an appointment, contact Susan Foster, Ext. 2888; Liz Gilbert, Ext. 2315; or e-mail donateblood@bnl.gov. In your message, include your name, phone extension, and preferred time to donate.

Blood Drive Raffle

BERA will sponsor a free raffle at the blood drive for all donors. First prize is two tickets to your choice of any BERA trip or event; second prize is a BNL spring jacket; third prize is a BNL sweatshirt; fourth prize is two movie tickets; and fifth prize is a BNL key chain. The drawing will be held on Wednesday, June 21, at 4 p.m.

BREA Noon Lecture: Retirement Living, 6/20

On Tuesday, June 20, at noon in Berkner Hall, Annika Shapiro of Peconic Landing and Russell Lusak of Jefferson Ferry will give a presentation entitled "Options in Retirement Living" that discusses senior housing. The presentation will deal with various retirement options and go into details about the "Life Care" concept. All are welcome at this free talk sponsored by the Brookhaven Retired Employees Association.

BWIS Talk: 'Getting More Out of Life,' 6/21

Brookhaven Women in Science will sponsor a talk by Natasha Kogan, a managing director at a venture capital firm and author of the book *The Daring Female's Guide to Ecstatic Living: 30 Dares for a More Gutsy and Fulfilling Life* (Hyperion, March 2006). The talk, titled "What's Your Dare?" will be given on Wednesday, June 21, at noon in Berkner Hall. Kogan will discuss the ideas in her book, hoping to inspire the audience to live a more fulfilling life.

Kogan's book has been featured on ABC and FOX, in national publications, and on over 30 radio shows. For more information on the lecture, contact Lynne Ecker, Ext. 2538 or lecker@bnl.gov.

To join BWIS and Natasha Kogan for lunch in Berkner Hall Room D immediately following the presentation, contact Ecker. Attendance is limited to the first 20 people who reply.

Internet Safety Presentation, 6/27

Join Suffolk County Police Department Sergeant John Cowie, a member of the Computer Crime Section, on Tuesday, June 27, from noon to 1 p.m. in Berkner Hall, where he will present "Internet Safety: Protecting Your Children." All are welcome to attend this free talk, but preregistration is necessary. Check your mailbox for registration forms. Return completed forms to Michael Thorn, Bldg. 490. For more information, contact Thorn at Ext. 8612.

'Oral Health and Diabetes,' 7/12

Mitchell Shapiro, DDS, will discuss how to maintain good oral health and options for treatment of oral health problems on Wednesday, July 12, from noon to 1 p.m. in Berkner Hall, Room B. Preregistration is required to attend this talk. Check your mailbox for registration forms. For more information, contact Michael Thorn, Ext. 8612 or mthorn@bnl.gov.

Science Camp for Elementary School Scientists

All BNL employees are invited to register their children for BNL's Summer Science Explorations Program, a free offering from the Lab's Science Learning Center. The three-day summer camp will be held from Tuesday through Thursday, 8:30 to 11:30 a.m. Students who are entering the 4th, 5th, and 6th grades will participate in a hands-on environmental field experience, an engineering day, and a day devoted to the solar system.

The Science Learning Center has reserved the following two weeks in August for the children of the BNL community: August 1-3, and August 15-17. Space is limited, so register your child/grandchild early by contacting the Science Learning Center Program Office, Ext. 4495. Children must attend all three days. The parents/grandparents of participating children are also welcome to attend.

CALENDAR

— WEEK OF 6/19 —

Tuesday, 6/20

***Retirement Living Lecture**

Noon, Berkner Hall, Annika Shapiro of Peconic Landing and Russell Lusak of Jefferson Ferry will give a presentation entitled "Options in Retirement Living" that discusses senior housing. See notice at left.

Tues. & Wed., 6/20 & 21

***Blood Drive**

9:30 a.m.-3 p.m., Brookhaven Center. To make an appointment, contact Susan Foster, Ext. 2888; Liz Gilbert, Ext. 2315; or e-mail donateblood@bnl.gov. In your message, include your name, phone extension, and preferred time to donate. See notice at left.

Wednesday, 6/21

416th Brookhaven Lecture

4 p.m. Berkner Hall. Dax Fu of the Biology Department will talk on "Molecular Design of a Metal Transporter." All are welcome to this free lecture. Visitors to the Lab of 16 and over must carry a photo ID. See story, page 1.

Friday, 6/23

*** 'Jump Blues' Dance Party**

7-10 p.m. Brookhaven Center. Lil' Cliff & the Cliffhangers will play at a dance party sponsored by the BNL Music Club. All are welcome. Tickets, $10. See notice at left.

Korean Movie Night

7 p.m., Biology Seminar Room. The Asian Pacific American Association and the English for Speakers of Other Languages Program invite all BNLers to see "Taegukgi (Brotherhood)," a movie that tells the dramatic tale of two brothers forced to fight in the Korean War, and how that conflict lays siege to their family and friends. (2:20, Rated R) Susan, Ext. 7988.

— WEEK OF 6/25 —

Monday, 6/25

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.

Tuesday, 6/27

***Internet Safety Presentation**

Noon-1 p.m., Berkner Hall. See notice at left.

Thursday, 6/29

BJ's Wholesale Club Demo

11 a.m.-2 p.m., Berkner Hall. Representatives from BJ's will present BNLers with a special 15-month membership for $30 for two membership cards (normally $45). Give aways and prizes too. Pete, 851-0214.

— WEEK OF 7/24 —

Friday, 7/28

***Celebrate Friedlander's 90th B-Day**

Noon, Hamilton Seminar Rm., Bldg. 555. An afternoon of talks, reminiscences by a variety of speakers BNL colleagues, friends, and family. Friedlander, distinguished nuclear chemist and Chairman of Chemistry, 1968-1977, will be honored by a half-day session of reminiscences presented by a variety of speakers. 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.

Get to Know Your Lab!
Water Treatment Facility Lunchtime Tour, 6/23

Check out the pictures and read all about the Water Treatment Facility (WTF), in the Bulletin's 2006 Water Quality Consumer Confidence Report (see www.bnl.gov/bnlweb/pubaf/water/2006Report.pdf) and then come see the WTF for yourself by attending the lunchtine tour for BNLers on Friday, June 23, from noon to 1 p.m. Organized by Tour Program Coordinator Elaine Lowenstein of the Community Relations Office, the tour will begin in the upper lobby of Berkner Hall at noon sharp. For more information, contact Lowenstein, Ext. 2400.

Roger Stoutenburgh D2820306

Richard Lutz in the control room of BNL's Water Treatment Facility

One-on-One Retirement Counseling, 6/20, 21, 26

A TIAA-CREF consultant will visit BNL on Tuesday, June 20; Wednesday, June 21; and Monday, June 26, to answer employees' questions about financial matters. The consultant will help BNLers better understand the importance of protecting assets against inflation; the right allocation mix; the benefits of TIAA-CREF retirement income flexibility; and comparing lifetime income vs. cash withdrawal options. For an appointment, call Arlene Lyons, (866) 842-2053, Ext. 4629. *Note: Not the on-site Ext. 4629.*

Money Management Classes, 6/19, 9/18

Representatives from Teachers Federal Credit Union will present BNLers with information on how to use and manage checking accounts and general money management techniques on Monday, June 19, and Monday, September 18, at noon in the Rec Hall.

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

Fidelity Investment Counseling, 6/28

A Fidelity Investment representative will be at the Lab on Wednesday, June 28, to hold sessions with individual employees interested in learning more about their retirement-savings and investment options. Schedule one of the 30-minute appointments by calling (800) 642-7131.

Hospitality Bus Trip to NYC, 7/15

All BNLers and their families are invited to join the BNL Hospitality Committee for a "Day in the City" coach trip, leaving from the Recreation Bldg. in the apartment area at 9 a.m. on Saturday, July 15, dropping off participants at Bryant Park and leaving the City at 6 p.m. Tickets cost $10 for adults and $5 for children ages 2-12. Reservations and payments must be made in advance. Money will be collected at Berkner Hall on Tuesday, July 11, from 11 a.m. to noon. For more information or to register, contact Hanna Herman, 849-2249 or haniaherman@yahoo.com, or Jing Rochman, 891-9430 or deshanghai@yahoo.fr.

Classified Advertisements

Placement Notices

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

OPEN RECRUITMENT – Opportunities for Laboratory employees and outside candidates

JH3944. RESEARCH & DEVELOPMENT MANAGER I (M-3) - Requires a Ph.D. in physics or advanced degree in engineering plus 15 years of relevant technical and management experience. Candidate must demonstrate a successful track record in the development or operation of an accelerator complex or similar facility, a strong record of technical accomplishments, and experience in one or more of the following: UHV, precision optics, LASERS, high precision mechanical design, assembly, measurement, and control, or magnet and power-supplies. Knowledge of analytical design techniques, such as FEA for structural and thermal analysis, is required. Prior project management experience or formal project management training is highly desirable. Will serve as the head of the Mechanical Engineering Group for National Synchrotron Light Source-II (NSLS-II) and will oversee mechanical engineers, designers, and technicians in support of the Project. Will set priorities and direct the managers of various mechanical engineering groups such as the Storage Ring Group, the Vacuum Group and the Design Room. Responsibilities will include establishing and supervising the team that will handle the mechanical engineering support for NSLS-II, including: developing requirements definitions; completing detailed cost and schedule estimates for the labor and material resources required for the successful design, construction, installation, integrated testing and commissioning of the respective scope of work; carrying out R&D, design, procurement, fabrication, installation and commissioning; establishing milestones; maintaining a current detailed schedule; planning, tracking and executing all procurements; managing configuration management activities; generating performance data and reports; monitoring and reporting on corrective action items; initiating comprehensive "bottoms-up" re-evaluations as appropriate to determine Estimates to Complete; and designating Control Account Managers to manage components of assigned scope. Candidate will report to the NSLS-II Accelerator Systems Division Director. National Synchrotron Light Source II-Project.

TB3689. PHYSICS ASSOCIATE IV (P-1, 2 positions) – Requires a BS in physics and excellent written and oral communication skills. Background experience in high power pulsed power supplies, digital electronics, computer controls and programming, as well as laboratory test and measurement techniques is desirable. Primary duties, as part of a rotating shift team, include the operation and troubleshooting of the Collider-Accelerator Complex for the experimental physics program. Will be part of emergency response team while on shift. Collider-Accelerator Department

TB3808. SCIENTIFIC ASSOCIATE III (P-3 term appointment) – Requires a bachelor's degree in a relevant field such as engineering, international relations, international affairs, or political science, and one year's experience in non-proliferation, open-source research. Familiarity with nuclear fuel cycles and international safeguards, ability to fluently read and write Farsi, and excellent written and oral communication skills are required. Significant foreign travel is expected. Experience working with the International Atomic Energy Agency (IAEA) and knowledge of the Additional Protocol desired. Will be responsible for monitoring open sources of information in Farsi and analyzing and packaging relevant information for provision to the IAEA for their files. Assistance to other BNL Safeguards projects is also possible. Nonproliferation & National Security Department.

TB3809. SCIENTIFIC ASSOCIATE III (P-3, Term Appointment) – Requires a master's degree in a relevant field such as engineering, international relations, international affairs, or political science , and two years' experience in non-proliferation, open source research. Familiarity with nuclear fuel cycles and international safeguards and excellent written and oral communication are also required. Significant foreign travel is expected. Experience working with the International Atomic Energy Agency (IAEA) and knowledge of the Additional Protocol desired. Will be responsible for monitoring open sources of information and analyzing and packing relevant information for provision to the IAEA for their files. Assistance to other BNL Safeguards projects is also possible. Nonproliferation & National Security Department.

Motor Vehicles & Supplies

04 FORD F350 - Lariat DSL crewcab, 8' bed, cap, liner, every opp, factory/warr. 26K mi. $32,000/neg. Richard, Ext. 5319 or 835-8309.

03 DODGE GD CARAVAN SPORT - 3.8L V6, pwr. drs/seat, cass/cd changer, roof rack, much more. 32K mi. $14,000/neg. 730-6556.

03 KAWASAKI KX 100 - motorcycle, orig. owner, only 5 hours used, mint care & cond. $3,100. Chris, 484-7434.

00 FORD RANGER - V-6, stick, 2wd, green, new tires, new brakes, spray-in liner, orig. owner, mint care & cond. 93K mi. $6,500. Chris, 484-7434.

99 ACURA TL 3.2 - black, 4dr., sedan, leather seats; navigation system, all options, well maint. 54K mi. $12,000/neg. Guo, Ext. 5343.

96 CHEVY S-10 BLAZER - 4x4, a/t, a/c, p/w, p/l, excel. cond. $3,100/neg. 289-9727.

93 BUICK LESABRE - dark blue, p/s, p/w, p/l, am/fm/cass, c/c, ABS, moving sale. 133.000 mi. $1,200/neg. Felix, Ext. 4940.

92 HONDA ACCORD EX - black, many new parts (timing belt, too many to list). 200K mi. $1,750/neg. 516-885-6307.

87 MAZDA RX7 - needs work, many new parts. $1,000. Tom, 365-7381.

84 PORSCHE 944 - runs well, garaged, well maint., a/t, a/c. 130K mi. $4,200/neg. Ext. 8611 or 581-6351.

Boats & Marine Supplies

19' EVANSON YACHT CO. CELEBRITY DAY SAILOR - all lines and rigging, 2 sets of sails, boom cover, and trailer. $1,900/neg. Ext. 2815 or 874-0437.

19' GRADY WHITE TOURNAMENT - 130 H.P. Yamaha, MagicTilt trailer, VHF & d/f, swim platform, and more, ready to go. $7,500. 878-8302.

23' COBIA CUDDY - i/o, 190, 4cly., many new parts, new canvis, rebuilt outdrive w/trailer. $2,000/neg. Richard, Ext. 5319 or 835-8309.

SEA RAY 34' - 2003 Sundancer, loaded, clean, low hrs, 8.1 i/b, ext. warr until 2009, GPS radar, gen. a/c, $158,000. 878-1198.

Furnishings & Appliances

AIR CONDITIONER - 28,000 Btu, window or wall mounted, Friedrich, 2 yrs. left on service warr., $750 neg. Tom, Ext. 3085 or 744-4535.

BEDROOM FURNITURE - girl's white oak desk w/hutch $125; matching head board $50; king size bed frame $25. Tom, Ext. 3085 or 744-4535.

CANDLE HOLDERS - crystal, 2 pair, $5 ea., Mikasa, one is 9" German lead crystal, other is 9" Austrian Ballet frosted-base. Jim, Ext. 2432.

DESKS - 2 oak wood finished desk w/ matching file cabnets, never used. Desks $250 ea. File cabnet $125ea. Deborah, 757-3952.

OVEN/RANGE - Whirlpool model SF362LXS, like new, AccuBake and self clean, great cond, you pick up, call for pic., paid $900, ask $350. Paul, 516-633-7275.

RANGE HOOD - 36" brand new Broan White ductless hood, still in box. Ask $35. Patriche, Ext. 5561.

REFRIGERATOR - white Frigidaire, 21.7 cu. ft., 6 yrs. old. $200. Kenneth, Ext. 4660.

TOASTER OVEN - almost new, Black & Decker, w/15 min. timer. $15. Cindy, 874-3652.

VICTORIAN COACH - beautiful antique, antique white w/stripe material, open back style, pic avail. $450. Donna, Ext. 2826.

Audio, Video & Computers

CAMERA - FUGI FinePix S5100 digital SLR, 4mp, 10x optical zoom, 256mb card, case, 2 batteries/charger, 1 yr. old, like new $225. Rich, Ext. 7294.

CAR STEREO - DuraBand, in dash, CD/MP3/CDR/CDRW playback w/MP3 display, 45Wx4, slide down/detchable panel w/rmte, 30 presets, $120. 434-5824.

CAR STEREO - Pioneer, 50W/channel, CDR/RW/MP3/WMA playback, satellite/ipod cmpat, blue OEL display/screensaver, $200. Laura, Ext. 7842 or 434-5824.

LAPTOP - Apple G4, 12" 1.5Ghz PB 512MB RAM, 80GB HDD, Superdrive, 3-yr. AppleCare warr., 4 months old. $1,500 neg. Rajiv, Ext. 4648 or 775-6677.

ROUTER - Linksys, 4 port, cable/DSL router, new, still in box, vac. pck.d, orig. $100 ask $50. 434-5824.

TV - 28" Panasonic, works great. $10 obo. Ext. 7855.

TV & CD PLAYER - 13-in. Symphonic TV/VCR combo w/rmt, gd cond.; Sony 5-CD changer. $30 ea./obo. Renee, Ext. 8278.

Sports, Hobbies & Pets

BUMPER POOL TABLE - slate w/balls, cue sticks and cue stick rack. Ask $150 obo. Kim, Ext. 7465 or 399-3098.

FISH TANKS, LIZARD HABITAT - 50-gal. tank w/filter & heater $50; 30-gal. tank $30; free 3x3 lzd hbitat, ht lamp, you pick up. 828-5117.

GOLF CLUBS - 1 set of woman's clubs w/bag, used for 6 lessons, like new. $150. Michael, Ext. 3255.

HOCKEY SKATES - Inline Tour TR902, like new, men's size 11, $100. 878-4512.

SCUBA TANK(S) 100 (2)-120(1) - HP steel tanks, in visual and hydro (until 6/06). Nitrox filled with EAN32. $225ea(100); $265(120). Carl, Ext. 4420.

Tools, House & Garden

AIR COMPRESSOR - Speedaire, older, 30-gal. horiz. tank, cast iron pump, 5.5 cfm, 110/220 volt Dayton motor, $125. Dennis, 878-0071.

POOL COVER - Loop Lock for 18x36 igp, incl. stakes, good cond. $100 obo. Bob, Ext. 3782 or 553-8903.

PORTABLE GENERATOR - Yamaha 600W, very quiet generator suitable for RV or home use. Jim, Ext. 8236 or 929-5945.

Miscellaneous

CHROME WINE RACK - 36"x64"x14", holds 100 bottles, $50, cavavino@optonline.net. Ed, 589-3992.

LITTLE TYKES COUNTRY KITCHEN - w/ assorted plastic food and dinnerware. $15. John, Ext. 4028.

NORDIC TRACK - $100; Browning compound bow, $50; 2-position bike rack, fits sm. hitch, $25. Ed, 589-3992 or casavino@optonline.net.

POOL - above ground 30x20 oval, new liner, accessories incl., orig $2,500, sell for $250. Karl, Ext. 3116.

WINE/BEER MAKING KIT - incl. fermentation bucket, air locks, hygrometer, syphon hoses, & more, $50. 589-3992.

On-Site Service Station

BOAT & MOTORCYCLE STARTERS, ALTERNATORS - The on-site servicxe station can supply needs for boats and m/cycles as well as perform all vehicle services, NYS inspections, etc. Ext. 4034.

Free

POOL COVER WATER BAGS - 5 double-tube water bags. Roger, Ext. 4698.

Wanted

GAS CANS - 6 gal. for outboard motor, in good cond., need three. Dennis, Ext. 4028 or 375-8519.

Lost & Found

FOUND: GLASSES, PHONE - several pairs of glasses; T-Mobile phone; found in Berkner Hall. Ruth, Ext. 3545.

LOST: CELL PHONE - lost Tues. late afternoon in front of RHIC/AGS Users Office, dark brown, Sony Ericsson T610, T-Mobile. Achim, Ext. 4750.

For Rent

ANTIGUA - timeshare week: 11/25 to 12/2, studio, www.antiguavillage.net $1,000/wk./neg. Mike, Ext. 2550 or 744-7360.

CENTER MORICHES - 4-bdrm., wtr. front house, huge dock on creek, eik, dishwasher, w/d, f/p, 2 full baths, more. $2,150/mo. Elaine, 261-7908.

COOPERSTOWN - Baseball Hall Of Fame, 4-bdrm. house on spectac 200 acres, 7 mi. from center of town, newly remodeled, all new appl, fully furnished, sleeps 8 comft. $785/wk. RIck, Ext. 3005 or 874-9639.

FARMINGDALE - 4 bdrm., 2 bath, all new kit./bath, s/s appl., near golf course, hot tub/spa, great back yard, newly painted, great SD, lots of room for all. $2,600/mo./neg. Paul, 516-633-7275.

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

OCALA, FL - 3-bdrm., 2-bath, unfurnished 2-yr.-old ranch in beautiful gated Ocala Palms retiree golf community, only 6-mo. lease or longer will be considered. $1,400/mo. Maria, Ext. 5483 or 744-0790.

PATCHOGUE - 1-bdrm. apt., l/r, eik, 2nd floor pvt.. ent., w/w carpet, new appliances, no smkg./pets, credit check & refs., 1 mo. sec., elect not incl. $975/mo. Carter, Ext. 7515 or 654-0411.

PATCHOGUE - 2-bdrm., 1-bath duplex on Patchogue River, 5 min. to LIRR & Davis Pk. Ferry, 15 min. to Lab, pvt. ent. & pkg, deck, w/d, no smkg./pets. $1,400/mo. 516-768-7909.

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

SHIRLEY - studio apt, suitable for 1., full bath, sep. ent., all incl., cable & internet, no smkg./pets, 5 min. to stores & beach, 1 mo. security. $550/mo. Ext. 8321.

SHOREHAM - 3-bdrm. ranch, 1 bath, l/r, den, kit, w/d, 1-car gar., lg. yard, utilities extra. $2,000/mo. 258-4607.

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

WADING RIVER - newly renov., 3-bdrm. house, d/r, l/r, bsmt., bath w/jacuzzi, good for 4-5 people (price neg. dep. on # of people) $2,200/mo. 929-1481.

YAPHANK - 2 bdrm., l/r, kit., full bath, lg. yd., + util $1,000/mo. Christopher, 436-6357.

For Sale

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

CENTEREACH - 3-bdrm. ranch, 2 bath, eik, l/r, d/r, fam. rm. w/fp, fin. bsmt., cac, heated semi-igp, igs, htd. tile flrs., alarm, skylgts., hot wtr. htr., deck. $435,000 Denise, Ext. 2881.

KINGS PARK - 4 bdrm., 2 bath, poss. m/d, totally renovated inside/out, everything new, Anderson windows, 30-yr. arch roof, vinly siding, much more. $537/neg. Richard, Ext. 5319 or 835-8309.

MIDDLE ISLAND, NY - 2 bdrm., 2 bath, l/r, d/r, lg. eik, new upgraded appliances, partly fin. bsmt., igs, .5 acre, shed, 5 min. to BNL. $329,000/neg. Karen, 924-4968.

MILLER PLACE - comfortable 4-bdrm. Colonial, lg. eik, d/r, l/r, fam. rm, 2-1/2 baths, gar., 20 min. to Lab & SBU, 5 min. to beach. $474,000/neg. 473-4715.

PORT JEFFERSON - historic Victorian in ctr. village, 4 bdrm., 2 bath, 2-l/r, gas f/p, d/r, renov. eik, pool, waterfall views, attic, gas heat, cac. $759,000/neg. 804-4662.

PORT JEFFERSON STA. - hi-ranch, mint+, 3 bdrm., 2 bath, updated kit, l/r, windows, office, fully renovated bath, new roof (w/warranty), great location, well-priced. $419,999/neg. Milind, Ext. 3327 or 331-6725.

SOUTHOLD - French Normandy style home, 1 level, estate like grounds in downtown Southold, walk to town and beach, no updates needed. $999,000 Amy, Ext. 8032.

the Bulletin

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On the Web, the Bulletin is located at www.bnl.gov/bnlweb/pubaf/bulletin.html. A calendar listing scientific and technical seminars and lectures is found at www.bnl.gov/bnlweb/pubaf/calendar.html.

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