the Bulletin

BROOKHAVEN NATIONAL LABORATORY

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Space Radiation Effects on Brain Cells Studied at BNL

Astronauts may be going to Mars between 2017 and 2020, says Marcelo Vazquez, associate medical scientist and NASA liaison scientist in the Medical Department. During these years, the distance between Mars and Earth will be relatively close, although it will still take six to nine months to get to the red planet.

Before a Mars mission becomes a reality, however, Vazquez and other scientific experts will have to determine whether it will be safe for humans to exist in space for such an extended time.

To explore the health-related problems associated with long-duration human space flight, the National Space Biomedical Research Institute (NSBRI), a consortium of twelve research institutions, including BNL, is funding 86 research projects in 67 institutions in the U.S.

One approach focuses on understanding the effects of radiation expected during extended space travel. Vazquez, who is performing research in that area, has been named associate team leader for the Radiation Effects Team of NSBRI.

Long-term space travel will expose astronauts to many types of high-energy cosmic radiation, which can result in doses equivalent to hundreds of times greater than those that people receive on Earth.

These high radiation doses may kill cells, damage tissues or cause mutations that can lead to cancer or other diseases.

Specifically, Vazquez is principal investigator of the project entitled "Risk Assessment and Chemoprevention of Central Nervous System Damage Induced by Heavy Ions," with Carl Anderson, Biology Department, and Louis Peña, Medical Department. They are investigating the type of damage that cosmic radiation in space may cause in the central nervous system. Further, the researchers will attempt to understand the molecular mechanisms that cause the damage, and develop damage-prevention strategies.

Roger Stoutenburgh CN 5-5-01

Louis Peña, Marcelo Vazquez, and Carl Anderson, as seen against a view of Mars screened in behind them.

To simulate space radiation, the scientists bombard cell cultures with heavy ions at the Alternating Gradient Synchrotron (AGS). As one of only four accelerators in the world that can simulate the heavy-ion component of cosmic rays for biological experiments, the AGS has been home since 1996 to radiation-biology experiments conducted by BNL and institutions across the country and sponsored by the National Aeronautics & Space Administration (NASA).

"Once we determine the molecular pathways of cell damage, we will attempt to prevent the damage with certain chemicals," Vazquez said.

Based on other studies, the researchers suspect that a gene called p53 may help to cause cell death after a cell is irradiated with heavy ions. The BNL team will attempt to understand p53-dependant and independent mechanisms, and determine if certain chemicals can regulate p53 to prevent damage or death to brain cells. The team will also test several compounds to determine if they can protect cell membranes, neurotrophic factors and free radical scavengers to prevent neuronal death.

"Our findings may not only help to determine if future long-term space missions will be safe, but may also improve certain radiation treatments for brain tumors or tumors surrounding the eye," Vazquez said. "Our results may be used to improve radiotherapy to protect normal brain tissue from damaging radiation during treatment."

— Diane Greenberg

RHIC Update

First Run Re-Cap

On Monday, April 30, science reporters covering the American Physical Society (APS) meeting in Washington, D.C., met with scientists working on BNL's Relativistic Heavy Ion Collider (RHIC) for an update on results from the collider's first run, and to hear what is in store as the machine prepares to resume operations at even higher energy.

"Since the Quark Matter conference in January, when the first results were shown, the four experimental collaborations — STAR, PHOBOS, PHENIX, and BRAHMS — have had the opportunity to do empirical comparisons of their results. And we've had the opportunity for theorists to look at the data," said Vanderbilt University physicist Vicki Greene, who opened the press conference.

"We are starting to see a consistent picture, with data from all the experiments in good agreement," she said.

Even more exciting, the results so far indicate that the conditions achieved in RHIC's collisions of gold ions appear to be right on target for creating a quark-gluon plasma. Such a state of matter — in which quarks and gluons, the constituents of protons and neutrons, are free to move with no boundary — "only existed once in our universe, only a few microseconds after the Big Bang," said Xin-Nian Wang, a theorist from Lawrence Berkeley National Laboratory (LBNL). By creating and studying this form of matter, scientists hope to understand better how matter in our universe evolved.

One finding that may be compared to those early universe conditions was reported by all four detector groups. All observed nearly equal numbers of particles (matter) and antiparticles (antimatter), with a slight excess of matter, emerging from the collisions.

"This is very much like the Big Bang," said Peter Jacobs of LBNL, who presented the STAR results. Over time, as the universe evolved, antiparticles and particles annihilated, leaving the excess of matter, which makes up our universe today. "So from the point of view of counting particles and antiparticles, we are really close to the conditions of the Big Bang," Jacobs says.

Another key finding is that the number of particles produced in these gold-gold collisions is in excess of what would be expected by colliding the individual protons and neutrons that make up the ions. As BRAHMS

(continued on page 3)

364th Brookhaven Lecture

Exploring Order in Super-Small Magnetic Structures

Many BNLers are familiar with Lab research and expertise in superconducting magnets — which, when cooled to near absolute zero, lose all resistance to electricity. Huge superconducting magnets make it possible to power the likes of the Relativistic Heavy Ion Collider.

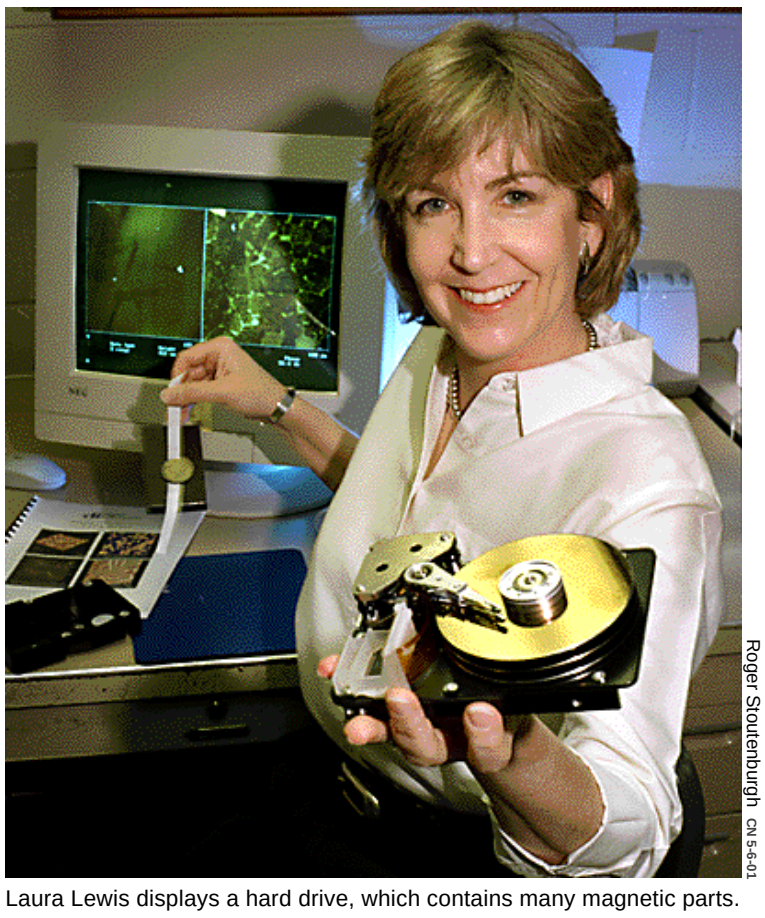
Other magnets — room-temperature magnets, electro, or permanent magnets — have super-useful properties. Various types of these magnets are needed in electrical systems, motors, and advanced sensors, or sometimes in exotic applications such as setting bones or alleviating pain perception. But the hottest, newest applications for permanent magnets are mostly at a super-small scale, the nanoscale. A nanometer, or billionth of a meter, is the equivalent of a few atomic radii.

BNL scientists are doing groundbreaking research to tailor the properties of room-temperature magnetic materials at the nanoscale.

To describe this work, Laura Henderson Lewis, Energy Sciences & Technology (ES&T) Department, will give the 364th Brookhaven Lecture, "From Anarchy to Oligarchy: Structure-Magnetism Connections, Magnetism in Nanosystems." Lewis will give her talk in Berkner Hall at 4 p.m. on Wednesday, May 16, after being introduced by David Welch, ES&T.

As Lewis will explain, by understanding the behavior of magnetic materials at the nanoscale, researchers can learn to control the magnetic behavior of the entire system. Advanced materials and designs then become possible with many potential benefits to industry and the economy.

Lewis earned her Ph.D. at the University of Texas in 1993. She joined BNL in 1993 as a research associate, rising to her present position as a materials scientist in 2000. To dine off site with the lecturer after the talk, call Maryann Larese, Ext. 3508.



Roger Stoutenburgh CN 5-6-01

Laura Lewis displays a hard drive, which contains many magnetic parts.

Thursday, May 17

Nobel Laureate
C.N. Yang
of
Stony Brook University
will talk on
Museum Collection Of Chinese Arts in North America

Berkner Hall, 4-5 p.m.

Calendar

of Laboratory Events

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

— EACH WEEK —

Tuesdays: Welcome Coffee

10-11:30 a.m. Rec. Bldg. Newcomers meet friends. Mimi Luccio, 821-1435.
— Hospitality event

Wednesdays: On-Site Play Group

9:30 a.m.-11:30 a.m. Rec. Bldg. Parents meet while children play. Free, drop in any time. Monique de la Beij, 399-7656. — Hospitality event.

Wednesdays: Yoga Practice Sessions

12:10-12:50 p.m., Rec. Bldg., free. Ila Campbell, Ext. 2206.

Wednesdays: Weight Watchers

noon-1 p.m., Brookhaven Center South Room, Mary Wood, Ext.5923.

Wednesdays: Dance Lessons

6-9 p.m., Brookhaven Ctr. North Ballroom, beg.-adv., Marsha Belford, Ext. 5053.

Tues. & Thurs.: Aerobic Dance

5:15 p.m., Rec. Bldg. $4 per class or $35 for any ten classes. Pat Flood, Ext. 7886; or Susan Monteleone, Ext. 7235.

Mon., Tues., Thurs.: Kickboxing

noon-1 p.m., Mon. & Thurs. and 5:15-6:15 p.m., Tues. & Thurs. Mary Wood, Ext. 5923, or wood2@bnl.gov.

May is Asian Pacific American Heritage Month. For specific events, see the notice on page 3, or visit http://synchrotron.bnl.gov/asian.

—THIS WEEKEND—

Friday, 5/11

Asian Pacific American Video

noon, Berkner Hall, "Ancestors in the Americas, Part 2."

Asian Pacific American Heritage Dance Social

$2, 7 p.m.-midnight, Brookhaven Center North Ballroom.

GLOBE Meeting

BNL's gay and lesbian club, GLOBE, will hold its monthly meeting. For more information and the meeting's location, contact Mike Loftus, Ext. 2960, or Chris Gardner, Ext. 4537.

Saturday, 5/12

BNL Dance Club - Ballroom Dance Ultimate Saturday Social

8-11:30 p.m., North Ballroom, Brookhaven Center. $2 for club members. $5 for nonmembers. Contact Marsha Belford, Ext. 5053.

— NEXT WEEK —

Monday, 5/14

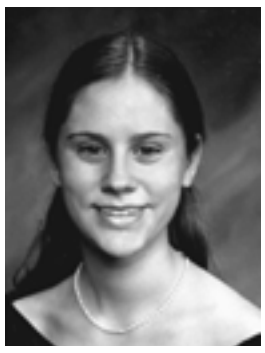
*Asian arts, crafts, costumes, more

11 a.m.-2 p.m., Berkner Hall.

2001 BSA Scholars

BSA has announced the 15 winners of the annual BSA Directors' Scholarships, which go to children of BNL employees in continuation of a tradition instituted at BNL 35 years ago. Each BSA Scholar is a high-school senior who will receive $2,500 per year for up to four years of study at the college or university of his or her choice.

Justin Flagg, the son of Charles Flagg, Environmental Sciences Department, attends Interlochen Arts Academy. He will study theater arts and history at Brown University.



Sylvia Krinsky, daughter of Samuel Krinsky, National Synchrotron Light Source Department, attends Ward Melville High School. She will major in creative writing and psychology at Tufts University.

Sheikh Omer-Farooq, the son of Sheikh Farooq of the Collider-Accelerator Department, attends Connetquot High School. He will major in computer science at Columbia University.

Meir Hershcovitch, son of Ady Hershcovitch, Collider-Accelerator Department, attends Mount Sinai High School. He may major in biomedical engineering at Columbia University or Duke University.

Nicholas Lynch, son of Donald Lynch, National Synchrotron Light Source Department, attends Shoreham Wading River High School. He will major in engineering at Lehigh University.

Darshan Vairavamurthy, son of Appathurai Vairavamurthy, Environmental Sciences Department, goes to Shoreham Wading River High School. He will study chemistry and pharmacology at Stony Brook University.

Brigitte Hseuh, the daughter of Hsiao-Chaun Hseuh of the Collider-Accelerator Department, attends Ward Melville High School. She will study engineering at The Johns Hopkins University.

Lelaina Marin, daughter of William Marin, Information Services Division, attends Southold Junior-Senior High School. At Cornell University, she will study natural resource management.

Julie Wang, the daughter of Yung Wang of the Information Technology Division, attends Ward Melville High School. She will major in English and education at Boston College.

Huiru Jiang, daughter of Jiansheng Jiang, Biology Department, attends Ward Melville High School. She will major in political science at the University of Chicago or Columbia University.

Peter Mohanty, the son of Kim Mohanty of the Physics Department, attends Ward Melville High School. He plans to major in political science or mathematics at Swarthmore College.

Karen Wu, the daughter of Kuo-Chen Wu, Superconducting Magnet Division, goes to Ward Melville High School. She will major in human ecology at Cornell University or business at New York University.

Kimberly Kahnhauser, daughter of Henry Kahnhauser, Radiological Control Division, is at Ward Melville High School. She will attend the Georgetown University School of Foreign Service.

Keith Nintzel, son of Gary Nintzel, National Synchrotron Light Source, attends Sayville High School. He will major in computer engineering at the State University of New York, Binghamton.

Michelle Yakaboski, the daughter of Stan Yakaboski of the Collider-Accelerator Department, attends Eastport High School. She will study biology or physics at Loyola College.

Roger Stoutenburgh CN 5-1-01

RHIC Update *(cont'd.)*

physicist Jens Jorgen Gaardhoje of the University of Copenhagen put it, "we have a kind of new math," where 197 plus 197 (the number of protons and neutrons in each colliding gold ion) equals 4,000 particles streaming out of each collision.

"The energy density one can derive from these measurements is the highest energy density ever achieved in a laboratory," said Russell Betts of the University of Illinois, Chicago, who spoke for PHOBOS.

The scientists had a variety of ways of expressing this density: BNL's Sam Aronson, who presented data from PHENIX, said the matter produced was about 30 times the density of an ordinary gold nucleus. Wang commented that it would be like stuffing Earth's moon into a swimming pool!

One of the most intriguing findings was the possibility that several of the detectors were observing a phenomenon known as jet quenching — a loss of energy from the most energetic particles emerging from the collisions.

The idea is that these jets of particles might be slowed down, or quenched, by having to traverse the blob of matter created during the collision — as marbles are slowed down by a puddle of honey spilled on a kitchen table, said Jacobs.

"This is like what we'd expect to see in a plasma," said Aronson. "I think it's too early to say that that's exactly what we've seen, but the data are very tantalizing on this subject." This phenomenon could be an important new tool for studying the collision conditions.

"These are all pieces of a puzzle that we are very much in the midst of putting together," Jacobs reminded the reporters. It's like discovering the bones of a dinosaur: One bone can't tell you the whole story, he said — lsuch as whether the dinosaur was a meat-eater or a vegetarian.

So no conclusions can be reached yet about whether RHIC has created quark-gluon plasma. For all of its success, last year's first run provided only a small fraction of the data for which the RHIC experiments are designed. The coming run should provide a clearer picture.

In this run, which is set to begin in June, the physicists will take the machine up to its full design energy, colliding nuclei at energies of 100 billion electron volts (GeV) per nucleon. The machine should also produce collisions at about ten times the rate achieved last year and is planned to run for several months. Last year's data was accumulated in only a few weeks.

As a result, "We'll have a lot more data, perhaps up to 100 times more data," said Greene, a member of the PHENIX collaboration.

Already the collider is being cooled down so the superconducting magnets can begin accelerating gold ions to nearly the speed of light. First collisions are expected late in June.

With the promise of RHIC's first run fresh in their minds, the physicists are eager to get started. Though understated, Russell Betts' summary statement said it all: "Some exciting new physics awaits us."

— Karen McNulty Walsh

Hospitality Says 'Welcome' With Coffee

Roger Stoutenburgh CN 4-75-01

Hospitality Committee Chair Mimi Luccio (left) with a Tuesday morning "Welcome Coffee" group.

At the Recreation Building in the apartment area, the aroma of coffee and a buzz of conversation in many languages means it's Tuesday morning, and the Welcome Coffee held by Mimi Luccio, who heads BNL's Hospitality Committee, is in full swing. Each week, from 10 to 11:30 a.m., Luccio greets and introduces "long-term" apartment dwellers, who can be of several months' standing, to recent arrivals to the Lab. It's a chance to sip tea or coffee, nibble cookies, and get to know some of the BNL community.

"When we came to the Lab, we felt very alone," explains Su-lan Xu, who is from China and whose husband is a researcher in the Chemistry Department. "Then we heard about this meeting, and it is warm. We can communicate with each other and get information."

One woman has just arrived from Germany. "I'm your neighbor," says someone seated on the same sofa. "I knew you were from Europe, as your children were up at 5 a.m.!" Several in the group nod agreement — travel with young children is difficult with the time changes.

In another part of the large room, some children play quietly while their mothers chat. Others stay near the sofa area. Everyone is relaxed and talks slowly, so that more people may understand them. On one sofa is a young woman from Finland, one from Poland, and one from China. "More people will come soon when the English class is finished," they say, referring to one of several free classes arranged by BNL and the Hospitality Committee.

"It is very nice to come here," says Katka Zelena, who is from the Czech Republic and whose husband works in Physics. "You have the opportunity to practice speaking." Zelena, who already speaks English well, explains that the family recently spent three years in Canada.

"This meeting . . . is warm. We can communicate with each other and get information."

Near her, a mother from Germany is looking for a violin teacher for her child. Xu solves the problem, as both her children take violin lessons from a good teacher, she says.

Not all members of the group are scientists' wives. Dorota Nillsson does research at the NSLS, but she comes to the coffee meetings whenever she is free. "I have friends at work," she says, "but I come here because I like to have friends from other countries too."

Nillsson also comes for the friendly welcome. "It is due to Mimi," she says. "She creates the wonderful atmosphere, and we want to come back."

Mimi Luccio, whose husband, Alfredo Luccio, is a physicist in the Collider-Accelerator Department, is glad that the coffee mornings are a success. As she recalls, "We came to the Lab from Italy 22 years ago and lived in the apartments. A group of women from Israel who were there were so warm and friendly — always ready with open doors and helpful information. We want to continue that spirit.

"We have excellent volunteers on the Hospitality Committee who work hard to make things easier for scientists and their families who have just arrived," Luccio continues. "Many of us went through this process of arriving and knowing nothing about the Lab, so we like to help others."

Organized events include potluck suppers, cooking exchanges, bus trips, English lessons, and more. On Wednesdays, from 9:30 to 11:30 a.m., Monique de la Beij arranges a children's play group where parents can meet and talk.

For information about Hospitality Committee events, watch the Bulletin and announcements posted in the Lollipop House and laundry in the apartment area.

NSLS Users Meeting

Monday-Thursday, May 21-24

Four Monday Workshops

Tuesday Annual Meeting

Keynote Speaker: Jane "Xan" Alexander, Acting Director, Defense Advanced Research Project Agency (DARPA)

Three Wednesday Workshops

Thursday Workshop

Tuesday Night Banquet

For more information and registration fee schedule, consult the Web site at http://nslsweb.nsls.bnl.gov/nsls/users/meeting/Default.htm or contact conference coordinator Lydia Rogers, Ext. 4746, fax: Ext. 7206.

Arrivals & Departures

Arrivals

Steven B. Dierker ..... NSLS
Patrick T. Folk ..... Plant Eng.

Departures

Charles P. Neuman ..... NSLS

Farmers' Market

Farmers' Market vendors will sell produce and crafts on Wednesdays, 11:30 a.m.-1:30 p.m., by Berkner Hall parking lot.

Swim Pool To Open

The BNL swimming pool is scheduled to reopen on Friday, June 1. More details will follow.

Hospitality Event

Cooking Exchange

The Hospitality Committee invites the Lab community to a cooking exchange on Monday, May 14, and on Monday, May 28, 9 a.m.-noon, in the Recreation Building. To attend, call Marcia Leite, Ext. 1040, Bring $2 to contribute to the cost of ingredients.

BNL Soil Cleanup

At the end of June, BNL's Environmental Restoration Division will continue the soil cleanup which began last year with the removal of on-site landscaping soils. The purpose of this project is to remove radiologically contaminated soil from Lab property, as agreed by regulatory agencies.

Three areas will be excavated, though not all at once: Bldg. 811, the Bldg. 650 sump outfall, and the former Hazardous Waste Management Facility. The soil-removal operation will be less visible than it was last year, but it will take place in areas frequented by runners or lunchtime walkers. Employees are reminded to remain clear of these areas while work is in progress.

A fact sheet describing the upcoming work is available online at www.bnl.gov/erd/soils/ou1/ou1rd-sheet.html. For more information, contact Ken White, Ext. 4423.

Calendar

(continued)

Wednesday, 5/16

Brookhaven Lecture

4 p.m., Berkner Hall.
Laura Lewis will talk on "From Anarchy to Oligarchy, Structure-Magnetism Connections, Magnetism in Nanosystems."

Thursday, 5/17

Asian Pacific Heritage Talk

4 p.m., Berkner Hall, Nobel Laureate C.N.Yang will talk on the "Museum Collection of Chinese Arts in North America."

Friday, 5/18

Yoga: Traditional Art of Excercise and Meditation

noon-1 p.m., Brookhaven Center North Room.

—WEEK OF 5/21—

Monday, 5/21

BERA Golf Tournament

Heatherwood Golf Course
$35 per person — two-person scramble . Joe Carbonaro, Ext. 5139, carbonar@bnl.gov.

IBEW Meeting

6 p.m., Knights of Columbus Hall, Railroad Ave., Patchogue
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.

Thursday, 5/24

BERA Bridge Club

7 p.m., Berkner Hall cafeteria
Morris Strongson, Ext. 4192, mms@bnl.gov.

Friday, 5/25

Women Engineers' Lunch Networking Meeting

Noon, Berkner Hall, Room A.
Arlene Zhang, Ext. 5369.

—WEEK OF 5/28—

Tuesday, 5/29

Indian Music & Dance Program

Noon-1 p.m., Berkner Hall.

Friday, 6/1

N.Y. Yankee Bus Trip

Yankees vs Indians. Bus from BNL 4:15 p.m.-11:30 p.m. $55 for main level box ticket, bus transportation. Tickets are available at the BERA Sales Office.

—WEEK OF 6/11—

Monday, 6/11

BERA Golf Outing

7:30 a.m. Tee off at Cherry Creek Golf Links. $75 per person. Format is two-man best ball. Gordon Rawn, Ext. 7095, rawn@bnl.gov.

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 the 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.

BNL Bowlers Win Title

Roger Stoutenburgh CN 4-247-01

Taking home the first-place trophies of the Long Island Men's Industrial Tournament's Incentive Division were: (from left,) Rich Eggert, Procurement & Property Management Division; Brian Mullaney, Joe Zebuda, and (not pictured) Sonny DiMaiuta, all of the Collider-Accelerator Department. At the tournament, which was held at the North Levittown Lanes on four consecutive Saturdays starting in late February, the BNL team competed against 16 teams representing other local industries, including Home Depot, Keyspan Energy Corporation, Avis, and the Town of Hempstead. Each night the team bowled four games and won the division by knocking over the highest total number of pins over their established average. Mullany and Zebuda bowl for the Purple and White team of the BNL Mixed League and DiMaiuta and Eggert play regularly in the Tuesday Men's League.

Food Service Change

BNL's Elementary School Science Fair is being held in Berkner on Saturday, May 12. As a result, breakfast and lunch will be served in the Brookhaven Center dining room from 7:30 a.m. to 2 p.m. The cafeteria in Berkner will open for breakfast and lunch on Sunday, May 13.

BNL Toastmasters Celebrate Tenth Year

The BNL Toastmasters Club, member of Toastmasters International and BERA, is celebrating its tenth anniversary on Tuesday, May 15 at 5:30 p.m. Guests and previous members are especially invited to attend this charter celebration. Established in 1991, the club is open to all adults both inside and outside the BNL community.

Toastmasters International has more than 8,000 chapters worldwide. The goal of this nonprofit organization is to promote effective communication and leadership skills through public speaking. BNL's Toastmasters Club' mission is to provide a mutually supportive environment in which every member has the opportunity to develop communication and leadership skills, which in turn foster self-confidence and personal growth.

For more information, consult the club's web site at http://www.bnl.gov/bera/activities/toastmstrs/default.htm or call Ronnie Evans, 289-0532 or Nancy Manning, 344-5744.

U.S. Open Bus Trip

The BERA Tennis Committee is sponsoring its popular bus trip to the U.S. Open Tennis Championships at the National Tennis Center in Queens, on Tuesday, September 4. The bus will leave from the tennis-court parking lot at 8:30 a.m., with a pick up at the LIE exit 63 park & ride. Departure from the National Tennis Center will be at 7:30 p.m.

The per-person cost of $58 includes the day-session ticket, which is $43, the bus fare and a tip for the driver. Reserve your place early with a check made payable to BERA, at the BERA Sales Office, weekdays, 9 a.m. to 3 p.m.

Retiree Luncheon 6/28

Come meet and greet old friends

A luncheon get-together for all the retired and associate members of the Lab community is planned for Thursday, June 28, at Villa Lombardi in Holbrook. The Brookhaven Retired Employees Association will be sending a letter with the details to all retirees in early June.

Defensive Driving

A six-hour defensive driving course will be offered on Saturday, June 23, 9 a.m.-3:30 p.m., in Berkner Hall, Room B. The course is open to the Lab community, at $23 per person. To register, send a check to Empire Safety Council, care of Scott Zambelli, P.O. Box 670, Mount Sinai, NY 11766. All checks must be received by June 16. Include your phone number in case you need to be contacted.

Roger Stoutenburgh D0240500

The Lab community is asked to donate generously to the BNL Food Drive, which assists the needy of Brookhaven Town. Help fill the Food Drive bins in every building. Or, send a personal check to BNL Food Drive, in care of Rita Kito, Bldg. 460, or Donna Wadman, Bldg. 129.

To Celebrate
Asian Pacific Americans' Month
Monday, May 14
Berkner Hall
11 a.m.-2 p.m.
Arts and Crafts Displays, Demonstrations
Chinese Calligraphy
Indian Hand Painting
Origami, Tea Tasting
Asian Costumes, Fashion

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 employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present 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; call the JOBLINE, Ext. 7744 (344-7744), for a list of all job openings; use a TDD system to access job information by calling (631) 344-6018; or access current job openings on the World Wide Web at www.bnl.gov/JOBS/jobs.html.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

MK2208. POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in chemistry with experience in organometallic synthesis, design and development of new catalysts, NMR spectroscopy and handling very air-sensitive compounds. Research will include work in organometallic chemistry and homogeneous catalysis. Under the direction of M. Bullock. Chemistry Department.

NS2000. STAFF SPECIALIST (A-6, reposting) - Requires a minimum of a bachelor's degree in political science or similar field such as security, law enforcement, criminal justice, (master's degree preferred), excellent communication skills, and a minimum of five years' related experience. Experience in locating, assembling, and collecting raw data for analytical use and assessing and analyzing data to reach judgements, conclusions and recommendations supported by the assembled facts, and devising long and short term estimates of future trends and possibilities is necessary. Must be able to obtain/maintain a DOE "Q" and Sensitive Compartmented Information "SCI" security clearances, and successfully pass a CI-limited scope polygraph examination. Some travel will be required. Will perform essential tasks related to the research, analysis, and production of finished counterintelligence products for BNL and the DOE Office of Counterintelligence, including threat assessments, case studies, program reviews, conducting formal presentations and briefings. Reactor Operations Directorate.

NS2041. SCIENTIFIC ASSOCIATE II (P-5, reposting) - Requires an MS in a physical science or engineering field; some x-ray background is important and experience at a synchrotron is helpful. Computing and basic mechanical, vacuum, and electronic skills are desirable. Will support the X25 beam line by interacting with beamline scientists and users, coordinating efforts related to experiment changes and overseeing instrument alignments; ensuring the calibrations and operational status of beamline and experimental equipment, including x-ray optics, goniometers, and area detectors. Will also participate in instrumentation and methods R&D, spanning fields from structural biology to materials science. (Project Appointment funded by NIH.) National Synchrotron Light Source Department.

the Bulletin

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LIZ SEUBERT, editor
JOHN GALVIN, reporter
ROGER STOUTENBURGH, photographer

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

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