BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

Energy Secretary O'Leary Pays First Visit to Brookhaven

Secretary of Energy Hazel O'Leary came to Brookhaven National Laboratory on Thursday, December 8, to meet with employees and tour the Medical Department facilities used in BNL's boron neutron capture therapy (BNCT) program.

In her town hall-style meeting with an audience of about 500 in Berkner Hall auditorium and an additional 100 who were watching the proceedings on closed-circuit TV in Room B and in the lobby, O'Leary shared her views on the importance of science and technology to the U.S. Department of Energy (DOE) mission, and her conviction that DOE and the national laboratories must communicate more effectively with the American public.

"Constant interchange with our Congress, with our legislators at the state level and with folks in our communities is what is going to be necessary to convince the American public that what we do has value and is valuable for them," O'Leary stressed, adding, "I believe that that's our job."

Photos by Roger Stoutenburgh

Before addressing the packed house in Berkner Hall (above), Energy Secretary Hazel O'Leary presented Laboratory Director Nicholas Samios (above left) with a letter; after her talk (bottom left), she admires one of the Brookhaven T-shirts Samios presented to her.

Hazel O'Leary meets with scientists involved with boron neutron capture therapy: (from left) Darrel Joel, Arjun Chanana, Jeffrey Coderre of BNL, and Manjeet Chada, Beth Israel Medical Center.

She was introduced by Laboratory Director Nicholas Samios, who anticipated the Secretary's discussion of DOE's five major areas and her emphasis on communication, discussion and empowerment, by saying, "These are ideas that we embrace easily since they flow so naturally from our activities and our scientific initiatives."

Secretary O'Leary on the task force headed by Robert Galvin that she appointed to evaluate the national laboratories:

"I thought it would be good if someone else took a look at us. It's been very contentious. In my opinion, it's built a stronger link and partnership between the 'parent,' if you can call us that, DOE, and our laboratories. We're talking to each other. We have to. Because if we are to succeed, to be able to make a contribution, nationally, in the 21st century, then we'd better do it as a partnership."

One initiative is BNCT, an experimental treatment for a type of brain cancer called glioblastoma multiforme. This past September 13, one patient was treated with BNCT following approval from the U.S. Food & Drug Administration, and she came to BNL to meet with O'Leary during her visit.

Thus, when the Secretary took the stage in Berkner Hall after visiting the areas in Bldg. 490 associated with BNCT, her first order of business was to present Samios with a letter offering her commendation for the rapid preparation of the Brookhaven Medical Research Reactor for the September treatment.

"This was an outstanding example of the Department's commitment to improving human health which continues to make this country a world leader in medical technologies and health care delivery," she wrote. "It was your extraordinary dedication that allowed us to provide this therapy many months ahead of all previously projected time frames. Thank you for your commitment and for the outstanding effort of your staff in responding to the needs of this patient."

After the presentation, O'Leary began a "quick overview of where I think we are on this December day" with a chart showing five strongly overlapping circles, representing DOE's areas of emphasis. The center one was labeled "science and technology" and the four outer circles were tagged "economic productivity," "national security," "energy resources" and "environmental quality."

The positioning of science and technology at the center was deliberate, O'Leary explained. "The heart and the soul of what we do is . . . science and technology," she said. "When I talk to the general public, I call it knowledge. Nothing happens without the base that drives us all . . ."

O'Leary also spoke of "a number of extraordinary challenges," including deficit reduction. "Last year," she said, "we lived through . . . a tough struggle . . . to stay beneath caps and, at the same time, find something to contribute to the reduction of the national deficit. It was a tough piece, and it was done, and it was done well, and you will tell me and I'm well aware of it, it was done on your backs. . . ."

Secretary O'Leary on Brookhaven National Laboratory:

"Yours is a proud legacy, and we know it, with four Nobel Prizes in physics, with a national reputation as a fundamental particle-physics laboratory, with clear and known accomplishments in medical and biological technologies, and an extraordinary user facility which, for its size, among the 27 national laboratories under the Department of Energy's management, cuts the best record. . . ."

The sacrifice, O'Leary said, has paid off, with the salary freeze contributing $1.15 billion to deficit reduction. And, she added, some $6.3 billion is expected over five years from contract reform and $2.5 billion from reform of environmental management programs.

Secretary O'Leary meets with Carson Nealy (center), Manager of DOE's Brookhaven Area Office, and Medical Department Chairman Darrel Joel.

Then, speaking of budgets and staff, O'Leary observed that BNL did not have the same decreases as the Department of Energy in general. "You're ahead of the game," she said, "and, most importantly, your programs have been allowed to blossom."

Concluding, the Secretary said, "I have tremendous respect for each of you. . . . I'm honored by the opportunity to represent you, and I think that I have been valuable because I question the things that you take for granted. I question the way you communicate because I am your sieve for talking to a public who does not understand you, who wants to respect and honor us, but needs a reason. And the reason has to be that the things we deliver, the things you spend your lives working for and the things you get so high on doing, all have to be translated to them in language they understand and be focused on beliefs and things that are close to them."

After her talk, O'Leary answered questions, such as a query from Joanna Fowler, Chemistry Department, regarding the accessibility of the Laboratory and its facilities to outside agencies and foundations. In reply, O'Leary said, "I am well aware that the set of procedures we've established for doing business with our national laboratories would choke a mule. . . . I will commit to you that we will address that this year."

Walking through Medical, Secretary O'Leary is flanked by: (from left) Laboratory Director Nicholas Samios; Robert Hughes, President of Associated Universities, Inc.; M. Sue Davis, BNL's Associate Director for Reactor, Safety & Security; and Medical Department Chairman Darrel Joel.

Secretary O'Leary on how to measure the effectiveness of Laboratory programs:

"If I were looking for measures, I'd go to places like R&D Magazine's R&D 100 Awards, and I would remind you that, over the last 30 years that this award has been given for technology coming out of basic research and into the marketplace, as a southerner would say, ya'll have 19 in 30 years. That's pretty good. It runs about average for our national labs, but guess what? It's better than most private sector institutions . . ."

The meeting ended as it began — with a presentation. Samios gave the Energy Secretary three T-shirts featuring BNL, the National Synchrotron Light Source and the Relativistic Heavy Ion Collider.

— Anita Cohen

Four Lab Scientists Receive Brookhaven's Highest Honor

On Monday, December 12, the four Brookhaven scientists pictured here were honored with the Laboratory's 1994 Distinguished Research & Development Awards, each receiving a check for $5,000, before taxes, and an engraved memento. The highest of the honors in the Employee Awards Program, this one recognizes distinguished contributions, over a period of one or more years, to the Lab's research and development mission. Summaries of each recipient's contributions are given here, and greater detail will be provided in a January issue of the Brookhaven Bulletin.

Carl Dover, Senior Physicist in the Physics Department, has made major contributions to nuclear theory, particularly in the field of medium-energy physics, but also in heavy-ion physics. The recent U.S. Department of Energy review of the national nuclear physics program stated that Carl is "the intellectual leader of the entire theory community concerned with strangeness in nuclei." His work has included the comprehensive theoretical framework behind (π,K) reaction studies done at BNL and the definitive study of sigma hypernuclei.

Joanna Fowler, Senior Chemist in the Chemistry Department, is a preeminent chemist in the field of radiopharmaceutical chemistry and its application to the neurosciences using positron emission tomography (PET). As a principal investigator in Brookhaven's PET research group, she is playing a pivotal role in the new BNL Center for Imaging and Neuroscience. A scientist of international reputation, she made important, early contributions to the synthetic strategy for preparing ^{18}F-labeled fluorodeoxyglucose, a compound now used in every PET center worldwide.

Samuel Krinsky, Deputy Chairman of the National Synchrotron Light Source Department (NSLS), has played a pivotal role in making the NSLS the leading synchrotron source in the world. His award is also based on his continuing research aimed at increasing the brightness of the NSLS x-ray ring, for which he was responsible for a major part of the design, as well as the development of new insertion devices. He has also made significant contributions to the theory of free-electron lasers.

Y.Y. Lee, Physicist in the Alternating Gradient Synchrotron Department (AGS), has made many outstanding and creative contributions to the design, development and improvement of the accelerator complex at Brookhaven. Having become an internationally recognized accelerator physicist since coming to BNL in 1971, Lee was nominated specifically for the design of the AGS Booster and his contributions to its successful commissioning, which is critical to the future development of high energy and nuclear physics at BNL.

Celebrating Three Months of Service Awards

The following employees celebrated BNL service anniversaries during **October** 1994:

40 Years

David C. Rahm ..... Physics

30 Years

Katherine J. Boggi ... Mgmt. Info. Sys.
Bill Greenberg ..... Biology
John C. Heinrichs ..... Medical
Mark Sakitt ..... Director's Off.

25 Years

Gerard M. Blackford .... Budget Office
Donald M. Lazarus ..... AGS
Ronald R. Picinich ..... RHIC

20 Years

Mark O. Israel ..... Fiscal
John C. Lee ..... App. Science

10 Years

Seymour Baron ..... Director's Off.
Patrick F. Browne ..... Plant Eng.
Elke Dedner ..... Sfgrds. & Sec.
James L. Desmond III ..... NSLS
Gary M. Gross ..... Sfgrds. & Sec.
Michael P. Hurley ..... Sfgrds. & Sec.
Brian W. McCarrick ..... Sfgrds. & Sec.
Kathleen A. McNaught . Sfgrds. & Sec.
Richard A. Miraglia ..... Sfgrds. & Sec.
John C. Mollica ..... Plant Eng.
Victor Pineiro Jr. ..... Sfgrds. & Sec.
Joseph Scaduto ..... AGS
Philip Sgro ..... Plant Eng.
Paul S. Stein ..... AGS
Thomas E. Stephenson ..... Reactor

The following employees observed service anniversaries in **November**:

40 Years

Daniel R. Oldham Jr. ..... Reactor

35 Years

Yung Yee Chu ..... Chemistry
Ronald S. Dobert ..... Adv. Tech.
Vannett D. Pfeiffer ..... Instrum.

30 Years

Gilbert R. De Gregory ..... AGS
Carnal Hobson ..... Plant Eng.
Patricia F. Meehan ..... Physics
Richard S. Richard .. Saf. & Env. Prot.
James J. Roesler ..... Saf. & Env. Prot.
Joseph J. Zeneski ..... Cent. Shops

25 Years

Joseph A. Mazzarella .... Sup. & Mat'l.
Thomas L. Smith ..... RHIC
Morris M. Strongson Comp. & Comm.

20 Years

Joseph Buscemi ..... Plant Eng.
Hubbard Harris Jr. ..... Plant Eng.
Norman E. Holden ..... Reactor
John R. Johnson ..... App. Science
Peter G. Kroeger ..... Adv. Tech.
Carol S. Ogeka ..... Saf. & Env. Prot.
Betty J. Rollins ..... Staff Services

10 Years

Agnes C. Abola ..... AGS
Kamal K. Bandyopadhyay .. Adv. Tech.
Joseph M. Barkwill ..... Reactor
Edward C. Carley ..... Cent. Shops
Robert E. Chanda ..... Cent. Shops
Emanuel Garber ..... Physics
Dhruba K. Ghimiray ..... Sup. & Mat'l.
Arthur H. Jens ..... Cent. Shops
Donald S. Olcott ..... Reactor
Louis M. Pergola ..... Cent. Shops

December service anniversaries belong to:

35 Years

Duff M. Henze ..... Adv. Tech.
Douglas Humphrey ..... Ph. & G. Arts
Richard M. Okula ..... Plant Eng.

30 Years

John L. Barry Jr. ..... Plant Eng.
Peter S. Bilski ..... Plant Eng.
Wesley E. Buxton ..... AGS
Robert L. Ellis ..... Plant Eng.
Robert G. Horton ..... AGS
Lawrence A. Johnson ..... Plant Eng.
Gerard J. Paul ..... Mgmt. Info. Sys.
Walter R. Powell ..... Cent. Shops
Joseph F. Sheehan Jr. ..... NSLS
Frank D. Strebel ..... Plant Eng.
Frank J. Strelecki ..... Plant Eng.
William F. Studier ..... Dir. Off.
Peter Thieberger ..... Physics

25 Years

Marshall D. Newton ..... Chemistry
Allan J. Smith ..... Comp. & Comm.

20 Years

Roger C. Bailey ..... Plant Eng.
Antoinette M. Insolia .... Budget Office

10 Years

Suzanne M. Agnetti ..... RHIC
Carl J. Costantino ..... Adv. Tech.
Richard L. Hahn ..... Chemistry
Lawrence T. Hoff ..... RHIC
Michael F. Jacobellis ..... AGS
Charles A. Miller ..... Adv. Tech.
Swapna Mukherji ..... Plant Eng.
Jeffrey B. Raynor ..... Plant Eng.
Peter M. Stefan ..... NSLS
Anthony Tanza ..... AGS

WordPerfect Users

The next meeting of the WordPerfect for Windows Users' Group will be held at 10 a.m. on Tuesday, December 20, in the CCD seminar room, Bldg. 515. WordPerfect for Windows 6.11 will be discussed. Call group moderator, Pat O'Connor, Ext. 7341, to confirm attendance.

Water Advisory

Employees and others working or living on site are asked to review the way that they use the Lab's potable water.

In routine testing of BNL's water in October, lead was found in a few locations at levels that exceed the U.S. Environmental Protection Agency's Action Level, which is the standard for potable water. Reanalysis of these specific locations in December found lead to be below the action level.

To be safe, Bob Casey, Head of the Safety & Environmental Protection Division, recommends flushing the tap prior to using water for drinking or cooking. "Flushing the tap is a simple and effective means for reducing your exposure to lead in drinking water," says Casey. "Always let the water run until it's noticeably colder, typically 30 seconds to a minute."

The problem is not the water coming from the water treatment plant and potable supply wells, but water that sits long hours in building plumbing systems.

Excess lead can be found in the potable water system on site for two reasons: First, plumbing systems in older buildings contain copper piping assembled with lead solder joints. Second, groundwater on Long Island is slightly corrosive. So, even though water leaving the water treatment plant and potable supply wells meets drinking water standards, when it sits in pipes for long hours, lead can leach into the water.

Remember, always flush the tap prior to drawing water for drinking or cooking, especially if the water has been unused for periods greater than six hours.

Arrivals & Departures

Arrivals

Debabrata Goswami ..... Chemistry
Edward A. Fiegler Jr. ..... Reactor
Terence D. Healy ..... Comp. & Comm.
Gregory A. Mayr ..... Biology

Departures

This list includes all employees who have terminated from the Lab, including retirees:

Jean-Michel Escoubas ... App. Science

Reports Available

The following reports are available to Lab staff and affiliates of DOE, AUI and NRC. Others may purchase them from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. Staff members should call the designated contact.

BNL-52417
Contact: M. Chaloupka, Ext. 2746
Hydrodynamic Effects in Tanks Containing Layered Liquids. A. Veletsos, P. Shivakumar, K. Bandyopadhyay.

BNL-52420
Contact: M. Chaloupka, Ext. 2746
Dynamic Response of Rigid Tanks With Inhomogeneous Liquids. P. Shivakumar, A. Valetsos, K. Bandyopadhyay.

AA Meetings

During the holiday season, the on-site Alcoholics Anonymous (AA) group will meet on Monday, December 19, but not on Mondays December 26 or January 2. Next years's meetings will commence on Monday, January 9, to continue every Monday thereafter: January 16, 23 and 30.

All employees, retirees and other working on site who hold current BNL identification cards and their dependents may attend.

For the meeting location and time, call the Employee Assistance Program (EAP), Ext. 4567, or write P.O. Box 641, Upton, NY 11973. Callers will not be asked to leave their names, and all calls are confidential. EAP welcomes calls from those with alcohol or other problems that may arise during the stressful holiday season.

Catch a glimpse of
GLANCE
playing in Berkner Hall
weekdays, 8:30 a.m. to 4:00 p.m.
Show changes every Tuesday.

BNL Lecture: Protons – Shaping Up and Spinning Out!

Have you ever wondered: *Just how round is a proton?*

This question about the nucleus of a hydrogen atom has been a hot topic of debate at almost every electron accelerator around the world. And the LEGS facility — short for Laser Electron Gamma Source, at BNL's National Synchrotron Light Source — is no exception.

In fact, the LEGS facility *is* an exception, or, at least, exceptional, because, says Andrew Sandorfi, a senior physicist who heads the LEGS team in the Physics Department, "We've got the answer first! Our results show that if you could sit on a proton, you would find that it's anything but spherical."

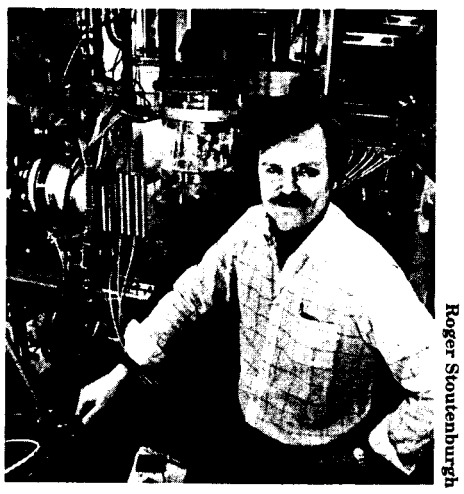
Why is the intrinsic shape of a proton so important? Sandorfi explains, "There's a mathematically elegant theory, called quantum chromodynamics, that most scientists believe can accurately describe things like the protons and neutrons in the atoms around us. The trouble is, it's so complicated that you can't really use it to calculate anything, except at very high energies. So we simplify. We make models that are inspired by what we think should be the full theory.

"The picture of the proton as made up of three quarks is a good example," Sandorfi continues. "This simple model has been very successful at describing a whole host of phenomena. But it seems to get into a predicament when you ask questions about the proton's angular momentum, or spin. It predicts that some of the spin comes from orbital motion, and this requires a breaking of spherical symmetry."

Sandorfi will comment on this puzzle and the implications of the new experimental findings from the LEGS facility, in the 301st Brookhaven Lecture on Wednesday, December 21. His talk, entitled "Looking Inside the Proton With Scattered Laser Light," will begin at 4 p.m. in Berkner Hall. He will be introduced by Peter Bond, Physics Department Chairman.

As Sandorfi will explain, answering questions about spin requires a probe that carries spin. "For most accelerators," he says, "that complicates things enormously. But that's where we have a big advantage. For these experiments, the quality of the beams at LEGS is unequaled."

The LEGS facility was built by the BNL group together with collaborators from Italy's Frascati National Laboratories and the University of Rome, the University of South Carolina, the University of Virginia, and Virginia Polytechnic Institute. Since LEGS began operating in 1990, the team has been able to study with extraordinary sensitivity how protons interact with polarized gamma rays, generating particles called pions.



Roger Stoutenburgh

Andrew Sandorfi

Sandorfi will explain that, not only is the proton *not* spherically symmetric, but also, its degree of deformation is much larger than expected. In fact, as he will say, this result fits rather well with other surprising results from high-energy experiments at CERN in Europe and at the Stanford Linear Accelerator Center. Those data showed the contribution to the proton's spin from the intrinsic spin of its quarks is much less than expected.

"In a nutshell," Sandorfi says, "the quark model ascribes most of the proton's spin to the spins of its constituent quarks, with a little bit left over in orbital angular momentum. But nature seems to have other ideas: The effects of orbital motion are a lot larger than expected, while the contributions from quark spins are a lot smaller."

Andrew Sandorfi obtained his BSc. in mathematics and physics in 1973, his MSc. in physics in 1974 and, two years later, his Ph.D. in nuclear physics, all at the University of Toronto. After a brief visit for an experiment at Brookhaven in 1977, he spent the rest of that year and the next at the High Energy Physics Laboratory of Stanford University, under fellowships from the Canadian National Research Council and the Royal Society.

In 1979, he returned to BNL's Physics Department as an assistant physicist. Three years later, he headed the proposal to DOE for the construction of the LEGS facility at the NSLS, and, in 1985, he was elected a Fellow of the American Physical Society, partly in recognition of the LEGS initiative. He has been a senior physicist since 1992.

After the lecture, all are invited to join Sandorfi for discussions and refreshments. To join him for dinner at a restaurant off site, contact William Morse, Ext. 3859.

United Way — Every Donation Is Vital

Roger Stoutenburgh

As BNL's United Way fund drive continues, the $79,833 donated so far has been given by only 15 percent of Lab employees and retirees. Said Fund Drive Chairman Jim Licari, "If everyone else would give what they can afford, even a small amount, we would easily meet our goal of $105,000." Licari also reminded BNLers that pledges do not carry over. "You have to send in your pledge card each year, or your contributions stop," he explained. "We always accept pledges — it's not too late." There is even still time to win a prize with your pledge card if you get it to Betty Pergan, Bldg. 179A, by December 19. (From right) Licari and fund drive assistant Michelle Cummings are pictured here with Anita Cohen, Margaret Bogosian and Tony Baltz, who each won dinners for two at the last drawing. More prizes will be drawn during the rest of the campaign, including the grand prize of a New York City weekend for two.

1996 Visa Lottery

The U.S. Department of State has announced the second phase of the Diversity Immigrant Visa Lottery, but foreign nationals from the following countries are ***not*** eligible to participate: Canada, China (mainland-born), Colombia, Dominican Republic, El Salvador, Great Britain and its dependent territories (Northern Ireland *is* eligible), India, Jamaica, Mexico, Philippines, South Korea, Taiwan-born and Vietnam.

Registration for the DV-96 visas will run from January 31 to March 1, 1995, and applications may be filled from inside or outside the United States. For information packets on how to register, call the Office of Scientific Personnel, Ext. 7831.

Travel to Berkner

On Wednesday, December 21, come to the Omega Leisure Travel Office in Berkner Hall, where, beginning at 11:30 a.m., you may sample complimentary Christmas refreshments in addition to travel literature for 1995 vacations to exotic destinations. Among the offerings are low fares to cities across Europe. For more information, contact Omega's Kerri Fitzpatrick, Ext. 5918 or 5958.

Rec. Bldg. Schedule

The Recreation Building in the apartment area will be closed from Wednesday, December 21, through Monday, January 2. Regular scheduling will resume Tuesday, January 3.

Retirement Planning

To help you plan your retirement, the Personnel Division has gathered the following:

- **Retirement and financial planning software** — From Fidelity and Vanguard to help you determine whether you are saving enough or need to save more. To borrow the software, contact Joyce Wund, Ext. 7516.
- ***Money Talks* videotapes** — The seminars "Investments and Options at Retirement" and "The Basics of Investing" are available at the Research Library, Bldg. 477.
- **Literature from TIAA-CREF, Fidelity, Vanguard and more** — Available from Personnel, Bldg. 185, including: TIAA-CREF's tax savings and compound-interest calculator, which shows the tax savings you can achieve through salary reduction and how much you can accumulate through a systematic savings program; Fidelity's FundMatch worksheet, which helps you decide between aggressive and conservative funds; Vanguard's "Investing For Your Future" pamphlets, which review the advantages of the voluntary tax-deferred retirement program; retirement resources list, which identifies useful financial publications; and income-in-retirement worksheets, which help you estimate your future financial needs.

Here Comes Santa Claus!

For the 12th consecutive year, Santa Claus will be coming to Upton town, to wish everyone happy holidays and distribute candy canes. This year, however, Santa (Lieutenant Chuck LaSalla of the Fire/Rescue Group, Safety & Environmental Protection Division) and his Elf (Firefighter Frank Palmeri Jr.) are expecting you to put something in Santa's sack in return: donations to the BNL Food Drive, so that those in need may have happier holiday meals.

With Fire Engine #2 as their sleigh, Santa and his elf will make their rounds of offices and laboratories on Friday, December 23, beginning around 9:30 a.m. While they try to visit every building on site, if they have missed yours in the past (maybe because you have been naughty) or if you want Santa to make a special appearance in your workplace, call the North Pole hotline, Ext. 2351, to make a reservation.

Today is your last chance this year to visit the Science Museum to:

- ***Finish your holiday shopping at the Winter Holiday Sales at the Science Store.***
- ***Take a self-guided tour.***

10 a.m. to 3 p.m., Bldg. 701

Amateur Radio Club

The next meeting of the Amateur Radio Club, on Thursday, December 22, in the lounge of the Recreation Building, will include election of club officers. All Lab employees, guests and licensed amateur-radio operators are invited. For more information, contact Chris Neuberger, Ext. 4160, or Nick Franco, Ext. 5467.

SGI Users Meeting

Silicon Graphics (SGI) workstation users are invited to attend the first group meeting at 2 p.m. on Tuesday, December 20, in the CCD seminar room. Topics will include establishing a users' group, computer security and SGI training. For more information, call John Spiletic, Ext. 4112.

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Bowling

Red and Green League

R. Mulderig Jr. 278/225/214/717 scratch series, A. Warkentien 255/236/228/719 scratch, H. Arnesen 234/204/200/638 scratch, K. Asselta 231/226/642 scratch, M. Palumbo 222/210/612 scratch, E. Larsen 216/213/615 scratch, K. Koebel 216/209/624 scratch series, J. LaBounty 244, E. Sperry III 224, R. Wiseman 217, J. Griffin 215/601 scratch, R. Eggert 215, T. Prach 213, H. Dawson 211, A. Liotta 206, J. Goode 203, R. Raynis 203, B. Sick 202, B. Giuliano 201, N. Scala 200.

Purple and White League

R. Raynis 233/182, K. Riker 207, E. Sperry III 200/187, J. Sheehan 198/181, S. Frei 191, G. Munoz 187/181, S. DiMaiuta 186, Doug Fisher 186, G. Riker 185, E. Sperry IV 184/184, T. Farmer 184, S. Smith 177, I. Batchelor 171, D. Botts 171, M. DiMaiuta 170, S. Logan converted the 5/6/10 split, K. Batchelor converted the 3/7/10.

Volleyball

Standings as of December 13

Open League		League 1	
The Men and Me	27-6	Rude Dogs	18-6
Farside	22-11	Network News	16-8
GTEAM	18-12	Koopas	15-12
The Roofing Co.	13-20	Underdogs	7-17
Bud Men	1-32	Safe Sets	7-20
League 2		**League 3**	
Fossils	21-6	Silver Bullets	19-2
Mon. Night Live	17-10	Take Five	16-5
Net Wits	17-10	High Volley'em	14-7
Safe Sets II	17-10	Upton-Ups	13-8
Nuts & Bolts	13-14	For Play	8-13
Spiked Punch	10-17	DO-DAT	7-14
Jolly Vollies	10-17	Harlem Knights	4-17
Night Court	3-24	Bonnie's Bombers	3-18

Schedule Change

Since Monday, January 2, is a BNL holiday, the matches scheduled for Monday, January 2, for the Open League and League 2 will be played at the end of the regular season: March 27 for the Open League and April 3 for League 2.

Carol Time Is Coming

Roger Stoutenburgh

'Twas the week before Christmas in year ninety-three,
This choir assembled — made up of employees!
Decorations were hung in the Cafeteria with care,
In hopes that the singers soon would be there.
With voices so pure and conductor so jolly,
The choir's lively songs shook the leaves from the holly!
"Deck the Hall," "Jingle Bells," "Away in a Manger"
Brought a smile to all — BNLer and stranger.
This year they'll return, when John Weeks gives the beat,
To spread Yule cheer at noontime — while all the rest eat.
On December twenty-one, come hear them a-singing,
And share the glad spirit that they will be bringing!

Atlantic City Trip

The next BERA-sponsored, one-day trip to Atlantic City will be to the Trump Castle Hotel and Casino, on Saturday, January 14. The initial cost will be $22, but the hotel-casino will give a $12.50 coin return and a $5 return voucher. The bus will leave the Brookhaven Center at 9 a.m., with an extra pickup at LIE Exit 63, if requested. Return will be about 11:45.

Buy tickets now at the BERA Sales Office in Berkner Hall, weekdays, 9 a.m. to 1:30 p.m. For more information, call Andrea Dehler, Ext. 3347; Rosalie Piccione, Ext. 3160; or Kay Dellimore, Ext. 2873.

Cafeteria Menu

Monday, December 19	
Soup: Spicy potato kale	.90/1.20
A la Carte: Arroz con pollo	3.75
Fitness: Pot roast	4.25
Deli: Pastrami	3.20
Grill: Ham & cheese	3.30
Tuesday, December 20	
Soup: Split pea	.90/1.20
A la Carte: Tortellini carbonara	3.65
Fitness: Baked cod	3.95
Deli: Roast beef	3.20
Grill: Monte Cristo	3.30
Wednesday, December 21	
Soup: Cream of mushroom	.90/1.20
A la Carte: Christmas turkey dinner	4.75
Fitness: Pasta w/marinara sauce	3.50
Deli: Virginia ham	3.20
Grill: Spanish omelet	3.30
Thursday, December 22	
Soup: Chicken vegetable	.90/1.20
A la Carte: Chicken lo mein	3.75
Fitness: Stir-fry beef	3.95
Deli: Turkey	3.20
Grill: Cuban sandwich	3.30
Friday, December 23	
Soup: Soup du jour	.90/1.20

Limited menu available until 1 p.m.

Note to Employees:

Attendance at lectures, meetings and other special programs held during normal working hours is subject to supervisory concurrence.

Phys. Rev. Job Opening

The American Physical Society's (APS) *Physical Review A/E Journals* seek a responsible individual to work at the Ridge Editorial Office as a part-time Editorial Assistant. Responsibilities will be split between the two Journals. Must be able to work at least three days a week, between 8 a.m. and 6 p.m., for a total of 19 hours. Minimum requirements are a B.S. in science and the ability to understand mathematical notations. Strong English speaking and writing skills are needed to perform technical editing, phone contact and written correspondence. Send cover letter and resume to Joseph Igancio, Personnel Manager, APS, 1 Research Road, Box 1000, Ridge, NY 11961.

Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position. Consideration is given to candidates 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, handicap or veteran status.

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and second, for general recruiting under 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, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

SCIENTIFIC RECRUITMENT - Doctorate normally required. Candidates may apply directly to the department representative named.

ASSISTANT SCIENTIST - With experience in NMR and in vivo MR research, to join the new High-Field MRI Laboratory of the Brookhaven Center for Imaging and Neuroscience. Contact: Charles Springer, Chemistry Department.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

MK 108. TELEPHONE OPERATOR - (substitute) Will function on an on-call basis to assist in placing calls and other related telephone duties. Computing & Communication Division.

DD 0797. SECRETARIAL POSITION - Requires an AAS in secretarial science or equivalent experience and a thorough knowledge of Laboratory policies and procedures, as well as excellent oral and written communications skills. IPAP travel and WordPerfect 5.1 experience essential. Will provide varied secretarial support to the Department Administrative Manager. (reposting) Medical Department.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

LS 3804. INDUSTRIAL HYGIENIST/ENGINEERING POSITION - (term appointment) Requires an MS or equivalent in industrial hygiene, toxicology, environmental health, occupational epidemiology or a related field and several years' relevant experience. A broad background in all aspects of industrial hygiene and ABIH certification is desirable. Responsibilities include assessing compliance with OSHA standards, defining corrective measures and assisting with the implementation of program improvements. Safety & Environmental Protection Division.

LS 3802. PROGRAMMING POSITIONS - (term appointments) Requires a bachelor's degree in an appropriate discipline and experience in some of the following: UNIX, Oracle 7, C, PERL, MS-Windows, bar-coding hardware. Will be responsible for application design, program coding and testing, preparing program documentation and end-user training. Will develop an instrument tracking and calibration records system or personnel monitoring records management database applications. Safety & Environmental Protection Division.

NS 2058. PHYSICS ASSOCIATE POSITION - Requires a BS in a scientific discipline or engineering, or the equivalent experience, and a comprehensive background in the electronic control of precision mechanical components. Prior supervisory experience and knowledge of cryogenics is very desirable. Will be responsible for the day-to-day operation of all experimental equipment and support laboratories at the HFBR, including installations and modifications. Will also be responsible for supervision of technical staff, work-flow control, purchasing and budgets. Physics Department.

DD 3809. TECHNICAL POSITIONS - (term appointments) Requires general knowledge of practical principles of chemistry and computer literacy. Responsibilities include the physical identification of all existing chemicals at BNL and the application of bar-code labels. Additional duties include data entry, records maintenance and data migration. Safety & Environmental Protection Division.

Motor Vehicles & Supplies

93 GEO STORM - 13k mi., m/t, alarm, asking $9,000 neg. or take over payments. Doreen, 797-8468 or 321-4296 after 10 p.m.

91 GEO METRO - blue, 2-dr., 5-spd., 59k mi., cosmetic body damage, runs well, $3,495. Joe, Ext. 2898.

89 JEEP WRANGLER - red, 6-cyl., a/t, 2 tops, ac, am/fm stereo, new tires. 588-9325.

89 CAMARO RS - V-8, a/t, ac, p/l, p/w, cruise, tilt, alarm, black, 75k mi., $4,995. Tom, Ext. 5265.

87 OLDSMOBILE REGENCY BROUGHAM - 75k mi., 4-dr., elec. sunroof, white w/leather int., excel., $4,900. 744-9802.

87 NISSAN SENTRA - clean, in good running cond., 109k mi., $1,950. John, Ext. 2769.

86 MONTE CARLO - 4.3L EFI, good cond., asking $1,500. 286-1097.

85 FORD ESCORT - new engine, excel. cond., must see. Harvey, 281-7568.

85 CHRYSLER LE BARON - 4-cyl., 4-dr., p/s, p/w, ac, am/fm stereo, 36,928 mi., one owner, v.g. cond., $2,400. O. Booker, Ext. 3082 or 727-5912.

85 PEUGEOT 505 - 467-6975 after 5 p.m.

80 THUNDERBIRD - full power, p/s, p/b, p/w, tilt, a/t, $1,000 neg. Fred, 924-6918.

77 CHEVY - 4-dr., a/t,. p/s, p/b, mechanically sound, high mi., $475. Lou, Ext. 3499.

76 CHEVY CAMARO 350 - V-8, $850 neg.; tires, 225/70R15, 4 Dunlop-tread, $60/4; 225/70R14, Goodyear Eagle ST radials, $35/2. Ron, Ext. 4553 or 744-1194.

76 CHEVY MALIBU CLASSIC - 350 small block, Holley 4-bar. carb., Edelbrock manifold, chrome headers, B&M Quicksilver slapshift, posi rear. Phil, 286-1348.

TIRES - 2, Blizzak snows, 175x70x13 on 4-bolt, 100mm wheels, both unused, fits Mazda Protege 323, Escort, some Civics, $124. Dave, Ext. 7268.

PARTING OUT FORD F150 4x4 - front nose, 351M motor, new rear, hood, door, transfer case, steering box. Wayne, Ext. 2964.

The Brookhaven Bulletin is printed on paper containing at least 50 percent recycled materials, with 10 percent post-consumer waste.

TIRES - 1, P215/70R14, Firestone, excel., $25; 2, P225/75R15, Goodyear, brand-new, orig. $175, now $40 ea. 698-9274.

CARBURETOR - Holly 650, 4-barrel, single-pump, rebuilt, $75. Dan, Ext. 4605 or 475-3527 after 5 p.m.

HONDA CIVIC ENGINE - 1500cc, other Honda parts, take all or none. Gary, Ext. 3751.

TIRES - Classic 78II, P195/75B14, plus rims, $80; Goodyear polysteel radials, P205/75R14, $100. Ext. 3827.

Boats & Marine Supplies

25' CHRIS CRAFT - 1975, new '93 engine, many extras, moving, must sell, $5,000. Phil, 821-2940.

23' SAILBOAT - fg, sleeps 4, galley, fixed keel, mooring, dinghy, new jack stands & windows, 6-h.p. motor, sails, extras, $1,800. Mike, Ext. 7861 or 698-3967.

OUTBOARD MOTOR - 1988, 18/25-h.p. Mercury, Blue Max, used about 20 hrs., elec. start, gas tank & stand, $950. 929-5880.

Furnishings & Appliances

BEDROOM SET - hardwood, armoire, dresser, 2 nightstands, king-size bed, excel., $1,100. Ext. 3922.

BREAKFRONT - French Provincial, medium brown, good cond., asking $50. Nancy, Ext. 7976.

DINING ROOM - lighted breakfront, octogonal pedestal table, 2 arm & 4 side chairs, extra leaves. Shirley, 689-8665.

ETAGERE - rattan, 6'x6', w/glass shelves, $200; china closet, $40.; fireplace doors, new, 39"x28", brass w/glass doors, $75. 325-1907.

END TABLES - coffee, oval, dark pine, like new, $100; wrought-iron patio set, 4 swivel chairs, table, Formica top, indoor, $200. Marty, Ext. 2214.

FIREPLACE DOORS - 48", custom-made, $150 neg.; upright freezer, GE, 15 cu. ft., like new, $250 neg.; Volvo car parts. Ext. 3018 or 369-5181.

LIVING ROOM - dining room; bedroom; sofa bed, contemp.; coffee table & 2 end tables; 2 leather swivel tub chairs. Shirley, 689-8665.

MICROWAVE - Goldstar, 0.8 cu. ft., white, used 3 mo., $100; KitchenAid cooktop, 4-burner, smooth, radiant heat, 21"x30", $150. Nancy, Ext. 7996.

REFRIGERATOR - Hotpoint, 2-dr., almond, auto. ice maker, excel. cond., $240. Steve, Ext. 2897.

TABLE - w/2 chairs, 1 bench, v.g. cond., $70, delivered close to Lab, $90. Dan, Ext. 4830 or 929-3228.

TABLES - coffee, 2 end, solid maple, good cond., Col., $125 neg.; bed frame w/4 drawers, $25 neg. Steve, Ext. 3018 or 369-5181.

CARPET STEAM CLEANER - Regina, like new, hardly used, $60. 929-3235.

WASHER - GE, large-capacity, heavy-duty, 6 cycles, white, runs well, $120; Kenmore dryer, elec., $55. Ext. 5076 or 744-4615.

Tools, House & Garden

POINSETTIA - florist-quality, various sizes, 727-6818 after 4 p.m.

Sports, Hobbies & Pets

BOOTS - Airwalks snowboard, size 7, like new, $70. Ext. 2138.

COCKATIEL - male, 9 mo. old, hand-raised, lovely, friendly, will hold for Christmas, $75. 473-6432.

WEIGHT-LIFTING EQUIPMENT - Nordic Gold Flex, excel. cond., w/computer, orig. $1,350, now $1,000. Joann, 584-3830.over $50/all. 924-4097.

RECORDS - 1970-80, good to new cond., best offer over $50/all. 924-4067.

ROWING MACHINE - $25; exercise bike, $25; video camera, GE, VHS, hard case, $250. Naidu, Ext. 4263.

Audio, Video & Computer

CAMERA COLOR ENHANCER - Panasonic PY-L5, for 8mm camera, $15. Anthony, Ext. 4035.

COMPUTER - Packard Bell, 386/25 MHz, 170 MB Quantum HD, 3½ & 5¼ FDs, 4 MB RAM, VGA mon., 2,400-baud modem, $1,900. George, 728-9337.

GAMES - for Super Nintendo, $25-$35/ea. Ext. 7505.

SOFTWARE - baseball & golf for Windows, new, $29. Ext. 4341 or 475-4005.

SPEAKERS - Fisher, shelf, 10"Hx9"Wx9"L, $20/pair; Technics standing speakers, 37"Hx16"Wx10"L, $60/pair. Al Park, Ext. 2023 or 758-7233 after 5 p.m.

TV - GE, 17", color, old, but works well, $30. Larry, Ext. 3942 or 727-1412.

TV - Hitachi, 52" big screen, color, v.g. cond.,asking $500. Terri, Ext. 2896 or 727-8280.

Miscellaneous

BEAVER COAT - excel. cond., size 8-10, must see. Ext. 3179.

RING - ruby & diamond, chevron design, $150. Theresa, Ext. 2907.

Free

DOG - mixed terrier, 3-yr.-old female, good w/children, w/6'x6'x10' cage & dog house. Darlene, Ext. 4685.

Lost & Found

LOST - on site, keys on bronze snap-hook. Gary, Ext. 3751.

Wanted

CAR - reasonably priced, running, for beginning driver. Lou, 473-8562.

HOUSE - for rent in Longwood School District, 3-4 bdrm., 2 baths, garage. Joshi, Ext. 3847 or 281-1077.

ICE SKATES - figure, adult size 7½, child size 2½. Vera, Ext. 7702.

LIONEL - and other trains & accessories, any cond., extra cash for diesels, toy trucks. Carole, Ext. 7100.

MACINTOSH - to rent, 12/21-1/4 for grad. student; sublet/short lease NYC apartment for mature, responsible, nonsmoker. Herbert, Ext. 3172 or 929-4446.

NATURAL HISTORY - items for home museum, programs; used glass aquariums. Bob, 874-4184.

OLD DOLLS - doll tea sets & related items. 475-4199.

SKIERS - for Windham 1/11/95, $42 includes bus & lift. Send payment to Augie Hoffmann, Bldg. 510C.

TOYS - for needy kids for Christmas. Lorraine, Ext. 7814.

VIOLIN - good cond., reasonable for young child. Mike, Ext. 7861.

In Appreciation

Thanks to everyone for a great send off: The gifts are one of a kind, and your generosity is appreciated.

— Lou Graziano

Thank you to all my friends and coworkers for your overwhelming sympathy and support upon the loss of our son, Bryan.

— Mort & Caryn Rosen & family

To all who have given help and comfort upon Bob's passing — we are so grateful.

— Carol Goodrich & Family