

## Preventing Pollution: Tips for Business, Government at BNL Workshop



From an auto body shop to an airport, from a garden club to a town garage, many Suffolk County businesses and government agencies sent representatives to the Pollution Prevention Workshop held February 27 in BNL's Berkner Hall. There, the more than 110 participants heard from New York State Department of Environmental Conservation (NYSDEC) experts, who gave advice on coping with regulations and minimizing hazardous-waste output from many common but polluting operations. The attendees also heard from Ulf Andresen, of Microwave Circuit Technology, Inc. (left), and George Goode, BNL's Pollution Prevention Coordinator, about pollution-prevention success stories at both sites. For example, Goode reported, the Lab has reduced its use of the solvent 1,1,1-trichloroethane by 86 percent in just five years and has made so many changes in the vehicle-maintenance area that no hazardous waste was generated by that operation in 1995. Andresen described the steps that his company, which makes specialized circuit boards, has taken to reduce chemical rinses and reuse water. The workshop was cosponsored by NYSDEC and BNL. For more information on the Lab's pollution prevention activities, see the Brookhaven Bulletin of February 16, 1996.

—Kara Villamil

## BNL Lecture: The AGS's Ace — Accelerating a High-Intensity Beam

In the decades since July 1960, when the Alternating Gradient Synchrotron (AGS) reached full strength as the world's highest energy accelerator, physicists working there have made major contributions to science, including three Nobel Prize-winning discoveries. And although it was inevitably overtaken by newer accelerators of higher energy, the AGS had another ace up its sleeve — intensity.

Last year, the AGS broke its own world's record for proton intensity, with 63.3 trillion protons per pulse —

63,000 times greater than its original design intensity. This means that, while operating at its original design energy of 33 billion electron volts, the AGS can accelerate and collide protons in far greater numbers than any other synchrotron accelerator worldwide. The more trillions of protons in the beam, the more data are available for experimentalists who are looking for events as small as one part in a trillion — and the more likely it is that exciting new physics will be revealed.

But what is the secret of such suc-

cess? How did the AGS physicists do it?

To explain some of the physics he and others used in this achievement, with a particular focus on the vital part played by feedback, Physicist Michael Brennan of the AGS Department will give the 314th

At the model of a beam tube in the Alternating Gradient Synchrotron lobby in Bldg. 911, Michael Brennan uses a silver ball to demonstrate the behavior of the beam inside the accelerator.



## All-Female Team Sets Up NSLS Experiment To Study Prostate Cancer Therapy

Researchers Brenda Laster and Lynne Warkentien, both of the Medical Department; and Yanxiang Zhao, a graduate student from the State University of New York at Stony Brook, are among those exploring a method to improve the treatment of prostate cancer and some other cancers. Last month, in another first at the National Synchrotron Light Source (NSLS), this all-female team was responsible for the entire setup of beam line X12A, including the electronics, equipment, alignment and software necessary to carry out their experiment.

Laster, Warkentien and Zhao are part of a collaborative effort working to predict the therapeutic advantage of using an indium-labeled porphyrin activated by the x-rays emitted by iodine-125 seeds to increase the radiation damage to tumor cells. Using brachytherapy techniques, the seeds are planted directly in the prostate tumors of patients as a current method of treating this type of cancer.

Collaborators for this research are: Victor Bond, Medical; Gad Shani, Ben Gurion University of the Negev, Israel; William Thomlinson and Peter Siddons, NSLS; and Janos Kirz, State University of New York at Stony Brook, who designed the x-ray microscope at NSLS beam line X1A.

In this treatment, which is called photon activation therapy (PAT) the patient would be injected with the indium-carrying porphyrin, a drug which appears to seek out tumors. Then, the iodine-125 seeds would be planted in the tumor. The x-rays emitted by the seeds are made up of photons, most of which are at the right



(From left) Lynne Warkentien, Brenda Laster and Yanxiang Zhao at beam line X12A, which they set up at the National Synchrotron Light Source.

— Photos on this page by Roger Stoutenburgh

energy to interact with the indium, a metal. The photons activate the indium, generating a cascade of electrons called Auger electrons, which can destroy tumor cells if the cascade is close to the tumor DNA.

While the principles of photon activation of Auger electron cascades were known, it was BNL's late Ralph Fairchild who had suggested PAT as a practical approach in treating deep-seated tumors.

At the NSLS, a crystal in the x-ray beam allows researchers to "tune" the beam to get x-rays of a chosen energy. In this experiment, the energies match those of iodine-125; so, by looking at how much damage the indium's activated electrons cause to samples of

tumor cells, the researchers can evaluate the clinical potential of PAT.

The group has conducted experiments at the Brookhaven Medical Research Reactor to measure how much indium was taken up by the tumor cells, with the NSLS x-ray microscope to show that the indium homes in on the cell's DNA, and now at this X27B beam line experiment to show how much cell destruction comes from the Auger electrons.

Results suggest that the drug-radiation combination from PAT will deliver twice the dose to the tumor as the dose from the iodine-125 seeds alone. The next step, animal studies, will begin this summer.

— Liz Seubert

Brookhaven Lecture on Wednesday, March 20th. Brennan, who heads the AGS Radio Frequency (RF) Systems Group, will talk on "Accelerating High-Intensity Beam at the AGS," beginning at 4 p.m. in Berkner Hall. He will be introduced by AGS Chairman Derek Lowenstein.

Brennan received his B.S. in physics from the University of Notre Dame in 1969 and his Ph.D. in nuclear physics from Rutgers, the State University of New Jersey, in 1979. After seven years at the State University of New York at Stony Brook, with a summer as a guest scientist at the Max Planck Institute, Brennan joined BNL's AGS Department as an associate physicist in October 1986.

Brennan's experience in the accelerator field has been considerable. While at Stony Brook, he coinvented with BNL's Ilan Ben-Zvi a quarter-wave resonator that has been adopted by laboratories around the world. At BNL, Brennan invented a fast-beam chopper that improved accelerator efficiency and reduced unwanted radiation. He also developed a very high frequency cavity for the AGS to reduce beam loss.

Promoted to Physicist in 1988 and named Leader of the AGS RF Group in 1989, Brennan headed the major rf upgrade project for the AGS, which was completed in 1995, a key ingredient to the world's record intensity. He was honored with the Lab's highest award, the Distinguished Research and Development Award, in 1994.

After the lecture, all are invited to join Brennan for discussion and refreshments. Those wishing to have dinner with the speaker at a restaurant off site may call Marion Heimerle, Ext. 4776.

— Liz Seubert

## Diversity Offers Food for Thought

Since the program was started this January, two monthly Diversity Breakfasts have been hosted in Berkner Hall by BNL Deputy Director Martin Blume, who asked the breakfast-goers to bring their thoughts and suggestions about BNL's diversity, equal opportunity and affirmative-action programs to the table.

At each event, Blume, Lorraine Merdon, who is Manager of BNL's Di-

versity Office, and another member of senior management breakfast with up to six employees, giving them an opportunity to discuss their ideas and concerns about employment and advancement opportunities for all at the Lab. While any Lab employee may be invited to one of these breakfasts, those who have been invited to date are department or division Equal Employment Opportunity representatives.

## 1996 Science Bowl — An Invitation

Outstanding students from 31 Long Island high schools will compete in the 1996 Science Bowl, an academic tournament that will test their knowledge of science and math, tomorrow Saturday, March 16, in Berkner Hall.

The public is invited to the final rounds of the games, beginning at 1:50 p.m., and to an award ceremony, starting at 3:20 p.m. Suffolk County's Fourth District Assemblyman Steven Englebright will be the keynote speaker at the award ceremony.

The tournament at BNL is part of the National Science Bowl sponsored by the U.S. Department of Energy (DOE), along with Bechtel Foundation, BP Alaska, Duracell and Texas Instruments, to increase interest in science and mathematics among American pre-college students. The regional contest at Brookhaven was organized by BNL's Office of Educational Programs (OEP) and sponsored by DOE and Suffolk County Community College. Winners of the regional competitions will compete against each other in the National Science Bowl in Washington, D.C., in May.

This year for the first time, after each team's first game, one member of each team will give a four-to-five minute talk on "The Impact on Society of High Energy Physics," BNL scientists will follow student presentations with commentary.

Another first: Students will tour the Relativistic Heavy Ion Collider, thanks to the Museum Programs group in the Public Affairs Office and BNL volunteers Bob Lambiase, David Lynn, Albert Prodel and Sebastian White.

BNLers have also volunteered to help with various aspects of the tournament, which has been coordinated by Louise Hanson, who holds a joint appointment in OEP and Department of Applied Science.

The employees who will be on hand to serve as game moderators, judges and timekeepers are: Bruce Abel, Joe DeLong, Rich Derocher, Pat Flood, Vinita Ghosh, Henry Kahnhauser, Elise Keith-Monnica, Ahovi Kponou, Carol Kramer, Alan Kuehner, Terri Lacker, Bill Leonhardt, Bruce Martin, Kathleen McIntyre, Jan Naidu,

Paul O'Connor, Dan Oldham, Gary Schroeder, Steve Shapiro, Peter Takacs, Kara Villamil, Kate Vodopia and Gavin Watson.

Presentation moderators will include Martin Kramer, Michael Murtagh, Mark Sakitt and Mike Tannenbaum.

For more information, call Hanson at Ext. 5849. — Diane Greenberg



Roger Stoutenburgh

Pictured at the Diversity Breakfast held in February are: (back, from left) Anne Meinhold, Department of Applied Science; Lorraine Merdon, Diversity Office; Pamela Yerry, Reactor Division; Andrea Epple, Safety & Environmental Protection Division; Juanita Beatty, Administrative Support Division; (front, from left) Leonard Chimienti, Alternating Gradient Synchrotron Department; BNL Associate Director for Reactor, Safety & Security Sue Davis; Maurice DuBois, Financial Services Division; and BNL Deputy Director Martin Blume.

## BWIS — Not for Women Scientists Only

It's Women's History Month — a good time to recall the history of Brookhaven Women in Science (BWIS)

Founded in 1979, by Vicki McLane, now BNL's Women's Program Coordinator, and Harriet Martin, who recently retired, BWIS has been an impressive presence at BNL. The group's goals are: to raise people's consciousness to the accomplishments and needs of working women; promote the advancement of women in science, the professions and technical fields; provide a forum for the exchange of scientific, professional and technical information; support each other's efforts and successes on the job; and encourage students to consider careers in science, mathematics, engineering and other technical fields.

Toward that end, BWIS currently offers two scholarships: the Renate W. Chasman Scholarship for Women (see below) and the Gertrude S. Goldhaber Prize, whose 1996 winner is soon to be announced.

In addition, BWIS activities have benefited the Lab community as a whole: BWIS worked with BNL administration to bring the Teacher's Federal Credit Union on site, in 1982; enact coordination of medical insurance benefits for spouses both employed at BNL, in 1983; and establish the Child Development Center, which has provided on-site child care for children of BNL employees since 1991.

Clearly, then, BWIS is not for women scientists only. Membership is open to everyone at the Lab, and tax-deductible dues are \$10 a year. For more information or to become a member, call Maria Beckman, Ext. 2301, or

Gail Schuman, Ext. 7985, or contact the BWIS home page on the World Wide Web: <http://sun20.ccd.bnl.gov/~wp/#bwis>. If you would like to make a tax-deductible contribution to one of the scholarship funds, send a check, payable to BWIS, to PO Box 183, Upton NY 11973.

### Chasman Scholarship

A decade ago, BWIS established the Chasman Scholarship to encourage women whose education was interrupted to continue formal studies in science, engineering or mathematics.

This one-time \$2,000 scholarship is awarded annually to a woman who is currently enrolled or has been accepted in a degree program at an accredited institution.

To be eligible for the 1996 scholarship, you must be enrolled in a program of study for 1996-97 at either the

junior or senior undergraduate level or at the first-year graduate level, to be pursued on a half-time or greater basis. In addition, you must be a U.S. citizen or permanent resident alien who lives in Nassau or Suffolk County or the boroughs of Brooklyn or Queens.

The winner will be chosen by a committee of representatives from Long Island colleges and industry, and she will be given the award in August.

For application forms and more information, write to: Chasman Scholarship Fund, PO Box 183, Upton NY 11973. Applications are due by May 1. The scholarship fund is supported by fund-raising events and tax-deductible contributions.

Renate Chasman (1932-1977) was a noted BNL physicist. As co-designer of BNL's National Synchrotron Light Source, her work influenced the design of other synchrotrons worldwide.

## What's in a Name? It's Elementary!

If you could name an element, what name would you choose? That's the question that was posed to BNL Director Nicholas Samios and four other scientists and writers by a reporter for *The New York Times Magazine* of March 10, 1996. The reporter was seeking suggestions for names for Element 112, which was recently devised by a team of German scientists.

For the magazine, Samios replied, "If I had time to think, I would name it after someone who was big in nuclear physics." When given a little time, Samios proposed that the element be called "mayerium," after Maria Goeppert Mayer, the physicist who, with her colleague Johannes Hans Daniel Jensen, won the 1963 Nobel Prize in Physics "for their discoveries

concerning nuclear shell structure."

Samios' choice is particularly appropriate since this is Women's History Month, but the Bulletin wondered why he chose Mayer above all other physicists, men or women, for this honor?

Samios explained, "Foremost, Dr. Mayer was an outstanding scientist. She was active and productive for many years, and she greatly influenced the progress and success of nuclear physics, with her major recognition being the shell model, which describes the structure of nuclei.

"It is also true," Samios continued, "that Maria Mayer happened to be a female, but she achieved great distinction and accomplishments under conditions that were not the most ideal."

## In Memoriam

**Arthur Jens**, a senior technical specialist with the Relativistic Heavy Ion Collider (RHIC) Project, died of a heart attack on March 4. He was 62.

Jens came to BNL as an experimental machinist in the Central Shops Division on November 19, 1984. In 1985, he became a tool and instrument maker, and, in 1986, a fabrication assistant. Later that year, he was promoted to Machine Shop Supervisor and, in 1992, was named Maintenance Supervisor.

In April 1995, Jens transferred into the RHIC Magnet Division as a senior technical specialist. After an initial eight months of installing magnets



into the vacuum vessel at the cryostat assembly station, in January 1996, he became supervisor of the workstation.

Jens established himself as a highly skilled and energetic worker, notable for his efforts to find ways to increase productivity while retaining quality of workmanship, said his supervisor, Robert Kehl. Most recently, as supervisor, Jens instituted cross training of personnel, making it easier for co-workers to learn new phases of operation. "He was a good friend to work with," said Kehl, "and he will be sorrowfully missed."

Jens, who was a resident of Medford, is survived by his wife, Joan; sons Arthur and Matthew; daughters Patricia Jens and Laura Smith; stepson Stephen Lindenfesler; stepdaughter Joy Lehman; father Henry; seven sisters; five brothers; and two grandchildren.

## 50 YEARS AGO THIS WEEK

This series, which recounts the earliest days of Associated Universities, Inc. (AUI), and BNL, will run as appropriate throughout 1996 and 1997, the 50th anniversary years of AUI and BNL, respectively.

• **March 18, 1946** — George Pegram, Dean of Columbia University, writes to presidents of the nine universities that had agreed to sponsor a research laboratory in the northeast. His letter summarizes progress of negotiations with the Manhattan District and states that it is now "desirable to move promptly toward effecting more formal arrangements among the (nine) universities to organize a group, a committee, or committees, to take the responsibility of carrying forward with the

Manhattan District the necessary plans and work preliminary to the establishment of the laboratory."

Pegram's letter also asks the nine presidents to designate representatives to attend a meeting on March 23.

The representatives, Pegram says, should be "preferably at least one scientist and one administrative officer who could represent authoritatively the general policies of the institution."

(To be continued on March 22.)

# Meet the Candidates for Upcoming BERA Board Elections

After the ballots are counted in the elections scheduled for the week of March 25, two of the four BNLers below will have been elected to the BERA Executive Board to represent the members of the Brookhaven Employees Recreations Association (BERA). You're automatically a BERA member if you're an employee of BNL, AUI or DOE or any permanent on-site contractor.

During their four-year terms, which will begin on May 1, the winners will have

## James Durnan

James Durnan, a project engineer in the Safety & Environmental Protection Division, has been a BNL employee for a decade — as well as an active member of several BERA clubs.



A former member of the Runners Club, Durnan is currently captain of the Bombers in the Softball League and a member of the Aerobic Dance Club, the R/C Model Aircraft Club, and the Rifle & Pistol Club.

"I think BERA clubs should be publicized more," Durnan said. "Some clubs are very active and popular, but others are low-key. If BERA would provide employees with more information about the clubs and their activities, perhaps in the Bulletin, some of the less active clubs might be able to increase their membership."

Right now, Durnan is focusing on the Softball League. "I hope to see membership in the Softball League expand," he said, "with the organization of the new league being announced in the Bulletin today, to include beginning players who would enjoy softball as a relaxed, social event."

## Charles Gardner

Charles Gardner, a technical specialist in the Alternating Gradient Synchrotron Department, has been an active BERA participant since his joining the Lab in 1987.



His activities have included playing in both the Softball and Football Leagues and working out with the Body Building Club, for which he has been president for the past five years. In 1995, Gardner served on the BERA Nominating Committee. And, for the last three years, he has organized the Body Building Club's exhibit at the Lab's Healthfest.

"I'm currently helping develop a BERA home page on the World Wide Web, which will keep BERA members up to date on club activities," explained Gardner. "If I am elected, my goal is to find a way to provide new facilities and improve existing ones that cater to the needs of the different BERA clubs, especially those dedicated to fitness. This is important because involvement in BERA activities is a great way for employees to stay in shape, relieve stress and, as a result, become more productive in the workplace."

## Ed Meier

Ed Meier, a research engineer in the Physics Department, has been active in BERA sports since joining the Lab full-time in 1980.

In the Softball League, Meier has played on teams in both the mixed and employees' leagues. Now, he's looking forward to the new season, playing with the Titans. Currently, Meier is active in the Volleyball League, as a member of the Open League's Monday Maulers and Scared Hitless in League I.

Meier has also scored in the Basketball League and tackled the Touch Football League. As a member of the Runners Club, he raced with BNL's teams entered in corporate events and in the Ocean-to-Sound 50-mile relay. He even tried his hand with the Handball Club one summer.

"I've been involved with BERA sports for a long time," said Meier, and I think it's a great thing for everyone — it gives people something to do beyond 5 o'clock. Since I have gotten so much out of BERA, I thought I'd give something back. But I think BERA is pretty good the way it is."

## Rosalie Piccione

Rosalie Piccione, a contracts specialist with the Division of Contracts & Procurement (DCP), joined the Laboratory's Fiscal Division in 1961 and moved to DCP in 1974. Her BERA activities have included bowling and softball, and, more recently, organizing the popular bus trips to Atlantic City.



"I enjoy working with people and arranging things so that everyone has a good time together, so it's always worth the effort," she says.

Piccione has worked hard to give people the chance to have fun through BERA. As chairman of the BERA Special Events Committee for the past 15 years, she has run family picnics, dinner/theater events on site, and the Lab's 35th and 40th anniversary picnics. She was also a BERA Board member in 1980, 1986 and 1991.

"Being so involved with BERA takes time," admits Piccione. "But I know so many Lab people that BERA club members seem like family. I like the challenge of trying to see that all the different interests in the BERA family are encouraged as much as possible."

## To Your Health

The Health Promotion Program of the Occupational Medicine Clinic is offering the following events. For more information or to register, call Health Promotion Specialist Mary Wood, Ext. 5923.

### Arthritis Lecture

On Long Island, arthritis affects nearly half a million people, while nationally, 37 million are afflicted.



Ronald Bennett

While most rheumatic diseases are not yet curable, they can be successfully managed with proper treatment.

A discussion of "Current Treatment for Arthritis" will be presented at the next Healthline lecture, on Tuesday,

March 19, from noon to 1 p.m. in Berkner Hall.

The talk will be given by rheumatologist Ronald Bennett, who is back by popular demand. During

his lecture, he will focus on the current treatment of rheumatoid arthritis, osteoarthritis, gout and systemic lupus erythematosus.

A diplomate of the American Board of Internal Medicine with a subspecialty in rheumatology, Bennett is in private practice in Port Jefferson and Smithtown and is chairman of the board of the directors of the Long Island Chapter of the Arthritis Foundation.

All are invited; the lecture will be available afterwards on audiocassette in the Research Library, Bldg. 477.

### Strength-Training Workshop

Exercise physiologist Laura Tipaldo is returning to the Lab to conduct a three-part strength-training workshop, from noon to 1 p.m. in the Brookhaven Center on March 18, April 22 and May 28. All are invited to one or all three sessions, and participants are asked to bring a towel and wear comfortable clothing.

On Monday, March 18, Tipaldo will demonstrate and help participants with exercises to strengthen the abdominal and back muscles, which will ward off backaches and improve posture. Then, on April 22, she will go over strengthening moves for the chest, back and arm muscles; and, finally, on May 28, she will review exercises for the legs and gluteus muscles.

## New Web Address for Visitor's Guide

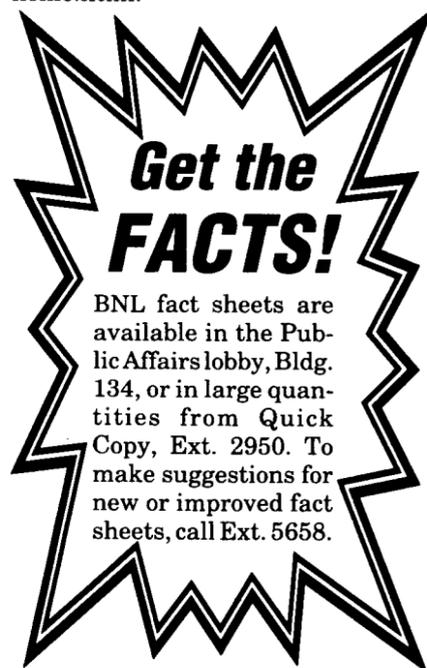
If you're a BNL guest or new employee, or you're hosting Lab visitors or students, here's an important tip: Check out the World Wide Web address [http://www.bnl.gov/PUBAF/insiders\\_guide.html](http://www.bnl.gov/PUBAF/insiders_guide.html).

There, you'll find the complete text of the *Insider's Guide to Visitor Life at BNL*. Of course, paper copies of the guide are still available in the lobby of the Public Affairs Office, Bldg. 134, from many department and division offices and in Berkner Hall.

The *Insider's Guide* lists useful information about living and working at BNL, and visitors and students may wish to read it on the Web before they arrive.

The electronic version is currently available to *all* users, not just those at BNL — due to popular demand, the access has been expanded! Visitors may also be interested in the "If You're Coming to BNL" hotlink from the Public Affairs home page at [http://www.bnl.gov/PUBAF/pubaf\\_home.html](http://www.bnl.gov/PUBAF/pubaf_home.html).

[www.bnl.gov/PUBAF/pubaf\\_home.html](http://www.bnl.gov/PUBAF/pubaf_home.html)



## Computing Corner

The Personal Computer Resource Center in the Computing & Communications Division (CCD) offers the following in CCD's Seminar Room, Bldg. 515:

### Appraisal Templates

For use with WordPerfect for Windows version 6.1, templates for the BNL performance appraisal forms for exempt and non-exempt employees are now available. Supervisors are invited to a demonstration, at 10 a.m. on Tuesday, March 19; bring formatted 3.5-inch diskettes to get copies of the templates. For more information or to reserve a seat, call Pat O'Connor, Ext. 7341.

### Explore Netscape

How to explore the World Wide Web with Netscape will be the subject of a demonstration from 2 to 3 p.m. on Thursday, March 21. For more information, call Laurie Pearl, Ext. 5520, or e-mail [pearl@bnl.gov](mailto:pearl@bnl.gov).

## Next BERA Concert — Music by Bach and Beethoven

The next BERA concert will feature outstanding young artists from the State University of New York at Stony Brook, performing the music of Bach and Beethoven. The concert will be held in Berkner Hall, on Tuesday, March 19, at 8 p.m.

The program will include Bach's *Partita No. 3 in A minor for piano and Beethoven's Clarinet Trio in E-flat major, Op. 38*.

The suggested donation is \$6 per person.

## BROOKHAVEN BULLETIN

Published weekly by the Public Affairs Office for the employees of BROOKHAVEN NATIONAL LABORATORY

ANITA COHEN, Editor  
MARSHA BELFORD, Assistant Editor

Bldg. 134, P.O. Box 5000  
Upton NY 11973-5000  
Tel. (516) 344-2345; Fax (516) 344-3368

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



## Orchids & Dinosaurs On Next Art Bus Trip

Join the Art Society's Orchids and Dinosaurs bus trip to New York City on Saturday, March 30, leaving BNL at 8 a.m. and returning by 8 p.m. The Greater New York Orchid Show in the Winter Garden of the World Financial Center is free; the new dinosaur exhibit and many other glories of the American Museum of Natural History cost \$7, or \$10 including a giant-screen film on the Titanic or on Destiny in Space. The bus cost is \$17. Call Liz Seubert, Ext. 2346 or 286-8563, evenings, for information or reservations.

## Microcomputer Club

Learn how to create a Web page at the next meeting of the BERA Microcomputer Club, at noon on Thursday, March 21, in the CCD Seminar Room, Bldg. 515. There, Edward McFadden will review the basic HTML tags needed for creating pages on the World Wide Web (WWW), as well as tips and techniques. All are invited to attend. For more information, call Steve Stein, Ext. 5694, or visit the WWW location <http://www.bnlmcc.bnl.gov/~bnlmcc>.

## Arrivals & Departures

### Arrivals

Donald C. Elliott.....Instrum.  
Robert G. Grego.....RHIC  
William J. McGrath.....Biology  
Clyde T. Newton.....Safety & Envir. Prot.

### Departures

This list includes all employees who have terminated from the Lab, including retirees:  
John N. Buscemi.....Safety & Envir. Prot.  
James D. Kos.....Director's Off.

## Bowling

### Red and Green League

A. Warkentien 259/212/210/681 scratch series, G. Weresnick 249/232/629 scratch, R. Larsen 239/236/653 scratch, J. Griffin 245/215/621 scratch, W. Powell 218/204, R. Mulderig Sr. 203/200, J. Goode 202/200, H. Arnesen 245, E. Larsen 233, R. Eggert 224, J. LaBounty 221, E. Meier 215, E. Sperry IV 209, B. Geib 208, D. Fisher 204, H. Dawson 202, J. Meier 202.

## Basketball

### Games on February 29

| Bulldogs 76      |    | Scram 47          |    |
|------------------|----|-------------------|----|
| Chuck Bennett    | 13 | Tim Powers        | 15 |
| Brian Hobson     | 11 | Alan Jones        | 8  |
| Doug Aichroth    | 10 | John Skonieczny   | 8  |
| Simon North      | 10 | Joe Barkwill      | 6  |
| Louis Lalor      | 8  | John Duggan       | 6  |
| Pete Ratzke      | 8  | Al Boerner        | 4  |
| Jerry Gaeta      | 5  |                   |    |
| Tracey Fountaine | 4  |                   |    |
| Jeremy Middleton | 4  |                   |    |
| Mike Mallardi    | 3  |                   |    |
| Magic 71         |    | Storm Troopers 39 |    |
| Troy Mayo        | 13 | Hector Machado    | 14 |
| Mitch Williams   | 13 | Robert Prophet    | 7  |
| Ed Gregory       | 11 | Kevin Murray      | 4  |
| Terry Buck       | 7  | Frank Nocera      | 4  |
| Ray Jackson      | 7  | Frank Traylor     | 4  |
| Al Langhorn      | 6  | John Jones        | 2  |
| Robert Singleton | 6  | Alex Ratti        | 2  |
| Fred Maier       | 4  | Ron Simpson       | 2  |
| Pat Browne       | 2  |                   |    |
| Fred Molone      | 2  |                   |    |

Three-point shots: Machado (4), Gregory, Maier, Prophet

## Volleyball

### Standings as of March 8

| Open League       |       | League I          |       |
|-------------------|-------|-------------------|-------|
| Monday Maulers    | 44-13 | Bikers 'n Spikers | 49-14 |
| Pass, Set & Crush | 43-14 | Rude Dogs         | 46-17 |
| Far Side          | 24-30 | Scared Hitless    | 33-33 |
| Spikers           | 25-35 | No Names          | 24-42 |
| Bud Hitters       | 8-52  | Underdogs         | 10-56 |
| League II         |       | League III        |       |
| Safe Sets         | 40-8  | Silver Bullets    | 38-10 |
| Spiked Jello      | 39-9  | Just 4 Fun        | 31-14 |
| Fossils           | 27-21 | Joy of Sets       | 28-17 |
| Monday Nite Live! | 26-22 | Harlem Knights    | 27-18 |
| Jolly Volleys     | 23-25 | Upton Ups         | 27-18 |
| Nuts & Bolts      | 17-31 | DO-DAT            | 19-26 |
| Volley Folly      | 13-35 | High Volley'em    | 19-26 |
| Night Court       | 7-41  | New Comers        | 9-36  |
|                   |       | OER               | 6-36  |

### Note to Employees:

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

## C-W Dance Lessons

The BERA Country-Western Dance Club will sponsor eight weeks of lessons at 5:30 p.m. for beginners and intermediates, and at 6:30 p.m. for couples, starting on Tuesday, April 19. Instructed by Judy and Paul Cutler, the one-hour classes will be held in the North Room of the Brookhaven Center.

The per-person cost is \$25 for the 5:30 p.m. class and an additional \$10 for the couples class. Registrations must be paid by Friday, March 29. For more information, call Marilyn Johnson, Ext. 2546.

## Softball League

### Think Softball

With spring training under way, it is time to think of warm summer nights, the company of good friends, and the joys and frustrations of trying to recapture one's youth — while playing softball.

The BERA Softball League is looking for players, and, since there are slots on teams of all abilities, you don't need to be of major league caliber to join the fun. Games are played Mondays through Thursdays, and employees and spouses are welcome. Women players are especially needed for mixed, as well as open, play. Players may join both a mixed league team and an employees' league team, but may play on only one employees' league team.

For more information, call Rich Scheidet, Ext. 5284, or Joe D'Ambra, Ext. 3764, or e-mail [softball@bnl.gov](mailto:softball@bnl.gov).

### New League Forming

A new league, Employees III, is being organized. Within this league, all team members will play regardless of skill or experience. Teams can lend each other players, so there will be no forfeits. No double-headers or playoffs will be scheduled, and masters rules will prevail.

So far, four teams have joined the new league, but more players are needed. To sign up, call Joe D'Ambra, Ext. 3764; Jim Durnan, Ext. 4617; Bob Marascia, Ext. 4672; or Doug Paquette, Ext. 7046.

## 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 Human Resources Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Human Resources, 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 (344-7744), for a complete listing of all openings.

Current job openings can also be accessed via the BNL Home Page on the World Wide Web. Outside users should open "http://www.bnl.gov/bnl.html", then select "Scientific Personnel Office" for scientific staff openings or "Employment Opportunities" or "BNL Human Resources Division" for all other vacancies.

**OPEN RECRUITMENT** - Opportunities for Laboratory employees and outside candidates.

DD 4508. TECHNICAL POSITION - Requires BSET or BMT, or AAS in electrical or mechanical technology and relevant experience. Primary responsibility will be NSLS experimental safety operations. Duties will include safety-system checkouts and monitoring user safety and conduct of experiments at the beam lines. Shift work is required, as is storage ring operator cross training. National Synchrotron Light Source Department.

DD 3515. OFFICE SERVICES ASSISTANT - (temporary) Requires previous travel-office experience, including several years' SABRE computer experience. Will assist Laboratory staff in all aspects of travel, such as airline, railroad, bus and ferry reservations,

limousine or car rentals, and accommodations. Administrative Support Division.

NS 3832. ENGINEERING POSITION - (temporary/part-time) Requires BS in fire-protection engineering, or a related engineering degree with several years' experience in highly protected risk and life-safety code evaluations (NFPA 101). Must be able to design, develop and conduct loss-prevention programs with minimal supervision. Safety & Environmental Protection Division.

### Motor Vehicles & Supplies

94 CHEVY S10 PICKUP - low mi., 4-spd., bed cover, many extras, like new, mint cond. 727-3863.

92 METRO - 22k mi., 2-yr. factory warr., 5-spd., am/fm, 45 mpg, blue, like new. Joe, Ext. 4496.

92 MITSUBISHI 3000 GT SL - red, gray leather, a/t, full power, 47k mi., bal. of 6-yr./100k mi. warr., \$16,000 neg. Paul, Ext. 2447 or 878-1486.

91 FORD RANGER XLT - 5-spd., long bed w/liner, 67k mi., one owner, runs well, excel. cond., \$6,200. Larry, 727-1412.

91 YAMAHA BLASTER QUAD - new everything, many extras, runs well, excel. cond., \$2,000; go-kart, 8-h.p., off-road, fast, new tires & clutch, \$600. 878-1196.

91 MERCURY CAPRI XR2 - convertible, red, turbo, loaded, 53k mi., \$6,500. Ext. 5360 or 477-8117.

89 DODGE SPIRIT - 4-dr., brown, 4-cyl., cruise, ac, a/t, tape deck, 99k mi., runs well, \$1,600 neg. Peng, Ext. 3869 or 821-0438.

89 COLEMAN POP-UP CAMPER - Sun Valley, sleeps 6, sink, stove, potty, extras, excel. cond., \$3,500. Tom, Ext. 7287 or 744-4535.

88 CHEVROLET SPECTRUM - 4-dr., new brakes, high mi., runs well, \$1,600. Ext. 3884.

88 FORD HI-TOPO CUSTOM VAN - a/t, dual ac, TV, VCR, asking \$5,000. Ken, Ext. 7915 or 929-0823.

88 MITSUBISHI MIRAGE - white, 4-cyl., 4-dr., a/t, ac, am/fm, 70k mi., no rust, excel., must sell, \$3,200. Shin'ichi, Ext. 5898.

86 TOYOTA CRESSIDA - a/t, sunroof, CD, recent tune-up, tires, 122k mi., looks good, runs well, \$2,500. Keith, 654-9057.

86 DODGE COLT VISTA - 5-spd., m/t, high mi., runs well, moving, must sell, \$1,200. Ext. 2707 or 344-1087.

86 NISSAN 300ZX - red, T-roof, a/t, well maint., brand-new cover, 126k mi., \$4,500. Kay, Ext. 2873 or 472-5510.

86 HYUNDAI - 4-cyl., 5-spd., ac, am/fm, 95k mi., good body cond., works, many new parts, needs some work, best offer. Ext. 3881.

85 CUTLASS CIERA BROUGHAM - 4-cyl., 4-dr., full power, cruise control, alarm, am/fm cass., excel. cond., asking \$2,800. Chris, 587-7034.

85 NISSAN - 2-dr., a/t, 134k mi., \$1,000 firm. 864-1798.

84 CADILLAC ROADSTER - V-8, full power, roadster top & grill, 53k mi., mint, \$3,700. Brett, 727-5956.

84 PONTIAC FIREBIRD TRANS AM - black w/gold trim, 5.0-liter eng., V-8, 5-spd., \$1,700 neg. Rich, Ext. 5893 or 744-4816.

84 BUICK CENTURY - s/w, high mi., looks good, runs well, \$1,250 firm. Ext. 7430 or 286-6492.

84 DODGE RAM CHARGER BLAZER 4x4 - good cond, moving, must sell, \$1,500 obo. Frank or Joe, beeper 278-7562.

81 FORD F-100 PICKUP - 6' bed, w/'86 Ford 6-cyl. eng., 3-spd., m/t, new shocks, carb., extras, excel. body, \$750. 929-8418.

81 YELLOWSTONE TRAVEL TRAILER - 20', sleeps 4, shower, stove, refrig., heat, 110 conv.-charger, single axle, new tires, mint cond., \$2,600. 924-0705.

80 MUSTANG - black, red int., sunroof, 302, posi rear, m/t, sunroof, mech. sound, many new parts. Tammy, 924-8626.

79 FORD TRUCK PARTS - hood, door, fenders, 4x4, 4-spd. tranny, CB radio, like new, B&M shifter, 302 alum. manifold. Wayne, Ext. 3084.

79 MERCEDES 240 - diesel, '89 factory rebuilt eng., a/t, p/s, p/w, p/b, ac, new rad., good cond., clean. John, Ext. 7882.

77 BUICK ESTATE WAGON - runs well, \$400. D. Hunter, Ext. 4484.

65 GMC TRUCK - 4wd, heavy-duty, works well, mech. sound & dependable, solid frame, body has rust, \$500. Tony, 298-1932.

MOTOR - Mustang, tranny, rear, tires, GT40 spec. heads, must sell. Ed, 661-9155.

TIRES - 2, B.F. Goodrich A/T, 31x10.5x15", \$50/both. Bob, 737-0751.

### Boats & Marine Supplies

31' BAHAMAS CRUISERS SPORT FISHERMAN - 1987, 454's, 225 hrs., sleeps 4, full canvas, electronics, outriggers, loaded, \$33,500. Dan, 474-9102.

21' PENN YAN - 231c.i., V-6, i/o, solid, \$1,800. Ext. 2012.

### Furnishings & Appliances

CHAIRS - 2 contemp. leather, \$100/both; l/r set, 3-pc., 3 tables, wall unit, oak, basketweave, \$100; stove, Tappan, gas, yellow, \$50. Lloyd, Ext. 5225.

DESK - kid's, white laminate, primary color drawers, \$150; dryer, Kenmore, excel. cond., \$100. Tom, Ext. 7287 or 744-4535.

ENTERTAINMENT CENTER - black, glass door w/2 adjustable shelves, TV shelf, new cond. Bruce, Ext. 2188.

FIREPLACE INSERT - wood-burning, \$500; freezer, G.E., 6 cu. ft., \$75. Chris, Ext. 2972.

FUTON - full-size, 60" wall space w/8" mattress & decorative cover, \$150. Fred, 369-9720.

LIVING ROOM SET - v.g. cond., \$300 obo. Pete, Ext. 4581/5105 or 399-2813 after 5 p.m.

LOVE SEAT - beige, leather, Stern's, excel. cond., \$230; 2 white wicker chairs & table, \$90; 3 navy lounge chair cushions, new, \$60/all. 929-5742.

SOFA BED - Sealy, full-size, 6" innerspring mattress, Scotchguard, beige, excel. cond., \$425. Ext. 5873.

TABLE - 36" round, glass top, birch pedestal & 2 match. chairs, \$175; TV, 27" Fisher, color, stereo, \$225. Linda, 874-8259.

WATER BED - queen-size w/bedding, 6 mos. old, \$250. Pete, 878-8654.

### Tools, House & Garden

HOT WATER HEATER - electric, 30-gal., new, never used, \$100 obo. Roy, 727-6714.

PATIO SET - 6 chairs w/cushions & matching umbrella table, 40"x96", Scotchguard & pvc, all covers, orig. \$2,000, now \$1,000. John, 395-5922.

TABLE SAW - Sears Craftsman, older model, works well, many extras, \$250. John, 395-5922.

PLOW - Craftsman, tractor, \$150. Emil, 473-3120.

### Sports, Hobbies & Pets

BICYCLE - road touring, 28", 10-spd., mint cond., \$120. Shin'ichi, Ext. 5898.

DIRT BIKE - 1995, MSR SYS 6, shirt, pants, boots, gloves, chest protector, goggles, \$225; ABU RX helmet, \$180. Dan, Ext. 4605.

GOLF CLUB - Taylor Bubbis Burner copy driver & 5 wood, \$100 ea. Emil, Ext. 4289 or 473-3120.

IGUANA - + all, \$50. David, Ext. 4432 or 473-9678.

ORGAN - Gulbransen, spinet, \$250. Ext. 2460 or 281-2471. John, Ext. 2460.

PING-PONG TABLE - good cond., best offer over \$100. 286-3742.

POOL TABLE - full-size regulation, slate, v.g. cond., \$250. Dick, Ext. 2486.

SKI BOOTS - Koflach, size 9 1/2, front-entry, 4 buckles, used 5 times, excel. cond., paid \$300, now \$50 obo. Don, Ext. 7237 or 929-6571 after 5:30 p.m.

SLANTBOARD - Weider, full length, vinyl coated, 2" high-density foam, upholstery incline board, folds for easy storage, \$40. Fred, 369-9720.

### Audio, Video & Computers

COMPUTER - PC, 486DX7-66, 8MB RAM, internal modem, 14" monitor, 342 drive, other extras, \$600. 737-0751.

COMPUTER - IBM, AT 286, 1MB RAM, 40MB HD, 14" monochrome monitor plus keyboard, \$250; printer, Epson LQ 570+, \$150. Marvin, 791-4342.

COMPUTER - Panasonic multimedia laptop, CF-V41, internal CD, built-in sound, 486 w/BMB memory, 420 MB HD, color TFT display. Ext. 7056.

COMPUTER - 386 SX-20, 65MB HD, 4MB RAM, floppies, VGA color, mouse, \$425, w/8MB RAM, \$525. Dorian, Ext. 7316.

DISKMAN - Magnavox, anti-shock, shuffle & dynamic compression, \$55. Ron, Ext. 4553.

KEYBOARD - Roland U-20, \$500; Roland JC120 amp, \$500; Roland GP8 guitar effects system, \$300. Greg, Ext. 2575.

MOTHERBOARDS - DTK, 386DX33 w/math coprocessor, \$45; Magtronics 386DX40, \$40. Bart, Ext. 2005 or 924-6761.

STEREO - Proton amp/rec., CD player, cassette deck, 2 Boston speakers, make offer. Janet, Ext. 2345 or 929-3910.

TURNTABLE - Pioneer, PLS40 direct drive, quartz lock, Audio Technica cartridge, \$95. Artie, Ext. 7934.

VIDEO GAME - Nintendo deluxe joystick, NAS Advantage, 18 games w/TV, \$300. John, 395-5922.

### Miscellaneous

FOX COAT - full-length, size 14-16, excel. cond., \$475. 473-5063.

DIAMOND RING - 1.13 cts, VS2 clarity, I color, GIA certified, papers, insurance appraisal, platinum setting. TJ, 333-6740.

ENGAGEMENT RING - center stone 70 pts., G-color, VS2, round, w/10 side stones, total weight 95 pts., appraised, \$3,350, asking \$1,800. 399-1512.

SHOES - men's, black, 11D, now \$70, now \$30; Farberware turbo convection oven, auto. temp. control, timer, \$50. 475-7257.

TICKETS - Johnny Mathis, Roberta Flack, Radio City Music Hall, May 11, 8 p.m., orchestra seats, \$40 ea. George, 472-1479.

TICKETS - Broadway musical *Sunset Boulevard*, April 27th, 8 p.m., 2 orch. seats, 15th row, center, \$70 ea. Don, Ext. 5533.

### Free

LIZARD - Sudan plated. 727-6714.

MATTRESS & BOXSPRING - double-size. Ken, Ext. 4514.

UTILITY TABLES/EXTERIOR DOORS - some w/glass valance, some w/adjustable windows, you pick up. TJ, 333-6740.

### Wanted

BABY-SITTER - reliable person, 3-4 days a week from 7:30 a.m. to 8:30 a.m. in Shoreham. Ext. 3479.

BASKETBALL HOOP - portable, must be in good cond., reasonable. 821-7879 eves.

CANOE - 15'-17', used, good cond., Ed, Ext. 5360 or 477-8117.

COMPUTER - old 286 computer system for gifted high school student, reasonable. Bill, 878-6016.

HOME - for 8 mo. old, mixed Lab & Shepherd dog, neutered male. Dina, 543-4919 after 5 p.m.

HOUSE TO RENT - 3 or 4 bdrm., Mattituck-Cutchogue SD, professional family. Ext. 7657 or 298-9560.

MARINE FISH ENTHUSIAST - share experiences, chat fish & possibly show off tank setups. Ext. 4617.

OBOE - Miiza, 821-6916.

PERSON - who sells origami earrings. Janet, Ext. 2345 or 929-3910.

VIDEO RECORDING OF GULLIVER'S TRAVELS - 2-part series to copy. Victor, Ext. 2395.

### In Appreciation

My sincere appreciation to my friends at BNL for their kind expressions of sympathy after the recent loss of my father.

— Don Farnam & family

Thanks to all my friends for your thoughtfulness. Your gift is greatly appreciated. Love always.

— Tina Rogowski