

## BNL/SUNY Collaboration Promises to Help Cancer Patients

Ground was broken Monday for a new facility that will not only breathe new life into a quiet pavilion of BNL's Medical Research Center, but will also help extend the lives of Suffolk County cancer patients.

The Radiation Therapy Facility (RTF), which will adjoin the back of the Medical Research Center, will provide radiation treatment for cancer patients. The RTF also marks a new collaboration between BNL and the State University of New York at Stony Brook.

"This is really the start of a very productive, integrated collaboration between Brookhaven and Stony Brook, and it not only involves ideas and people, but also equipment, building and money," said Richard Setlow, BNL's Associate Director for Life Sciences, who presided over Monday's ceremony.

"Important linkages are being forged between Brookhaven and Stony Brook," said Jordan Cohen, Dean of the Medical School at Stony Brook.

William Newell, Executive Director



Getting a leg up on the new collaboration are William Newell Jr., Executive Director and Chief Executive Officer of the University Hospital at Stony Brook; Allen Meek, Chairman of Radiation Oncology at Stony Brook; Arjun Chanana, Chairman of BNL's Medical Department, and RTF Project Coordinator Kenneth Kowalski, of BNL's Plant Engineering Division.

of University Hospital at Stony Brook, concurred, saying that the combined efforts of Brookhaven and Stony Brook have the potential to make significant strides in the field of cancer research.

The collaboration will provide Stony Brook clinicians with greater opportunities for research, while offering BNL researchers the benefits of Stony Brook's clinical expertise.

"It's a good marriage," said Setlow.

At the heart of the RTF will be a linear electron accelerator, or linac, that will produce high-energy electrons. The electrons can be used directly to treat cancer, but they first are usually converted into gamma radiation. The state-of-the-art accelerator will be the best in Suffolk County, shooting beams of radiation at up to 25 million electron volts (MeV) compared to the 15 MeV now available at the University Hospital at Stony Brook.

Commenting on the RTF, BNL Director Nicholas Samios said, "I am pleased that we could get together with Stony Brook to obtain a machine that's much better — for less money!"

As part of the agreement between BNL and Stony Brook, the University will pay about \$700,000 for the linac, which is being provided at about half price by the manufacturer, Philips Medical Systems, Inc., of Shelton, Connecticut.

BNL will spend about \$850,000 to construct the building to house the linac. According to Project Coordinator Kenneth Kowalski of BNL's Plant Engineering Division, the building should be completed in about a year, and the RTF should be operating in about 18 months.

Because of the strong beams of radiation, the building will have to be heavily shielded: The walls will be seven feet thick in places, and the ceiling above the accelerator will be three feet thick.

The RTF plans were drawn up in near-record time by the Design and Construction Division of Plant Engineering.



Monday's ground breaking for the Radiation Therapy Facility at BNL marked the start of a new cooperative effort between the Lab and the State University of New York at Stony Brook. Working together are Jordan Cohen, Dean of the School of Medicine at Stony Brook; Marvin Kushner, Chairman of the Board Trustees of Associated Universities, Inc.; Richard Setlow, BNL's Associate Director for Life Sciences; and BNL Director Nicholas Samios.

— Photos on this page by Roger Stoutenburgh.

"It's been a little over three years since this project really started," said Setlow, "and it's remarkable that, in this short time, plans could be made and all the approvals could be gotten."

Approvals for the RTF came from the U.S. Department of Energy, Associated Universities, Inc., and New York State, as well as Stony Brook and BNL.

At Stony Brook, the project was spearheaded by Allen Meek, Chairman of the Department of Radiation Oncology, and is now being coordinated by Lucien Wielopolski, formerly a BNL researcher and now a medical physicist at the University. Arjun Chanana, Chairman of BNL's

(Continued on page 2)

## Blaze Damages Part of Bldg. 422

The cause of the Thursday, June 15, fire that damaged part of Bldg. 422 is being investigated by a committee appointed by the Manager of the Brookhaven Area Office of the U.S. Department of Energy, Jerry Bellows.

The blaze, which occurred at night in the middle of a thunderstorm, charred the interior of the concrete extension housing the Cabinet Shop's finishing workroom.

An undetermined amount of damage was caused by the flames and smoke, but no one was injured. By destroying the finishing shop, the blaze did displace the Cabinet Shop's finisher, Celso Ponce, who has been forced to move his trade entirely to a second spray shop in Bldg. 458, one formerly used only for very large objects.

The Red Shift of the Fire & Rescue Group, Safety & Environmental Protection (S&EP) Division, successfully extinguished the fire within 15 minutes of its discovery.

The fire alarm for Bldg. 422 was received by Timothy Devine, the firefighter on watch, at 10:15 p.m., following a lightning strike during a thunderstorm that both hit BNL's firehouse, Bldg. 599, and set off a half-dozen fire alarms around the site.

The flames in Bldg. 422, which sits opposite the firehouse on Brookhaven Avenue, were discovered by Fire Captain Robert Safranek and Firefighter Paul Larson on their first stop in rounds to check the alarms. When they radioed the news back to the firehouse, the other firefighters could see smoke coming from the building extension.

After breaking the glass of the northwest door and reaching in to open the entrance, the firefighters quenched the blaze with a 2½-inch hose line from BNL's Engine 1, a class A, 1,000-gallon pumper.

With Devine and Firefighter James Forkin as backups, Firefighter Paul Larson fed the hose, and Firefighter

(Continued on page 3)

## BNL's Testing Ability Attracts Taiwan Magnet

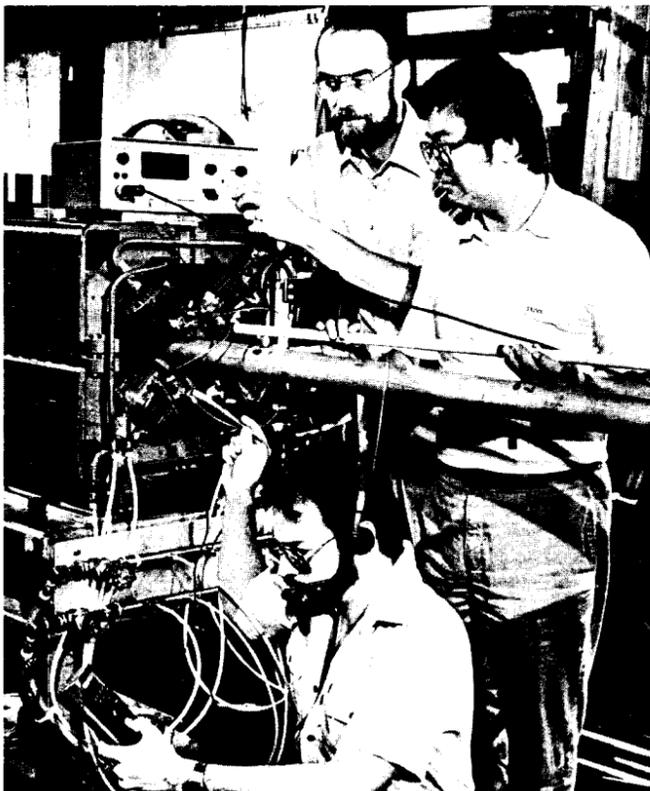
The Magnet Test Group in the Magnet Division of the Accelerator Development Department (ADD) has magnet-measuring capabilities not available in Taiwan — so where else in the world would Taiwan send its prototype quadrupole magnet for the Taiwanese national Synchrotron Radiation Research Center (SRRC) but to BNL?

Designed to have 1.3 billion electron volts of energy, the electron storage ring at Taiwan's SRRC should be completed in the city of Hsin-Chu by end of 1991. Involved as advisors to the project on magnet issues are BNL's William Weng, ADD, who is project manager of the Booster accelerator now under construction for BNL's Alternating Gradient Synchrotron; and Hank Hsieh, Associate Chairman for Mechanical Engineering at BNL's National Synchrotron Light Source.

Because the SRRC magnet-testing equipment was not in place, Weng and Eric Willen, head of the Magnet Division, arranged for the testing of the Taiwanese quadrupole prototype at BNL. If satisfied with the prototype's test results, the Taiwanese will begin production of the quadrupole magnets, which will focus the electron beam within the SRRC synchrotron.

After arriving on May 14 and being set up for testing, the Taiwanese prototype was subjected to two types of tests between May 26 and June 6 to see what the magnetic field strength and other parameters actually are compared to specification.

To learn more about synchrotron storage ring design, representatives from SRRC will be back at BNL this summer, attending the 1989 U.S. Particle Accelerator School, July 24-August 4.



J.H. Huang (center), of Taiwan's Synchrotron Radiation Research Center (SRRC), is checking the installation of the Hall probe used to measure the magnetic field strength of the prototype of the SRRC quadrupole magnet. During the two weeks of prototype testing, 15 BNL'ers were involved, including Peter Wanderer (top) and John Cintorino, both of the Magnet Test Group of the Magnet Division, Accelerator Development Department.

# Meet the Viking's Daughter and Her Scientist-Author

*She loved with abandon. She grappled with brutal and determined enemies. She set loose the dark forces of ancient mystical faith as Christianity claimed new followers and threatened time-honored beliefs. Ultimately, she fought for her own redemption and the salvation of her people. Her name was Gudrid, and the Norse sagas have immortalized her as "a most accomplished woman."*

These words, which grace the inner flap of a book jacket, describe the heroine of a new novel — one written by BNL's John Andrews and just published by Doubleday.

*A Viking's Daughter* is the first novel by Scientist John Andrews, who heads the Architectural & Buildings Systems Division in the Department of Applied Science (DAS). His 307-page, fictionalized account of Gudrid's life in Iceland, Greenland and the New World was officially released to bookstores on Monday.

## Chapter 1: The First Review

The reviewers got their copies first, and the first reaction came on May 26, when *A Viking's Daughter* was enthusiastically reviewed in the prestigious *Publishers Weekly*:

... the author develops this robust first novel around the triumph of a strong-willed woman, an 11th century chieftain's daughter. Gudrid, daughter of Bjorn, grows to young womanhood as Christianity is gaining a foothold in Greenland, but clinging to the old ways, she relies on the magical powers of an amulet bequeathed by her mother. ... The Viking culture, with its emphasis on mysticism and the harsh rule of law, is the backdrop for this involving novel. ... Andrews, a physicist ... has created a commanding heroine and placed her in a vividly depicted setting.

## Chapter 2: The Saga Influence

Gudrid, however, is not entirely Andrews' creation. He met her and the other characters that people his novel while reading the *Vinland Sagas*, which encompass the *Saga of Erik the Red* and *The Greenlanders' Saga*. Like other Norse sagas, these narratives center on legendary or historical figures or families. First written down around the year 1200, they were composed from the 11th to the mid-14th centuries.

"They are difficult for the modern reader," says Andrews, "because there are so many characters in them. But if you can get beyond that, you can tell a lot about what the society was like and how behavior was regulated."

The modern reader who is interested in learning about this society can now take a short cut: Andrews' book draws a clear and absorbing picture of Norse life in Gudrid's times. The characters are painted as distinct individuals. The harshness and brutality that punctuated their lives, is often met with dignity, gentleness, fairness and wisdom.

How heavily did Andrews lean on the sagas for his interpretation?

For the major events that affect his

characters, he says, "I tried to be consistent with the saga, as much as possible. And when I departed from the saga, as I did with Thorstein and the bear, I tried to escape."

Thorstein is Gudrid's first husband, who dies a brutal and unheroic death in what Andrews calls one of his "crescendo" scenes. Andrews included Thorstein's bloody encounter with the bear to advance the plot, but, since it contradicts the sagas, he "escaped" by having Thorstein's father Erik decree, "It won't do for this to be told abroad. When outlanders come here, say Thorstein died of a sickness." Thus, Andrews got back on track with the Saga of Erik the Red.

Are there more such instances? Andrews says, "For anyone who gets interested, I highly recommend that they get the *Vinland Sagas* and read it, and they can see how much of *A Viking's Daughter* is saga, how much is John Andrews."

Since the sagas were written by men, with a very masculine point of view, what prompted Andrews to write his novel about a relatively minor woman player? "I was drawn to Gudrid's story. I liked her," he explains. "She seemed strong-willed, and the writers of the saga described her as 'beautiful and capable.' I got the impression that she just didn't go along for the ride."

## Chapter 3: A Natural Step

Gudrid began to come to life again in the early 1980's, when Andrews started writing the first of three drafts of *A Viking's Daughter*. But the process actually started when Andrews was a teenager in the 1950's, with a fascination for the Vikings and their visits to America. Following a 1972 trip to Newfoundland to view a site uncovered in the 1960's where traces of Norse houses and artifacts were found, Andrews began reading the Icelandic sagas.

The step from reading about the Vikings to writing about them was a natural one for Andrews. "It seemed like it would be interesting to get into their heads and see what life was like from their point of view," Andrews recalls. "Then the idea built up in the 1970's that there might be a receptive audience, that the time might be right for it."

Trained as a scientist, with a Ph.D. in physics from the University of Notre Dame in 1967, Andrews made his first major attempt at writing in the early 1970's and produced "a sort of science fiction novel that's still sitting in my drawer — a learning experience."

Meanwhile, he was gaining other experience, as a scientist, which brought him to BNL as a guest researcher in the Physics Department in the 1960's and to the DAS staff on a permanent basis in 1977.

While doing science full-time, Andrews still found moments to begin *A Viking's Daughter*. "I wrote whenever I could," he says, "and I couldn't have done it without a word

**John Andrews, author of the new novel, *A Viking's Daughter*, points to the area of Greenland where the heroine of his book settled after leaving her native Iceland, almost 1,000 years ago.**



Roger Stoutenburgh

processor. I took a printout with me everywhere I went."

## Chapter 4: The Workshop

After writing the novel, and then rewriting it, "I realized that it still needed work," Andrews says. That's when he joined the Ashawagh Hall Writers Workshop in East Hampton, which he found "very helpful in learning what works with people and what doesn't. Often you come up with an idea, and you wonder, 'Will people buy it?'"

For example, to convey the feeling of a novel set almost 1,000 years ago, Andrews first had his characters speaking in a rather archaic style. "The workshop had a problem with that," he said, "so I switched to a more modern style, and it seemed to work better."

Reading his novel to the workshop members, about three-quarters of whom were women, was an eye-opener for Andrews. "Almost without exception," he says, "when I experimented with being more graphic, they pushed for it. If it was part of the story and moved the story forward, they were all for it."

## Chapter 5: A Bit of Luck

Andrews finished his 46-chapter third version in February 1988. He had been looking for an agent on the advice of workshop leader Marijane Meaker, but, before he contracted

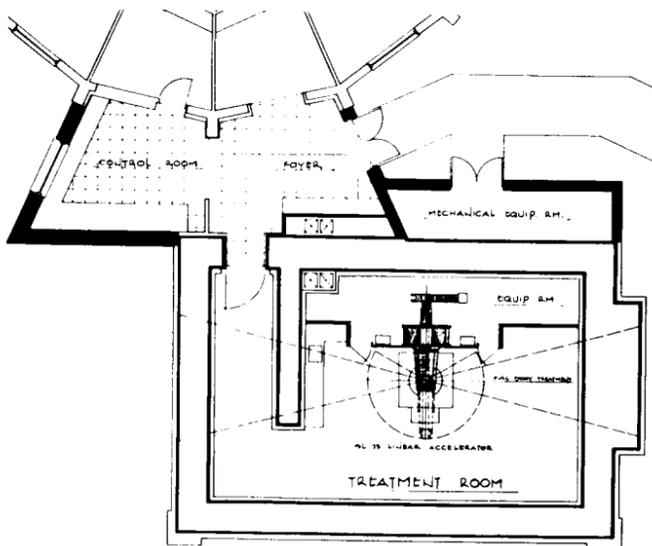
with one, another workshop member "talked my book up to a finder at Doubleday, who passed it to her editor," Andrews says.

"She loved it," he recalls. "There's always an element of luck, and that was mine. I think you need three things to be a writer: a certain amount of talent, an inner need to keep at it — and a bit of luck!"

## Chapter 6: The Sequel

Now that the dream Andrews began permitting himself to dream as his third draft took shape is about to come true, and books bearing an artist's conception of Gudrid's likeness and John Andrews' name are in the bookstores, he is not going to sit back and relax. He's already working on a sequel, which catches up to Gudrid in northern Iceland, 12 years after the events that conclude *A Viking's Daughter*. He does, however, have more time to write these days, as he works at DAS only half-time now.

The sequel to *A Viking's Daughter* will also be based on a saga, this time the *Njalsaga*, which Andrews calls "the most highly regarded of all the Norse sagas. I want to involve my character in some of the events of that saga," says Andrews the author — and then the scientist comes out — "sort of like adding a reagent to a chemical reaction." — Anita Cohen



**Diagram of the Radiation Therapy Facility, to be constructed behind the Medical Research Center in Bldg. 490.**

## BNL/SUNY

(cont'd)

Medical Department, led the Lab's participation in the project.

"This is just the beginning," said Chanana, who is also the Dean of Stony Brook's clinical campus at BNL. "We fully understand that our mission will be to turn this into a first-class teaching, learning and healing facility that both institutions can be proud of."

The RTF will become part of the University Hospital, serving all of Suffolk County. Its location at BNL will be especially convenient for cancer patients coming from the east.

It will be staffed by Stony Brook clinicians, with BNL providing some support staff. BNL researchers see the presence of the Stony Brook clinicians as a vital ingredient to their continuing research into cancer therapies.

When the time comes to apply new techniques on real patients, licensed Stony Brook physicians will be needed. Stony Brook personnel will also provide their expertise in med-

ical physics and dose planning. That expertise is needed to decide what type of therapy is best for a patient, how strong a radiation dose should be used and how it should be applied — decisions that are crucial when attempting to destroy a cancer most effectively while minimizing the damage to the surrounding healthy tissue.

The collaboration has benefits for Stony Brook clinicians, as well. The facility will provide state-of-the-art training for medical interns and residents and radiation therapists. In addition, the Stony Brook physicians will have opportunities for research at BNL and a chance to learn the latest techniques for cancer therapy.

"This is like a dream come true, to me," said Meek.

"Both institutions — Brookhaven and Stony Brook — have something to gain," said Setlow.

But the people who have the most to gain will be those who need the treatments: the cancer patients, who hope to gain a new lease on life.

— Kevin Eber

**Blaze**

(Cont'd)

Kevin Cosgrove and Fire Sergeant William Leigh-Manuell controlled the nozzle. They were assisted by Firefighters Linda McCarthy and John Foley.

Their quick action prevented the flames' spread to the rest of Bldg. 422, a wood-frame structure housing the Cabinet and Paint Shops.

As all of the Red Shift was involved in this action, the off-duty White and Blue Shifts were called in case the blaze grew or another one of the alarms proved to be true. Before they arrived, however, the Ridge Fire Department came on the scene, responding promptly to BNL's mutual aid call with their class A pumper and ambulance.

To determine the fire's source, the investigative committee will be sifting through the debris for clues. The committee first met on Friday, June 16, and expects to make its preliminary report to the Brookhaven Area Office by July 15.

Headed by Charles Flood, S&EP, the committee includes Lewis Jacobson, Plant Engineering (PE) Division; Kenneth Kowalski, PE; and Joseph Levesque, S&EP.

"Our investigations are proceeding — we've already examined the scene of the fire and are now in the process of doing interviews," explains Flood. — Marsha Belford



Peter Horton

The June 15 fire scorched the interior of the Cabinet Shop's finishing workroom, a concrete extension to Bldg. 422. Three pressure tanks (foreground), used in the spraying of lacquer, sealer and paint, survived the blaze, and are back in service after being refitted with new hoses.

**Radio Club**

The BERA Amateur Radio Club will meet in Room C, Berkner Hall on Thursday, June 29, at noon.

The agenda includes a report on the progress of the UHF repeater conversion, and other upcoming club activities.

All licensed radio amateurs who work at the Lab are invited to attend; those who are interested in becoming licensed amateur radio operators are also welcome.

For more information, contact Andy Feldman, Ext. 3264, or Bob Bacharach, Ext. 7790.

**BROOKHAVEN BULLETIN**

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**Take Time for the Brookhaven Book Review**

Attention BNL bookworms: Wiggle out of your wormholes and inch down to Berkner Hall on Thursday, June 29. From 10 a.m. to 3 p.m., you can browse through the pages of scientific, professional and technical books hot off the presses of 12 leading publishers — at the first annual BNL Book Fair.

Sponsored by the Technical Information Division (TID), the Book Fair is a one-day opportunity for members of the BNL reading community to become literary critics — and to recommend the purchase of those books that get good reviews.

The publishers that will display the new and the noteworthy are: Academic Press, Addison-Wesley, American Institute of Physics, American Society of Mechanical Engineers, Cold Spring Harbor Laboratory, Elsevier Science Publishers, Gordon and Breach, National Institute for Standards and Technology (formerly National Bureau of Standards), Oxford University Press, Pergamon Press, and John Wiley & Sons.

"Only those who are doing the research, writing the programs or developing the devices know what books they need — but they have to tell us what they want to read, so the library can make the purchases," explains Senior Librarian Harriet Martin, TID, who is organizing the Book Fair with Librarian Doris Alkes, TID. "We hope that the Book Fair will make it easier for library users to make their book-purchase recommendations known to us."

Whether for the Research Library, one of the Lab's 16 branch libraries or for an individual staff member, all books at Brookhaven are purchased through the Technical Information Division, using its own or other departments' funds. At the Book Fair, book-purchase recommendation forms will be available for reviewers at each of the 20 book-display tables.

"As information is no longer free and books have become costly, we hope that the Book Fair will encourage BNL's reading community to help us spend the Lab's book dollars wisely," concludes Martin.



Roger Stouenburgh

Doris Alkes (left) and Harriet Martin prepare for next week's Book Fair.

**Aerobic Dance: Summer Program**

The Aerobic Dance Club has announced two afternoon summer programs: Monday stretch classes and Tuesday aerobic dance classes.

Both sets of classes run from 5:15 to 6:15 p.m. A mat is suggested for floor exercises in both kinds of classes.

The fee for each ten-week session is \$30, payable at registration, which will precede the first class, to be held as follows:

- Stretch — Monday, July 10
- Aerobic Dance — Tuesday, July 11

To confirm the location of each class, or for more information, call Bill Leonhardt, Ext. 2378, or Janet Sillas, Ext. 2345.

**National Safety Week  
June 25 — July 1, 1989**

It's the age of computers, home-entertainment centers, automation and electronic technology in the workplace. Americans today enjoy the benefits of electricity more than ever.

But there's a down side to this modern miracle: Thousands of individuals die or are seriously injured from electrical shock every year due to simple neglect or carelessness. These statistics, provided by Leo DeBobes, Safety & Environmental Protection Division, who is president of the Long Island Chapter of the American Society of Safety Engineers, should spur us all to "Turn on to Electrical Safety":

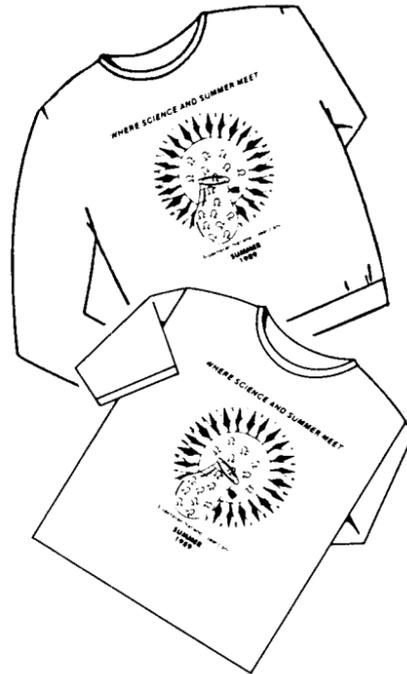
- Electrocution is the fifth leading cause of work-related death from injury.
- Annually, there are more than 600 deaths by electrocution in and around U.S. homes.
- In 60% of work-related deaths, the victim was not involved in electrical work, but was using defective equipment or not following standard safety practices.

**Summer T-Shirts and Sweatshirts**

"Where Science and Summer Meet" is the theme of this summer's BNL T-shirts and sweatshirts, now on sale to all employees, students and visitors. T-shirts are \$6 each, sweatshirts are \$12 each, including tax.

These blue-with-white-print shirts are 50% cotton and 50% polyester, for minimal shrinkage. They are available in unisex adult sizes: small (34-36), medium (38-40), large (42-44), extra large (46-48); and unisex children's sizes: small (6-8), medium (10-12) and large (14-16).

Shirts must be ordered by July 21, and each order should be accompanied by cash or a money order made payable to "Renée Flack — Shirts '89." No personal checks, please. Orders and payments can be mailed or brought to Renée Flack, Affirmative Action Office, Bldg. 185A, Ext. 3316. Allow two weeks after placing order for delivery.

**IBEW Meeting**

Local 2230, IBEW, will hold its regular monthly meeting on Monday, June 26, at 6 p.m. in the Knights of Columbus Hall, Railroad Avenue, Patchogue. There will also be an afternoon meeting at 2 p.m. for shift workers in the Union office at 31 Oak Street, Patchogue. The agenda includes regular business, committee reports and the president's report.

**Scoop of the Week**

Summer started June 21 — so the first Scoop of the Week during this second annual summer contest goes to Peter Wanderer Jr., Accelerator Development Department, for his tip that "BNL's Testing Ability Attracts Taiwan Magnet."

Throughout the summer, Bulletin readers are invited to trade their hot tips for scoops of frozen yogurt in the Scoop of the Week contest. To enter, rush your ideas for Bulletin news or features to the Brookhaven Bulletin, Bldg. 134, or call Ext. 5053. If you scoop the Bulletin's informed sources and a story based on your idea is published, you'll win an official certificate for soft-serve, frozen yogurt, redeemable anytime at the Cafeteria.

**You Ought to Be In Pictures**

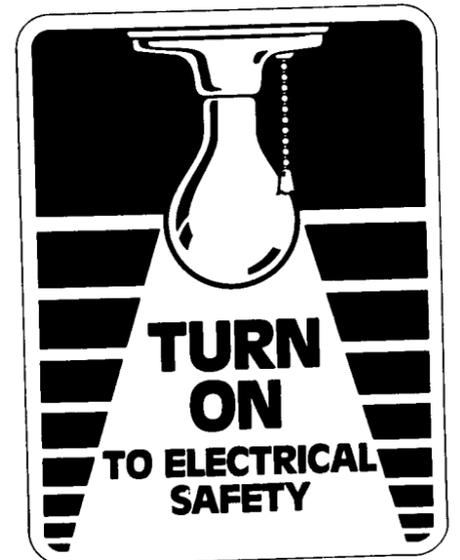
Attention: Brookhaven Women in Science (BWIS) members past and present — a picture of the group will be taken on Tuesday, June 27, at 3 p.m. in front of the BNL entrance sign by the main gate. The rain date is Wednesday, June 28, at 3 p.m.

The photo will be used during BWIS' tenth anniversary celebration during the week of October 30, when the group will sponsor lectures, a workshop, a reception and other events to commemorate becoming ten years wiser. For more information, call Marsha Belford, Ext. 5053.

**Local Users Group**

"Overview of the Computer and Communications at BNL" will be the topic at the next meeting of the Upton Local Users Group (LUG), on Wednesday, June 28, at 10:30 a.m., in Room B, Berkner Hall. Attendees will participate in open discussions and have the opportunity to offer comments and suggestions about the facilities provided by the Computing & Communications Division.

This session completes LUG's third year. LUG monthly meetings will resume in September, with dates and topics to be announced at a later date. Your recommendations for topics and speakers would be appreciated. Your participation and assistance in the future are also welcomed.



# Softball

## Standings as of June 16

League I	League IV
Phoubars 4-0	Snake Bites 6-0
Blue Jays 3-1	Simply Awesome 4-1
Cool 'n Gang 2-2	Survivors 4-1
Six Pax 2-2	Spacekads 3-3
Light Source 1-3	Kidz-R-Us 2-3
Ravens 0-4	Hounds & Foxes 2-4
	Farm Team 1-4
	Foul Ups 0-6

# Arrivals & Departures

## Arrivals

Xihong Bai .....Biology  
Valerie A. Yantsos .....Biology

## Departures

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

Sally D. Calabrese .....Plant Eng.  
Jian Zhang .....Accel. Dev.

# Cafeteria Menu

## Week of June 26

### Monday, June 26

Soup: Ham & vegetable	(cup) .75
	(bowl) .95
Chicken breast Chablis w/pot. or veg.	3.10
Parmesan-yogurt baked fish w/pot. or veg.	3.10
Lite-line: Light Waldorf salad	2.85
Hot deli: Open roast beef sandwich	2.85

### Tuesday, June 27

Soup: Turkey noodle	(cup) .75
	(bowl) .95
Flank steak w/creamy mustard sauce & pot. or veg.	3.10
Chicken broccoli-cheese bake	3.10
Lite-line: Broiled beef au jus w/pot. or veg.	3.10
Hot deli: French bread pizza	2.85

### Wednesday, June 28

Soup: Cheddar-broccoli chowder	(cup) .75
	(bowl) .95
Apple-ginger pork chop w/pot. or veg.	3.10
Deep-fried ravioli w/sauce Italienne & garlic bread	3.10
Lite-line: Oriental bean-sprout salad	2.85
Hot deli: Patty melt	2.85

### Thursday, June 29

Soup: East-side chicken chowder	(cup) .75
	(bowl) .95
Pasta w/turkey & vegetables	3.10
Country-fried steak w/pot. or veg.	3.10
Lite-line: Steamed turkey w/pot. or veg.	3.10
Hot deli: Homemade burritos	2.85

### Friday, June 30

Soup: Fish chowder	(cup) .75
	(bowl) .95
Chinese pepper steak	3.10
Tomato-basil baked fish w/pot. or veg.	3.10
Lite-line: Broiled whitefish w/pot. or veg.	3.10
Hot deli: Open turkey sandwich	2.85

# Classified Advertisements

## Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position, with consideration given to candidates in the following order of priority: (1) present employees within the department and/or appropriate bargaining unit, with preference to those within the immediate work group; (2) present employees within the Laboratory as a whole; and (3) outside applicants. In keeping with the Affirmative Action plan, selection decisions are made without regard to age, race, color, religion, national origin, sex, handicap or veteran status.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all non-scientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment.

Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement listing, contact the Employment Manager, Ext. 2882.

**SCIENTIFIC RECRUITMENT** - Candidates may apply directly to the department representative named, or through the Office of Scientific Personnel, Ext. 7813.

**POSTDOCTORAL RESEARCH ASSOCIATE** - in Radionuclide and Radiopharmaceutical Research Group, for recent Ph.D. trained in organic or organometallic chemistry, to conduct research involving radiolabeling monoclonal antibodies. Contact: Arjun Chanana, Medical Department.

**STAFF POSITION** - using synchrotron x-ray optics to develop a monochromating computed system on the X-17 superconducting-wiggler beam line at the National Synchrotron Light Source. Contact: A. Dilmanian, Medical Department.

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees only.

4074. **DATA SERVICES ASSISTANT** - (part-time) Requires AAS in related field or equivalent, previous IPAP/J-CARS experience and accurate keyboard skills. Will be responsible for inputting data, running programs, preparing and distributing printed output, downloading and uploading data from mainframe. Additional responsibilities will include a wide range of clerical duties including typing and maintaining files. Computing and Communications Division.

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

4075. **TECHNICAL POSITION** - Requires AAS in electronic technology or equivalent and experience in constructing, testing, repairing, and maintaining rf equipment. Previous experience with digital circuitry and power supplies desirable. Alternating Gradient Synchrotron Department.

4076. **TECHNICAL POSITION** - Requires AAS in electronic technology and a minimum three years' experience in both analog and digital circuitry. Responsibilities will include prototype construction, testing, troubleshooting and maintenance of pulsed power supplies. Familiarity with SCRs, power transistors, thyristors and ignitrons is desirable. Knowledge of both analog and digital associated controls helpful. Alternating Gradient Synchrotron Department.

4077. **CLERICAL POSITION** - (part-time) Requires a good knowledge of office procedures and accurate typing skills. Will assist project secretary in a wide range of clerical functions including filing, photocopying, distributing mail. Previous telephone experience essential. Word processing experience helpful. Accelerator Development Department.

## Motor Vehicles & Supplies

89 TRAILER - enclosed, galvanized frame, 4'w x 8'1 x 4'h, mint cond., \$650. Jim, Ext. 7971 or 286-1358.

88 IROC-Z28 - p/s, p/b, p/w, p/seats, T-tops, a/c, p/mirrors, a/t, mint cond., 18k mi., every option, \$11,000. John, Ext. 5318.

76 MERCURY CAPRI II - 4-spd., 4-cyl., high mi., good tires, reliable, \$250 neg. Biays, Ext. 2946.

73 POSTAL JEEP - LHD, 6-cyl., a/t, runs well, best offer. Ext. 2172 or 744-4386.

72 VOLVO NORDIC TROCER - 150k mi., runs well, some rust, 4-dr., 4-spd., 4wd, efi, am/fm, new tires & battery. Paul, 864-5755.

70 TR6 - red, convertible, very good cond., 42k mi., asking \$4,800. Ove, Ext. 5297.

COACHMAN SLIDE-ON TRUCK CAMPER - 11 1/2', good cond., \$1,250. Ext. 4529 or 929-4258 after 6 p.m.

TIRES - P205/70R14; P205/70R15; P205/70R13, all good tread, \$15 for 13 & 14", \$20 for 15". Myles, Ext. 3312.

ALUM. RIMS - 85 Mustang GT, 4-lug, ask. \$250; Chevy 4x4, 6-lug, w/225LT75R Firestone tires, \$400. John, Ext. 4424 or 698-5701 eves.

FORD FACTORY CAP - for 8' bed, \$350; 8' snow plow, power angle, \$500; brake bleeder, \$100; 20-ton air-assisted hydraulic jack. 474-5715.

CAR SEAT - Sears, Safe & Sound, w/cover, good cond., \$10. Noreen, 878-6921.

ENGINE - 440 cu. in., best offer. Ext. 2543.

TIRE - C78-14, new recap, never used, mud & snow, \$5. Mike, Ext. 2214.

65 CHEVY NOVA - 2-dr., 6-cyl., auto restorable, \$850 or trade for parts. 821-5165.

CENTER HUBCAPS - 2, for Corvette, late '60's, early '70's, \$25 pr.; trailer hitch for Wagoneer, \$20. Jim, Ext. 4452.

AIR-FLOW BOX - Nissan, T-top; orig. Datsun 280 trim ring Z tires (4); black bucket seats (2), make offer. Janet, Ext. 2345 or 929-3910.

SLIDE-ON CAMPER - pop-up, Scamper, sink, stove, propane tank, sleeps 3, excel. cond., will fit small pickup, \$1,300. John, Ext. 3082 or 3083.

CAR MASK - custom, black, new, fits Mazda RX7, 1981-84, asking, \$50; airfoil for Mazda RX7, 1981-84, rear hatch, asking, \$50. Tom, Ext. 7842.

TIRE - new, Firestone 721 235/75R15, Eldo rim, \$50. Ernie, 588-4987.

## Boats & Marine Supplies

19' FIBER FORM - 1977, I/O, 120 h.p., canvas, extras, w/trailer, good cond., \$3,000. George, Ext. 4547.

15' DUO BOWRIDER - fiberglass, 55 h.p. Johnson outboard, w/trailer, \$600. Bill, Ext. 2036.

15' CORONADA DAY SAILER - ready for the water, w/trailer, \$1,600. Steve, 874-3729 after 6 p.m.

14' BLUE JAY SAILBOAT - w/trailer, needs some work, \$495. Frank, Ext. 2022.

14' FIBERGLASS BOAT - windshield, wheel, 35 h.p. Chrysler engine, excel. trailer, \$400. Sheryl, Ext. 5384.

## Tools, House & Garden

LAWN MOWER - 20" Briggs & Stratton, 3 1/2 h.p., \$20. Ken, 369-0533, leave message.

TOPSOIL - screened, \$19 per yard delivered, 5 yd. min., also sand and gravel delivered. 924-9427.

LAWN SPREADER - \$9; hand-push lawnmower, \$8; Singer sewing machine, \$25; vacuum, \$10, set golf clubs, \$35. 878-6637.

WATER PUMP - three-stage jet, Flint & Walling make, new GE 1 1/2-h.p. motor, w/pressure tank, used 3 years. 821-3925.

MACHINIST'S TOOLS - micrometers, 12" Vernier, dial indicators, telescoping gauges, etc., USA made, \$1,200 value, ask \$500. Doug, Ext. 4175.

RADIANT HEATER - Kero-Sun, 36", used one season, \$35. Ext. 2906.

LAWN MOWER - Craftsman II, 3.5 h.p., 20" cut, rear bagger, cast-iron cylinder liner, 2 yrs. old, \$150 or best offer. Wick, 758-6773 eves.

LAWN MOWERS - Jacobsen 20" cut, \$100; Sears Craftsman 22" cut, rear bag, excel. cond., \$135; more. Dan, days, 698-7322 or Ext. 4987 eves.

GENERATOR - 4000W, on wheels, new \$400. 475-7092.

## Sports, Hobbies & Pets

SCUBA FINS - Turbo II, \$30. Ken, 369-0533, leave message.

MOVIE CAMERA - Super 8 and projector for 8 mm or Super 8, \$20. Ext. 2906.

BICYCLE - woman's 3-spd., 26", \$20. Susanne, Ext. 3118.

BICYCLES - 2, boy's, \$25 and \$30. Luiz, Ext. 2598 days or 282-3181 eves.

BICHON FRISE - purebred, white, very affectionate and playful, asking \$150. 563-3792.

PANASONIC SPORT BICYCLE - 12-spd., good cond., extras, \$150, neg. 331-9792 eves.

COCKER SPANIEL - AKA, female, black & tan, sweet, affectionate, well trained, needs good and loving home. 331-9792 eves.

## Furnishings & Appliances

SOFA & LOVE SEAT - Early American, maple wood, pheasant print cushions, good cond., must sell, \$100 both. Vita, 277-0464 or Frank, Ext. 7519.

BATH TUB - porcelain, claw foot, you take away, \$40; antique 42" round dining room table, w/2 leaves, \$425. Wells, 878-4214.

MIXER - Black & Decker, 3-spd., 1 year old, \$9. Susanne, Ext. 3118.

COMPUTER DESK - w/hutch, very good cond., \$50. Luiz, Ext. 2598 days or Ext. 3181 eves.

FREEZER - United, large, commercial, like new, \$250. 727-0499.

SOFA BED - brown plaid, good cond. 924-4587.

DRESSER - solid oak, w/5 drawers, \$100. 689-7326.

CHEST/NIGHTSTAND - Colonial, maple, \$175; 2 Castro convertible sofa sectionals, red & gold upholstery, \$200. Joan, Ext. 4697 or 744-9423.

SOFA - 3-cushion, Colonial, fawn & blue floral print, excel. cond., \$100. 929-4530.

CHANDELIER - 6-light, amber-colored glass, brass frame. 928-6930.

## Audio, Video & Computers

COLOR TVS - 14" Emerson, \$90, and 19" Sony, \$150, both w/remote. Luiz, Ext. 2598 days or Ext. 3181 eves.

TURNTABLE - AR Model 77XB, new Grado cartridge, excel. cond., \$95. Ext. 4153 or 732-5829.

## Miscellaneous

GRATEFUL DEAD TICKETS - 2, Buffalo, July 4th, \$25 ea. or trade for Meadowlands Who tickets. David, 878-8541.

BABY CARRIAGE - Perego, coach-style w/windshield and basket, \$300 new, sell for \$125, excel. cond. 744-0722.

SWIM POOL LADDER - removable-type for 4' pools, \$20. Ext. 5786 or 589-5490.

STAINED GLASS BOXES - \$20; old wicker baskets, \$7; pencil sharpener collection, \$3 ea; hassock, \$10, new bird feeder, \$8. Tim, 744-2203.

STROLLER - Gerry, double umbrella w/canopy, \$80. Mark, Ext. 5350 or 369-0793.

JAM - homemade strawberry, 12 oz., \$3.25. Ernie, Ext. 3357.

MACHINIST'S TOOLS - micrometers, 12" Vernier, dial indicators, telescoping gauges, etc., USA made, \$1,200 value, ask \$500. Doug, Ext. 4175.

## Lost & Found

LOST - women's bifocal glasses, vicinity of softball field #5, 6/14. Connie, Ext. 2594 or 727-1483.

LOST - silver ring with lion's head and tail. Dino, Ext. 5508 or 5506.

## Yard & Garage Sales

SHOREHAM - moving sale, everything must go, some items free, June 24, 10 a.m.-4 p.m., 20 Walnut Drive, 744-2947.

SHOREHAM - 5 families, Sat., 6/24, 9-4 p.m., 16 Huck Finn Lane, one block west of Wm. Floyd, off 25A.

## Free

KITTENS - male & female Russian Blue. Frank, Ext. 3120.

CAT - found, gray cat w/collar, very friendly, needs home. Ruth, Ext. 5324.

CAT - very affectionate, Persian, indoor, needs home without other animals, for someone in need of companionship. 447-5364 after 6 p.m.

## Real Estate

*Real Estate advertised for sale or rent is available without regard for the race, color, creed, sex or national origin of the applicant.*

## For Rent

CENTER MORICHES - office space on Main St., recently renovated, 980 sq. ft., reasonable rent. Ext. 4547, 878-1178 or 874-2934.

PORT JEFFERSON - Harbor Hills, furnished 3-bdrm. house, 3 baths, private beach, nonsmokers, \$1,200/mo. + security, 9/1/89-9/1/90. 473-3604.

RIDGE - 3-bdrm. ranch, 1 1/2 baths, country kitchen, all appliances, fenced-in yard, family neighborhood, 5 min. from Lab, \$900/mo., avail. July 1. Carol, Ext. 2673, or 744-8632 after 6 p.m.

ROCKY POINT - new 1-bdrm. apt., full bath, l/r, eik, priv. ent., walk to beach, nonsmoker, no pets, \$600/all. 744-6386.

SELDEN - 1-bdrm. apt., priv. ent., eik, full bath, l/r, access to washer/dryer, avail. 9/1. \$550/mo. Ext. 5177 or 698-6120.

SELDEN - brand-new studio, kitchen, l/r-bdrm. combo, full bath, new appliances, private ent., private driveway, no pets, no children, all utilities incl., \$550/mo. avail. now. 732-7565 after 6 p.m.

YAPHANK - Colonial Woods, 3-bdrm. condo, 2 baths, gar., bsmt., a/c, w/w, 5 appl., pool, tennis, clubhouse, avail. 7/1, no pets, \$1,000. 473-1732 eves.

WADING RIVER - beautiful single apt. on beach to sublet for July, possibly longer, fully furnished, king-size waterbed, stereo, more, \$665/mo. Tina Kaarsberg, Ext. 7176 or 929-3662.

## For Sale

BELLPORT VILLAGE - 2-bdrm. ranch, attached garage, large kitchen, 100'x100' property, move-in cond., \$150,000. 286-0795.

CORAM - 9-rm. Colonial, cul-de-sac, 4 bdrms., 2 1/2 baths, fam. rm., f/p, eik, d/r, l/r, mud rm., i/r pool & lawn sprinkler, 2-car garage, extra: \$195,000. Ext. 2303 or 732-3902 after 5 p.m.

CORAM - Tanglewood Hills, 4 bdrms., 2 baths, California ranch, cathedral l/r, 2-car garage, gas heat, fenced 1/3 acre, professionally painted, \$130,000. 928-7154 eves.

E. SETAUKET/PORT JEFFERSON - 4-bdrm. Colonial, l/r, d/r, family rm. w/fp, eik, 1 1/2 baths, full bsmt., 2-car gar., a.g. pool, 0.42 acre, 3 Village School, Cheng, Ext. 2958 or 473-6429.

HOLBROOK - 3-bdrm. townhouse/condo, 5 appl., w/w, 1 1/2 baths, tennis courts, swimming pool, clubhouse, balcony & fenced-in patio, 15-20 min. to BNL, \$129,000. Ext. 2873 or 472-3236.

MANOR PARK - 4-5 bdrm. Colonial, 1 1/2 baths, l/r, d/r, fam. rm., part. finished bsmt., gar., 1/2 acre, South Manor SD, 5 min. from Lab, new roof & heat, now \$149,000. Roger, Ext. 3578 or 395-1969.

MASTIC - 3-bdrm. ranch, 1/4 acre, 1 1/2 baths, den, fin. bsmt., deck, appl., house fan, 3 ceiling fans, shed, fence, near school, shopping, 15 min. to Lab, asking \$115,000. 265-2366 after 6 p.m.

PORT JEFFERSON - 6-bdrm. farm ranch, 3 full baths, l/r, d/r, f/r, laundry rm., c/ac, c/vac., 3-car gar., 2 patios, 1/3 acre, priv. beach, SD#6, walk to shopping, Tallon, Ext. 4847 or 473-3987.

PORT JEFFERSON - 4-bdrm. Colonial, full bsmt., 2-car gar., 2 baths, ca/c, all oak floors, walk to harbor, village, mint cond., priced to sell. 474-1482 eves.

REGO PARK, QUEENS - 1-bdrm. co-op w/24' terrace, pool, indoor park., 24-hr. doorman, near subway & shopping, low 70's. neg. 473-1732.

RIVERHEAD - Southampton-Wildwood Lake area, custom-built 3-4 bdrm., 2 baths, large l/r den, 2 levels, 40' patio, pie-shape prop., large priv rear yd., \$138,000. 727-0499.

ROCKY POINT - 2 story, alum. siding, 100'x100', 2-3 bdrm., eik, den, 12x18 l/r, 1 1/2 baths, w/w, 4 appl., OHWH, city water, low taxes, walk to all, reduced, \$110,000. 744-3792.

ROCKY POINT - Tides, walk to priv. beach, 1 yr. old, custom-built, 3 bdrm., 2 baths, 2-car gar., eik, l/r, d/r, fam. rm., cathedral ceilings, skylights, much more, \$197,500. John, Ext. 4498.

ROCKY POINT - 3-bdrm. ranch, 100'x100' lot, eik w/skylight, Andersen windows, half bsmt., large fenced yard, SCWA water, under 5 yrs. old., mint cond., all appl., beach rights. 821-3925.

ROSLYN - 1-bdrm. co-op, corner, sunny, fully renovated, w/w, Roslyn SD. Ext. 3924 or 484-3897 eves. and weekend.

SETAUKET - No. 25A, contemp. cape, on 1/3+ acre, 4 bdrm., country kit., skylight, wood floors, new carpet, l/r w/fp, playrm., family neighborhood, mint., \$219,000. P. Vincent, 689-8675.

SHIRLEY - 2-bdrm. Cape, city water, low taxes, large partially finished attic, quiet neighborhood, near beaches, Lab, south of Montauk, \$99,000. 395-4272.

SHOREHAM - Soundview Acres, contemporary ranch, 3 bdrm., 2 baths, l/r w/fp, bsmt., 2-car gar., deck, sprinkler system, steps to priv. beach, \$229,000. 744-9746 eves.

STONY BROOK - North 25A, near beach & univ., custom-built, 2/3 acre, 4 bdrms., finished bsmt, 3 1/2 baths, d/r, l/r, den, eik, priced to sell, Ext. 4635 or 751-2860.

STONY BROOK - 3-bdrm. ranch, expanded Buckingham in S-section, l/r, d/r, den w/fp, eik, 2 baths, all appl., wooded lot, screened-in porci asking \$179,900. Ext. 7949 or 689-7282.