

AUI Distributes First Patent Royalties to BNL Departments

The fruits of BNL's past scientific and technology-transfer labors ripened recently when Associated Universities, Inc., (AUI) made \$250,000 in patent royalties available to the Laboratory.

The money will fund BNL-approved programs within the Biology, Medical and Applied Science (DAS) Departments, including new scientific projects, additional graduate students and educational efforts.

The \$250,000 distributed in mid-June represents the portion of AUI's royalties that it has agreed to plow back into the Lab's scientific and educational programs. Altogether, Biology received \$187,500, Medical was granted \$60,500, and DAS got \$2,000.

New Initiative

This was the first significant distribution made by AUI under its patent licensing initiative, begun under its 1988 contract with the U.S. Department of Energy (DOE). The initiative enables AUI to pour patent-licensing royalty income back into the research programs whence it originated.

"It looks like it's been a successful operation," Jerome Hudis, AUI Vice President for Programmatic Affairs, said of the pioneering effort that led to the royalty distribution. "It seems to be running very well, and we're delighted."

Under its prime contract with DOE, the non-profit AUI has the option to take title to any invention made by BNL employees under a federally funded research program. When AUI exercises this option, it owns and can license all patents that cover the invention.

After all expenses associated with their patent are covered, the individual inventors are the first to receive a share of royalties earned when patents covering their inventions are licensed to private industry. AUI's costs in obtaining patent protection and in licensing an invention average \$5,000 to \$10,000 per invention, said Margaret Bogosian, Deputy Manager of the Office of Technology Transfer.

Technology Transfer to BNLers

Before AUI's royalty money could be divided among the patent-holders' departments, a ground-breaking cooperation between scientists and administrators took shape to gather and evaluate proposals for how those funds would be spent. "We're the first lab to implement an official program for distributing contractor royalty money," said Gregory Ogeka, Special Assistant to Associate Director for Administration Hank Grahn. "This is technology transfer with our own employees."

Contractors, such as AUI, which run the national laboratories for DOE, have only recently gained the right to hold patents and collect royalties. So, Ogeka and fellow Special Assistant Anthony Romano prepared guidelines under which departments may propose uses for their shares. These were then reviewed and approved by BNL and AUI management.

"Since we were on the cutting edge, we took the initiative and submitted the plan to the DOE, and they concurred," Romano said.

According to the new guidelines, AUI royalty money may be used by departments in any of five categories:

- education and training activities that support graduate and postdoctoral students and teachers;
- cooperative ventures with universities to recruit graduate students to be trained at BNL;
- technology-transfer activities for existing or new inventions;
- entirely new research and development initiatives; and
- other programs, such as travel costs for seminar speakers or the purchase of scientific books and journals.

Royalty funds may not be used to subsidize previously funded research or hire permanent staff. The money must be spent within three years.

These funds are made available to department chairpersons. Royalty proposals are then submitted and approved by them and reviewed by Grahn's office, with final approval by Laboratory Director Nicholas Samios.



Roger Stoutenburgh

Biology Department Chairman William Studier (right) shows Laboratory Director Nicholas Samios the catalog listing for a BNL-developed, patented product that generated much of the royalty money that Associated Universities, Inc., recently poured back into Lab programs.

New Lines of Investigation

One of the groups reaping the benefits of its past patents is Medical's Radionuclide & Radiopharmaceutical Research Division, headed by Senior Scientist Suresh Srivastava.

In 1988, four BNL researchers there, led by Srivastava, patented a kit that allows doctors to label blood cells with the isotope technetium-99m in order to diagnose heart disease and gastrointestinal bleeding. That same year, AUI exclusively licensed Mallinckrodt Medical, Inc., of St. Louis, Missouri, to manufacture and sell the kit.

Mallinckrodt has sold nearly 200,000 of the kits each year since June 1991, when it received U.S. Food and Drug Administration approval for human use of the kit.

The red blood cell-labeling kit has become the second most revenue-generating technology of the 75 inventions in the AUI licensing portfolio. It is bested only

(continued on page 2)

Initial Reduction in Force Affects 39 Employees

Though Congress has not yet concluded the process that will decide the nation's — and BNL's — final budget for fiscal year 1995 (FY95), the budget picture has come into focus enough to make it clear that some reductions in force cannot be avoided. Accordingly, on Friday, July 8, 39 employees from 12 of the Laboratory's departments and divisions were notified of their layoff.

In announcing the reductions, BNL Director Nicholas Samios said, "I regret that this action is necessary, and I want to assure you that steps are being taken to keep the reduction to a minimum. I will keep you informed of further developments."

In fact, when first announced in the Brookhaven Bulletin of April 29, the reductions anticipated by FY95 were predicted to affect 140 employees. That number is now expected to be lower — affecting about 115 employees.

Although serious funding problems still beset the BNL budget, improvement and clarification in some areas account for a portion of the 25-job difference. The rest can be traced to BNL's having already reduced employment figures through attrition and nonrenewal of term contracts and to the transfer of some employees to more secure positions.

A second round of reductions is expected at the Lab in August, with the balance coming before the end of FY94, on September 30. In the meantime, the Personnel Division will be working with employees affected by the layoff, trying to find positions for them either within or outside BNL.

The Lab's final budget picture will become clear once Congress passes the Energy & Water Development Appropriations Bill, the part of the budget that contains funding for most BNL programs. So far, different versions of this bill have been approved by the Senate and the House of Representatives. Once these differences are resolved in a conference between House and Senate conferees, the compromise bill will be presented to both houses of Congress for approval. Henry Grahn, BNL's Associate Director for Administration, is optimistic that Congress will complete this procedure before the start of the new fiscal year.

OER Director Visits Lab



Roger Stoutenburgh

Martha Krebs, Director of the Office of Energy Research in the U.S. Department of Energy, visited the Lab on Thursday, July 7, to review some Brookhaven programs. Here, she tours the experimental hall of the Accelerator Test Facility, the centerpiece of BNL's Center for Accelerator Physics, with: (from right) Laboratory Director Nicholas Samios, Deputy Director Martin Blume and Denis McWhan, Chairman, National Synchrotron Light Source (NSLS). The group was looking at the final assembly of the free electron laser (FEL) oscillator, for which NSLS Scientist Alan Fisher (left) is the spokesman. About to begin first operation with an experiment to lase with green light, the FEL is the first experimental step toward developing a fourth-generation light source at BNL. While on site, Krebs also visited several experimental programs at the Alternating Gradient Synchrotron.

First Mixed-Waste Shipment Leaves Brookhaven for Hanford

BNL's first-ever shipment of waste containing both hazardous and radioactive components left the Lab by truck on June 24.

It arrived several days later at the U.S. Department of Energy's (DOE) Hanford Disposal Site in Washington State. There, it will be stored under supervision until proper disposal methods, such as approved incineration, become available.

Removal of the waste from BNL's Hazardous Waste Management Facility (HWMF) to another location is mandated by the New York State Department of Conservation (NYSDEC).

The bill for the "cradle-to-grave" treatment of this single shipment of 5.4 metric tons (12,000 pounds) of waste plus its packaging is expected to total \$190,000 through the storage phase, with additional costs for final disposal.

A Mixed Bag of Mixed Waste

Known as mixed waste because it contains both radioactive and hazardous materials, the June shipment contained products generated by various scientific research projects at the Lab since 1986.

"An important message that the BNL community can take from this is the need to continue to work with diligence to reduce the amount of mixed waste we produce," said Leonard Emma, head of the Safety & Environmental Protection (SEP) Division's Environmental Management Section, which includes the HWMF. "Even though we've now proven that we can handle mixed waste, it's so labor- and dollar-intensive that we should do everything we can right at the source to cut down the amount."

None of the shipped waste products gave radiation dose readings of more than 0.5 millisievert (mSv) (50 millirems) per hour, most emanating from isotopes of cobalt generated in the normal course of accelerator experiments. By comparison, the average American receives natural background radiation of 3.6 mSv (360 millirems) each year.

Hazardous materials in the waste included flammable solvents such as toluene and xylene, the basis for "scintillation cocktail" mixtures used to detect radiation in other substances. Toxic metals such as lead, mercury and chromium were also present.



At the Hazardous Waste Management Facility, (foreground from left) Michael Clancy and Peter Kwaschyn, both Safety & Environmental Protection (SEP) Division, along with (back, from left) SEP's Edward Richards, Alan MacIntyre and Leonard Emma, make final checks of drums of mixed waste, which were loaded into the truck at rear by other SEP employees.

Before being shipped, the waste was protected, padded and distributed among 74 approved and labeled galvanized metal drums. Although each drum has a volume of 0.24 cubic meters (eight cubic feet), the actual volume of waste in each was far less, due to the large amount of protective and absorbent packaging and the drum's thick lining.

After packaging, the waste left the Lab within an enclosed 18-wheel truck driven by a driver certified for mixed-waste shipping. It was accompanied by a box of quadruplicate paperwork describing in detail the BNL waste's composition and potential hazards.

"They've done a commendable job," Emma said of the HWMF staff under the supervision of Operations Supervisor John Strahmann. "It's taken a lot of effort to get all this characterized and packaged and ready to ship."

Under a Watchful Eye

"As all of this indicates, strict regulations control the preparation, packaging, shipment, storage and disposal of mixed waste," said Peter Kwaschyn, Leader for SEP's Engineering and Operations Group for Hazardous Waste Management.

Michael Clancy, Operations Manager of the HWMF, added, "The worst risk is flammability — there's not very much radioactivity, and it's very minimal in some cases, but still we have to follow regulations."

Some of the waste's level of radioactivity, Clancy explained, is not different from background radioactivity levels, but the material must still be classified as mixed waste because it once contained isotopes, now decayed, which were added by a laboratory process.

The same Environmental Protection Agency (EPA) regulations that control mixed waste's definition and handling also dictate that the waste must be moved from its point of generation within a certain time period.

In BNL's case, the NYSDEC has been given jurisdiction by the EPA. After three years of waivers, the Lab was given a deadline of 1994 to ship out mixed waste that had been collecting in the HWMF.

During the waiver period, SEP staff worked closely with Hanford officials to develop a Storage Disposal Approval Record (SDAR). Hanford must approve an SDAR in order to take delivery of any waste for storage or disposal.

SEP staff characterized each waste product, using documentation from the scientists who produced it, sampling and getting testing done on substances whose exact composition was unknown. Labeling and documentation protocols for the drums were also worked out far in advance.

BNL's connection with Hanford for mixed-waste storage probably will remain in place, as future shipments of mixed waste are planned. Said Kwaschyn, "We'd like to go out there once a year to keep the liaison going."

But if BNLers can reduce the amount of mixed waste they produce, the number and size of shipments can decrease. For example, the scintillation cocktails that scientists use to detect radiation in materials can now be made using nonhazardous solvents, so that even when they are contaminated with radioactivity, they will not necessarily be considered mixed waste.

—Kara Villamil

First ESP Award For ALARA Idea



Ingenuity and a concern for keeping radiation exposure "As Low As Reasonably Achievable" (ALARA) have won \$310 for Jon Merkel, a Health Physics Technician for the Safety & Environmental Protection (SEP) Division assigned to the High Flux Beam Reactor (HFBR).

Merkel is the first BNL employee to be recognized for an ALARA contribution to the Employee Suggestion Program (ESP) since ALARA became part of the program in 1991. His award-winning suggestion was actually an improvisation — Merkel crafted the retrieval tool he's shown with here to get small pieces of inadvertently dropped hardware out of a tight place: a three-inch diameter, S-bend irradiation tube at the HFBR.

Merkel's corkscrew-like extension tool not only retrieved the objects, it also eliminated the need to dismantle machinery in a radioactive environment. This saved both 200 person hours of labor and 0.4 person-rems, a measurement of radiation exposure to humans.

Any suggestions for cutting costs, promoting safety and reducing radiation exposure can be submitted on ESP forms available at department and division offices, the Berkner Hall lobby and Personnel, Bldg. 185.

Complexity Explored

A summer seminar series on complexity, united under the theme "Theories of Really Everything?", is under way. Several lectures remain, all open to "students of all ages" and all taking place in the large seminar room of Physics, Bldg. 510, at 2 p.m.

Today, July 15, Maya Paczuski, Physics Department, will speak on "Evolution and Particle Field Theory." Upcoming lectures are: Monday, July 18, "Cellular Automator and Life," Michael Creutz, Physics; Wednesday, July 20, "Turbulence and Forest Fires," Maya Paczuski; Friday, July 22, "A Simple Brain Model: Mimicking Pavlov's Dogs," Dimitris Stassinopoulos, Physics; and Monday, July 25, "Economics at the Edge of Chaos," Per Bak, Physics.

This schedule supersedes the listings on the Weekly Calendar for the week of July 11.

Royalties

(cont'd)

by a genetically engineered gene-expression system invented by a group of former and present Biology Department researchers, including Department Chairman William Studier.

Samios, as Laboratory Director, determines the amount to be allocated to a department, considering the amount of royalty income generated by that department, as well as previous distributions of royalty funds to it. This has allowed the Medical Department to allocate to Srivastava and his colleagues enough funding to pursue an entirely new research project.

They hope to develop new radiolabeled analogs of the growth hormone antagonist somatostatin, which could help doctors make images of cancerous growths — specifically, tumors that have receptors for somatostatin on their surface, such as neuroendocrine tumors, lymphomas and breast cancer.

"This funding catalyzes the process of new research, and it gives a little breathing space to allow some very preliminary investigation in a new area," Srivastava said.

Biology and DAS, as well as an-

other Medical researcher, applied to use their AUI royalty money for other purposes under the Lab's new guidelines.

Studier, for example, described his department's intent to support post-doctoral research associates, graduate students and several summer students, as well as an initiative in cooperation with the State University of New York at Stony Brook to recruit graduate students to BNL.

Also using AUI royalty money, DAS plans to expand its seminar series and provide travel costs and honoraria to outside speakers. And Medical Department Chairman Darrel Joel has opted to put some of the department's funds toward supporting a Stony Brook Ph.D. student.

Romano and Ogeka expressed optimism for the royalty-distribution program's future and plan to submit a progress report to DOE every year.

"With the emphasis on technology transfer and the program's being self-perpetuating, this could get to be a significant program," said Romano. "Patent royalties distributed this way reward the scientists personally and scientifically, which allows them to do further work." — Kara Villamil

Brainpower Has Increased at BNL

Brookhaven has had a brainpower surge.

Seventeen employees, probably the largest number to graduate with the help of BNL's tuition assistance program in a single semester, received college degrees this June, while three others graduated earlier this year, according to the Personnel Division.

The graduates are bringing expertise to BNL in fields ranging from computer science to atmospheric sciences and electrical engineering.

"Everything I learned will be used on the job," said Carmen Benkovitz, a senior environmental scientist in the

Department of Applied Science, who earned her doctorate in atmospheric sciences from New York University. At BNL, she is currently researching transport and transformation of pollutants in the atmosphere.

The incentives for pursuing these degrees are as many as there are graduates, but there are common themes: personal satisfaction, job advancement opportunities and increased job skills.

"I felt that I had gone as far as I could without a degree," said John Strahmann, a technical specialist in the Safety and Environmental Protec-



Some of BNL's 1994 graduates: (from left) Patricia Bender, Cheryl Ann Miezianka, Barbara Kponou, Lisa Toler, Mary Wood, Jean Marie Volkman, Carmen Benkovitz, Pamela Ciufu and (middle, rear) Eric Kramer.

— Photos on these pages by Roger Stoutenburgh

Congratulations Graduates!

The following employees earned degrees this year using the Lab's tuition refund program.

Name	Dept.	Degree	School
Michael Barriere	DAT	Ph.D.	Hofstra University
Patricia Bender	PE	B.A.	SUNY-Stony Brook
Carmen Benkovitz	DAS	Ph.D.	New York University
Frank Biele	SEP	M.S.	Dowling College
Michael Buckley	NSLS	MBA	Dowling College
Pamela Ciufu	DAT	AAS	Suffolk Community College
Peter Eterno	PE	BBA	Dowling College
David Graham	Phys.	B.S.	New York Institute of Technology
Barbara Kponou	DAT	AAS	Suffolk Community College
Eric Kramer	PE	A.S.	SUNY-Farmingdale
Donna LeDoux	AUI	B.S.	Dowling College
Patricia Manzella	Pers.	AAS	Suffolk Community College
Cheryl Ann Miezianka	Phys.	BBA	Dowling College
Philip Pietraski	NSLS	B.S.	Polytechnic University
Beth Schwaner	Pers.	M.S.	New York Institute of Technology
John Strahmann	SEP	B.A.	SUNY-Stony Brook
Judith Thompson	NSLS	AAS	Suffolk Community College
Lisa Toler	DAT	B.S.	Empire State College
Jean Marie Volkman	DCP	B.S.	St. Joseph's College
Mary Wood	OMC	MBA	Adelphi University

tion Division, who earned a bachelor's degree in multidisciplinary studies at the State University of New York (SUNY) at Stony Brook. He pursued nuclear physics and geology as two of his three required areas of emphasis. "It will benefit my career, but I also needed to finish it for myself."

According to some employees, it would have been difficult to obtain their degrees without the assistance of the tuition refund program.

"The tuition refund program is excellent, you can't beat it," said Michael Buckley, an operations coordinator at the National Synchrotron Light Source, who earned an MBA in total quality management from Dowling College. "It would have been difficult on my own."

The tuition refund program is open to all full-time employees and eligible part-time employees. The program specifies that courses must be pertinent to work the employee is doing in the Lab or may reasonably be expected to do.

Employees taking courses at the undergraduate level are reimbursed 75 percent of tuition costs. Those receiving their baccalaureate degree are refunded the additional 25 percent for the previous five years of study when they complete the degree. Tuition costs are reimbursed 100 percent for graduate-level courses.

Employees interested in the program should contact the Tuition Refund Office of the Personnel Division, Ext. 7631. — Georgia Moore

Scoop of the Week

The first Scoop of the Week for this seventh contest season goes to Roland "Frenchie" Baillargeon, Staff Services Division, for suggesting a story on Larry Kunzig's becoming Hauppauge Fireman of the Year.



During the summer, if you can scoop all of the Bulletin's informed sources with a hot tip and if the Bulletin publishes a story based on your idea for news or a feature, then you too may win a Scoop of the Week: an official certificate, suitable for framing or redeeming at the Cafeteria for a free frozen dessert of your choice, compliments of Service America Corporation.

BNLer Named Hauppauge Fireman of the Year

Larry Kunzig, a mechanic in the Staff Services Division and a Hauppauge volunteer firefighter, had to think fast. Smoke was pouring from the second floor of his neighbors' house, two doors down from his own, and he did not have access to any of his protective gear.

He forced his way into the burning house anyway, searching the upstairs bedrooms for Laurie and John Hannaway and their three-year-old son Ryan and that is why he is the Harvard M. Nichols Fireman of the Year.

Kunzig received the award because of the initiative, bravery and professionalism of this act. A plaque was presented to him in May by Hauppauge Fire Chief Walter Mayer, during the annual Hauppauge Fire Department dinner.

"I was very surprised," Kunzig said



Larry Kunzig

about receiving the award. "I didn't expect it."

At the time of the fire, all he could think about was getting his neighbors

out, he said. It appeared that someone was home because a car was in the driveway and lights were on in the house.

"There were very heavy smoke conditions and very intense heat," Kunzig said in a recent interview. "I knew the family, and I just couldn't live with myself if there were people up there. Someone had to check."

During his search, the fire broke through the second-story roof. Fortunately, no one was at home, and Kunzig escaped uninjured.

"Larry is a very unselfish individual," said John Scimeca, First Assistant Chief of the Hauppauge Fire Department, who arrived on the scene just as Kunzig exited the house. "He put his life in danger for his neighbors. He was taking a big chance going in without a mask and gear, and we're very proud of him." — Georgia Moore

Inside Info

Susan Perino was named the Lab's Deputy Fiscal Officer on April 1. In that position, she assists Mark Israel, who is the Lab's Fiscal Officer, responsible for the Fiscal Division and the Lab's fiscal policy. All sections within the division — General Accounting, Accounts Payable, Accounts Receivable and Payroll — report through Perino.

Perino takes over the responsibilities of Vincent Bilms, who retired on December 31, 1993, after almost 30 years in the Fiscal Division, 26 years as Assistant Fiscal Officer.

Perino joined the Lab in 1991 as the Administrator of the Plant Engineering Division; she was promoted to its Administrative Manager in 1993. On

April 4, Pamela Montag became the Plant Engineering Administrator, after over nine years of public accounting experience with Coopers & Lybrand, and, more recently, two years as Director of FCC Compliance for Cablevision Systems Corporation.

A certified public accountant, Perino came to the Lab from Holtz, Rubenstein & Company, a public accounting firm where she served as an audit supervisor. She holds a BBA from Dowling College and has matriculated in Dowling's graduate program leading to an MBA in total quality management.

As part of Fiscal's restructuring, John Tighe was named Manager, General Accounting, effective March 1. In addition to preparing the Lab's financial statements and regulatory

reports, he is responsible for the General Accounting, Accounts Receivable and Accounts Payable sections.

With five years' experience with Albrecht, Viggiano & Zureck, Tighe came to Brookhaven in April 1979 as an accountant and, in 1988, was promoted to senior accountant. He holds a MBA in management from Dowling College.

The Clinical Laboratory of the Clinical Research Center in the Medical Department, Bldg. 490, has been awarded a two-year accreditation by the Commission on Laboratory Accreditation of the College of American Pathologists (CAP), based on results of a recent on-site inspection.

In being advised of this national

recognition, the laboratory's staff was congratulated for the "excellence of the services being provided." This laboratory is one of the more than 4,200 CAP-accredited clinical laboratories nationwide.

Begun in the early 1960s, The CAP Laboratory Accreditation Program is recognized by the federal government as being equal to or more stringent than the government's own inspection program. Accreditation is granted to a laboratory only after CAP inspectors examine its records and quality control for the preceding two years, as well as the education and qualifications of the entire staff, and the adequacy of the facilities, the equipment, laboratory safety and laboratory management, to determine how well the laboratory is serving its patients.

Huge Price Reduction For BERA Disney Trip

If you have already reserved your place or are planning to sign up for the 1994 BERA trip to Disney World, September 28-October 4, then here's some good news for you: A drop of \$113 in the round-trip airfare has made the seven-day, six-night trip even more affordable.

The discounted group rates are now as follows: \$675/person - 4 adults/rm.; \$717/person - 3 adults/rm.; \$796/person - 2 adults/rm.; \$1,134/person - 1 adult/rm.; \$469/children 10-17 (share rm. w/adults); \$417/children 3-9 (share rm. w/adults); \$203/children age 2; no cost/children under 2.

The rate also includes accommodations at Disney's Dixie Landings Resort, and unlimited admission, transportation and use of attractions at the Magic Kingdom, Epcot Center, Disney-MGM Studios — and more.

For more information and to make your reservation, call M. Kay Dellimore, Ext. 2873, or Andrea Dehler, Ext. 3347, by Friday, July 29.

Boardwalk Bound

The next BERA-sponsored, one-day trip will be to the Claridge Hotel and Casino on the Boardwalk in Atlantic City, on Saturday, August 27. The initial cost will be \$22, but the hotel-casino will give a \$10 coin return.

The bus will leave the Brookhaven Center promptly at 9 a.m., with an extra pickup at Exit 63 of the LIE, if requested. Return will be by approximately 11:45 p.m.

Tickets are on sale now at the BERA Sales Office in Berkner Hall weekdays from 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.

Honk If You Like Quarks!

"Top" and "Bottom Quack" appear to be heading to Physics, Bldg. 510, to discuss the meaning — and the misspelling — of the names they were given by Physicist Michael Le Vine earlier this year. Though their quark namesakes are rather hard to detect, it's usually pretty easy to spot Canada geese. However, you won't find these particular geese confined to the grassy area in front of Physics anymore — they seem to be scattered and may have been detected elsewhere on site.



Roger Stoutenburgh

Swimathon'94 — Sign Up ASAP

Teams, individual swimmers and helpers are needed at the Lab pool on Saturday, July 23, for Swimathon '94, sponsored by the Brookhaven Employees Recreation Association (BERA) to benefit the Long Island Division of the American Cancer Society (ACS). The reward for doing a job well swum for this good cause will not only be a good feeling, but also a commemorative, limited-edition ACS Swimathon'94 T-shirt.

During Swimathon'94, individual swimmers and department, division or club teams are needed to put in as many laps as they can between 8 a.m. and 9 p.m. — with rests allowed be-



tween sets of laps. The swimmers' sponsors make a flat pledge or a per-mile pledge, which totals up to a tax-deductible contribution to the ACS.

In turn, the ACS Long Island Division uses the contributions not only to fund basic and clinical cancer research in Nassau and Suffolk Counties, but also to offer local cancer prevention, screening, information and support programs. Last year, for instance, the ACS provided 700 Long Island women with low-cost, first-time mammograms, screened some 2,000 Long Islanders for prostate and skin cancer, and introduced 8,500 students to breast or testicular self examinations.

In addition to sponsored swimmers, helpers are needed to check-in the swimmers, count their laps, and assist with entertainment and refreshments. So sign up as soon as possible, using the forms available at the pool, Bldg. 478; the BERA Sales Office, Berkner Hall; or the Recreation Office, Bldg. 185.

Pool Reserved 7/23

During Swimathon'94, the BNL swimming pool, Bldg. 478, will be reserved only for participants in this important charity event. While BERA regrets any inconvenience that this may cause, the organizers invite all who want to swim that day to participate in Swimathon'94.

Coming Up

The 1994-95 BERA concert series will get off to an early start on Wednesday, July 27, with a recital by internationally acclaimed pianist Gilbert Kalish. The concert is part of a Brookhaven Town-wide "Haydn in July" festival, and Kalish will be playing two Haydn sonatas as part of his program, which also contains modern and contemporary music.

The concert will be held in Berkner Hall at 8 p.m. At \$14 for general admission, and \$9 for students and seniors, tickets may be purchased at the door, or in advance from Kay Dellimore, Bldg. 185, Ext. 2873.

Equipment Demo

A. Daigger & Company will feature the latest in lab equipment and supplies on Thursday, July 21, in Berkner Hall, from 10 a.m. to 2 p.m. The exhibit will feature Brinkman instruments, Oxford labware, Labline incubators, shakers and ovens, Corning hot plates and pH meters, and Nalge plasticware. Coffee and refreshments will be served from 10 to 11:30 a.m.

Public Auto Auction

Forty-nine BNL vehicles, located at Warehouse T-87, are to be sold at a public auction on Wednesday, July 20, at 10 a.m. in Berkner Hall.

Those interested may inspect the vehicles on Monday and Tuesday, July 18 and 19, between 9 a.m. and 3 p.m. For further information, call Ext. 4527.

In Memoriam

The following retirees passed away recently:

Charles Smol, who retired on December 31, 1969, as a technician III in the Accelerator Department, died on June 25. He was 87 years old. He started at the Lab on February 21, 1951, as a technician C in the Proton Synchrotron Division of the Accelerator Project.

Marion V. Kaminski, one of the Lab's first employees, died on July 2 at the age of 78. He started as a fireman in the Architectural Planning & Plant Maintenance Department on March 22, 1947. When he retired 33 years later, on June 27, 1980, he was a senior stationary engineer in the Plant Engineering Division.

Carl W. Vogel, who came to BNL to November 2, 1976, died on July 2. He was 60 years old. His 12 years as a steamfitter A in the Plant Engineering Division ended with his retirement on January 9, 1989.

Mia D. Williamsen, whose 20 years at BNL were all spent in the Medical Department, died on July 7, four days after her 85th birthday. She started in Medical on September 24, 1954, as a laboratory assistant and retired on December 31, 1974, as a hospital services assistant II.

See separate Supplement for more notices and Classified Ads.

Loveliest of Trees . . .



Roger Stoutenburgh

In mid-April, this flowering cherry tree, cornered between the entrances to the Occupational Medicine Clinic and the Research Clinic in the Medical Department, Bldg. 490, was not yet living up to its name

— except for the single protected branch nestled under the eave at far right. The rest of the branches had caught up to their precocious sibling by the end of the month.

Be Prepared to Stop for Vehicle Searches

The Police Group in the Safeguards and Security Division (S&SD) wants all employees and visitors to be aware that it periodically conducts random searches of vehicles exiting the Lab.

"These searches help prevent theft and loss of government property," says

Police Group Inspector Leonard Butera, "and they occur regularly year-round, not just during the summer. So our summer visitors should not feel singled out."

A U.S. Department of Energy order establishes the Police Group's responsibility to conduct these searches, and a BNL Standard Practice Instruction explains the procedure.

The S&SD Manager schedules the searches monthly, and the Police Group is informed as to when and where the searches are to be conducted, and whether to pull over every third, ninth or other number vehicle.

When a random vehicle search is being conducted, police cones and standards are set up to slow and control traffic, and an inspection area is marked off. Drivers may be asked to pull their vehicles into that area, at which time a patrol officer will inform them about the purpose of the inspec-

tion, record their names and vehicle descriptions, and ask permission to examine the vehicle. At that time, drivers will be asked to open their car trunks or truck caps.

"A search only takes a few minutes, yet it can save the Laboratory a lot of money over time," concludes Butera, "So, the Police Group appreciates everyone's cooperation in helping us do our job."

Catch a glimpse of

GLANCE

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

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



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) 282-2345; Fax (516) 282-3368

Stargazers Wanted

BNL's Astronomy Club is reorganizing and seeking new members. Tentative plans call for gathering at the Lab's observatory between July 15 and 20 in hopes of observing pieces of the Shoemaker-Levy 9 comet hitting Jupiter.

Call club president Keith Power, Ext. 7772, for more information.

Cafeteria Menu

Please note price increases effective Monday, July 18.

Monday, July 18	
Soup: Beef barley	.90/1.20
A la Carte: Cod w/mustard beurre	3.75
Fitness: Vegi calzone	2.95
Deli: Pastrami	3.20
Grill: Reuben	3.30
Tuesday, July 19	
Soup: Chicken & rice	.90/1.30
A la Carte: Veal Parmesan	3.95
Fitness: Chicken cacciatore	3.85
Deli: Virginia ham	3.20
Grill: Lamb kabobs	3.30
Wednesday, July 20	
Soup: Vegetarian	.90/1.20
A la Carte: Chicken primavera	3.85
Fitness: Shepherd's pie	3.65
Deli: Roast beef	3.20
Grill: Monte Cristo	3.30
Thursday, July 21	
Soup: Black bean	.90/1.20
A la Carte: Braised short ribs	4.25
Fitness: Southwestern chicken	3.70
Deli: Hot turkey	3.20
Grill: Philly cheesesteak	3.30
Friday, July 22	
Soup: New England clam chowder	.90/1.20
Display Cooking: Pasta	
Fitness: Flounder w/julienne veg.	3.75
Deli: Corned beef	3.20
Grill: Tuna melt	3.30

Come to work as cool as an air-conditioned cucumber - or as warm as a melted icecream - but don't forget to bring **FOOD** for the



BNL FOOD DRIVE
Pickup all next week.

Arrivals & Departures

Arrivals

Wilson E. Buvinger Biology
Nicholas I. Earl Mgmt. Info. Sys.
Shoji Nagamiya Physics
Michael H. Viscusi Plant Eng.
Edward J. Whelan Comp. & Comm.

Departures

This list includes all employees who have terminated from the Lab, including retirees:
John R. Becan Saf. & Env. Prot.
Cynthia A. Murphy RHIC
Melvine R. Turner Physics

Praise for BNL Food Drive

The BNL Food Drive contributes to a Brookhaven Town effort called INTERFACE. The following appeared in the July 1994 issue of *INTERFACE News Network*:

Thanks to Brookhaven Lab

Brookhaven National Laboratory is one of the founding members of *INTERFACE*, and, over time, has been one of its chief contributors of food. The Lab conducts monthly food drives, delivering thousands of pounds of food to local pantries. This is a year-round project for Lab employees. . . .

Want knows no season. People in the Town of Brookhaven go to bed hungry all year round. Our thanks and congratulations to Brookhaven National Lab for their continued commitment to the *INTERFACE* food drive program.

Great Adventure For Summer Visitors

Students and other summer visitors are invited to go on a great adventure - to Six Flags Great Adventure amusement park on Saturday, July 30. Sponsored by the Office of Educational Programs, the trip is a real deal: The cost of \$25 per person includes round-trip bus transportation on a luxury, air-conditioned coach with bathroom, on-board breakfast and admission to the park for six hours of fun. The bus will leave the Brookhaven Center promptly at 7 a.m.

The limited number of seats are being sold first-come, first-served, and, in past years, this trip has been a quick sellout - so act now. To reserve your seat, bring \$25 cash to Renée Flack, Science Education Center, Bldg. 438, by Friday, July 22. For more information, call Ext. 3316.

Wanted:



Private Eyes

The Brookhaven Bulletin needs the help of students, advisors and employees in making the upcoming Summer Student Edition exciting and informative. Please call Georgia Moore at Ext. 5657 or send E-mail to gmoore@bnl.unix1.bnl.gov by July 25 with suggestions for stories with an emphasis on research and information about the activities of students and teachers on site this summer. Don't forget photo opportunities!

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.

SCIENTIST/ENGINEER - Experienced in management of environmental science programs. Successful applicant will be Head of DAT's Environmental and Waste Technology Center, responsible for the administration and technical management of ongoing programs and new program development in areas of: advanced waste form research and development; containment barrier and high-integrity container research and development; geochemistry evaluations at waste sites; performance/risk assessment of waste sites; and development of regulations for waste management. Contact: Romney Duffey or Robert Bari, Department of Advanced Technology.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in microbiology/biochemistry, with experience in molecular cloning and cell culture, to join a program to clone the receptor on human cells that mediates adsorption of adenovirus. Experience with cell culture and DNA cloning techniques is essential. Contact: Paul Freimuth, Biology Department.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

DD 6448. OFFICE SERVICES POSITION - Requires AAS or equivalent experience, excellent computational skills, a solid background in a payroll-type environment, and experience that demonstrates an aptitude for figures and accuracy. Proficient use of calculator and data-entry experience is also necessary. Responsibilities will include the processing of employee time cards, and preparing reports and payroll-related documents. Fiscal Division.

DD 5545. OFFICE SERVICES POSITION - Requires AAS or equivalent experience, demonstrated organizational skills and knowledge of IPAP system. Familiarity with WordPerfect and PC databases is desired. Duties will include entering, tracking, expediting and receiving orders. Will be responsible for shipments in and out of the Division, as well as general office duties. Computing & Communications Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

NS 2049. PROJECT PLANNING POSITION - (term appointment) Requires a bachelor's degree in a relevant discipline and several years' experience in cost and schedule control for major technical programs. Experience with project-management software such as Excel, Microsoft Project or similar packages, background in PCs and workstations, and excellent communication skills are necessary. Responsibilities will include budget tracking and cost-performance reporting for the construction of a large DOE-funded research project. Physics Department.

Motor Vehicles & Supplies

93 HYUNDAI SONATA - black, V-6, anti-lock brakes, p/sunroof, anti-theft stereo, tinted windows, 4 yrs. on ext. warr. Ext. 2459 or 287-3262 after 5 p.m.

92 BUICK LESABRE - burgundy, V-6, ABS, full power, climate control, 29k mi., \$16,000. Richard, Ext. 3804 or 286-3471.

92 TRAVEL MASTER 265 MOTOR HOME - 460 Ford class C, twin beds, entertainment: center, gen., awning, 9k mi., \$34,000. 286-0804.

91 NISSAN 300ZX - red hot & fully loaded, heavy-duty suspension w/low mi., must sell, sacrifice at \$6,100. Derek, Ext. 4611.

89 NISSAN SENTRA - 2-dr., a/t, p/s, ac, am/fm, 71k mi., excel. cond., asking \$4,000. Su-Yu, 632-7918 or 345-2344 after 9 p.m.

89 NISSAN SENTRA XE - coupe, blue, 2-drs., 5-spd., m/t, ac, am/fm cass. stereo, 79k mi., excel. cond., \$4,500. Emilio, Ext. 3734.

88 PLYMOUTH RELIANT - 4-dr., a/t, 2.5L eng., 60k hwy. mi., mint cond., \$3,200. 345-5783.

88 HONDA PRELUDE 2.0 SI - a/t, all power, moon roof, white, v.g., \$6,500. Jeff or Allison, 286-1348.

88 ISUZU TROOPER - 5-spd., 4-cyl., am/fm stereo cass., 71k mi., excel., \$6,900. Donna, 924-5062.

87 DODGE ARIES - blue, a/t, 63k mi., many new and yr. old parts, dependable, \$2,600. Marcia, Ext. 7129.

87 JEEP WRANGLER - 6-cyl., 5-spd., p/s, p/b, black on black, soft & bikini tops, ask. \$6,200. Rich, 929-8514.

87 HYUNDAI - 4-dr., a/t, moon roof, 54k mi., good cond., \$1,550. Kenneth Johnson, 878-1514.

87 TOYOTA SUPRA - loaded, excel. cond., best offer. Ext. 3695, leave message.

87 HYUNDAI EXCEL - 4-dr. sedan, 39k mi., mint cond., must see, \$3,500 or best offer. 281-3515.

87 MITSUBISHI STARIONESI-R - black/black leather, turbo, 5-spd., alarm, ac, cruise, am/fm stereo cass., 100k mi., excel. cond., \$3,500. Ext. 5151 or 874-4812.

86 NISSAN 300 ZX - a/t, stereo, ac, cruise, p/s, p/b, loaded, removable top, \$5,100. Jack, Ext. 4037.

86 MITSUBISHI TREDIA L - red, a/t, 4-dr., ac, p/s, p/b, \$500. Pat, Ext. 5406.

86 FORD MUSTANG - convertible, 72k mi., excel. cond., must see, \$5,495. Mike Z., 475-3896.

86 TOYOTA CAMRY - 5-dr. h/b, a/t, ac, sunroof, etc., high mi., excel., ask. \$4,500. S. Aronson, Ext. 2051.

86 CORVETTE - red/red, a/t, Bose stereo, glass top, 48k mi., adult driven, excel., \$12,000. Tara, 422-7759.

85 CUTLASS CIERA - 4-cyl., 100k mi., dependable, needs minor mech. work, ask. \$1,100. Joe, Ext. 5139.

85 MITSUBISHI TREDIA - 50k mi., new clutch, battery, \$1,100. S. Mukerjee, 821-7375.

85 STARCRAFT POP-UP CAMPER - stove, sink, ice box, excel. cond., Mark, Ext. 4291/4095.

84 OLDS DELTA 88 ROYALE - 4-dr., V-8, a/t, p/s, p/b, ac, cruise, new exhaust, blue, good cond., reliable, ask. \$1,900. Zhongwei, Ext. 4331 or 924-5181.

84 NISSAN SENTRA WAGON - 5-spd., am/fm cass., 90k mi., excel. cond., must sell, asking \$1,700. Zoltan, Ext. 5341 or 341-1021 eves.

84 MERCURY MARQUIS - a/t, p/s, p/b, rebuilt engine 30k mi., trans., brakes, \$1,100. Skalyo, Ext. 2509 or 878-4882.

83 CHEVY WAGON - blue, 2.0L, a/t, ac, 108k mi., good cond., runs well, \$900. Walter, Ext. 4100.

83 TOYOTA CELICA GT - light blue, 5-spd., m/t, high mi. Mike, 286-7451, leave message.

82 SUNLINE CAMPER - 8', slide-in, ref., stove, sink, bathroom, 110 to 12-volt converter, excel. cond., \$1,100. Jim, Ext. 4026 or 298-9748.

82 HONDA ACCORD - high mi., 5-spd., runs well, \$450. Al, Ext. 2175 or 231-4613 after 5 p.m.

82 CADILLAC - 401 fuel inj., sunroof, burgundy. Bert, Ext. 5156 or 581-4436.

81 CADILLAC - excel., \$1,500. Jean-Marc, Ext. 1063.

81 PICKUP - cyl., a/t, new am/fm/cd, recent paint, 108k mi., \$1,500 firm; '69 Mustang, conv., 6-cyl., 85k mi., ask. \$5,900. Tirre, Ext. 3288 or 281-0360.

81 OLDS 302, 4-dr., blue, ac, p/s, p/b, w/pw, dark blue velour int., runs well, \$400. Bonnie, Ext. 3541.

80 CHEVY PICKUP - new tires, needs steering column, 100k mi., ask. \$800. Nicki, 821-3721 after 6 p.m.

79 DATSUN SUNLINE MOTOR HOME - new paint, sleeps 3, fully equipped, 110-12V, propane, 44k mi., excel., \$3,000. Sue, Ext. 3492 or 734-2593 eves.

76 PICKUP TRUCK - red, w/cap, straight 6, extra tires, \$1,500. Chas, Ext. 5462 or 288-2080.

76 DATSUN F-10 - needs carb. and flex. front brake lines plus work, also good for parts. Ed, 929-4522.

72 BUICK EXLTRA 225 - collectible, 2-dr. hardtop, 454 CID, 4 barrel duals, factory orig., 3 family owned, \$1,200. Joe, Ext. 3464 or 281-7683.

66 PLYMOUTH SPORT FURY - 440 V-8 torque, Flite Cragars, must sell, \$3,700. J. Woods, Ext. 2932 or 360-0841.

NOSE BRA - for '87-'90 Toyota Camry, \$25. Vinnie, Ext. 5005.

RIMS - from '87 Blazer, 15", \$75. John, Ext. 4668.

RIMS - Centerline, alum., like new, used less than 9 mos., 15"x7", cost \$600, asking \$375. 878-3143.

FORD PICKUP BACK BUMPERS - 2, both excel. cond., both w/brackets; step bumper, \$35; std. bumper w/tr. hitch, \$25. Tom, Ext. 4507 or 878-1060.

RIMS - 16", 4 1/2"x5" bolt pattern, 5-lug w/lug nuts, racing alloys, excel. cond. \$200/4. Steve, Ext. 4424.

RIMS - Ford pickup, alum. rims; '69 Mustang rear seats, cheap. Wayne, Ext. 7238.

TIRES - P225x75R14, 2, excel., \$35/ea.; P225x75R15, brand-new, \$35/ea. 698-9274.

Boats & Marine Supplies

26' CHRIS CRAFT - dinette, galley, head, full canvas, sleeps 4, many extras, family boat. 475-3553.

22' O'DAY SAILBOAT - 6-h.p. Evinrude motor, furling jib, main, good cond., \$3,500. 286-3791.

22' CATALINA SAILBOAT - 6-h.p. Johnson motor, new furling, genoa and main sail, w/trailer, \$3,900. Barbara, 329-2467.

SUNFISH - 1980, & trailer, \$500. Ed, 581-1509.

19' FIBERFORM - 1976, cuddy, V-8, Mercruiser i/o, DF, VHF radio. Ext. 5286 or 298-9594.

19' CHAPARRAL 198XL - 1988, 165-h.p. Mercruiser i/o, 1993 EZ Load Rite trailer w/powerwinch, am/fm stereo, mint cond. Ext. 3376.

17' O'DAY - w/trailer, main & jib, 2-h.p. eng., plus access., excel. cond., \$2,000. Sonja, Ext. 3575 or 261-5290.

17' WINNER - 1970, 100-h.p. Johnson, good cond., \$1,500. Tim, 878-3947 after 5 p.m.

16' SAILBOAT - fg hull, alum. mast, Dacron sail; 12' fg windsurfer. Al, Ext. 2047.

16' STARCRAFT - 35-h.p. Evinrude, Cox galvanized trailer. 325-0447 after 6 p.m.

14' BOAT - Sears, alum., v.g. cond., \$350. Ext. 7918.

14' SUNFISH SAILBOAT - new rudder, tiller, centerboard, autobailer, extras, excel. cond., \$675. George, Ext. 3061 or 751-0265 eves.

14' HOBIE CAT - good sails, good cond., fast & fun, \$800; Kawasaki Jet Ski 300, 1987, excel. cond., \$1,100. Ryan, 878-1178.

KAYAK - for person up to 155 lb., bay & lake or surf, good cond., \$300. Ernie, Ext. 5092 or 281-7873.

PRACTICAL SAILOR BACK ISSUES - 10 yrs. of sailboats & sailing equipment info., prices & test results, \$65. Ext. 4747 or 765-1075.

Furnishings & Appliances

AIR CONDITIONER - Amana Super-Thrust, 13,300 Btu, 9.5 EER, slide-in chassis, excel. cond., \$300. 473-6546.

AIR CONDITIONER - Kenmore, used once, 6,000 Btu, energy efficient, fits standard windows, 25"-38", orig. \$450, now \$275 neg. Lisa, 467-8185.

BABY CHANGING TABLE - white, w/shelf & pad, \$35. Donna, 821-3739.

BEDROOM SET - full-size bed, dark wood, Colonial, 6 pieces, good cond., \$400. John, Ext. 7411.

BED - platform, double, unfinished pine, 6 storage drawers, 2 halves joined together, like new, \$75. Pete, Ext. 5320.

BED - Bassinet, youth w/mattress, \$20; crib mattress, \$10; Hedstrom carriage, \$25; Cosco toddler booster car seat, \$10. 821-0125.

BEDS - 2, twin, no frames, \$15 ea.; oval dining table \$10; cooler, 28 qt., like new, \$5; iron, \$5. 924-5181.

CHINA BREAKFRONT - 2 glass sliding top drs. w/2 bottom solid doors, 2 step end tables, \$80, or will sell separately. 924-3553.

CHINA - service for 12, white, silver trim, \$75; Lane chest, \$100. 368-6115.

COUCH - queen sleeper sofa plus recliner, matching light blue/white fabric, like new, \$400. Gail, 246-5968.

DAYBED - w/innerspring mattress, \$50; 34" bunk bed mattress, \$25; 10-spd. Iverson women's bicycle, \$50. 289-1003 after 6 p.m.

DINING ROOM SET - Bennington pine trestle table, 6 ladder-back chairs, hutch & server, asking \$1,500. 744-8567.

DINING ROOM - custom, Colonial, triple hutch, oval table, 4 chairs, \$1,200; recline chair, motorized, \$125; additional furniture. Barbara, 475-3896.

DINING ROOM SET - table, 6 chairs, breakfront, honey oak, \$900; 2 love seats, 2 end tables, 2 lamps, \$450. 368-6115.

DRYER - Maytag apt.-size, \$50; Sears, apt.-size washer & dryer, like new, \$400. 265-6542.

FUTON - v.g. cond., \$50. Jim, Ext. 3372 or 821-0250.

Classified Ads (continued)

FUTONS - 2, well-made, oak, orig. \$2,400 asking \$1,000; dining room hutch & table, asking \$400; satin-wood dresser set, asking \$300. 821-1726.

FREEZER - upright, \$50; Keroson heater, \$50; trash compactor, \$75. Marilyn, Ext. 2259 or 878-0939.

GRANDFATHER CLOCK - moondial, oak, \$650; Colonial bedroom set, \$550; pine kneehole desk, \$200; corner hutch, \$125; more. Barbara, 475-3896.

LAMP - \$15; vacuum, 3-spd., 4.5 A, \$15. 924-5181.

LIVING ROOM - Colonial, sofa, love seat, 2 tables, 2 lamps, 3 pictures, good cond., asking \$300 neg. Steve, Ext. 2897.

PLAYPEN - like new, hardly used, in orig. carton, \$40. Israel or Yael, Ext. 4830.

POLE LIGHT - 3-way, 3-lights Colonial hurricane lamp w/amber globes, \$40; two 2-step end tables, \$40, both for \$75. 924-3553.

RANGE - electric, self-cleaning, good cond., \$85. Jim, 744-2095 after 6 p.m.

RANGE - GE 30" freestanding oven: GE 24" d/w; GE 30"x64" 16 cu. ft. refrig.; Frigidaire 24"x66" w/d combo, all harvest gold, excel., price neg. Lisa, 467-8185.

REFRIGERATOR - 17 cu. ft., White Westinghouse, frost-free copper-tone, \$125. John, Ext. 7456.

REFRIGERATOR - white, 25 cu. ft., \$200; stove, white, electric, \$125, excel. cond. Sheila, Ext. 3144.

ROLL-TOP DESK - pine w/Windsor chair, \$400; Ping-Pong table, \$50; 744-8567.

RUG - 9'x12', mauve carpet w/binding, \$50. Gail, 246-5968.

SOFA BED - Castro, queen-size, multi-colored peach/seafoam, 9 mos. old, must sell, \$400. 541-6587.

SOFA BED - full-size, good cond., asking \$100. Tom, Ext. 2823.

TABLE - dining room table, white Formica w/drop-in leaf, 6 swivel armchairs, \$200 neg. Don, Ext. 7237 or 744-2921 after 5:30 p.m.

TELEVISION - color, 13", works well, missing volume control knob, \$50. Sandra, Ext. 7814.

WASHER/DRYER - brand-new, Magic Chef, in orig. cartons, list \$850/both, selling for \$500. O. Booker, Ext. 3082.

WASHING MACHINE - 1938, Sears wringer type w/manual & parts list, still works, \$100. 363-9527.

WATER BED - twin w/drawers, \$100; 5-piece wood bedroom set, \$75; 2 sets wooden room dividers. 289-8212.

Tools, House & Garden

ATTACHE - tool case, new, MFG Xcelite #TC-100, suitable for engineers & high-tech troubleshooters, \$60. 727-3608.

BARBEQUE TANK - w/gas, new, never used, \$18. Marsha, Ext. 5053.

BARBEQUE TANKS - & gas, \$20 ea. Joe, Beeper 0562.

CEMENT BLOCKS - 100+, 8"x8"x16", also 200+ red bricks, all for \$75 or will sell separately. 924-3553.

DOORKNOB SETS - used, bdrm., bath, keyed entry lock sets, deadbolts, \$1/ea. Pete, Ext. 5105.

GARAGE DOORS - 2, 9' wide, 7' high, wood w/ glass section, all hardware incl., \$75 ea. Ken, Ext. 5110.

LAWN MOWERS - elec. start, self-propelled & push riders w/ w/o blade. Al, Ext. 2047.

MOWER - riding, Sears, 1 fwd., 1 rev., good cond. \$400. Al, Ext. 2175.

PATIO FURNITURE - redwood, 52" table, 4 benches, 12 chairs, chair, rocker, ultra-plush cushions, minimal repair, \$100 takes all. Barry, Ext. 4118.

POOL FILTER - ig, Tagelus TA-60 sand filter w/1.5-h.p. Pac-Fab pump, new motor, 6-position multi-port; a.g. pool deck, ladder. Kenny, 758-7853.

POOL - 4'x18' complete, w/deck & privacy panels, cover, sand-filter, pump, solar cover, extras, \$400. 928-0984.

POULTRY NETTING - wire, 4 rolls, 50'X2"X24", \$7.50/roll. Ruppert, Ext. 3254.

WOOD WORKING BENCH - 1890s, heavy-duty, w/2 wood vises, \$150. 363-9527.

Sports, Hobbies & Pets

AQUARIUM - complete 70-gal. setup, 2 Aquaclear filters, undergravel plates w/powerhead, stand, glass canopy light, more, \$200. Winnie, Ext. 5005.

BICYCLE - men's 3-spd., \$25; exercise bike, \$15. Judy, 924-7077.

BICYCLE - women's 26" 10-spd., open frame, like new, \$95. Ralph, Ext. 4171.

BICYCLE - girl's 18", \$10; 21 folding shopping carts, \$5 ea. 281-7844 eves.

BIKE - girl's 20" w/gears, \$25. John, Ext. 5100.

BICYCLES - women's 10-spd. and 2 children's bikes, \$30 takes all, needs cleanup, you pick up. Sandra, Ext. 7814.

BIKES - men's 27" 10-spd., \$30; woman's 24" 10-spd., \$25. Tim, Ext. 4630.

BIKES - 20" boy's 2, \$15/ea. 924-5181.

BIKE - girl's 20", excel. cond., 4 yrs. old, used for 2 yrs. by 1 child, \$35. Linda, Ext. 5763.

BODY CONDITIONER - rowing & lifting machine, complete, excel. cond., \$40. 924-3553.

EXERCISE BIKE - \$55. Mardor, Ext. 4830.

EXERCISE STEP MACHINE - Proteus 100 w/computer, \$75, like new. 864-1798.

GOLF CLUBS - 2 sets w/bags, 5 irons, \$75 ea., buy both get hand cart free. Ed, 286-0932.

GOLF CLUBS - irons, Wilson Pro Staff, 3-PW cavity back, \$150. 467-1343.

GOLF SHOES - leather, women's size 7M, excel. cond., \$15; Coleman sleeping bag for one adult, \$10. Linda, Ext. 2733 or 878-8491.

GYM - Weider Flex Stack Master bench press, leg and arm curls, complete workout, excel. cond., \$90. Donna, 281-4866.

PIANO - Yamaha spinet, excel. cond., always kept in tune. \$800. Ext. 2051.

PING-PONG TABLE - folding, \$50; exercise bike, \$25. Dick, 286-3372.

Don't Nix Summer Pix!

If you're a student or teacher learning on site this summer, come to Berkner Hall on Thursday, July 28, at 1:30 p.m. You'll be included in a giant photo to be published in the August 5 issue of the Brookhaven Bulletin, which will be devoted to summer educational programs at BNL.

PUPS - German shepherd, AKC, m/f, white, raised w/ children, excel. temperaments, 6 wk. old. 924-6324.

PUPPIES - A.P.B.T., excel. temperaments, all shots, reds, brindles, patches, ready now. Mike, 281-8293.

RABBIT - 1-yr. old, lop ear, rust color, large den fits 2 rabbits, 6'x4', built solid, needs good home. John, Ext. 7340.

SEWING MACHINE - Sears Kenmore in wood cabinet, zig-zag, aged, runs well, \$25 neg. Linda, Ext. 5763.

SKIS - Olin, 180cm w/Salomon 444 bindings & run-away straps, great beginner or just a second pair, \$20 neg. Don, Ext. 7237 or 744-2921 after 5:30 p.m.

WATER SKIS - O'Brien Performer Combos, never used, orig. \$200, now \$100. Richie, Ext. 2175 or 734-7342.

WELL PUMP - Wayne, Hi-Lo Jet, \$60; 40-gal. water tank, \$15; Turturi exercise bike, \$95. 289-1003 after 6.

WORKOUT BENCH - Weider, complete, legs, arms, \$60; row machine, \$20, all excel. cond. 472-3254.

Audio, Video & Computers

COMPUTER - 386DX, 33 MHz w/math coprocessor, 14" VGA monitor, 180M hard drive, both floppies, keyboard, \$600 or best offer. Henry, Ext. 7749.

DISNEY VIDEO - classic tape, *Robin Hood*, \$8. 924-5181.

ENTERTAINMENT CENTER - 6'Hx5'W, glass doors on top, walnut color, \$100 or best offer. 281-3515.

LPS - Franklin Mint Collection, favorite waltzes & overtures, classic violin performances, great romantic concert, hardly used. Janet, Ext. 2345 or 929-3910.

MODEM - 14400 baud US Robotics external sportster modem, \$100 neg. Henry, Ext. 7749.

NINTENDO SYSTEM - 2 controllers, light gun, 30 games w/box, sleeves, instruction booklets, reasonable. Steve Warhol, Ext. 3929.

PRINTER - Citizens, little use, 1 yr. old, perfect cond., \$200, orig. \$300. Sandra, Ext. 7814.

TV - color, 19", remote, excel. cond., must sell, \$100 neg. Zoltan, Ext. 5341 or 341-1021 eves.

TV - Toshiba, color, 19", remote, \$120; VCR, remote, \$140; or \$250/both, used for 2 years; Nintendo, \$20, 4 games, \$5 ea. Zhongwei, Ext. 4331 or 924-5181.

TV - 13" b/w, \$20, cassette deck, Pioneer, \$20. Tim, Ext. 4630.

VCR - Fisher, new, still in box, on-screen program, \$225. 289-8212.

VHS CAMCORDER - RCA, HQ #CC260, low hrs., ask. \$350. Ext. 5316 or 289-0034.

WORD PROCESSOR - Smith Corona w/CRT, like new cond. Ralph, Ext. 4171.

Miscellaneous

BEER CANS - whole collection, about 300, U.S. & worldwide, best offer. Tim, Ext. 4630.

CHILD'S CAR SEATS - \$20, \$5; crib w/mattress, \$40. 751-1867.

COMMODORE - new, for elderly or handicapped, \$25; walker, used, good cond., \$15. 928-0984.

DRAFTING TABLE - w/drafting machine, \$50. Donna, 821-3739.

SHOES - \$85, Levi's comfort, size 12, new in box, \$30. Al Campbell, Ext. 2047.

RING - women's 14kt. gold, 2ct. tdw diamond cocktail ring, comes w/\$3,195 appraisal, size 10, \$700, real steal. Ruth, Ext. 3305.

TICKETS - 2, Harry Connick Jr., 8/25, Jones Beach, \$70. Jim Lacy, Ext. 2138.

TICKETS - theater, 2, *Blue Light* starring Dianne Wiest, Bay Street Theatre, Sag Harbor, 8/13, \$50. Diane, Ext. 2347.

TICKETS - 4, Billy Joel-Elton John, Sunday, 7/24, 8 p.m., Giants Stadium, \$50 ea. Lauri, Ext. 5520.

TICKETS - U.S. Open Tennis, eve. sessions, 8/31 and 9/1, \$20 ea. Gail, Ext. 3338.

WESTERN BOOTS - brown leather, men's 10 1/2 D; black leather, men's 7 1/2 D, like new. Pat, Ext. 5406.

Free

COUCH - loveseat & 2 end tables, good cond., you pick up, must take as a set. Angela, Ext. 5168.

DOG - 3 yrs. old, male, German shepherd, needs good home, good temperament. Brian, 821-4234.

DOGHOUSE - good cond. Ext. 4565 or 929-1033 eves.

KITTENS - three, 14 weeks, distemper shots, wormed, FeLV-free, litter trained, people-oriented and friendly. Ext. 5540.

KITTENS - male and female, all colors, first come, first served. Rodger, Ext. 4630.

POOL TABLE - w/cues & balls, you move it, it's yours. Dick, 286-3372.

RABBITS - 2, 1 white, 1 b/w, w/hutches, need good home, friendly. Joanne, 928-0984.

SPEAKERS - Panasonic, 2 pr.; bowling balls, 10 lb. & 12 lb., women's bowling shoes, size 7 1/2. Judy, 924-7077.

Yard & Garage Sales

PATCHOGUE - 7/16-17, 9 a.m., multifamily, antiques, collectibles, boats, motors, dolls, carriages, vintage clothing, etc., 175 Grove Ave.

PATCHOGUE - 7/16, new items, furniture, clothes, collectibles, corner Woodside and Buffalo Ave.

WADING RIVER - 7/16, 9-4, clothes, housewares, books, records, rare beer cans, toys & furniture, 405B Oakwood Drive, Lewin Hills.

Car Pools

BOHEMIA-E. ISLIP-OAKDALE-SAYVILLE - needs 1 more driver, call for interview. Frank, Ext. 2314.

CUTCHOGUE AREA - need ride, will pay expenses, 8 a.m.-4:30 p.m. work hours. Rich, Ext. 3351 or 734-5066.

LIE EXIT 36 - need 4th for carpool. John, Ext. 5181.

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

BAITING HOLLOW - beach cottage, sleeps 4, 1/2, eik, full bath, deck, priv. beach, laundry, rec. hall, near farms, SplishSplash, wineries, \$400/wk., July, Aug., Sept. Mike, Ext. 7861 or 698-3967 eves.

BELLPORT VILLAGE - 1-bdrm. apt., full bath, enjoy all village amenities, \$625/mo. incl. utilities & cable, single person, nonsmoker. Jim, 744-2095 after 6 p.m.

CORAM - 3-bdrm. house, 1 1/2 baths, eik, 1/2, newly decorated, \$1,200/mo. incl. heat & water. John, 732-9180.

E. YAPHANK - 1-bdrm. apt., 1/2-kit. combo, priv. ent., 1/2 mil from LIE, no pets, perfect for single, no pets, \$525/mo. incl. util. & security. Donna, 281-4866.

MANORVILLE - luxury 2-bdrm. townhome, 1 1/2 baths w/round tub, gar., fp, w/d, skylights, cathedral ceilings, cac, pond view, new, \$980/mo. + util. Eric, Ext. 5875.

MIDDLE ISLAND - Lake Pointe, luxury 1-bdrm. apt., d/r, 1/2, tennis, pool, 5 min. to Lab, avail. 8/1, \$685/mo. + elec. Shan, Ext. 4393 or 345-6923.

MIDDLE ISLAND - Fairview, new section, 2-bdrm. condo, upper, w/pond view, 1 1/2 baths, 5 appl., pool, tennis, clubhouse, 5 min. to Lab, \$925. Mac, Ext. 4576 or 924-2348.

NORTH SHIRLEY - studio, 14'x32' bdrm./1/2 bath, w/w, phone, cable, share kit, fenced 1/2 acre, pool, parking, single, nonsmoker pref., \$450/mo. incl. all, refs. & sec., avail. 7/1. Ext. 3413 or 399-6947.

PATCHOGUE - very large 2-bdrm. apt., eik, d/r, swimming pools, sauna, gym, lg. terrace, \$925/mo., avail. 12/1. Greg, Ext. 7960.

ROCKY POINT - master bdrm., guest bdrm., office space, 1/2, d/r, gar., w/d hookup, deck, walk to beach, ideal for 2, no pets, \$850/mo. + util. (718) 721-4271 wkdays., 821-6698 wknds.

ROCKY POINT - 1-bdrm. apt., priv. ent., bsmt. apt., 1/2-kit. combo, ac, w/w, suitable for 1 nonsmoker, \$525/mo. all. Frank, 744-6014.

SHOREHAM VILLAGE - summer rental, swimming, tennis, boating, 4 bdrm., avail. July & August by week or month. 744-3480.

SOUND BEACH - 1-bdrm. apt., full bath, eik, cable, priv. ent. & parking, close to BNL & beaches, avail. 8/1, single, nonsmoker pref., \$500/all. 744-7007.

YAPHANK - 3-bdrm. condo, min. from Lab, 1/2, d/r, att. gar., bsmt. w/w/d, fp, pools, tennis & clubhouse, \$1,000/mo. + util., avail. 8/1. Frank, Ext. 3433

YAPHANK - 2-bdrm. townhouse, gar., fp, fin. bsmt., pool, tennis, 5 min. to Lab, \$950/mo. + util. Ann, Ext. 7611 or 924-1604.

WADING RIVER - 2 bdrm., 1 1/2 baths, 1/2, d/r, kit., SWRS, fp, new kit., appl., bsmt. storage, no pets, 100m to priv. beach, \$800/mo. + util., avail. 8/1, Bill, Ext. 2906 or 929-4529.

KEY WEST, FL - 1-bdrm. oceanfront timeshare, Coconut Beach Resort, sleeps 4, full kit., ac, TV, deck, pool, Jacuzzi, fish, swim, night life, \$1,050/wk. of July 23-30. Pat, Ext. 2539 or 929-3586.

MT. DESERT ISLAND, MAINE - lakefront, full furn. 1 rm. cottage w/sleeping loft, kitchenette, bath, fp, deck on Echo Lake, Acadia Nat. Park, July, late Sept. & Oct., \$450/wk. Bob, Ext. 2514.

HILTON HEAD ISLAND, SC - 2-bdrm. condo, sleeps 6, fully furn., 2 baths, pool, beach, golf nearby, avail. through Sept., \$450/wk. Guy, Ext. 3147 or 689-5378.

For Sale

AQUEBOGUE - 3-bdrm. ranch, eik, fd/r w/hardwood floors, 1/2 w/tp, cathedral ceilings, skylights, Jacuzzi bath, full bsmt. w/8' ceilings, fenced 3/4 acre, \$139,000. Sharon, Ext. 5919 or 722-3010.

BELLPORT - 3-bdrm. ranch, 1/2 w/tp, d/r, bath, full bsmt., 20'x16' deck, det. 3-car gar., shy 1/2 acre, SCS, city water, garbage pickup, near Village, dock, red. to \$119,000. Maryann, Ext. 2352 or 286-3377.

BOHEMIA - 3-bdrm. Colonial, 2 baths, walk-in closets, fin. bsmt., 2 1/2-car gar., maintenance-free exterior, lg. property, ask. \$149,000. Ext. 3438.

CALVERTON - 2-bdrm. condo, 5 appliances, patio, upper deck, ac. Ext. 7595.

CALVERTON - 3-bdrm. ranch, eik, d/r, 1/2, 1/2 bsmt., gar., 8'x12' shed, 60'x130' yard, fenced backyard, 3 mi. from BNL, \$2,200 taxes, \$99,900. Ken, Ext. 2012.

CUTCHOGUE - Nassau Point, 3-bdrm. ranch, 2 full baths, full bsmt., 16 yrs. old, 2-car gar., eik, screened patio, terrace brick & cedar, Thermopane windows, 1+ acre, taxes \$4,100, \$255,000. 734-7933.

E. PATCHOGUE - 3-bdrm. ranch, s. of S. Country Rd., mint, quiet, \$130,000. Ext. 3291 or 589-3020.

HOLBROOK - m/d; upstairs, 3 bdrm., 1 bath, 1/2, d/r, kit., deck, oak floors; downstairs, 3 bdrm., 1 bath, 1/2, d/r, kit., priv. ent., all appl., gar., fenced yard, \$125,000 firm. Ext. 3562 or 821-1271.

HOLTSVILLE - 2-bdrm. condo, 1/2, d/r, eik, appl., 1 full bath, laundry, w/d, cac, w/w, blinds incl. tennis courts, immaculate, ask. \$124,990. Bob, 929-6421.

MASTIC - 120'x100' cleared bldg. lot, all variances & permits, ask. \$30,000. Patti, Ext. 3145.

MEDFORD - Blue Ridge Country Club, 2-bdrm. condo, 1 1/2 baths, incl. golf, tennis, billiards, in/out pools, whirlpool, sauna, clubhouse, restaurant, 15 min. to Lab, \$79,990. 736-8742.

MEDFORD - 3-bdrm. center-hall Colonial, 1 1/2 baths, eik, den, 1/2, d/r, gar., 0.4 acre, fenced, \$109,900. 286-1571.

MT. SINAI - 2-bdrm. ranch, 3/4 + acre, wooded, lg. paneled 1/2, dinette, kit., full bath, 1/2 bsmt., det. oversized gar. w/electric, city water, 20 min. to BNL, \$107,000. 473-6432.

NORTH SHIRLEY - 3-bdrm. ranch, 1/2, d/r, new kit. & appl., gar., full bsmt., fire & burglar alarm, dead-end street, fenced yard, 10 min. to Lab, assum. mortg., \$115,000 neg. Jim C., Ext. 4150 or 281-0489.

NORTH BRENTWOOD - 3-bdrm. ranch, poss. m/d, 1/2, d/r, eik, lg. covered deck, pool, \$120,000. 231-4613 after 5 p.m.

PORT JEFF. STATION - high ranch, legal income apt., cac, w/w, new kit., skylights, 2 decks, wood/coal fp, igs, 12'x16' shed, 1/2 acre treed, fenced \$142,000. Bob, 473-9180.

PORT JEFFERSON VILLAGE - custom-built, quiet, wooded, 3 1/2 baths, 2-car gar., fin. bsmt. w/sep. ent., bath & full windows, beach, golf, tennis. 331-4768.

RIDGE - 5-yr.-old, high ranch; upstairs: 4 bdrm., 2 baths, 1/2, d/r, kit., downstairs: large 1-bdrm. apt., Euro kit., full bath, priv. ent., 1-car gar., 5 min. to Lab, \$129,900. Ext. 5076 or 744-4615.

RIDGE - 3-bdrm. high ranch, 2 baths, 1/2, d/r, eik, sunroom, 1+ acres, fenced yard, wooded, secluded, extras, 5 min. BNL, \$120,000. 924-7077.

RIDGE - 3-bdrm. townhouse, 1 1/2 baths, lg. 1/2, 5 min. to Lab, \$69,900. 924-4734.

SAYVILLE W. - 3 1/2-bdrm. Colonial, 1 1/2 baths, fenced yard, screend Florida rm., walk to golf, 10 1/2 yrs. old, \$149,000 neg. 563-2889.

SHOREHAM - north of 25A, 4-bdrm. Colonial, 2 1/2 baths, 1/2, d/r, lg. kit., fp, w/w, fin. bsmt., igs, 2-car gar., a/c, 1/2+ acre, \$194,900. Ext. 5076 or 744-4615.

SHOREHAM N. - 4-bdrm. Cape, wooded setting, cul-de-sac, deeded beach access, 2 new baths, fp, hardwood floors, \$170,000. Harvey, 821-1726.

SHOREHAM VILLAGE - 3+ bdrm., 2 1/2 baths, cathedral ceiling, Jacuzzi, steam bath, lg. decks, fin. bsmt., attic, gar., igs, walk to priv. beach, tennis & country club, SWRS, \$269,000. 744-9718.

SOUND BEACH - shy 1/2 acre, unobstructed, year-round, waterview of Long Island Sound, \$79,000. Tara, 422-7759.

TERRYVILLE - 4-bdrm. tri-level, 1 1/2 baths, 1/2, d/r, eik, fam. rm. w/bay windows & sliders, well-maintained, 1/3 acre, landscaped w/20'x40' brick patio, shed, possible m/d, ask. \$120,000. 928-7265.

WADING RIVER - 3-bdrm. Col., 2 1/2 baths, 2-car gar., custom kit., Jennair, gazebo, shed, igs, ipp, deck, steam bath, satellite dish, SWRS, 1.1 acre, \$229,000. 929-8323.