

## High Tech Meets Humanity: BNL Offers Mine Detection Techniques To Help Solve Devastating International Land-Mine Problem

*"I was excited by the peace. My family hoped to return to peace. We wanted no memories of war. However, my brother, on the long walk home, stepped on a land mine and lost his foot. What have I done to deserve this? They told me we had peace."*

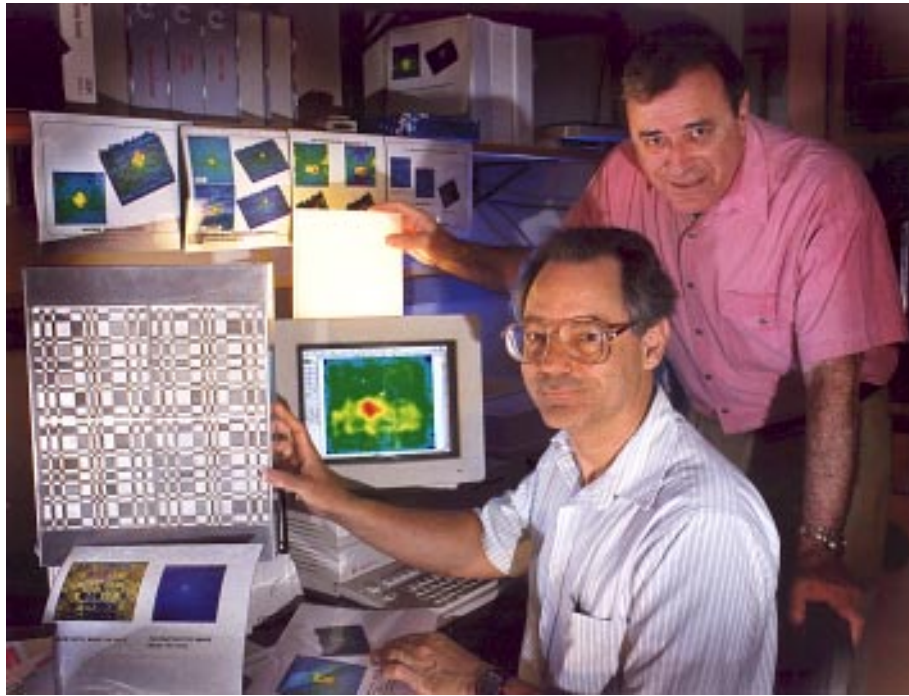
— Alice Simbane, a Mozambican refugee in Zimbabwe, as told to *Africa Watch* in December 1992.

For millions of people, memories of war are a daily, physical reality. An estimated 100 million land mines, left undetected and unexploded, maim or kill 25,000 people each year in 64 countries — most of them undeveloped. Ninety percent of these people are civilians, and many are children.

The devastating problem of abandoned land mines left over from years of conflict began to gain global attention with the end of the cold war and the use of land mines in the conflict in Bosnia-Herzegovina. While many countries are considering a ban on using land mines, the problem of existing mines will persist and needs addressing.

BNL has joined this humanitarian effort by offering solutions in the form of mine-detection technology.

"This is an international problem that should be worked on by the U.S.



Roger Stoutenburg

**Leon Forman (back) and Peter Vanier, both of the Department of Advanced Technology, demonstrate how the cadmium-coded aperture they have developed, which is sensitive to thermal neutrons reflected from a land mine, can produce an image on the computer — a land-mine detection map. The darker spot on the map, usually shown in red, identifies the land mine.**

Department of Energy [DOE] labs because the technical challenges involved

are what DOE national labs are all about," said Leon Forman, a principal investigator in BNL's Department of Advanced Technology (DAT), agreeing with Alvin Trivelpiece, Director of Oak Ridge National Laboratory.

Last May, Forman had attended a meeting of ten national labs entitled "Land Mine Detection Technology," at Oak Ridge, where Trivelpiece spoke. "Everyone agreed that mine detection is the major problem," Forman said.

### Difficult to Detect

Land mines are difficult to detect for a number of reasons. First, modern antipersonnel mines contain very little metal and are increasingly made of plastic and wood. Mines also can range from 3 to 20 inches in diameter.

Second, maps of land-mine distributions are scarce. Mines planted by warring factions, or even neighbors, are often placed without any records of their locations. Some types of small land mines can be placed using a helicopter. Dropped over large areas, these mines distribute at random.

Mines also have the ability to move surprising distances due to erosion. In countries with monsoon seasons, land mines can migrate when thousands of tons of mud move from uplands to the more populated lowlands. These present major hazards for people trying to carry on daily activities such as farming or gathering wood.

"In Cambodia, mine fields have denied people the use of half the land," Forman said.

Humanitarian land-mine detection requires removal of 100 percent of land mines, and, therefore, BNLers have been challenged to develop techniques that detect the essential functional constituents of land mines — hydrogen and nitrogen.

### Some Possible Solutions

Funded by DOE's Office of Nonproliferation and National Security, DAT's Forman and Peter Vanier are working on a detection system that uses a fast neutron source to illuminate the ground.

The land mine's hydrogen causes fast neutrons, which have an energy

of up to 14 million electron volts, to slow to thermal energies of less than 1 electron volt. The thermal neutrons are then detected by a coded-aperture imaging system indicating the mine's location.

The imaging system is based on a two-dimensional, gas-filled detector built by Graham Smith and Neil Schaknowski of BNL's Instrumentation Division.

Rectangular holes in a cadmium-metal square act like an array of pin-hole cameras to generate an image from the thermal neutrons. Energetic, electrically charged particles generated by a nuclear reaction between neutrons and helium-3 gas in the detector cause an ionization — stripping of an electron from the gas atoms in the detector.

The electrons are pulled by an electric field toward a wire grid, causing a secondary ionization. An avalanche of charge created by the secondary ionization sends a signal along electrodes.

The signal's output shows the position where the neutron entered the detector. The image contributed from the position information enables researchers to find the mine and determine what it looks like.

Other DAT researchers have suggested different approaches. For example, George Greene has developed an electromagnetic detection technique in which high-intensity radio frequencies disarm or disable the detonator of a land mine.

And Nikolas Simos is using sonic waves to detect the resonant frequencies of land mines. Each type of land mine has a signature frequency that provides information about the mass, weight and shape of the object. A device sensitive to land-mine signature frequencies would act as an effective detection device.

"I've been getting a broad response from researchers at BNL," Forman said. "BNL has some of the world's best technology to contribute to mine-detection methodology."

### The Financial Challenge

But, ultimately, the most challenging question may not be mine-detection technology, but financing mine removal for humanitarian reasons. Land mines are an inexpensive type of weapon that can be purchased for as little as a dollar apiece. The cost of removal, however, is now between \$300 and \$3,000 per mine.

A few countries have millions of deployed land mines: Egypt tops the list with an estimated 23 million buried in its soil. However, Cambodia and Bosnia-Herzegovina have much higher land-mine densities — 142 per square

(continued on page 2)

### What They're Saying . . .

## Smith Launches AUI Boycott

BNLers may have read in *Newsday* this past Sunday about a boycott aimed at the Lab. The focus of the article was Bill Smith, Executive Director of Fish Unlimited, who had issued a press release on September 19 that began with the following paragraph:

*A campaign to force the nine member universities that make up Associated Universities, Inc., the managing body of Brookhaven National Laboratory (BNL), to divest themselves from BNL activities because it is "poisoning life on Long Island" was announced today by the national fisheries organization Fish Unlimited.*

Contrary to what Smith says, employees should note that the nine universities that originally sponsored Associated Universities, Inc. (AUI) have no legal and binding ties to BNL, as they are not members of AUI. It is AUI the corporation, chartered in 1946 as a nonprofit research and educational institution in New York State, that operates BNL under contract to the U.S. Department of Energy.

Smith also calls on the alumni to stop donating money to their schools. This is unfair to these institutions, since they have no control over BNL operations, said Leland Willis, AUI Vice President, Environment, Safety & Health.

Willis added, "The Lab operates under local, state and federal environmental regulations. We are currently addressing all the past environmental problems that may have occurred prior to the advent of present-day environmental requirements. Our employees deserve a safe and healthy workplace, and the surrounding communities deserve an environmentally sound and safe scientific facility as a neighbor."

The original nine sponsoring institutions are:

Columbia University	Princeton University
Cornell University	University of Pennsylvania
Harvard University	University of Rochester
The Johns Hopkins University	Yale University
Massachusetts Institute of Technology	

AUI is governed by a board of 25 trustees selected from a broad range of scientific fields, with at least one trustee from each of the original sponsoring institutions. The trustees do not represent their home institutions when they serve on the AUI board. In addition, these institutions neither nominate nor elect AUI trustees.

The current trustees are affiliated with the original nine universities, plus the following ten institutions:

Carnegie Institution of Washington	State University of New York
Case Western Reserve University	at Stony Brook
IBM Corporation	University of Maryland
Lawrence Berkeley National Laboratory	University of Washington
New York University	University of North Carolina
Sematech	

— Mona S. Rowe

### Coming Up

**Senior Physicist Samuel Aronson, Physics Department, who is Project Director for the PHENIX experiment being built at the Relativistic Heavy Ion Collider (RHIC), will deliver the next Brookhaven Lecture, on Wednesday, October 16. His talk on "Revisiting the Big Bang: RHIC Research Programs and Detectors," will begin at 4 p.m. in Berkner Hall.**

## Brookhaven Gothic

On 200 picturesque acres of countryside, in the midst of Long Island's suburban sprawl, is the Old Bethpage Village Restoration, a pre-Civil War village typical of rural Long Island. There, life in the mid-1800s is recreated through the actual practice of the agricultural, domestic and trade crafts and skills of the times. Annually since 1970, Bethpage Village has held the Long Island Fair, an agricultural exposition featuring traditional music, draft horse demonstrations, brass band concerts and the like — and, again this year, the in-costume husband-and-wife volunteer team of Richard Scheidet, Plant Engineering Division, and Mary Scheidet, Public Affairs Office. Since Mary's late father enjoyed the Village, following his death, her family donated a black walnut tree to the restoration. In returning to check on the tree's growth, the Scheidets, including their children Evan and Rebecca, found themselves getting caught up in the spirit of the village and its times, and the fun of the fair. For two years, Mary's wild blueberry jam placed first, while Richie's pickled tomatoes took a second one year. From winning, she moved to assisting in judging jams, and, now, Mary is a guide to the Exhibition Hall's culinary section. Meanwhile, during this year's fair, October 11-14 and 17-20, Richie will be found hawking peanuts throughout the village.

— Marsha Belford



Roger Stoutenburgh

### POS Seminar

As of January 1, BNL will begin offering employees the option of medical coverage under two point-of-service (POS) plans: CIGNA, and the North Shore-HIP Health Partnership. The new POS option is in addition to the existing choices of two HMOs or the AUI Medical Plan (see article at right).

BNL employees may learn the specifics of the CIGNA POS program during a seminar from noon to 1 p.m. on Wednesday, October 9, and, again, on Tuesday, October 22. For those who wish to attend this seminar, department chairs and division heads have been requested to extend employees' half-hour lunch to one hour.

Information about the North Shore-HIP Health Partnership POS program will be available from representatives in Berkner Hall, only on October 9, 18, 19 & 22 (see story at right).

### Reminder: Insurance Benefits Office Hours

The hours for the Insurance Benefits Office in the Human Resources Division, Bldg. 185, are limited to 8:30 a.m. to 1 p.m., Monday through Thursday, when employees and retirees may request assistance with all aspects of their insurance benefits, such as enrollments and coverage changes.

In case of emergency, call Denise DiMeglio, Ext. 2881.

### Land Mines (cont'd.)

mile and 152 per square mile, respectively — making ordinary daily activities almost impossible.

While the economics of land-mine detection remain to be worked out, "We are developing a technological road map to solve the problem," Forman said. — Sarah Gilbert

### Munitions on Site

Live munitions left over from the World War I and II days when the BNL site was Camp Upton have been found numerous times on the Lab's grounds.

What should you do if you find an unusual-looking object that you suspect might be a munition?

To avoid injury, says Alfred Berretta, Manager of BNL's Police Group, do *not* touch it. Instead, call Ext. 2222 to alert emergency personnel. Leave a marker, such as a stick or a rock, nearby, to help authorities locate the object for safe removal. — S.G.

## Enrollment Open for Medical & Dental Plans

Until October 31, eligible employees working 20 or more hours per week may make changes to their medical and dental coverages: Employees may join a medical and dental program, change from one program to another, add or drop family members covered, or drop coverage entirely.

Until October 31, retirees and participants on long-term disability may make changes to their medical coverage (see notice at right).

Coverage changes made during the open-enrollment period will become effective January 1, 1997. Employees who do not want to change their coverages at this time do not have to do anything for them to continue.

### AUI Program, HMO or POS?

The medical programs available to eligible employees are: the AUI Medical Insurance Program, administered by CIGNA; two health-maintenance organizations (HMOs): Vytra Healthcare and U.S. Healthcare; and two point-of-service (POS) programs: CIGNA and North Shore-HIP Health Partnership. Employees who enroll in any of the medical programs must pay a contribution for their medical insurance coverage (see Brookhaven Bulletin of September 27, 1996).

In an HMO, employees receive medical services from physicians and health-care facilities within that HMO's provider network. There are no claim forms to submit, and many services are covered, including physician visits, well-baby care, surgery, x-rays, hospitalization, diagnostic tests and prescription drugs. Some HMOs require a copayment at the time services are rendered.

In a POS program (see notice at left, above), health care is provided through a network of physicians and health-care facilities, but provisions are made for providers who are not in the network. There are no claim forms to submit for care provided within the network. For out-of-network reimbursement, employees must submit claim forms.

Under the AUI Medical Insurance Program, employees choose their physicians and health-care facilities. To be reimbursed for covered medical expenses, employees must submit claim forms to CIGNA.

### Dental: CIGNA or AUI Plan?

The dental plans available to eligible employees are: the CIGNA Dental Health Plan, and the AUI Dental Assistance Plan, administered by Eastern Benefit Systems. Employees who enroll in either of the dental plans are required to pay a contribution for the dental-insurance coverage.

Under the CIGNA Dental Health Plan, there are no deductibles, no

maximum benefits and no claim forms to submit. Dental services are provided through a network of participating dentists. Many preventive and basic services are covered in full. Restorative and orthodontic services are based on a fee schedule.

Under the AUI Dental Assistance Plan, employees may choose any dentist, and preventive, diagnostic, basic and major dental services are based on a fee schedule. Orthodontia for dependent children is covered at 50 percent of the reasonable and customary charge. Claim forms are required for reimbursement. The plan has a \$25 individual and \$75 family calendar-year deductible for basic and major dental services. The maximum benefit is \$1,000 per person per calendar year for non-orthodontic services, with a separate \$1,000 lifetime maximum per child for orthodontia.

### Plan Representatives on Site

To help employees decide which medical and dental plans are right for them, representatives from all the available plans will be in Berkner Hall from 11 a.m. to 1:30 p.m. on Wednesday, October 9; Friday, October 18 during Healthfest '96; and Tuesday, October 22; and from 10 a.m. to 2 p.m. on Saturday, October 19, also during Healthfest '96. Literature will be available, including sheets comparing the programs, and lists of physicians and facilities participating in the medical HMOs and POS programs, and the CIGNA Dental Health Plan.

Employees who want to change their medical or dental coverage must contact Muriel Pfeiffer, Bldg. 185, Ext. 2877, Monday through Thursday, 8:30 a.m. to 1 p.m., to obtain the required

forms and return them to her by Thursday, October 31. Pfeiffer will also be at Berkner Hall at the times and dates above, to answer any questions.

Changes can be made only during the annual open-enrollment or when a qualifying event occurs. Qualifying events, such as the birth or adoption of a child, marriage, divorce or legal separation, loss of dependent status, or spouse's gain or loss of employment, allow employees to make certain changes to their coverage within 30 days of the event.

### Attn. Retirees: Changes Due by 10/31

Retirees and long-term disability (LTD) participants who are eligible for Medicare are reminded that the deadline for medical coverage changes is Thursday, October 31.

As discussed in the Brookhaven Bulletin of September 6, 1996, Medicare-eligible retirees and LTD participants now have two health-maintenance organizations as options in addition to the AUI Medical Plan: For Long Island residents, Vytra Medicare is being offered, and, for residents of certain areas in the U.S. including Long Island, CIGNA Health-Care for Seniors is available.

To continue your present coverage under the AUI Medical Plan, you do not have to do anything. To learn more about these HMOs and obtain the necessary forms to change your coverage, then contact Muriel Pfeiffer, (516) 344-2877, Monday through Thursday, 8:30 a.m. to 1 p.m. Any changes in coverage that you elect will be effective on January 1, 1997.

## Take Your Sons to Work

Registrations are pouring in for the Lab's second Take Our Sons to Work Day, on Columbus Day, Monday, October 14. (Girls have their special day in April.)

Since the event is open to only the first 200 employees' sons ages 11-15 who are registered by today, parents should quickly return the registration form, which was sent to all employees earlier this month or is available at the reception desk in the Human Resources Division, Bldg. 185, or call Susan Foster, Human Resources, Ext. 2888.

Any parents who cannot bring their sons to their workplaces due to safety concerns should try to arrange for a "host parent" for the morning portion of the day's activities. Parents unable to make such arrangements should note this on the registration form so the Lab can find host parents for their sons.

The day will start with sons' reporting to work at their parents' or host parents' normal reporting time. At noon, the boys and their parents will go to the Brookhaven Center for a box lunch. Then, the boys will hop onto buses for visits to the Science Museum and several other areas of the Lab. Parents will pick their sons up at the Brookhaven Center at their usual departure times.

Employees interested in being host parents of afternoon chaperones may call Susan Foster, Ext. 2888.

BNL's Healthfest is being sponsored by the Director's Office for the fourth year to encourage BNLers to take personal responsibility for their individual and family's health, fitness and safety. The hope is that employees and their families who attend Healthfest '96 — which is scheduled for **Wednesday through Saturday, October 16-19** — will not only use the information to improve their personal well-being, but also to decrease their risk of occupational injuries and illnesses.

On **Wednesday, October 16**, the festivities for employees will begin with the **2-mile Employee Fitness Walk**, organized by the BNL Walking Club, the Director's Office and the Office of Educational Programs. Rain or shine, it will start at noon and leave from the Science Education Center, Bldg. 438. The first 200 participants will receive Healthfest '96 T-shirts. Before the walk, the BNL Aerobics Club will hold an **Aerobic Stretch**, from 11:40 a.m. to noon.

Then, on **Thursday, October 17**, the pace will be picked up with a **5-kilometer (3.1-mile) Employee Fitness Run**, organized by the BNL Roadrunners Club. To be held regardless of the weather, it will start at the Biology Department, Bldg. 463, at noon, and the first 100 finishers will receive a

# 1996 Healthfest

BNL Health, Fitness & Safety Fair

Healthfest '96 T-shirt. The run will also be preceded by an **Aerobic Stretch** at 11:40 a.m.

The two-day **Health, Fitness & Safety Fair** will be held **Friday and Saturday, October 18 & 19**. On Friday from 11 a.m. to 2 p.m., employees are invited to view the various displays on such topics as back safety and ergonomics, cancer and heart-disease prevention, and mental health and substance-abuse prevention; participate in a demonstration of stress management and relaxation techniques; and be screened for blood pressure, body composition, hearing and foot problems.

Then on Saturday, from 10 a.m. to 2 p.m., employees are invited to bring their families to the fair, which will be expanded to interest children and parents alike. Parents may be interested

in children's height and weight measurements, foot screening, and photo ID and fingerprinting; while children will like the teddy bear clinic (bring your child's own), pumpkin painting, face painting, clowns and balloons. Each day, free door prizes and healthy refreshments will also be offered.

In addition, Saturday will feature: a **Tennis Tune-Up & Fun Doubles** (bring your own racquet and a can of balls), from 10 a.m. to 1 p.m. at the BNL Tennis Courts; a **10-mile Individual & Team Fitness Biathlon** (2-mile run & 10-mile cycle; bring your own bicycle; bicycle helmets required) starting at the Gymnasium, Bldg. 478; and a group lecture and demonstration of **Reiki healing**.

To register for the stretch, walk, run, stress workshop, foot screening, hearing check, tennis tune-up, biathlon and/or Reiki healing circle, use the form below. For more information, contact Health Promotion Specialist Mary Wood, Ext. 5923.

## Service Awards

The following employees recently celebrated their service anniversaries:

### July 1996

**35 Years**  
Karl M. Kohler.....AGS

**30 Years**  
Vincent LoDestro.....AGS  
John J. Sterzenbach.....Plant Eng.

**25 Years**  
Anand M. Saxena.....Biology  
Lewis C. Snead.....Adv. Technology

**20 Years**  
Sharon L. Atkins.....Cont. & Proc.  
Donna M. Earley.....Physics  
James F. Hainfeld.....Biology  
Robert E. Hall.....Adv. Technology  
Bruce A. Lein.....Reactor  
Kenneth R. Perkins.....Adv. Technology  
Gunnar I. Senum.....Applied Science  
Linda K. Zahra.....Cont. & Proc.

**10 Years**  
Thomas J. Butler.....Plant Eng.  
John Dioguardi.....Physics  
Michael A. Hickey.....Plant Eng.  
George R. Misson.....Safeguards & Sec.  
Mark A. Opisso.....Safeguards & Sec.  
Henry G. Raimondo.....Safeguards & Sec.  
Mark W. Renner.....Applied Science  
Frederick F. Sawicki.....Director's Off.  
Jamie L. Sims.....Safeguards & Sec.

### September 1996

**40 Years**  
James R. Powell.....Advanced Tech.

**35 Years**  
Kenneth J. Foley.....Physics  
Anthony J. Fuoco.....Safety & Env. Prot.  
Sanford Lacks.....Biology  
Rosalie Piccione.....Cont. & Proc.

**30 Years**  
Suh-Urk Chung.....Physics  
Junichi Iwai.....Medical  
Sidney H. Kahana.....Physics  
Austin J. McGeary.....AGS  
Melvin Month.....Director's Off.  
Edward J. Sujeski.....Plant Eng.  
Hiroshi Takahashi.....Adv. Technology

**25 Years**  
Anthony J. Baltz.....Physics  
Pamela Mansfield.....Comp. & Comm.  
Patricia Valli.....Physics

**20 Years**  
John A. Benjamin.....Physics  
Craig S. Diaz.....Reactor  
Mary Faith Healey.....Cont. & Proc.  
Stephen A. Kahn.....RHIC  
Alex J. Reben.....Information Services  
William G. Shier.....Adv. Technology

**10 Years**  
Carol L. Bell.....Safety & Env. Prot.  
Theodor C. Carpluk.....Plant Eng.  
F. Avraham Dilmanian.....Medical  
Joseph M. Geller.....AGS  
Brigita Gordon.....RHIC  
Claudia A. Jones.....Plant Eng.  
Samuel Mason.....RHIC  
Felice P. Villani.....Plant Eng.  
Judy A. Wilson.....Plant Eng.  
Douglas T. Zigrosser.....RHIC

## Cafeteria News

La Touraine Colombian blend was the coffee of choice at the Cafeteria, by 61 percent of last week's taste-testers. Therefore, the food-service contractors, FLIK International, will switch to this brew by next week. Selected in conjunction with the coffee tasting were the winners of the free-breakfast-coffee-for-a-week contest: Paul Kalb, Department of Advanced Technology, and Charles Pearson, RHIC Project.

Upcoming taste-testing events at the Cafeteria include: apple cider tasting, Monday, October 7; and a Snapple beverage tasting, Thursday, October 10.

## Rifle & Pistol Club

The BERA Rifle & Pistol Club meets on the second Wednesday of each month, so the next scheduled meeting is October 9, at noon, in room 202, Bldg. 911. For more information, Call Otto Jacobi, club president, Ext. 3471.

## 1996 Healthfest Registration Form

Name: \_\_\_\_\_  
 Life # \_\_\_\_\_ Ext.: \_\_\_\_\_  
 Dept./Div.: \_\_\_\_\_ Bldg.: \_\_\_\_\_

**Aerobic Stretch (rain or shine)**  
 Wednesday, October 16 11:40 a.m. - noon

**2-mile Employee Fitness Walk (rain or shine)**  
 Wednesday, October 16 noon - 1 p.m.

**Aerobic Stretch (rain or shine)**  
 Thursday, October 17 11:40 a.m. - noon

**5-kilometer (3.1-mile) Employee Fitness Run (rain or shine)**  
 Thursday, October 17 noon - 1 p.m.  
 sex:  female  male age on day of run: \_\_\_\_\_  
 T-shirt size:  L,  XL, OR  XXL

**Foot Screening for EMPLOYEES**  
 Friday, October 18 11 a.m. - 2 p.m.

**Hearing Screening for EMPLOYEES**  
 Friday, October 18 11 a.m. - 2 p.m.

**Stress Management and Relaxation Techniques Workshop**  
 Friday, October 18 select time:  noon - 12:30  12:30 - 1 p.m.

**Foot Screening for the FAMILY**  
 Saturday, October 19 10 a.m. - 2 p.m.

**Hearing Screening for the FAMILY**  
 Saturday, October 19 10 a.m. - 2 p.m.

**Tennis Tune-Up & Fun Doubles**  
 Saturday, October 19 10 a.m. - 1 p.m.

**10-mile Individual & Team Fitness Biathlon**  
 Saturday, October 19 11 a.m.

**Reiki Healing Circle**  
 Saturday, October 19 11:30 a.m. - 12:30 p.m.

Return completed form to: Mary Wood, Bldg. 490, by Wednesday, October 9.

## Outreach Workshop: Perfectionism Revisited

Back by popular demand, psychologist Jonathan Hoffman will present "More About Perfectionism and Related Conditions," for the next Outreach workshop sponsored by the Employee Assistance Program (EAP) of the Occupational Medicine Clinic.

The workshop will take place on Tuesday, October 8, in Berkner Hall. All are invited, and the talk will be

available afterwards on audiocassette in the Research Library, Bldg. 477.

After reviewing various types of perfectionists, Hoffman will discuss how to cope with perfectionistic tendencies in oneself, family members and coworkers. Specifically, he will introduce cognitive and behavioral strategies, offer exercises to practice these techniques and use examples of

their application.

The author of a workbook on obsessive-compulsive disorder and addition, Jonathan Hoffman, Ph.D., is the Associate Clinical Director of the Institute for Bio-Behavioral Therapy & Research in Great Neck. He works extensively with those suffering from anxiety disorders and, among other projects, is involved in research of the

treatment of schizophrenia and schizoaffective disorder.

To register for this workshop, return completed the bottom portion of the Outreach flyer recently sent to all employees to: EAP Staff Psychologist Dianne Polowczyk, Bldg. 490, by Monday, October 7.

## Computing Corner

The Computing & Communications Division (CCD) offers the following in Bldg. 515:

### Netscape Escape

Repeated by popular demand, Netscape and its mail function will be demonstrated from 2 to 3 p.m. on Tuesday, October 8, in the second-floor seminar room. For more information, contact Laurie Pearl, Ext. 5520 or e-mail pearl@bnl.gov.

### Windows 95 Installation

A how-to demonstration on installing Windows 95 at BNL will be repeated from 10 a.m. to noon on Wednesday, October 9, in the second-floor seminar room. For more information, contact Bob Barone, Ext. 2368 or e-mail barone1@bnl.gov.

## BROOKHAVEN BULLETIN

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## Healthline & Outreach Schedule

In addition to next week's talk, five more lunchtime presentations on health and mental-health topics have been planned through December, for the Healthline lecture series of the Health Promotion Program and the Outreach workshop series of the Employee Assistance Program:

Date	Series: topic	Speaker
Tue., Oct. 22	Outreach: Personality	Sue Dermit, Ph.D.
Tue., Nov. 12	Healthline: Cross Training	Laura Tipaldo
Tue., Nov. 19	Healthline: Mediterranean Cooking	Marlisa Brown, RD
Fri., Dec. 6	Outreach: Difficult People	Linda Costanzo, CSW
Tue., Dec. 10	Outreach: Family Dynamics	Joann Fallon, CSW

Under the auspices of the Occupational Medicine Clinic, the Healthline series presents talks on topics related to healthy living, while Outreach offers discussions of psychological issues and social problems. See future issue of the Bulletin for details on each presentation, or, for general information, call Ext. 5923 about Healthline lectures, or Ext. 4567 about Outreach workshops.

## Turn Over a New Leaf Through Aerobics

The BNL Aerobic Dance/Stretch Club is looking for members of all ages and levels to attend its Tuesday and Thursday aerobics classes and Wednesday stretch sessions, all in the Recreation Building at 5:15 p.m.

The first class is free. After that, blocks of any ten classes are available for \$35, or you can pay by the class at \$4 each time. Call Pat Flood, Ext. 7886, or Kara Villamil, Ext. 5658, for more information. Or, join in the club's stretch clinics before the Healthfest walk, October 16, and run, October 17.

## Arrivals & Departures

### Arrivals

**Nathan A. Towne**.....NLSL

### Departures

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

**Per Bak**.....Physics  
**Hui Cao**.....Advanced Tech.  
**James F. Davis**.....Advanced Tech.  
**Robert T. Diem**.....AGS  
**James A. Goode**.....Safeguards & Sec.  
**Everette S. Harris**.....AGS  
**Jurgen Holfort**.....App. Science  
**Andrew P. Hull**.....Safety & Envir. Prot.  
**Barry Karlin**.....NLSL  
**Nina A. Leonhardt**.....Director's Off.  
**Gregory A. Mayr**.....Biology  
**Richard McCluskey**.....RHIC  
**Maya Paczuski**.....Physics  
**Mark Shleifer**.....NLSL  
**Paul T. Singer**.....Biology  
**Daniel N. Slatkin**.....Medical  
**Edith E. Thornhill**.....Human Res.  
**Joseph Weneser**.....Physics  
**Alonzo P. Werner**.....RHIC  
**Ralph T. Wiedmann**.....Advanced Tech.  
**Kim A. Woodle**.....AGS  
**Qing Zhu**.....Physics

### Note to Employees:

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

## Bowling

### Purple and White League

B. Tozzie 235/188, J. Goode 224/182, Don King 212/210, D. Riley 209/192, R. Raynis 206/193/180, P. Wynkoop 196/195, P. Callegari 193/188, K. Botts 192/182, P. Manzella 191/177, R. Picinich 189/186, M. Guacci 187/180, T. Mehl 185/175, S. DiMaiuta 229, E. Sperry IV 219, J. Zebuda 211, E. Sperry III 202, S. Logan 189, E. Meier 187, K. Riker 181, M. Reynolds 178, S. Logan 6/7 split.

## Classified Advertisements

### Placement Notices

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

Each week, the Human Resources Division lists new placement notices, first, to give employees an opportunity to request consideration for themselves through Human Resources, and second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (344-7744), for a complete listing of all openings.

Current job openings can also be accessed via the BNL Home Page on the World Wide Web. Outside users should open "http://www.bnl.gov/bnl.html", then, under "Information," select "Jobs." For scientific staff openings, select "Scientific Personnel Openings"; for all other vacancies, select "General Personnel Openings."

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

**SCIENTIST** - Trained in human factors, psychology or related discipline, with experience in human-factors research and engineering programs, to join the Human Factors & Performance Analysis Group. Must have experience in human-system integration aspects of complex systems, i.e. HFE analysis techniques, and the design and evaluation of human-machine systems. Capabilities in research planning, experimental design, performance measurement and data analysis, and domain application in aerospace or transportation or medicine is preferred. Contact: John O'Hara or Robert Hall, Department of Advanced Technology.

Dosimetry badges will be changed tomorrow. Please place your badge in its assigned rack space before leaving work today.