

## In Response to Regulators' Call for More Data, BNL Delays Tritium-Plume Remediation Start

To meet a 60-day deadline established by the U.S. Department of Energy (DOE) on February 20, following the discovery of the tritium groundwater plume emanating most likely from the spent-fuel storage pool of the High Flux Beam Reactor, BNL was ready to turn on the remediation system on Thursday, April 17 — three days ahead of schedule.

However, on Friday, April 18, DOE Assistant Secretary for Environment, Safety & Health Tara O'Toole announced a delay in the start up: "Regulatory officials have asked that we obtain additional information regarding modeling and characterization of the tritium plume before starting the remediation system. We have agreed to take additional time to provide this information [since] the regulators play a critical role in assuring that our actions are appropriate and that the contamination poses no threat to the health of the citizens of Long Island."

The regulators which have called for further study of the plume before starting any remediation include: the Suffolk County Department of Health Services (SCDHS), the New York State Department of Environmental Conservation (NYSDEC), and the U.S. Environmental Protection Agency (EPA).

Despite the delay, the tritium plume continues to be contained on the BNL site and poses no threat to worker or public health.

"Given the slow rate of tritium movement and the absence of any imminent health threats, it is most prudent to define the full lateral and vertical extent of the tritium plume before implementation [of the remediation project]," noted Joseph Baier, who is the Director of Environmental Quality for the SCDHS.

"We worked hard to get a safe and effective system designed and installed and ready to run by April 20th, as promised," states Bill Gunther, who manages BNL's Office of Environmental Restoration (OER) which is overseeing the tritium-plume remediation. "But we are committed to working with our regulators by providing them with the additional wells, data, analysis and modeling that they requested, so as to assure everyone involved that we are *not* taking any unnecessary risks by beginning operations prematurely."

At present, the pump-and-recharge system is designed to remove tritiated water at or below the drinking-water standard of 20,000 picocuries per liter (pCi/L) from the aquifer via pumping wells located off Princeton Avenue, where the peak concentration of tritium has been found to be about 6,500 pCi/L.

After the tritiated water passes through carbon filters to remove any volatile organic compounds, it will be piped north to a recharge basin located north of Brookhaven Avenue, where it will be diluted further and decay as it flows with the rest of the groundwater south. It has been calculated that it will take 19 years for water from the recharge basin to reach the southern boundary of the Lab site, by which time the tritium in the water will barely be detectable.

### Responding to Concerns

Baier was the first to request a delay, in a March 27 letter to Laboratory Director Nicholas Samios: "The



At the "Tritium Modeling & Conceptual Design Review" on April 9 & 10, George Pindar (standing, left of center), who is Dean of Mathematics at the University of Vermont, addresses the technical experts gathered at BNL to discuss the design, installation, operation, monitoring and maintenance of the pump-and-recharge system designed to remove tritiated water in the plume south of the High Flux Beam Reactor. Participants in the review included: (from far left) U.S. Department of Energy (DOE) Assistant Secretary for Environment, Safety & Health Tara O'Toole; Jim Owendoff, DOE Deputy Assistant Secretary for Environmental Restoration; Cherri Langenfeld, Manager of DOE's Chicago Operations Office; and Carson Nealy, Manager of DOE's Brookhaven Group.

potential efficacy of the proposed system cannot be properly evaluated without a more complete delineation of the tritium plume . . ." While complete documentation was forthcoming and a technical review of the system before start up was planned, Baier, however, urged, "Design and construction should, of course, proceed at the fastest practical rate . . ."

On April 4, OER submitted the report "Plume Remediation Design Decision Proposal for Pumping at the Leading Edge of the Tritium Plume" to SCDHS, which contained the technical details regarding the system's design and operation.

Then, on April 9 & 10, approximately 75 hydrogeologists, computer modelers and other environmental experts from EPA, the U.S. Geological Survey, DOE, NYSDEC, SCDHS, Brookhaven Town, the University of Vermont and elsewhere met at BNL for the "Tritium Modeling & Conceptual Design Review," during which O'Toole listened to their technical evaluation.

As a result of the two-day meeting, certain technical recommendations were made regarding the testing, start up, operation, monitoring and maintenance of the pumping system. It was generally agreed, however, that the

## DOE Seeks Input On Remediation

The U.S. Department of Energy (DOE) is seeking comment from the public, which includes BNL employees, on alternatives for remediating waste areas on the Laboratory site. The public comment period began on April 23 and ends on Friday, May 23.

The waste areas are located in a secluded, south-central section of the Lab. An investigation has identified 51 holes there that were used between the late 1950s and 1981 for the disposal of chemicals, animal carcasses, laboratory glassware, and glass, metal and plastic containers.

DOE's document describing the waste areas is available for review at BNL's Research Library, Bldg. 477, as well as at the public libraries in Shirley and Middle Island. Of the several remediation alternatives discussed in the document, DOE recommends excavation with groundwater monitoring downgradient from the holes.

For more information on the inactive waste areas, call BNL's community relations coordinators: John Carter, Ext. 5195; Mary Dernbach, Ext. 6336; and Peter Genzer, Ext. 3174.

structure and application of the computer model used to project tritium migration in the ground, which was developed by the environmental consultants Geraghy & Miller of Plainview, is proper and appropriate. "The information presented has gone a long way toward answering many of the initial concerns expressed (continued on page 2)

## BNL Lecture: Ten Years of High-T<sub>c</sub> Superconductivity — Forefront Basics

Ten years ago, the Nobel Prize for physics was hot news: Front-page headlines reported wild excitement in commercial, as well as scientific, circles because the winners, two scientists in Switzerland, had discovered a high-temperature (high-T<sub>c</sub>) superconducting material.

Superconductors lack all resistance to the flow of electricity. However, until 1986, the high-T<sub>c</sub> discovery date, known superconductors worked only at extremely low temperatures that are very costly to maintain. The 1987 business world buzzed with the promise of new materials that would become superconducting at liquid-nitrogen temperatures, which are high enough to be affordable for everyday use.

The scientific community was even more excited by the long-sought breakthrough, but knew that much time might elapse before the new phenomenon was understood and ready for practical application. So, all over the world — and nowhere more than at BNL's array of complementary facilities for basic research — solid-state physicists rolled up their theoretical or experimental sleeves and set to work on high-T<sub>c</sub>.

After a decade, how far have the mysteries of high-temperature superconductivity been penetrated? How near are theorists to complete comprehension?

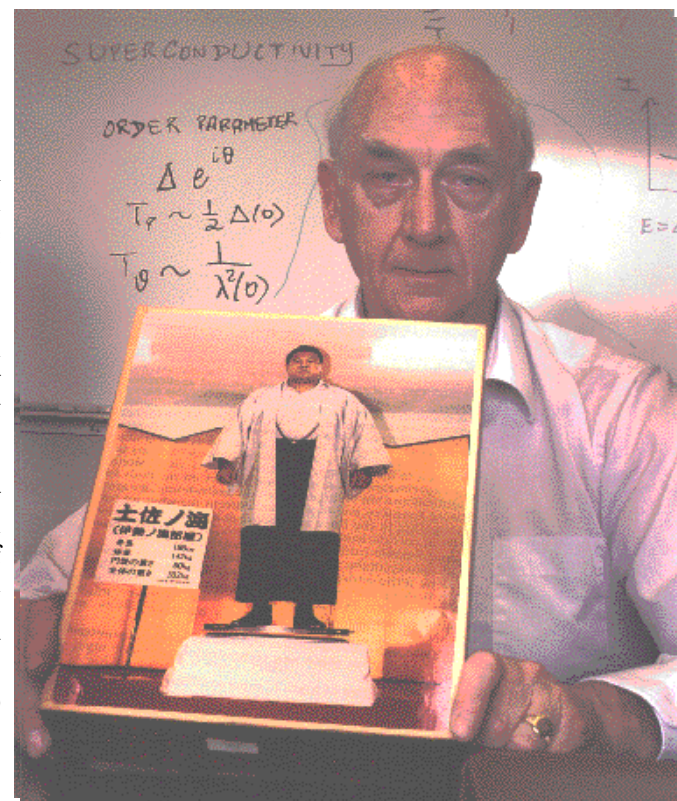
To answer these questions, Senior Physicist Victor Emery will give the

**Victor Emery holding an unusual illustration of the Meissner effect.**

326th Brookhaven Lecture, entitled "High Temperature Superconductors — The First Ten Years," on Wednesday, April 30. At 4 p.m. in Berkner Hall, Emery will be introduced by Senior Scientist Martin Blume, Physics, who is former Deputy Director of BNL and now Editor-in-Chief of the American Physical Society.

In his talk, Emery will use simple, non-technical terms to present the most up-to-date understanding of high-T<sub>c</sub> superconductors.

Following the pathways of basic research, he will guide the audience through some of the world's forefront theory in this field, much of it established at BNL's High Flux Beam Reactor and National Synchrotron Light Source. He will also relate how key experiments at the Lab have both confirmed these ideas and led to deeper insights into the atomic structure and



forces of electricity and magnetism that underlie the mechanisms of high-T<sub>c</sub> superconductivity.

In describing these concepts, Emery will conjure up some intriguing phenomena. For instance, how can a 200-kilogram Japanese Sumo wrestler float unconcernedly on a thin magnet a clear two inches above a ground- (continued on page 2)

## BNL 50th Anniversary Celebration

# First Reminiscence Seminar: Early Brookhaven, BGRR

Thirty-four BNL scientists — some retired, some still active, all with wonderful stories — will be participating in the Reminiscence Seminars scheduled for May 7, 9 and 13, in Berkner Hall, all starting at 2:30 p.m.

Part of BNL's golden anniversary celebration, the Reminiscence Seminars are being organized by Bernard Manowitz, Department of Applied Science, and will be moderated by BNL Historian Robert Crease.

Each seminar will be divided into two segments, each featuring brief individual talks, followed by a question-and-answer session.

The first seminar, on Wednesday, May 7, will have segments on "Early Brookhaven" and the "Brookhaven Graphite Research Reactor" (BGRR).

Speaking about early Brookhaven will be the following:

• **Lyle Borst** — For about a year before BNL's official opening in March 1947, scientists from academic institutions throughout the Northeast had been working together to create the Laboratory. Borst, who in August 1946 was placed in charge of the design and development of a research reactor for the anticipated new lab, will address site selection and the founding of Associated Universities, Inc. (AUI).



• **Gerald Tape** — No one could be more qualified to discuss relations with the Atomic Energy Commission (AEC) or bureaucracy than Tape, who has seen these issues from all sides: first as BNL's Deputy Director, from 1951 to 1962; then as AUI President, from 1962 to 1963 and 1969-80; and, in the interim, as AEC Commissioner, 1963-69.



• **Martin Plotkin** — Like Lyle Borst, Plotkin was hired by AUI some six months before the Lab was established at the Camp Upton site in March 1947. Plotkin, who retired in 1984, will speak about the accelerator project that resulted in the Cosmotron and about BNL's interdisciplinary flavor.



• **Bernard Manowitz** — Looking forward to celebrating his 50th anniversary at BNL in October, Manowitz is the Lab's longest-term active employee. His early years with the Lab's Department of Reactor Science & Engineering qualify him to speak about the reactor project and bureaucracy at the new Laboratory.



• **Dennis Puleston** — Puleston's 22 years at BNL, which concluded with his retirement in 1970, were but one interlude in his long and adventurous life. A naturalist and environmentalist, Puleston was one of the cofounders and first chairman of the Environmental Defense Fund, which first met at BNL in 1967. He will talk about the spirit of adventure and the environment.



• **R. Christian Anderson** — Anderson's association with BNL began in chemistry and continues today with community relations, the two topics he will cover. Having started in the



Chemistry Department in 1948, Anderson spent most of his 36 years at BNL as Assistant Director for scientific personnel. Since retiring in 1984, he has been very active in BNL's Speakers Bureau.

The subject of the BGRR will be covered by the following speakers:

• **Lyle Borst** — As the leader of the "Pile Project," Borst, who left the Lab in 1951, will discuss the project's background and design, including some of the pile's unique features.

• **Robert Powell** — Annealing and operations at the BGRR will be addressed by Powell, who became an engineer with the design project in 1947, then took charge of the Reactor Operations Division from 1949 to 1956, when he was appointed head of the Reactor Division. He retired from that position in 1980.



• **Herbert Kouts** — A former Chairman of the Department of Nuclear Energy and one of the five co-inventors of the High Flux Beam Reactor (HFBR), Kouts, who retired in 1989, came to BNL in 1950 to head the BGRR Reactor Shielding Group. He will speak about experiments, drawing on his 16 years as Head of the Experimental Reactor Physics Group and 12 years as Head of the Reactor Physics Group.



• **Vance Sailor** — Instruments were critical to the nuclear measurements that Sailor was responsible for at the startup of the BGRR in 1949, the year he arrived at



BNL. Sailor, who retired in 1985, will discuss use and development of instruments used at the BGRR — including the computer.

• **Julius Hastings** — When the BGRR became operational on August 22, 1950, Hastings, who had joined the Chemistry Department in 1947 and retired in 1987, and his collaborator Lester Corliss (who will speak on May 9) performed the first experiment there. One of the five co-holders of the HFBR patent, Hastings, who continues his research at the HFBR as a guest senior chemist, will offer his perspectives on experiments and the interdisciplinary character of research.



Information about speakers for the May 9 seminar will appear next week; look for more about the May 13 seminar in the May 9 issue of the Bulletin.

— Anita Cohen

## Employee Meetings Through Next Week

Employee meetings on issues of concern continue today with employees from the **Information Services** and **Central Shops Divisions** gathering in Berkner Hall, at 11 a.m.

Meetings next week are as follows:

- **Monday, April 28: Financial Services Division, Associated Universities, Inc., and the Staff Services** group of the Administrative Support Division, 11 a.m., Berkner Hall.
- **Tuesday, April 29: on-site residents**, 11 a.m., Recreation Building in the apartment area.
- **Friday, April 30: Computing & Communications Division**, 11 a.m., Bldg. 515 seminar room.

While these are the last in this series of meetings, a "You've Got Questions, We've Got Answers" session has been scheduled for Thursday, May 8, at noon in Berkner Hall, for all employees who wish to attend.

## Remediation Start (cont'd.)

in my earlier correspondence," noted Baier in an April 14 letter to Carson Nealy, who is DOE's Brookhaven Group Manager, "but, I believe, as was brought out at the April [9 &] 10 meeting, more information is needed."

The SCDHS's specific concerns, "which are of a technical nature," involve: obtaining further analytic results from existing groundwater samples near the proposed extraction wells; installing additional profile wells to define better the eastern and western edges of the plume; adding monitoring wells in the vicinity of the extraction wells; allowing "sufficient time to complete the development of the groundwater model and resolve the problem of numerical dispersion;" and providing an operation and maintenance manual for the treatment system.

### Horizontal Well Data

In the meantime, recent analysis of the samples taken from two horizontal wells drilled in March immediately north and south of HFBR's spent-fuel pool and 50 feet below the building's foundation was not able to provide conclusive data regarding the source of the leak. It was expected that the north well, which is upgradient of the groundwater flow and one foot below the water table, would show little or no tritium, while it was thought that the south well would register high concentrations of tritium.

However, the northern well had

tritium concentrations from 2,000 to 19,000 pCi/L, while the southern well had tritium concentration of 2,000 to 5,000 pCi/L. Not only were these results contrary to what was expected, but they did not account for the peak concentration of 660,000 pCi/L of tritium found 200 feet south of the reactor. One interpretation of the data is that the contrary results may be the result of the different depths that the two wells occupy in the water table.

These results were presented on Thursday, April 17, during one of the regular weekly meetings with the regulators. While the present horizontal well data is inconclusive, results from leak-rate tests and from the analysis of the plume still point to the HFBR's spent-fuel pool as the primary cause of the tritium plume. More conclusive horizontal well data are expected in the summer, as the water table falls.

While awaiting more conclusive data, OER expects to test the pumping system next week, to study the pump's performance, and to begin operating the system within the next few weeks, "pending the concurrence of our regulators with DOE's decision to start up," concludes Gunther.

— Marsha Belford

## Equipment Demo

On Tuesday, April 29, from 11 a.m. to 3 p.m. in Berkner Hall, the Goodfellow Corporation will exhibit readily available and less common metals and materials for use in research and prototype development.

## Service Awards

The following employees celebrated service anniversaries during April:

<b>40 Years</b>	
Edward K. Elliott.....	AGS
<b>35 Years</b>	
Leonard C. Emma.....	Safety & Env. Prot.
John W. Jackson.....	AGS
E. Eric Klug.....	Safety & Env. Prot.
John F. Slavik.....	AGS
Walter M. Spiers.....	Plant Eng.
Richard C. Strand.....	Physics
<b>30 Years</b>	
Irene L. Rosati.....	Biology
E. Paul Valli.....	AGS
<b>25 Years</b>	
William J. Michalowski.....	CCD
<b>20 Years</b>	
Hsiao-Chaun Hseuh.....	RHIC
Kathleen D. Hygom.....	Human Resources
Donald M. Litcher.....	CCD
Robert G. Malone.....	NLS
Bruce A. Martin.....	RHIC
Dean C. McDonald.....	RHIC
Bonnie J. McGahern.....	Biology
Gary A. Schaum.....	Safety & Env. Prot.
Frederick C. Squires.....	Plant Eng.
<b>10 Years</b>	
John Aloï.....	NLS
Richard F. Chorzempa.....	Reactor
Michael Farnitano.....	Reactor
John M. Hammond.....	Physics
Andrew E. Levine.....	Safety & Env. Prot.
Darcy J. Mallon.....	Medical
Sean McCorkle.....	Biology
Reginald P. Redman.....	Central Shops
Margareta L. Rehak.....	RHIC
Jonathan M. Reich.....	AGS
William F. Sassano.....	Plant Eng.
Lin-Shen Sun.....	Adv. Technology
Victor J. Usack.....	AGS
Harold J. Wiesmann.....	App. Science

## BNL Lecture (cont'd.)

level superconductor? As the audience will learn, it is through the Meissner effect, one part of high- $T_c$  superconductivity basic research.

Victor Emery received his Ph.D. in theoretical physics at the University of Manchester, England, in 1957. He came to BNL in 1964 from the University of Birmingham following a fellowship year at the University of California, Berkeley.

At BNL, Emery received tenure in 1967 and was named Senior Physicist in 1972. In the Physics Department, he led the Cryogenics Group, 1973-77, and the Solid State Theory Group, first from 1975 to 1984, and again, since 1994. He also has served as Associate Chairman, 1981-85.

Internationally recognized as one of the world's leading theorists in the study of phase transitions and of superconductivity, Emery won the BNL Distinguished R&D Award in 1996.

After the lecture, all are invited to join Emery for discussion and refreshments. Those wishing to have dinner with the speaker at a restaurant off site may call Bill Morse, Ext. 3859, before noon on Wednesday, April 30, to make their reservations.

— Liz Seubert

### Note to Employees:

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

## Walk This Sunday

It is not too late to pick up a sponsor sheet so that you may participate in this Sunday's annual WalkAmerica. Sponsored by the March of Dimes, the walk raises funds used to help reduce infant mortality and the incidence of low birth-weight babies.

To walk with BERA during WalkAmerica, pick up a sponsor sheet at the BERA Sales Office, Berkner Hall, weekdays, 9 a.m. to 1:30 p.m. If you cannot join the walk, but want to make a donation, send your check payable to the March of Dimes to BNL's Recreation Office, Human Resources Division, Bldg. 185, or drop it off at the BERA Sales Office.

For more information, call Andrea Dehler, Ext. 3347; M. Kay Dellimore, Ext. 2873; or Mary Wood, Ext. 5923.

## A Better You! Starts 5/1

The start of the "A Better You!" weight-loss program has been rescheduled from Thursday, April 24, to Thursday, May 1. It will meet Thursdays from noon to 1 p.m. for ten weeks, offering participants consultation with a dietitian or nutritionist to customize the program, healthy cooking techniques, dining-out strategies, food-shopping tips, exercise approaches, stress-reduction hints, and more.

The per-person cost is \$140. For more information or to register, call Mary Wood, Health Promotion Specialist, Ext. 5923.

## Water Aerobics

Eight weeks of water stretching and exercise classes will again be offered at the Lab pool, Bldg. 478, from 5:20 to 6:10 p.m., on Tuesdays and Thursdays.

The first classes will be on March 6 and 8, respectively; the start of the classes was delayed from April 29 and May 1 due to a scheduling conflict for the instructor.

Sponsored by the Health Promotion Program of the Occupational Medicine Division, water aerobics classes are free, but participants must pay the pool fee of \$2 a session or show their season pool pass. Employees and their spouses may sign up for one or both classes by calling Mary Wood, Ext. 5923.

## Atlantic City Trip

Many seats remain for the next BERA-sponsored, one-day trip to the Trump Castle hotel and casino on the marina in Atlantic City, on Saturday, May 17. If a sufficient number of reservations are not paid for by Wednesday, April 30, the trip will be canceled.

The initial cost will be \$23, but the hotel-casino will give a \$12.50 coin return and a \$2.50 deferred voucher.

Buy tickets now at the BERA Sales Office, weekdays, 9 a.m. to 1:30 p.m. For more information, call Andrea Dehler, Ext. 3347, or M. Kay Dellimore, Ext. 2873.

## Flack Coordinates 50th Activities

Renée Flack, Office of Educational Programs, has assumed the additional duty of assisting the committees organizing BNL's 50th anniversary activities. This project had previously been assigned to former Public Affairs Manager Anne Baittinger, who has now taken on new responsibilities in BNL's Legal Office.



Baittinger continues as vice chair of the 50th Anniversary Committee, chaired by Bob D'Angio, Manager of the Human Resources Division.

Last fall, this committee began planning the Lab's year-long celebration, with the help of the following subcommittees and their chairs:

- **50th Anniversary Speakers:** Geoffrey Hind;
- **Open House/Family Day:** Janet Tempel;
- **Entertainment & Arts:** Susan Foster;
- **Photographic Exhibits:** Ronald Manning & Janet Tempel; and
- **Reminiscence Seminar:** Bernard Manowitz.

Since then, said Flack, "Volunteers have been busily making preparations, and several events have been planned, including next month's Reminiscence Seminars and Last Official USO Dinner-Dance & Show [see stories elsewhere in this issue], and the Employee Picnic scheduled for July 19."

"However," she continued, "there is room for more! I welcome and invite your suggestions, comments and volunteerism. Please feel free to contact me on Ext. 3316."

As new activities for the 50th are added, Flack promises that the calendar of anniversary events will be updated and placed in highly visible locations around site.

The theme of the observance of BNL's first half century is "From 50 to the Future," so Flack urges all employees to join with her at "marveling at our many positive accomplishments — none of which could have been achieved without each employee doing his or her own part."

"Let's not allow present-day events to overshadow our contributions," Flack concludes. "This is the 50th year of the Lab's very important existence, so let's celebrate it together and strengthen our BNL family ties."

— Anita Cohen

## In Memoriam

**Claire Shellabarger**, who had retired in October 1989 as a senior scientist in the Medical Department, of which he had been Acting Chairman, 1984-1986, died on March 12, 1997. He was 72 years old.

Graduating with a BA in zoology from Miami University in Oxford, Ohio, Shellabarger then served as a pilot with the U.S. Army Air Force in Europe during World War II. After the war, he returned to academic life, earning his MS in zoology and his Ph.D. in endocrinology from Indiana University.

Shellabarger first came to BNL as a junior pathologist in 1952. He was named Scientist in 1959. In 1960, he became a professor of zoology at the University of Michigan, but retained a guest scientist appointment at the Lab until he rejoined the BNL staff in 1968 as Senior Scientist.

In addition to serving two years as Acting Chairman, during Shellabarger's years in Medical, he headed the Radiobiology Division and coordinated the Genetics & Biochemical Sciences Program.

Shellabarger's early research focused on comparative endocrinology, the study of the endocrine glands and the hormones that they synthesize and secrete. He specialized in thyroid gland physiology and biochemistry in various classes of vertebrates, and he made many contributions to knowledge of the effects of radioiodine and astatine on thyroid function.

After the 1954 fallout accident that exposed human beings in the Marshall Islands to a mixture of gamma and beta radiation, Shellabarger, at the request of the Atomic Energy Commission, undertook a study on rats to see if whole-body radiation at doses of 100 rad and above would enhance the effects of beta radiation of the skin. He found that, for these high doses, the incidence of mammary tumors increased with radiation dose.

Shellabarger extended these studies and showed that ovariectomy eliminated the development of mammary tumors in rats, but that transplanting ovaries or injecting ovarian hormones stimulated tumor development.

Thus, he concluded, high doses of radiation, 50 rads or more, produced a



**Claire Shellabarger**

genetic defect in the mammary cells that required hormonal stimulation of cell proliferation in the mammary gland for the tumor to develop. This was a major development in experimental mammary tumorigenesis.

Said Eugene Cronkite, a retired Chairman of the Medical Department, "Claire's observations of the effects of this comparatively high radiation dose on rats are particularly interesting, as they established that normal endocrine function was required for tumors to develop."

Cronkite, who knew Shellabarger well, remembers him as "greatly concerned about the welfare of minorities and women in general and in science, and as active in furthering the advancement of minorities and in protecting their interests."

Cronkite added, "His untimely death is a loss not only to his family and friends, but also to all of his past associates who profited from his biological insight and dry sense of humor."

During his career, Shellabarger served on a number of significant committees, including: the review committee of the American Cancer Society, the Life Sciences Study Team for assessment of ecological impacts of the space shuttle; the National Cancer Institute Ad Hoc Working Group on the risks associated with mammography in mass screening for the detection of breast cancer; and the Mammography Committee of the National Council on Radiation Protection & Measurements. He was a member of the Radiation Research Society, the Endocrine Society, Sigma Xi, and the American Physiological Society.

Claire Shellabarger was a resident of Bellport. He is survived by his wife Marilyn; three children: Charles, Nancy and Mary; and two grandchildren.

— Liz Seubert

## Outreach Workshop

## Good Change

*[G]ive us grace to accept with serenity the things that cannot be changed, courage to change the things which should be changed, and the wisdom to distinguish the one from the other.*

— Reinhold Niebuhr, 1943

Assuming you can distinguish those things that can be changed from those that cannot, and assuming you have the courage to change what should be changed in your life, you may also benefit from strategies developed by psychologists to create and sustain change — thereby putting courage to work.

To learn the latest techniques for addressing difficulties with food, cigarettes, alcohol, drugs and money, attend "Changing for Good." As the next Outreach lecture sponsored by the Employee Assistance Program (EAP) of the Occupational Medicine Clinic, the talk will be presented by clinical psychologist Ellyn Altman on Wednesday, April 30, from noon to 1 p.m. in Berkner Hall. All are invited.

President of the Clinical Division of the New York State Psychological Association, Ellyn Altman, Ph.D., is a professor at the Postdoctoral Center for Psychoanalysis & Psychology at Adelphi University. She has a private practice in Great Neck and Rockville Centre, and she has lectured widely on behavioral approaches to change and improved well-being.



To register for this workshop, return the completed bottom portion of the Outreach flyer recently sent to all employees to EAP Staff Psychologist Dianne Polowczyk, Bldg. 490, by Tuesday, April 29.

For more information about EAP and its Outreach workshop series, call Ext. 4567.

## BERA Concert Features Pianist

The next BERA concert of the 1996-97 season will feature Lucerne DeSa, a promising pianist from the State University of New York at Stony Brook. The concert will be held on Sunday, May 4, at 2 p.m. in Berkner Hall.

A doctoral student under the tutelage of internationally known pianist Gilbert Kalish, DeSa earned her bachelor's degree from the University of California, Irvine, and her master's degree from the University of Southern California.

For eight years, she was a faculty member at Irvine Valley College and the University of California, Irvine.

DeSa has performed nationally as a solo recitalist, most recently at Middlebury College in Vermont and at McPherson College in Kansas. She has won numerous competitions, including the Southwestern Youth Music Festival and the Joanna Hodges International Piano Competition.

The program for the BERA concert will consist of Beethoven's Sonata in D minor, Op. 31, No. 2; Brahms' *Klavierstücke*, Op. 119; Chopin's *Préludes* from Op. 28, G major and B-flat minor, Op. 45, C-sharp minor, and Barcarolle, Op. 60; Prokofiev's Sonata in D minor, Op. 14.

The suggested donation for the concert is \$6.

## BROOKHAVEN BULLETIN

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## Classified Advertisements

### Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position. Candidates are considered 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, disability or veteran status.

Each week, the Human Resources Division lists new placement notices, first, so employees may request consideration for themselves, and, second, for 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; call the JOBLINE, Ext. 7744 (344-7744), for a complete list of all job openings; use a TDD system to access job information by calling (516) 344-6018; or access current job openings on the World Wide Web at <http://www.bnl.gov/JOBS/jobs.html>.

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

NS 4764. PHYSICS ASSOCIATE POSITION - requires a BS/MS in physics, an interest in being part of the team responsible for the operation and troubleshooting of the AGS complex for its experimental physics program, and excellent communication skills. Must be able to work shifts. Alternating Gradient Synchrotron Department.

## BUY YOUR USO DINNER-DANCE & SHOW TICKETS NOW

**Camp Upton's most famous graduate was U.S. Army Sergeant Irving Berlin (center), who is pictured with two members of the all male cast on the 1918 set of *Yip, Yip, Yaphank*, the show that he wrote based on his experiences at the World War I training camp and the first show to have been produced at Camp Upton for the entertainment of the troops.**



Tickets are now on sale for The Last Official USO Dinner-Dance & Show at Camp Upton — BNL's 50th anniversary ballroom & R&B pop-dance extravaganza, to be held on Friday, May 9, from 5:30 p.m. to midnight in the Brookhaven Center.

That night, BNLers, retirees, guests and their friends are invited to enjoy:

- ★ a delicious **three-course buffet dinner** under a tent on the patio;
- ★ **five hours of dancing to both DJ Ed Taylor's R&B and pop-dance music** in the South Room, **and big band ballroom, Latin and swing by the 18-piece Big Band East** in the North Ballroom;
- ★ a standing-room-only, **40s-style dance show** featuring the **Big Apple Lindy Hoppers** of New York City, the **Dance Magic Dancers** of Smithtown, and **Patti's Swing Kids** of Bellport, with **stage-setting narration** by the Lab's own historian, **Bob Crease**;
- ★ chances at thematic **door prizes** and **best World War II costume prizes**;
- ★ a display of **Camp Upton memorabilia** in the lobby;
- ★ and a **cash bar**.

The USO has officially authorized the use of its name in association with this event, and all voluntary contributions will be forwarded to USO World Headquarters in Washington, D.C.

To encourage donations, every contributor who gives \$10 and over will be entered into a drawing to win one of the large American flags to be on display that evening, which were flown over the U.S. Capitol on BNL's 50th birthday, March 21, 1997.

Tickets are \$25 per person, in checks payable to the BNL Dance Club, which is organizing the event. A maximum of 325 tickets will be issued. During the evening, you may go freely from one dance room to the other, so buy your tickets for your favorite dance spot.

Buy tickets for DJ dancing from: April Donegain, Ext. 2459, Bldg. 134; Patti Bender, Ext. 3145, Bldg. 134; Charles Gardner, Ext. 5214, Bldg. 911; Rosemary Taylor, Ext. 3251, Bldg. 535; or Nedy Santiago, Ext. 3402, Bldg. 197.

Tickets for ballroom dancing may be purchased from: Rudy Alforque, Ext. 4733, Bldg. 817; Nelson Cause, Ext. 5354, Bldg. 134; Harold Kirk, Ext. 3780, Bldg. 901; Don Litcher, Ext. 7587, Bldg. 515; or Dick Savage, Ext. 4640, Bldg. 120.

## IBEW Meeting

Local 2230, IBEW, will hold its regular monthly meeting on Monday, April 28, at 6 p.m. in the Knights of Columbus Hall, Railroad Avenue, Patchogue. There will be a meeting for shift workers at 3 p.m. at the union office.

The agenda includes regular business, committee reports and the president's report.

## HS Summer Program Applications Available

Applications for the Community Summer Science Program (CSSP) are now available for interested high school students from the Office of Educational Programs, at the Science Education Center, Bldg. 438. CSSP enables local high school juniors and seniors who have a demonstrated interest in science to study at BNL for six weeks during the summer. This year, the program runs from Monday, July 7, through Friday, August 15. Completed applications must be postmarked by Monday, May 12. For more information, call Ext. 4503.

## Arrivals & Departures

### Arrivals

**Nathaniel J. Coniglio**.....Safeguards & Sec.  
**Jeff Efron**.....Safeguards & Sec.  
**Patrick E. Hawkins**.....Safeguards & Sec.  
**Richard J. Michta**.....NSLS  
**David P. Morrison**.....Physics  
**Lisa A. Smith**.....Safeguards & Sec.

### Departures

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

**William F. Sassano**.....Plant Eng.