

The Trouble With Al

Of the thousands of patients who must undergo kidney dialysis for renal failure, virtually all are routinely treated with medications containing aluminum in order to prevent buildup of phosphorus in the body. But while dialysis and medication address the patient's acute medical troubles, they may also create an insidious problem — too much aluminum in the body.

"Ten years ago, when I first looked at this problem, no one was too concerned about aluminum," says Ken Ellis, scientist in the Medical Department. Now doctors are finding that excess aluminum can induce a bone disease called osteomalacia. One solution may be chelation therapy, which removes metals. But first, doctors have to know just how much aluminum is in a patient. Ellis is testing a novel way to do just that.

Aluminum in the Body

Aluminum is the most abundant metal in the earth's crust. A small amount routinely finds its way into the body from many sources, including food cooked in aluminum pots and pans, tap water, even antacids.

A renal patient on an aluminum-based medication receives thousands of times more aluminum than normal. The medication is necessary, however, because both renal failure and dialysis disrupt the body's normal ability to maintain the proper levels of phosphorus. If excess phosphorus is not removed, it can build to a critical level, causing extreme pain, says Ellis.

While the medication limits that problem, the aluminum in it slowly builds up in the body during long-term treatment. Most of it deposits in new bone being formed, where it can change the composition of the bone structure, making it more brittle and prone to fracture. And a new worry, says Ellis, is that younger patients now are being maintained on dialysis

and are being treated with aluminum hydroxide medications, which interfere with their actively growing bones.

Measuring Aluminum

At present, the clinical diagnosis for aluminum-induced bone disease usually requires a bone biopsy, in which a plug of bone is removed from the hip. Someday, that surgical procedure may be eliminated by the BNL technique that Ellis is developing in collaboration with Physicians Stephen Kelleher and Alfred Raciti from the State University of New York at Stony Brook, and with technical assistance from Roman Shypailo, BNL Medical Department.

Here's how it works. The patient places one hand in a low-intensity beam of neutrons from the Medical reactor for two minutes (the radiation dose is comparable to standard x-rays of the hand). A small fraction of the neutrons activates elements in the bone, in particular, aluminum and calcium. Then, because these radioactive elements decay rapidly, the patient is rushed to a special detector for a five-minute measurement of the induced aluminum and calcium signals. "In less than 15 minutes," says Ellis, "we can know the patient's aluminum/calcium ratio for bone. And we've accomplished it without hospitalization, without surgery."

What has made the technique possible is the detector system, designed and built by Ellis as part of the upgrading of Medical's whole-body counter. The detector consists of four large sodium iodide crystals that are configured around an opening just big enough for a hand.

Already, the new technique has proven successful with an initial group of patients, some of whom have had bone biopsies. Ellis says the data generally match what is already (Continued on page 2)



Mort Rosen

Roman Shypailo (foreground) and Ken Ellis calibrate the detector system in preparation for measuring the aluminum/calcium ratio in a patient.

Winding Begins On SSC Magnet Coils

Several firsts took place in Bldg. 924 this month, when new machinery was used for the first time to wind magnet coils for the first full-length R&D magnets for the proposed Superconducting Super Collider (SSC).

The 120-foot-long winding machine was designed by Bill Stokes, design engineer in the Magnet Division of the Accelerator Development Branch of High Energy Facilities. A new machine was necessary because the full-length magnets are so long — almost 17 meters (about 55 feet) — much longer than any previously built at BNL.

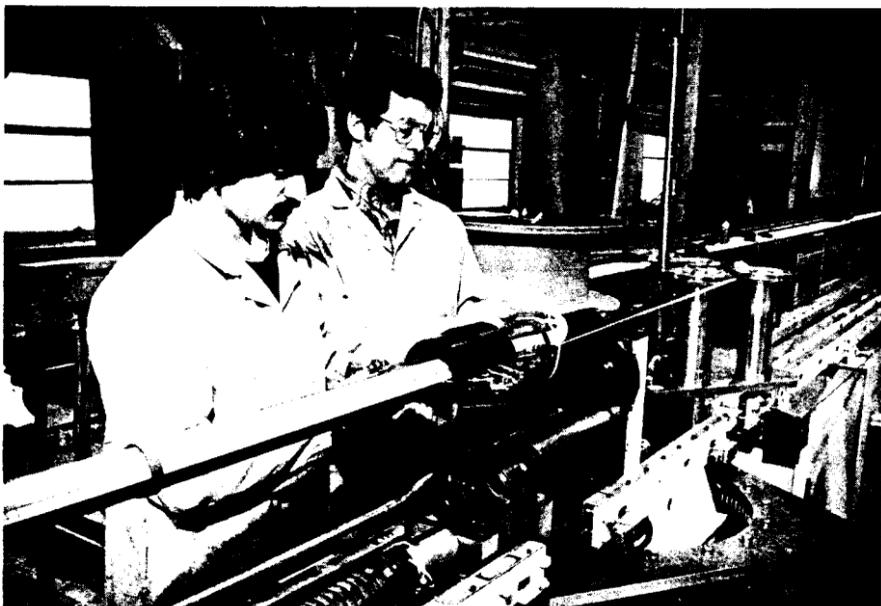
For these magnets, two inner and two outer coils will fit around the bore tube. The coils are being made of a niobium titanium superconducting Rutherford cable, which must be wound uniformly along the length of the coil on a support called a mandrel.

In the winding process, the cable feeds from a spool at the center of the assembly, as the mandrel is moved on a carriage along a track to the other end. When cable has been laid on one side of the form, the spool rotates to the other side of the machine. The carriage reverses direction, and cable is

laid along the other side of the mandrel. This process repeats until the required number of turns has been applied. According to Bill Sandhoff, who supervises the activities in Bldg. 924, it takes 16 full turns to complete the winding of one inner coil, while an outer coil takes 20 turns. All told, this process takes about eight hours.

From the winding machine, the coils, with rigid support, are lifted by crane to the other end of Bldg. 924, where they are cured in a heated press to gel the epoxy on the insulation of the cable. This curing operation obtains uniformity of coil size. Morris Shapiro, mechanical engineer in the Magnet Division, said that during this initial run coils will be wound and cured for four magnets.

From 924 the coils go to Bldg. 905 where magnet assembly is done. Later this spring, when the first full-length magnet is completely assembled, it will be shipped to the Fermi National Accelerator Laboratory for testing. Fermilab, Lawrence Berkeley Laboratory and BNL are collaborating on the development of superconducting magnets for the SSC.



Peter Horton

Technicians John Benante (left) and Danny Schiappia, with the winding spool to their left, make final adjustments to a completed coil.

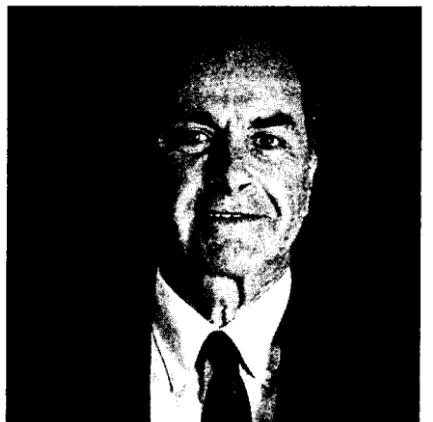
Is SDI Legal?

To most people the Space Age is about astronauts, pictures of far-away planets beamed to earth, NASA, the shuttle tragedy, but it has many other facets.

One of these facets, the legal context, has been under study by international lawyers and political leaders since the Space Age began. In these 30 years a body of law has been developed covering the regulation of such things as the placement of satellites in geostationary orbit, the allocation of frequencies for space communications and weather reporting networks.

Perhaps the area of most concern being studied is that of the use of outer space for ballistic missile defense and anti-satellite weapons. A leading international lawyer and scholar, Abram Chayes, Felix Frankfurter Professor of Law at Harvard University, will come to Brookhaven to address "The Legal Aspects of the Strategic Defense Initiative." The lecture will take place on Friday, March 7, at 3:30 p.m. in Berkner Hall.

Chayes is expected to discuss, in particular, the Treaty on the Limitation of Anti-Ballistic Missile Systems signed and ratified by the United States and the Soviet Union in 1972; the Outer Space Treaty, which was developed in the United Nations in 1967 and now has about 80 signatories; the interpretation and compliance with these treaties; and the legal rules relevant to the Strategic Defense Initiative enterprise.



Abram Chayes

Mr. Chayes is a graduate of Harvard and the Harvard Law School. He served as law clerk to Supreme Court Justice Felix Frankfurter in 1951-52, joined the faculty of the Harvard Law School in 1955 and, in 1976, was appointed to the chair at Harvard named for the Justice. During the Kennedy years, he was an advisor to the Department of State and was the director of the foreign policy task forces in the 1972 Democratic Campaign. He was the chief U.S. delegate to the International Nuclear Fuel Cycle Evaluation during the Carter Administration. Recently Chayes headed the legal team representing Nicaragua in its lawsuit against the United States in the International Court of Justice.

He is the author of four books: "The International Legal Process;" "Evaluation of the Decision to Deploy an Antiballistic Missile System;" "The Cuban Missile Crisis;" and "International Crises and the Role of Law."



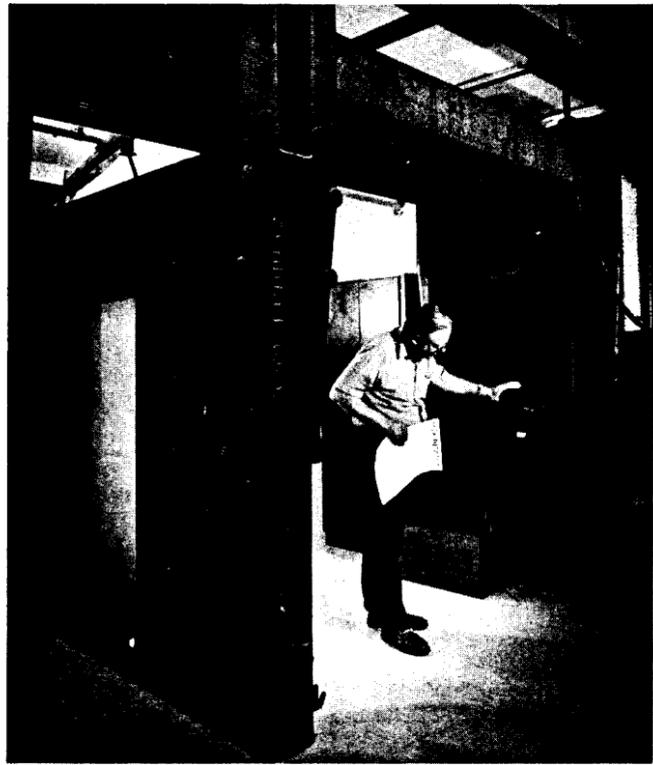
1. The first to become involved in producing the Bulletin is the Composition Group, which includes Typesetters Michele Dickerson (foreground) and Dolores Knighton, and Supervisor Leo J. Casey. From Friday to the deadline of Wednesday noon, edited and approved copy is sent from Public Relations' IBM PCs via the telephone. Composition's interface system converts the information so it can be read by the three computerized phototypesetting machines. Last-minute typewritten copy is rushed over by Red Ball, Graphic Arts' messenger service.

Gone are the days of mechanically set type. Since 1981, the typesetters sit in front of terminals, keying in instructions to the typesetting computers. The Bulletin is set in a type font known as Schoolbook, in nine point type (points are a measure of height), and in what is known as book style for copy and bold style for captions.

After generating one-column wide strips of typeset copy, called galleys, the tedious but important task of proofreading begins. Red Ball runs the galley proofs back and forth between Composition and the editor's desk in PR until, ideally, the proofs are perfect.



2. In the meantime, the Word Processing Group is deciphering employees' handwritten ads and typing them. Members of that group include Word Processors Jody Fanizza, Vicki Feldman, Kathy Koenig, Donna McCambridge and Joy Monaco; they are supervised by Mary Wigger (pictured), who is the first to proofread the typed ads. After further proofreading, the ads are set by Composition in the type font Megaron, seven point type, and they are proofread again.



3. While the typesetters are working on the words, Cameraman Tom Browne uses his large process camera to enlarge or reduce any pictures or graphics that accompany Bulletin stories. Photographs, for instance, must be shot through a ruled screen that breaks up the picture into a series of tiny dots. The dots are closer together in dark areas and farther apart in light areas, but blend together to give the appearance of continuous tones when printed. In the camera room, Browne is shown adjusting the focus of the lens; the back of the camera goes through an opening in the wall, so the negative and camera controls are housed in a darkroom where Browne does his processing.



4. Jeff Knighton is in the position with Dolores Knighton as the galley is laid out by the editor using copies of the galleys. Basic typesetters lay out the galleys to page. After they approve the pasted-up galleys, Browne makes each. Before the picture is made for making the galley they must be working in the darkroom known as st

Aluminum

(Cont'd)

known about these patients. In all, 40 patients from the Stony Brook Health Sciences Center will be studied.

Future Application

"The real application of this method will come in the evaluation of chelation therapy as a treatment for people with renal failure," says Ellis. "In order for it to be successful, you have to know what their aluminum levels are."

— Mona S. Rowe

PC Users Meeting

The PC/Workstations Group will meet on Tuesday, March 11, at 2 p.m. in the Applied Mathematics Department Seminar Room. General Parametrics Corporation will present a product called VideoShow, a hardware/software package, which uses a color monitor or video projector, slides or hard copy device. Pictures are created with easy-to-use software on an IBM PC.

Coming Up

The New Zurich String Quartet will perform at Berkner Hall on Tuesday, March 11, at 8:30 p.m. The program will consist of works by Shubert, Haydn and Ravel. Single admission is \$9; students and those over 65, \$6; and those under 18, \$5. Tickets are available at the door.

Concert Notice

The concert tonight, featuring John Lessard, Elisabeth Palmedo, George Fisher and Stephen Payson, will begin at 8:30 p.m. and not at 8 p.m. as previously announced.

To Your Health

"Osteoporosis" is the topic of the fifth Health Promotion Seminar on Monday, March 3, from noon to 1 p.m. in Room B, Berkner Hall. The lecturer is Medical Research Collaborator Ashok Vaswani, a physician specializing in the study of this debilitating bone disease. He will present an overview of the disease, discuss who is at risk and stress how the disease can be prevented through a calcium-rich diet and weight-bearing exercise.

Hospitality News

"Vegetable Gardening" will be the topic of Caroline Kiang's presentation at the next Hospitality Committee get-together on Tuesday, March 4, at 9:30 a.m. at the Brookhaven Center. Kiang, who is a member of the Suffolk County Cooperative Extension, will provide some tips on how to start and maintain a vegetable garden.

Spouses of Lab employees, guests and visitors are welcome. Coffee, tea and danish will be served. Please come and bring the children. Babysitting will be provided free of charge.

Science Fair Volunteers Wanted

BNL and the Science Teachers Association of New York State are sponsoring the 35th State Science Congress, which will be held at Berkner Hall on May 8, 9 and 10. High school students, winners of regional Science Congress competitions, will present their projects in the areas of biology, chemistry, computer science, ecology, electronics, energy, earth and space science and physics.

Among the events planned is a show on scientific demonstrations called "The Magic of Science", the evening of May 10, and the organizers are looking for volunteers from the BNL staff who can contribute to unique, fairly simple and exciting demonstrations of scientific principles in different branches of science.

Volunteers from the various disciplines are also needed to judge the projects of students by reading their papers and evaluating their oral presentations.

Those who can help out in either of these areas are asked to please send a note by March 15, with name and telephone number, to C.V. Krishnan, Department of Applied Science, Bldg. 801.

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

Pick a Student

Completed applications for the 1986 Summer Student Program are now available for review in the second floor conference room, Bldg. 460. Selections should be made by March 7.

For Parents And Children

Viki Diamond, a children's entertainer, will perform at the Upton Nursery School in the Recreation Building on Sunday, March 9, at 1:30 p.m. She has been here several times before and is a big hit with both parents and children. Ms. Diamond sings songs and tells stories and plays the guitar, autoharp or hammer dulcimer. With help from her Jumping Johnny doll, she encourages audience participation. A donation of \$2.50 per family is asked.

Bring your children to the concert and also learn about the nursery school. The School is now enrolling three and four-year old children related to BNL employees and Lab visitors for classes beginning in September. Children participate in a stimulating program either two or three mornings a week and are led by professional teachers. Parents help as teachers' assistants on a rotating basis and manage the school's business. For further information, call Joan Rice, enrollment chairperson, 924-8880, or Marian Dreimann, president, 924-6723.

Press

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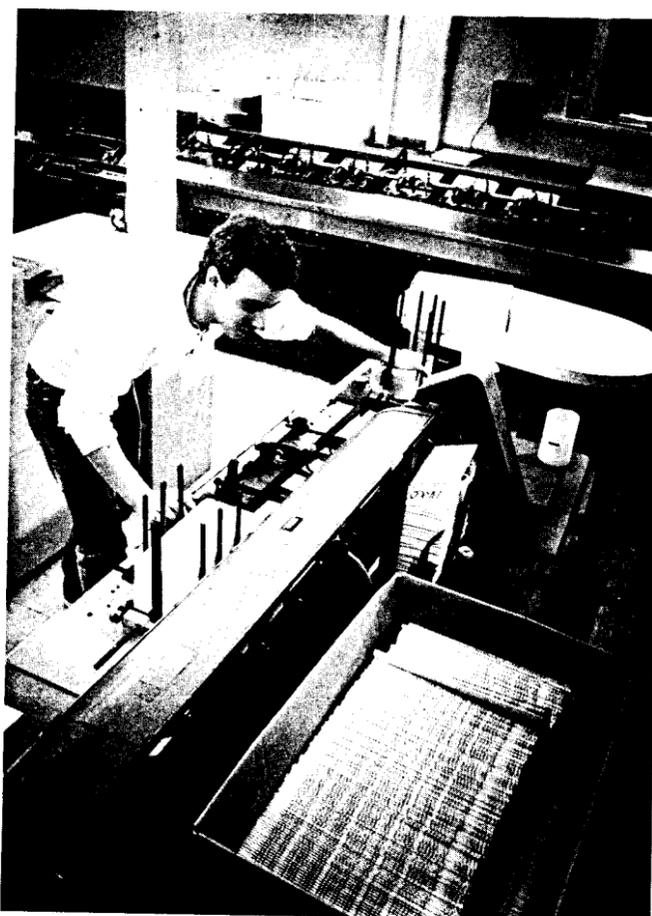
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5. Pressmen Neil Jackson (foreground) and Andy Brems use the negative assembly to make two aluminum plates: one for pages one and four, and another for pages two and three. After Supervisor Bruce Style approves the plates, the plate for pages one and four is clamped into the offset press, that Friday's Bulletin is officially "put to bed," and Jackson and Brems oversee the press run.



6. As the 6,225 issues come hot off the press, Christine Saitta feeds them through a folder, and batches and boxes the folded copies. Red Ball then delivers them to the Mail Room for on-site distribution with Friday's morning mail.



7. Friday morning, Bulletins to be mailed off-site are folded to letter size. Quick Copy Service Center Supervisor Joe Hanson assigns Rick Backofen (pictured), Mike Colon, Eva Esposito or Jerry Gaeta, who also take turns as the Red Ball driver, to insert them in envelopes.

Photos
by
Mort
Rosen

BERA Board Slate Selected for 1986

The BERA Nominating Committee has selected the following candidates for the 1986 BERA election: Haskell Frei, Reactor Division; Rosalie Piccione, Contracts and Procurement Division; George Sintchak, Instrumentation Division; Doris Terry, Nuclear Energy Department.

During the week of March 17, eligible BERA members, including employees of BNL, AUI, DOE and all other permanent on-site employers, will be invited to cast their ballots to elect two of the four candidates to serve on the BERA Executive Board for three years.

More information on the candidates and a listing of designated polling stations will be published in the March 14 issue of the Bulletin.

Service Awards

The following employees received service awards during the month of February:

Thirty-Five Years
Frederick C. Merritt Instr.

Thirty Years
Walter W. Becker DNE
Elizabeth B. Mill Supply & Mater.
R. Ronald Rau Physics
James J. Reilly Jr. DAS

Twenty-Five Years
Henry Arnesen Physics
Ronald E. Brewer Central Shops
David A. Comstock Chemistry
Paul V. Hough Biology
John T. Koehler Physics
Robert E. Meier Accel. Dev. Br.
Richard N. Ruffing Applied Math
Elizabeth A. Symonds .. Applied Math
Fred Traxel Plant Eng.
Alexander Wirszyła HEF

Twenty Years
Meyer Garber DAS
Robert W. Goodrich DAS
John J. Gould AGS
Anthony J. Krupien AGS
Ernst P. Lindevald Central Shops
Samuel J. Strelecki Plant Eng.
Neal R. Tempel Biology

Ten Years
Edwin Casanas Accel. Dev. Br.
James J. Downing ... Supply & Mater.
Judy C. Ferrero NSLS
Michael P. Hope AGS
Susan Norton Accel. Dev. Br.
Kenneth M. Novak DAS
Jerome D. Quigley ... Supply & Mater.
Joanne Roys DNE
Oscar Sanchez Central Shops
James G. Vogel Staff Services

Swim Club

The Swim Club will meet for a dive-start clinic on Thursday, March 6, at 5:30 p.m. at the pool. In preparation for the CCNY Masters meet, the Swim Team will hold a sprint practice afterwards. The team will meet as usual on Thursday, March 13. For more information, call Marsha Belford, Ext. 3327, or Mark Catan, Ext. 5060.

Volleyball

League I	W-L
Dinkers	34-4
Up FaGrabs	27-11
Bumpers	18-20
X-Rayted	16-22
Net Results	11-27
TNT	8-30
League II	W-L
Phoubars	38-0
Nuts & Bolts	22-16
Fossils	20-18
Cannonballs	16-22
Chungas Revenge	15-23
Upton-Ups	3-35
League III	W-L
Print Outs	29-13
Foul Ups	24-18
Screwballs	23-19
The Buddys	22-20
Light 'n Lively	15-27
Couples	13-29
Open League	W-L
Odds & Sods	31-5
Dakota	29-7
Phoenix	14-12
Court Jesters	17-19
Rowdy Radicals	15-21
Generic	8-28
Out-of-Control	2-34

Singles Club

There are still openings for the Mount Brodie Ski trip, March 14 to 16. For information and reservations, call Doris Terry, Ext. 2228.

Bowling

Red/Green League
N. Parrinello rolled a 235, D. Jesaitis 231/611 scratch series, S. Dimaiuta 209, C. Bohnenblusch 203, J. Connelly 200.

Purple League
Rich Larsen had a 257/605 scratch series, Joe Sheehan 223, John Niemczyk 213, Sharon Moore 189, Millie Connelly 187, Lee Barberich 187, Marilyn Picinich 179/170, Sharon Smith 175. Marge Stoessel converted the 8-10 split.

White League
High games were bowled by Jim Petro 218, Dick Adams 212, Paul Callegari 203, Pat Manzella 190/180, Nancy Roesler 183, Anna Marie Spira 180, Antoinette Carollo 171, Ben Belligan converted the 6-7 split.

Reminder
The Scotch Doubles will be held Sunday, March 2, at 2 p.m. at Port Jeff Bowl.

Basketball All Star Game

BNL Allstars - 100	Nassau Allstars - 65
J. Desmond	M. Holland
E. Meier, Jr.	R. Raab
B. Gunther	D. Winters
G. Mack	D. Picha
R. Doty	R. Hargel
R. Seymore	R. Raab
M. Colon	A. Gallo
T. James	M. Gallo
J. Brady	

BROOKHAVEN BULLETIN

Published weekly
for the employees of
BROOKHAVEN NATIONAL LABORATORY

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MONA S. ROWE, Associate Editor
ANITA COHEN, Senior Reporter
MARSHA BELFORD, Reporter

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Telephone (516)282-2345

Investment Options Performance Summary

In February of 1982 Mutual Funds were added as investment options for voluntary employee tax-deferred contributions under the AUI retirement program. In order to provide Laboratory employees with information concerning the various investment opportunities available under the AUI retirement program, the Personnel Division has compiled the performance records of TIAA-CREF Regular and Supplemental Retirement Annuities and Fidelity and T. Rowe Price mutual funds.

Values as of 12/31/85, for monthly contributions of \$100 started 1/1/85, 1/1/84, 1/1/83 and 3/1/82

Past performance (hypothetical accumulations with dividends and capital gains reinvested and all expenses deducted). Security prices can fluctuate considerably and these yields should not be considered as representative of future earnings.

Date Contributions Commenced 1/1/85 1/1/84 1/1/83 3/1/82
Total Contributions \$1200 \$2400 \$3600 \$4600

TIAA - CREF

Regular (Non Cashable)

TIAA	\$1275	\$2700	\$4298	\$5791
CREF	1382	3065	4835	6918

SRA (Cashable)

TIAA*	\$1256	\$2660	\$4233	\$5704
CREF*	1361	3019	4762	6814

Fidelity Group Funds

Cash Reserves	\$1250	\$2616	\$4111	\$5474
U.S. Government Reserves	1250	2611	4099	5442
Corporate Bond	1351	2947	4616	6288
High Income	1355	2982	4766	6765
Thrift Trust	1344	2951	4668	6352
Contrafund	1363	2948	4436	6146
Discoverer	1330	2841	4303	6222
Trend	1377	2999	4643	6566
Mercury	1413	3161	4844	N/A
Equity-Income	1351	3023	4524	6769
Fidelity Fund	1378	3021	4685	6707
Puritan	1363	3070	4955	7130
Magellan	1468	3312	5225	8032
Freedom	1404	3068	4489	N/A

Select Portfolio

Aerospace & Defense	1429	N/A	N/A	N/A
Energy	1243	2641	4198	5794
Financial Services	1440	3431	5693	8409
Health Care	1460	3446	5217	7564
Precious Metals	1063	1891	2662	3844
Technology	1299	2581	3772	5854
Utilities	1413	3274	5359	7554
Leisure & Entertainment	1478	N/A	N/A	N/A
Special Situations	1437	3205	N/A	N/A

T. Rowe Price Funds

Prime Reserve	\$1250	\$2620	\$4122	\$5487
U.S. Treasury Money	1246	2599	4072	N/A
New Income	1329	2849	4499	6134
Growth & Income	1328	2835	4446	N/A
Growth Stock	1432	3160	4783	6597
New Era	1348	2885	4541	6424
New Horizons	1348	2840	4182	5929
International	1563	3262	5187	7249

*The TIAA/CREF SRA accounts (which are cashable) require a front end load charge of 1-1/2% for each monthly contribution.

N/A = Funds not in existence for the full time period were excluded from this comparison.

Classified Advertisements

Placement Notices

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

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

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

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

THE VACANCIES LISTED BELOW HAS BEEN EXEMPTED BY THE DIRECTOR'S OFFICE FROM THE CURRENT FREEZE ON OPEN REQUISITIONS.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

2402. TOOL AND INSTRUMENT MAKER - (2 positions) Central Shops Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

2403. TECHNICAL POSITION - Requires AAS in electronic technology or equivalent experience. Primary responsibility will be NSLS experimental area safety operations. Duties will include safety system checkouts, beam line documentation, interfacing between control room and experimenters with respect to user safety and enabling of

beam lines for experimental use. The safety operator will work with the BNL Safety and Environmental Protection representatives at the facility to insure proper beam line operation. National Synchrotron Light Source Department.

2404. TECHNICAL POSITION - Requires AAS in electronic technology or equivalent experience. Hands-on experience with low frequency and RF analog circuits as well as hands-on experience in the construction of electronic systems required. National Synchrotron Light Source Department.

Autos & Auto Supplies

71 VW BEETLE - runs well, \$250. Rainer, Ext. 4494 or 2402.

74 TORINO - 77k mi., a/t, p/s, p/b, recent tires, brakes, batt., water pump, am/fm cass., \$950. 281-0360 after 6 p.m.

79 FORD PINTO - a/t, p/s, a/c, \$1,400. 363-6940 eves.

83 DATSUN 200 SX - coupe, 5 spd., am/fm stereo cass., excel. cond., \$6,300. Ext. 5316.

83 RENAULT ALLIANCE - 4 dr., am/fm cass., 4 spd., 25k mi., excel. cond., \$4,000. 928-5779.

75 TORINO WAGON - a/t, p/s, p/b, a/c, new tires, recent alt., batt., \$750. Ext. 2591.

75 FORD LTD - wagon, good cond., \$600 neg. Ext. 3125.

83-1/2 TOYOTA CAMRY - 5 dr., liftback, two-tone, luxury edition (LE), 49k mi., all options, \$9,600. Leo, Ext. 4615.

78 E150 FORD VAN - 6 cyl., service truck, good running cond., heavy duty suspension. Rod, 751-7023.

AMC GREMLIN - good transp., \$350. 399-1271 after 6 p.m.

78 FORD MUSTANG - a/t, 4 cyl., reb. eng., 82k mi., \$1,100. John or Armin, Ext. 4570.

77 OLDS CUTLASS - V6, a/t, p/s, p/b, 72k mi., 2 dr., console, buckets, (5) steel belted radials, excel. cond., \$2,000 firm. 286-1214.

74 CAPRI - 4 spd., lt. brown, reb. eng., incl. snows on rims, \$700. 585-2563 eves.

76 HONDA CIVIC - good running cond., 74k mi., body fair, \$750. Ext. 3968.

74 DUSTER - p/s, a/t, new starter, snow tires, plus (3) spares. Dave, Ext. 4360 or 269-5319.

78 FORD FAIRMONT - stand., 2 dr., \$1,800 neg. Ext. 3755 or 3222.

Cafeteria Menu

Week of March 3

Monday, March 3

Cream of spinach soup	(cup) .65
	(bowl) .85
BBQ porkchop w/choice of 1 veg.	2.45
Turkey broccoli primavera w/choice of 1 veg.	2.45
Hot Deli: Virginia baked ham	(bread) 2.25
	(roll) 2.40

Tuesday, March 4

Lentil soup	(cup) .65
	(bowl) .85
Pot roast of beef w/choice of 1 veg.	2.55
Broiled fish w/choice of 1 veg.	2.65
Hot Deli: Smoked turkey grinder	2.45

Wednesday, March 5

French onion soup w/croutons	(cup) .65
	(bowl) .85

Baked meatloaf with sauce and choice of 1 veg.	2.45
Vegetable lasagna w/garlic bread	2.45
Hot Deli: BBQ chicken on onion roll	2.40

Thursday, March 6

Beef noodle soup	(cup) .65
	(bowl) .85

Fresh ham w/choice of 1 veg.	2.50
Shrimp & broccoli stir fry over rice	2.50
Hot Deli: Corned beef	(bread) 2.35
	(roll) 2.50

Friday, March 7

Clam bisque	(cup) .65
	(bowl) .85

Braised Swiss steak jardiniere w/choice of 1 veg.	2.50
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Fried clams - all you can eat special w/choice of 1 veg.	2.95
Hot Deli: BBQ beef on a French roll	2.45

Arrivals & Departures

Arrivals

Sherie Michale Appl. Sci.
Teresa M. Scheuerer Fiscal
Jane B. Throwe Physics

Departures

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

Wendy S. Mancuso Chemistry

73 DART - good for parts, runs but burns oil, \$100 or best offer. Chuck, Ext. 5317 or 929-4413 after 6 p.m.

75 SAAB LE - new muff., bucket seats, am/fm cass., GLE int., radials. Damien, 924-8686 days or 744-5074 eves.

77 TOYOTA CELICA GT - h/b, good cond., KYB gas shocks & struts, louver, Pirelli tires. Ext. 3571.

77 DATSUN B210 - excel. cond., 4 spd., a/c, reb. carb., front end, trans., new clutch, \$1,850. Ext. 3395 or 928-4683.

Boats & Marine Supplies

28' OWENS - 1964, recent canvas, hardtop, sleeps 4, standup head, good cond., \$2,000. 281-0360 after 6 p.m.

18' GLASTRON - fiberglass, 115 HP elec. Evinrude, galv. trailer, very good., \$3,800. 269-9510.

12' ALUMINUM BOAT - 7.5 HP motor, trailer, all access., excel. cond., \$600. Bill, Ext. 2807 or 281-0557.

SURF WAVE-SKI - w/dbl. paddle, \$170. Tim, Ext. 3496 or 281-7873.

19' ARISTOCRAFT - 1972, 1976 120 HP I/O Mercury cruiser, 1978 trailer, \$1,300. 698-4630.

OUTBOARD - 2 HP Johnson, \$150. 473-2473.

23' O'DAY - 1980, 7.5 HP Honda, 6 sails, full race equip., keel ctr. bd., electronics, extras, excel., \$15,400. Lloyd, Ext. 3381 or 286-1024.

Miscellaneous

APARTMENT SALE - 30C Country Club Dr. (La Bonne Vie Apts.), Coram, March 7-9, 10 a.m.-7 p.m., furniture, toys, baby items, etc. 732-5047.

MOVING SALE - queen bed, colonial bed, elec. broom, picnic table, chandelier, drawers, chest & more. Ext. 2963.

BATHROOM SINK - 18"x20", beige ceramic, \$20. Les, Ext. 2920.

BASSINET - white wicker, very good cond., \$20; umbrella carriage, plaid, good cond., \$20. 281-0360 after 6 p.m.

CHINA - Arabia Finnish, Ruska pattern, 12 place settings, \$85; Hoover Celebrity II vacuum cleaner, \$35. Ext. 3591 or 298-9528.

DEN SET - 3-piece, \$110; 5-piece dinette set, \$125; 64" bathroom vanity, w/sink, faucet, walnut. Rod, 751-7023.

MINIDRYER - 115 VAC, excel. cond., like new, \$100. Victor, Ext. 2395.

KITCHEN TABLE - love seat, best offer. Ady, Ext. 4531 or 331-3785.

HIRISER BED - \$35; bureau w/mirror, \$30; kitchen set, \$20. Fred, Ext. 5015.

(2) CONCERT TICKETS - Pete Seeger, Carnegie Hall, 3/1/86, \$12 ea. Ext. 4493 or 924-0836.

FORMICA KITCHEN CABINETS - new, contemporary, \$75 ea. Tim, Ext. 3496 or 281-7873.

REFRIGERATOR - 18 cu. ft., side-by-side, excel. cond., \$135; full size mattress, boxspring & frame, excel. cond., clean, \$90. 286-1214.

SNOW THROWER - Sunbeam Snow Champ, 12 in., elec., like new, \$175. Kevin, 878-4285 after 5:30 p.m.

KITCHEN SINK - avocado green, \$15; chrome & white chandelier, 5-light bulb, \$25; (4) dinette chairs, blue, bucket style, on chrome swivel base, \$40. Ken, Ext. 4421 or 744-0722.

COLOR COMPUTER - w/disk drive, cables, 30 disks plus 50 tapes, incl. WP, SS, DBMS, COMM, games & more, \$175. Dick, Ext. 2911.

Free

FURNITURE - sofa, bed, upholstered chair, misc. smaller items. 928-5779.

Real Estate

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

For Rent

RIDGE - 2 bdrm. townhouse, 1/r, d/r, 1-1/2 baths, w/w, 5 appl., 5 min. to Lab, no pets, prefer. no children, \$600 mo. plus util. Ext. 4525 or 924-7029 after 6 p.m.

BELLPORT VILLAGE - furnished 2-1/2 room apt., full kit. fac., cable TV outlet, w/w, shower stall, priv. ent., nonsmoking working person preferred, \$450 mo. incl. util. 286-9705.

CORAM - new Bretton Woods condo., 2 bdrms., 2 baths, 1/r, d/r, eik, w/w, 5 appl., golf, tennis, clubhouse, no pets, \$750 mo. plus util. & 1 mo. sec. 289-0413.

CATSKILLS - 3 bdrm. chalet, sleeping loft, fully furnished, near Hunter & Windham Mts., weekly or weekends. Judy or Kay, Ext. 3595 or Bea, Ext. 3642.

HILTON HEAD, SC - 2 bdrm. condo., tennis, golf, \$300 week. 585-9149 or Ext. 3147 after 4:30 p.m.

N. PATCHOGUE - priv. 3 bdrm. apt. in home, kit., 1/r, fenced-in yard, 15 min. to Lab, \$750 mo. plus 3/4 util., no pets. Carol, 289-3917.

FARMINGVILLE - furnished 1 bdrm. apt., for single person, \$425 mo. plus sec., avail. March 1. 736-3384 after 6 p.m.

YAPHANK - house on wooded 2 acres, 2 bdrms., eik, 1/r, bsmt., 10 min. to Lab, \$650 mo. John, Ext. 3675 or 924-3528.

For Sale

AQUEBOGUE - 3 bdrm. ranch, 1-1/2 baths, 1-1/2 car garage, 1/3 acre, f/p, town water, fenced-in back yard, \$119,000. 722-4644.

YAPHANK - condo./townhouse, at Colonial Woods, 3 bdrms., 1 full & 2 half baths, full bsmt., central air, all appl., storms & screens, many extras, \$103,000. 924-3928 after 6 p.m.

YAPHANK - condo./townhouse, Whispering Pines, 2 bdrms., 1-1/2 baths, full bsmt., int. access garage, all appl., storms & screens, f/p, many extras, pools, tennis, clubhouse, \$99,900. Leo, Ext. 4615.

S. HAUPPAUGE - California ranch, 6 bdrms., 2-1/2 baths, (2) 1/r, d/r, kit., 1 car garage, excel. for (2) families. 957-9684 after 6 p.m.

OAKDALE - Idle Hour section near water, 2-story Tudor, 4 bdrms., 2 baths, garage, attach. full apt., w/priv. ent., 1/2 acre on dead end street, \$210,000. 363-6940 eves.

FLORIDA - Vero Beach, condo., on golf course, 2 bdrms., 2 baths, Florida rm., mint cond., many extras, \$64,000. 698-5046 after 7 p.m.

GILBERTSVILLE - Otsego County, 37+ acres, all hardwood in shoot gun area, lots of small game, \$24,000. Wait, Ext. 3848 or 281-9299.

MANORVILLE - 3 bdrm. ranch, 1-1/2 baths, 1/r, d/r, den w/f/p, cathedral ceilings, garage, fenced acre, wood sunscreened patio on cul-de-sac, William Floyd SD, \$129,000. Ext. 4798.

SHOREHAM - 3 bdrm. ranch, garage, .54 acre, cul-de-sac, pool, all appl., extras, \$90's. 744-1429.

PORT JEFF. STA. - Sagamore Hills, 2 bdrms., 1-1/2 baths, townhouse, pool, tennis, clubhouse, etc., quiet court area. 928-8522.

BAITING HOLLOW - 1/2 wooded acre, winter waterfront, deeded beach rights, very private, \$49,500. Ext. 2008 or 928-5875 after 6 p.m.

SOUND BEACH - cedar ranch, 3 bdrms., new kit., full bsmt., patio, \$105k. Paul, Ext. 7760 or 744-5256.

RONKONKOMA - Bohemia area, 3-4 bdrm. ranch, full bsmt., part finished, lg. eik, fenced yard, oak flooring, tile bath, Connetquot SD, \$110,000 neg. 585-3417 or 874-3796 eves.

Car Pools

MASTIC BEACH - need ride. Nick, Ext. 4979/4057 or 395-1043 eves.

LIE EXIT 22/26 - needs driver, 8:30-5:00. Vladimir, Ext. 5261.

LIE EXIT 26 - fourth driver needed, 8:30-5:00. Sorin, Ext. 2765.

Wanted

DOCKAGE - in Moriches/W. Hampton area, for 23' inboard boat. Jim S., Ext. 2957 or 286-0796.

ALTO SAX - good cond., reasonable, w/case. Ext. 4669 or 744-9429 after 6 p.m.

SINGLE PERSON - interested in 1 week vacation to Acapulco, \$400 room/airfare. Ext. 4098 or 924-9508.

VIOLIN - good cond., full size, w/case & bow. Tak, Ext. 2823 or 4510.

TRAINS - Lionel, American Flyer, accessories, any condition brings good price. Carole. Ext. 3362 or 924-4097 eves.

BOYS - 9-12 yrs., Little League football, Port Jeff. area, PAL league, preregistration. Mike, 473-8762 after 6 p.m.

STUDENT DESK - wood or metal, 40"x34"x30" or within specs. Tim, 281-7873 after 5 p.m.

CRADLE - bassinet, or port-a-crib, very good cond