

The Peyer's Patch Project

Sometimes a bit of serendipity can change the course of one's research. Such was the case with Darrel Joel and the Peyer's patches.

Several hundred small lymphoid nodules line the walls of the small intestines of most mammals, and some of them form visible clusters called Peyer's patches. Peyer's patches — as they relate to the ingestion of particulate pollutants — have been the subject of scrutiny by Joel and his colleagues in the Medical

Department since 1972.

"I began work in this area with a completely different idea in mind," said Joel, a senior scientist. In 1969, working with newborn mice, Joel was studying the migration of white blood cells (lymphocytes) from the thymus, and observed that the vast majority ended up in Peyer's patches. Since lymphocytes are involved in initiating protective antibody responses to antigens (macromolecules foreign to the body), Joel wondered whether antigens might also enter the Peyer's patches. A simple experiment, in which mice were given a carbon suspension, demonstrated that minute particles could indeed cross the intestinal lining and did so almost exclusively in association with Peyer's patches.

With this serendipitous observation, Joel's efforts were redirected to the Peyer's patches. Through the years, he has worked with a number of colleagues and with funding from the Department of Energy and the Environmental Protection Agency. In 1975, he was joined by Scientist Marian LeFevre. When Joel moved to another Medical Department project in 1978, LeFevre became principal investigator for the Peyer's patch project, which ends with the fiscal year. Joel and LeFevre's work can be summarized by questions they have asked and experiments they have undertaken to answer them:

Do particles get into the Peyer's patches?

In the researchers' earliest experiments, mice were given drinking

Marian LeFevre (right) and Angela Boccio in the laboratory.



Alex Reben

water laced with small carbon particles. Examination of tissue from the mice confirmed not only that foreign substances can get into the Peyer's patches, but also that uptake is cumulative and persists for weeks or months after ingestion ends. Similar experiments were conducted with other particles, including latex.

Why do Peyer's patches take up particles?

Probably due to the need for a mechanism to "sample" ingested antigens. LeFevre explained, "Protein antigens get into Peyer's patches, initiating an immune response. This leads to the distribution of protective antibodies up and down the intestinal wall. The uptake of carbon and latex particles is a by-product of this antigen sampling process, and does not appear to be harmful."

How do particles get into the Peyer's patches?

A single cell layer separates Peyer's patches from the contents of the small intestine. LeFevre and Joel have dubbed this epithelium an "imperfect barrier," because, unlike the rest of the intestinal wall, it allows particles to pass through. This layer contains cells called M cells that take up macromolecules and particles like carbon, for antigen sampling.

The role of the M cells in the uptake of larger particles such as latex is unknown; however, LeFevre is hoping that Myron Ledbetter and Neal Tempel of Biology will be able to provide an answer by using an electron

microscope to catch a latex particle in transit across the epithelium.

Is the uptake process selective?

For an answer to this question, mice were given water containing asbestos, a particle known to cause harmful effects in the lung. Though asbestos is most likely to be inhaled, LeFevre noted that a large fraction of particulate matter in the lungs, no matter how deep it is, will be brought up and swallowed, and the asbestos will pass through the intestinal tract. Once there, however, it apparently will not penetrate the Peyer's patch outer layer.

"This accumulation and storage that we demonstrate so easily for carbon and large latex particles is not similarly demonstrable for asbestos," she said. "As a result of that and experiments with other particles, I've come to the conclusion, which probably won't be proved in my scientific career, that there is some selectivity to this uptake process."

How many particles actually enter the Peyer's patches?

Because carbon uptake is cumulative, the researchers could not tell how much of each dose ended up in the Peyer's patches in their earliest experiments. But the work LeFevre is now completing attempts to find out. Mice were given water containing carbon labeled with a very pure beryllium-7 isotope (see accompanying story). As the carbon accumulated in the Peyer's patches, Medical Associate Angela

(Continued on page 2)



Peyer's patches consist of clusters of small lymph nodes, or follicles. This cross section shows one follicle from a mouse given a 1.5% carbon suspension as drinking water for two months. Each black spot in the follicle represents an accumulation of carbon particles in a macrophage(s). The particles are abundant in the dome (arrow) and at the base of the follicle, and are scattered throughout the follicle. The epithelium is the thin layer covering the dome.

Road Over Tunnel Opens Next Week

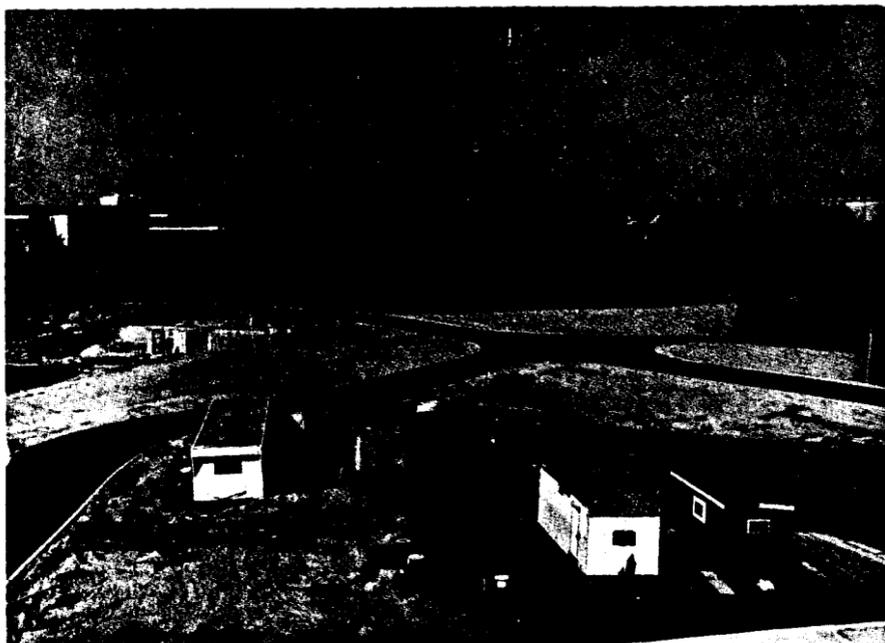
You will no longer have to bypass the construction area at the intersection of Rutherford and Lawrence Drives. The road will be open to traffic on Monday, September 9. When you travel on the southern end of Rutherford Drive, which has actually been rerouted west of the original roadbed, you will be passing over the new heavy ion beam transfer line linking the Tandem Van de Graaff with the Alternating Gradient Synchrotron (AGS). Construction will be continuing in the area for a few more months, so proceed with caution as you pass through.

Work began on the underground tunnel in October 1984. In the intervening ten months, a construction crew from Balport Construction Inc.,

Hawthorne, New York, excavated the 2,000-foot-long tunnel, poured a concrete floor, installed electricity and started to put up two equipment buildings, one mid-point along the tunnel and the other at the AGS end.

Brookhaven took occupancy of the tunnel last month and is about to install the first shipment of magnets from Denmark, where they are being manufactured. Eventually, a total of 80 magnets will be placed in the tunnel, along with a vacuum system, power supplies and other beam transfer equipment.

Modifications are in progress at the Tandem and the AGS. Those are expected to be completed later this year, with beam commissioning planned for sometime next spring.



Peter Horton

The intersection of Lawrence and Rutherford Drives will be open to traffic on Monday.

Peyer's Patch Problem Solved With BLIP

In 1979, during a seminar on the progress of her research, Marian LeFevre discussed the difficulty she and Darrel Joel were having in quantifying carbon accumulations in the Peyer's patches of mice. After her talk, Powell Richards offered a solution to the problem: Why not repeat the experiment with an isotopically labeled carbon? The fact that no suitable radioisotope existed didn't faze Richards at all. He proposed trying to make it in BLIP.

Commonly called BLIP, the Brookhaven Linac Isotope Producer is situated near the end of the linear accelerator that injects particles into the Alternating Gradient Synchrotron. Some excess particles are there siphoned off to produce unique radioisotopes for medical research and clinical use.

Richards, who retired in 1983, worked closely with BLIP and was well-known for other isotopic inventions, particularly technetium-99m. Now, Richards had the idea that by bombarding carbon black with high energy protons, another element, beryllium-7 would be formed from some carbon nuclei, creating carbon particles activated with beryllium-7.

As Joel and LeFevre knew, carbon was a good candidate for their particle uptake and distribution studies because it is non-toxic, insoluble and available in high purity with varying particle sizes. But existing carbon isotopes were either too short-lived or did not emit detectable gamma rays. If Richards were successful, the researchers would have access to a material with neither of these shortcomings, but which would be stable against chemical attack. Joel and LeFevre liked the idea and asked Richards to go ahead with it.

"They had never done this before," LeFevre recalled, "we furnished them the carbon black, and they took it from there." Richards, chemist Thomas Prach and Leonard Mausner, who is now in charge of radionuclide research and production at the BLIP, developed a unique radiotracer, beryllium-7 labeled carbon particles, for which there is now a patent pending. So far, their material has been used in two Medical Department studies: LeFevre and Joel's, and another headed by Daniel Costa. In both those cases, the radiotracer was used in suspension, but Mausner said it can also be made into aerosols for pulmonary studies, and some researchers are inquiring about that use.

"The development of this radioisotope is something that couldn't be done except in a high energy facility like BLIP," LeFevre said. "This is an example of the application of Brookhaven's special capabilities to biological science."



Peter Horton

From left, James Vaughn (DAS), John Short (BOCES) and Donna Dowling who coordinated the program for the Personnel Division.

BOCES Honors Vaughn

For ten years he has welcomed high school students into his lab and worked with them on various science projects during the summer. For his "service to the youth of Suffolk County," James Vaughn, environmental virologist in DAS, was awarded a commemorative plaque by the BOCES II Summer Institute for Gifted and Talented Youth. The plaque was presented to Vaughn by John Short, coordinator of the BOCES summer science program, on August 27 at BNL.

Short said that BOCES wished to express its appreciation to the Lab for the participation of a number of its scientists in the program and that Vaughn had been selected to receive the award because of his long service and because he had been especially helpful. Short remarked that the science internship was the most popu-

lar course in the Summer Institute. This year, 13 students (10th and 11th graders) spent from a month to two months in various labs at BNL learning how scientists work and about the many steps involved in conducting an experiment.

Vaughn keeps track of his students and their subsequent careers. One recent student was a semifinalist in the Westinghouse Science Talent Search based on a project she started at BNL. "She came back in the fall and it took her two months to complete," says Vaughn, "and it was good science, not flashy." About the program over-all, Vaughn said, "all the kids are helpful to me. I haven't had one that didn't work out."

DAS scientist Jeff Gaffney, who has just left the Laboratory, was also singled out by BOCES for his active participation in the program.



Peter Horton

Twenty-one high school students from such various places in New York State as Cropseyville and Brooklyn, spent a week at the Laboratory studying environmental sciences. They were selected for this Department of Energy-supported program by the Science Teachers Association of New York State. The students learned about research in environmental chemistry, environmental monitoring, radioactivity and radiation, bioassays of pollutants, medical applications of nuclear technology, and oceanography. On one of their field trips, they went to Long Island MacArthur Airport where BNL's research plane is housed. There, Dan Leahy, Environmental Chemistry Division, Department of Applied Science, (center) took them into the plane and showed them how it is instrumented for studies of air pollution. In this photo, he explains the workings of a cloud water collector.

SUNY Prof Seeks Info On Radwaste

BNL Personnel working on scientific or policy aspects of radioactive waste disposal are invited to discuss their work and contribute any thoughts or suggestions they may have in connection with a comprehensive, two-year, study of national radioactive waste issues. The project, funded by the National Science Foundation, will focus on disputes over scientific claims, and over ethical and social values surrounding the disposal of high-level and low-level radioactive wastes, especially in light of the complex and novel programs set up by the Nuclear Waste Policy Act of 1982 and the Low-Level Radioactive Waste Policy of 1980.

As part of the project, a conference primarily devoted to low-level radioactive waste management and transportation policies affecting the New York region will be held at SUNY Stony Brook in May 1986. Leaders from federal, state and local government, environmental and citizen groups and universities and national laboratories will participate.

For more information about the project, or if you have ideas or suggestions to discuss, contact Professor Sheldon J. Reaven, Department of Technology and Society, College of Engineering, State University of New York at Stony Brook, Stony Brook, New York 11794, or call 246-8645.

Peyer's Patch (Continued)

Boccio helped count radioactivity levels, from which the researchers can deduce what percentage of each dose found its way into the Peyer's patches.

What happens to particles in the Peyer's patches?

The invaders are engulfed by cells called macrophages. If the particle is an antigen, certain immune responses are triggered in the lymphoid system. But carbon and latex simply remain trapped by the macrophages for long periods. Macrophages, however, are capable of transporting engulfed materials to distant areas. Although Joel and LeFevre found particle-laden macrophages deep in Peyer's patches and in adjacent lymph nodes, they found little evidence for significant transport to the circulatory system.

LeFevre's present analysis traces the activities of fluorescently labeled latex particles and radioactive carbon, looking at the amount of fluorescence or radioactivity that later emanates from organs distant from the Peyer's patches. "We're not finding much," LeFevre said, "and I think that has to do, in part, with the macrophages in the Peyer's patches. I think they can not only transport particles to the lymph nodes, but also return them to the intestine proper."

Others will have to answer any questions that remain; LeFevre will retire in October. While she is now wrapping up the project at the Marine Biological Laboratory in Woods Hole, Massachusetts, she is still on the BNL staff and returns to the Lab once a month to do some laboratory work and consult with Joel.

— Anita Cohen

Back to the Classroom

After eight weeks of research, either at BNL or at six Long Island companies, 18 high school teachers returned to their classrooms this week intellectually stimulated and ready to communicate their enthusiasm to students throughout Nassau and Suffolk Counties.

The research program, tailored to meet teachers' needs, made its debut last summer with seven teachers working at BNL. This year, the National Science Foundation gave a grant to BNL to expand the program over the next five years, and 18 teachers were given research opportunities, 12 at the Lab and six in private industry. Each teacher spends three summers in the program.

The terms of the grant are that NSF pays all expenses the first year and 56% the second year; the host institution pays the entire bill in the third year.

Besides BNL, the organizations currently involved are the Sperry Corp., Long Island Lighting Co., Quantronix Corp., Grumman Aerospace Corp., DuPont Pharmaceuticals and the Plum Island Animal Disease

Center. "I would like to get more companies involved next year," says Don Metz, organizer of the program.

As well as the 16 teachers supported by NSF, the Department of Energy (DOE) is financing two of the 18 teachers at BNL this year, and two more at both Argonne and Lawrence Berkeley. The three laboratories discovered last year that they were all doing a similar program, and it was suggested to DOE that because of the geographic locations of the three labs, the work be coordinated into a national program. The participants are selected on a national basis.

The teachers work on research projects in biology, chemistry, mathematics and physics, and arrangements have been made for them to get three graduate credits for their work from Southampton College. They are graded by their research supervisors.

Don Metz says the program is turning out to be most worthwhile. "There is a pool of talent out there," he says, "and it can be used to our mutual benefit. Everybody gains: teachers, students and host institutions."

Reports Available

The following reports are now available to the Laboratory staff and to affiliates of the DOE, AUI and NRC. Others may purchase the reports from the National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Rd., Springfield, VA 22161. Staff members should call Ext. 5068.

NUREG/CR-2331
BNL-NUREG-51454

Vol. 4 #4
Safety Research Programs Sponsored by Office of Nuclear Regulatory Research. Quarterly Progress Report Oct. 1 - Dec. 31, 1984. Compiled by A.J. Weiss

NUREG/CR-4149
BNL-NUREG-51857
Ultimate Pressure Capacity of Reinforced and Prestressed Concrete Containments. S. Sharma, et al

NUREG/CR-4200
BNL-NUREG-51868
Biodegradation Testing of Solidified Low-Level Waste Streams. P.L. Picuolo, et al

NUREG/CR-4215
BNL-NUREG-51873
Technical Factors Affecting Low-Level Waste Form Acceptance Criteria. D.R. MacKenzie, et al

NUREG/CR-4221
BNL-NUREG-51874
An Evaluation of Stress Corrosion Crack Growth in BWR Piping Systems. M. Kasir, et al

NUREG/CR-4229
BNL-NUREG-51877
Evaluation of Current Methodology Employed in Probabilistic Risk Assessment (PRA) of Fire Events at Nuclear Power Plants. C. Ruger, et al

NUREG/CR-4231
BNL-NUREG-51879
Evaluation of Available Data for Probabilistic Risk Assessments (PRA) of Fire Events at Nuclear Power Plants. P.K. Samanta, et al

NUREG/CR-4254
BNL-NUREG-51888
Occupational Dose Reduction and ALARA at Nuclear Power Plants. B.J. Dionne & J.W. Baum

NUREG/CR-3091
BNL-NUREG-51630
Vol. 4 & 5
Review of Waste Package Verification Tests.

Vol. 4 Semiannual Report Covering the Period Oct. 1983 - March 1984
Vol. 5 Semiannual Report Covering the Period Apr. 1984 - Sept. 1984. H. Jain, et al

BNL-NCS-51771
First Edition
Supplement One
Integral Charged Particle Nuclear Data Bibliography. Literature Scanned from Apr. 1, 1984 through Mar. 31, 1985. N.E. Holden, et al

NUREG/CR-3876
BNL-NUREG-51795
Probability Based Load Combination Criteria for Design of Concrete Containment Structures. H. Hwang, et al

BNL-51881
Oxidizing and Scavenging Characteristics of April Rains — OSCAR Data Report. C.M. Benkovitz, et al

BNL-51882
Thyroid Absorbed Dose for People at Rongelap, Utrik, and Sifo on Mar. 1, 1954. E. Lessard, et al

BNL-51885
Biological Effects Summary Report: Pyrene, S.D. Keimig, et al

BROOKHAVEN BULLETIN

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Courses in English

A course entitled "English as a Second Language" is being offered at the Laboratory to employees, guests, and their immediate families. This program is designed for adults who would like instruction in conversational English, as well as in reading and writing the language. There is no charge for the course.

Classes will be held in the Personnel Training Room, Building 459, Thursday evenings, beginning September 12 as follows:

Beginners - 7 p.m. to 8:15 p.m.
Intermediates - 8:15 p.m. to 9:30 p.m.
If you are interested in attending, please report to the training room at the designated time. Any questions should be directed to the Personnel Office, Ext. 7631.

For those who wish further instruction in English, the Longwood Central School District, Middle Island, is offering an "English for the Foreign Born" course for a \$20 fee. The course will meet on Mondays from 7:30 p.m. to 9:30 p.m. for ten weeks and will start on Monday, September 23. For further information, call the Community Education Office, 345-2163.

Arrivals & Departures

Arrivals

Mario E. Cerritelli Biology
Corinne A. Coughanowr DAS
Elaine Friedman Medical
Richard F. Garrett NSLS
Ching N. Guey DNE
Zbigniew S. Kolber DAS
John Z. Larese Physics
Min Lee DNE
Michael D. Lenz Physics
Deborah Moore Biology
Lars H. Olsen Physics
Peter S. Pershan Physics
Michael A. Poetzsch DNE
Richard E. Stanton Chemistry

Departures

This list includes all employees who have terminated from the Laboratory, including retirees:
Neil J. Baker Physics
Bruce T. Cleveland Chemistry
Susan N. Coppersmith Physics
June B. Martino DAS
James A. Morris, Jr. Plant Eng.
Marjorie R. Neuberger Biology
Thomas J. O'Leary Plant Eng.
Gasper R. Perry Instr.
Marjorie H. Schnader DAS
Gavin M. Watson NSLS

Turtle Talk

It's a busy time of year for turtles, who are apt to be crossing Lab roads throughout September as they search for mates. So drivers should be aware that what looks like a fallen leaf in the roadway could very well be a box turtle. Drive carefully and help preserve this protected species. And if you spot a turtle crossing, why not give it a helping hand, if it can be done safely? Be sure to bring it to the side of the road it was heading for, or the turtle will just try again.

Service Awards

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

Thirty Years
Donald G. Schweitzer DNE

Twenty-Five Years
Donald W. Gardner Physics
Fred H. Kuehl AGS
Frank J. McNulty Instrumentation
Edward S. Miezianka Plant Eng.
George J. Munoz Physics
Evelyn F. Ritter Chemistry
Dorothy K. Thompson DNE

Twenty Years
Hong-Bo Chiang AMD
Henry A. Dawson Plant Eng.

Ten Years
John R. Lehner DNE
Joan A. Lemaire S&M
James T. Pedersen S&E Svcs.
Robert R. Rooks Reactor
Stephen E. Schwartz Applied Sci.

PSI News

The Upton chapter of Professional Secretaries International (PSI) recently elected officers for 1985-86. They are: Mary Cooper (AMD) - president; Geraldine Callister (Medical) - vice president; Susan Carlsen (S&EP) - recording secretary; Sharon Moore (DNE) - correspondence secretary; and Cheryl Christie (S&EP) - treasurer.

The next meeting of the chapter will be on September 16 at 6 p.m. Patricia Durcan, our delegate to the international convention at Louisville, Kentucky, will give a talk and slide show. Also scheduled to speak are Geraldine Callister and Sharon Moore, delegates to the Federally Employed Women's Conference in Detroit. Prior to the meeting, members and guests may gather for dinner in Room C.

Diners Note

The Cafeteria will be closed on Saturday, September 7. On that day, snack bar service will be available from 9 a.m. to 2 p.m. at the Brookhaven Center.

Cafeteria Menu

Week Ending September 13

Monday, September 9
Potato bacon soup (cup) .65 (bowl) .85
Beef chow mein on white rice 2.25
Macaroni & cheese w/1 veg. 2.25
Hot Deli: Sloppy Joes 2.25

Tuesday, September 10
Beef rice soup (cup) .65 (bowl) .85
Fried chicken finger basket 2.40
Swedish meatballs on white rice 2.25
Hot Deli: Smoked turkey breast (bread) 2.35 (roll) 2.55

Wednesday, September 11
Tomato beef soup (cup) .65 (bowl) .85
Sauerbraten & potato pancake 2.45
Fettucini Carbonara & 1 veg. 2.25
Hot Deli: Corned beef (bread) 2.15 (roll) 2.35

Thursday, September 12
Navy bean soup (cup) .65 (bowl) .85
Veal patty Parmesan & 1 veg. & spaghetti 2.30 2.50
Beef Burgundy on egg noodles 2.40
Hot Deli: Baked Ham (bread) 2.15 (roll) 2.35
Special: Top your own 1/2 lb. hamburger Served from grill area 2.20

Friday, September 13
New England clam chowder (cup) .65 (bowl) .85
Seafood platter 2.40
Kielbasy & sauerkraut 2.20
Hot Deli: Clam boat 2.25

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

BERA News

Concert Next Week

Pianist Agustin Anievas opens the 1985-86 Concert Series with a performance on Thursday, September 12, beginning at 8:30 p.m. in Berkner Hall. This concert marks his third appearance at the Laboratory.

Mr. Anievas has been hailed by critics as a dazzling virtuoso of the keyboard. A popular recording artist, he was selected by Angel records to celebrate the 100th anniversary of Rachmaninoff's birth with an album of the composer's piano concerti and the Rhapsody on the Theme of Paganini.

For his concert at Brookhaven, Mr. Anievas has chosen an all-Chopin program. He will play Etudes Op. 10 and Op. 25, both of which he has recorded on the Seraphim label.

Tickets will be sold at the door. General admission is \$9; students and those over 65, \$6; and those under 18, \$5. Block tickets, good at all five con-



Agustin Anievas

certs in the 1985-86 series, may be purchased the evening of the Anievas concert at \$6 each for five or more tickets.

New Board Member

Richard Scheidet, a project engineer in Plant Engineering, has been chosen for the Executive Board of the Brookhaven Employees Recreation Association (BERA). Scheidet will fill the unexpired three year term of Bernie Silverstein, who was elected to the Board in March and recently left the Laboratory. In the event of a vacancy on the six-member Board, the remaining members are authorized to select a replacement under the BERA constitution. During his nine years at BNL, Scheidet has been a member of the Softball League, Exercise Club, Mountain & Canoe Club, Runners Club, Volleyball League and Bowling League. He is currently vice president of the Bowling League.



Have you considered sending your three- or four-year-old to nursery school? Upton Nursery School, run for the children of BNL employees and their families, is enrolling children for the 1985-86 school year. Classes begin in September and are available two or three mornings a week. For more info, call Joan Rice, 924-8880.

Touch Football

The BNL Touch Football League announces that games will begin in September and continue through the end of October. Games will be played at the BERA Recreation Park on Monday and Wednesday evenings at 5:20.

All teams interested may pick up entry blanks and game rules at the BERA Sales Office any weekday between 9 a.m. and 2 p.m. New teams are welcome. A player's pool will accommodate those individuals who would like to play but are not on an organized team's roster. Since no blocking and limited body contact are part of the game rules, players of all ages can take part with little fear of being injured.

Contact Ed Taylor, league chairman, on Ext. 7589 for further information.

Volleyball

All rosters for the Volleyball League must be sent to Bob Marascia, Bldg. 911B, by Wednesday, September 11. There will be a volleyball meeting on Wednesday, September 18, at noon in Room D of Berkner Hall. All captains should attend; voting on rules and roster fees will take place.

Sales Office Hours Changed

As of Monday, September 9, the BERA Sales Office in Berkner Hall will be open from 9 a.m. — 2 p.m.

Wanted

One lb. or 13 oz. coffee cans with plastic lids. Needed to hold plastic sample bottles for EPA acid rain program. Will pick up at your home or office. Leave your name and telephone number on the answering machine at Ext. 2983. — John McNeil, Meteorology Group.

Met Opera Tickets

Tickets for the 1985-86 Metropolitan Opera Season will go on sale at the BERA Sales Office in Berkner Hall at 8:00 a.m. on Wednesday, September 11. On-site employees may purchase as many pairs of tickets as they wish. All sales will be final; no refunds or exchanges.

Copies of the schedule, including a listing of available Family Circle seats, may be picked up at the Sales Office between the hours of 9:00 a.m. and 2:00 p.m. For more information call Ext. 3347.

Softball

Games of August 26

League I
Phoubars 11 - Blue Jays 2
Scram 16 - Moles 10
Ravens 12 - Cool 'N Gang 10

League III
Farm Team 9 - Nads 5

League IV
Turkeys 9 - Septembers 4
Who Cares 13 - Farmbusters 12

Makeup games:
Farmbusters 8 - Kidz-R-Us 7
Farmbusters 18 - Kidz-R-Us 7

League V
Mudville Sluggers 17 - Underalls 8

Motorcycle Club

A meeting will be held on Monday, September 9 at 5:15 at the Recreation Building.

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, 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

LABORATORY RECRUITMENT/OPEN RECRUITMENT

- Opportunities for Laboratory and outside applicants.

2315 MEDICAL ASSOCIATE (2 positions) - Requires a B.S. or equivalent in biology or biochemistry to work with medical group on problems of genetic toxicology. Duties include field work involving the live-trapping and handling of wild rodents, tissue sampling and preparation, extensive microscopic evaluation of various cytogenetic indicators, and computer data entry and verification. (Term positions to 9/30/86) Medical Department.

Autos & Auto Supplies

76 OLDS - 4 dr. sedan, low mi., good cond., \$1,500. Kevin, 563-1189.

82 CHEVY CITATION - hatchback, a/t, p/s, 51k, very good cond., \$4,300, 286-3211

79 CHEVY MALIBU - 4 dr., a/t, a/c, p/s, high mi., excel. cond., \$1,750 Ren, Ext. 3178.

63 CHEVY BELAIR - orig. mi., 3 spd., manual, 2 dr., good cond., needs work but it runs, \$400. John, Ext. 3292 or Mark 286-4150.

76 PINTO WAGON - 4 spd., new tires/shocks, \$900 Harry, Ext. 2175 or 669-8917.

70 CHEVY MALIBU - 8 cyl., p/s, p/b, orig. owner, new tires, good body, \$800 Larry, Ext. 4295.

81 AMC EAGLE - p/s, p/b, a/c, 6 cyl., stereo, new clutch, 4 wd. clean in and out, runs great, \$5,000 firm Rose, 744-5069.

72 PINTO WAGON - runs excel., some body rot, \$200, 475-3598.

71 VW BUG - still runs, \$200 firm. Ext. 3670 or 744-1760 eves.

82 CHRYSLER LEBARON - showroom cond., p/s, p/b, 50k mi., reliable, orig. owner, \$4,700. John R., Ext. 3397 or 732-2702.

78 HONDA MOTORCYCLE - 750K, garaged, fairing, radio, mint. cond., \$1,500 firm. 929-6798.

83 MUSTANG GT - 5 liter, 5 spd., 13k mi., alarms, Alpine stereo, sunroof, louvres, new cond., \$8,700. 326-2632.

70 NOVA - new suspension and exhaust syst., reliable eng. and trans., \$500. Walt, Ext. 2907 or 698-0576 after 6 p.m.

77 VW RABBIT - gas, am/fm, very good cond., new tires, must sell, \$1,000, Harvey, Ext. 3758 or 821-1726

REPAIR MANUAL - elec./mech., for Toyota Corolla, \$15; oil filters, \$1.50; '82 blue touch-up paint, \$1. Joe, Ext. 4259.

83 PONTIAC J2000 - interm. wagon, immaculate, low mi., 28 mpg, \$5,500. Ext. 4395 or 653-4195.

76 KAWASAKI 400 - \$650; '76 Kawasaki 100KD, 4225, \$800 takes both. 744-3284 eves.

83 HONDA CIVIC - 4 dr., grey, \$5,600 firm; '81 GS-1000 Suzuki, w/helmet & cover, 9,500 mi., \$1,350. Ext. 2231 or 589-8533.

RALLEY WHEELS - for Corvette, w/tires, missing 2 chrome rings, \$250. Bill S., Ext. 4434 or 399-6186.

TRAILER TIRE - Goodyear, w/rim, new, 20.5x8-10: (4) pump jacks w/roof brackets, used once, 4100 for all. Ext. 2705.

72 YAMAHA MOTORCYCLE - 250 cc, \$175. Roy, Ext. 4664 or (212) 691-4396.

73 VW SQUAREBACK - 107k mi., 31 mpg, many new parts, very reliable, good cond., Wolfgang, Ext. 5295 or 821-3519.

70 DODGE DART - slant 6, low mi., reliable transp. John, Ext. 3651 or 744-6287 eves.

81 YAMAHA SPECIAL II - 650 cc, 4k mi., sissy bar and helmet, \$900 firm. 878-1640.

76 NOVA - good transp., 6 cyl., good tires/brakes, 3 spd., \$1,000; '57 Harley Davidson Sportster, custom, 900 cc, good running cond., \$2,500. Vinnie, 732-6569 after 6 p.m.

77 VW RABBIT - very good cond., no rust, new tires/battery, \$1,200. Harvey, Ext. 3758 or 821-1726.

TIRES - (3) A-78-12" snows: (1) A-78-14" w/rim, good cond., make offer. Janet, Ext. 2345 or 929-8152.

70 DODGE VAN - 318 a/t \$600; Crager rims w/tires, \$50, tube grill \$10, chrome roof rack, \$15. Ray, Ext. 3536 or 289-7615.

83 FORD RANGER - w/cap, 4 spd., 4 cyl., step bumper excel. cond., \$4,000 325-0854

70 VOLVO - 164, not running, good for parts, am/fm, radials, \$100 or best offer, 654-8175.

75 CHRYSLER - station wagon, am/fm, a/c, p/s, a/t, runs well, must sell, \$600 Armin, Ext. 4570 or 3104

75 TOYOTA COROLLA - 1600, 4 spd., 2 dr., 51k, mech. good, \$850 neg. Ext. 5110 or 363-2641.

BATTERY - full size, 12 volt, top lugs, good cond., \$15. Tom, Ext. 4084 or 878-1060.

76 CHEVY - Malibu wagon, 8 seater, V8, p/s, p/b, new brakes, starter, excel. eng. dents, very reliable, \$700. Ext. 2830 or 543-0487.

69 GMC - carryall, 4x4, w/7-1/2' snow plow. Sal Ext. 7599 opr 281-2907 after 6 p.m.

75 FORD TORINO - new tires, rebuilt trans., good cond., \$900. Ext. 3908.

78 KZ400, very good cond., lo mi., dealer maint., asking \$750. 281-0360.

73 LINCOLN CONTINENTAL - 4 dr. air cond., leather seats, all Lincoln extras \$1,000. Ext. 2146.

82 RENAULT FUEGO - mint cond., extras, must sell. Patrick, Ext. 4509

77 CAMAROLT - 3 spd., p/s, spoiler, cassette, new tires, runs, looks good, best offer., Steve, Ext. 5163 or 475-6964.

83 CHEVY - G20 p/s, p/b, p/l, p/w, a/c, auto, TV, cruise cont., Cap Chrs, carpeted, am/fm, wood panel, blinds, cust., like new, must see, \$17,000. 585-2088.

73 PONTIAC CATALINA - 350, V8, 4 dr. sedan, p/s, p/b, a/t, 76k mi., \$700. Bill, Ext. 4774.

71 CHEVY IMPALA - V8, a/t, p/s, p/b, a/c, good cond., 82k mi., \$600. 744-8632 after 6 p.m. or 282-2673.

78 CHEVETTE - 2 dr., 4 spd., 30 mpg., excel. cond. Ext. 2610 or 929-3924.

80 RENAULT - Le Car, very good cond., 47k mi., \$1,600. Jerry, Ext. 5506 or 732-4701.

72 VOLVO WAGON - excel. running cond., am/fm tape, needs some body work. \$950 or best offer. Ken, Ext. 2008 or 928-5875 after 6 p.m.

76 CORVETTE - hi mi., exc. mech., needs pains. S.S. caliper, \$6,500 firm. Bill S., Ext. 4434 or 399-6168.

79 RENAGADE - CJ7 jeep, 304, auto, all options, excel. cond., \$5,500. Ext. 3082 or 286-3865.

72 CHEVY CHEVELL - Malibu. 281-7330.

77 HONDA - 38 mpg, 4 spd., Civic, 42k mi., rebuilt trans. engine, \$850; tires (4) radials 6.00-12 4 ply, \$60. Jack, Ext. 3164.

TIRES - 145 S-13(4) Bridgestone, \$25. Jag, 751-1884.

78 HONDA CIVIC - rebuilt motor, clean, stereo, \$1,300. Ralph, Ext. 3649.

81 PONTIACK - Bonaville, 4 dr., a/c, p/s, elec., wind wire wheels, \$1,400. 242-7873.

TIRES - (2) E78x14, almost new, \$35 for the pair; (1) E78x14 mounted on Dodge rim, good cond., \$12. Ext. 4153 or 732-5829.

76 CAMARO - V8/305, p/s, p/b, auto/trans, am/fm cassette stereo, spoiler, very good cond., runs excel., \$2,500. 736-7484.

71 FORD LTD - excel. running cond., p/s, p/b, am/fm radio, vinyl roof, \$650. Don, 281-7595.

81 CITATION - hatchback, 4 dr., p/s, p/b, a/t, 26k mi., excel., \$3,000. 475-1813 after 6 p.m.

71 MERCURY COMET - runs well, \$375. Harry, Ext. 2175 or 669-8917 after 5:30.

Boats & Marine Supplies

CARAVELLE 21' - '75 Cuddy 233 Mercruiser, full canvas, d/f, VHF, swim platform, rebuilt 1985, excel. cond., \$6,500. Ext. 3457 or 584-8409.

77 O'DAY - 27', atomic 4, 4 sails, vinotmeter, VHF fathometer, cradle Bob Drew, Ext. 3575 or 689-9089.

77 CRESTLINER - 21' mint, 305 I/O, cuddy cabin, white/saddle, VHF radio, sink, refrig., stereo, swim platform, 744-9802 after 6 p.m.

28' OWENS - new canvas & hard top, head, sink, stove, sleeps 4, very good cond., 327 Cl. Chevy eng., \$2,200. 281-0360.

78 BOWRIDER - 19' Renkin, 120 HP, Volvo I/O, lo hrs., new canvas, excel. cond., \$3,995. Ron Manning, Ext. 3887 or 286-0353.

23' CHYSLER CABIN - fiberglass, 68 twin Volvo engines, sleeps 2, extras, \$3,000. 399-3381.

Miscellaneous

EXERCISE GYM - universal type, Marcy Mach 1, excel. cond. \$1,500. John, Ext. 3292 or 475-4370.

PIANO - needs work, best offer. Ext. 3919 or 2385.

STEREO SYSTEM - Pioneer SX1500TD amp., Sony TC 650 tape deck, dual 1009 turntables, LWE-3 speakers, needs some work, all \$200. 472-1875 after 5:30 p.m.

STEREO SPEAKERS - (2) 20W, needs some work, good cond., 425 pr. 751-3551.

VIDEO/Hi-Fi STEREO RECORDER - brand new, w/remote control, JVC-HRD725U, new \$1,000, sell for \$750. Donna, 351-9792 after 6:30 p.m.

FISH TANKS - (3), 410; child's record player stereo w/2 speakers, \$5. 20" Columbia bike, \$20. Bauer ice skates, size 9-1/3, like new, \$8; am/fm radio cassette player, \$10. Larry, Ext. 4295.

PATIO TABLE - round, 42" diam, good cond., \$15; GE portable air cond., 5,950 BTU, excel. cond. Barbara, Ext. 3437 or 281-5721 after 6 p.m.

BICYCLE - boy's 3 spd., 20", rear hand brake, \$15. 924-8213

WALLACE FLATWARE - 1835 silverplate, 60 pieces, serv. for 12, Pacific cloth lined box, excel., \$140. Corliss, Ext. Ext. 2482 or 472-1585.

COLONIAL DINETTE - maple, (4) chairs, table w/leaf, \$35. Ext. 5110.

FISH TANK - 20 gallon, stand, pump, access, \$65. Ext. 2883.

UMBRELLA - 8-1/2' ft., 12 ribs, yellow, for round patio table, \$50; 21" lawnmower, self-propelled, 4 HP, mulcher, excel., \$150; 5 piece luggage set, (2) 26", (2) 24". (1) 18", excel., \$150. Ext. 3392 or 475-8330.

ADULT GAME - Charade, new, \$18.95, sell for \$12. 727-3608 after 5 p.m.

POWDERPUFF TRICYCLE - and 4 wheel cycle, very good cond., make offer. Wick, Ext. 4372 or 924-0582.

CABINET DOORS - fit Levitt houses, or for wood content, GE four burner range, \$30. Ext. 4192.

FURNITURE - china cabinet, \$25; door, \$10; sofa bed, \$25; redwood loveseat and chairs, \$15 set. Ext. 4773.

GIRL'S VELVET DRESS - size 3T; blue Easter coat, size 4T, both worn once, excel. cond., \$15 ea. 744-9677.

FURNITURE - beds, sleeper couch, single \$40; hi-riser, \$60; loveseat, sleeps (1), dk. green naugahyde, \$75. Ext. 7194 or 929-3683.

STEREO - am/fm radio; Colonial cabinet, \$45; swivel desk chair, \$40; Ottoman sleeper, \$120. Ext. 7686 or 878-0897.

WATER PUMP - piston type, Gould CID 35, new working cond., for shallow well, \$90. Ernie, Ext. 2957.

FREEZER - Sears, 15 cu. ft., upright, like new, 4100; kitchen set, table and chairs, good cond., \$50; living room couch, good cond., \$50. Ext. 4312.

FURNITURE - couch/hide-a-bed, gold woven fabric, very good cond., new foam cushions, \$100 firm. Witkover, Ext. 4607.

FURNITURE - oak table (4) chairs, \$30; director's wood chairs, \$8 ea.; brass mesh fireplace screen, \$6; playpen, \$8. 286-0259.

WOOD SHUTTERS - (2) 59"x15", 410; 24" window fan, \$10; girl's 20" bike, \$30. 281-7844.

AUTO TELECONVERTER - w/carrying case for standard type thread, new, \$8. Susan, Ext. 4267.

ROWER - DP300, home exerciser, converts to do curls and bench press, excel. cond., \$100. 654-1185 eves.

BEDROOM SET - Bassett, dk. pine, full/queen headboards, dresser, mirror w/shelves, chest on chest, (2) night tables, excel. cond., \$700 neg. Karen, Ext. 4262.

MOVING SALE - couch, TV, clothes, etc. Joann, 758-7435 after 1 p.m.

BIKES - 16" (1); 22 - 1; Tricycles (2); bike totcarriers. Ray, Ext. 4479.

TYPEWRITERS - portable, (1); Royal (1); Smith Corona w/carry case, good cond., \$35 ea. Ext. 2492.

ICE SKATES - \$8; roller skates \$10; all size 6-1/2; new crock pot, \$8. Watt, Ext. 7154.

BLOWER - for grooming animals, floor model, swivel wheels, \$100. Ext. 2314 or 567-5131.

TABLE TOP - 1/4" plate glass, 46" dia., no chips, no cracks, best offer. Rick, Ext. 3932.

LIVINGROOM TABLES - (3) Colonial style, solid maple, \$35 ea. June, Ext. 4692 or 878-2040 after 6 p.m.

LYMAN SIZER - lubricator moder, 450, \$450; Lyman scale, \$40.

COAL STOVE - Haas & Sohn, never used, still in crate. 878-8302 after 5 p.m.

SOFA - (4) cushion, good cond., Levine, 473-2754.

PIANO - baby grand, white, good cond., \$1,000, 281-0360 after 6 p.m.

IBM PC - 640k; color and mono display printer, extras, Scott, 472-9772 after 7 p.m.

WESTERN SADDLE - good cond., some decorative carving, \$75. Joe, Ext. 4660 or 821-2515.

SANYO STEREO \$100; Sanyo B&W TV, \$40; electric guitar & amplifier, \$100. Patrick, Ext. 4509.

SINGLE BED - Swedish style, \$20. Ext. 2971.

TOY - Big wheel \$15. Ext. 3369.

DOUBLE BED - mahogany, Beautyrest bedding; walnut Danish dining set, (5) chairs; credenzoe triple dresser, teak, moving, 654-1326.

BED LINENS - complete set of Fieldcrest, for 2 twin beds, no iron, percale, brand new, pastel yellow trim, \$30. Les, Ext. 2920.

MASTERS OF THE UNIVERSE - castle, vehicles, figures, cats, etc., very good cond., 475-4792 after 5 p.m.

FIREWOOD - approx., 3 cords, unsplit, sum seasoned, you pick up. 928-0397.

BABY CARRIAGE - Italian Peggy, used 8 months, \$90; infant seat, Century solid \$7, both excel. cond. 924-8722.

STEREO - Clarion, 8 track, 4 channel player, 4 speakers, and a Garrard turntable, good cond., make offer. Ext. 7112 or 472-1922.

QUEEN SIZE BED - mattress, box spring and metal frame, excel. cont., \$120; hair drier, salon style, \$20. Ext. 3370.

FARBERWARE - open hearth w/roastisserie, new sells for \$60, want \$40; GE portable dishwasher w/butcher block top, \$75. Rosemary, 589-2470.

FORMICA DINETTE SET - sturdy, \$30; high chair, \$7; bicycle 2 spd., \$18; old 5 cal crock, \$12. playpen, \$7. 878-6637.

TYPEWRITER - Royal, electronic brand, new model 2002, \$175. Penny, Ext. 4444 or 467-8297.

CRIB - white, handpainted design, good cond., \$40; sleeping bag, down filled, good to go, like new. 249-8223.

POLAROID COLOR CAMERA - model 250 w/portrait and close up extra lenses, flash, filters etc., asking \$100; sleeping bags, 50% polyfill, adult size, clean, excel. cond., two for \$15. 286-0237.

WASHER - gas dryer, whirlpool used only one year, half price, \$375. Ext. 2389 or 751-1224.

Free

KITTEN - male, about 6 wks old.; silver cat, young female, spayed, adopted one too many, need home for 1. Vicki, Ext. 5205 or 744-8765 after 6 p.m.

REFRIGERATOR - GE, 17 cu. ft., working cond., you pick up in Stony Brook. Ext. 2389 or 751-1224.

PARAKEET - w/cage, needs home. Ext. 2883.

Yard Sale

MASTIC - driveway sale. Sat. - Sun., Sept. 7-8, 10:00 a.m. to 4:00 p.m. rain or shine, 10 Milford Street. Barbra VanDerlaske, 399-4929.

CENTER MORICHES - corner of R.R. Ave. & Main St., hugh yard and bake sale, Sept. 14, 10 a.m.-4p.m., raindate, Sept. 21. 878-2239.

Car Pools

MATTITUCK - 3 drivers want a fourth. Ext. 3140.

COMMACK - 8:00 a.m.-4:30 p.m. Don, Ext. 2043.

Lost & Found

LOST - tricolor gold bracklet, at softball dinner at Rockhill Country Club on 8/30, sentimental value. Ed, Ext. 4688.

LOST - gold earring between cafeteria and Medical. Dottie, Ext. 3644.

LOST - brown framed prescription glasses, Aug. 22. Eric, Ext. 2847.

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

YAPHANK - condo., 1 bdr., bath, use of appliances, 2 miles from lab., tennis, pool, one person, non-smoker, no pets, \$300 plus elec. Ext. 2485 or 924-0123.

WADING RIVER - 3 rm., furn. apt., legal and airy, pvt. ent., walk to beach, \$450 incl. util. 929-8772.

MASTIC - 2 bdrm. house, nice area, 10 min. to BNL, avail. 9/30/85, \$425 a month plus util. Ext. 4922 or 281-8166.

FLORIDA - Spring Hill, 2 bdrm. house, avail. Sept.-Dec. 14, fully furnished, 5 mi. to Gulf, 90 miles to Disneyland. Ext. 4226 or 261-2719.

WADING RIVER - 2 story, 3 bdrm. house, water-view, fully furn., \$600 mo. plus util., lease Nov.-May, non-smokers only. Barclay, Ext. 4587 or 929-8443.

For Sale

RIDGE - Lake Panomoka, 3 bdrm. ranch on 1/4 acre, cathedral ceil. in l/r and d/r, 1 block to lake, extra insulation, and private ent., fenced yard, 7 yrs. old, mint, \$89,500. 929-8748.

SHOREHAM - 1 acre, 3 bdrm. ranch, l/r, d/r, eik, playroom, utility room, patio, heavily wooded cul de sac location, SWR school dist., taxes \$1,300. Ext. 7786 or 744-7796.