

## BNL Research: Basic Background to Further Discovery

Last week's announcement that researchers in New England had pinpointed a gene thought to be responsible for at least 10 percent of all colon cancers also points out the importance of basic research, in particular that performed by a BNL biologist and his team.

The discovery that certain cancers are linked to a breakdown in the ability of cells to repair flaws in DNA depended on basic work done by BNL Senior Geneticist Sanford Lacks. Lacks and his team first investigated the repair system in *S. pneumoniae* bacteria, paving the way for researchers at Boston's Dana Farber Cancer Research Center and the University of Vermont (UVM) to find its correspondent in human cells.

"I consider this a real plug for basic research. Bacterial work shows in a simpler system what genes do," said Lacks, whose team found and sequenced the bacterial mismatch-repair gene which, when mutated, fails to correct mismatched "rungs" of DNA and is thought to allow mistakes to collect and cause cancer.

Lacks's work on bacterial repair mechanisms began inadvertently in 1960, during his investigation of ability of bacteria to incorporate new DNA into their existing strands. Working with Biology Associate Bill Greenberg and postdoctoral colleagues T.S. Balganes and Scott Priebe, Lacks found that a particular mutation kept some bacteria from rejecting the foreign DNA as others did.

Tracking this further, the team identified the gene, dubbed hexA, in which the mutation occurred that allowed mistakes to slip by undetected.

**Sanford Lacks (right) and Bill Greenberg in the Biology Department lab where they performed basic research crucial to other researchers' recently announced discovery of a gene related to some colon cancers.**

Photos on this page by Roger Stoutenburgh



A later paper catalogued the exact mismatches and mistakes that evaded the notice of repair sentries.

In 1988, Lacks published the sequence of base pairs in the mismatch-repair gene, work from which the Dana

Farber researchers drew when they used copied segments of the bacterial gene and DNA from yeast cells to pinpoint the location of a similar repair gene in yeast before moving to human cells.

Lacks' substantial work with *S. pneumoniae* was cited in the yeast paper, along with results from a Massachusetts Institute of Technology team, which sequenced a similar gene in *S. Typhimurium* bacteria.

The mismatch-repair gene, whose location was announced last week, was found to be on chromosome 2, in the vicinity of a gene previously implicated in colon cancer. This means that human colon cells may rely on a repair mechanism for faulty or mutated DNA, which, when it fails, can allow cancer's spiraling growth to occur.

The recent announcement set off a flurry of speculation about possible clinical tests for the presence of the mutated repair system, and about potential gene therapy to correct the gene in affected individuals. The findings are expected to be confirmed by another paper, to be published later this month.

But, none of the findings would have come at this time without the basic background research performed at BNL and other institutions.

— Kara Villamil

## BNL Lecture: Watching Layers Grow & Melt

When you bundle up for the winter's chill, you dress yourself in layers, adding one on top of another.

But, when atoms and molecules form layers of film on surfaces by a process called adsorption, things get a little more complicated. Questions arise, such as: How, precisely, do layers form? What effect does a change in temperature have on layer formation and, subsequently, melting? And what

practical applications, if any, can be gleaned from learning all this?

Some surface scientists, including a team in BNL's Chemistry Department, are trying to answer those questions at the High Flux Beam Reactor using a technique called powder neutron diffraction. The approach takes advantage of neutrons' ability to give clues to atomic level dynamics.

John Larese, Chemistry Department, will give more details about findings in this field when he delivers the 292nd Brookhaven Lecture.

Entitled "Neutron Studies of Layering and Melting," the talk will take place at 4 p.m., on Wednesday, December 15, in Berkner Hall. BNL Senior Physicist Laurence Passell, a pioneer in using neutrons to examine adsorbed films, will introduce Larese.

Larese will describe how high-surface-area materials, such as graphite, can be used as substrates for powder neutron diffraction, using ordinary objects to illustrate the concepts more clearly.

Through their powder neutron diffraction studies, scientists have found that gas atoms build layers on a graphite surface in a somewhat orderly fashion, with the entire first layer forming before the second begins, and on and on. Imagine spilling many ball bearings onto a plate: The plate first becomes covered with a single layer, then more layers stack on top.

But atoms have a "choice" when they begin a new layer: They can fill divots between spherical atoms of the layer below in either one of two ways, and the option they follow determines the structure of all atomic layers that form on top of them.

Early neutron diffraction work at BNL centered on one-layer structures, but, Larese explained, the research later began focusing on three-dimensional structures, those with more than one layer.

Larese will explain how diffraction profiles for films are used to determine the number of layers present, how they are stacked, and how they melt and re-form as temperature changes. He will also describe the va-



John Larese

riety of phase transitions found in growing and melting layered structures.

Since adsorption isn't just limited to gas atoms on graphite, this basic research has application for such wetting phenomena as the spreading of ink on paper and the tendency of fine wine to coat the inside of a glass when swirled.

Examining surfaces at atomic levels is nothing new to Larese, who earned his Ph.D. in physics from Wesleyan University in 1982. After a postdoctoral position at Pennsylvania State University, he began his BNL career as an assistant physicist in the Physics Department in 1985, moving to the Chemistry Department as an associate physicist, and later a chemist, in 1987. He received tenure in April 1992.

Larese was also a member of one of two BNL teams among the winners of the U.S. Department of Energy's (DOE) 1988 Materials Sciences Research Competition. The winning research used neutron scattering to find out more about the phase-transition structures of a nickel-aluminum alloy.

After the lecture, all are invited to join Larese for discussion and refreshments. To accompany him to a dinner at an off-site restaurant, call Jean Petterson, Ext. 4302.

## Orbit Correction and Analysis Discussed at Workshop



The path followed by particles within accelerators and storage rings is called an orbit, and, in recent years, the tolerance for deviation from a prescribed orbit in those machines has decreased from over 200 micrometers (mm) to under 5mm.

As a forum on the new methods for correcting particle-beam orbits and for analyzing beam behavior, an Orbit Correction and Analysis Workshop was held at BNL, December 1-3. The workshop drew about 60 participants from the U.S. and Europe, who were either accelerator physicists experienced with hadron accelerators or electron synchrotrons, or students new to the field.

Among the topics discussed were: the use of a digital feedback system for orbit stabilization, like that being designed for the National Synchrotron Light Source (NSLS); the use of new algorithms and neural networks to control machine orbits; and the improvement of algorithms for analyzing beam orbits and the use of this information in computer models of the machine.

The local organizing committee included: (from left) James Niederer, Alternating Gradient Synchrotron (AGS); Aharon Friedman, NSLS; Eva Bozoki, NSLS; and (second from right) Alfredo Luccio, AGS; with help from conference secretary Marion Heimerle (third from right), AGS; Kathleen Loverro, NSLS; and (missing) Toni Hoffmann, NSLS.

## Don't Forget . . .

Today is the last day for the **BNL Blood Drive** — and walk-ins are welcome. Just go to the Brookhaven Center any time between 10 a.m. and 3 p.m., and give someone a gift they'll cherish for life.

The **Science Store** at the BNL Science Museum is open today and next Friday, December 10 and 17, from 10 a.m. to 3 p.m. The store is in the west side of Bldg. 701; park in the north parking lot.

The **National Weather Service Forecast Office**, which opened on site in October, invites BNLers to visit the new office and see a demonstration of weather forecasting with the Doppler radar unit, on Monday, December 13, from noon to 2 p.m. The office is located on Brookhaven Avenue, just east of the ball fields.

## In Memoriam

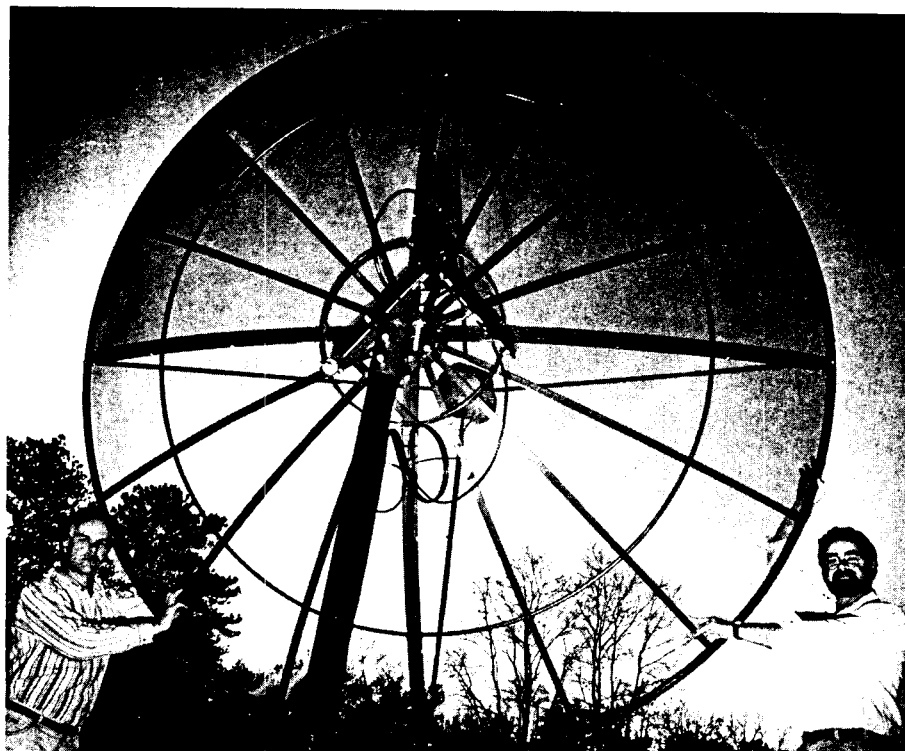
The following retirees passed away recently:

**Rino Tulipano**, who retired as a principal technician in the Alternating Gradient Synchrotron Department in May 1982, died on October 25, at the age of 77. He started at the AGS as a technician B, on July 21, 1958. He is survived by his wife Felicia; son Richard, who works in the Reactor Division; and three daughters: Mary Bennardo, Flora Bachmann and Renee Tiernan.

**Wesley Ripperger** died on November 18 at the age of 67. He had joined BNL on August 21, 1957, as a senior designer with the Alternating Gradient Synchrotron. When he left in May 1985, he was a senior design engineer in the Department of Applied Science.

**Richard L. Vogt**, who retired as a senior personnel representative in the Personnel Division in June 1971, died on November 23. He was 87 years old. He had started in Personnel on June 9, 1947, as supervisor of employees' welfare.

## Satellites at Your Service



Roger Stoutenburgh

This new satellite dish stands just outside Bldg. 493, headquarters for BNL Video. The new dish means that through the Video Group, which is part of the Photography and Graphic Arts Division, BNL now has access to the thousands of hours of programming beamed to satellite dishes throughout the U.S. A tremendous variety of programs is available, including C-Span and NASA, as well as a number of professional and scientific seminar channels, and additional channels may be added on request. The Video Group can record programs around the clock, as well provide facilities for comfortable viewing of live programming. Contact Doug Humphrey or the video staff at Ext. 3680, for service and cost information.

## AP Code Seminar

Please note changes to the registration information for the one-week seminar that the Center for Accelerator Physics and the Computing & Communications Division are cosponsoring on the use and applications of the three-dimensional electromagnetic code called MAFIA (MAxwell's equation using the Finite Integration Algorithm).

The seminar will be held February 7-11 and is limited to 20 participants. A registration fee of \$350 per participant will be charged. Call Kathleen Tuohy, Ext. 3845, for information.

## Voice Mail Manuals

Additional manuals for the new Octel voice mail system can be obtained from the Computing & Communications Division's Documentation Store, Bldg. 515, Ext. 4144.

## Arrivals & Departures

### Arrivals

**John T. Boger** ..... Chemistry  
**Jianming Li** ..... App. Science  
**Patrick J. Perl** ..... App. Science  
**David A. Whitehouse** ..... Physics

### Departures

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

**Jennifer A. Colledge** ..... SEP  
**Karl C. Garrison** ..... Physics  
**John J. Grogan** ..... Cent. Shops  
**John F. Sganga** ..... Sfgrds. & Sec.

## Inside Info

Physicist **James Davenport** was named Associate Chairman to oversee the Physics Department's solid-state physics program, effective October 1. He filled the vacancy left by Senior Physicist **Myron Strongin**, who, after serving seven years as Associate Chairman, requested to return full time to research.

As he has been since 1986, Davenport continues as Leader of the Solid State Theory Group, in which his work has focused on first-principles calculations of the properties of various materials. In addition, he has been working at the forefront of advanced computing initiatives and, for many years, has been a member of various scientific computing committees, both at the Lab and nationwide.

"I am happy that such a capable person as Jim has agreed to help steer the Department's solid-state program through the current changing times and plan for its future," stated Peter Bond, Physics Department Chairman.

Strongin continues as Leader of the Surface Physics Group, a position he



**James Davenport**

has held since 1985, including while serving as Associate Chairman. His research interests include transport and surface properties of superconductors, amorphous materials, the action of hydrogen on metals, photoemission spectroscopy, and properties of metal bilayers.

"Throughout his term as Associate Chairman, Myron has been a force in trying to keep science in the forefront and administration in its rightful place, and I look forward to continuing to receive his sound advice in the future," concluded Bond.

Two journal articles coauthored by BNL researchers are burning up the chart of papers most cited by physicists.

Coauthored by a team of University of Pennsylvania scientists and BNL Senior Physicist **David Cox**, "Orientational ordering transition in solid C<sub>60</sub>" is listed by the most recent issue of the Institute for Scientific Information's *ScienceWatch* newsletter as the third most cited paper for the second consecutive two-month period. The article was cited 20 times in May and June 1993.



**Myron Strongin**

The team, working at beamline X7A at BNL's National Synchrotron Light Source, published its results in *Physical Review Letters* in June 1991 after finding that C<sub>60</sub>, the form of carbon called buckminsterfullerenes or, more commonly, "buckyballs" undergoes a phase transition at slightly below room temperature, around 249 kelvins, or -24 degrees Celsius. Synchrotron x-ray powder diffraction revealed that the compound's structure changed from a disordered to an ordered state as the temperature changed.

A second article, "Solar neutrinos observed by GALLEX at Gran Sasso," zoomed to number five in its first time in the Top Ten. The Europe-based GALLEX collaboration, of which BNL is the only American member, published the results of its first set of experimental runs in *Physics Letters B*'s July 1992 issue. BNL researchers on the GALLEX team are: Chemists **Richard Hahn**, **Francis Hartmann**, **Keith Rowley** and **Raymond Stoenner**, and Physicist **Joseph Weneser**.

GALLEX stands for GALLium EXperiment; the experiment uses 30 tons of gallium at Italy's underground Gran Sasso Laboratory as a catcher's mitt for solar neutrinos. In its first series of experimental runs, GALLEX detected for the first time low-energy neutrinos from the nuclear reaction that is the major source of the sun's energy.

The paper was also cited 20 times in

## User Group Meetings

### WordPerfect 5.1

The WordPerfect 5.1 Users' Group will next meet on Tuesday, December 14, from 10 to 11 a.m., in the Computing & Communications Division (CCD) seminar room, Bldg. 515. The topics to be discussed are: using mail merge, and, if time permits, creating tables of contents.

Seating is limited; call group moderator Pat O'Connor, Ext. 7341, to confirm attendance by December 13.

### Sybase

At the next meeting of the Sybase Local User Group (SYLUG) on Wednesday, December 15, at 9 a.m. in the CCD seminar room, Bldg. 515, Marty Fredrickson of Sybase will present a one-hour overview of the seven products that make up the foundation of System 10, to be followed by a more technical Q&A session for proficient Sybase users and by demonstrations.

For more information, contact Susan Eng, E-mail to sge@bnl.gov or Ext. 7988, or subscribe to the SYLUG-L listserv, the electronic system for disseminating Sybase news.

### Local Users

The next meeting of the Upton Local Users Group (LUG) will be held on Wednesday, December 15, at 11 a.m. in Room B, Berkner Hall.

Mark Wiesenberg, Head of CCD, will update users on his division's activities. This will be followed by a question-and-answer session with Physics Department Chairman Peter Bond and members of the CCD Steering Committee, which Bond heads.

All computer users are encouraged to attend. For more information, send E-mail to LUG@BNL or to LUG chairperson Zohreh Parsa, PARS@bnl.

## Our Fair BERA Is Broadway Bound

If you want to give the perfect holiday gift, but can't get tickets to *My Fair Lady* which has just returned to Broadway starring Richard Chamberlain, then has BERA got a deal for you!

On Saturday, March 26, BERA will sponsor a full-day trip to New York City for BNL employees and their family members and friends. The cost of \$113 per person includes:

- round-trip bus transportation
- front mezzanine seat to matinee performance of the sellout Broadway show, *My Fair Lady*
- full-course dinner at the famous S.P.Q.R., an elegant restaurant in Little Italy, with a varied menu and all taxes and tips prepaid.

Reservations are being taken at the BERA Sales Office in Berkner Hall, weekdays, 9 a.m. to 1:30 p.m. A \$50 deposit to reserve theater tickets is due immediately, with the balance due by March 1. For more information, contact M. Kay Dellimore, Ext. 2873, or Andrea Dehler, Ext. 3347.

## AA Meetings

The on-site Alcoholics Anonymous meetings for December 13 and 20 have been canceled. The group will meet for the last time this year on Monday, December 27.

All employees, retirees and others working on site who hold current BNL identification cards and their dependents are invited to attend.

For meeting locations and times, call the Employee Assistance Program (EAP), Ext. 4567. Callers will not be asked to leave their names, and all calls are confidential. Meeting information may also be obtained by writing to P.O. Box 641, Upton, NY 11973.

### Note to Employees:

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

## Bowling

### Red/Green League

11/23: R. Mulderig bowled a 248/209/624 scratch series, A. Sauerwald 232/208/614 scratch, K. Asselta 231/604, R. Larsen 226, H. Arnesen 225/221/211/657 scratch, M. Guacci 224/200/620 scratch, M. Palumbo 221, A. Warkentien 214/209/204/627 scratch, K. Riker 211, J. Goode 205, E. Larsen 202, E. Sperry IV 201, R. Wiseman 200.

11/30: R. Larsen bowled a 246, R. Mulderig 245/233/650 scratch, H. Arnesen 245/619, E. Meier 234/600 scratch, A. Warkentien 233/201/602 scratch, J. Goode 227, K. Asselta 214/213/619 scratch, E. Beadle 212/208, R. Mackinnon 212/201, K. Riker 212/202/602 scratch, E. Sperry IV 210/201/600 scratch, R. Raynis 207, M. Guacci 204/204, R. Wiseman 204/200.

### Purple League

George Munoz bowled 214/203, Debbie Keating 180, Kay Conkling 179, Maria Yanez 176, Judy Coleman 174, Fran Brown 174.

### White League

Bob Geib bowled 223/212, Jim Petro 204, Caryl McDougall 176/171, Pat Manzella 173, Sue Cataldo 172, Mickey Haller 172, Lorraine Roecklein 172, Gerry Riker 171.

# BROOKHAVEN BULLETIN

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## Update on Women's Programs: Outreach Program and E-Mail

As Women's Program Coordinator, Vicki McLane regularly addresses the employment concerns of women at Brookhaven. She also looks ahead, recognizing that tomorrow's BNL women will come from the students of today.

With that in mind, the Women's Program Office is planning a program aimed at encouraging promising high school girls to continue their studies in science and mathematics. For this program, 20 outstanding female science and mathematics students — one junior and one senior from each of ten local schools — will be invited to spend the day of March 11 at the Laboratory. Each student will be accompanied by a science or math teacher of her choice.

One Brookhaven woman scientist will be paired with each student for the day. Events will also include a seminar and a tour of the BNL Science Museum, where other Brookhaven scientists will be on hand to discuss their work and answer questions. McLane needs volunteers to participate in this program and to help with planning. Anyone interested should contact her at Ext. 5099, or E-mail MCLANE1.

Speaking of E-mail, McLane also plans to set up an electronic mailing list for all Lab employees, featuring periodic bulletins about programs or issues of special interest to women. To be placed on the distribution, send E-mail to MCLANE1, with your name and department or division.

## BERA Toy Drive

For the tenth year, BERA is participating in the annual toy drive organized by Brookhaven Town to provide happy holidays for needy young people in our local communities. The 1993 Toy Drive has begun and will run through Wednesday, December 22.

New toys are needed for children of all ages — infants through teens, and donations may be brought to the BERA Sales Office from 9 a.m. to 1:30 p.m. weekdays.

For more information about the toy drive, call Andrea Dehler, Ext. 3347, or M. Kay Dellimore, Ext. 2873.

## Microcomputer Club

The annual holiday party of the Microcomputer Club will be held at the next meeting on Thursday, December 16, at noon in Room A202, Bldg. 911. All members and friends are invited.

At the meeting, many soft-sectored disks will be distributed. To receive a set, send \$1 to club president Irving Montanez, Bldg. 911A, by Tuesday, December 14.

The purchase of a CD-ROM reader for use by club members will also be discussed and nominations for club officers will be taken.

## Classified Advertisements

### Placement Notices

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

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

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

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees.

DD 0168. ELECTRICIAN A - Under minimum supervision lays out, constructs, installs, maintains, repairs and operates electrical systems, equipment, controls and related devices. Plant Engineering Division.

DD 2840. SECRETARIAL POSITION - Requires an AAS in secretarial science or equivalent, excellent communication and organizational skills, as well as a knowledge of Laboratory policies and procedures. Will perform varied secretarial functions for the Thermal Hydraulics Analysis Group, such as preparing technical reports and correspondence, arranging for foreign and domestic travel, and maintaining office files. IBM PC experience is essential, especially WordPerfect 5.1 and/or WordPerfect for Windows. Department of Advanced Technology.

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

LS 0421. VETERINARY SERVICES POSITION - Requires general knowledge of veterinary services in order to observe and report the condition of laboratory animals to appropriate personnel, including clinical observations, body weights and monitoring of animal environmental conditions. Under general supervision, will be responsible for the handling, general care and breeding of laboratory animals. Will assist scientists in all procedures involved in handling animals. Medical Department.

### Motor Vehicles & Supplies

92 NISSAN 240SX - 5-spd., 9k mi., burgundy, ac, am/fm cass., extras, one owner, excel. cond., \$15,900. Sue, Ext. 4931 or 447-5557 after 7 p.m.

91 S-10 BLAZER 4x4 - 2-dr., white, 32k mi., serviced every 2,500 mi., new brakes, ac, am/fm cass., p/l, p/w, \$13,800 neg. 654-0812.

90 GEO STORM GSI - a/t, ac, am/fm cass., new exhaust system, \$5,500. Andrea, Ext. 5943 or 286-9456.

89 VW CABRIOLET - convertible, ac, a/t, Blaupunkt, 58k hwy. mi., excel. cond., \$11,500. 821-0686.

88 FORD ESCORT EXP - 71k mi., ac, p/b, p/s, c/c, 5-spd., 2-seater, good cond. Daniel, 360-3803.

88 YUGO - white, removable stereo, new battery & tires, runs well, good cond. \$500. Bart, 924-6761.

87 PLYMOUTH VOYAGER - bed, cruise, new tires & timing belt, excel. int/ext., 117k mi., \$4,700. Bob, Ext. 4637 or 692-8659.

86 BUICK CENTURY - a/t, ac, 6-cyl., 110k mi., moving, must sell, \$1,500 or best offer. Ext. 5534 or 345-2686 after 6 p.m.

86 SUBARU GL WAGON - needs clutch, exhaust, rack & pinion, etc. \$125. Carol, 331-8785.

82 FORD ESCORT - \$200, selling for parts, tires, gauges, seats, body panels, etc. Fred, Ext. 5319.

81 CADILLAC SEDAN DE VILLE - many new parts, runs well, good cond., \$1,250 neg. 475-8242.

79 CHEVROLET MONTE CARLO - white, a/t, 90k mi., good cond., \$650. Jean, Ext. 4938.

78 CORVETTE - Silver Anniversary Ed., T-top, 4-spd., 350 motor, loaded, Bob, Ext. 2309 or 473-9180 eves.

78 TOYOTA CELICA - 5-spd., ac, am/fm cass., brakes, clutch, new parts, good tires, insp., runs well, rusty, \$400 neg. Julia, Ext. 1051.

65 MUSTANG FASTBACK - 289-4bbl, classic, red, black int., \$6,500. John, Ext. 4090.

BIKE CARRIER - fits most cars & all min. vans, new, never used, \$35. Bart, 924-6761.

PARTS - for '80-'83 Honda Civic, engine, electrical parts, glass, doors, etc., cheap. Ext. 3751 or 589-5490 after 6 p.m.

HONDA SCOOTER - 1.8k mi., like new, \$1,200. Ext. 4090.

### Boats & Marine Supplies

18' HOBIE CAT - sailboat with trailer, \$800. Peter, Ext. 7579.

SAIL - 1992, Rushwind convertible 5.7m<sup>2</sup>, excel., used one season, \$250. Joe, Ext. 7762 or 878-0093.

### Furnishings & Appliances

BASSINET - excel. cond., \$20. John, Ext. 3422 or 429-4101.

BED - single, perfect cond., adjustable, w/mattress, \$65. Howard, 878-8294.

BED - full-size, box spring, mattress, orig. \$195, sell for \$135. 473-3852 after noon.

BED - twin, mint cond., \$100. Ext. 5534 or 345-2686 after 6 p.m.

BEDROOM SET - French provincial, triple dresser, chest of drawers, headboard, 2 nightstands, \$500. 654-5469.

BUREAU - light chestnut, 5-drawer, ask. \$25. 474-3799 after noon.

## Walking Club

The Walking Club will get together on Thursday, December 16, from noon to 1 p.m. in Room B, Berkner Hall. At that time, registered dietitian Dorothy Garone-Finkelstein will give a brief presentation on "Misconceptions of Sports Nutrition," focusing on fluid intake. After her talk, she will take questions from the audience.

Bring your lunch; beverages and desserts will be served. For more information, call Mary Wood, Ext. 5923.

## Cafeteria Menu

### Monday, December 13

Soup: Chicken noodle	.80/1.10
A la Carte: Mexican pizza	
Fitness: Pasta w/marinara sauce	3.20
Deli: Pastrami sandwich	2.95
Grill: Reuben platter	2.95
Salad: Chicken & cantaloupe	

### Tuesday, December 14

Soup: Cream of mushroom	.80/1.10
A la Carte: Display cooking of Oriental entree	
Fitness: Fish w/lemon & tomato	3.55
Deli: Roast beef sandwich au jus	2.95
Grill: Western omelet w/French fries	2.35
Salad: Seafood chef's	

### Wednesday, December 15

Soup: Bavarian lentil	.80/1.10
A la Carte: Herbed loin of pork	
Fitness: Tomato & broccoli casserole	3.25
Deli: Virginia ham sandwich	2.95
Grill: Italian cheesesteak	2.95
Salad: Mixed fruit	

### Thursday, December 16

Soup: Cream of spinach	.80/1.10
A la Carte: Italian steak pizzola	3.75
Fitness: Tarragon-lime chicken	3.50
Deli: Corned beef sandwich	2.95
Grill: Ham & broccoli	2.75
Salad: Marinated green beans	

### Friday, December 17

Soup: Boston seafood chowder	.80/1.10
A la Carte: Chicken Dijon w/mushroom	3.65
Fitness: Flounder & mussels saffron	
Deli: Roast turkey sandwich	2.95
Grill: Fried shrimp boat	3.25
Salad: Chilled turkey	

BEDROOM SET - twin bed, complete w/mattress, box spring, excel. cond., cherry wood, antique dresser & vanity. Marlene, 744-5801.

CABINET - \$15; carpet, 6'x9', \$25; fan, new, \$24. Ext. 5534 or 345-2686 after 6 p.m.

DINING ROOM SET - almost new, 8 upholstered chairs, orig. \$2,000, sell for \$700. Howard, 878-8294.

FREEZER - 15 cu. ft., GE, white, upright, good cond., \$75. John, Ext. 3422 or 929-4101.

GAS RANGE - bottled gas, 30", works well, avocado, \$50. 924-6751.

OUTDOOR REDWOOD SET - wicker porch set, freezer, rocking chair, oak hutch, more. Mary, 395-3177 after 5:30 p.m.

PORT-A-CRIB - solid wood, mint cond.; changing table w/pad; swing; walker; umbrella stroller, new, make offers. Bob, Ext. 3509 or 289-9533.

ROCKER - Newport 35, John Stuart King walnut; iron white-gold twin headboards; Brother elec. typewriter; Ping-Pong table; all excel. Ext. 7427.

ROOM DIVIDER - 6', 4-panel, handcrafted wood screen, \$300. 751-4539.

SOFA BED - couch, recliner, beige, good cond., asking \$125/all. Tom, Ext. 2823.

TABLE - dining room, dark pine, 62"x40", 2 leaves, extends to 86", 4 chairs, excel. cond., \$395. Cathy, Ext. 2541.

TABLE - dining room, 42" round, 2 leaves, 4 chairs, corner hutch, dark pine Col., \$400. Rich, 929-6197.

WASHER & DRYER - Sears, apt.-sized, 2 yrs. old, \$400. Mauro, 265-6542.

WASHING MACHINE - new, portable. Sheryl, Ext. 7716 or 928-8741.

WASHING MACHINE - antique, 1920, vintage ringer type, \$60. Roger, Ext. 7518 or 878-8847.

BEDS & MATTRESSES - captain's, 2, twin-size, 3 drawers in each base, excel. cond., \$175/ea. Mort, 286-8448.

BED - new, queen-size; dryer, \$50; coffee table, \$50; recliner, \$150. Chu, Ext. 3809.

BED - single, foam mattress, 4 1/2" thick, 38"x74", metal frame, casters, new cond., \$50. Rau, Ext. 3864 or 286-4774.

BED - toddler, Cosco, white, w/rail, like new, \$25; crib mattress, 600 coil, excel. \$20; \$40/both. Ext. 7707.

BED - twin, child/youth, solid oak, w/headboard, 2 drawers, hardly used, like new, \$200. 821-6856.

CABINET - dark oak, 30"Hx30"Lx16"D, w/double door, front shelf, inside shelf, \$35. Charlie, Ext. 2550.

CHAIR & LOVE SEAT - rust velvet, rattan sides, antiqued finish, \$100/both. Ext. 4341 or 475-4005.

CURTAIN RODS - Kirsch, antique brass, adjustable, five 36"x48", \$25/ea.; one 96"x120", \$50; one pewter, 96"x120", \$50. Carol, 331-8785.

DINING ROOM - table w/4 chairs, rocking armchair, wall clock, mirror, 3-piece wall unit; Sega, Atari cartridges. 423-9750.

HEADBOARD - cherry, king-size, spindle back, Pennsylvania House, \$75. Carol, 331-8785.

(continued on page 4)

# Classified Ads

(cont'd)

MICROWAVE - GE, dual wave, fully digital, 1 1/4 cu. ft. Bob, Ext. 2144.

MINI BLIND - 108"Wx50"H, off white, \$10. Marsha, Ext. 5053.

MINI BLINDS - Ikea, aluminum, dark green, brand-new, 55"x68 3/4", \$7.50/ea. Sue, Ext. 7235 or 395-3529 eves.

RANGE - elec., Americana, hi-low double oven, harvest gold, excel. cond., \$250. Bob, Ext. 2144.

REFRIGERATOR - 20 cu. ft., side-by-side, excel. cond., clean, \$200. Mark, 286-1832.

REFRIGERATOR - GE, side-by-side, 21.9 cu. ft., no frost, working cond., \$155. 874-4845 after 6 p.m.

ROCKING CHAIR - solid wood, excel., \$20. Ext. 2679 or 472-6922.

SLEEPER SOFA & LOVE SEAT - charcoal gray, great cond., \$350/both. 874-4784.

STOVE - elec., GE, v.g. cond., harvest gold, \$150. Karen, Ext. 4262.

WALL UNIT - for TV, stereo, books, etc., \$300. Chu, Ext. 3809.

## Tools, House & Garden

STOVE - coal, Surdiac, good cond., asking \$150. Bill, 298-5117.

STOVE - coal, Surdiac, good cond., \$200. Ext. 3334 or 744-2404.

STOVE - coal, Surdiac, excel. cond., \$300. Rich, 744-4816.

DOORS - Andersen Perma Shield frenchwood, gliding patio door, panels, screens & brass hardware, FWG 6068R, new. Gerry, 447-6528.

FIREWOOD - seasoned hardwood, split, delivered, \$115/cord, \$60/half cord. Glenn, 924-2035.

INVISIBLE FENCE - dog control, brand-new, still in box, \$150. Bart, 924-6761.

LAWN MOWER - 22", Murray, used 1 season, \$75; garden cart, \$10; moving, must sell. 473-5376.

POINSETTIA - florist quality, various sizes, low prices. 727-6818 after 4 p.m.

PRAYER - Hudson, gas-powered, good cond.; vacuum for lawns, Giant vac, gas-powered, good cond. 325-0447.

STOVE - Surdiac, 29"x12"x28"H, \$200. Carol, 331-8785.

STOVE - coal or wood, w/pipes, best offer. Jim C., Ext. 4150.

TABLE SAW - Alltrade, 10", 1 3/4 h.p., 10A, \$75; Ingersoll-Rand air compressor, 1 1/2 h.p., asking \$800. Rob, 727-7404 after 5 p.m.

WINDOWS - alum., storm & screen combos, 6 windows, various sizes, orig. \$45/ea., sell for \$20/ea. Dan, 698-7322.

## Sports, Hobbies & Pets

BIKE - child's, 20", w/training wheels, \$10. Yoshi, Ext. 3202 or 1030.

BIKE - 18-spd., gray, 27", Fuji, touring series, rack, alloy wheels, asking \$125. 474-3799 after noon.

BIKES - Raleigh, 5-spd., \$75; Motobecane, 10-spd., \$100, both excel., neg. Ext. 7427.

BICYCLE - women's, 10-spd., pink, \$45. Ute, Ext. 3890 or 341-1072.

CAMERA - Minolta Maxxum 7000, 2 lenses, flash, carry case, owner's manual, asking \$400. Chris, Ext. 2022 or 395-6112.

COMICS - 80+, including Shadow Hawk #1, XO Man, O War #0, many others, \$250. Gary, Ext. 5903.

GUINEA FOWL - noted tick eradicators. John, Ext. 3675 or 924-3528.

GUITAR - elect., Memphis ST2R, red, 4 pickup, rose type tuner/locks, w/case, good cond., \$100. Fred Kuehl, Ext. 7947 or 588-2268.

PIANO - 5', Kohler-Campbell Grand, c. 1920, \$1,500. Leslie, 286-7127.

PUPPIES - Labrador, AKC, OFA, vaccinated, dewormed, dew claws removed, National Field Champion bloodline, rare dual champion line. 878-2577.

RC CARS - street car, w/radio, \$125; Fox and Falcon, \$75/ea. Gary, Ext. 5903.

SKATES - men's figure, \$10; men's roller, \$10; both size 8. I. Meyer, 929-4326.

TRAINS - HO scale, engines, cars, tracks, accessories. Peder, Ext. 4591.

VIOLIN - Wenzel Fuchs, honey color, rosewood tailpiece, chin rest & pegs, black case, new strings, more, \$1,500. Marie, 369-9413 between 7-9 p.m.

WEIGHTS & BENCH - 300+ lbs. of weights, bench, w/leg attach., adjustable back, good for beginner, asking \$50. Chris, Ext. 2022 or 395-6112.

BIKE - boy's, 20", Haro, 1 yr. old, excel. cond., \$80. Ext. 3705 or 689-1877.

BIKES - 2, girls', 20", \$10 & \$20. Bart, 924-6761.

CAMERA - Nikon F SLR, 43-86 telephoto lens, \$195. 874-4845 after 6 p.m.

COMICS COLLECTION - large variety. 737-8281.

ELECTRONIC KEYBOARD - Casio CT-607, complete w/foot pedal, almost new, \$115. Carol, 331-8785.

ICE HOCKEY EQUIPMENT - helmets, skates, C.C.M. jerseys, tacks, equip. bags, leather pro gloves, etc. John, Ext. 4414 or 929-5476.

PUPPIES - 2, dachshunds, males, 1 black/tan, 1 brown, ready for Christmas. Fred or Deb, 399-6122.

PUTTER - Ping Anser, like new, used 6 times, \$35/firm. Nick, Ext. 7307.

RC TRUCK - Blackfoot, remote control, 3 batteries, charger, extra parts, Daniel, 360-3803.

WOODEN CRATES - 0-027 gauge for model trains, \$5.95/3 crates. Richard, Ext. 3804.

## Audio, Video & Computer

CAMCORDER - Chinon, 8mm, 6-to-1 zoom, low light, 2 new batteries, hard case, recharger, ac adapter, make offer. Bob, Ext. 3509 or 289-9533.

COMPUTER - 486 DX33, new, in box, 245 MB, 4 meg. RAM, 3 1/2 & 5 1/4 floppies, SVGA .28 mon., 1 yr. warr., \$1,350. Vinny, 582-6241.

COMPUTER - 286, 14" monochrome monitor, Panasonic printer, computer desk w/swivel chair, some software. \$400. John, 472-6528.

COMPUTER - Commodore 64, 1541 drive, joysticks, some games, \$125. Rich, 929-6197.

COMPUTER - Commodore 64, DD, software, games, manuals, \$125; Goldstar VCR w/remote, works, but needs repairs, asking \$50. Charlie, Ext. 7264.

COMPUTER - notebook, Texas Instruments, 3 1/2, 1 MB ram, 40 meg hard drive, MS mouse, case, Windows, ac & battery, \$700. neg. Gary, Ext. 5903.

COMPUTER - Tandy, 128k, extended basic keyboard, disk drive, joysticks, printer, software, games, \$300 neg. Ext. 7427.

COMPUTER - Tandy, TL/2-286, 40 meg, 3 1/2 & 5 1/4 drives, graphics, 16 color mon., printer, mouse, lots of software. Bob T., Ext. 2314.

KEYBOARD - Yamaha PSR 27, excel. cond., 100 voices, 49 full-size keys, 16 rhythms, power supply, \$100. Steven, Ext. 5694.

NINTENDO SET - w/control deck, gun, two controllers, 8 tapes, 19" color TV, ask. \$125. Tirre, Ext. 3288.

PRINTER - dot-matrix, \$60. 751-4539.

PRINTER - HP Deskjet 500, 256K cartridge, 3 soft fonts, LG cartridge, 5 hi-capacity ink cartridges, manuals, \$300 or best offer. Leland, Ext. 3328 or 744-3422.

SPEAKERS - Sansui, 120 W, 13" W x 25" H x 11 3/4" D, v.g. cond., \$75. Dennis, Ext. 5278.

TV - 20", Zenith, color, remote, \$80. Bo, Ext. 3537.

TV - Goldstar, 13", 5 mo. old, remote control, color, cable ready, \$150 or best offer. Ute, Ext. 3890.

TV - Hitachi, color, 14", v.g. cond., \$80. Maj Britt, Ext. 2384.

VIDEO PATTERN GENERATOR - Leader #LCG-400, new, in box, w/manual, make offer. Chris, Ext. 2022 or 395-6112.

AMPLIFIER - Yamaha, natural sound stereo, power, MX-600, 180-200 w.p.c., black. \$300. Brian, 736-2575.

CAMCORDER - Sony Handycam 8mm, hard case, 2 batteries, charger, all cables, mint, \$300 firm. Charlie, 732-8837.

COMPUTER - Commodore 64, 1541 floppy drives, joystick, software, manuals, orig. boxes, \$100. Jim C., Ext. 4150.

COMPUTER - Commodore, disk drive, 13", color mon., many disks, games, etc., 2 printers, \$325. Joe, Ext. 4661.

COMPUTER - 640k RAM, 60 MB hard disk, 360k floppy, clock/calendar, mono. monitor, par/ser ports, software, \$250. Alan, Ext. 2928 or 929-0461.

COMPUTER - ZEO5 386DX-20, 84 MB hard drive, color monitor, 1.44 MB & 1.2 MB floppies, Microsoft Bus mouse, \$550. Steve, Ext. 2897.

GAMES - Super Nintendo, \$30-\$35/ea.; Superscope 6, \$30. Ext. 7505.

MIXING BOARD - TEAC 6-channel, preamps, Fender precision bass, best offer. Jim C., Ext. 4150.

SCANNER - black & white, AT&T, overhead, 8 1/2"x11", 300 dpi, w/software & card, excel. cond., \$150. Tom, Ext. 4563.

SPEAKERS - Dahlquist, 5-way dynamic phased array speaker system, asking \$350, frequency response 37 Hz-27k Hz, handle up to 200W. Ext. 7496.

TV - 19" color, JVC, w/remote, excel., \$85; Nintendo games, \$6-\$10. Ext. 2679 or 472-6922.

TV - 19", color, Zenith, good, \$45. Charlie, Ext. 2550.

VCR - Hitachi, 5 heads, portable, plays well, does not record, \$35. Charlie, Ext. 2550.

VIDEO CAMERA - GE, good cond., \$275; stereo w/cassette & record player, 2 speakers, \$30; double stroller, \$25. Dave, Ext. 3849.

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JACKET - new, women's, ski jacket, Powderkeg Columbia, still in wrapper, orig. \$180, sell for \$80. Pete, 924-7357.

MAPLE SYRUP - from my family's farm in Vermont. Peter, Ext. 7687 or 744-1112.

MOBILE - musical, mint cond., \$10. Ext. 5534 or 345-2686 after 6 p.m.

PLATE - ltd. edition, *Aida*, LaScala grand opera collection, 1st ed., ivory alabaster, \$45; sleigh, antique, 1 horse, black, red tufted seat, \$700. Pat, Ext. 2452.

DIAMOND RING - over 1 carat, excel. cond., \$3,250. Klein, Ext. 2214.

RING - women's, 14k gold, 2 carat total weight diamond, appraised \$3,195, sell \$700. Ext. 3305.

TEA SET - Royal Doulton, creamer, sugar, serves 8, old, charming, perfect, \$225. Carol, 331-8785.

T-SHIRTS - 45 scientists names montage, last ones, 1 med., 1 lg., 1X-lg., \$5/ea. Ralph, Ext. 2180.

TYPEWRITER - electronic, portable, w/memory, automatic correction zone up to 65 characters, 55 keys, excel. cond., \$65. Ext. 7496.

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