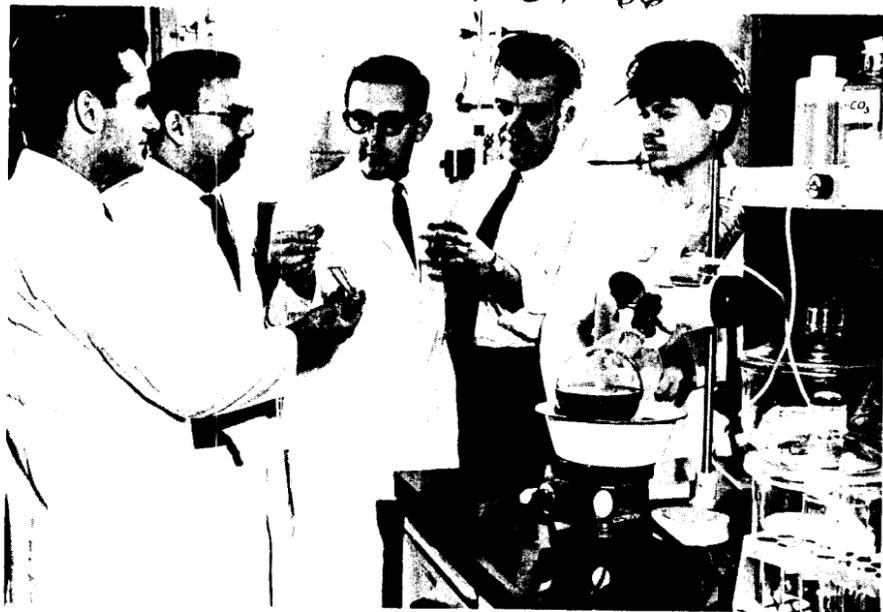


# BULLETIN BOARD

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January 6, 1966



## BNL Research Team Achieves Synthesis of Human Insulin

In the United States, 2 percent of the population suffers from diabetes and is kept alive only by periodic shots of the hormone insulin which keeps their blood sugar from rising to lethal levels. These regular injections of insulin, obtained from the glands of cattle and pigs, substitute for the natural human insulin that is lacking the diabetic due to some malfunction of body activity. Not only is the diabetic a slave to the hypodermic needle, but as time goes on, his body builds up antibodies to the foreign protein and so must have larger and larger doses to keep him alive. Diabetes cannot be cured; only controlled.

This week medicine was given an invaluable research tool in the study of diabetes when a team of five BNL researchers from the Medical Department synthesized human insulin for the first time.

The successful project headed by Dr. Panyotis G. Katsoyannis, with the assistance of Dr. Andrew Tometsko, both biochemists, marks the first synthesis of a human protein and the first time that 51 amino acids were strung together in a test tube. Dr. James Z. Ginos and Dr. Monohar A. Tilak, organic chemists, were responsible for synthesizing part of the human insulin molecule. Clyde Zalut rounded out the research team.

### High Water Mark

The perfection of the techniques to construct human insulin is a high-

### U.S., Yugoslavia Sign Science Exchange Pact

The National Academy of Sciences has entered into a scientific exchange program with Yugoslavia. The three-year agreement is similar to the one which now exists between the United States and the Soviet Union but is considerably more flexible and more informal.

Similar scientific exchange agreements under consideration between the United States and Poland, Czechoslovakia, Hungary, and Rumania.

water mark in the efforts of scientists to understand the body processes and opens whole new avenues for research on diabetes. It is now within the limits of possibility that insulin could be commercially manufactured. This human insulin would not cause the toxic rejection in the body that animal insulin does. Dr. Katsoyannis said that the synthesized insulin can be altered into analogs — altered forms of the insulin molecule—to produce a hybrid or artificial insulin that would have natural insulin's assets without its liabilities. Insulin molecules can be built with radioactive tracers included in the structure and perhaps provide answers to the questions of how the insulin stimulates the oxidation of blood sugar, and what biochemical reactions are involved.

Insulin came into notice in 1916 when a Scottish physician, Albert Sharpey-Schafer, suggested that a group of cells in the pancreas called "the Islets of Langerhans," named for their discoverer, Paul Langerhans, were producing an anti-diabetic hormone. He named this hormone "insulin" from the Latin word for island. In 1923, two Canadian scientists, Frederic Grant Banting and John James Rickard Macleod, received the Nobel Prize for extracting the hormone from the islets. Later, scientists found that insulin was constructed of two amino acid chains linked by bridges of sulphur atoms, and that at a certain position on the "A" chain there is a three-amino-acid sequence that differs in different animals. In cattle, the sequence is alanine-serine-valine; in swine, threonine-serine-isoleucine; in sheep, alanine-glycine-valine. Any of these insulins can be substituted and still perform the same functions.

### Came from Pitt

While a Professor of Biochemistry at the University of Pittsburg, Dr. Katsoyannis headed a project that synthesized sheep insulin. Since then, a group of Chinese chemists has syn-

(Continued on Page 2)

**BREAKTHROUGH**—The vial that commands the attention of this research group from the Medical Department holds some of the first human insulin ever synthesized in a laboratory. From left are: Dr. James Z. Ginos and Dr. Manohar A. Tilak, organic chemists who contributed to the project by taming a tricky amino acid. Holding the first human protein ever made in a laboratory is Dr. Andrew Tometsko, a biochemist who played a key role in the discovery. Next is Dr. Panayotis Katsoyannis leader of the project. Dr. Katsoyannis is flanked by Clyde Zalut, a research assistant and contributor to the work.

## BNL Short Subjects

### Dancing

There will be folk dancing at the Recreation Hall on Monday, January 10, and again on Monday, January 24, sponsored by the Brookhaven Folk Dance Group. The program is international, with plenty of variety, ranging from the Swedish Hambo and Russian Drakowiak to the Lesnoto from Macedonia and the Hora from Israel. (Sorry, the Monkey is not on the program.) All those interested are welcome, regardless of experience. You will be even more welcome if you bring a friend. Sessions start at 8 p.m.

### Bridge Group Meets

The Hospitality Committee Women's Bridge Group will meet at Brookhaven Center Tuesday, January 11, 8 p.m. to 11:30 p.m. All welcome!

### Rifle and Pistol Club Meets

The January meeting of the BNL Rifle and Pistol Club will be held on Thursday, the 20th, at 8:00 p.m. in the Recreation Building.

### Final Call -

#### "Heartbreak House" Tryouts

This is absolutely your last chance to be Captain Shotover, Lady Utterword or Hector Hushabye in George Bernard Shaw's comedy, "Heartbreak House." Director Gert Friedlander (55 Bell; Ext. 619) expects to see you, if you're interested, at the Theater on Tuesday, January 11, at 8 p.m.

### Sports Car Event

Brookhaven Lab Auto Sport & Touring Club offers "Fun-Khana I" this Sunday, January 9, at the Cafeteria parking lot. Registration will start at 11 a.m. and the first car will be off at Noon. This is a Fun Event. Gimicks galore. The size and make of car have no bearing as to winning a trophy. Everyone is welcome to participate. The entry fee is \$2 per car for B.L.A.S.T. members and \$3 per car for all others. All you need to participate is a car and a co-pilot. One hint - there will be three different courses and your co-pilot must be on speaking terms with you. Seat belts not required.

**Ten-Year Service Pins  
Awarded to 12 Employees**

Mark Q. Barton, Accelerator . . .  
Rudolph M. Funn, Plant Maintenance . . .  
Richard Hildenbrand, Cosmotron . . .  
Agnes H. Johnson, Plant Maintenance . . .  
Edward A. Kessler, Accelerator . . .  
John D. Langfeldt, Accelerator . . .  
Richard C. Larsen, Cosmotron . . .  
George F. Lowe, Physics . . .  
John J. Ruscica, Biology . . .  
Nils E. Segerdahl, Accelerator . . .  
Howard Vetter, Accelerator . . .  
Frank Volny, Plant Maintenance .

**Eight BNL Employees Retire**



**SIMON FREED**  
Sr. Chemist  
Chemistry  
Started: 4-20-49

**FRANK J. BENESCH**  
Inter. Technician  
Cosmotron  
Started: 1-30-51

**MILISLAV DEMEREC**  
Sr. Geneticist  
Biology  
Started: 7-1-60

**ABRAHAM CARRINGTON**  
Laboratory Janitor  
Plant Maintenance  
Started: 10-29-56

**Ski Club Meeting**

The Ski Club will meet at the Lake View Inn tonight. Plans for the ski trip on January 14-16 will be completed. The ski bus is going to Mad River Glen, Glen Ellen and Sugarbush in Vermont. All those taking this trip please attend this meeting. Each person must pay \$38 for his bus fare, lodging and meals by this meeting as the bus company must be paid by January 7.



**HARVEY MORRIS**  
Heating Supply Foreman  
Plant Maintenance  
Started: 3-24-47

**JOHN REINFRANK**  
Heating Service Foreman  
Plant Maintenance  
Started: 3-24-47

**EDWARD D. SPERRY**  
Painting Foreman  
Plant Maintenance  
Started: 6-16-47

**ANTHONY STEVENS**  
Driver (Light)  
Plant Maintenance  
Started: 5-3-48

**Cafeteria  
Menu**

**Monday (Jan. 10)**

- Entrees**  
Corned Beef & Cabbage, Mustard Sauce..... .65  
Turkey Shortcake on Cornbread..... .65  
Salisbury Steak..... .65

- Hot Special**  
Farmer's Omelette, French Fries  
Pickle Chips..... .60

- Special Sandwich**  
Kosher Salami on Hard Crust  
Rye, Potato Salad, Pickle.... .65

**Tuesday (Jan. 11)**

- Entrees**  
Roast Fresh Ham, Spiced Fruit .65  
Corned Beef Hash, Poached Egg..... .65  
Spaghetti, Meat Sauce..... .65

- Hot Special**  
Grilled Cheese, Bacon, Potato  
Chips, Cole Slaw..... .65

- Special Sandwich**  
Italian Hero, Celery, Olives,  
Pickles, Peppers..... .60

**Wednesday (Jan. 12)**

- Entrees**  
Batter Fried Chicken..... .65  
Pork Chop Suey,  
Steamed Rice..... .65  
Swiss Steak, Brown Gravy..... .65

- Hot Special**  
Pork Roll, Baked Beans, Spiced  
Peach..... .55

- Special Sandwich**  
Sliced Turkey, Potato Chips,  
Cole Slaw..... .65

**Thursday (Jan. 13)**

- Entrees**  
Broiled Flank Steak, Au jus.... .65  
Roast Leg of Lamb,  
Mint Sauce..... .65  
Grilled Steer Liver, Onions..... .65

- Hot Special**  
Pastrami on Rye, Cole Slaw, Dill  
Pickle..... .60

- Special Sandwich**  
Roast Beef on a Roll, Potato  
Salad, Pickle..... .65

**Friday (Jan. 14)**

- Entrees**  
Broiled Salmon Steak, Lemon  
Slice..... .65  
Shrimp, Fried Rice..... .65  
Macaroni, Beef & Tomato..... .65  
Roast Leg of Veal, Brown  
Gravy..... .65

- Hot Special**  
Crab Cakes on a Bun, French  
Fries, Cole Slaw..... .65

- Special Sandwich**  
Tuna Club, Potato Chips,  
Pickles..... .65

**Ralph Bunche to be First AUI Lecturer**

Dr. Ralph J. Bunche, United Nations Under-Secretary for Special Political Affairs, has accepted an invitation to give the first lecture in the "AUI Trustee Distinguished Lectures."

Dr. Bunche has been the recipient of numerous honorary degrees and awards, including the 1950 Nobel Peace Prize, given for his role in Palestine.

The lecture is scheduled for Thursday, January 13, at the Brookhaven Theater, 8:30 p.m.

There will be a buffet dinner served at Brookhaven Center before the lecture. No reservations for the dinner will be accepted after 6 p.m. on Wednesday, January 12. For reservations call extension 2453.

Ticket Application  
The AUI Trustee Distinguished Lectures  
Thursday, January 13, 1966

Please send 1 2 (circle the number desired) tickets to the lecture.

NAME..... (please print)

LAB ADDRESS.....

Send To: M. Kuper  
40 Brookhaven Ave.



**BRIEFING**—Some of the Russian solid-state physicists who visited the Lab recently listen to Dr. C.P. Baker explain the workings of the new spiral-ridge magnet pole tips for the 60-inch cyclotron. To the left of Dr. Baker is Steve Amoretty of the BNL Information Division who assisted with the Russian translations. The Soviet scientists visited several other unclassified research facilities in this country as part of a series of technical exchanges between the Russian and American scientific communities.

## Insulin . . .

(Continued from page 1)

thesized beef insulin, and Dr. Katsoyannis and Dr. Tometsko have come to BNL.

In addition to linking the all-important amino acid series in the "A" chain of human insulin—threonine-serine-isoleucine, Dr. Katsoyannis' group had to construct a "B" chain with threonine at the end, in-

stead of the usual alanine; a structure unique to human insulin. Drs. Ginos and Tilak worked on the "B" chain synthesis. Dr. Katsoyannis said that the synthesis of the "A" chain was extremely difficult because serine can react several different ways, and that the "B" chain was a problem because threonine was very reactive.

## Smaller Paychecks Starting This Week As New Social Security Rates Debut

Pay checks will be smaller this week and for many weeks to come as the new rates for Social Security Tax deductions go into effect. The total bite of 4.2 percent reflects the increase in Social Security benefits now scheduled, and the cost of the "Medicare" program passed by Congress last July.

Beginning January 1, the rate advanced from 3.625 percent of the first \$4,800 earned in a calendar year to 4.2 percent of the first \$6,600 earned. This raises the maximum annual payment from \$175 to \$277.20.

For example, if an employee makes \$77 per week, last year he paid \$2.80 per week as his Social Security Tax. As of the first of this year, he will have \$3.24 deducted each week. If the 1966 salary is \$127 per week, deductions will rise from \$4.60 per week to \$5.33 per week. In addition, with the new \$6,600 cutoff rather than the

\$4,800 cutoff of previous years, he will have the \$5.33 deducted for all 52 weeks of the year. An employee earning \$150 per week will pay at the rate of \$6.30 per week until the maximum of \$277.20 is reached.

Next year, the rate will go up to 4.40 percent of the first \$6,600 earned, and in 1969, another increase will be tacked on to bring the rate to 4.9 percent. The tax will go to 5.4 percent in 1973, 5.45 percent in 1976, 5.55 percent in 1980, and 5.65 percent in 1987.

### Archery Club Meeting

A meeting of the Nimrods Archery Club will be held in the Recreation Building in the Apartment Area at 12 noon on Wednesday, January 12. Bring your lunch and suggestions for nominating a slate of officers for 1966.

## Arrivals & Departures

### Arrivals

**John P. Shanley**, Medical....**Surendra N. Purohit**, Nuclear Engineering....**George J. Igo**, Physics....**Joseph S. Giordano, Jr.**, Biology....**Robert H. Quick, II**, Medical....**William P. Kolb**, Mechanical Engineering Division....**Kenneth R. Fannin**, Applied Math....**Elizabeth M. Barnes**, Biology....**Thomas J. McBride**, Photo & Graphic Arts....**Susan E. Grudier**, Photo & Graphic Arts.

### Departures

**Patricia M. Reilly**, Medical....**Susan H. Doxsee**, Physics....**Anita Anger**, Reactor Division....**Winslow F. Baker**, Physics....**Paul Hinkley**, Physics....**Michael J. Howley**, Reactor....**Ino Ikuo**, Biology....**John N. Palmer**, Plant Maintenance....**Willis R. Sceviour**, Nuclear Engineering....**Lewis M. Siegel**, Biology....**Rita Springsteen**, Fiscal....**Jose Vera Roman**, Medical....**James H. Wyche**, Biology.

### DECEASED

**Jerome Centabar**, Central Shops (12/26).

## BERA Film Series

### 'The Magnificent Seven' (The Seven Samurai)

Have you ever heard of Akira Kurosawa? Well, if not, let us introduce you to him with the *Magnificent Seven*. Director of so many of the fine films to come out of Japan (*Rasho-Mon*, *Throne of Blood*, *Yojimbo*), Kurosawa gives us here a raging, sensuous epic.



Basically, the story is the defense of a village which has been the annual target of bandits. The Seven Samurai have been recruited for the job and they organize the villagers for the battle.

## Seaborg Highlights Research Goals For Coming Year

In his year-end statement, Dr. Glenn R. Seaborg, Chairman of the Atomic Energy Commission, called attention to two areas of research which will be explored in the coming year. He said: "We will expand our efforts to unravel the possible interrelationship of viruses, chemicals and radiation to carcinogenesis . . . we will continue developmental work on a radiation-powered 'pacemaker' to stimulate the human heartbeat."

## Two BNL Fishermen Land Awards

The 1965 Fishing Contest seems to have been dominated by the tremendous run of bluefish that surrounded Long Island this summer and fall. Not only were there lots of "blues," but they were the largest seen in some time.

The contest winners for the October-November period were: Largest Fish - Carl Cantera (Mechanical Engineering) - 13 lb. 8 oz. bluefish. Average Fish - Richard O'Kula (Medical) - 24½ lb. striped bass.

Under the main story are many incidents and subplots including a delicate touch of humor, but the movie has all the impact of the biggest spectacle.

"Kurosawa is a virtuoso exponent of every technique of suspense, surprise, excitement, and in this he gives nothing to his Western masters . . . and his use of the camera is devastating . . . usually the film makes a tremendous impression . . . incident after incident is created with biting precision."

**SHORT: 'Barney Oldfield's Race For Life'**

One of the hilarious Mack Sennett comedies. Appearing in the typical "chase" film are Sennett himself, Ford Sterling and Mabel Normand as the girl the villains tie to the railroad tracks.

Please note change of date from earlier publication. These films will be shown on *Wednesday, January 12, 8:30 p.m.* in the Lecture Hall.

### Cowan on New AEC Panel

Dr. Frederick P. Cowan, Head of the Health Physics Division, has been named to the new AEC Panel on Radiation Safety. The panel, made up of specialists in radiation safety is designed to pool experience in that field.

# Classified Advertisements

## Autos, Auto Supplies

1959 RAMBLER - (Super) 4 dr. sedan, 6 cyl., std. shift. Engine & heater shot. Good body, good tires (6.50-15), new brake linings. Great car for someone with new motor or in need of parts. Best offer over \$50. takes it. Call Ext 435 or AT6-2278 after 6 pm.

1958 CHEVROLET - 2 dr Sport Coupe Impala, 348 cu in, V8, ps, r/h, 2 new snow tires, 2 new front tires. Must be seen to be appreciated. Asking \$550. Ext 7139 after 3:30.

1960 THUNDERBIRD - White w/red interior, good cond., reasonable. Don, Ext 2410 or MO6-4491.

1961 CHEVROLET - Biscayne, 6 cyl, std trans, good cond, low mileage. AT9-1568 after 6.

1956 CADILLAC - Coupe, hardtop, excel mech cond, full power. \$250. 281-3805 after 6.

1958 VOLKSWAGEN - Excel cond, sunroof, r/h, extras. \$500, firm. Reilly, Ext 434 or AT6-1192.

1959 CHEVROLET - 4 dr Impala, 8 cyl, auto trans, r/h, 4 new tires this Oct, 55,000 mi, very good cond. \$350. J. Hendrie, Ext. 7796 or AT6-8412.

1961 CHEVROLET - Impala, 4 dr hardtop, V8, r/h, turboglide trans, good tires, 39,000 mi, excel cond. \$995. Ext 592 or AT6-0508.

1960 VOLKSWAGEN - Convertible, new top, new paint, good cond. \$700. Bud, Ext 622.

1960 RAMBLER - 6 cyl sedan, std trans, r/h, body and mechanics good. \$350. P. Garvey, Ext 7118.

TRAILER - Tilt-bed, for small crawler loader or Ford loader, platform about 7'x15'. Asking \$250. Ext 7139 after 3:30 pm.

HOUSE TRAILER - 36'x8' Silver Star, living rm, dinette, bedrm-bath. Ideal for single person or married couple. Ext 2739.

SNOW TIRES - (2) 8.25x14 Goodyear Suburbanites mounted on Ford rims, like new. \$30. O. Haller, Ext 7678.

1955 OLDSMOBILE - Super 88, 4 dr sedan, r/h ps/pb, needs new muffler, otherwise in good cond, new front tires and almost new snow tires on rear, NYS inspected. \$80, firm. Ext 597 or AT6-0436.

1960 CHRYSLER - New Yorker, 4 dr hardtop, ps/pb/pw, white w/light blue interior, a truly luxurious car. \$750. L. Baker, Ext 591.

1960 MGA - 1600 Roadster, all tires brand new, recently replaced top and paint job, top mech cond throughout, extras include transistorized ignition, r/h, st op and service manual, tool kit. Original owner. \$650. R. Jones, Ext 591 or EM3-6783.

1966 CHEVROLET - SS, Maroon, 396 engine, 4 spd trans, positraction, r/h, 2500 mi. GR5-1234 after 6.

1964 VOLKSWAGEN - Sedan, fully equipped, w/w snow tires and rims. \$1250. E. Pluta, Ext 445 or SH4-9785.

1961 MERCURY - 2 dr, V8, auto trans, needs some work. \$275. Jake, Ext 2211.

1962 OLDSMOBILE - 88 Holiday Coupe, red/white, ps/pb. \$1100. Connell, Ext 2741.

1962 FORD - Galaxie 500 XL, tudor sedan, red w/black interior, 5 new tires, many extras. J. Hughes, Ext 2105 or 2343.

1959 STUDEBAKER - Silver Hawk, V8, auto trans, r/h, leather upholstery, new paint job, like new tires, 2 snow tires on separate rims, excel cond, 48,000 mi. \$500. Walt, Ext. 2457 or AT6-0246 after 5:30.

1963 FORD - Fairlane, black, std trans, V8, excel cond. Best offer over \$1000. W. Stafford, Ext 411.

1964 CHEVROLET - Chevy II, std trans, 4 dr, blue, excel cond. \$1400. AT6-9260.

TIRES - Five 5.90x15, 4 with at least 9/16" tread, mounted on 1960 Lark wheels. \$34. F. Plasil, Ext 626 or WA9-4364.

## Boats, Marine Supplies

15' BOAT - Lyman, 35 hp Johnson motor, trailer, many extras, excel cond. \$450. P. Ulzheimer, Ext 620 or GR5-7191.

18' SPEEDBOAT - Century "Arabian", new 215 hp Gray Marine V8 engine, 47 mph, all mahogany hull, many extras, excel cond. Sacrifice, \$1950. P. Watson, Ext. 2293 or MA 7-1420.

BOAT TRAILER - For boats 15'-17', 1000 lb capacity, good cond. Any reasonable offer. Augie, Ext 7218 or SE2-4101.

## Houses

HOUSE - Port Jefferson, Harbor Hills, split level, 3 bedrms, 2 1/2 baths, large playrm, partly finished basement, 1/2 acre wooded in rear, private beach rights. H. Katz, Ext. 696 or HR3-1455.

HOUSE - Blue Point (for sale or lease), completely remodeled and decorated, 7 rms, 1 1/2 baths, 2 car garage, large plot, low taxes. EM3-6673 after 4:30.

HOUSE - Village of Bellport, close to shopping, schools, churches, 3 bedrms, 1 1/2 baths, large rear porch, nicely landscaped, 1/2 acre plot, w/w carpet, reasonable taxes. Ext 2213 or AT6-0291.

## Pets

FREE - One active and entertaining parakeet w/cage. G. Barton, Ext 2102 or SH4-2216.

BEAGLE PUPS - AKC registered, Mac, Ext 439 or 281-9559.

## Radio, TV, Hi-Fi

TV - Console, RCA model 21T635, 21" screen, all tubes tested in December. \$25. J. Olson, Ext 441 or AT9-1463.

HAM GEAR - Hallicrafter HT37 transmitter, \$250; 2 meter 100W AM transmitter w/Mod. and Power supply, \$50; precision oscilloscope, 5", \$15; 2 meter transistor converter, Vanguard, \$9.; 2 meter converter (tubes), \$10; phone patch w/meter, \$5; Heathkit CW transmitter, Model AT-1, \$10; 3' telescope made in England, 35-100 power, \$20. Nils, Ext 311.

TV - 19" RCA set, about 10 yrs old, console, still plays. \$25. Jake, Ext. 2211.

RADIO EQUIPMENT - Zenith table radio, \$5.50. Heathkit amplifier, \$9.50; 12" coaxial speaker w/cabinet, \$14.50. GR5-2337.

## Home Furnishings

SEWING MACHINE - Singer, treadle type, in excel cond, for simple sewing, cabinet style early 1900 vintage. \$10. AT9-0687.

MISCELLANEOUS - Couch, \$55; cedar chest, \$5.50; baby dresser, \$20; laundromat, 8 cycle, \$75; Hotpoint dryer, \$75. (Washer & dryer available end of January.) GR5-2337.

## Miscellaneous

ICE SKATES - Girl's, size 1, used one season, like new, child spent more time on her pride than on the skates. L. Jacobson, Ext 7772 or HR3-1980.

CAMERA - Polaroid, black & white, 10 sec Model 80, wink light, flash attachment, light meter, perfect working cond. Asking \$35. Ext 7139 after 3:30 pm.

ELECTRIC HEATER - Radiating type without thermostat, \$5. Jerry, Ext 7782.

ROTO-BROIL - Rotisserie-Broiler oven, 6 mo old, holds 20 lb roast, glass door, used only twice, excel cond. Cost \$56 new, will sell for \$35, firm. Cammarano, Ext. 691.

ANTIQUE GUN - 1862 Springfield musket in good cond. J. Paul, Ext 2390 after 4 pm or 475-5196 before 4.

GAS STOVE - In perfect cond, about 12 yr old. \$10. J.P. Palmer, Ext. 2958 or 751-1315.

FISHTANK - 1 twenty gal. J. Paul, Ext. 2390 after 4 or 475-5196 before 4.

GUN - J.C. Higgins, 22 cal, semi auto good cond. \$30. J. Paul, Ext 2390 after 4 or 475-5196 before 4.

POLAROID CAMERA - Model J66, very good cond, color attachments. \$60. J. Paul, Ext 2390 after 4 or 475-5196 before 4.

SHOTGUN - 12 ga, Stevens Model 311, plastic stock, clean. \$40. J. Paul, Ext 2390 or 475-5196 before 4.

SNOW BLOWER - 18" self-propelled Auger type "Mono", 2 yrs old. Orig. \$120, now \$40. C. Reed, Ext 2182.

ICE SKATES - Girl's, white cowhide, size 1, outgrown, good cond. Ext 2910.

MISCELLANEOUS - Ladder, \$2.50; croquet set, \$4.50. GR5-2337.

## For Rent

APARTMENT - Studio w/full kitchen, newly furnished, all utilities incl. use of washer and dryer. Bob, Ext 7111 or 281-3558.

APARTMENT - North Shirley, unfurnished, 2 bedrm, modern kitchen w/electric oven and stove, very neat and spacious. \$125 per mo includes all utilities. 924-3283.

APARTMENT - 5 spacious rms, modern kitchen and bath, 10 min from Lab. YA4-6118 after 3 pm.

## Wanted

SKI RACK - For Corvette Stingray convertible. Lou, Ext 439 or 466.

VOLUNTEERS - To tutor for the Mastics-Moriches-Shirley Community Action Program. For details call G. Levine, Ext 2113 or 878-0248.

## Carpools

HELP! - Ride needed desperately from vicinity of Munsell Rd, E. Patchogue. K. Paul, Ext 7731.

DRIVER - To complete existing carpool from W. Islip, Dmitri, Ext 2859 or 7227.

DRIVER/RIDER - Wishes to join existing carpool or form new one from E. Patchogue-Patchogue Shores area. P. Ulzheimer, Ext 620 or GR5-7191.

## Raised Eyebrows Department

Italian screenwriters tend to work in teams, like physicists and card-sharps. —The New Yorker