

the



Record

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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NATIONAL INSTITUTES OF HEALTH

Dr. Robert Levy Named Director, Div. of Heart, Vascular Diseases, NHLI

Dr. Robert I. Levy has been appointed director of the Division of Heart and Vascular Diseases, National Heart and Lung Institute.

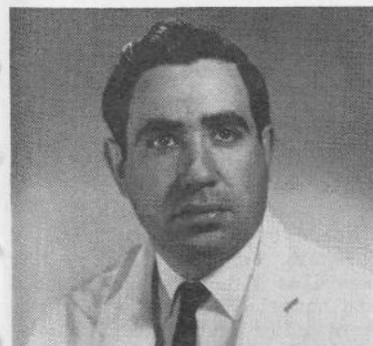
Dr. Levy replaces Dr. Theodore Cooper, NHLI Director, who has served as acting director of the Division since its creation in July 1972.

Dr. Levy has been with the Institute since 1963 when he joined the staff as a clinical associate in the Molecular Disease Branch.

He has served since 1966 as head of the branch's Section on Lipoprotein Metabolism and Intervention, and since 1971 as chief of the Lipid Metabolism Branch. He will continue to hold both of these positions.

Dr. Levy will plan and direct the Institute's research and training programs in heart and blood vessel diseases.

This area encompasses the major killer diseases: hardening of the arteries (arteriosclerosis) and its complications (heart attack, stroke, and kidney failure); high blood pressure and hypertensive heart disease; congestive heart failure; congenital heart defects; rheumatic heart disease; various abnormalities of heart rhythm,



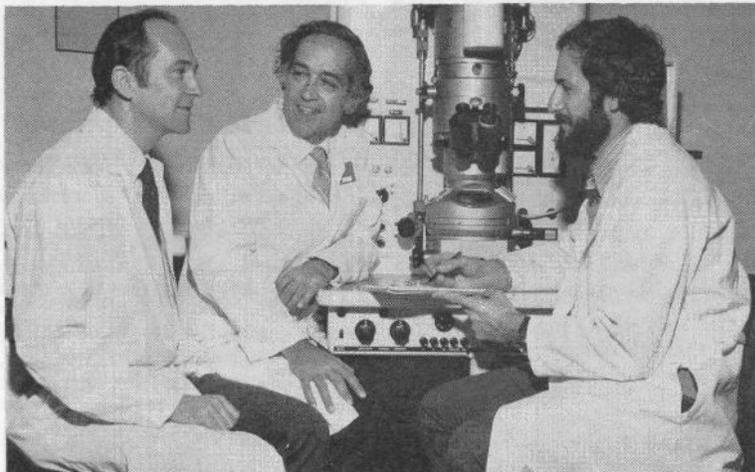
Dr. Levy has published numerous papers in the areas of lipid and lipoprotein metabolism, atherosclerosis, nutrition, and clinical disorders of blood fats.

and other disorders of the circulatory system.

Dr. Levy received his A.B. (with highest honors and distinctions)

(See DR. LEVY, Page 7)

NIAID Researchers May Have Visualized Virus That Causes Infectious Hepatitis



The investigators (l to r), Drs. Purcell, Kapikian, and Feinstone, sit at the electron microscope that was used to observe the one millionth of an inch, spherical, virus-like particle. Its identification should aid in attempts to isolate the virus in cell culture. (See story on hepatitis B discovery, page 8.)

By Madeleine Jacobs

Scientists at the National Institute of Allergy and Infectious Diseases believe they have visualized, for the first time, the virus that causes infectious hepatitis.

This debilitating disease—which is accompanied by inflammation of the liver, fever, nausea, fatigue, and jaundice—afflicted a reported 54,000 Americans last year. The true figure may be ten times that because of unreported cases.

The organism, which Drs. Stephen M. Feinstone, Albert Z. Kapikian, and Robert H. Purcell have captured on film, was found in the stools of patients experimentally infected with infectious hepatitis.

These stool specimens and sera were collected several years ago by other investigators who conducted volunteer studies of infectious hepatitis in Illinois.

The agent visualized by the NIAID scientists is a very small—27 nanometers or one millionth of an inch—spherical, virus-like particle. In appearance and size, it resembles the picornaviruses and parvoviruses.

Infectious hepatitis, or hepatitis A—as opposed to serum hepatitis, or hepatitis B—is usually spread by direct contact or by contaminated drinking water or food.

It frequently is the culprit in large community-wide outbreaks. Scientists have long suspected that the disease is caused by a virus

and have shown that it can be transmitted to volunteers.

However, efforts by many investigators to isolate causative agents in cell cultures have failed, and success in transmitting the agent to laboratory animals has been limited to a South American monkey, a marmoset.

Attempts to find a virus or an antigen—a protein which could serve as a marker for the virus—in the serum of hepatitis A patients have also been unsuccessful, possibly because the virus is present in the bloodstream for only a short time.

Scientists know, however, that stools of patients with hepatitis A are infectious from approximately 2 weeks before until 2 weeks after onset of clinical symptoms.

The NIAID researchers decided to examine stool specimens from hepatitis A patients using immune electron microscopy (IEM).

Dr. Kapikian had previously used this method in detecting, in a stool filtrate, the "Norwalk" agent, which is morphologically

(Continued on Page 6)

New \$30 Million Training Program Plans Announced

Approximately \$30 million will be available this fiscal year in a new HEW research manpower program to support training at the doctoral level in the biomedical sciences.

HEW Sec. Caspar W. Weinberger recently announced details of the program and said that applications for fellowship awards will be accepted immediately.

The awards will be made for advanced training in research in specified shortage areas in biomedical and health-related sciences only. Study leading to the doctoral or other professional degree will not be supported under this program.

Awards—which will be administered by NIH and the Alcohol, Drug Abuse, and Mental Health Administration—are of two types:

Postdoctoral Research Fellowships are to be awarded in national competition to individuals who have already received the doctoral or equivalent degree.

Details Explained

All applicants must be U.S. citizens or have been admitted to the United States for permanent residence.

The basic stipend is \$10,000 per annum. No dependency allowances will be provided. The institution at which each Fellow trains will receive up to \$3,000 per annum to help defray the necessary research

(See TRAINING PROGRAM, Page 4)

Greetings to All Readers; Next Issue Will Be Jan. 3

The NIH Record staff extends greetings for the holiday season to all of its readers.

Only one issue of the NIH Record—now approaching its 25th year of publication—is published in December.

Because of bindery schedules, the next Record will not be off the press until Thursday, Jan. 3. Subsequent issues will come out—as usual—on paydays unless a holiday delays publication.

the  **Record**

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Final Depot Location Between NIH, NNMC Approved by Metro

The Metro Board has given approval for the final location of the Medical Center Metro station on Rockville Pike between NIH and the National Naval Medical Center.

The depot entrance will be on the south side of South Drive, about 200 feet west of Rockville Pike.

No parking will be allowed at the terminal; however, the station will have 30 passenger drop-off (kiss 'n' ride) facilities for automobiles and six Metrobus bays.

Bus System Planned

A feeder bus system will serve communities to the east and west of the station, with a portion of these buses traversing the NIH grounds.

It is intended that the buses serve as a shuttle for NIH employees to and from their work

Trio di Milano to Play Selections From Haydn, Ravel, Beethoven

The Trio di Milano will perform in the third concert of the 1973-74 Chamber Music Series of the Foundation for Advanced Education in the Sciences, on Sunday, Dec. 9, at 4 p.m. in the Masur Auditorium.

This is the group's second American tour; they appeared at NIH during the 1971-72 FAES concert series. Their program will include selections from Haydn, Ravel, and Beethoven. Admission is by ticket only.

location as well, and will provide public transportation to NIH employees in areas to be served by the feeder buses.

Metro estimates that 16,300 passengers will use the station daily, and it is expected that about one-third will be NIH and NNMC employees, visitors, and patients.

At a later date, the *NIH Record* will provide a more complete description of the approved station at NIH.



Dr. Waggoner is the author of several papers in the field of medical statistics.

Dr. Deward E. Waggoner Of NCI Retires After 20 Years with Gov't

Dr. Deward E. Waggoner, chief of the Office of Program Analysis and Communication, Viral Oncology, Division of Cancer Cause and Prevention, NCI, retired recently after 20 years of Federal service.

During his career as an analytical statistician, Dr. Waggoner held several overseas posts. In 1953 he was sent on a 2-year mission to Egypt as an advisor on health statistics.

From 1955 to 1958 he was chief, Natalty Branch, National Office of Vital Statistics. In 1958 he was again stationed in the Near East as an advisor to the Government of Iran on a national system of vital statistics.

From 1959 until his retirement, Dr. Waggoner held several posts at NIH in the program analysis area.

A camping enthusiast, Dr. Waggoner was presented with several pieces of camping equipment at a luncheon held in his honor.

'After-Hours' Program Offers College Courses

Over 60 college-level courses are being offered in 23 downtown Federal buildings in the District of Columbia this spring through the Federal After-Hours Education Program.

The College of General Studies, George Washington University, has undergraduate and graduate courses leading to bachelor of science and master of science degrees.

Registration will be held Jan. 9 and 10 for the spring semester beginning the week of Jan. 21.

Tuition is \$63

Tuition is \$63 per semester hour, and all courses are 3 semester hours.

Federal agencies are authorized to pay tuition costs and other fees if courses are related to job requirements.

For further information, contact Robert W. Stewart, field representative, GWU, 676-7018.

2nd Annual Davis Plan Bake Sale To be Held Tomorrow, Dec. 6

Come one, come all to the second annual Davis Bake Sale to be held tomorrow (Dec. 6) from noon to 1:30 p.m. in Bldg. 31, Room 11A-10.

Items for sale include cookies, cakes, cheese balls, and lots more.

Proceeds will be donated to the Patient Emergency Fund through the Davis Plan.

NIH Stage Band Will Present Concert on Thursday, Dec. 13

The NIH Stage Band will present a concert on Thursday, Dec. 13, at 8 p.m. in the Jack Masur Auditorium.

The free concert will feature tunes from the '40s and '50s, progressive jazz, and current jazz-rock.

NIH employees, relatives, and friends are invited to attend.

John Sharkey Dies; Top Finance Officer

John E. Sharkey, 52, Director of the Office of Financial Management, Office of the Director, died unexpectedly on Nov. 29 in Holy Cross Hospital, Silver Spring, Md. He had been ill only a few days.

Mr. Sharkey came to NIH as chief of the Financial Management Branch in 1968, and was named



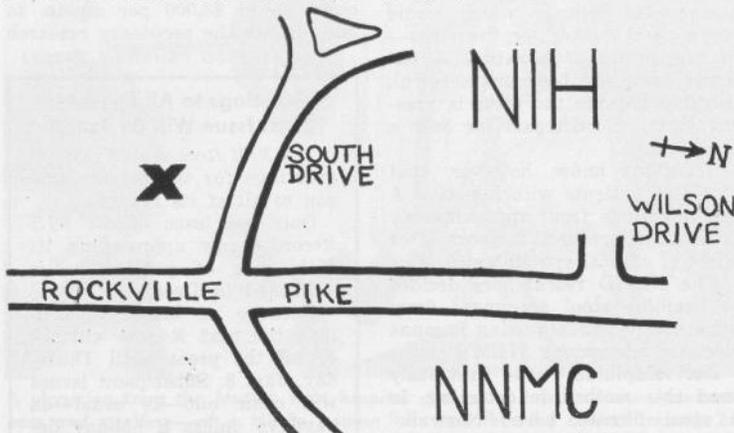
John E. Sharkey

Director of OFM a year later.

Before coming to NIH, he had served as a financial management and budget officer in the National Aeronautics and Space Administration and the Atomic Energy Commission.

Mr. Sharkey was born in Cincinnati, Ohio, and was a graduate of Xavier University. He is survived by his wife and 12 children at the family home in Gaithersburg, Md.

The family requests that, in lieu of flowers, contributions be sent to the NIH Patient Emergency Fund.



"X" MARKS the approximate location of the recently-approved Metro station.

The Rise of the Energy Crisis at NIH Results in the Fall of the Thermostat

During these last balmy days of Indian summer it sometimes seems hard to believe that the energy crunch is on. But the Office of Engineering Services has been busy devising new ways of reducing energy consumption at NIH.

The first and most obvious step was the resetting of heating thermostats in office and laboratory areas to 68 degrees. As Dr. Charles Edwards, HEW Assistant Secretary for Health, remarked:

"The President's recommendation to reduce room temperature to 68 degrees is quite consistent with good health practices. So far as maintenance of good health is concerned, mid-70's temperatures, to which many of us have become accustomed, are just not necessary."

Temperatures Adjusted

Settings in animal and other special-purpose areas will also be adjusted. Temperatures in animal rooms may be lowered in gradual steps, giving the animals time to become conditioned to their cooler environment.

In all cases, settings will be lowered only after consultation with lab personnel indicates that it would be a feasible move.

Chilled water supply to many buildings is shut off at this time of the year to prevent coils from freezing and to conserve energy.

The unseasonably warm weather in recent weeks has caused many spaces to get uncomfortably warm because outside air cannot be used effectively to offset heat generated by lighting, people, and equipment.

Other Plans Explained

The overhead lighting system contributes many degrees of heat to the office temperature, and turning off all non-essential lights is a sure way to lower room temperature and save energy as well.

Another plan set in motion by Engineering Services has been the reduction of ventilation (outside air supply) in office buildings during nights and weekends. Air is re-circulated throughout the buildings rather than pumped in from the outside.

Certain systems have been modified to lower nighttime temperatures in non-laboratory buildings to 60 degrees.

Already the outside lighting system on the campus has been cut back. Lights illuminating the National Library of Medicine are now turned off at 9-10 p.m.

Reductions in parking lot lighting in selected areas are now limited by existing equipment, but design work is in progress to achieve more savings in this area.

The motor pool has been directly affected by the energy crisis. Its gas allotment was reduced by 8

per cent, and a maximum speed for all Government vehicles has been set at 50 miles an hour.

The motor pool further advises all drivers to take the shortest, least congested route, and to avoid "jack rabbit" starts and stops.

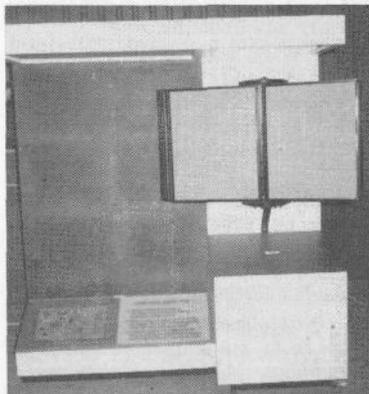
The jitney service between the Poolesville farm and the NIH reservation has been discontinued.

Other energy-savers are being considered but require considerable study to determine energy reduction and cost benefits.

A re-examination of products designed to reduce solar heat gain is in progress, a matter of particular concern to buildings with large glass exposures. Bldg. 31, for instance, has a number of heating-cooling problems because of its many-windowed facade.

Even such prosaic items as toilets and sinks have come under the scrutiny of Engineering Services. A spring-valve device that eliminates leaks is being studied as an alternate faucet model. Water conservation becomes energy conservation, since electricity is used to run the pumps.

Modern, Redesigned Car Pool Locators Soon to Be Installed in Buildings 10, 31



The new car pool locator, shown under construction, will be installed in the middle of December.

Clothing for Kids Drive Is Now Underway at NIH

The large marked boxes that have suddenly appeared in the halls of NIH are part of this year's Clothing for Kids Campaign.

Any donation of clean, serviceable clothing for pre-school and school-age children would be appreciated. Hangers are also needed.

The drive will continue through Dec. 15.

Clothing deposit boxes have been placed in Bldgs. 1, 10, 12-A, 13, 31, 35, and 38, as well as the Westwood, Landow, and Federal Buildings.

Dr. H. G. Fletcher, Jr., Dies; Was With NIAMDD

Dr. Hewitt G. Fletcher, Jr., of the National Institute of Arthritis, Metabolism, and Digestive Diseases, died recently at the age of 56 after a long illness.

At the time of his death, he was chief of the Section on Carbohydrates in the Laboratory of Chemistry.

Dr. Fletcher received a Ph.D. degree in organic chemistry in 1942 from the Massachusetts Institute of Technology.

He was a chemist with Atlantic Research Associates in 1940 and 1941, and in the following 6 years served as instructor in chemistry at M.I.T.

From 1945 to 1948, Dr. Fletcher was a research associate and Chemical Foundation Fellow at NIH. In 1951, he was named chief of the Section on Carbohydrates, NIAMDD.

Dr. Fletcher authored over 170 publications on the synthesis, structure elucidation, and biochemistry of carbohydrates.

He also supervised a number of postdoctoral fellows through the NIH Visiting Scientists program.



Dr. Harley Sheffield (r), head, Cell Biology and Immunology Section, NIAID, and NIH Credit Union president, presents Dr. John F. Sherman, NIH Deputy Director, with a cup commemorating International Credit Union Day. The NIH Federal Credit Union, one of the largest in the U.S. with assets totalling over \$34 million, celebrated its 33rd birthday by serving NIH employees an estimated 5,000 cups of coffee and 4,800 doughnuts.

Ruth M. Bell, Former NIMH Secretary, Dies

Ruth M. Bell, secretary to the NIMH chief of Clinical Care before her retirement this past June, died Nov. 16 in Holy Cross Hospital following a long illness.

Mrs. Bell served as a medical secretary with the NIMH Laboratory of Psychology as well as with NCI and NIAID. Her career at NIH covered more than 20 years.

A native of Rockport, Ind., Mrs. Bell attended public school there and graduated from the Lockyear Business College before coming to Washington, D.C. in 1945.

Mrs. Bell leaves her husband, Vance, of Adelphi, Md., her mother, Mrs. Minnie Mackey, of Rockport; and three sisters, Mary Howes of Rockville, and Naomi Ebley and Lucille Harris, of Rockport.

Protect Personal Property; Special Precautions Urged

Happiness and joy go hand in hand with the holiday season. However, at this time of year, personal property losses and theft also tend to increase.

The Office of Protection and Safety Management, OAS, urges employees to take special precautions to protect their property.

Lock car doors, keep attractive items in a safe place out of sight, and do not leave offices unattended. The burden of protecting personal property is on each employee.

reducing air pollution, and easing frustration with traffic. Join a car pool now.

Car pooling offers many advantages—saving gas and money; re-

Poinsettias, Plum Pudding, Parties, Plus Carols Mark Holidays for CC Patients



Each year Santa and his helpers preside at a Christmas party sponsored by the Clifton Park Citizens Association. Patients and staff are invited.

Carols and roast turkey, poinsettias and plum pudding will mark the holidays this year for Clinical Center patients.

A full schedule of activities has been planned by the Patient Activities Section and the Spiritual Ministry and Nutrition Departments.

Patients will make special trips to see Santa, buy Christmas gifts, view the poinsettia show at the Botanical Gardens, and see the national Christmas tree on the elipse.

They will trim trees and make Christmas crafts and gifts. Entertainment will be provided by the Scottish Rite Masons and the D.C. Annunciation Church choir.

Christmas Eve, carolers will visit the nursing units and a Protestant carol service will be held earlier in the week. Chanukkah candle lighting ceremonies are also scheduled.

Parties will include the annual children's party presented by the Clifton Park Citizens Association, a Holly Hop, and an open house for patients and staff from 2 to 4 p.m., Wednesday, Dec. 19.

The season's festivities will culminate in a New Year's Eve gala with games, music, favors, and prizes for patients of all ages.

TRAINING PROGRAM

(Continued from Page 1)

costs to the institution.

In addition, a limited number of Institutional Research Fellowship awards will be made to institutions for the support of individuals at the postdoctoral level in fields where there are critical manpower shortages and demonstrated national need.

Application material for both programs — and information regarding the specified fields — may be obtained from the Office of Research Manpower, Division of Research Grants, NIH, Bethesda, Md. 20014.

Capt. Jeanne M. Reid Of NIAMDD Receives 1973 McLester Award

Capt. Jeanne M. Reid, USPHS, research dietician at the National Institute of Arthritis, Metabolism, and Digestive Diseases, received the 1973 McLester Award at the 80th annual meeting of the Association of Military Surgeons of the United States held in Washington last week.

Plaque Presented

The bronze plaque and honorarium, provided by the Lederle Laboratories Division of American Cyanamid Company, were presented to Capt. Reid "for outstanding contributions in metabolic mineral balance studies for Gemini VII and Skylab programs."

Capt. Reid's work with the National Aeronautics and Space Administration began in 1965 with metabolic studies as part of the Gemini VII program. Since 1969 she has been involved in the planning and implementation of foods used in metabolic balance studies of the Skylab program. (See the Oct. 9 issue of the *Record*.)

The Association of Military Surgeons selects award winners for outstanding work in the field of nutrition and dietetics. The Lederle-sponsored award honors Colonel James Somerville McLester who was a consultant to the Surgeon of the American Expeditionary Forces in World War I.

Applicants who submit material by Jan. 1 will be notified by letter in May-June 1974 of the final action on their application.

Postmaster Requests Reduced Bulk Mailings Over Holiday Season

Due to the increased burden imposed upon the U.S. Postal Service during the holiday season, the Postmaster, Washington, D.C., requests that from Dec. 1 through Dec. 26, all bulk mailings of pamphlets, books, forms, and other printed matter or supplies be withheld.

The NIH Mail Room will cooperate with the Postal Service's request. Bulk mailings during this period will be restricted to those which are absolutely necessary.

A problem frequently encountered in the Mail Room involves the handling of personal packages and greeting cards which interfere with the delivery and dispatch of official mail.

NIH personnel can help alleviate the situation by mailing all personal mail through regular USPS facilities.

In addition, personal mail for NIH employees should be addressed to the persons' home rather than their offices.

U.S. PHS Profile Published

A Profile of the United States Public Health Service, 1798-1948, has been published by the National Library of Medicine.

The book was written under a PHS contract by Bess Furman Armstrong, well-known newspaper writer and author, who died shortly after completing the manuscript.

Most of the original documents used in the preparation of the book can be found in NLM, the Library of Congress, or the National Archives.

A Profile may be purchased for \$4.35 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.



L. D. Weiford, Jr., R&W manager, congratulates Helene Thomas on her 14 years of service as R & W postmistress. Mrs. Thomas will now work at the R&W activity desk since a fully-automated facility was recently installed in the Clinical Center.

Marjorie Guthrie Named NIGMS Council Member

Marjorie M. Guthrie, nationally prominent lay health leader and widow of folk singer Woody Guthrie, has been named to a 4-year term on the Advisory Council of the National Institute of General Medical Sciences.

A former creative dancer and instructor with the Martha Graham troupe, Mrs. Guthrie undertook to foster medical research and services 6 years ago by founding the Committee to Combat Huntington's Disease.

Her change in careers followed the death of her husband in 1967 from Huntington's disease, an inherited disorder of the nervous system which affects men and women alike, occurs most often in middle life, and usually is fatal within 5 to 15 years of onset.

The CCHD, which works closely with health, research, and social workers to assist Huntington's disease patients and their families, now has 48 chapters in the United States and affiliates in Canada, England, Scotland, and Australia.



When You Commute to Work by Bicycle You Might Follow These Suggestions

Dr. Harold Wooster, chief, Research and Development Branch, Lister Hill National Center for Biomedical Communications, NLM, is Safety Chairman of the Potomac Pedalers Touring Club. He offers some suggestions that future NIH bike commuters might follow when riding to work.

Had you thought about riding a bicycle to work to conserve gas? Do you live 5 miles or less from campus? Do you think you would like to experiment with commuting by bicycle?

Let me offer some hints about bicycle safety.

1. For commuting, a good three-speed is better than a cheap 10-speed. It's more reliable and less likely to get ripped off.

2. Make sure that your bike is in top mechanical condition. Old Georgetown Road during rush hour is no place for a brake failure. Get a safety check-up from a bike shop if necessary.

3. It gets dark around 5 p.m. now. Montgomery County law says that all bicycles must show a white light in front and a red light in the rear. Do not ride after dark without these lights.

Leg lights (two-headed flashlights strapped on the legs) are cute and sexy but don't show you where you are going.

I like generator lights in front; some of my friends swear by batteries. There is no substitute for a good two-cell battery light in the rear.

4. Be visible. Slather reflective tape liberally on your bike. Wear a bright colored jacket, yellow or orange—not red, which is loud in the daytime but looks black by



Dr. Wooster waits at a stop sign for traffic to subside. He is wearing a bright yellow nylon jacket and an orange crash helmet. From behind, a luminescent triangle, reflector, reflecting tape, and tail light make his bike easy to see at night.

headlight.

Put reflective tape on your jacket. Be drab and inconspicuous during duty hours, but be a peacock on your bike.

5. Be a rodent on the road. A mouse sticks close to the wall until he dashes for the open spaces.

Ride close to the right-hand side of the road, or even on sidewalks.

NIH has fantastic sewer gratings which you can ride over; the standard Montgomery County gratings are bike traps and should be avoided.

Do not cut in and out of traffic. At traffic lights take advantage of your dual status and turn pedestrian when safe to do so.

6. Plan your route. The way you drive to work isn't necessarily the best way to travel by bicycle. Stay off main roads (Rockville Pike, Old Georgetown Road) until close to campus.

NIH is bounded by a network of suburban residential streets. Use them. A good rule of thumb is to stay off roads that don't allow parking.

Keep Head on Shoulders

7. Wear a crash helmet. You put a lot of time and money into your head—try to keep it together.

8. Remember, with few exceptions, bicycles are subject to the same laws that govern automobiles.

For technical advice on bicycles, call Dr. Wooster on Ext. 64441.

Med. Professor Talks On DMSO Research

Dr. Jack C. de la Torre, a specialist in neuropharmacology, University of Chicago, will talk on the experimental use of DMSO—dimethyl sulfoxide—in trauma research at the second symposium on DMSO at the N.Y. Academy of Science, Jan. 9-11. The research on this drug was supported by a grant from the National Institute of Neurological Diseases and Stroke.

Dr. de la Torre, who is assistant professor in the departments of surgery (neurology) and psychiatry, will describe results from using DMSO in experimental studies of spinal cord injuries, stroke, and gunshot wounds, compared to results from other drugs now in clinical use.

He will also discuss an experimental technique to predict motor function recovery utilizing evoked nerve and brain potentials, before and after the use of DMSO and other drugs.

Soviet, U.S. Researchers Meet to Assess Results Of Joint Cancer Studies



At the end of the meetings, Dr. Rauscher (l) and Dr. Trapeznikov held a final discussion on the collaborative program. The Russian scientist agreed with the NCI Director, who said, "... we accomplish much more for the cancer patient than we could by working independently."

The U.S.-U.S.S.R. Joint Subcommittee on Oncology held its first meeting, Nov. 12-14, at the National Cancer Institute. The subcommittee's coordinators are Dr. Frank J. Rauscher, Jr., Director, National Cancer Institute, for the United States, and Prof. N. N. Blokhin, Director, Institute of Experimental and Clinical Oncology, for the Soviet Union.

The meeting assessed the results of collaborative projects undertaken since the initial agreement was signed by the two countries on May 23, 1972.

Participants discussed projects and programs and formulated plans for future cooperation in major areas of cancer research. These areas are cancer chemotherapy, leukemia and tumor viruses of animals and man, mammalian somatic cell genetics related to neoplasia, and immunotherapy of tumors.

The subcommittee reported on several important results of the cooperative program. They are:

Protocols have been established for mutual cooperation on the four original oncologic problems; joint investigations have been initiated; an effective program for the exchange of scientists has been achieved; both sides have also exchanged drugs and strains of viruses which are under study, and seven meetings have been planned for 1974.

These programs were approved by Dr. Rauscher and Dr. N. N. Trapeznikov, the Soviet Deputy Coordinator for the U.S.-U.S.S.R. cooperative program on malignant neoplasms. Dr. Trapeznikov is the Director for Science, Institute of Experimental and Clinical Oncology.

Dr. Rauscher expressed appreci-

'People's Forum' Held On Contracting Issue

Dr. Robert S. Stone, NIH Director, met with employees in a "people's forum" held last Tuesday, Nov. 27, in Masur Auditorium.

The meeting brought together NIH-EEO Officer Raymond Jackson, Dr. Stone, and many lower grade service workers concerned about the issue of "contracting out."

A number of service areas, including laundry and housekeeping, are being examined to evaluate whether an outside contractor could do the work more economically.

Dr. Stone emphasized the fact that management was studying the situation to determine what future course would most benefit the entire NIH community.

Questions came fast and furiously from the floor. Workers, feeling their jobs were in jeopardy, repeatedly voiced concern that if low grade, entry level positions are contracted out, an important avenue for upward mobility at NIH would be eliminated.

Both Dr. Stone and Mr. Jackson stressed that the meeting was held to promote free dialogue and exchange of information.

The "people's forum" made one point crystal clear: any decision which may be reached on "contracting out" will have to weigh "costs" in human as well as economic terms.



Dr. James R. Ganaway (r), veterinary officer, receives the PHS Commendation Medal from Dr. Joe R. Held, DRS Director, for advancing knowledge of laboratory animal diseases—"particularly for designing methods to maintain animal health."

ation to the Soviets for their efforts in making the sessions productive.

He stated that "In getting the very best of Soviet science together with the very best of American science we accomplish much more for the cancer patient than we could by working independently."

Dr. Trapeznikov said he agreed with Dr. Rauscher, and considered the results so far as "... indicative of the success that will be achieved in this joint program."

Safety Tips for NIH



A puncture wound from a contaminated needle poses a hazard for all laboratory personnel. Following these tips could reduce the incidence of puncture wounds:

1. Use extreme care in handling all needles.
2. Never discard a contaminated needle in a waste basket.
3. Never place unsharpened needles into plastic bags.
4. Always recap the needle before placing in a clean-up tray.
5. In case of puncture, cleanse wound immediately.
6. Report punctures to the nearest employee health unit at once.

For more information on safe disposal of needles and syringes, contact the Environmental Services Branch, Ext. 66034.

NIAMDD Forms Section On Chemical Immunology

A section on Chemical Immunology has been established in the Arthritis and Rheumatism Branch of the National Institute of Arthritis, Metabolism, and Digestive Diseases.

Under the direction of Dr. Henry Metzger, the section staff will conduct research on problems related to the structure of immunoglobulins and their interaction with antigens and cell surfaces.

Dr. Metzger, a PHS medical officer, is a former staff member of the Section on Connective Tissue Diseases, ARB.

A graduate of Columbia University School of Medicine, his chief interests lie in both clinical and basic research in autoimmune diseases.

In a parallel action, Dr. Robert T. Simpson has been named chief of the Section on Developmental Biochemistry in the NIAMDD's Laboratory of Nutrition and Endocrinology.

HEPATITIS A VIRUS MAY HAVE BEEN VISUALIZED

(Continued from Page 1)

similar to the hepatitis A agent. The Norwalk agent was found to be associated with a form of acute infectious nonbacterial gastroenteritis—intestinal flu—in humans.

The IEM method involves the use of serum from convalescent patients which usually contains antibody specific for a causative organism. This antibody, when mixed with infective material, coats the infecting particles and makes them appear in aggregates or groups or as readily recognizable individual units.

The procedure enables the recognition—not possible by conventional electron microscopic examination—of a very small virus which may be present in small numbers.

In their initial experiment, the NIAID team examined stool filtrates which had been obtained from four adult volunteers, before and after they were infected with hepatitis A in the Illinois study.

The scientists found the small, virus-like particles in two of the four acute illness specimens after incubation with serum from a convalescent hepatitis A patient. In contrast, they could not detect particles in any of the four pre-infection specimens.

Using the stool filtrates derived from one of the acute phase specimens that had detectable particles, the scientists examined several groups of sera for antibody to this virus-like antigen.

Antibody in Volunteers

They found antibody to the antigen in all sera from six volunteer study patients—four from Illinois and two from an investigation carried out in 1967 in New York.

None of these volunteers showed evidence of antibody prior to infection. In addition, the NIAID group found serologic evidence of infection with the virus-like particle in six patients who had naturally acquired infectious hepatitis.

Three of these were students

at the College of the Holy Cross in Massachusetts during the 1969 hepatitis outbreak there and three were scientists who acquired the disease in American Samoa.

In other experiments, the investigators were unable to detect any relationship between the hepatitis A antigen and the "Australia" or hepatitis B antigen which is associated with hepatitis B disease.

In addition, they were unable to detect a serologic relationship between the hepatitis A antigen and the Norwalk agent.

The scientists also tested two samples of commercially prepared immune serum globulin, which protects against or modifies hepatitis A illness.

They found that one of the lots contained a substantial quantity of antibody, whereas the other contained only a moderate quantity of antibody to the newly-found hepatitis A antigen.

Further Testing Suggested

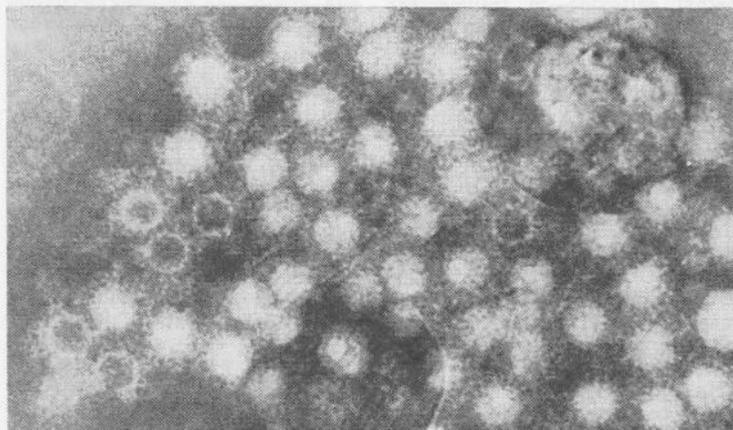
The investigators suggest that testing for antibody to hepatitis A antigen may prove useful in standardizing the potency of immune serum globulin.

The NIAID investigators, who reported their work in the current issue (December 7) of *Science*, conclude that their data strongly suggest that the observed small virus-like particle is the causative agent of hepatitis A.

Electron microscopic identification of the virus should aid in attempts to isolate the virus in cell culture. Growing a supply of virus is a necessary prerequisite to vaccine manufacture.

More immediately, the discovery of this virus-like antigen and the development of a technique able to detect antibody to it provide, for the first time, a means of diagnosing and studying hepatitis A.

These findings may provide a spur to research on hepatitis A analogous to that provided to hepatitis B research by the discovery of the hepatitis B antigen.



Immune electron microscopy reveals these virus-like particles in a concentrated filtrate prepared from a stool specimen of a patient with hepatitis A. Magnification is 225,000 times.

Drs. Kouwenhoven, Zoll Receive Lasker Award

Dr. William B. Kouwenhoven and Dr. Paul M. Zoll have been named recipients of the 1973 Albert Lasker Award for Clinical Medical Research.

Much of the work for which they were honored was supported by grants from the National Heart and Lung Institute.

Heart Massage Pioneer

Dr. Kouwenhoven, department of surgery, Johns Hopkins University School of Medicine, was cited for originating closed chest cardiac massage and for his contributions to techniques for the control of potentially fatal heart-rhythm disturbances, including the development of devices for both open and closed chest defibrillation.

Closed chest cardiac massage requires only the hands for the rhythmic application of pressure to the breastbone.

In victims of cardiac arrest, the rhythmic compression of the heart between breastbone and spinal column maintains its output of blood and, combined with mouth-to-mouth resuscitation, can sustain life until definitive therapy becomes available.

The technique has been taught to firemen, rescue workers, and policemen and its application has saved thousands of lives.

Dr. Paul M. Zoll, Department of Medicine, Harvard Medical School and Beth Israel Hospital, was cited for his contributions in developing electrical techniques for restarting arrested hearts, correcting heart-rhythm disturbances, and sustaining a regular heartbeat with artificial pacemakers in patients with chronic heart-rhythm abnormalities.

Pacemakers Not Uncommon

Today, an estimated 60,000 Americans have received artificial pacemakers for the control of disabling, chronic arrhythmias, and an estimated 12,000 to 15,000 new pacemaker implants are done annually.

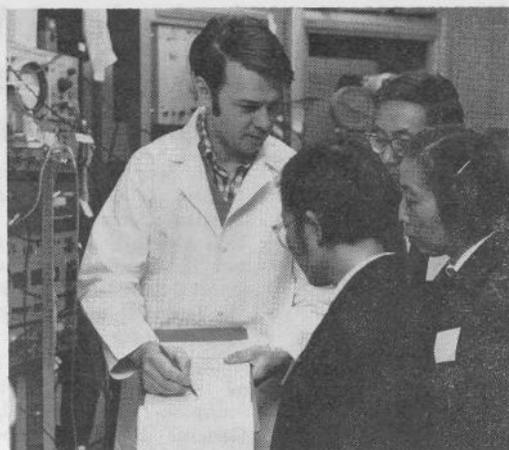
Dr. Zoll also developed the theory and technique for the continuous monitoring of heart rhythm now widely practiced in hospital coronary care units.

Symphony Orchestra to Present Concert, Sunday, December 16

The NIH Symphony Orchestra, conducted by Robert Webb, will present a concert at 3 p.m., Sunday, Dec. 16, in the Masur Auditorium.

The program will include the Fugue in G Minor by Bach, Symphony No. 31 by Haydn, and Symphony No. 5 by Schubert.

There is no charge for admission.



PEOPLE'S REPUBLIC OF CHINA SCIENTISTS spent 3 days at NIH, Nov. 5-7. The nine-member group—for whom briefings were held—visited a number of laboratories. Part of the group was interested in the physiology of pain, the other, in biomedical engineering. Their tour included (top, left to right) visits to Dr. Ronald Dubner, chief of NIDR's Neurophysiology and Anesthesiology Branch; Dr. Ante L. Padjen, visiting scientist from Yugoslavia, NIMH, at St. Elizabeths, and Dr. Arnold W. Pratt, DCRT Director, who is explaining how the remote terminal in his office works. Later (r) the Chinese visitors met with Dr. Robert S. Stone, NIH Director.

NIEHS-EPA Conference Covers Possible Effects Of Ingested Asbestos

The National Institute of Environmental Health Sciences and the Environmental Protection Agency recently co-sponsored a conference in Durham, N.C., to discuss what is known and suspected about the possible effects of ingested asbestos.

The conference brought together approximately 140 scientists from various parts of the world to outline research needed to assess the threat of swallowed asbestos.

Particles of asbestos breathed in with air can sometimes affect the lining of the abdomen or chest to produce a form of cancer called mesothelioma.

Frequency Unexpected

Also, gastro-intestinal cancers, such as cancer of the esophagus, stomach, colon and rectum, tend to occur more frequently than expected in persons exposed to asbestos dust.

One explanation suggests that asbestos fibers coughed up from the lung are swallowed, and thus have a chance to enter the gut wall to induce cancer.

However, at present too little is known to draw any conclusions about the possible adverse effects of asbestos taken in with food and water.

Over the next 5 years, NIEHS will invest approximately \$2.9 million to support an Environmental Health Sciences Center to concentrate on asbestos research.

The center has been established at the Mount Sinai School of Medicine in N.Y.C. under the direction of Dr. Irving J. Selikoff, a pioneer in asbestos epidemiology.

DR. LEVY

(Continued from Page 1)

from Cornell in 1957. He attended Yale University Medical School, where he received his M.D. degree, cum laude, in 1961 and also won the Keese Prize for his research thesis.

As chief of the Institute's Lipid Metabolism Branch for the past 2 years, Dr. Levy has been responsible for the establishment of a continent-wide network of Lipid Research Clinics.

These Clinics are engaged in research and demonstration projects designed to improve the diagnosis and management of blood fat disorders and determine the prevalence of these disorders in the population and their association with coronary artery disease.

Investigators at the Clinics will also determine whether lowering blood cholesterol in high risk patients will prevent or retard the development of atherosclerosis—the most common form of arteriosclerosis and the Nation's number one killer.

Applications Now Available for PHS Art Exhibit Next Spring

An art exhibit will be held in conjunction with the PHS Professional Association's meeting next April in Washington, D.C.

Those who register for the conference and their immediate family members (over age 16) are eligible to submit applications for entries in six categories: oils and acrylics; water colors; sculptures; graphics including pen and ink, etchings, lithographs, colages, etc.; photographs, black and white, and photographs, color.

The entry fee is \$2 and applica-



HEW Makes CFC Goal; NIH, Campaigners Cited

Eight NIH employees were singled out for special honors at the Combined Federal Campaign victory celebration held last Thursday, Nov. 29, at the HEW North Auditorium to mark the first time the Department reached its CFC goal.

The overall Government group also surpassed its goal.

HEW Sec. Caspar W. Weinberger, CFC chairman for the Metropolitan area, praised the participants' efforts in making the campaign such a success.

Dr. Robert S. Stone, NIH Director, accepted the 1974 CFC Award presented to NIH for outstanding achievement.

According to the latest NIH tabulation — with contributions still trickling in — \$207,334 has been collected here.

Secretary Weinberger also presented a Special Recognition Award to Dr. Stone.

The Secretary's Certificates for Outstanding Performance were presented to Kent A. Smith, of NLM, CFC Coordinator for NIH; James J. Bozek, FIC; Jerome N. Kerkhof, NLM; Leland W. Mosedale, OD, and John A. Wassell, DRG.

A Special Secretary's Recognition may be obtained by calling Dr. John M. Lynch, chief of the Employee Health Service, Ext. 64411.

tion Award for creativity in conducting the campaign went to two NHLI employees, Mildred F. Gettings and Marceline H. Lee.

Special recognition was also given to Tony d'Angelo, ODA—NIH Stage Dance Band. The band played at numerous CFC rallies and at the victory celebration.

After the presentations, the award winners and special guests attended a reception in the Snow Room.

EHS Changes Arrangements For Care of NIH Personnel

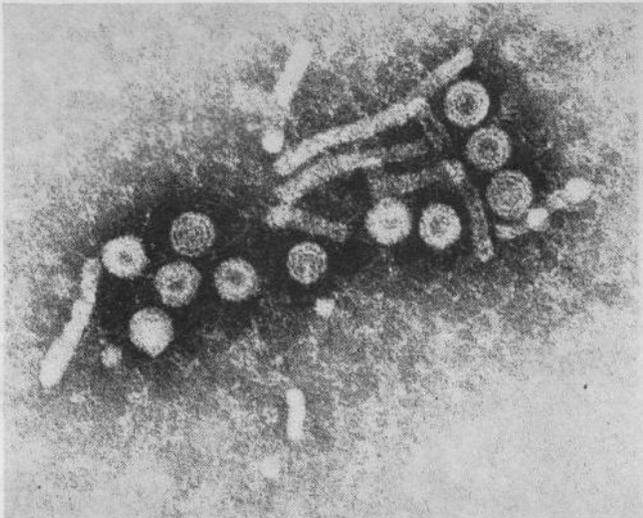
The Employee Health Service has announced that it is changing its emergency health care arrangements during non-regular work hours. However, there will be no change in services between 8:30 a.m. and 5 p.m. on working week days.

EHS will no longer be open on weekends and holidays. This ruling became effective last Sunday (Dec. 1).

Employee emergency medical care during non-regular working hours will now be available under an expanded arrangement with Suburban Hospital.

A detailed account of the new proceedings is given in a memorandum that has had a desk-to-desk distribution throughout NIH.

Discovery of Elusive Virus That Causes Hepatitis B Gives Clue for Prevention



Dane particles and filamentous forms of hepatitis B antigen found in hepatitis B disease. Magnification, 150,000 times.

NIH-supported scientists may have found the elusive virus that causes human serum hepatitis.

The disease causes 6,000 deaths a year, mostly in people who have received infected blood products during transfusions.

Scientists have long suspected that serum hepatitis is caused by a virus which can be transmitted from person to person by infected blood materials.

Nucleic Acid Found

Now, investigators have found evidence that the agent which causes serum hepatitis contains nucleic acid, the genetic material for many viruses and other organisms, including man.

This is the first clue that the agent has one of the most important attributes of a conventional virus. Until this time, the virus itself had never been isolated and cultivated in living cells, nor had scientists shown conclusively that it contained nucleic acid.

Findings Are Important

These findings are important if a vaccine is to be developed to prevent the disease, and could also lead to a better test for detecting infectious blood and blood products.

For several years, scientists have known that a foreign substance, or antigen, is associated with serum hepatitis (also called hepatitis B).

In the sera of hepatitis patients or carriers this antigen exists in three physical forms: a small sphere; a filamentous form, and a larger, more complex particle having an outer coat and a smaller inner core.

The complex form is called the Dane particle after the British investigator who first described it in 1970.

Since the Dane particle's appear-

ance is similar to that of a virus, scientists have been trying to detect associated nucleic acid or some other marker of viral activity which could confirm that the particle is the long-sought-after hepatitis B virus.

The team of scientists found just such a marker—an enzyme called DNA polymerase which directs the synthesis of deoxyribonucleic acid (DNA), one type of nucleic acid.

NIAID-AEC Sponsored

Molecular Anatomy Laboratory scientists—sponsored by the National Institute of Allergy and Infectious Diseases and the Atomic Energy Commission—first examined plasma samples from chronic carriers of hepatitis B antigen using electron microscopy.

Dr. John L. Gerin of MAN Laboratory selected eight patients whose sera had relatively high concentrations of Dane particles. The sera from these individuals were then concentrated and purified by Dr. Gerin.

Results Noted

Working with these preparations, a team of Stanford University Medical School scientists detected DNA polymerase activity in each of the eight sera. In contrast, the Stanford researchers were unable to detect any DNA polymerase activity in seven samples of sera from people who did not have hepatitis B antigen.

From other experiments, the investigators determined that the core of the Dane particle most likely contains a DNA "template" which directs the synthesis of DNA.

These findings, although indirect,

Dr. Stephen G. Waxman Delivers First Lecture In Tuve Memorial Series

Dr. Stephen G. Waxman, clinical fellow in neurology at Harvard Medical School and a resident in that specialty at Boston City Hospital, was the first guest lecturer in the new Trygve W. Tuve Memorial Seminar Series held recently at NIH.

The series—named in memory of the late associate director for manpower, National Institute of General Medical Sciences—honors outstanding young scientists supported through NIH intramural and extramural programs.

Was NIGMS Trainee

Its objective is to foster the exchange of ideas and information between these two programs.

Dr. Waxman is one of 50 graduates of the NIGMS Medical Scientist Training Program, which provides support for combined medical and scientific training to highly-motivated persons of superior research potential.

In his lecture on structural differentiation of axons, Dr. Waxman observed that these axons—fibers

suggest that the Dane particle is the human hepatitis B virus that scientists have been seeking for so long and that the virus itself is a DNA virus.

A better test for infectious blood and blood products could be one in which polymerase activity would be a marker of infectivity. Currently, screening tests for hepatitis B rely upon detection of hepatitis B antigen.

Researchers Listed

In addition, identification of the Dane particle as the virus of hepatitis B would be an important step in development of a vaccine, since, traditionally, isolation and growth of a virus in tissue culture is a vital prerequisite.

This research was carried out by Drs. Paul M. Kaplan, William S. Robinson, and Richard L. Greenman of the Stanford University School of Medicine; Dr. John L. Gerin of the MAN Laboratory, Rockville, and Dr. Robert H. Purcell of NIAMDD's Laboratory of Infectious Diseases. (Dr. Kaplan is now at the MAN Laboratory.)

Other Support Given

In addition to NIAID and AEC support, the scientists received funds from the National Cancer Institute; the National Institute of Arthritis, Metabolism, and Digestive Diseases, and the Damon Runyon Memorial Fund.

A report of the research is published in the November issue of the *Journal of Virology*.

Dr. Michael Sela to Give NIH Lecture on Dec. 12

Fogarty Scholar Dr. Michael Sela will present the next NIH Lecture, Probing into Immunological Phenomena: From Molecule to Cell, on Wednesday, Dec. 12, in the Masur Auditorium.

Dr. Sela is dean of the faculty of biology and head of the department of chemical immunology at the Weizmann Institute of Science, Rehovot, Israel.

that carry impulses from nerve cells to other areas of the central and peripheral nervous systems—are not simple "transmission lines" but far more complex structures requiring intensive study.

New information on the structure and function of axons is needed, Dr. Waxman said, to determine what happens in nerve cells when protective coatings around nerve tissues are damaged by disease or injury.

Myelin Destroyed

Such damage may result after severe injury to the spinal cord or in diseases such as multiple sclerosis. In either case, the myelin sheath which protects the fibers is often destroyed or severely damaged.

The Tuve Memorial Seminar Series was established by friends of Dr. Tuve shortly after his death in 1972 at the age of 38.

Funds Contributed

They contributed funds to the Foundation for Advanced Education in the Sciences to support an appropriate activity in his memory.

During much of his 14-year career at NIH, Dr. Tuve played a key role in the administration of the MSTP and other NIGMS training activities for young scientists.



Dr. Waxman holds both the M.D. and Ph.D. degrees from Albert Einstein College of Medicine in New York.