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the NIH Record

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

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NATIONAL INSTITUTES OF HEALTH
PUBLIC HEALTH SERVICE

LAB Is First Federal Civilian Animal Facility Accredited by AAALAC

The Laboratory Aids Branch, Division of Research Services, is the first federal civilian animal facility to be accredited by the American Association for Accreditation of Laboratory Animal Care. Announcement of this was made recently by Dr. Robert J. Byrne, Chief of the LAB.

The Laboratory Aids Branch,

Claude W. Tibbs, Animal Caretaker, holds a small sample of the more than one million rodents and rabbits issued to NIH scientists during FY 1966 by the DRS Laboratory Aids Branch. —Photo by Sam Silverman.

one of the largest animal facilities in the world, is responsible for the production of rodents and rabbits; for the conditioning of dogs, cats and primates; for maintaining

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NIH Bond Drive Extended To July 1 in Effort to Up PHS Participation to 75%

The NIH Savings Bond Drive has been extended to July 1, 1966, to give those institutes and divisions who have not attained their percentages of participation an opportunity to do so.

Dr. Eugene A. Confrey, director of the NIH drive, calls upon all employees who have not given their support to respond to the President's request that the Public Health Service bond participation be increased to 75 percent.

Leukemia Investigators Heartened by NCI Report on Results of Drug Treatment

A National Cancer Institute study demonstrating the increased effectiveness of a new schedule for combination drug treatment of acute leukemia was reported recently to the American Association for Cancer Research by the study's chief investigator, Dr. Edward S. Henderson, Medicine Branch.

In the study begun January 1964, children with acute leukemia were treated intermittently with massive doses of 4 anticancer drugs for 15 months. The children's symptom-free remission periods lasted twice as long as those reported in earlier studies of 4-drug combinations and, in most cases, drug resistance did not occur.

Thirty-five children with acute lymphocytic leukemia were treated intensively, according to a 3-stage, 15-month schedule, with the established antileukemic drugs: vincristine, prednisolone, 6-mercaptopurine, and methotrexate.

Thirty-two of the 35 patients (91 percent) achieved a complete

Dr. Edward S. Henderson, Head of the Leukemia Service, Medicine Branch, National Cancer Institute, checks a patient's chart at a nursing station in the Clinical Center.—Photo by Ed Hubbard.

remission within an average of 22 days of treatment. Now, 30 months later, 28 of the patients are still alive, and the median duration of the original remission for the first 23 patients was 14-plus months.

The children received the drugs in the highest doses they could tolerate for 5-day courses during the remission induction stage. In the second stage, which lasted 8 to 9 weeks, there were 4 courses of treatment, and for the final 12 months, the drugs were given once a month.

Intensive supportive care was

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Dr. Maitland Baldwin Elected to Society of Neurological Surgeons

Dr. Maitland Baldwin, Clinical Director and Chief of Surgical Neurology, NINDB, was elected to the Society of Neurological Surgeons on April 15, 1966.

The Society of Neurological Surgeons is the senior organization in neurological surgery and there are only 48 active members. It was founded by Harvey Cushing and his first colleagues, and membership in it is considered the highest honor that can be conferred on a North American neurosurgeon.

NIH Scientists Attend International Conference On Leprosy, Tuberculosis

Among the 29-man American delegation to a joint international conference on leprosy and tuberculosis held recently in Tokyo were Dr. James E. Banta and his assistant, Dr. Philip Ross, both of the Office of International Research, NIH.

The conference was the first undertaking of the U.S.-Japan Cooperative Medical Science Program created last year by President Johnson of the United States and Prime Minister Sato of Japan.

The secretariat for the program is located in the OIR, and is under the guidance of Dr. Banta, Head of the Special International Program Section, and Dr. Ross.

The Tokyo conference brought together American and Japanese scientists and experts from the Republic of Korea, the Philippines, Malaysia, India, Australia, Great Britain, France, West Germany and Switzerland to exchange latest research findings on the basic microbiology, prevention and treatment of tuberculosis and leprosy.

Data presented by several inves-

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Dr. Rowe Receives Langer Award for Cancer Research

Dr. Wallace P. Rowe of the National Institute of Allergy and Infectious Diseases received the Esther Langer - Bertha Teplitz Award for 1966 and a check for $1,000 from the Ann Langer Cancer Research Foundation at a ceremony in Chicago June 5 for his work in the field of virus-cancer research.

Dr. Rowe

The Langer Foundation, a private fund-raising organization, makes annual contributions to the University of Chicago Cancer Research Foundation, the Bobs Roberts Memorial Hospital for Children, Mt. Sinai Hospital, and the Cancer Prevention Center, all in Chicago; and to the Hebrew University in Jerusalem.

Dr. Rowe has been head of the *oncolytic and oncogenic virus unit* of the Laboratory of Infectious Diseases, NIAID, since 1957. He joined the Institute staff in 1952, after 3 years as a virologist at the Naval Medical Research Institute, Bethesda, Md.

Dr. Rowe was a member of the NIAID research team which in 1953 first isolated and described the adenoviruses and established that

(See DR. ROWE, Page 3)

Remote Console Offers New Computer Service

The recent installation of several remote teletype consoles at NIH connected to a powerful General Electric 235 computer in Arlington, Va. is the first step to provide remote computing service in the central computer facility.

According to officials of the Division of Computer Research and Technology who coordinated the installation, the big advantage of a remote teletype console is that it gives direct and immediate "on line" access to the computer.

It means that a scientist can

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the NIH Record

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NEWS from PERSONNEL

YOUTH OPPORTUNITY CAMPAIGN

NIH is participating again this summer in the President's Youth Opportunity Campaign by providing summer jobs to young people who need work because of economic or educational disadvantage.

The ages of this group of employees, designated Youth Trainees, will range from 16 through 21 years, both male and female. As a group they will be qualified to perform laboring and other work of a routine nature requiring no special skills or knowledge. They will be placed in jobs where they can learn good work habits and render useful service, so that, it is hoped, they will be able to continue their education through their own efforts.

Interested supervisors who provide leadership and guidance to these Youth Trainees can help to make this summer work meaningful and of mutual benefit to both NIH and the young people.

For those Youth Trainees who may need financial aid to cover lunch money and carfare during their first week, the NIH R&W has agreed to make a $10 loan, interest free and repayable out of the first paycheck. Application for such loans should be made through the I/D personnel offices which will refer requests to the R&W office.

E-M GUIDELINES

The Personnel Management Branch has prepared an instructive guide, entitled "Employment-Management Cooperation at the National Institutes of Health," for use by supervisors.

This booklet highlights important aspects of the collective bargaining machinery which has been established in the Federal Service by Executive Order 10988. It specifically discusses the obligations which this program places upon management officials and supervisors and spells out the rights of employees and their union.

Development Rapid

At NIH the Employee-Management Cooperation program has been developed rapidly during the last two years. Several areas now have exclusive recognition, and in some of these areas labor agreements have been negotiated. It is expected that other areas will become involved in the program.

Supervisory personnel who have union members among their employees are encouraged to obtain a copy of the booklet, if they have not already received one from their personnel office. Additional copies may be obtained from the I/D personnel offices.

Aiding Autistic Children Is Subject of Program Set for June 17 at CC

A program to stimulate interest and optimism in creating proper and adequate service facilities for the mentally handicapped child in the local area will be presented by the National Society for Autistic Children, Inc., Friday, June 17, at 8 p.m. in the main auditorium of Building 10.

Dr. Larry Dizmang, Office of the Director, the National Institute of Mental Health, will show a film, "The Headbangers," a story of the successful treatment of severely disturbed self-destructive children.

Gilbert Freitag, Psychologist from Yale University Psycho-Educational Clinic, New Haven, Conn., will describe a treatment and educational program designed for autistic children.

Admission is free.

Red Cross Hospital Volunteers Assume Additional Duties Along With New Name

Volunteer workers at the Clinical Center recently have received not only a new name, but new responsibilities as well.

Red Cross Hospital Volunteers, formerly known as "Gray Ladies," or "Gray Service Workers," are helping to fill a gap created by the critical shortage of nursing personnel by assuming an expanded role in patient care.

Hospital Volunteers now provide "supportive care" by accompanying patients scheduled for diagnostic tests, chaperoning women patients during physical examinations, feeding patients, and assisting patients in wheelchair transportation.

These duties are an addition to such traditional ones as letter writing, shopping and other morale-boosting services.

Margaret Benson, Chief, National Institute of Allergy and Infectious Diseases' Nursing Service, conducted a short-term training course this spring to instruct volunteers in techniques necessary to these aspects of nursing care.

In her new role as a Red Cross Hospital Volunteer, Ora Tamm prepares to escort a Clinical Center patient to a diagnostic test.—Photo by Ralph Fernandez.

Need Increases

"Progress in medicine means that more auxiliary workers will be needed to provide personalized patient care," Miss Benson said. "As doctors are able to do more for patients, additional staff members will be needed to keep pace with medical advances. These volunteers are helping to fill the need for more para-medical personnel."

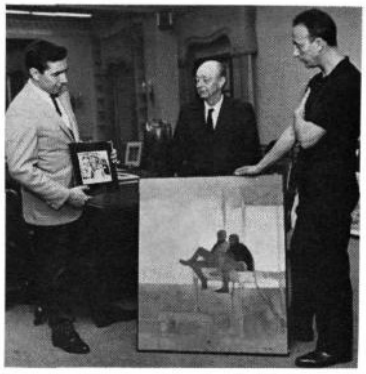
Another feature of the change in services is that volunteers will be assigned to a particular nursing unit. In the past Hospital Volunteers went where needed. Because they moved about the entire hospital it was difficult for them to form close relationships with either the patients or the staff. By being stationed on a single floor, the volunteers will be able to establish an identity with patients and thus contribute even more to their well-being.

Betsy Popoff, chairman of the NIH Hospital Volunteers, explained that the expansion of volunteer services is nation-wide.

Survey Taken

"The National American Red Cross conducted a survey to determine what hospitals needed in terms of volunteers. As a result of this survey, many services—nurses' aides, canteen workers, and Gray Ladies—have been combined under the new nomenclature," she said.

The CC volunteer program also has inaugurated an additional orientation class in June so that potential volunteers can come into the program throughout the year. In the past the program has lost applicants because the individuals could not wait for the yearly fall orientation conference.



Judges in the 8th Annual NIH Art Exhibit, sponsored by R&W, show their prize-winning selections in three categories: (from left) graphic arts, judge Frank Wright, Instructor at Corcoran Gallery of Art, holds an untitled work by Kathi Giberman; James McLaughlin, Curator of the Phillips Collection, stands behind Norma Eskenazi's oil painting, "Lifeguards," and Alfredo Halegua, former American University Instructor, looks at Jennie Lea Knight's sculpture (center), "Blind Owl."—Photo by Ed Hubbard.

NIH Donors Give 165 Units To CC Blood Bank in May

The Clinical Center Blood Bank reports that 165 units of blood were received from NIH donors in May. During the same period CC patients received 1,637 units of blood.

Six NIH staff members joined the "gallon-donor club." They are Albert R. Cannon, DCRT; Sidney J. Cutler, NCI; William E. Garrett, DRS; Adolphus H. Horne, DRS; W. Glen Moss, NHI, and Irving Nash, NINDB.

C. Landreau of DRFR Will Retire on June 17

After 24 years in Government, 17 of them with the National Institutes of Health, Caroline Landreau is retiring. Next Friday (June 17), she leaves the Division of Research Facilities and Resources where she headed the Grants Management Section, Health Research Facilities Branch.


Mrs. Landreau

One of the first employees to join the HRF Branch when it started in 1956, Mrs. Landreau shared the citation commending the staff for getting the construction program underway.

She began her civil service career with the U.S. Housing Authority, coming to NIH in 1949. Her positions here have included assignments in the Division of Research Grants, the National Heart Institute and the Division of Research Facilities and Resources.

DR. ROWE

(Continued from Page 1)

some human adenoviruses cause a variety of widespread acute infections in their natural hosts.

The same team later discovered the T antigens in tumors produced in animals by certain adenoviruses. These antigens are a previously unknown type of virus protein which is produced by the tumor cells.

Dr. Rowe is among the research workers investigating the possible role of adenoviruses in the induction of human cancer.

He has also participated in the discovery and continuing study of "hybrid" tumor viruses, a combination of two known viruses which produces a third, more highly oncogenic virus. This work has led to new concepts on the origin of new viruses and on the mechanism by which they may produce cancer.

Dr. Rowe and his coworkers in the Laboratory of Infectious Diseases developed tissue culture detection and antibody tests for mouse polyoma virus and the mouse leukemia viruses.

These new techniques have become standard methods for studying many cancer-producing viruses and various leukemias. They make possible for the first time studies of the natural history of these viruses in their natural hosts.

Dr. Rowe studied at the College of William and Mary and Johns Hopkins University, and received his M.D. degree from Johns Hopkins Medical School. He won the Eli Lilly Award of the Society of American Bacteriologists in 1960 and was Mary Scott Newbold Lecturer at the College of Physicians of Philadelphia in 1961.

Experimental Vaccines Against 3 Types Of Parainfluenza Viruses Show Promise

Experimental vaccines against three types of parainfluenza viruses, important agents of severe respiratory tract infections in infants and children, have shown promise in early tests at Children's Hospital of the District of Columbia.

The encouraging advance against such illnesses as croup and broncho-pneumonia was reported in the June 6 issue of the Journal of the American Medical Association by Drs. Hyun Wha Kim, Jose C. Canchola, Andrew J. Vargosko, Julita O. Arrobio, and Robert H. Parrott of the Research Foundation of Children's Hospital and Georgetown University School of Medicine, and Dr. J. L. DeMeio of the National Drug Company.

The vaccines are among the earliest developed through the sponsorship of the Vaccine Development Program of the National Institute of Allergy and Infectious Diseases.

Studies Monitored

The report submits evidence that experimental killed vaccines against parainfluenza viruses type 1, type 2, and type 3 were safe and 90 to 100 percent effective in stimulating a significant rise in the level of protective antibody in young infants.

Studies of these experimental vaccines are being continuously monitored by the Institute's Vaccine Development Committee for both safety and efficacy.

The three vaccines were injected into adult volunteers before being tested in 36 infants, and were well tolerated by both adults and infants, the investigators report.

Ten infants received two injections 1 month apart of parainfluenza virus type 1 vaccine, plus a later "booster" injection. Nine of the ten developed a significant rise in antibody level 2 weeks after the third injection.

Of ten infants who received two injections of parainfluenza virus type 2 vaccines, nine showed a four-fold increase in antibody 2 weeks after the second injection. For that reason, no "booster" type 2 injection was given.

All of 16 infants who received three injections of parainfluenza virus type 3 vaccine showed a significant rise in the level of protective antibody.

The scientists recommend that these vaccines be combined in a polyvalent preparation for early use in evaluation studies.

Parainfluenza viruses 1, 2, and 3 are among the causes of an estimated one-fifth of respiratory tract illnesses serious enough to require hospitalization of infants and small children.

How well the vaccines actually protect against the illnesses will be evaluated in future controlled field trials.

West German Dentists Tour NIDR's Facilities

Several members of the West German Dental Association were visitors at the National Institute of Dental Research on May 25.

Dr. Rene Clemancou, Chief of Oral Surgery, University of Bern, Switzerland, was also with the group.

After a welcoming address by Dr. Loren F. Mills of the NIDR staff, a scientific program was presented, the NIH orientation film was shown, followed by a tour of the research facilities.

Dr. Mills, who was the German interpreter on General Mark Clark's staff during World War II, served as interpreter for the visitors.


One of a series of four Television Seminars arranged for NIH information personnel by Virginia Stuart (left), Consultant, covered TV Public Affairs, Special Programs and NIH Information. With Mrs. Stuart are Al Dalnig, Program Director, WDCA-TV, and Susan Olney, Producer, News and Public Affairs, WTTG-TV. Purpose of the recently completed seminars was to promote a better understanding of broadcast requirements through personal contact and discussion between IO's and media representatives.—Photo by Thomas Joy.

James Augustine Named DRFR Information Head

James Augustine has been named Information Officer for the Division of Research Facilities and Resources by Dr. Thomas J. Kennedy Jr., Chief of the Division.


Mr. Augustine

Mr. Augustine comes to DRFR from the Public Health Service's Diabetes and Arthritis Program where he was Public Information Officer.

In 1956 Mr. Augustine was an information specialist with the U.S. Army at Valley Forge Army Hospital, Phoenixville, Pa. While serving there, he was awarded a Freedom Foundation Medal for an essay submitted in the Foundation's annual competition.

Mr. Augustine was graduated from the University of Virginia in 1960.

The following year he joined the Food and Drug Administration as an editor, and in 1962 transferred to the PHS.

'Common Cold' Common in Summer, Too—Volunteers for Lab Study Urgently Needed

The 'common cold' knows no season . . . neither does the cold study being conducted by NIAID's Laboratory of Infectious Diseases.

This long-term research project still needs volunteers with colds.

Employees with summer colds are requested to contribute samplings of nasal secretions plus two blood samples. Participants receive $2 for each blood sample.

Appointments may be made by calling Mrs. Sara Kelly or Harvey James, Ext. 65811, within the first three days of infection.

If possible, employees are urged to schedule appointments in the morning to give investigators ample time for processing.

Irmogene Adams Retires, In Government 30 Yrs.

Mrs. Irmogene R. Adams, a practical nurse in the CC Nursing Department's Allergy and Infectious Diseases Nursing Service, retired recently after 30 years' government service.

Mrs. Adams joined the nursing staff here shortly after the Clinical Center opened in 1953. She received practical nurse training at Goldwater Memorial Hospital, New York, N.Y. and the Clinical Center.

NHI Scientists Search College Records For Clues to Coronary-Prone Types

Can college records shed light on factors that may precede by several decades the development of hypertension and coronary disease?

Epidemiological studies conducted by scientists of the National Heart Institute over the past several years indicate they can—and have. Their work is based on the assumption that some of the contributory factors to coronary disease can be identified early in adult life and thus provide forewarnings to those in potential danger.

Prevention, rather than cure, is the goal sought here. Untimely death from heart disease for so many men at a time when their productive capacity is at its highest constitutes a tremendous community loss.

Program Concentrated

Thus far the study program has concentrated on some 45,000 former students at Harvard and the University of Pennsylvania. Data used were gathered from physical, environmental and psychological records made during their college years. These have been correlated with their later health status as measured by answers to questionnaires, further case-taking, alumni records, and death certificates.

The college records provided data on examinations over a period of 30 successive years since 1920. Most of the living study subjects are now between 30 and 65 years old.

Nearly 85 percent of questionnaires mailed out by the investigators were returned, providing new information on about 18,000 persons. Questions asked were mostly related to cardiovascular diseases and social habits.

The investigators sought to identify doctor-diagnosed cases of high blood pressure, angina pectoris, heart attack and related disease. They also asked about smoking and physical activity, parental diseases and death.

Comparison Made

For the study of mortality from coronary heart disease, the first 590 male coronary deaths were identified and their records compared with those of classmates known still to be alive. Two such surviving classmates per decedent were randomly chosen as study controls.

In terms of their contribution to death from coronary disease, nine characteristics have been identified as distinguishing those dying from coronary disease from their living classmates. Findings were similar for two universities, hence the results were pooled for presentation.

Early heavy smoking of cigarettes turned up as having the strongest single influence. Although collegiate smoking patterns may have changed later in life, smoking half a pack daily in young adulthood was associated with 60 percent higher coronary mortality for all age groups.

Next came high blood pressure, then obesity, short stature, early parental death, absence of brothers and sisters, low levels of physical activity, anxiety and depression, and finally, scarlet fever in early life.

As for college athletics, an inverse relationship was determined between participation in varsity sports and coronary death. From this it was deduced that high levels of physical activity have either a protective effect afforded by vigorous physical exertion or a selective effect gained from the endowment of a strong cardiovascular system.

Emotions a Factor

Students with emotional problems indicating anxiety or depression while in college experienced a two-fold increase in coronary risk among subjects who died before 45 years, but only a slightly higher risk thereafter.

Short body stature (less than 68 inches), loss of father or mother before entering college, and being an only child, were characteristics that showed a cumulative effect when combined as pairs or altogether.

There may be other characteristics or combinations that will indicate the coronary-prone individual and enable physicians to recommend measures to reduce the individual's heart-disease risk at a time when such measures are most likely to be effective, but at present these have not been identified.

A preliminary report has been prepared for publication in a forthcoming issue of the Journal of the American Public Health Association by Ralph B. Paffenberger Jr., M.D., Joel Notkin, M.D., Dean E. Krueger, M.S., Philip A. Wolf, M.D., Melvyn Thorne, M.D., Joseph LeBauer, M.D. and James L. Williams, M.D. Their progress report was presented before a meeting of the American Public Health Association.

Wiscon Bldg. Employees Are First to Use New CC Shuttle for Blood Donors

The Clinical Center Blood Bank staff has inaugurated a new blood donor shuttle service to make it possible for NIH employees in outlying buildings to donate at a time of specific patient-care need.

The plan was tried in mid-May when 17 staff members in the Wiscon building were shuttled in a station wagon to the Blood Bank, donated blood, and then were driven back. Ten other Wiscon employees volunteered for future donations.

The staff will also experiment with the shuttle service to the Westwood building, where the largest concentration of off-reservation employees is located.

In the past, a blood collection station has been set up in Westwood conference rooms 2 to 3 times a year.

Individuals in the various off-campus buildings will be notified in advance when the needs of the patients at the Clinical Center make a periodic shuttle-service visit necessary.

Dr. Donald W. Patrick, Former Director of CC, Dies in Colorado at 60

Dr. Donald W. Patrick, 60, Director of the NIH Clinical Center from 1954 to 1956, died recently in Wheat Ridge, Colo., near Denver, where he had lived following his retirement in 1957.

Dr. Patrick

Dr. Patrick was born in Denver and received his medical degree from the University of Colorado in 1930. After interning at the PHS hospital in New Orleans, he was commissioned in 1931. For several years he served in PHS stations in New Orleans and Seattle.

In 1935, Dr. Patrick joined the NIH staff and worked with Dr. R. E. Dyer, former NIH Director, on studies of typhus and spotted fever. The following year his NIH assignment took him to the Leprosy Investigations Station at the Kalihi Hospital in Honolulu.

He returned to the mainland in 1940 and served as executive officer of the Staten Island PHS Hospital, and then was medical officer in charge of PHS hospitals at Evansville, Indiana, Detroit, and Baltimore.

After his CC duty, Dr. Patrick was in charge of the PHS hospital in San Francisco. On retirement, he returned to his native state. He especially enjoyed a resort home in Estes Park in the Rockies.

He is survived by his wife, the former Margaret Ruth McGrew, of 3540 Allison Court, Wheat Ridge; and by two sons, William K. Patrick, who is with the Census Bureau in Baltimore, and Captain Thomas J. Patrick, USAF, of Westover AFB, Mass., and by five grandchildren.

Burial was in Denver.

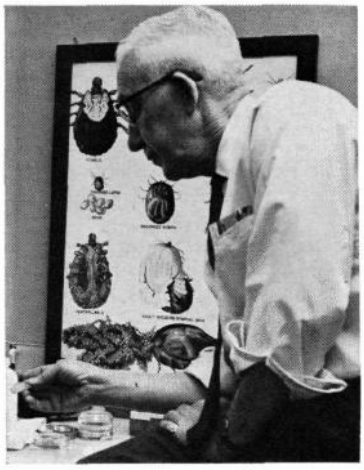
Glen M. Kohls Awarded Honorary D.Sc. Degree

Glen M. Kohls, an acarologist of the National Institute of Allergy and Infectious Diseases' Rocky Mountain Laboratory at Hamilton, Mont., has been awarded an honorary Doctor of Science degree by Montana State University.

Mr. Kohls, who is considered a world authority on tick biology and tick-borne diseases, received the degree at commencement exercises at the Bozeman, Mont. campus on June 5. He received his B.S. degree from Montana State in 1929 and an M.S. degree from the University of Minnesota in 1937.

A fellow of the American Association for the Advancement of Science, Mr. Kohls is currently president of the International Northwest Conference on Diseases in Nature Communicable to Man.

His chief professional interests have been the taxonomy and the biology of North American ticks and their role as transmitting agents of such human diseases as Rocky Mountain spotted fever, Colorado tick fever, tularemia and Q fever. He has published more than 150 articles in scientific journals.



Glen M. Kohls examines a tick specimen at Rocky Mountain Laboratory of NIAID. Mr. Kohls was awarded an honorary Doctor of Science degree by Montana State University on June 5.

Background Given

In World War II he served as an instructor in tropical and military medicine at the U.S. Army Medical School and did research on scrub typhus in New Guinea, India, Burma, and China under the auspices of the Armed Forces Epidemiological Board of the U.S. Typhus Commission. He was awarded the Typhus Commission meritorious service medal.

A native of Vesta, Minn., Mr. Kohls joined the PHS Commissioned Officer Corps in 1929 and has spent his career at the Rocky Mountain Laboratory.

Dr. Robert W. Berliner Elected APS President

Dr. Robert W. Berliner, National Heart Institute Director of Intramural Research, has been elected president of the American Physiological Society, it was announced recently.

Dr. Berliner

Dr. Berliner, who has carried out important research in renal physiology, has been a member of the Council of the APS since 1965 and Chairman of its Publications Committee since 1963. He served as President of the American Society for Clinical Investigation from 1959 to 1960. Last year he received the Homer W. Smith Award in Renal Physiology, given annually by the New York Heart Association for "significant original contributions to research in renal physiology."

Before coming to NHI Dr. Berliner led a research group at Columbia University, New York City, where he was Assistant Professor of Medicine. He was also Research Associate at the Department of Hospitals of the City of New York. He joined the Heart Institute staff initially in 1950 as Chief of the Laboratory of Kidney and Electrolyte Metabolism and has been Director of Intramural Research at NHI since 1954.

CONSOLE

(Continued from Page 1)

now sit in his lab, put his problem on an easy-to-use teletype machine and have an answer back almost as fast as he can add a column of figures.

He may consult the GE 235 on matters such as setting up simultaneous equations to represent a phenomena, calculating the amount of energy involved in a chemical reaction and many other similarly complicated mathematical computations.

Whatever his mathematical problem, the remote teletype console brings the answer back faster than ever before.

A significant feature of the new service is that a number of persons can use the computer simultaneously and produce significant results without extensive training in computer programming.

A simplified computer language called BASIC is used for problem solving. It can be mastered by novice programmers in less than a day.

One of the consoles has been installed in the training computer unit of the Computation and Data Processing Branch, DCRT. It will be integrated with the training program and made available to investigators who wish to experiment with the applicability of this form of computing to their research projects.

The training computer unit will include a discussion of the use of remote consoles in its regularly scheduled computer training course. Personnel are available for demonstrations and short orientation courses to individuals or small groups.

For further information call the training computer unit, Ext. 61297.

CC Investigators Stress Value of Using Multiple Media in Detecting Septicemias

Shown examining the computer printout on more than 20,000 CC blood test records are (l to r) Dr. William Kirkham, Dr. Viola Young, Gary Knott (DCRT programmer), and Donald Hochstein.—Photo by Ed Hubbard.

What proportion of blood infections does a laboratory staff fail to find?

High interest was evident at the American Society for Microbiology's annual meeting in Los Angeles recently when three Clinical Center investigators reported that the failure rate may be 20 percent—if the laboratory technologist uses only one liquid medium.

Dr. William R. Kirkham, H. Donald Hochstein, and Dr. Viola M. Young, of the CC's Clinical Pathology Department, reported on 20,000 blood cultures, representing 11 years' experience. At least 4, and sometimes 5, media were used to culture microorganisms and allow them to reproduce.

In 1,800 blood samples, from 800 patients, CC bacteriologists found infections, known as "blood poisoning" by laymen and "septicemias" by health personnel. If only one medium—say the widely used TSB—had been employed, about 380 of the blood samples would have been mistakenly classed as negative.

Many laboratory staffs use only one medium, and few use more than two.

Aside from noting the importance to a patient of failure to identify the cause of a septicemia, the CC investigators listed other unfavorable results. A physician may clearly see symptoms of a septicemia, but the bacteriologist, after tedious attempts, may be unable to confirm it. Both physician and bacteriologist become unsure of laboratory techniques.

Even with the use of several media, the CC investigators suspect that some septicemias escape detection. Therefore, Clinical Pathology Department personnel continue to test media. They routinely use three: trypticase soy broth (TSB), the same broth with mucin added (TSBM), and thioglycollate broth (Thio).

They have experimented with trypticase soy agar (TSA) pour plates, cooked meat medium (CM), anaerobic-culture medium (AC) and brain heart infusion medium (BHI).

Preference Given

If only one medium is to be used, the CC bacteriologists prefer TSBM. At the CC, it has produced results equal to TSB overall and even better for anerobic microorganisms than Thio, which is designed for this purpose. However, they strongly recommend multiple media.

They believe that, basically, laboratory testing techniques have not been significantly improved in 30 years. They hope additional studies will lead to better ways of overcoming substances such as antibodies and antibiotics present in blood, which restrict the growth of bacteria.

Dr. Kirkham, who is assistant chief of the Clinical Chemistry Service, also stresses that: "The early diagnosis of a septicemia can be critical, but it takes at least 18 hours to identify the responsible organism. We must find faster methods so that the correct therapy can be used as early as possible."

Science Administrators Attend Policy Seminar

An opportunity for senior science administrators to meet informally and exchange ideas with individuals playing important roles in science policy was provided recently by an NIH-sponsored seminar held at the Army Management School, Fort Belvoir, Va.

The 21 participants in the Fourth Seminar on Science and Public Policy from NIH and the National Library of Medicine spent four days living at the School, free from the interruptions and distractions of workday activities.

The interchange of ideas during this interval enabled them to obtain a clearer understanding of the varied and complex issues, relationships and influences surrounding scientific programs in the Federal Government.

Each day was divided into a morning and afternoon seminar session, with an after-dinner discussion group in the evening. Professor Norman Kaplan of George Washington University was the program leader.

Guest speakers were Dr. Charles V. Kidd, Executive Secretary, Federal Council for Science and Technology; Dr. Lee J. Westrate, Office of Management and Organization, Bureau of the Budget; Herbert Roback, Staff Administrator of the Military Operations Subcommittee, House Committee on Government Operations, and William D. Carey, Executive Assistant Director, Bureau of the Budget.

Other guest speakers were Dr. William Kissick, Chief of the Division of Public Health Methods, Office of the Surgeon General; Joseph S. Murtaugh, Chief of the Office of Program Planning, NIH; Professor Rene Dubos, Department of Pathology and Bacteriology, Rockefeller University, and Dr. John Sherman, Associate Director for Extramural Programs, NIH.

Shown participating at a session of the Fourth Seminar on Science and Public Policy for Senior Extramural Staff are Dr. Merrill S. Read, National Institute of Child Health and Human Development; Dr. William Mayer, Division of Regional Medical Programs; Dr. Marjorie Wilson, National Library of Medicine; Dr. James W. Pratt, Division of Research Grants, and Dr. Paul Pearson, NICHD.—Photo by Ralph Fernandez.

LEUKEMIA

(Continued from Page 1)

provided throughout the study. Seventy percent of the children received frequent transfusions of blood platelets to prevent hemorrhage, and a number of them required transfusions of white blood cells in addition to the antibiotics used to combat infection.

Results Described

All of the children had been referred for this therapy as soon as possible after diagnosis, and 23 of them entered the study early enough for significant long-term evaluation at this time.

Ten of the 23 remained in complete remission at the end of the 15-month treatment. Eighty percent of those who relapsed were brought into a second remission by further therapy with the original drugs, an indication that the intermittent schedule did not generally give rise to drug resistance.

Since serious resistance did occur in earlier studies in which drugs were administered daily, its absence in the intermittent schedule suggests the possibility of an indefinite series of remissions, and perhaps even long-term control of acute lymphocytic leukemia in some children.

The study was one of a planned series here at NCI and in a number of institutions in the Acute Leukemia Task Force, investigating drug schedules and dosages in an attempt to eradicate, through repeated administration of combinations of drugs, all or almost all leukemic cells. There is hope among investigators that if the malignant cell population is reduced to a very small number, the patient's own immunological defenses may then be able to destroy the remainder.

Study Outlined

In future studies, treatment schedules will be timed to take advantage of possible differences between the mitotic (cell division) cycle of cancer cells and normal cells.

Studies of mouse leukemia and lymphoma suggest that cancer cells have a short resting phase before cell division; normal cells, however, have a long resting phase during which they are relatively invulnerable to cancer drugs. Carefully timed "pulses" of drug treatment will be calculated to attack the abnormal cell population repeatedly during vulnerable periods, with less damage to normal cells which have greater opportunity for recovery. The resulting steady decrease of malignant cell population may then permit eventual cure.

Public response to news media accounts of Dr. Henderson's report was direct and immediate, as doctors and parents of leukemic children wrote, wired and called the National Cancer Institute on their behalf. Not all patients are suitable for this study but patient referrals by physicians are given every consideration.

Dr. Henderson, anxious that every child with leukemia receive the best possible care, reports that treatment methods offering the hope of extended and repeated remissions are now available at a number of hospitals in the U. S.

Facilities Extended

Facilities for the intensive supportive care usually required by the newer drug schedules and combinations are being extended to still more hospitals through NCI grants to cooperative chemotherapy groups of the Acute Leukemia Task Force.

An understandable mood of guarded optimism now persists among leukemia investigators. Two decades of research have elapsed since the discovery of the first effective antileukemia drug in 1947. Until then, a child usually lived only 2 to 4 months after a diagnosis of leukemia. The 30-month survivals already achieved by some of the participants in Dr. Henderson's study are a measure of accelerating progress.

Cooperative Effort

The concept of the new drug schedule was based on observations by Dr. Howard E. Skipper and his associates at Southern Research Institute, Birmingham, Alabama, on the results of drug treatment of mouse leukemia.

Besides Dr. Henderson, the others who were involved in the NCI study in the earlier phases include Drs. Emil J. Freireich and Myron Karon, formerly of the NCI Medicine Branch, and now affiliated with the M. D. Anderson Hospital and Tumor Institute in Houston, Texas, and Dr. Wendell F. Rosse, formerly of NCI, now of Duke University Medical Center, Durham, North Carolina.

Some days it's a real pleasure to come to work! John D. Ewan, College Relations Officer, NIH, is pictured with graduates of Marjorie Webster Junior College who recently visited the Bethesda campus. While here the group was briefed on careers at NIH by Robert L. Schultheis, Assistant Chief of Personnel, shown the NIH Film and taken on a tour of the Clinical Center by the Special Events Section. Their visit was part of a continuing program to introduce schools and students to NIH, its mission and employment opportunities. —Photo by Ralph Fernandez.

Dr. Law Vice President Of American Association For Cancer Research

Dr. Lloyd W. Law, Laboratory of Biology, National Cancer Institute, was elected Vice President of the American Association for Cancer Research at its 57th annual meeting held in Denver, Colo. recently. As Vice President he will succeed to the presidency in 1967.

Dr. Law

Dr. Law, a recognized authority on the role of the thymus in the development of cancer in experimental animals, last year delivered the invitational Fifth Annual G.H.A. Clowes Memorial Lecture at the Association's meeting in Philadelphia. A member of this year's program committee, he has also served on the Board of Directors of the Association.

At NCI since 1947, Dr. Law is also a member of the Research Advisory Council of the American Cancer Society.

Book Lists Formula and Special Grants, FY '65

Publication of a new booklet listing $105,275,666 in formula and special project grants during Fiscal Year 1965 for health services was announced recently by the Public Health Service.

Formula grants to States, totaling $50,020,000 in FY 1965, are listed also.

Copies may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at 30 cents each.

Bunim Memorial Lecture To Be Given in Denver By Noted Rheumatologist

The first in a series of lectures honoring the late Dr. Joseph J. Bunim, past Clinical Director of the National Institute of Arthritis and Metabolic Diseases, will be presented at the 1966 annual meeting of the American Rheumatism Association in Denver, Col., June 17 and 18.

Professor Jonah H. Kellgren, distinguished British rheumatologist and director of the Rheumatism Research Center at the University of Manchester, will deliver the lecture. His topic will be "The Epidemiology of Rheumatoid Arthritis."

Accomplishments Cited

Dr. Bunim's death in 1964 at the age of 58 brought to a premature end the career of one of the best known leaders in U.S. rheumatology. As one of Dr. Bunim's colleagues wrote, "His influence in the scientific and organizational development of the relatively infant field of rheumatic disease was of the first importance."

Beginning as the first medical director of the New York Chapter of the Arthritis and Rheumatism Foundation, Dr. Bunim eventually became president of the American Rheumatism Association, now amalgamated with The Arthritis Foundation.

From 1950 to 1964, Dr. Bunim was editor of the Bulletin on Rheumatic Diseases, and from 1952 on he had been the clinical director of the then newly founded National Institute of Arthritis and Metabolic Diseases.

The lecture series has been made possible by contributions to the Joseph J. Bunim Memorial Fund from his colleagues at the National Institutes of Health, the American Rheumatism Association, and New York University, as well as from many patients and friends.

LAB

(Continued from Page 1)

farm-type animals and post-experimental dogs, and supplying other essential animal-related services for NIH.

LAB was awarded a certificate citing the Branch for "demonstrating its compliance with the Association's standards." AAALAC was established to promote a voluntary program of accreditation of laboratory animal care facilities which will encourage, promote, and facilitate scientific research using experimental animals. Its function is similar to that of the Joint Commission on Hospital Accreditation.

A primary AAALAC objective is to assure the public and the accredited institution that laboratory animals are properly cared for.

CONFERENCE

(Continued from Page 1)

tigators on laboratory and field trials of BCG vaccination in leprosy control are considered the most significant reports to come out of the meeting.

BCG vaccination has been used successfully for many years in the prevention of tuberculosis. At these trials it was tested against the closely related mycobacterial disease of leprosy.

Results, while not conclusive, suggest the possibility of someday being able to safeguard entire populations against leprosy with BCG vaccination.

Heading the American delegation to the conference on leprosy was Dr. Charles G. Shepard, Chief of the Special Projects Unit, Communicable Disease Center, PHS.

Dr. Gardner Middlebrook of the Institute of International Medicine, University of Maryland School of Medicine, headed the American delegation to the tuberculosis meeting.

The Japanese delegations were led by Dr. Yoshio Yoshie, Director of the National Institute for Leprosy Research, and Dr. Tatsuro Iwasaki of the Research Institute of Japan Anti-TB Association.

In addition to leprosy and tuber-

Dr. Banta

Dr. Ross

culosis, the U.S.-Japan Cooperative Program will study and attack several other diseases highly prevalent in Asia. These are cholera, malnutrition, certain respiratory and insect borne virus diseases and the parasitic diseases, primarily schistosomiasis and filariasis.

NIH Personnel Invited to IBR Colloquium June 21

NIH personnel are invited to a colloquium at the Institute for Behavioral Research Tuesday, June 21 at 3:45 p.m.

Charles B. Ferster of IBR and John Cameron of the Washington School of Psychiatry will speak on the Linwood Project—"Laboratory Techniques with Autistic Children in a Treatment Center."

IBR is located at 2426 Linden Lane, Forest Glen.

Dr. Laster Is Consulting Editor

Dr. Leonard Laster, Chief of the Section on Gastroenterology, National Institute of Arthritis and Metabolic Diseases, has been named a consulting editor for Medical Annals of the District of Columbia.

Research of Noted Hungarian-American From NIH Exhibited at Budapest Fair

This photo of Dr. Koloman Laki working in his laboratory on the purification of the clot-forming enzyme thrombin was on display recently at the 4th Annual Budapest International Fair.—Photo by Sam Silverman.

By Mary Anne Gates

A glimpse of NIH research was caught recently by Hungarians visiting the 4th Annual Budapest International Fair. What they saw was a blown-up photo of Dr. Koloman Laki engaged in a research project in his laboratory.

The photo's caption read, "Professor Laki, Chief of the Biophysical Chemistry Laboratory of the National Institute of Arthritis and Metabolic Diseases, Bethesda, Md., has been engaged in the study of the chemistry of protein involved in blood clottting and muscular contraction."

Dr. Laki was one of two U. S. biochemists featured in a panel exhibit portraying notable Hungarian-Americans in the U. S. section of the Fair. The other chemist so honored was Nobel Prize winner Dr. Albert Szent-Gyorgyi of the Institute of Muscle Research in Woods Hole, Massachusetts.

Theme of the U. S. exhibition, presented by a six-man team from the Department of Commerce, was "Tools of America." The "tools" exhibited ranged from metal-working instruments to hi-fi kits, automobiles, and medical laboratory equipment.

Americans Featured

The section featuring Hungarian-Americans was intended to depict the many ways in which Hungarians have contributed to the development of the United States. Dr. Laki was presented with such other noted persons as Joseph Pulitzer, leading figure in American journalism; Sigmund Romberg, celebrated composer of musical comedies and light operettas; and Marcel Breuer, leader in contemporary American architecture.

"I can't imagine receiving a greater honor than to be singled out by my fellow Americans in this way," said Dr. Laki.

Born in Szolnok, Hungary, Dr. Laki attended the University of Szeged where he received a Ph.D. in organic and biochemistry in 1936. He taught and did research at Szeged from 1933 to 1944 except for a year's absence during 1938-39 to study at the University of Manchester, England, as a fellow of the Rockefeller Foundation.

Prize Awarded

From 1945 through 1947 he served on the faculty of the Institute of Biochemistry at the University of Budapest. During this time he became a member of the Hungarian Academy of Sciences and received the Kossuth Prize, the highest Hungarian award for scientific accomplishment.

He spent most of 1948 as a visiting professor at the University of Leeds, England. Later that year he came to NIH as a special research fellow in the Laboratory of Physical Biology, NIAMD.

Dr. Laki became a U. S. citizen in February 1954. That same year he was made chief of the Laboratory's section on Physical Biochemistry and in 1964, when the section was elevated to laboratory status as the new Laboratory of Biophysical Chemistry, he was appointed chief.

Dr. Laki's main research interest has been the mechanisms of blood clot formation. Among his more important contributions is the purification of fibrinogen, the protein in blood which produces coagulation.

He was the first to discover the mode of action of thrombin, one of the two enzymes that act on fibrinogen to produce coagulation. In association with Dr. Jules Gladner, also of NIAMD, he found that the clot-forming enzyme thrombin is essentially a proteolytic enzyme which splits only the protein fibrinogen. When the splitting takes place, two peptides are released. He and his co-workers established the chemical nature of these peptides and showed that they have important physiological activity on the blood vessels.

Enzyme Discovered

It was Dr. Laki who found that, in addition to thrombin, there is a second enzyme which acts on fibrinogen to produce coagulation. This enzyme acts as a clot-stabilizing catalyst by introducing crossbonds between fibrinogen molecules. Such a crossbonded fibrin clot is essential for proper wound healing.

William C. Wicht Dies; With NIH Since 1939

William C. Wicht, a biological laboratory technician at the National Institute of Allergy and Infectious Diseases' Rocky Mountain Laboratory, died May 28 after suffering a heart attack.

Mr. Wicht, 48, had been an employee of NIH since 1939, when the Institute was located in downtown Washington. He worked in the Laboratory of Infectious Diseases with Dr. Carl L. Larson, and in 1950 transferred from Bethesda to the Rocky Mountain Laboratory when Dr. Larson became its director.

Aids Director

Mr. Wicht often directed the daily work of the laboratory and continued a number of Dr. Larson's experiments while the director was on assignment in Europe for the World Health Organization.

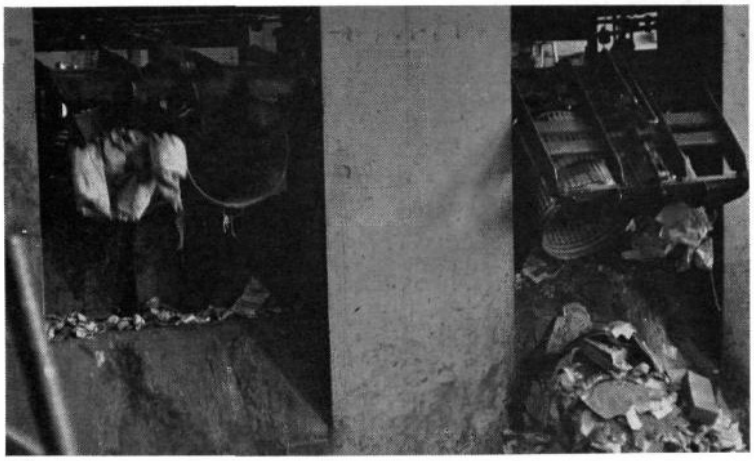
He aided in setting up the first tissue culture laboratory at the Rocky Mountain facility for its 1954 evaluation of the Salk polio vaccine. He received a superior performance award from the PHS in 1959 for his work in the allergy and immunology section of the laboratory.

In 1962 when Dr. Larson retired as director, Mr. Wicht transferred to the biophysics section of the laboratory and worked with Dr. Edgar Ribi on tuberculosis studies.

His wife, Mary Wicht, was also a laboratory technician at NIH from 1943 to 1950, and has held a similar post at the Rocky Mountain Laboratory.

About 92,000 cancer patients who died in 1965 might have been saved by earlier treatment, according to the American Cancer Society. The best way to protect yourself is to have a yearly physical examination.

Employee Cooperation Needed to Take Kinks Out of Trash Operation at NIH



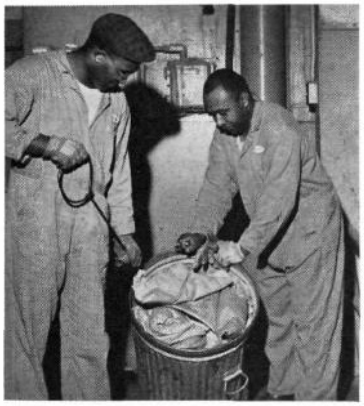
The semi-automatic can-dumping equipment, viewed from the side opposite the conveyor belt, shows here two cans that cannot be emptied because of trash wedged into the bottom.—Photos by Ralph Fernandez.

By Tony Anastasi

Instead of sheep, Roy Reynolds counts trash cans at night. Sometimes he has nightmares. All the cans on the conveyor belt come to a halt. They back up down the line because the automatic dumping device cannot dislodge the trash that somebody stamped down into the bottom of the big GI can.

Worse yet, this actually happens to Roy every day here at NIH. He heads the power plant unit (Bldg. 11) in the Plant Engineering Branch, Division of Research Services.

Every day 800-1000 of the 32-gallon refuse cans are delivered to the incinerator. About one out of three has trash wedged into the can which precludes emptying the can by automatic equipment.



George Thornton (left) and Wilbert Washington try to manually loosen the trash stuffed into one of the GI cans.

The entire can processing operation must be stopped and the can (which weighs 37 pounds empty) emptied by hand. NIH employees can help to prevent this and thus help to keep the refuse handling operation running smoothly.

"I'd like to stress two ways in which employees can help us," Mr. Reynolds said. "First, I would ask them not to forcibly push the trash down into the bottom of the GI cans, and second, I would request that they not throw unburnables (glass, metal, plastic) in with the regular refuse."

He pointed out the problems caused by throwing a pop bottle in with paper trash. All of the refuse—glass, paper, and miscellaneous—is dumped from the cans into a single storage bin in Bldg. 11.

Slows Operation

A crane picks it up and drops it into the incinerator. Since the glass and metal items don't burn, they have to be manually sifted from the ash and stored in GI cans for later removal to the refuse dump.

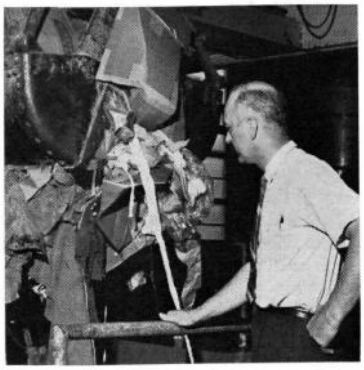
A new study of waste disposal problems at NIH is in process by the Management Policy Branch. The study thus far recommends that *all* GI refuse cans be tagged for identification purposes.

The summary of recommendations includes the revision of the current NIH policy and procedure memorandum to incorporate the requirement for tagging all GI cans, and to post new guidelines on the proper disposal of waste material in rooms where work on animals is performed.

It also recommends that the Transportation Section instruct waste collection personnel not to remove unlabelled cans from waste pick-up areas.

Present NIH policy requires only the tagging of refuse cans that contain infectious materials. The new policy of tagging all cans, if adopted, would apparently have several advantages: spotting cans ready for pick-up; tracing improperly prepared waste and items inadvertently tossed in with waste matter; and eliminating the human error factor by using prestamped tags.

With the mountain of trash daily piling up, the incinerator working to full capacity, and the plant crew working overtime, there is an urgent need now for employee cooperation in this area, since expansion of NIH facilities will increase the problem.



Roy Reynolds, head of the Power Plant Unit, watches the crane prepare to drop a load of trash into the incinerator.

Science and Public Policy Is Theme of Seminar

The second of a two-part series of annual seminars for NIH Grants Associates and extramural scientific administrators from Public Health Service bureaus was held at Airlie House, Warrenton, Va., June 5-10, under sponsorship of the American Society for Public Administration.

The seminars are planned to introduce Grants Associates to public administration as a career and to give perspective and operating experience to the health scientist administrator within the PHS.

Topic Given

"Science and Public Policy" was the theme of the second-part seminar with Dr. Frank P. Sherwood, Professor of Public Administration at the University of Southern California, as the director.

Dr. Eugene A. Confrey, Chief of the Division of Research Grants, was the leader of one of the discussion groups. The publication, "The Scientific Estate," by Don Price, was the topic for this group.

The first of this year's series, on the theme of "The Science Administrator in the American System of Public Management," was held at Airlie House, May 1-6, under direction of Dr. Calvin W. Taylor, Professor of Psychology at the University of Utah.

The Grants Associates program was initiated in 1961 to recruit and train professional staff in the specialties of the scientist administrator's field for the extramural branches of all PHS granting divisions.

DRG plans and directs the 12-month period of training the individual Grants Associate reecives.

Approximately 20 PHS representatives attended the seminars this year.

Camera Club Announces Slide Contest Winners

Winners of the NIH Camera Club's annual color slide competitions were awarded trophies recently by Dr. Harley G. Sheffield, newly elected president of the Club.

Winner of the "Best Slide of the Year" contest was John B. Reed, with Dr. Laura B. Stewart and Dr. John E. Tobie placing second and third respectively.

John B. Reed's "Sharon" was the winner of the NIH Camera Club's "Best Slide of the Year" Contest.—Photo by John B. Reed.

Winners of the bimonthly competitions were Mr. Reed, first; Dr. Stewart, second, and Albert Lauderbaugh, third.

Club Described

The Camera Club is sponsored by R&W. It is composed of amateurs whose interests in photography range from merely recording vacation trips to portraiture and abstract art.

Meetings are held the third Tuesday of each month. Color slide competitions are featured at alternate meetings, with expert photographers of the Greater Washington area acting as judges. They also give Camera Club members pointers on improving their skills.

The first meeting of the new Club year will be held June 21 at 8 p.m. in Bldg. 31 with Roy Perry, Chief of the Motion Picture Section, Division of Research Services, serving as judge of the color slide competitions.

All NIH personnel interested in photography are invited to attend. Membership in the Camera Club is open to all R&W members.

In 1964 the median salary of the 224,000 scientists reporting to the National Register was $11,000. Salaries ranged from $7,100 or less in the lowest decile to $18,000 or more for scientists in the highest decile.—*NSF Reviews.*