Secy. John W. Gardner Praises HEW Employees

John W. Gardner, Secretary of Health, Education and Welfare, whose resignation was accepted January 25 by President Johnson "with deep regret," paid tribute to departmental employees "in all agencies and all grades" in a report summarizing his term of service.

"It was my good fortune to come to this Department at an extraordinarily exciting time in its history," Secretary Gardner said in HEW Progress Report, a 51-page document addressed to all HEW employees.

Mr. Gardner gave credit for the achievements of the Department since he assumed the post of Secretary in August 1965 to President Johnson, to Congress, and "to the able employees of HEW who (See Secy. Gardner, Page 2)

Dr. DeCesare to Head DRFR's Gen. Clinical Research Centers Br.

Dr. William R. DeCesare has been named Chief of the General Clinical Research Centers Branch of the Division of Research Facilities and Resources.

SiDr. DeCesare joined the Division in November 1966 as assistant chief of the branch, and had been serving as acting branch chief for several months.

The General Clinical Research Centers Branch is responsible for the administration of grants for 91 clinical research centers with a total of 1,070 beds. Each center has its own beds, staff, and laboratories within a larger hospital, for precise clinical studies.

Dr. DeCesare received his A.B. from Dartmouth College, graduating cum laude, and his M.D. from Harvard Medical School. He was a Fellow in Dartmouth Medical School while at the Veterans Administration Hospital, White River Junction, Vt., and
(See Dir. DeCesare, Page 3)

DRS Develops Labor-Saving Instruments For Use in CC's Virus Diagnostic Lab

Under the guidance of Dr. Andrew VargasGo (center), Sharon Geinigbuss operates the automatic medium exchanger as its developers, George Lawrence (I) and Frank Anderson of DRS, look on. The exchanger is designed to mechnically change nutrient material to keep cell tissue growing at a controlled rate.—Photos by Ed Hubbard.

By Sandra Silk
NIH Information Intern

With the possibility of a severe influenza epidemic forecast here, strains of "Sore throat... dripping nose... nausea... fever... headaches... I think I've got the flu," are likely to become more prevalent.

What is commonly called "flu" is a catch-all term for infections due to respiratory viruses that send thousands of persons to bed each year. Research is being conducted at NIH to identify both old and new strains of viruses so that vaccines can be developed and improved to combat them.

Identifying and typing viruses is tedious and time-consuming. In the Division of Research Services, biomedical engineers and technicians work with researchers in the Clinical Center's Virus Diagnostic Laboratory, Clinical Pathology Department, to develop automated, labor-saving instruments that will aid in cell culture maintenance and serological virus identification.

Viruses are so small they cannot be seen through a light microscope. However, if they are inoculated into and adhere to certain cell cultures, their effect upon the living cells can be observed.

Because viruses only grow in
(See DRS, Page 2)

Income Tax Help Available To Employees at 3 Centers

Assistance and advice in completing income tax returns are available to NIH employees at the following locations and times:

Blalg. 31, Rm. 3R-49, Monday through Friday, 9:30 a.m. to 4:30 p.m.; Mr. L. R. Ralbo, Ext. 64022.

Westwood Blalg. Rm. 322, Wednesday, 10 a.m. to 5 p.m.; Mr. J. V. Rowley, Ext. 7090.

Blalg. 10, Rm. 1R-35, Monday, Tuesday, Thursday, and Friday, 1 to 6 p.m.; Mr. J. L. Rowley, Ext. 60095.

A draft copy of the tax return should be completed as far as possible and brought to the tax assistant when requesting help. Copies of income tax forms can also be obtained at the locations listed above.

Proposed 1969 Budget Asks $1,196.6 Million Appropriation for NIH

A request of $1,196.6 million for the National Institutes of Health is included in the Fiscal Year 1969 Federal budget President Johnson submitted to Congress January 29. This is an increase of $21.5 million over the $1,175.1 million appropriated for FY 1968.

A summary of the President's budget showing separate appropriations will be found on page 4.

Specifically, the budget provides that in 1969, NIH will support approximately 12,000 research project grants, of which about 3,200 will be either new awards or renewals of grants whose prior period of support has expired.

Many of these projects will be new investigations in fields such as reproduction and population research, perinatal biology, adult development and aging, atherosclerosis, hypertension, and latent viruses as a cause of chronic neurological disease.

In addition to these increases, $12.7 million will be available for the continuation and expansion of associated resource support programs, such as clinical and specialized research centers, and for the training of research personnel.

In accordance with last summer's
(See BudgeT, Page 8)

Dr. Bartter Delivers First Eli Lilly Lecture

Dr. Frederic C. Bartter, chief, Clinical Endocrinology Branch, National Heart Institute, presented the first Eli Lilly lecture at the VII Annual Meeting of the Mexican Society for Nutrition and Endocrinology in Guadalajara, Mexico, recently.

His topic was "Studies on the Biochemical and Physiologic Abnormalities in Non-Salt-Losing Congenital Adrenal Hyperplasia."

Dr. Jorge Martinez Manautou, the president of the Society, awarded the lectureship to Dr. Bartter.

Dr. Bartter also presented the annual Alfonso Rivera prize to Dr. Federico Dies for outstanding work
(See Dr. Bartter, Page 7)
LIFE INSURANCE CHANGES

The Postal Revenue and Federal Salary Act of 1967 made important changes in the Federal Employees' Group Life Insurance program. An information sheet pointing out these changes and their effect on employees' pay checks was distributed recently.

As a result of the 4.5 percent retroactive pay raise, the salaries of many employees were raised to the next higher $1,000 salary bracket. To be eligible for employees' regular life insurance coverage and withholdings were increased on December 16, 1967, the date the pay bill was signed.

Beginning February 25, 1968, employees earning less than $8,000 a year will be insured for $10,000. Only employees who have regular insurance coverage are eligible for the optional insurance.

OPPORTUNITY TO FILE

Employees will soon receive a special form through their time-keepers. Each employee not excluded by law or regulation, including those who previously waived coverage, will be asked to indicate on this form one of the three following choices: he may elect the extra $10,000 insurance in addition to regular coverage; he may decline the optional insurance if he prefers to have regular coverage only; or he may waive all life insurance coverage.

February 25 Cut-off Date

Effective February 25, 1968, all life insurance waivers on file will be automatically cancelled. Therefore, employees wishing to continue to waive life insurance coverage must do so on the special form before that date, or withholdings from their paychecks for regular life insurance coverage will automatically be made.

Latest Participants in NIH Visiting Scientists Program Listed Here

1/2 - Dr. Livio Mullacci, Italy, NIAID. Sponsor: Dr. Norman P. Salzman, Bldg. 2, Rm. B13.
1/4 - Dr. Yngve O. Olsson, Sweden, NINDB. Sponsor: Dr. Keith Richardson, Bldg. 9, Rm. B9.
1/10 - Dr. Eiichi Kano, Japan, NCI. Sponsor: Dr. Mortimer M. Elkind, Bldg. 10, Rm. B13.
1/18 - Dr. Ken Hotta, Japan, NIHMD. Sponsor: Dr. William J. Bowen, Bldg. 4, Rm. B99.

'the NIH Record'

Published bi-weekly at Bethesda, Md., by the Publications and Reports Branch, Office of Information, for the information of employees of the National Institutes of Health, principal research center of the Public Health Service, U.S. Department of Health, Education, and Welfare, and circulated by request to all news media and interested members of the medical- and science-related fields. The NIH Record content is reprintable without permission and its pictures are available on request.

NIH Record Office
Bldg. 16, Rm. 212.
Phone: 49-62125

Associate Editor
Margaret Suter
Assistant Editor
Frances W. Davis

Staff Correspondents
Tony Anastasi, DRS; Bari Attis, NINDS; George Bragaw, NIH; Dale Carter, DRMP; Mary Anne Gates, NIAMD; Sue Hannon, NIDR; Elizabeth Y. James, DEHS; Betty Kuster, DGBT; Hugh J. Lee, DRG; Art McIntire, NIMH; Martha Mader, NIAID; Faye Peterson, DBS; Dan Rogers, NICHD; Wanda Wardell, NIGMS; Beverly Warran, DRFR.

The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policy of the paper and the Department of Health, Education, and Welfare.

NiH News

CIRCULATED BY REQUEST TO ALL NEWS MEDIA AND INTERESTED MEMBERS OF THE HEALTH SERVICE, U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, AND CIRCULATED BY REQUEST TO ALL NEWS MEDIA AND INTERESTED MEMBERS OF THE MEDICAL- AND SCIENCE-RELATED FIELDS. THE NIH RECORD CONTENT IS REPRINTABLE WITHOUT PERMISSION AND ITS PICTURES ARE AVAILABLE ON REQUEST.
living tissue, tissue in which the viruses are tested must be kept alive for the duration of the testing period, usually 3 weeks. This is accomplished by feeding nutrients to the cell cultures.

**Workload Heavy**

Each week the Virus Diagnostic Lab receives hundreds of test tubes containing living cultures of human or animal cells. These mono-layered cell cultures, supplied by commercial firms and DRS, are kept alive for the duration of the testing period. Therefore, in the Virology Lab, the growth medium is exchanged for a maintenance medium manually.

**Automatic Exchanger Developed**

An automatic medium exchanger has been developed by Dr. Andrew Vargosko, CC Clinical Pathology Department, and a DRS biomedical engineering team consisting of George Simon, George Lawrence, and Frank Anderson, to relieve the laboratory technicians of changing the maintenance medium manually.

This device mechanically exchanges medium for fresh medium in a controlled environment at the rate of two test tubes every 20 seconds. A rack of test tubes is automatically fed into the exchanger, unscrews the caps, and tilts the tubes, emptying the liquid contents. The cell culture is not lost during this procedure because it grows on and adheres to the test tube walls.

**Procedure Described**

As the tubes are raised again to an upright position, the lips of the tubes pass between small burner burners to be dried and sterilized. The tubes are then injected with fresh, pre-measured medium, the caps screwed back on, and the tubes returned to the rack.

Since the virus cannot be seen under a light microscope, the technician must look for the effect it produces in the cell culture, termed cytopathic effect, or CPE.

**3-Week Growth Period Allowed**

Sometimes CPE doesn’t appear for 3 weeks, the amount of time the virus is allowed to grow and attach itself to the cell culture. Normally, if no CPE is evident at the end of this period, the specimen is said to be negative.

But some viruses, although they are growing in the cell culture, never show CPE and are only detected by other procedures, such as hemadsorption or the interference of growth of a known virus.

Different types of CPE are identified by screening tests dependent on trained observers. Once it has been established that a virus is present, an attempt at identification is made. The hemagglutination inhibition test and the complement fixation test are sometimes used to determine the type of virus present.

**Optical Scanner Being Developed**

A new optical scanner, being developed by DRS, will automatically pass over the micro-titer plate wells and, by measuring light transmittance, determine if the antigen-antibody reaction caused the red cells to agglutinate, button, or hemolyze.

It is expected the optical scanner will read the test results, record them on computer tape, and have them printed out and sent to the physician on the ward.

**Culture Inoculated**

During the identifying and typing process the prepared cell culture is inoculated with a specimen suspected of harboring a virus. The specimen might be a throat swab, sputum, or a urine sample. It is delivered to the lab in collection fluid of a balanced saline solution to maintain the virus in the state it was found. The collection fluid also contains antibiotics to kill any bacteria that might contaminate the virus culture to be tested.

After the virus is introduced to the cell culture, the test tubes are placed on a slant in a roller drum and turned. If a virus is present in the specimen, it will invade the cells and start to grow.

Unlike bacteria which reproduce by binary fission, viruses replicate. A virus invades the cell nucleus and redirects the signals produced by the DNA molecules. The virus tells the DNA to stop its normal functions and signals the cell to make viruses. The cell is altered by this action, and the new viruses break out and go into other cells.

Dr. Vargosko in the Virology Lab devised instruments to aid identification: an automatic diluting device, a measured aliquot dropping device, and an optical scanner that will aid in performing the hemagglutination inhibition and complement fixation tests.

The automatic dropping device will deposit reagents of a specific amount and type into wells of a micro-titer plate. The diluting device dilutes out the antigen or its antibody used in these tests. It is important that during these processes the diluting loops do not touch the sides of the wells or the proportions will be upset.

In the antigen-antibody reaction, the red blood cells will agglutinate, button, or hemolyze, or combine some of these reactions. If agglutination occurs, the red cells spread out, forming a thin film across the micro-titer plate well. If they button, the cells drop down to the bottom of the micro-titer plate well as a small dot. Hemolysis will result in suspended or floating particles in the micro-titer plate well.

Dr. Vargosko and Sharon Gainsburg of the CC Virus Diagnostic Lab, and Frank Anderson of the DRS Biomedical Engineering and Instrumentation Branch. This machine will automatically dilute out antigens or antibodies used in virus identification.
2 New Films on Cancer
Chemotherapy Research
Telecast This Month

Two new motion pictures on cancer chemotherapy research, sponsored by the National Cancer Institute, will be telecast beginning this month by 133 stations of the National Educational Television network.

In Washington the first film of the "Drugs Against Cancer" series, subtitled "The Search," will be shown in color Monday, February 12 at 10:30 p.m., and repeated Sunday, February 18, at 4 p.m., on WETA-TV, Channel 26.

Research Methods Shown

The station will telecast the second film, subtitled "The Battle in the Cell," Monday, February 19, at 10:30 p.m., and again Sunday, February 25, at 4 p.m. "The Search" details the NCI's methods of finding, screening, and evaluating cancer drugs and achieving optimum therapeutic effects in cancer patients.

"The Battle in the Cell" describes the scientific basis for achieving selective toxicity with cancer drugs, including details of the cell cycle and determinations of effective drug doses and schedules. Both are half-hour films.

BUDGET

(Continued from Page 1)

report to the President on NIH research programs, funding for specific goal-oriented research, conducted largely through contracts, will be expanded by more than $9 million. This includes new or increased investigations in the artificial heart program, in transplantation immunology, in the development of new contraceptive methods, in the psychological and social aspects of family planning, and in the early detection and treatment of cancer of the lung and breast.

An amount of about $20.6 million will be available for grants to assist construction of health research facilities. This represents a combination of new funds requested and money brought forward from FY 1968.

NHI Exhibit on Stroke 
Wins Merit Certificate

A scientific exhibit, "Epidemiology of Stroke," prepared by the National Heart Institute, has received a Certificate of Merit from the American Osteopathic Association.

The exhibit was displayed recently at the AOA's 72nd Annual Convention and Scientific Seminar.

Dr. David Korn, Laboratory of Biochemical Pharmacology, National Institute of Arthritis and Metabolic Diseases, was recently named a "Distinguished Young Scientist" by the Maryland Academy of Sciences for his research on the biochemistry of bacteriophages.

The Academy presented three distinguished scientist awards and one outstanding scientist award to Maryland recipients under age 35.

Dr. Korn's Work Cited

Dr. Korn was honored for demonstrating a new mode of action for actinomycin D, a widely used antibiotic. He found the drug prevents assembly processes may provide a target for such research efforts.

Dr. Korn received an M.D. from Harvard University in 1959 and completed his internship and residency in pathology at Massachusetts General Hospital. He then served for 2 years in NIAID's Laboratory of Biochemistry and Metabolism as a research associate in the PHS Commissioned Corps. He joined the permanent staff of the Laboratory of Biochemical Pharmacology in 1964.
DR. DE CESARE
(Continued from Page 1)
then served as a trainee in hemat­ology at Georgetown University Hospital. In 1964, he joined the Georgetown University as Instruc­tor in Medicine, Assistant Director of Hematology, Assistant Director of Laboratories and Assistant Pro­gram Director of an NIH Hema­tology Training Grant.
Dr. DeCesare has authored and coauthored papers on mechanical hemolytic anemia and blood pres­ervation.

CCNC.
Miss Kauffmann was born in Medford, Mass., and earned an A.B. degree from Radcliffe College. She began her professional career as an immunochemist at Harvard Medical School in 1924.
Miss Kauffmann has a great in­terest in photography, music, and literature. She recently donated 200 books from her collection to the Chevy Chase Presbyterian Church library.
She is a member of the American Chemical Society, Society of American Bacteriologists, Ameri­can Association for the Advance­ment of Science, Society for Ex­perimental Biology and Medicine, and the American Academy of Po­litical and Social Science.
Miss Kauffmann has returned to her home in Massachusetts.

Volunteers Help NIH Visiting Scientists
And Their Families Get Settled in Area

Putting a roof over the heads of visiting scientists and their fam­i­lies from foreign countries has been the self-appointed project of Mrs. Ulrich Weiss and Mrs. Elliott Charney, wives of NIAMD researchers.

Since 1966, when they saw the need to make foreign scientists welcome and comfortable, these ladies have helped countless fam­i­lies find housing, obtain advice on where to purchase items, learn about community activities and get acquainted with the metropolitan area.

Presently visiting scientists can contact Mrs. Weiss at 539-1740 (in the evening) for advice and leads. Mrs. Charney maintains a "stock" of housewares and other conveniences collected from friends to pass on to visitors starting new homes.

Always in demand are more housewares, from pots and pans to baby cribs and play pens, and storage space such as a spare at­tie, basement, or garage, for larger items she has found.

Many Items Needed

Also needed are willing hands to continue this project, and addi­tional housing for these visitors whose stays are usually for one year.

Mrs. Weiss says she soon must relinquish this activity as she is now employed full time. She will be happy to talk with anyone inter­ested in joining this people-to­people project.
RML's Dr. Carl Eklund, Authority on Chronic Viral Diseases, Retires

Dr. Carl M. Eklund, a leader in research on slow-growing viruses as possible causes of chronic disease, retired from the PHS December 31 after a 22-year career. Except for the first year, all of Dr. Eklund's service was spent at the NIAID's Rocky Mountain Laboratory at Hamilton, Mont.

Studies Will Continue

Dr. Eklund has accepted a staff appointment at the University of Minnesota at Minneapolis, where he will continue study of chronic viral diseases.

During the first 15 years of his career, Dr. Eklund directed the RML's investigations on mosquito-transmitted viruses that cause encephalitis in man and animals and on viral diseases transmitted by ticks.

More recently, with Dr. William J. Hadlow, he has developed methods to study slow-virus animal diseases in relation to possible counterpart diseases of man, such as multiple sclerosis.

Transplantation Conf. Proceedings Published

The proceedings of a 3-day conference on organ transplantation sponsored by NIH in Santa Barbara, Calif., in January 1967, are now available.

The 500-page volume includes the formal papers and discussions of 200 participants at the conference, sponsored and planned by the Surgery Study Sections of the Division of Research Grants and supported by a grant from the National Heart Institute to the University of California at Los Angeles in the name of Dr. William D. Longmire, Jr.

New Research Areas Discussed

Conferences discussed the status of transplantation research, including areas needing further investigation and new avenues for laboratory and clinical study. Papers were presented on The Liver, The Kidney, The Heart, The Lung and Other Organs; Lymphocyte Response to Antigens; Determination of Histocompatibility; Experimental Antilymphocyte Serum; Problems of Organ Preservation; Abrogation of the Immune Response by Irradiation Therapy and Lymphocyte Depilation, and by Drug Therapy.

In his report to the NIH following the conference, Dr. Longmire said clinical experience provides an opportunity to investigate aspects of transplantation that can only be carried on with human subjects, for example, typing of donor and recipient.

Future Needs Noted

Additional basic research on the immune response and the hypersensitivity reaction are needed, Dr. Longmire said, but clinical evaluation and experimentation must be contained in surgical techniques, specific histo compatibility and physiology, immunology, bacteriology and other areas. Expert ancillary personnel and sufficient laboratory support are essential to sophisticated clinical care and investigation, he reported.

The proceedings may be obtained from the publishers, The Williams and Wilkins Company, Baltimore, Md., 21202, for $3.50 a copy.

Social Security Amendments of 1967

Increase Cash and Medicare Benefits

The Social Security Amendments of 1967, signed by President Johnson on January 2, 1968, provide the largest increase in total cash benefits in the history of social security.

As a result of the new law, every beneficiary will get an increase of at least 15 percent. Beginning with checks due in March, the average monthly benefits for a retired worker and his wife now on the rolls will be increased from $145 to $163. The minimum benefit for retired workers at age 65 will be increased from $41 to $50 a month.

Effective in 1968, Social Security taxes are being collected on wages up to $7,500 a year. The previous taxable wage base was $6,600. In addition, the law increases from $1,500 to $1,680 a year the amount a beneficiary may earn without loss or reduction of benefits.

The payroll tax rate paid by both the employer and worker will remain at 4.4 percent for 1968, but will go to 4.5 percent in 1969. These rates include both the basic social security tax and the added tax for medicare.

Other Changes Described

The 1967 amendments also include a decrease in the number of work credits required to qualify for disability benefits for persons disabled before reaching age 31. Effective March 1968, a person disabled between ages 24 and 31 will need credit for only half the time between age 21 and the date on which he becomes unable to work. Similarly, a person disabled before age 24 will need work credit for only half of the 3-year period ending when his disability begins.

The bill liberalizes requirements for dependents and survivors of women workers must meet in order to receive benefits, permitting payments for some children whose mothers died, retired, or became disabled after working under social security. It also allows benefits for some widowers dependent on a wife at the time of her death and for some husbands dependent on a wife at the time of her retirement or disability.

New Medicare Benefits Listed

In addition, the bill provides the following new Medicare benefits:

1. A beneficiary will get a lifetime reserve of an additional 60 days of hospital care for use after exhausting the basic 90 days of coverage for each illness.
2. Pathology and radiology services to hospital patients will be paid in full.
3. Coverage of physical therapy has been broadened and certain medical services of podiatrists will be considered medical expenses.

Also included is a provision which makes it easier to claim medicare benefits for doctor bills and other medical services. Under the old law, payments for medical bills could be made only to a doctor or to a patient who presented a receipted bill. The new law permits direct payment on the basis of a doctor's itemized bill. This permits patients to pay medical bills without using savings or securing a loan.

To offset the cost of these benefits and compensate for rising costs, the new law increases the monthly premium for medicare insurance from $3 to $4 effective April 1968. There will be no further change until June 30, 1969.

Further details about the 1967 amendments and help with social security problems may be obtained at social security offices.

Dr. Charles A. Miller
Reassigned at NIGMS

Dr. Charles A. Miller has been appointed associate chief for scientific programs of the Research Training Grants Branch, National Institute of General Medical Sciences.

Dr. Frederick L. Stone, Institute Director, said that Dr. Miller will assist the branch chief in administering nationwide grant programs that support the training of thousands of young men and women in health sciences and the techniques of modern research.

Dr. Miller, a native of Winchester, Ind., was in the U.S. Army Air Force from 1943 to 1945. He received his B.A. degree from Wabash College (1949) and his Ph.D. degree from Indiana University (1957).

"Grow Up Smiling" Dental Week Theme

"Grow Up Smiling" is the theme of Children's Dental Health Week, February 4-10, sponsored by the American Dental Health Association. Barbara Sue Wentworth, who exemplifies the theme, is taking part in one of the National Institute of Dental Research's studies aimed at the reduction of tooth decay. She is the daughter of Lt. Commander Charles H. Wentworth, a PHS Officer attached to the base clinic, U.S. Coast Guard Station, Governor's Island, N.Y., where the cooperative study is under way.—Photo by Ed Hubbard.

Dr. Carl M. Eklund retired Dec. 31 from NIAID's Rocky Mountain Lab at Hamilton, Mont.
**In Brief**

The number of common colds each year in the United States has been estimated as high as 500 million.

To combat the "common cold" NIAID's Laboratory of Infectious Diseases is conducting a long-range research project for which it continues to need volunteers.

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

Appointments may be made by calling Sara Kelly or Harvey James, Ext. 65811, preferably within the first 3 days of infection.

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

---

**Progress Against Cancer, 1967**

The National Advisory Cancer Council has released its second public report on cancer research.

"Progress Against Cancer, 1967" deals largely with research on viruses as cancer-causing agents in laboratory animals and the effort being made to identify viruses that may give rise to malignant diseases in man. Progress in other areas of cancer research is also described.

**Council Established in '37**

The Council, established by the National Cancer Institute Act of 1937, advises the Surgeon General of the PHS on general policies, programs and needs, and reviews research developments and their application to the cancer problem.

Its first published report, "Progress Against Cancer, 1966," was issued under the Council's authority to collect information on cancer research and make it available to health agencies, physicians, researchers, and the general public.

The new 65-page report emphasizes that no virus has been identified as the causative agent in any form of human cancer. However, some viruses are known to cause several cancers in animals, many scientists believe they are also one of the causes of cancer in man. With this in mind, investigators are pursuing many lines of research, including effort toward development of an immunizing technique or agent, such as a vaccine, that can prevent virus-caused malignant disease.

"Progress Against Cancer, 1967" is illustrated with diagrams and photographs and includes an extensive bibliography on virus-cancer research. List as Public Health Service Publication No. 1720, it can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The price is 65 cents per copy.

---

**Joseph A. Capps Award**

Dr. Barry D. Kahan, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, received the annual $750 Joseph A. Capps award from the Institute of Medicine of Chicago January 17th.

The Joseph A. Capps award is given for the best paper submitted by a recent (within the last 5 to 7 years) graduate of a Chicago institution. Dr. Kahan received an M.D. degree in 1965 from the University of Chicago.

**Research Described**

In his research Dr. Kahan noted significant differences in amino acid composition of transplantation antigens among different strains of guinea pigs, and postulated that the factors which determine transplantation success or failure may depend upon protein structure.

These discoveries could aid researchers in the development of techniques to protect against organ transplantation rejection.

**Other Findings Cited**

Dr. Kahan also found that water-soluble guinea pig transplantation antigens could induce graft rejection, cause direct reactions in the skin of sensitized individuals, and stimulate immune reactions in new hosts.

Applications of his methods in purifying and studying guinea pig transplantation antigens have yielded initial success in inducing tolerance to transplantation in guinea pigs by antigen pretreatment.

An abstract of Dr. Kahan's report, covering 14 articles on transplantation antigens and additional new work, will be published in the March issue of the Proceedings of the Institute of Medicine.

Dr. Kahan, a staff associate, is married and lives in Arlington, Va.

---

**Assembly of Scientists Of NCI Elects Officers**

The Assembly of Scientists of the National Cancer Institute has announced the election of officers for 1958: Dr. Edward S. Henderson, president; Dr. Sidney J. Cutler, president-elect; and Dr. William C. Hammond, secretary.

Newly elected to the Assembly's Council are: Dr. Vincent T. De Vita, Jr., Mortimer M. Elkind, Robert W. Miller, and Thomas A. Wolman.

Continuing members of the Council are: Drs. Michael A. Chirigos, Mortimer B. Lipsett, Timothy B. O'Connor, and Katherine K. Sanford.

Membership in the Assembly, founded in 1952, is open to all scientists working in NCI.
NCI and University in Uganda Cooperate In Study of Certain Types of Cancer

Certain types of cancer common in Africa and of theoretical and practical interest to U.S. cancer scientists will be studied intensively by the National Cancer Institute and Makerere University College in Kampala, Uganda. Under terms of a research contract signed recently by the PHS and African medical authorities, the cooperative venture is expected to take 4 years.

Selected patients with lymphomas (cancers of the lymphoid cells) will be hospitalized at a new treatment center being established with PHS assistance at Makerere University College.

Research Described

Particular study will be given to African children with a form of cancer called Burkitt's lymphoma, which occurs rarely in the United States and may bear a relationship to the most frequently occurring cancer of American children, acute leukemia. Patients with Hodgkin's disease (a common malignant lymphoma) and a type of skin cancer called Kaposi's sarcoma will also be studied.

The responses of African patients to drug treatment and stimulation of their immune systems will be measured and compared with responses of American patients being treated at the Clinical Center.

Fundamentals to Be Evaluated

Immune reactions and characteristics of blood and bone marrow will be evaluated in an effort to discover why many African patients seem to respond better to drug therapy than American patients.

Findings will be correlated with an ongoing NCI study of environmental and genetic factors that may affect an African's development of lymphoma and his response to treatment.

It is hoped that the study will lead to more effective treatment of U.S. patients with lymphoma and related types of cancer.

Project director in Africa is Professor Sir Ian Mackinnon, Professor of Surgery at Makerere University College, with Mr. Sebastian Kyalwazi, Senior Surgical Consultant to Mulago Hospital, Kampala as principal investigator. Project officer for the NCI is Dr. Paul P. Carbone, Head of the Institute's Solid Tumor Service. Dr. John L. Ziegler, a clinical associate of the NCI, is now serving in Kampala as a consultant to the project.

Dr. Featherstone Named Consultant to NIGMS

Dr. Robert M. Featherstone, chairman of the Department of Pharmacology, School of Medicine, University of California, has been appointed consultant in pharmacology and toxicology to the National Institute of General Medical Sciences.

According to Dr. Frederick L. Stone, Institute Director, Dr. Featherstone will help develop a national program of support through research and training programs in pharmacology and toxicology.

Background Given

Dr. Featherstone is a native of Anderson, Ind., and received his B.A. degree from Ball State University in 1940, and his M.A. (1942) and Ph.D. (1943) from the University of Iowa.

One of the few molecular pharmacologists in the country, he was named to his present position in 1957.

Dr. Featherstone is president-elect of the American Society for Pharmacology and Experimental Therapeutics.

Automated Instruments in Use at CC

(Continued from Page 6)

sales are attached to cell counters and hemoglobin colorimeters. As a white blood cell count is determined, for example, the reading is automatically displayed on the console. When the technologist presses the "send" key, it is sent to the computer.

The computer accumulates both on-line and off-line results and prints chemistry reports and hematology reports for each patient. The computer is also being used to improve laboratory quality control.

In the future, the computer will print each day's test results for a patient and compile them with those for the past week, or for his entire stay in the hospital. It will also compare daily and previous results for a specific patient and so alert his physician of any abnormal change.

The Infectious Laboratory Service (microbiology) is developing an off-line data processing system which is to be integrated with the computer processing system.

Dr. Williams and his associates believe the research and development in automation and data processing will provide a fourfold increase in productivity with no increase in personnel or space, and with marked improvement in speed, accuracy, and reliability.

The system will reduce unit costs and aid clinicians in coping with large quantities of laboratory data. It also will make it possible to store and retrieve a mass of medical information that can help future investigations.