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

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NATIONAL INSTITUTES OF HEALTH

Dr. Ernest Cotlove, CC, Appointed Acting Chief, Pathology Department

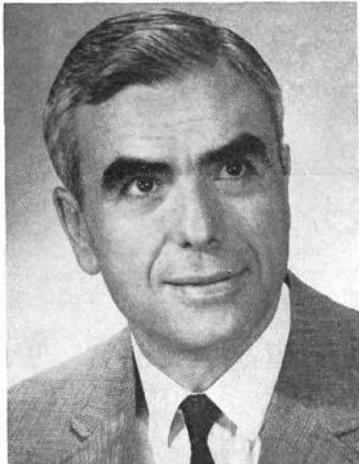
Dr. Ernest Cotlove has been appointed acting chief of the Clinical Pathology Department of the Clinical Center. He succeeds Dr. George Z. Williams who, recently retired from the Federal service.

Dr. Cotlove has been deputy chief since 1966, and also chief of the Research, Development and Automation Section of that department since 1967.

He will continue to direct the Pathology Department's program in laboratory automation and computer data processing.

Dr. Cotlove joined NIH in 1950 as a senior investigator in the Laboratory of Kidney and Electrolyte Metabolism of the National Heart Institute. During his research, he designed an electrometric instrument which has become the method for chloride determination.

In 1961 he was appointed chief



Dr. Cotlove, acting chief of the Clinical Pathology department, will also direct that department's program in laboratory automation and computer data processing.

of the Clinical Chemistry Service of the Clinical Pathology Department.

Dr. Cotlove is a consultant to the National Institute of General Medical Sciences and the Division of Research Grants in laboratory medicine, automation and training.

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DRS. HERSHEY, LURIA, DELBRUCK

Three Recipients of NIH Support Share Nobel Prize for Physiology or Medicine

Three American scientists, Dr. Max Delbruck, Dr. Alfred Day Hershey, and Dr. Salvador E. Luria—all recipients of NIH support—jointly won the 1969 Nobel Prize for Physiology or Medicine.

Dr. T.E. Malone Named NIDR Assoc. Director

Appointment of Dr. Thomas E. Malone as associate director for Extramural Programs, National Institute of Dental Research, has been announced by Dr. Seymour J. Kreshover, Institute Director.

Dr. Malone succeeds Dr. Robert M. Grainger, now Research Director of the Association of Canadian Medical Schools.

In his new position, Dr. Malone will administer NIDR's program of grant support of research and graduate research training which is conducted in more than 100 universities and other research institutions.

From 1963 to 1967, Dr. Malone served as scientist administrator and deputy chief of NIDR's Extramural Programs and chief of the

(See DR. MALONE, Page 6)

Squibb Award Presented To Dr. Chanock, NIAID

Dr. Robert M. Chanock, chief of NIAID's Laboratory of Infectious Diseases, received the second annual Squibb Award from the Infectious Diseases Society of America at its meeting in Washington, D.C., Oct. 25 and 26.

The award winner is noted for his contributions to the study of viral respiratory diseases, including those caused by parainfluenza and respiratory syncytial viruses.

Dr. Chanock organized and led the effort which validated earlier observations on the "Eaton Agent" as a major cause of pneumonia in military recruits. Verifying it as a pleuropneumonia organism rather than a virus, he gave it its name, *Mycoplasma pneumoniae*, and

(See DR. CHANOCK, Page 8)



Dr. Malone

The Laureates, friends for many years, did their award-winning research independently of each other. They will divide the \$75,000 in cash provided by the prize.

The winners, selected by a committee on the faculty of the Royal Caroline Institute of Stockholm, were cited "For Their Discoveries Concerning the Replication Mechanism and the Genetic Structure of Viruses." The committee also said the Laureates "set the solid foundation on which modern molecular biology rests."

Nirenberg Among '68 Winners

Last year Dr. Marshall Nirenberg, National Heart Institute, Dr. H. Gobind Khorana, an NIH grantee, and Dr. Robert W. Holley were named Laureates for their genetic research.

Biographical sketches of the three winners follow:

Dr. Delbruck, professor of Biology, California Institute of Technology, has received research support from the National Institute of General Medical Sciences.

The scientist's work on bacteriophages provided early theoretical and experimental support for later research in genetics.

Dr. Delbruck developed the method leading to the purification of a virus, known as the "plaque technique." In this procedure bacterial cells are spread on a thin gelatinous plate and then infected with virus particles.

Clear Zone Left

The bacterial cells dissolve, leaving a clear zone or "plaque."

Dr. Delbruck was born in Berlin and received his Ph.D. in physics at the University of Göttingen. In 1937 he came to the California Institute of Technology as a Rockefeller Foundation Fellow in Biology.

For 8 years, from 1939 to 1947, he taught at Vanderbilt University. He then returned to Cal Tech where he has been ever since. Dr. Delbruck became a naturalized

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Dr. Elvin Kabat to Speak At Annual Jules Freund Seminar on November 3

The Ninth Annual Jules Freund Memorial Seminar will be given by Dr. Elvin A. Kabat, College of Physicians and Surgeons, Columbia University, on Monday, Nov. 3 at 2 p.m. in the Jack Masur Auditorium, Bldg. 10. The scientific community has been invited to attend.

Dr. Kabat will speak on "Blood Group A, B, H, and Le Substances—Their Chemistry and the Nature of Their Reaction with Antibodies and Other Specific Hemagglutinins."

Dr. Kabat is professor of microbiology and professor of human genetics and development. He has been at Columbia University since 1941.

His principal research interests are the chemical nature of antigenic determinants and antibody combining sites, although his wide area of experimentation includes important contributions in allergy and autoimmunity.

He is a member of the World



Dr. Kabat, a member of WHO Advisory Panel on Immunology, has set up centers for immunological research and training in developing countries.

Health Organization Advisory Panel on Immunology, and has set up centers for research and training in immunology in developing countries. The book by Dr. Kabat and Dr. Manfred M. Mayer, *Experimental Immunochemistry*, is a classic in this field.

Dr. Kabat is a member of the

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the NIH Record

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'Open Season' for Fed. Employees' Health Benefits Program Starts November 10

An unlimited "Open Season" under the Federal Employees Health Benefits Program is scheduled for Nov. 10 through Nov. 28.

During this period, eligible employees have the opportunity to enroll in the program, and employees already enrolled may change their plan, option, type of enrollment, or any combination of these.

Under the program, three general plans are available: Government-wide Service Benefit Plan (Blue Cross-Blue Shield), Government-wide Indemnity Benefit Plan (Aetna Life Insurance Company), and Group Health Association Plan.

Also, some employee organizations sponsor health benefit plans for members.

These organizations include: the American Federation of Government Employees, National Alliance of Postal and Federal Employees, and Government Employees Hospital Association.

Also, the National Association of Post Office Mail Handlers, Watchmen, Messengers and Group Leaders, and the National Postal Union.

In early November, in a desk-to-desk distribution, employees will receive an envelope containing revised brochures on the three general plans.

Registration procedures will also be announced at that time, and registration assistants will answer questions and help employees in completing forms.

The Civil Service Commission will mail brochures to organization members. The brochures will also be available in all personnel offices.

The "Open Season" also applies to annuitants, and the Civil Service Commission will mail information directly to them.

For the contract period which begins in January 1970, there will be changes in the rates and benefits in each of the three major plans:

SERVICE BENEFIT PLAN

New bi-weekly rates and change in benefits:

| | High Option | Low Option |
|---------------|-------------|------------|
| Self only | \$ 5.57 | \$2.16 |
| Self & Family | 13.59 | 5.30 |

he returned to PHS.

Through the years he has held a number of administrative posts at NIMH, and contributed to the development of Institute programs.

In 1957, through special legislation a mental health program for Alaska was instigated. Mr. Ragas was one of a group sent by the Surgeon General to survey various outposts, including Barrow on the north coast. On this expedition Mr. Ragas served as administrative coordinator.

Recently, Mr. Ragas was given a farewell party by his NIMH associates—and a farewell gift—a trip to Rome, a city he has always wanted to visit.

Hector Ragas Retires, Served PHS 38 Years



Soon, Mr. Ragas will take off for the Eternal City—a trip to Rome was the parting gift from his NIMH associates.

Hector B. Ragas, National Institute of Mental Health, recently retired after 38 years in the Public Health Service.

In point of longevity Mr. Ragas holds a record—he has been with NIMH and its predecessor, the Division of Mental Hygiene, since 1938.

He arrived in Washington at the tender age of 20, and in the midst of the depression, but Mr. Ragas found a job. He was hired as a clerk-stenographer in the office of the Surgeon General, PHS.

There, he was able to develop his natural talent for administrative duties. While working, he attended Southeastern University where he earned a Bachelor of Commercial Science degree in 1935.

From 1942 to 1946 he served in the U.S. Army Medical Administrative Corps. After his tour of duty

NIH Television, Radio Program Schedule

Television

NIH REPORTS

WRC, Channel 4
 Fall series dates to be announced.

Radio

DISCUSSION: NIH

WGMS, AM-570—FM Stereo
 103.5—Friday evenings—
 About 9:15 p.m.

October 31

Dr. Peter Olch, deputy chief, History of Medicine, NLM
 Subject: The National Library of Medicine's Oral History Programs

November 7

Dr. John L. Doppman, Department of Diagnostic Radiology, CC
 Subject: The Role of X-Ray in Therapy and Diagnosis

Interview takes place during intermission, Library of Congress Chamber Music Series.

Jennifer Boondas, DN, Joins PHS's Denver Regional Office

Jennifer Boondas, Division of Nursing, Bureau of Health Professions Education and Manpower Training, is now the Principal Regional Nursing Consultant for the PHS's Regional Office at Denver, Colo.

In her new assignment, Miss Boondas joins another DN member, Ethel Todd, the Institutional Nursing Consultant, in the Regional Office which serves the states of Colorado, Idaho, Montana, Utah, and Wyoming.

Under the double coverage provisions, basic hospital and surgical-medical benefits will be subject to reduction if the charge is covered by another plan obtained through law or employment. This has always applied to Supplemental Benefits.

Blue Cross-Blue Shield in both options will pay for the services of a physician assistant-at-surgery when required by the attending surgeon and if a qualified physician intern or resident is not available.

Coverage under both options will pay for removal of impacted teeth in the outpatient department of a hospital or the physician's or dentist's office. This formerly was payable only if removal was performed for a hospitalized bed patient.

For confinement in a nonmember hospital the allowance under both options is increased to 80 percent of the cost of all covered hospital services in semi-private accommodations.

Low option coverage allowance is increased from \$12 per day to the hospital's average daily charge for semi-private accommodations.

INDEMNITY BENEFIT PLAN

New bi-weekly rates and change in benefits:

| | High Option | Low Option |
|---------------|-------------|------------|
| Self only | \$ 6.68 | \$2.89 |
| Self & Family | 16.64 | 6.84 |

The maximum benefit under the low option will be increased from \$15,000 to \$20,000.

GROUP HEALTH ASSOCIATION PLAN

New bi-weekly rates and change in benefits:

| | High Option | Low Option |
|---------------|-------------|------------|
| Self only | \$ 8.06 | \$ 5.25 |
| Self & Family | 20.75 | 13.85 |

Under the new contract, organ transplants and chronic renal dialysis are now specifically excluded.

Typing and Steno Exams Offered in New Location

NIH employees who wish to take the Civil Service Commission Clerk-Stenographer or Clerk-Typist examination should note the present testing schedule and new location.

These tests are now available on Monday, Wednesday, and Friday mornings in Room 104 of the Wisconsin Building, 7550 Wisconsin Avenue, Bethesda.

The tests are offered on a "walk-in" basis so appointments are not necessary.

Applicants should arrive about 8:30 a.m. in order to have time for orientation. Tests begin promptly at 9 o'clock.

Dr. Spock Speaks Here In Oct. 15 Observance Of Vietnam Moratorium

Many NIH employees joined in observance of the nationwide "moratorium" protesting continuation of the Vietnam war on Oct. 15.

An estimated 2,500 persons, principally NIH employees, gathered on the lawn east of Bldg. 1 to hear a noon address by Dr. Benjamin Spock, a nationally prominent critic of American policy and of American participation in the war.

Audience Includes Families

Dr. Spock spoke from the steps of the building. Among his audience were some members of the employees' families visiting the campus to hear him and a few other visitors.

His appearance had been arranged by employees who were members of the Vietnam Moratorium Committee at NIH-NIMH. Dr. David Reiss, a member of the Executive Board of the Committee, introduced Dr. Spock and explained the Committee's purpose in organizing the orderly demonstration.

The observance had been in doubt until a ruling was issued by the U.S. Circuit Court of Appeals for the District of Columbia Circuit, which directed the use, under certain circumstances, of Departmental facilities for this purpose.

4 Universities Receive NIGMS Grants to Train Physician-Scientists

A new kind of health professional, trained both as physician and scientist, will attempt to find the answers to pressing human disease problems through the medium of biomedical research.

Four universities have received grants from the National Institute of General Medical Sciences to train young men and women who will receive both M.D. and Ph.D. degrees and become scientist-teachers in medical schools.

Major Role Anticipated

They are expected to contribute to the education of increasing numbers of medical students, and play major roles in the advancement of medicine and the delivery of health services during the next decade.

The universities receiving NIGMS grants and their directors for this program are:

Washington University of St. Louis, Dr. P. Roy Vagelos; University of Pennsylvania, Dr. James J. Ferguson, Jr.; Columbia University, Dr. Brian Hoffman, and Yale University, Dr. Howard Levitin.

The universities will stress courses that will include biology, pharmacology, genetics, neurosciences, microbiology, and public health.

Dr. Gordon H. Seger, Recently Retired, Dies



Dr. Seger was associate director of NIGMS when he retired in April 1969.

Dr. Gordon H. Seger, 62, former associate director of the National Institute of General Medical Sciences, died of cancer Oct. 12.

Born in Shakopee, Minn., Dr. Seger graduated in 1934 from Northern Michigan University, from which he received its Distinguished Alumni Award 5 years ago. In 1938, he received his MPH degree in public health education, and in 1946, his Ph.D. in public health economics, both from the University of Michigan.

Before joining the PHS as a health education specialist in 1940, Dr. Seger had been health education director for public schools in Flint, Mich.

Gov't Service Noted

From 1941 until 1946, he was chief of State Personnel Administration for the Bureau of State Services. During World War II, he served 3 years with the U.S. Navy.

He joined NIH in 1946 as a study section executive secretary in the Division of Research Grants, and that same year became project review officer for DRG.

From 1951 to 1955, he was executive officer for the National Cancer Institute, and from 1955 to 1961, headed the Extramural Programs Branch for the National Institute of Neurological Diseases and Blindness.

In 1961, Dr. Seger was chief of the Special Programs Review Branch, DRG, and the following year associate director of NIGMS. He retired in April 1969.

He was a member of the American Public Health Association, the American Association for the Advancement of Science, and the Association of Management in Public Health. He also was a member of Phi Delta Kappa and Delta Omega fraternities and the Biomedical Science Administration.

Chaplain LeRoy Kerney, chief of

Ways in Which Children Acquire Social Values Reported by NICHD

How do children acquire their systems of values and how do these values affect social attitudes and behavior?

These are the questions discussed in a new volume published by the National Institute of Child Health and Human Development.

Acquisition and Development of Values, Perspectives on Research, summarizes the proceedings of an Institute-sponsored conference, held in May 1968, on current research into the moral principles and standards that underlie individual and social development throughout the world.

Conference Unique

The conference was unique in that it was sponsored by a research-oriented Government agency, underscoring the current concern with these questions.

More than 100 scientists from a variety of fields discussed studies concerned with the determinants of moral values, ethical standards and character formation.

Their discussion is presented in the book under six major headings: perspectives on value development; values and moral behavior in various cultures; the nature and measures of moral maturity; studies of psychosocial environment and moral character; adaptation and value development, and scientific research and moral judgment.

Single free copies are available from the Information Office, NICHD, Bldg. 12-A, Rm. 3017, Bethesda, Md. 20014.

NIH Orchestra to Start Rehearsals on Nov. 3

The NIH Orchestra sponsored by the R & W will begin its 11th season on Monday, Nov. 3, at 8 p.m. in the Jack Masur Auditorium, Bldg. 10. Mark Ellsworth will conduct the orchestra which will rehearse throughout the season on Monday evenings.

NIH employees and their families are invited to join. No auditions are held, but it is desirable to have had experience in playing classical music.

Music stands should be brought to each rehearsal. Also, current R & W membership card should be brought to the opening meeting.

For further information call Dr. John B. Wolff, manager, Ext. 67070.

the Clinical Center Department of Spiritual Ministry, gave the eulogy at the funeral services held in Bethesda, Md., Oct. 15.

Dr. Seger is survived by his wife, Mary K.; a brother, Roger, of Ventura, Calif., and two sisters, Mrs. A. J. Ross and Mrs. Lorene Posink, both of Ventura.

CFC Quotas Announced; Keymen Strive to Meet NIH Goal of \$190,000

The annual NIH Combined Federal Campaign has made its initial report to campaign headquarters—\$20,639.25 has been collected. This is 10.9 percent of our goal.

The quota for the National Institutes of Health is \$190,000.

The campaign, which opened officially Oct. 13, is seeking funds for 164 agencies. Organizations benefiting from the combined fund drive include those affiliated with the United Givers Fund, the National Health Agencies, and the International Service Agencies.

Any contribution designated specifically for a participating agency will be honored.

Undesignated contributions will be assigned to meet each group's



Illustration by Dick Barlow, MAPB.

quota. These funds will be distributed in accordance with a predetermined percentage: National Health Agencies, 17.57 percent; United Givers Fund, 75.32 percent, and International Service Agencies, 7.11 percent.

Again this year the NIH Recreation and Welfare Association is sponsoring a drawing in behalf of CFC. Three cash prizes—one for \$50 and two for \$25—will be awarded.

(See CFC, Page 4)

Weekly Television Series To Cover DHEW Areas

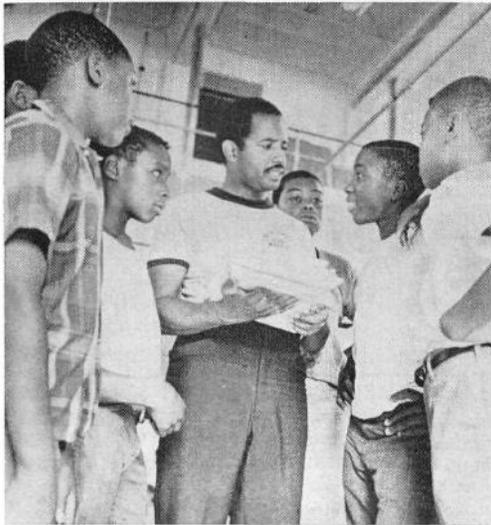
A weekly television series entitled "You!" is being produced in cooperation with the Department of Health, Education, and Welfare.

Drugs, sleep, heredity, alcohol, mental and physical health, education, and welfare will be some of the subjects telecast.

The series may be viewed on Saturday afternoons, 2:30 to 3 p.m., on WRC-TV's Channel 4. The next program will be aired on Nov. 1.

This show, "You! and Quackery," warns the public about fake diet pills and quack cancer cures. Some of the actual devices will be demonstrated.

Every week new ideas and the latest research will be shown in all areas of health, education, and family services.



YMCA OF METROPOLITAN WASHINGTON develops character and leadership, provides community centers, camping facilities, and recreational activities in schools, churches, homes and playgrounds.



PROJECT HOPE, on its journey around the world, is doctor, teacher, friend to the world.



AMERICAN NATIONAL RED CROSS—Metropolitan area chapters provide: blood program instruction courses, assistance to military personnel and families, emergency services during disasters, and volunteer services at 63 area hospitals and institutions.

CFC

(Continued from Page 3)

ed on Friday, Oct. 31.

To be eligible for this drawing, NIH employees should fill out a card, provided by his keyman, at the same time he fills out his donation card.

The drawing will be held at 12 noon in the R&W office. Cards submitted up to 10 a.m. on the day of the drawing will permit donors to be eligible for a prize.

The campaign is stressing the advantages of using the payroll authorization, the most effective and painless method of making a meaningful contribution and lending a helping hand to those in need.

Dr. Theodore Cooper, Director of the National Heart Institute, who is CFC Chairman, noted, "Americans have always been ready to help. In the past NIH employees have shown themselves to be especially concerned with their fellowmen, based on last year's participation and the fact that we

Agnes H. Des Marais Named DN Consultant

Agnes H. Des Marais, Division of Nursing, Bureau of Health Professions Education and Manpower Training, has been named Regional Nursing Consultant for the new PHS Region X office.

When fully operational, the regional office will serve the states of Alaska, Oregon, and Washington.

Pending more permanent arrangements, Miss Des Marais is located at the PHS Hospital at Seattle. In her new assignment, she will represent the Division of Nursing and its programs in the region.

achieved 92 percent of our goal."

He added that he was "confident that this year we will be able to report 100 percent and, in doing so, meet our goal."

Latest Participants in NIH Visiting Scientists Program Listed Here

10/2—Dr. Wilhelmus N. Konings, The Netherlands, Laboratory of Molecular Biology. Sponsor: Dr. Ernst Freese, NINDS, Bldg. 36, Rm. 3D02.

10/2—Dr. Hong Mo Moon, Korea, Laboratory of Molecular Biology. Sponsor: Dr. Elizabeth Maxwell, NIAMD, Bldg. 2, Rm. 207.

10/6—Dr. Marco Soria, Italy, Laboratory of Chemical Biology. Sponsor: Dr. Robert Goldberger, NIAMD, Bldg. 10, Rm. 9N317.

10/10—Dr. Mohammad Naimzada, Afghanistan, Laboratory of Preclinical Pharmacology. Sponsor: Dr. Erminio Costa, NIMH, St. Elizabeths Hospital, Washington, D.C.

10/15—Dr. A. Sampath Narayanan, India, Laboratory of Biochemistry. Sponsor: Dr. George R. Mar-

DR. COTLOVE

(Continued from Page 1)

He is a member of the Diagnostic Research Committee of the National Cancer Institute; and a member of the U. S. Civil Service Examining Board for Medical Technologists.

He has served as a consultant in Clinical Chemistry and Laboratory Medicine to clinical branches of the Institutes, particularly on acid-base, electrolyte, and renal problems.

Dr. Cotlove received his B. S. degree from the College of the City of New York in 1939, and an M.D. degree from the New York University College of Medicine in 1943.

Does Research at Harvard

Dr. Cotlove also did research in electrolyte physiology at the Harvard Medical School Department of Pediatrics. He is a Diplomate of the American Board of Internal Medicine, and also of the American Board of Pathology in Medical Chemistry.

He has held teaching appointments in medicine and physiology at the George Washington University School of Medicine.

In 1961 Dr. Cotlove went to Europe for postgraduate study in Chemical Pathology at the Postgraduate School of London.

He also surveyed Clinical Chemistry departments in Sweden, Denmark, Holland, Belgium, France, and Great Britain.

Dr. Cotlove is a U. S. Public Health Service commissioned officer with the rank of Medical Director. He holds membership in a

tin, NIDR, Bldg. 30, Rm. 403.

10/15—Dr. Raphael Salomon, Israel, Chemistry Branch. Sponsor: Dr. Harry V. Gelboin, NCI, Bldg. 37, Rm. 3D23.

Jerome Deutschberger, Assoc. Chief of NINDS Off. of Biometry, Dies

Jerome Deutschberger, associate chief of the Office of Biometry, National Institute of Neurological Diseases and Stroke, died at his home on Oct. 16. He was 52.

During his 7 years at NINDS, he engaged in research activities in neurology and ophthalmology, and wrote a number of scientific papers in the field of perinatal research.

A World War II army veteran, he also wrote several articles on military performance abilities.

Mr. Deutschberger received his B.A. and M.A. degrees in mathematics from Columbia University.

He was a research fellow in medicine at Cornell University and a research assistant, Institute of Physiological Research, Columbia University.

Coming to Washington in 1956, he served as a statistician in the Public Health Service—at the Division of Research Grants and in the Food and Drug Administration.

During this time he also lectured on mathematics at George Washington University.

A memorial service was held Oct. 17. He is survived by his wife, Jean, a daughter, Carla, and a brother, Paul, in Athens, Ga.

The family requests that in lieu of flowers, contributions be made to the Jerome Deutschberger memorial fund at the National Heart Institute.

number of professional societies and is on the Editorial Board of *Clinica Chimica Acta*.

He has written for scientific publications on electrolyte and renal physiology, instrumentation and automation, and laboratory medicine.

Unit Quotas for Annual CFC

| Unit | Goal |
|--------|----------|
| OD/ADA | \$29,697 |
| DBS | 4,598 |
| NCI | 26,657 |
| NIDR | 6,384 |
| NIAMD | 14,877 |
| DRG | 9,937 |
| CC | 15,143 |
| NICHD | 5,852 |
| NIGMS | 3,971 |
| NIAD | 8,588 |
| NINDS | 11,837 |
| NEI | 1,406 |
| NIEHS | 684 |
| BEMT | 15,903 |
| NHI | 11,305 |
| DRS | 8,569 |
| DCRT | 5,567 |
| FIC | 931 |
| NLM | 8,094 |

Cancer Symposium Reports Viruses Cause Leukemia Throughout Animal Kingdom

The National Cancer Institute and the Leukemia Society of America recently cosponsored a symposium—the IVth International Symposium on Comparative Leukemia Research—which reported on the relationship of viruses to leukemia and certain other forms of cancer. The meeting was held at Cherry Hill, N. J.

Evidence was presented which showed that viruses may cause leukemia in fish, toads, snakes, birds, mice, rats, hamsters, dogs, cats, cattle, monkeys—and man.

Steps toward identifying the hypothetical, elusive human leukemia virus were described by two scientists of NCI's Viral Leukemia and Lymphoma Branch, Drs. Timothy E. O'Connor and Peter J. Fischinger.

Uses "Synthetic" Virus

Using a "synthetic" virus they developed from two viruses that cause cancers in animals, the scientists were able to detect the presence of cat leukemia virus in tissue cultures.

Presence of the virus was signalled by morphologic changes characteristic of cancer. Next they plan to repeat the study with leukemic human cells, and they hope to "catch" the suspect human leukemia virus with the same "synthetic" virus particle.

Also significant was their report that the particle has already been found to cause changes associated with cancer in bottle-grown cultures of normal human cells.

The scientists explained that the synthetic particle appears to infect and grow equally well in cat and human cells. The NCI researchers therefore suggested that scientists handle cancer-causing viruses of the cat with care.

Additional studies on the growth and infectivity of cat leukemia virus in human cells were reported by Dr. Oswald Jarrett of the University of Glasgow.

Virus Relationships Described

Other newly discovered relationships between cancer-causing viruses were described by Dr. Arnold Graffi of the German Academy of Science in Berlin-Buch.

Dr. Graffi reported that a DNA virus found in skin cancers of adult hamsters, when inoculated into newborn hamsters, produced leukemia in these animals.

Specimens from the leukemic hamsters were then found to contain an RNA virus morphologically similar to those known to be associated with other animal leukemias. Dr. Graffi speculated that the DNA virus triggered the production of the leukemia-causing RNA virus.

Moreover, when the German scientists inoculated the newborn animals with cell-free specimens from patients with cancer of the stomach, lung, pancreas, and other

organs, up to 34 percent of the hamsters developed the same type of leukemia within 4 or 5 weeks.

In another report, a Russian scientist, Dr. Boris Lapin of the Institute of Experimental Pathology and Therapy of the USSR Academy of Medical Sciences, reported progress towards accomplishment of a goal long sought by other scientists.

This was the production of a leukemia-like disease in pregnant baboons following their inoculation with cell-free material from human leukemia patients.

A proposal for joint Soviet-American cooperation to repeat this research was made by Dr. S. S. Kalter of the Southwest Foundation for Research in Education, San Antonio, Texas. Dr. Kalter offered the use of his laboratories to Dr. Lapin.

NCI Supports Research

Research at the Southwest Foundation is supported by Federal contracts with NCI's Special Virus Cancer Program.

Evidence suggesting that viruses may be associated with human cancer of the connective tissue, as they are in animals with the same disease, was also reported.

Dr. Donald L. Morton, Surgery Branch, NCI, related experiments during the past year in which viruses or their "fingerprints" were detected in various human cancers of bone, cartilage and fatty tissue.

Related evidence of virus-induced cancers in lower animals was given by Dr. G. H. Theilen of the University of California School of Veterinary Medicine and collabora-

DR. KABAT

(Continued from Page 1)

National Academy of Sciences. He received the Eli Lilly Award in Bacteriology and Immunology in 1949, the first Golden Hope Chest Award of the National Multiple Sclerosis Society in 1962, and the Karl Landsteiner Award of the American Association of Blood Banks in 1966.

The National Institute of Allergy and Infectious Diseases has presented the Jules Freund Memorial Seminar annually since 1961, honoring the first chief of its Laboratory of Immunology.

Last year's speaker was Dr. Albert Sabin. Previous speakers have included Dr. Pierre Grabar, Dr. Rene Dubos, and Dr. Michael Heidelberger.

tors at Presbyterian-St. Luke's Hospital, Chicago, and Bionetics Research Laboratory, Kensington, Md.

Using cell-free materials obtained from a cat with fibrosarcoma or cancer of the connective tissue, the scientists were able to induce the same type of cancer in dogs, rabbits, and monkeys.

The virus they observed by electron microscopy in tissue samples from these animals' cancers was a C-type RNA virus, the same type of virus that causes leukemia in other animal species.

At a banquet closing the Symposium, the Leukemia Society of America's 1969 Scientific Award was presented to Dr. George H. Hitchings, vice-president in charge of research for the Burroughs-Wellcome Company.

Dr. Hitchings was honored for his development of several drugs used for treating patients with acute leukemia.

Dr. Shields Named Chief, Special Programs Branch In Nat'l Heart Institute

Dr. Jim L. Shields has been appointed chief of the Special Programs Branch of the National Heart Institute's Extramural Programs.

In his new post, Dr. Shields will direct the activities of the branch which evaluates applications for program project grants and plan-



Dr. Shields formerly headed a research team at Fitzsimmons General Hospital.

ning grants for cardiovascular research and training centers.

Dr. Shields came to NHI in September 1968 as a health scientist administrator in the Program Projects Branch (now the Special Programs Branch).

For 3 years prior to this, he headed a multidisciplinary research team and served as assistant chief of the physiology division at the U.S. Army Medical Research and Nutrition Laboratory, Fitzsimmons General Hospital, Denver, Colo.

Dr. Shields, a graduate in chemistry from Central Methodist College, Fayette, Mo., earned his M.A. in physiology (1958) and Ph.D. in environmental physiology (1962) from the University of Missouri.

Dr. Shield's principal research interests have been in the area of high altitude physiology and temperature regulation, with particular reference to carbohydrate and lipid metabolism and the cardiovascular effects of oxygen deprivation.

Cell Biology Symposium Provides Book Material

A book entitled *Biochemistry of Cell Division*, compiled from symposium presentations on cell biology, has recently been published.

The New York University Medical Center hosted the April 1968 symposium which was sponsored and organized by the Division of Research Grants.

It provided a forum for investigators in the field of cell division in mammalian cells—one of the major problems in molecular biology.



For those who can tear their eyes away from the fall foliage, a gaping hole appears at the southwest corner of the NIH reservation adjacent to Old Georgetown Road. Excavation has begun for the multilevel garage near Buildings 36 and 37 planned for 818 cars.

Thomas D. Hatch Named Deputy Director, DAHM

Thomas D. Hatch has been appointed deputy director of the Division of Allied Health Manpower, Bureau of Health Professions Education and Manpower Training.

He will also serve as acting director of the Division.

Mr. Hatch has been with DAHM since it was established in January 1967. He served first as executive officer, and since November 1968 has been assistant director.

In this capacity he has directed



Mr. Hatch has been involved in the development of DAHM since its establishment in 1967.

the ongoing programs and operation of the Division, including many activities which would normally have been carried out by a deputy director.

Prior to coming to BEMT, Mr. Hatch served in program management positions in the National Clearinghouse for Smoking and Health and the Diabetes and Arthritis Branch of the Division of Chronic Diseases, PHS.

He began his Federal Government career in 1959 as a management intern in the PHS Bureau of State Services.

Mr. Hatch received his baccalaureate degree in public administration from San Jose State College, and has attended the George Washington University Graduate School of Government.

Dr. Litchfield to Assist NLM Toxicology Prog.

The appointment of Dr. John T. Litchfield, Jr. as a consultant to the Toxicology Information Program, National Library of Medicine, has been announced by Dr. Martin M. Cummings, NLM Director.

Dr. Litchfield, who directed the medical research program of a large pharmaceutical company, also taught at Johns Hopkins and University of Minnesota Medical Schools.

DAHM Encourages, Supports Training In Many Health Occupation Categories

By Judith Roberts
Information Intern

The widening gap between the demand for health services, and their delivery to those who require them, stresses the importance of more effective use plus the need for an increase in health occupation personnel.

The gap also points up the necessity for new types of occupations that will take care of new health care concepts.

Physicians, nurses, and dentists are unable to provide all the health services. There are over 100 other categories identified as allied health professions and occupations. This number is constantly increasing.

One of 7 Divisions

The Division of Allied Health Manpower, one of seven divisions of the Bureau of Health Professions Education and Manpower Training, is the focal point for the study, encouragement, and support of education and training of allied health manpower.

A few of the allied health occupation categories supported by DAHM are the dental hygienist, medical technologist, medical record librarian, physical therapist, dietary technician, inhalation therapy technician, medical laboratory technician, and sanitarian technician.

It also provides graduate public health training grants and educational improvement grants for the professions of optometry, podiatry, pharmacy and veterinary medicine.

A DAHM report prepared this year for the President and Congress points out that 654,000 people made up the allied health manpower force in 1967—198,700 short of requirements for that time. This deficit is expected to be much greater by 1980.

Thomas D. Hatch, DAHM deputy director and acting director, sees three priority areas in the allied health field. These are: (1) the collection of information about manpower supply and requirements and educational resources, (2) experimenting in new methods of training and teaching, and (3) the production of qualified teachers and supervisors.

MRB Answers Questions

Answering questions about allied health people and educational programs falls to the Manpower Resources Branch, headed by David Hoover. One of their channels for collecting data is the state-wide Health Manpower Intelligence Projects.

Because manpower problems vary in different regions, health manpower information gathered at the State level should be especially meaningful. DAHM has contracts with health agencies to collect this data in Washington, Oregon, Pennsylvania and Oklahoma.

The wide range of health occupations important to DAHM is re-



A student at a junior college learns techniques on equipment purchased with an allied health professions Basic Improvement Grant. Eventually he will use this training in a job at a medical laboratory.

flected in the background of the division's staff. Typical is the staff of the Program Assistance Branch, headed by Dr. Fred J. Payne. It includes a sanitarian, a physical therapist, a pharmacist, a public administrator, and a dietitian.

The Allied Health Section, headed by Edison E. Newman, is the focal point for grant activities authorized by the Allied Health Professions Personnel Training Act.

This section administers grants for educational improvement, advanced training, and the development of new curricula and new methods for preparing health technologists.

Grants Purchase Equipment

This year, 258 junior colleges, colleges, and universities received \$9.75 million in allied health professions educational improvement grants. These grants are used to purchase equipment, pay faculty salaries, improve training programs, and increase student enrollments.

Schools of optometry and podiatry were also awarded grants for special projects. This year the division will be working with schools of pharmacy and veterinary medicine; new legislation has authorized educational improvement grants for these schools.

Advanced traineeship grants are made to eligible schools who, in turn, make awards to students. These students are headed toward careers as teachers, administrators, supervisors, or specialists in an allied health discipline.

The Public Health Section, headed by Dr. Floyd Clum, supports the training of people who already are health professionals—such as physicians, dentists, physical therapists, sanitarians, and nurses in public health care.

Social and economic factors in-

cluding increases in population, new medical techniques, and changes in methods of payment for health care, call for new types of health personnel and new ways to meet health needs.

The Educational Program Development Branch, under Dr. Joseph Kadish, acting chief, concentrates on innovative ideas in health care training such as investigating the developing of a training program for anesthesiology assistants, and a new category for health workers.

Other Programs Described

Another program at the University of Colorado trains child health associates who may help relieve the shortage of pediatricians in 1980—estimated at 88,000. This program emphasizes the 80 to 90 percent of pediatric practice which is concerned with well children and those with relatively mild diseases.

All efforts to improve educational programs, create new occupations, and analyze information are pointless unless people can be recruited into the allied health occupations. A DAHM contract with the National Health Council recognizes this problem.

The contract supports efforts which include strengthening and expanding state and community health councils, developing a system for responding to questions about health careers, and promoting activities to coordinate health career clubs in high schools and community organizations.



Men and women study in public health training laboratories. DAHM is responsible for graduate public health training grants for health professions that include podiatry and veterinary medicine.

DR. MALONE

(Continued from Page 1)

Periodontal Diseases and Soft Tissue Program.

For the past 2 years, he has been professor and chairman of the Department of Biology of the American University of Beirut, Lebanese Republic.

Dr. Malone came to NIH as a grants associate in 1962.

His research has been in the general field of reproductive histophysiology, and he has published numerous papers on the histogenesis of lutein tissues and the cytology and cytochemistry of reproductive tissues.

NOBEL*(Continued from Page 1)*

citizen in 1945.

Recently, he and Dr. Luria shared a \$25,000 award for biological research, the Louisa Gross Horwitz prize.

Dr. Hershey has been a NIGMS grantee for many years. He has conducted research on DNA and its physiological functions and replicates. His work is also related to transplantation immunology and to the possible origin of leukemia and other types of cancer believed to be caused by viruses.

Converts Phage Models

Dr. Hershey converted the phage models of Drs. Delbruck and Luria into forms that biochemists could use to study other viruses. His famous "shearing experiment"—using an ordinary kitchen blender—showed that the nucleus of a virus containing the DNA invades a cell by itself, leaving its protein "outercoat" behind.

Before this, it was not clear whether it was DNA or the virus protein that entered the bacteria to act as the genetic transmitter.

The Laureate, who is the Director, Department of Genetics, Carnegie Institution of Washington, in Cold Spring Harbor, N. Y., received his B.S. and Ph.D. degrees from Michigan State College.

Dr. Luria, a National Institute of Allergy and Infectious Diseases grantee, has also been the program director of a NIGMS training grant in microbiology.

Dr. Luria's grant-supported research has investigated the interaction between bacterial viruses and their host cells.

A native of Turin, Italy, he received his M.D. degree from the University of Turin in 1935. For the next 5 years he worked at the Curie Laboratory and Institute Pasteur in Paris before coming to Columbia University.

Works at Vanderbilt, Princeton

Later, he worked under a Guggenheim Fellowship at both Vanderbilt and Princeton Universities.

From 1945 to 1946 Dr. Luria was an investigator for the Office of Scientific Research and Development at Carnegie Institution of Washington, D. C. From there he went to Indiana University, and then, in 1950, became professor of Bacteriology at the University of Illinois.

In 1959 Dr. Luria accepted the post of biology professor at Massachusetts Institute of Technology. In 1964 he was given the Sedgewick Chair in Biology at that university, the position he now occupies.

Dr. Luria's other awards include the Lepetit Prize and the Lenghi Prize from the Accademia dei Lincei.

He became a naturalized American citizen in 1947.

NICHD's Diagnostic and Study Branch Examines Retardation in Young Patients

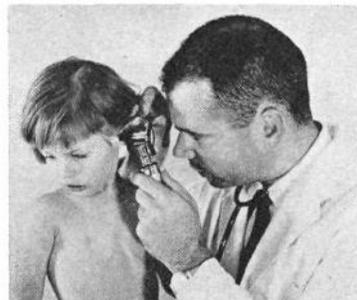
Dr. Jean Symmes, a research psychologist, observes the child's responses to toys and other material during a play period.

Since 1965 the Children's Diagnostic and Study Branch of the National Institute of Child Health and Human Development has studied children with mental retardation, physical handicaps, and learning disabilities.

The Branch is part of the Intramural Research Program of NICHD which operates under a cooperative agreement with the National Naval Medical Center. Dr. Duane Alexander is head of the project.

In order to be eligible for this program, children must be under 7 years of age and dependents of parents or guardians who are entitled to receive care in a military hospital.

Each year approximately 100 patients are seen for detailed studies, and successful diagnoses



Dr. Duane Alexander examines a young patient who will undergo physical and mental studies in order to determine the degree of mental retardation.

have been made in a large percentage of cases.

Most referrals for a diagnostic study are made by the child's physician, but direct requests from the family, school or community agencies are accepted.

Patients are first seen by a pediatrician who obtains their medical history and performs a physical exam. Other staff members also observe the young patient, and

blood and urine samples are taken to identify possible chromosomal or metabolic disorders.

The staff determines what further studies each child needs. The pediatrician and public health nurse work with the patients' families in arranging these studies.

A psychologist reviews the child's behavior and development history and administers psychological tests. An audiologist and speech pathologist determine the child's speech, hearing, and language abilities.

An education specialist notes the child's previous school program and studies his use of educational and play materials. The social worker evaluates the home and family situation and the parents' appraisal of the problem.

Agencies Receive Summary

On the basis of all reports, a diagnosis is made and recommendations are developed for educational programs, therapy, and family counseling.

The pediatrician interprets these findings to the parents and compiles a case summary which is sent to all agencies dealing with the child.

The goal of the Diagnostic and Study Branch research program is to acquire an understanding of the cause, prevention, and therapy of mental retardation.

This task requires the coordinated efforts of scientists and clinicians who work in the fields of biology, medicine, behavioral sciences, social sciences, and public health.

Dr. George L. Crocker, DDH, Appointed Chief, Resource Analysis Br.

Dr. George L. Crocker, formerly special assistant to Dr. Viron L. Diefenbach, Director of the Division of Dental Health, has been appointed chief, Resource Analysis Branch, DDH. His appointment was announced by Dr. Diefenbach.

Dr. Crocker will plan, develop, and direct a national program of dental resource studies to assess the supply, distribution, utilization, and productivity of dentists and dental auxiliary personnel.

Dr. Crocker received his undergraduate degree from Denison University. However, his studies were interrupted when he served for 18 months in the South Pacific as an Army Air Corps fighter pilot during World War II.

He received his dental degree from the University of Michigan in 1951, and his MPH degree from that University's School of Public Health.

After he was commissioned into the Public Health Service in 1958, he spent a year in postgraduate



When he was assigned to DDH in 1967, Dr. Crocker developed a comprehensive plan for automatic data processing in relation to applied research activities.

study in radiological health at the University of Michigan. He was then assigned to work on the Dental Radiological Health Program of the National Center for Radiological Health.

Under his direction, 77,000 dental X-ray machines throughout the United States were surveyed and corrected to bring them up to acceptable standards.

The volume of data handled during this period necessitated wide use of computers, which stimulated Dr. Crocker's interest in automatic data processing.

After serving for several years as a radiological health consultant he returned to NCRH in 1965, and eventually took charge of the Data Processing and Mathematical Section.

In 1967, Dr. Crocker was assigned to DDH to develop a plan for automatic data processing, particularly in relation to its applied research activities.

Dr. von Brand Retires, Continues Experiments On a 'Volunteer' Basis

Dr. Theodor C. von Brand, distinguished parasitologist and physiologist who recently retired from the National Institute of Allergy and Infectious Diseases, is still at work in his lab—now on a "volunteer" basis.

The renowned scientist, who has been chief of the Physiology and Biochemistry Section, Laboratory of Parasitic Diseases, since 1947, will remain at NIH until Jan. 1 to complete experiments now in progress.

He is also actively engaged with his duties as president of the American Society of Parasitologists, and will officiate at the society's 45th annual meeting in Washington, D.C. next week.

During the sessions he will be honored at a symposium on Nov. 5.

After his work is completed in January, Dr. von Brand plans to start his third monograph on the biochemistry and physiology of parasites. This book will differ from his two previous books—it will be written in German.

Dr. von Brand was honored by



Dr. von Brand is recognized internationally for his research accomplishments in parasite physiology and biochemistry.

friends at a luncheon Oct. 22. At that time he was presented with a bound volume containing letters of praise and recognition from international collaborators and colleagues who were associated with him during his career at NIH.

Taught at Barat, CU

Born and educated in Germany, Dr. von Brand immigrated to the United States in 1936. He taught at Barat College and Catholic University before coming to NIH in 1946.

Dr. von Brand's contributions to invertebrate physiology and biochemistry earned for him a reputation as a world authority.

His research accomplishments in parasite physiology and biochemistry have been described as giving

Richard Henschel, EO, Retires From NHI; Assumes R&W General Manager Post

The NIH Recreation and Welfare Association has a new General Manager. He is Richard H. Henschel, former executive officer of the Heart Institute.

Mr. Henschel, the third manager since the post was created in 1955, will replace Herbert B. Hopkins who resigned in June. Nellie McLeish of the Employee Counseling Service has been Acting General Manager since the post was vacated.

In his new position, Mr. Henschel will be responsible for managing all R&W activities. This includes supervision of the organization's finances, coordination of its present activities, and planning future programs.

Directs Service Centers

He will also supervise the R&W administrative staff as well as the three service centers located in the Clinical Center, Westwood Building, and the National Library of Medicine.

A former president of the association in 1964 and 1965, Mr. Henschel has also served as the NIH management liaison with R&W—evidence of his long-term interest and experience in the organization and its activities.

"We're trying to get the best quality merchandise into the R&W store," the manager stated. "We're handling good jewelry, Hallmark cards, Samsonite luggage, and other well-known brand name products."

Mr. Henschel added that space was the major problem in dispensing services. However, the additional space in the new Service Center should relieve this problem somewhat.

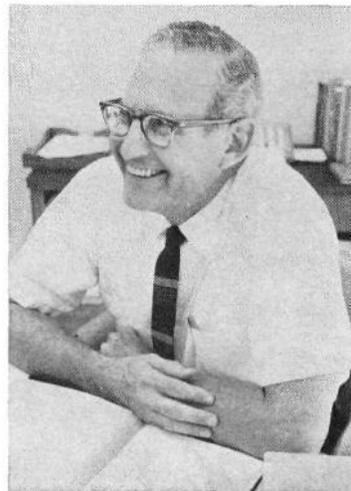
The new General Manager, appointed by the organization's 8-man Board of Directors, will assume the position Nov. 3, coinciding with the formal opening of the R&W Service Center in Bldg. 10.

new direction to that field.

In addition, his facility as an author has enabled him to produce several classical works in parasitology which have not only had a lasting impact on development of the field but have also influenced scientists in other disciplines as well.

Dr. von Brand is an honorary member of the medical faculty of the University of Chile. From 1964 to 1969, he was a member of the World Health Organization Expert Advisory Panel on Parasitic Diseases.

Among his recent awards are an honorary membership in the German Society of Parasitology and the DHEW Superior Service Award "for meritorious research on the chemical composition and metabolism of parasites."



Mr. Henschel has been in Federal service for 35 years—including 22 years at NIH.

Richard H. Henschel, executive officer of the National Heart Institute since March 1961, will retire on Oct. 31 after 35 years of Federal service. For the past 22 years he has been with NIH.

During that period Mr. Henschel has held important administrative posts within the Office of the Director, NIH, and with various Institutes and Divisions.

Background Cited

These include tours of duty as executive officer, National Cancer Institute (1947-1951); assistant executive officer, NIH (1951-1952); executive officer, Clinical Center (1952-1955), and chief, NIH Division of Business Operations (1955-1960).

In 1960, he returned to the Office of the Director, NIH, as assistant executive officer. The following year he accepted the post of NHI executive officer.

Mr. Henschel remembers with special fondness his 3-year association with the Clinical Center.

In terms of design, function, and operation, nothing quite like the CC had ever been attempted before, although many of its innovations have since been widely copied.

Responsibilities Noted

Mr. Henschel's responsibilities lay in the procurement, allocation, and management of facilities, equipment, and supporting services required for the CC's extensive research program.

He also assisted the CC Director and his immediate staff in establishing policies and procedures governing the admission and care of patients.

Mr. Henschel attended Haddon Heights High School, in New Jersey. After receiving his B.S. in economics from Ursinus College in

DR. CHANOCK

(Continued from Page 1)

showed that it was also a significant cause of pneumonia in children as well as young adults.

A native of Chicago, Ill., Dr. Chanock earned the B.S. and M.D. degrees at the University of Chicago. He came to NIAID in 1957 after teaching at the University of Cincinnati and the Johns Hopkins School of Hygiene and Public Health.

Dr. Chanock is head of the International Reference Laboratory for Respiratory Viruses of the World Health Organization.

In addition to the Squibb Award, which is presented to a person 45 years of age or younger for outstanding contributions to infectious diseases, Dr. Chanock has also received the E. Mead Johnson Award, the Public Health Service Meritorious Service Medal, and the Kimble Methodology Award.

1934, he entered Government service with the Federal Housing Administration.

From 1943 to 1946, he was a senior budget examiner in the Bureau of the Budget. In 1946 he was appointed head of the Administrative Management and Budget Division of the U.S. Patent Office, where he served until his appointment as executive officer of NCI.

Although he is retiring from Federal service, Mr. Henschel will continue his long association with NIH as General Manager of its Recreation and Welfare Association.

Blood Bank at CC Reports On Donations in September

The Clinical Center Blood Bank reports that 317 units of blood were received from NIH donors in September, and CC patients received 1,676 units of blood.

Three donors achieved a special status. Dr. Wallace P. Rowe, NIAID, attained the 3-gallon mark. Charles F. Crist, NIAMD, and George M. Pickrell, DRS, reached the 2-gallon mark.

Joining the Gallon Donor Club were: Charles W. Casey, DRG; Dr. John Giovanelli, NIMH; Edward Gotthardt, DRS; Robert Johnson, NIDR; Josephine Nelson, NCI; John S. Palmer, NIAMD, and Charles A. Rexroad, CC.

Make an appointment to donate blood now. Call Ext. 64506.

Cholera continues to be a threat to international health. The number of cases reported in 1967 went from 23,000 to more than 29,000 in 1968.—World Health.