Dr. Udenfriend Wins Annual Hillebrand Award

Dr. Sidney Udenfriend, Chief of the Laboratory of Clinical Biochemistry, National Heart Institute, has been selected by the American Chemical Society as this year's winner of the Hillebrand Award for original contributions to the science of chemistry.

The Award, named in honor of Dr. W. F. Hillebrand, Past President of the local chemical society, will be presented to Dr. Udenfriend at the Society's annual award dinner, March 8, at the Knights of Columbus Hall in Arlington, Va.

The eighth NIH scientist to receive the Award since its establishment in 1925, Dr. Udenfriend will be cited for his fundamental contributions to the biochemistry of neuroregulatory substances in the regulation of health and disease.

Dr. Udenfriend's primary research efforts at NIH have been on the metabolism of amino acids and amines. His studies have established him as an international authority in his field and findings have announced the establishment of the National Institute of Allergy and Infectious Diseases.

NIH Credit Union Moves To New Offices Monday

The NIH Federal Credit Union will move from the Clinical Center to its new and larger offices in Building 31 next Monday, March 5. Banking facilities with five teller windows will be located in Room 1A08, and the loan department will be located in Room 1A07.

A special feature of the loan department will be individual interview offices insuring complete privacy for loan applicants.

Open Daily

Business hours in the new offices will be from 10:00 a.m. to 4 p.m., Mondays through Fridays, with the exception of paydays when the offices will open at 9:30 a.m.

In addition, the CU will provide pay-by-mail envelopes for members wishing to make savings deposits or loan payments through the interoffice mail system.

An open house to which all NIH employees are invited, will be held in the new offices on Tuesday, March 6. Light refreshments will be served from 9 to 10:30 a.m. and from 2 to 3:30 p.m.

New NIAID Program Seeks to Develop Vaccines Against Respiratory Viruses

Surgeon General Luther L. Terry of a Vaccine Development Program in the National Institute of Allergy and Infectious Diseases.

The purpose of the new program is to make fullest possible use of tract viruses.

According to Dr. Terry, knowledge of these viruses has been accumulating rapidly, particularly over the past ten years, and that now is the time to concentrate on practical application of what is currently known, even as laboratory research continues to uncover new information.

The program will be directed by Dr. Dorland J. Davis, NIAID Associate Director in Charge of Research.

Advisory Board Meets

A Board for Vaccine Development, which has just held its first meeting, will advise Dr. Davis. Chairman of the Board is Dr. Gordon Meiklejohn, Professor of Medicine and Head of the Department at the University of Colorado Medical Center, and a recent past member of the National Advisory Allergy and Infectious Diseases Council.

Other members of the Board are Dr. Floyd W. Denny, Jr., Professor of Pediatrics, University of North Carolina School of Medicine; Dr. George Gee Jackson, Professor of Medicine at the University of Illinois College of Medicine; and Dr. Edward H. Utz, Jr., Department of Medicine at the University of North Carolina School of Medicine.

Joint Crusade-Health Agencies Campaign Begins Monday

The annual combined campaign of the Federal Service Joint Crusade and the National Health Agencies will be launched here on Monday, March 5.

This is the second of the two official fund drives sponsored each year by the Federal government.

Concentrated during the first two weeks of March, the NIH drive aims at 100 percent effective employee participation, with no dollar quota. Campaign keymen, one for every 25 NIH employees, will personally contact each member of their groups during the combined drive to outline its objectives.

Dr. Seymour J. Kressover, Jr., Acting Director of the National Institute of Dental Research, is NIH Chairman and Dr. Ralph E. Knutti, Director of the National Heart Institute, is Vice Chairman.

Directed nationally by Attorney General Robert F. Kennedy, the National Health Agencies drive benefits the Muscular Dystrophy Associations of America, the National Multiple Sclerosis Society, the National Society for Crippled Children and Adults, the United Cerebral Palsy Associations, the American Cancer Society, and the American Heart Association.

Also under Mr. Kennedy's direction, the Federal Service Joint Crusade includes the American Korean Foundation, CARE, and Radio Free Europe.

In urging full employee participation in the campaign, Dr. Kressover said that, "This campaign is one way for everyone to help in the never-ending battle against crippling disease, world-wide hunger, and the threat to liberty from lack of information. I sincerely hope that everyone at NIH will effectively contribute to the combined fund drive."

G. Halsey Hunt, Chief of DGMS, To Retire April 1

Dr. G. Halsey Hunt, Chief of the Division of General Medical Sciences will retire April 1 after 25 years' service with the PHS Commissioned Corps to become Associate Executive Director of Educational Council for Foreign Medical Graduates, Evanston, Ill.

Upon the retirement of Dr. Dean F. Smiley on January 1, 1963, he will become Executive Director of the ECDFM.

Dr. Hunt came to NIH in 1956 as the first Director of the Center for Aging Research. He has been Chief of DGMS since its establishment in July 1958 to administer NIH grant programs for research and research training in the basic medical and biological sciences. His successor has not yet been named.

Dr. Hunt was commissioned in the U. S. Public Health Service in 1936. From 1936 to 1948, he was on the surgical staffs of the Public Health Service hospitals in Staten Island, Seattle, San Francisco, and Louisville.

From 1945 to 1947, he directed a study of medical group practice in the United States, and in 1947 and 1949, respectively, was named Assistant Chief, then Chief, of the Division of Hospitals. From 1952 to 1956 he was Assistant Surgeon.

Army Band to Present Concert Here March 1

The U. S. Second Army Band will give a concert in the Clinical Center auditorium Thursday evening, March 1, at 7:30 p.m.

NIH employees, their families and friends are invited. The concert is primarily for CC patients and was arranged by Arnold Sperling, Chief of the CC Patient Activities Section.


Study of Psychiatric Outpatient Clinics In Maryland Yields Valuable New Data

The first comprehensive study of the characteristics of psychiatric outpatient clinics of an entire State—Maryland—has been carried out by a team of National Institute of Mental Health scientists and associates. Data were collected on the age, sex, color, place of residence, and mental disorder of every Maryland patient seen in various clinics serving residents of the State during the year ending June 30, 1959. Findings indicate that less than one-half of one percent of the population are seen in a psychiatric clinic in a year.

Primarily For Children

In rural counties, clinical services are primarily for children, reflecting the use of the clinic by school psychological services and as a casework and court diagnostic facility in lieu of other community resources. All clinics reported long waiting lists for treatment of children, indicating marked inadequacy of services in all geographic areas. Clinic admission and termination rates were considerably higher for boys than girls.

Children under five and adults 65 and over have the lowest rates of admission to clinics; high rates for school children are followed by a decline in late adolescence, a secondary rise at ages 30 to 40 years, followed by another decline. The general decline in the clinic population past the age of 40 does not indicate diminishing disease with age, since it is accompanied by an increase in the rate of admission to inpatient care. A lower psychiatric rate for adults was observed in less urbanized areas, which parallels earlier findings indicating that highest rates for hospitalization for schizophrenia occur in areas of high population mobility and density. Other findings show that in late adult life, brain syndromes associated with cerebral arteriosclerosis or senile or presenile brain disease predominate. Transient situational personality disorders (adjustment reactions) are of considerable numerical importance in childhood and decline at 18 years. In psychiatric classifications among children, personality disorders and mental deficiency were major problems among adults, psychiatric disorders led, followed by psychoneuroses.

Field Studies Needed

Results of the survey, the investigators note, sharply point up the need for further intensive field studies along these lines, and demonstrate the usefulness to the psychiatrist, mental health program planner, sociologist, and epidemiologist of such data obtained for an entire geographic area and referable to a population basis for computation of admission and termination rates. The study was reported by Anita K. Bahn, Caroline Chandler, NIMH; and Leon Eisenberg, Johns Hopkins University, in the American Journal of Psychiatry.

GMDS Awards Grants For Biophysical Studies

Grants amounting to $581,649, awarded to 23 scientists for studies in the fields of biophysics and biophysical chemistry were announced recently by the Division of General Medical Sciences.

The research to be supported by the new grants will focus on cell structure and function and will involve theoretical chemistry and the technics of the physical sciences. End result of some of these investigations, which will be carried out in 21 institutions in 16 States, will be a better understanding of basic biological processes, ranging from photosynthesis to the mechanism of enzyme action. One study is aimed toward providing a finding for the description of living cell membrane.

Biophysics and biophysical chemistry are fields receiving new emphasis in the DGMS research program. Currently, $75,000 has been awarded for studies in these areas during the current fiscal year.
from research that he has conducted or directed have influenced much of the basic and clinical research of the Heart Institute.

His studies on the biosynthesis and metabolism of serotonin, norepinephrine, and epinephrine have significantly contributed to NIH research on hypertension, especially in the pharmacological evaluation of hypertensive drugs.

Studies currently underway in Dr. Udenfriend's laboratory are yielding additional information on the operation of the central and autonomic nervous systems. His work on amino acid and amine uptake by the brain is helping to define further the nature of the "blood-brain" barrier.

Theory Suggested

The biosynthesis of acetylcholine, one of the body's most important neurotransmitters is being investigated in other studies. Some of his recent research has shown that homocarnosine, a compound that appears to be synthesized only by tissues of the central nervous system, is excreted in the urine. This suggests the possibility that homocarnosine may have an index of the metabolic activity of the CNS.

Dr. Udenfriend has been associated with NIH since 1950 and became Chief of the Laboratory of Clinical Biochemistry in 1956. Since 1951 he has authored or coauthored more than 140 scientific papers, and has recently completed a book, Fluorescence Assay and Clinical Biochemistry in 1956.

In 1958 he was the winner of the Arthur S. Flemming Award for outstanding contributions to NIH research programs.

Born in New York

A native of New York City, he received a B.S. degree from the College of the City of New York in 1939, and M.S. and Ph.D. degrees from New York University in 1942 and 1948 respectively.

He is a member of the American Chemical Society, the Society of Biological Chemistry, the Society of Pharmacology and Experimental Therapeutics, and the Society of Experimental Biology and Medicine.

Other NIH winners of the Hillebrand Award are the late Dr. Claude S. Hudson, who received the prize in 1948; the late Dr. Lyndon F. Small, 1949; Dr. Bernard L. Horecker, 1954; Dr. Bernard Witkop 1958; and Dr. Leon Heppel, 1960, all of NIAMD.

Two NCI scientists have also been winners of the Award: Dr. Dean Burk, in 1952, and the late Dr. Jesse P. Greenstein, in 1957.

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**Educational TV Use in Nursing Care Demonstrated by Special CC Program**

Dr. Jane Wilcox (left), Assistant for Nursing Research, CC Nursing Department, mans the TV control center during a special program on the "Use of Television in Nursing Research and Nursing Education." Monitors and switch box are shown in the foreground, and Ruth Motka, Assistant Chief, NCI Nursing Service, is readying props in the background. —Photo by Jerry Hecht.

A special program on the "Use of Television in Nursing Research and Nursing Education" was presented recently in the Clinical Center's 14th floor auditorium by the CC Nursing Department.

Directed and coordinated by Dr. Jane Wilcox, Special Assistant for Nursing Research, the 2-hour program included live demonstrations of the "do-it-yourself" use of television cameras in teaching and in nursing care observation.

The program was presented for members of the Nursing Research Study Section, DRG, at the request of Helen G. Tiptibbitts, Executive Secretary of the Study Section, in order to provide background information which would be helpful in evaluating research proposals involving the use of television.

To demonstrate how nurses can use television in teaching, Dr. Wilcox included the reenactment of part of a regular monthly clinical nursing conference. The portion she had been presented with the use of TV by the Cancer Nursing Service last October to show the hospital and home care of the colostomy and ileal bladder.

Use of television for direct observation of bedside nursing care in a patient's room was also demonstrated. Members of the Study Section were able to see how a researcher, by means of television, can observe actual nursing care. On two monitors they watched Barbara Daltorio, Cancer Nursing Service, as she cared for a patient with a tracheostomy. Robert E. Taylor, Jr., nursing assistant, played the part of a patient.

Another important part of the program was a presentation by Frank Vanaman, Chief of the Television Engineering Unit, CC Clinical and Professional Education Branch. He discussed the kinds of equipment, personnel, and other facilities needed for various types of programming when television is used as a medium of communication in research.

Dr. Wilcox and her staff are now making plans to produce a TV program on "Medical Asepsis."

### Hold Those Phone Calls During Area Snowfalls

During the recent snowstorms that have hit the area, the telephone switchboard at NIH has been deluged with calls from employees requesting information on dismissal times. These calls have so tied up the lines that in some cases employees did not receive notification that they could go home until as much as 30 minutes after they had been officially dismissed.

Howard E. Kettl, NIH Assistant Executive Officer, reminds NIH personnel that all Administrative Officers are alerted to area dismissal policies and they will immediately notify employees when the decision for early dismissal is reached. He adds that much valuable time will be saved and communication snarls will not develop if employees will refrain from calling the switchboard in the event of snow.

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**Iowa State Gets Grant for Study of Hepatitis**

A new U. S. Public Health Service research grant to the State University of Iowa for research on infectious hepatitis, a virus disease which afflicts an estimated one million people in the United States, has been announced by Surgeon General Luther L. Terry and University President Virgil Hanchen.

The grant will be administered by the National Institute of Allergy and Infectious Diseases. It will amount to $65,840 for 1962, and approximately half this amount is recommended for each of the following two years. Principal investigator for the studies at the University is Dr. Albert P. McKee, Professor of Bacteriology.

**Nearly 1 Million Affected**

In announcing the grant, the Surgeon General commented on the laboratory and clinical research problems related to viral hepatitis which struck an estimated 750,000 to one million Americans in 1961. (This estimate is projected from 72,559 cases reported to the Communicable Disease Center in Atlanta, Ga.)

He noted that the isolation of the causative virus has not been adequately confirmed and therefore physicians are still dependent upon clinical symptoms for diagnosis of the disease. Diagnosis is made more difficult by the resemblance of infectious hepatitis symptoms to those of many other liver ailments, Dr. Terry added.

Though relatively few deaths from infectious hepatitis are reported, the Surgeon General stressed the seriousness of the disease: severe illnesses lasting weeks or months, accompanied by fever, nausea, headache, and depression are commonly associated with infectious hepatitis.

**Studies Several Strains**

Dr. McKee will use the grant, to continue studies of several strains of viruses he isolated from patients in an outbreak of clinically apparent hepatitis.

The research, he said, "will be directed at seeking ways to inactivate the viruses without destroying their antigenic action (action which stimulates the production of antibodies in the infected person)." Development of a vaccine for immunization against the disease caused by the viruses; studies of the disease in patients and the development of a process to help in the diagnosis of the disease in cases which are not clinically obvious.

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**Reserpine Analog Shows Potentialities In Treating Mild Psychiatric Disorders**

An experimental drug that may offer several potential advantages over the tranquilizer, reserpine, in the treatment of mild psychiatric disorders is now being tested in animals by National Heart Institute scientists. The drug, a reserpine analog, was made by modifying the reserpine molecule. Reserpine, a "natural product" coming from the root of the Rauwolfia serpentina plant.

After testing the new drug in animals, the NIH scientists report that its action is readily reversible, and its effects are temporary and noncumulative. The intensity of its effects is dependent on the amount of drug in the brain. When the drug disappears, so do its effects. The desired clinical results are obtained by merely adjusting the dosage.

Reserpine, on the other hand, is harder to handle. Its action is not easily reversible and its effects last for long periods after therapy is discontinued. It is a "hit and run drug," often disappearing completely from the brain before its effects develop. Since effects pile up after each dose, clinicians must carefully regulate dosage to prevent serious side effects.

### Side Effects Cited

Some patients with high blood pressure, given a minimum dose of reserpine daily, may become increasingly lethargic, fatigued, and occasionally even mentally depressed. Patients with mental illness, given larger daily doses, may exhibit signs of Parkinsonism which may last weeks and even months after the reserpine therapy is discontinued.

Given intravenously, the new drug—known as SU-9064—is far less potent than reserpine and produces sedative effects much less intense even in doses five times as large. Administered orally, the drugs are about equal in effectiveness. The more potent reserpine loses much of its efficiency when given orally because much of that is absorbed from the stomach and intestines is rapidly metabolized by the liver before it can get to its sites of action in the brain. SU-9064 does not suffer this fate and is equally effective orally or intravenously.

### Report Published

**SU-9064**—chemically a methyl ether of methyl reserpate—was produced by CIBA Pharmaceutical Products in cooperation with the National Heart Institute. The Heart Institute scientists, Drs. Eduardo Cuenca, Erminio Costa, Ronald G. Kuntzman, and Bernard B. Brodie, reported their studies with SU-9064 in the December issue of Medicine Experiments.

### 42 Scientists Receive DGMS Career Awards

Forty-two research scientists have received research career awards totaling $656,482 from the National Institutes of Health, PHS Surgeon General Luther L. Terry, announced recently.

The program, administered by the Division of General Medical Sciences, seeks to encourage and support researchers working in the basic medical and biological sciences.

This group of 42 awards covers the first half of Fiscal Year 1962. Included are two types of special support for scientific investigators.

The program called Research Career Development Awards provides aid for young scientific investigators who need further experience to qualify for senior positions. These awards are going to 33 individuals in 24 institutions and universities in 16 States and the District of Columbia. The program referred to as Research Career Awards has the purpose of providing stable career opportunities for scientists considered to have superior capabilities in the health-related sciences. These awards are going to nine scientists in nine universities in as many States.

Under the Career Development program, support can be provided for five years and may be renewed to provide support for a total of 10 years.

Under the Career Award program, support can be provided in 5-year increments with review at appropriate intervals to ensure that the award continues to promote the objectives of the program.

These viruses which will receive immediate attention in the Vaccine Development Program. Priorities have been set up to make prototype vaccines, both live and injected with respiratory syncytial virus; parainfluenza viruses 1, 2 and 3; PPL-Eaton agent; and adenoviruses 1, 2, 3, 4, 5 and 7. These priorities have been chosen because RS viruses are believed to cause about 20 percent of these illnesses; parainfluenza viruses 15 percent; PPL-Eaton agent 10 percent; and adenovirus 10 percent. In addition, the possibility of vaccine development against the enteroviruses and enterovirus-like agents incriminated in respiratory disease of adults will be explored.

### Disease Is Costly

Human respiratory disease is recognized as the largest single disease problem of man. In the United States it causes more time lost from work and other productive pursuits than any other disease, with an estimated economic loss through this factor alone of over $3 billion a year.

A massive problem in adults, respiratory illnesses are even more pervasive in children. Each year in the pre-school age group, there are more than 20 million respiratory episodes with fever. An estimated 8 million of all illnesses between birth and age 18 are caused by acute respiratory disease, according to a 30-year study by scientists at the Harvard School of Public Health.

It is now possible to implicate known viruses in about 60 percent of the serious respiratory illnesses of hospitalized children, and it is...