Ground Broken for New NCI Facility; Other Construction Projects Planned

Building 31C (left), an extension to the NIH General Office Building, is scheduled for completion in the summer of 1968.

Ground was broken last month for the most recent NIH construction project—a Virus Isolation Facility for the National Cancer Institute. A second new project, the extension to Bldg. 31, is expected to be started late this summer.

According to the Division of Research Services, which coordinates the design and construction of new facilities, the overall building program will increase NIH laboratory space by 40 percent.

Projects now under construction at NIH are:

NCI Virus Isolation Facility—This building, designated Number 41, will house the work of the virus-leukemia program which was authorized by Congress in F.Y. 1965.

Because of the possible hazards of virus research, maximum protection of laboratory workers, animals and experiments must be provided. To accomplish this, conventional laboratory design was abandoned.

Changes Planned

Instead, the building is designed to hold prefabricated, hazardous-activity containment modules for various laboratory procedures, allowing its interior to be modified as research progresses and new information is developed.

It also will contain special equipment to handle treatment of contaminated air and waste.

Building 41, scheduled for completion in February 1968, will be located in the southern section of the reservation, west of the National Library of Medicine.

Building 31C—This extension to the General Office Building, to be added to the east end of Wing "B", (See CONSTRUCTION, Page 5)
American Heart Assn.
Accepting Applications For Research Awards

Applications from research investigators for support of studies to be conducted during the fiscal year beginning July 1, 1967, are now being accepted by the American Heart Association.

September 15 is the deadline for submitting applications for Established Investigatorships and Advanced Research Fellowships.

Deadline Noted

Applications for Grants-in-Aid should be submitted by November 1. Grants-in-Aid are made to experimentalists to help underwrite the costs of specified projects such as equipment, technical assistance and supplies.

Application forms for research awards may be obtained from the Director of Research, American Heart Association, 111 East 23rd Street, New York, N.Y. 10010.

Self-Teaching Notebook Prepared by CC Nurse

As the responsibilities of nursing assistants increase, so does the need for an efficient teaching method. To meet this need, a special self-teaching notebook was prepared by Cora L. Goodson, B.S.N., Chief of the Education and Training Unit of the Clinical Center Nursing Department.

The manual, entitled Temperature, Pulse, and Respiration Measurement: A Programmed Notebook for Nursing Assistants, is divided into five sections, each of which consists of instructional exercises and a review portion.

Prepared at CC

The notebook, published this month, is the second of its type to be prepared at the Clinical Center. The first, Temperature Measurement: A Programmed Notebook for Nurses was written by Jane Wilcox, R.N.

These notebooks follow a pattern of teaching known as "programmed instruction" which is rapidly gaining wide acceptance because of its individuality.

Although such programs vary in the devices used to provide the information, they are alike in that they are self-paced, are organized in terms of increasing complexity, require active student response and give immediate reinforcement of the correct responses.

Ocral Cancer Pamphlet Cites Merits of Routine Examination as Cancer Check

Routine examination of the month by a dentist or physician—even the alertness of an informed individual—may lead to the detection of oral cancer, cure of approximately 4,000 deaths each year in the U.S.

Symptoms, causes, treatment and research on the disease are discussed in a pamphlet, Cancer of the Mouth, issued recently by the Public Health Service.

It is the latest in a series of pamphlets on cancer of different body parts prepared for the public by the National Cancer Institute.

The pamphlet warns that many persons delay getting medical attention because problems in this area are so common. However, oral cancer usually progresses rapidly, and a doctor should be seen when a problem persists for 2 weeks.

Pipe smoking and consistent exposure to sunlight are cited as chief factors associated with cancer of the lip, the most frequently occurring form of mouth cancer.

Cancers inside the oral cavity are often associated with the use of cigarette, cigar, pipe, chewing tobacco and snuff.

Warning Given

Chronic irritations caused by jagged teeth or badly fitting dentures, and the excessive use of alcohol are also believed to have some relationship to mouth cancer.

Single copies of "Cancer of the Mouth" (PHS Publication No. 496) are available without charge from the Public Health Service, Washington, D.C. 20201. The pamphlet may be bought in quantity from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at 5¢ a copy or $2.75 per 100 copies.

List of Latest Arrivals Of Visiting Scientists

7/11—Dr. Klausmarin Volgt, Germany, Laboratory of Chemical Pharmacology. Sponsor: Dr. R. Erdey, NIH, Bldg. 36, Rm. 7A16.
7/15—Dr. Stuart O. Brandenburg Jr., U.S.A., Office of the Director. Sponsor: Dr. Robert Grant, NIH, Bldg. 31, Rm. 3492.
7/22—Dr. Ichiro Ohashi, Japan, Laboratory of Chemical Biology. Sponsor: Dr. C. B. Anfinsen, NIMH, Bldg. 10, Rm. DN599.

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Copies Available

Single copies of Temperature, Pulse, and Respiration Measurement may be obtained from the Clinical Center Information Office, Room 7A17, NIH, Bldg. 36, Washington, D.C. Single copies at $1 each are available from the Superintendent of Documents, Government Printing Office, Washington, D.C.
Dr. King Appointed Chief
Of OIR’s Latin America
Office in Rio de Janeiro

Dr. Cecil T. G. King has been named Chief of the NIH Office of International Research’s Latin America office in Rio de Janeiro, Brazil.

In his new position Dr. King will coordinate the interests of NIH in South and Central America, and advise on the status of research activities in that area. Also, he will work closely with NIH institutes and divisions in seeking new research and research-training opportunities.

Development of closer communications between biomedical research communities will be another aim of Dr. King when he assumes his new duties.

Since 1960 Dr. King has been with the National Institute of Dental Research. In 1965 he became Chief of that Institute’s Pharmacology Section in the Laboratory of Biochemistry.

Prior to assuming his new post, Dr. King attended the Third International Congress of Pharmacology, Sao Paulo, Brazil, where he presented a paper on Benzhydroxyprazine and Congenital Adrenal Hyperplasia.

Background Cited

Dr. King, a U.S. citizen though born in Argentina, is very knowledgeable about South America, having spent the first 18 years of his life there. He has presented numerous papers at conferences in South America, Europe and in this country.

Graduating from Harvard University cum laude in 1948, he received his M.A. in physiology in 1949 and his Ph.D. in physiology and endocrinology from Harvard in 1952.

Before joining NIH, from 1952 to 1956, Dr. King was employed in the Medical Research Laboratories, U.S. Naval Submarine Base, New London, Conn., as Chief of the Endocrinology Section. His studies during this period were on the effects of different concentrations of carbon dioxide on the pituitary adrenal system and the carbohydrate metabolism of the rat and the guinea pig.

Dr. King is a member of Gamma Alpha, the International Association of Dental Research, the Teratology Society and Sigma Xi. He has published 36 papers.

Blood Typing Program May Cut Number
Of Dog Donors Needed for Research

By Toni Anastasi

Trials are being conducted here to study the feasibility of establishing a blood bank program to provide blood for dogs used in large-scale experimental heart procedures at NIH.

These new tests might well eliminate the need for more than 2,000 canines per year. The project is directed by Dr. Raymond D. Zinn, Head of the Farm Animal Unit, Laboratory Aids Branch, Division of Research Services.

The canine blood is being used primarily by the National Heart Institute to prime heart-lung machines in experimental surgery and to help develop new and improved techniques for the replacement of diseased heart valves.

The dog blood bank will provide a method to make transfusions easier during animal surgery.

In his office at the NIH Animal Center near Poolesville, Md., where the donor-trial dogs are housed, Dr. Zinn said:

Benefits Given

"By maintaining a colony of healthy donor dogs, normal blood of known characteristics can be made available to the research laboratories, and manpower for quarantining and conditioning of dogs can be reduced.

"Under the present system, over half the entire number of dogs required for intramural research programs become, at best, a rather inefficient and less-than-satisfactory source of blood."

The present blood donor colony is housed in Bldg. T-8 at the Animal Center. It consists of 82 animals. These are of the hound-type.

An Inclusive Taxonomic Study Conducted on the Aerobic Pseudomonads

A detailed survey of an important group of eubacteria, hitherto resistant to satisfactory analysis, has resulted in the recent publication of "The Aerobic Pseudomonads: A Taxonomic Study."

The study was supported by a grant from the National Institute of Allergy and Infectious Diseases.

The aerobic pseudomonads make up a large and varied group of bacteria. But it is difficult to give a satisfactory account of their nature and extent. Their subgroups have been so fragmentarily described that the boundaries between these bacteria are generally not clearly established.

267 Strains Analyzed

The taxonomic study resulted from a detailed analysis—with emphasis on biochemical, physiological and nutritional characters—of 267 strains representing many of the principal biotypes.

The work brings to light many hitherto unrecognized characters of taxonomic significance. As a result, it is now possible to recognize a number of species which can be readily and clearly distinguished from one another by many phenotypic differences.

The 112-page study by Drs. R. Y. Stanier, N. J. Palleroni and M. Doudoroff, of the Department of Bacteriology and Immunology, University of California, Berkeley, appears in the Journal of General Microbiology.

Dr. King

Dr. King is the name of the author in the document.

Susan Pickeral, biologist at the Animal Center, takes a blood count of the canine blood to test the physical condition of a dog.

and are divided into groups for donor trial studies, and for breeders to produce future donors.

A laboratory has been established to carry on necessary hematologic studies and evaluate collection and handling procedures.

Dr. Zinn pointed out that there are some technical problems involved in a canine blood donor program. He said that the blood grouping system of the dog has not

BLOOD TYPING, Page 4

Dr. Samuel Greenhouse, Mathematics Statistician, Named to NICHD Post

Dr. Samuel W. Greenhouse has been appointed Chief of the Epidemiology and Biometry Branch, Program Services, National Institute of Child Health and Human Development, Dr. Donald Harting, Institute Director, announced recently.

Dr. Greenhouse’s branch will be part of NICHD Program Services under the Associate Director for Program Services, John McDougall.

In his new post, Dr. Greenhouse will develop a program of research and consultation in statistical, bio-mathematical, and epidemiological areas as these relate to the four scientific programs of NICHD—Fertility, Production, Growth and Development, Aging, and Mental Retardation.

At NIMH Since ’54

Dr. Greenhouse is a well known mathematical statistician who served the National Institute of Mental Health since 1954. While there he was Chief of the Theoretical Statistics and Mathematics Section and Assistant Chief of the Biometrics Branch. Before joining NIMH he was a mathematical statistician with the National Cancer Institute.

He is presently a National Science Foundation lecturer on statistics, and has been a professional lecturer at the Statistics at George Washington University since 1946.

Education Listed

Originally from New York City, Dr. Greenhouse took his undergraduate schooling at the City College of New York, earning his B.S. degree in 1948. He received his M.A. and Ph.D. degrees from George Washington University.

Dr. Greenhouse is a Fellow of the American Statistical Association, a member of Sigma Xi, and has many other professional affiliations.

Dr. Nathan Eddy Speaks
At Symposium on Pain

Dr. Nathan B. Eddy, retired Chief of the Section on Analgesics of the National Institute of Arthritis and Metabolic Diseases, was among the speakers at a symposium on pain held recently at the University of California Medical Center in San Francisco.

Dr. Eddy, an internationally acclaimed authority on drug addiction and analgesics, spoke on “The Search for a Potent Non-Addictive Analgesic.”
Dr. Berlin Is Honored by Downstate Med. Center

Dr. Nathaniel I. Berlin, Clinical Director of the National Cancer Institute, recently received the Distinguished Alumni Award from the Downstate Medical Center, Brooklyn, N.Y.

The Alumni Medallion was presented by Robert A. Moore, President of Downstate, who called Dr. Berlin a “distinguished alumnus and physician,” a “dedicated scientist and researcher,” and cited him for his services to humanity and to the advancement of the field of hematology.

Accomplishments Praised

During the award ceremony Dr. Harry Z. Mellins, Chairman of the Faculty Committee on the Alumni Medallion, reviewed Dr. Berlin’s continuing interest in and contributions to the physiology of hemopoiesis. Dr. Mellins pointed out that many of Dr. Berlin’s publications—of which there are more than 100—“have become classical references and sources for techniques repeated many times afterwards by other investigators.”

Dr. Berlin has been at NCI since 1956. He is also Consultant to the Downstate, who called Dr. Berlin a “distinguished alumnus and physician,” a “dedicated scientist and researcher,” and cited him for his services to humanity and to the advancement of the field of hematology.

NHI Shows Its Prize-Winning Exhibit on Heart Disease at Recent AMA Meeting

Hanford Moxley (left) is joined at the NHI exhibit by (from left) Dr. I. B. Buff, member of the Committee on Annual Physical Examinations for Physicians, Dr. Charles McArthur and Dr. Charles McArthur, chairman of the AMA committee on APEP. At the table in front of them, physicians are having their electrocardiograms interpreted by members of the American College of Cardiology.

The National Heart Institute’s prize-winning exhibit on “Habits and Coronary Heart Disease” had its second showing recently at the annual meeting of the American Medical Association in Chicago. The exhibit thus far has shown that certain factors, such as smoking, obesity and sedentary living, are definitely associated with a higher risk of coronary disease.

Findings Listed

Among the findings that have emerged from the Framingham study are:

- Risk of CHD among the “least active” males in the study was more than three times that of the “most active” males.
- The risk of angina pectoris rises progressively with increasing relative weight. The risk of individuals more than 20 percent overweight was almost three times that of individuals more than 10 percent overweight.
- The risk of heart attacks among heavy cigarette smokers was about twice that of non-smokers, but when a person gives up cigarettes, his risk of coronary heart disease drops sharply and promptly to the same level as that of persons who never smoked.
- It has also been found that consumption of coffee or alcoholic beverages is moderated, habitual lack of “adequate sleep,” marital status, and family size all appear to be unrelated to the risk of developing coronary heart disease.

This was the third successive year that NHI has been invited to exhibit in the area where examinations were given to doctors. This year over 22,000 pamphlets, brochures and reprints were distributed to practicing physicians, and many questions regarding NHI and its research programs were answered by NHI staff.

Dr. Janney Retires, Has 30 Years PHS Service

Dr. Harold M. Janney, Chief of the Mental Health Care Development Program, retired June 30 after 30 years with the Public Health Service Commissioned Corps.

He had headed the Career Development Program for the Training and Manpower Resources Branch of the National Institute of Mental Health since 1962.

Dr. Janney took up a new career Aug. 1 when he became Chief of Medicine, Retardation Services of the Department of Mental Hygiene for the City of California. He will reside in Sacramento.

He came to NIMH from the Department of Justice where he had been Medical Director, Federal Bureau of Prisons, for 9 years. He held various other positions with the Bureau since becoming a commissioned officer in 1936.

DR. LAVECK

(Continued from Page 1)

In addition to directing the retardation activities of NICHD, Dr. LaVeck is Chairman of the NIMH Staff Group on Mental Retardation and a member of the Secretary’s Committee on Mental Retardation.

Prior to joining NICHD, Dr. LaVeck was Head of the Crippled Children’s Service, Washington State Department of Health, Clinical Director of the Rainier School, a school for the mentally retarded in Buckley, Wash., and a clinical assistant and then Associate Professor of Pediatrics, University of Washington School of Medicine, Seattle.

Studies Cited

He is currently Clinical Associate Professor of Pediatrics at Georgetown University School of Medicine.

Dr. LaVeck’s research interests include studies on the epidemiology of infectious diseases and handicapping disabilities of childhood, and clinical investigations in mental retardation focusing on genetics, neurology, endocrinology and pharmacology.

Dr. LaVeck earned his B.S. and M.D. degrees at the University of Washington.

He is a Diplomate of the American Board of Pediatrics, a Fellow of the American Academy of Pediatrics, and a member of the American Medical Association, American Public Health Association, Washington State Medical Association and the Western Society for Pediatric Research.
CONSTRUCTION
(Continued from Page 1)
will provide facilities for 1,100 people now in rented space in the Bethesda area. Completion is expected by the summer of 1968.

Buildings 35, 36 and 37—Construction was begun last fall on this complex of two laboratory buildings and a cafeteria. Completion is scheduled for January 1968. Building 36 will be occupied by NINDB and NIMH, and will provide facilities to support the broad spectrum of research in these fields from the cellular level to clinical investigations.

Building 37 will provide facilities for direct research of the NCI and for the support and administration of cancer research in laboratories throughout the world.

The cafeteria, Bldg. 35, will provide dining facilities for occupants of the two new laboratory buildings and other nearby buildings.

DFS Space Increased

Building 28A—This extension to the DFS building will provide additional laboratory space to meet the increasing responsibilities of that division. Construction is expected to be finished in December of this year.

Clinical Center Library Annex and Cafeteria Extension—Construction of this dual project began in May.

The Library Annex will be added to the south side of the Clinical Center between the “C” and “D” wings. On its completion in September 1967, the NIH Library will have space more suitable to library activities, and the area occupied on the 5th and 11th floors of Bldg. 10 will be released for laboratory use.

The present Bldg. 10 cafeteria will be extended to provide needed space for additional seating together with a new kitchen facility. The existing kitchen will be entirely separate and used only for preparing patients’ food. The project will be completed in September 1967.

Other Buildings Planned

In addition to these construction projects, several others are still in planning stages. Among these are:

Multilevel Parking Structures

Two of these structures are currently planned—one near Bldg. 31 and the other near the NCI-NIMH/NINDB complex.

They will hold 650 and 825 cars respectively. Construction of both is planned to begin in the fall of 1967 and will be completed late in 1968.

NIMH Child Research Center

The child research program was formerly housed in Building T-4, which was partially razed to make way for the NCI-NIMH/NINDB complex.

Because of the natural environment required for this research, the building will be non-institutional in appearance and setting.

A private architectural-engineering firm has been engaged by NIH to study the use of land in the southern portion of the reservation, where this building will be located, and to prepare a Master Site Plan for the area. This will allow its most effective development, while preserving the natural beauty of the reservation.

Additional Facilities

Warehouse Building—A project to accommodate the receiving, inspection, storage and distribution of supplies and equipment necessary for the support of NIH research and clinical activities. The site for this building will be determined when the Master Site Plan for the southern area is complete.

NICHD Building—This will be a developmental sciences laboratory building in which an intramural research program will be conducted in the broad areas of growth and development, mental retardation and reproductive and perinatal biology.

Cancer Institute Names Dr. Ralph E. Johnson Radiation Branch Chief

Dr. Ralph E. Johnson has been named Chief of the Radiation Branch of the National Cancer Institute.

A native of Chicago, Dr. Johnson received the M.D. degree from Northwestern University in 1968. He served an internship at the University of California Medical Center in San Francisco and a residency at the Pennsylvania Cancer Hospital, Colorado Springs, before joining the NCI in 1962.

He worked for one year in the Institute’s Grants and Training Area and one year in the Laboratory of Chemical Pharmacology before becoming Acting Chief of the Radiation Branch in 1964.

Dr. and Mrs. Johnson and their 4 children make their home in nearby Bethesda.

‘Split ACD’ Method of Blood Separation Saves CC 185 Pints of Blood a Month

By Bowen Hosford

Wanda S. Chappell, Chief Nurse in the Clinical Center’s Blood Bank, has modified a procedure for blood separation that dramatically increases the efficiency of blood use. In a trial period that began 4 months ago, it is saving 185 pints of blood a month.

Dr. Paul J. Schmidt, Blood Bank chief, is conducting studies in cooperation with clinical care physicians to increase the saving further.

Mrs. Chappell’s technique has to do with platelets—sticky disc-shaped particles in the blood that are used to control bleeding in leukemia patients.

In the past, platelets were transfused to patients in platelet-rich plasma (PRP). The PRP was separated from whole blood by centrifuging it. The red cells that remained were returned to the donor by plasmapheresis, transfused to others or used for laboratory research.

Problem Defined

Blood investigators have centered attention on separating platelets from the PRP. The remaining plasma could then be remixed with the red cells. The result would be whole blood. It is used to transfuse other banked blood. The subtraction of platelets would not matter, because in stored blood platelets lose their effectiveness.

However, if the sticky platelets were concentrated, they would cling and form clumps.

Acid would keep them from clumping.

Acid citrate dextrose (ACD) is used to keep whole blood from clotting in its container. Extra ACD could be added in the sterile plastic containers during their manufacture, but such extra ACD is undesirable from the patient’s viewpoint.

Complications Given

Nor could citric acid be placed in a bag beforehand, because it would eat through the plastic. Citric acid has been added to the platelet-rich plasma, but this involves breaking into the sterile bag that contains it. Because of the chance of bacterial contamination, the remaining plasma could not be remixed with the red cells.

Mrs. Chappell hit on an idea that is as simple and ingenious as the invention of the paper clip. It is based on the fact that the standard amount of ACD in the main plastic bag was set some 20 years ago on a calculated excess.

Her idea was to transfer part of the ACD from the main bag to the satellite bag where it would add extra acidity to the PRP. Enough

(See BLOOD SEPARATION, Page 7)
BLOOD TYPING
(Continued from Page 8)
been extensively investigated.

Some seven major and 2 subgroups are presently recognized. Also, the relative fragility of the dog red blood cell is recognized as a problem.

"Whether by selective breeding and appropriate handling methods, we may be able to cope with these problems is yet to be seen," Dr. Zinn said. "However, our experience to date is cause for some optimism," he added.

Other unknowns, such as the maximum permissible storage time, collecting methods and quality control procedures must be evaluated.

Dr. Zinn is being aided in the project by Robert Pennington and Mary Strott of the Laboratory of Blood and Blood Products, Division of Biological Standards, who are helping with blood-grouping and typing techniques.

Prior to this project, it was not possible to blood-type these dogs, since an antiserum for this purpose was not commercially available.

Dr. Robert Reis of the NIH Surgery Branch uses blood from dog donors for the first time in an experimental animal heart operation. The blood can be seen in the heart-lung machine in foreground.

DBS has been instrumental in developing the needed antiserum for blood typing by purposely stimulating the A antibody in a negative dog. The serum harvested from these dogs is being used for blood typing other dogs.

U.S. Navy Band to Play for Season's Last CC Concert

The fifth and final in this summer's series of band concerts for Clinical Center patients will be presented on Tuesday, Aug. 16, at 7:30 p.m. by the United States Navy Band in the CC auditorium.

NIH employees, their families and friends are invited, but patients will have priority in seating. Arrangements for this concert were made by the CC Patients' Activities Section.

Dennis Cahill Turns in Low Net Score In NIHGA President's Cup Tournament

The first annual President's Cup Tournament of the NIH Golf Association was held July 29 with a net score of 66. He shot a 79 on the par 72 course, with a 13 point handicap.

Low gross was scored by Nathaniel White, CC, with a 2-over-par 74. Other winners in the championship flights were Frank Sordyl, NCHD, and Gunnar Gray, CC.

Winners in the first flight were Art Breuning, DRFR, and Alfonzo Dale, OD. Second-flight winners were Don Dunsmore, DRS, and Pat Patrick, Credit Union.

Foursome Given

The foursome with the low net score was composed of Dennis Cahill, NCHD; Bill Quinlan, NICHID; Luther Johnson and Ray Jones, both DRS.

A special NIHGA committee headed by Oscar Young, NINDB, ran the tournament. The President's Cup, now on display in the R&D office, will be presented at the year-end NIHGA banquet by Robert Schultheis, R&W President. All other winners receive gift certificates for golf shop merchandise.

Organized early in February of this year, the NIH Golf Association is sponsored by R&W. The intramural golf league is organized for handicapped match play. Team matches are contested for 9 holes on Tuesday and Thursday evenings at Reston North Golf Course, Reston, Va.

The first season began with an open field day on March 30, and will end Sept. 20 with play-offs. Individual and team trophies for both men and women will be awarded at a banquet at the close of the season. The members support this banquet and their green fees; the R&W provides the trophies, membership cards and prizes for special outings.

The NIHGA has held three outings this year. Membership has increased from 12 teams of approximately 90 players to 134. Although teams are made up of from 9 to 12 members, only four players from a team compete in a match. This enables players to participate when their individual situations permit.

Membership for 1966 was closed Aug. 1 but will be reopened early in 1967. All NIH employees, other employees on the reservation and related PHS employees in nearby field stations will be welcome to join. Membership is $1, and the 1966 greens fee is $1.50 per 9-hole round.

Betty J. Wood Heads D.C. Dental Assistants

Betty J. Wood, an employee of the National Institute of Dental Research since 1962, has been elected President of the Dental Assistants Association of the District of Columbia.

The prime function of the Dental Assistant's Association is to provide continuing educational opportunities for the dental assistants in the Washington area.

In addition to her other duties as president, Mrs. Wood will direct the Association's philanthropic program which includes various contributions to Junior Village, the D.C. Children's Home in Laurel, Md., and other children's institutions in the area.

Dr. E. Emory Ferebee, NIMH Administrator and Economic Adviser, Dies

Dr. E. Emory Ferebee, Social Science Administrator and a principal adviser of the National Institute of Mental Health, died July 22 following a heart attack at his home, 6900 Ridgeway Avenue, Chevy Chase, Md. He was 62.

Dr. Ferebee had been with NIMH since 1962. He was responsible for studies of the financing of community mental health centers in his capacity as adviser to the Chief of the Community Mental Health Facilities Branch.

He had served on a committee to study means of broadening insurance coverage for mental illness. From 1955 to 1963, Dr. Ferebee was Deputy Director of the Office of Vocational Rehabilitation, DIHEW. He came to Washington in 1940 as an economist with the Social Security Board.

He later was Deputy Director, Rubber Branch, War Production Board; Director, Division of Area Analysis, War Manpower Commission, and Principal Examiner, Bureau of the Budget.

Dr. Ferebee received the Superior Service Award of the Department of Health, Education, and Welfare in 1962.

Education Mentioned

Born Nov. 14, 1903, in London Bridge, Va., Dr. Ferebee graduated from Ocean City High School in Oceana, Va. He received his B.S. and M.S. degrees from the University of Virginia in Charlottesville and his Ph.D. from the University of Chicago.

Memorial services were held July 28 at the Bethesda Unitarian Church. Dr. Ferebee is survived by his wife, Shirley, who is Associate Chief, Research Section, Tuberculosis Program of the Communicable Disease Center, Washington office, and a son and daughter.

Contributions in Dr. Ferebee's memory may be made to the Echo Lake Summer Camp through Dr. Morton Miller, Rm. 14W07, Barlow Building. The camp is a facility for underprivileged children.

24 Contracts Awarded For Kidney Research

Twenty-four contracts totalling approximately $1.8 million have been signed under the Artificial Kidney-Chronic Uremia Research and Development Program, inaugurated by the National Institute of Arthritis and Metabolic Diseases.
**New International System of Classifying Rhinoviruses Is Established and Ratified**

More than a year of intensive collaborative testing by scientists at 11 laboratories has led to a new international system for classifying rhinoviruses, the most important group of viruses associated with the common cold.

The subcommittee on viruses of the International Microbiology Nomenclature Committee meeting during the 9th International Congress for Microbiology in Moscow July 24-30, ratified a numbering system that establishes 55 rhinovirus prototypes.

The program for testing and identifying distinct types within the family of rhinoviruses was sponsored by the Vaccine Development Branch of the National Institute of Allergy and Infectious Diseases.

**Contractors Named**

Dr. Vincent Hamparian and Robert Conant of Ohio State University and Children's Hospital, Columbus, Ohio, are the principal contractors in this program which is designed to clarify research on rhinoviruses.

Scientists all over the world were invited in 1965 to submit candidate strains to the typing center at Columbus.

There each of the 69 strains entered in the program was tested against antisera. Test results for each candidate virus were confirmed independently by at least one other laboratory.

A committee of virus research specialists participating in the program met at NIH in June under the chairmanship of Dr. Albert Z. Kapikian of the NIAID Laboratory of Infectious Diseases.

The committee reviewed and accepted test data, which established 55 distinct types of rhinoviruses, and assigned numbers to the types according to the date each strain was reported in a scientific journal or (in the case of unreported strains) submitted to the program.

**Research Grants Index Is Now in 5th Edition**

The Public Health Service has published a fifth edition of the Research Grants Index, an annual publication containing scientific subject matter summaries of more than 17,000 research projects supported by the PHS during F.Y. 1965.

The 2,432-page Index is printed in two volumes. The first volume classifies research grants and contracts according to scientific subject headings in alphabetical order, covering more than 5,500 aspects of biomedical research.

**Volume II Described**

Volume II contains three sections. The first lists the projects in numerical order of the grant numbers, showing investigators' names, addresses, project titles and recent publications. The second section lists grants by 75 broad scientific areas, and the third is an alphabetical list of investigators.

The publication is produced by the Research Documentation Section, Division of Research Grants, and is distributed to libraries of all PHS-grantee institutions.


**BLOOD SEPARATION**

(Continued from Page 5)

In the second phase of the program now underway, Drs. Hamparian and Conant are testing new candidate rhinovirus strains and gathering virus strains and antisera in sufficient quantities for distribution to investigators who then test their own candidates against accepted types.

The NIAID Research Reference Reagents Branch, another part of the Institute's Collaborative Research Program, will soon begin making available to qualified investigators reference quantities of virus and antisera for the accepted rhinovirus types.

A uniform classification system for rhinoviruses, the cause of much acute respiratory illness among adults, became necessary when improved tissue culture procedures made possible the isolation of new virus strains and the volume of rhinovirus research reports in the scientific literature increased.

Too great a project for a single laboratory to undertake, the classification program was established by the NIAID Vaccine Development Branch as an initial step toward possible development of vaccines against the strains of rhinoviruses most frequently isolated.

While still in the main bag to prevent clotting there, a nurse squeezes the PRP into the satellite bag. Then she spins it again; 7 times as long. Now the plasma floats on top of the platelets. They do not clump because they are acid. She squeezes the plasma back into the main container, mixing it with the red cells.

This is the "Split ACD" method of blood separation developed by Wanda S. Chappell. To trace the steps, start at upper left and follow the arrows.—Chart by George Gosney, Medical Arts and Photography Branch.

**Revised Examination for Aphasia Helps Appraise Subjects' Disabilities**

An NINDB grantee's re-evaluation of a short examination for aphasia will assist neurologists in assessing aphasic disabilities during the over-all neurological examination.

The newly designed examination is based on selection of a range of test items from the Minnesota Test for Differential Diagnosis of Aphasia, and is a revision of a short examination designed by the same investigator in 1957.

The revised short examination will provide a more adequate sample of language behavior for reliable diagnosis over the whole range of aphasic disabilities.

It is based upon the use of scaled tests for each subject, coupled with a Diagnostic Scale and a Severity Scale.

The two scales should enable the examiner to compare diagnostic patterns and severity of functional deficiencies among aphasic subjects and over intervals of time, resulting in a concise and meaningful summary of aphasic impairment observed in any given patient.

This is now whole blood. It goes to the refrigerator where it can be stored for use as long as 3 weeks. The platelets go at once—for they are short-lived—to a leukemia patient.

This "Split ACD" method yields platelets as a true by-product. That is, it is all gain and no loss. Mrs. Chappell's development is part of the Blood Bank's program for effective use of all the blood's bullets. Currently the use rate is 116 percent. This means that for every 100 pints of blood collected, 116 transfusions are made.
mentat health before their imprisonment, coming from stable and secure homes and returning to them upon liberation.

Nevertheless, 65 percent continued to show “concentration camp syndrome,” a complex of psychiatric disturbances; 93 percent showed anxiety manifestations, and up to 90 percent evidenced intellectual impairment. The younger prisoners suffered less impairment than those arrested at age 25 or over.

Another finding concerned the organic factors of psychiatric disturbance. These were found more significant than is commonly regarded in American studies of Nazi victims. A number of Norwegian prisoners showed evidence of traumatic encephalopathy resulting from head injuries during imprisonment.

Symptoms Tabulated

There has been less opportunity to study the effects of prison injury or illness among Jewish survivors, since the extreme conditions of their captivity meant death for those who fell ill.

His documentation revealed that two-thirds of the Norwegians suffered strong psychic reactions during their imprisonment. These included shock, depression and other disturbances. A total of 75 percent of the psychiatric symptoms was tabulated.

More than half the group reported extreme forms of torture. Many were subjected to “severe captivity,” including physical hands, long hours of labor, isolation and starvation.

Those who could manage to keep their sense of individuality and self-identity or “do any little thing for themselves,” according to Eitinger, had the greatest chance to survive their ordeal.

Several differences between the two groups of ex-prisoners were brought out in a question-answer interchange. One obvious difference was that many more Norwegians than Jews survived the camp experience.

Norwegians Survive

Of 22,000 Norwegians placed in Nazi custody, 20,000 lived to return to their homeland. The Jews were headed for the gas chambers. Too, the Norwegians were imprisoned because they chose to resist the Germans, while the Jews found themselves candidates for extermination on grounds of religion.

Many who escaped death when freed by the Allied forces were found to suffer overwhelming guilt feelings as the sole survivors of families put to death wholesale.

Among the Norwegians returning home as heroes of the Resistance, guilt was not a factor in their pathology.

Dr. Robert A. Cohen, Director of

CC's Closed-Circuit TV Aids Research: Versatile Tool Has Variety of Functions

In WNIH-TV's master control room, Television Engineering Chief Willard C. Whitehouse (center) operates a video tape recorder, and Assistant Chief Horace E. Cascio operates the video switcher to select among pictures transmitted by various cameras. - Photo by Tom Joy.

No Nielsen rating could reflect the interest with which investigators watch presentations on WNIH-TV, the Clinical Center's closed-circuit television station.

Television Engineering Chief Willard C. Whitehouse says that because audiences are restricted, few NIH employees are aware of the 11 TV systems operated or maintained by WNIH-TV engineers.

Some individuals think of closed-circuit TV only as a method of viewing without intruding—for example, looking over the surgeon’s shoulder as he operates.

It is true that neurosurgery in the CC's Surgical Wing may be watched by invited physicians in an office some distance away. But remote viewing is only one of several TV advantages that no other medium has. These have made it an important research tool.

Advantages Noted

One such attribute is Image Intensification.

In the past, it was necessary for personnel of the CC's Department of Diagnostic Radiology to work in total darkness when using fluoroscope to see the soft tissues inside the body.

It was also necessary for the staff to wear red goggles to keep their eyes accommodated to the darkness when a door was opened or when room lights were turned on for any reason.

Today, with TV Image Intensification, the radiation emitted by the X-ray tube can be reduced and the staff can work in dim light. Thus, the patient's exposure to radiation is reduced, the radiologist has a brighter and clearer view than before, and the red goggles are set aside.

Uses for which “fluoro” is combined with Image Intensification include showing such soft tissues as the gastrointestinal system and the gall bladder. Another is heart catheterization, a diagnostic procedure in which NIH clinicians inject a dye and view the functioning heart and associated vessels.

New Techniques Used

The split-screen technique is also useful in research TV. During surgery, WNIH-TV's engineers show and record EEG lead placement on one part of the screen and the EEG tracing on the other.

New techniques and procedures are taped, edited and replayed to investigators. Replay—whether of fluoro, surgery or other activity—permits accurate timing.

Mr. Whitehouse and his three engineers show action in slow motion or still frames.

Surveillance aids investigating too. For example: DRS investigators wanted to determine any correlation between operating room traffic and shedding of microorganisms. TV tapes recorded the movement of persons, and air sampling devices sought out the little contaminants.

‚Line Selection' Described

Another use involved a “line selection” technique. The engineers select one of the horizontal lines that make up the picture on a TV screen and transfer to paper-chart recorders the changes in brightness in that horizontal line.

Investigators of the Cardiology Branch, NIH, use this chart to study the dynamics of heart action. Another use of the same technique involves an ultraviolet television camera used for cellular research by the CC's Department of Clinical Pathology.

Dr. Ogden C. Johnson, Nutrition Expert, Heads OIR Food Science Unit

Dr. Ogden C. Johnson has been named Head of the Food Science Research Unit, Nutrition Section, Office of International Research.

In his new position, Dr. Johnson will assist in the determination of the extent of malnutrition in developing countries, organize research in metabolic problems defined and develop pilot programs for improving the nutritional status of these population groups.

A recognized authority in the field of food technology and science and nutrition, Dr. Johnson will consult with, advise and develop programs and research for other government agencies.

He is responsible for supervision of the World Food Composition Project, which has as its initial assignment the development of a food composition table and bibliography of food and nutrition research for Africa. A similar document for the Middle East and Near East areas is planned.

Since 1959 to the present Dr. Johnson was a Consultant to the Interdepartmental Committee on Nutrition for National Defense (now the OIR Nutrition Section). During this period he served on the Nutrition Survey Team in Peru, Burma, Bolivia and Guatemala.

Employed by AMA

From 1960 until he assumed his present duties, Dr. Johnson was Associate Director of the Department of Nutrition and Allied Secretary of the Council on Foods and Nutrition, both of the American Medical Association in Chicago, Ill.

Dr. Johnson received his B.S., M.S. and Ph.D. degrees from the University of Illinois in Urbana. Since 1963 he has been an Associate Editor of Nutrition Reviews.

In numerous professional societies, Dr. Johnson is a member of the Sigma Xi and Gamma Sigma Delta.

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