Annual Lectureship Award Established Honoring Dr. Mider

Dr. Robert Q. Marston, NIH Director, on the recommendation of the Scientific Directors of the National Institutes of Health, has announced the establishment of an annual G. Burroughs Mider Lectureship Award, in honor of the first NIH Director of Laboratories and Clinics.

Dr. Mider completed 8 years as Director of Laboratories and Clinics last spring, and moved to the National Library of Medicine as Special Assistant to the Director, to undertake the development of new programs of liaison between the Library and the biomedical scientific community.

Is Part of NIH Series

The newly named Lectureship will be part of the prestigious NIH Lecture Series. Now in its 16th year, the Series was established to facilitate interchange of information and to give appropriate recognition for outstanding scientific accomplishment.

Lecturers for the Series, originally selected only from distinguished scientists outside the NIH, are sponsored by the Institutes and the Director, NIH.

(Continued on Page 6)

**EXPLORING MISSION**

**NIH Reorganization Strengthens Health Manpower, Communications Functions**

A new organizational structure for the National Institutes of Health was approved by DH&EW Secretary Wilbur J. Cohen, and published last Jan. 4—in the Federal Register.

The structure reflects the new mission of the NIH which, in addition to being the prime Federal biomedical research agency, now includes responsibility for developing health manpower resources and utilizing modern methods to communicate biomedical information speedily and widely to the medical and health professions.

**Cohen Leads Reorganization**

It is designed to achieve the broad objectives of the reorganization plan approved April 1, 1968 (see NIH Record, April 2, 1968), under which NIH was given status as an operating agency within the Department, and expanded to include the Bureau of Health Manpower and the National Library of Medicine.

DH&EW Secretary Wilbur J. Cohen said the new organization now provides a balanced and effective approach to the support of both biomedical science and health professions education.

"Science and education programs are now joined under this expanded mandate for NIH," Mr. Cohen said, "yet the new organization insures continued major effort in each area.

"Another attractive feature of the new organization is the emphasis it places on biomedical communication."

**Establishes NEI**

The new plan also establishes the previously-authorized National Eye Institute, bringing to nine the number of Institutes now included in the NIH.

A major feature of the plan expands and restructures the Bureau of Health Manpower as the Bureau of Health Professions Education and Manpower Training. Dr. Leonard Penninger will direct the expanded Bureau.

The new Bureau will be composed of seven Divisions divided into two categories, each headed by a Deputy Director (to be

(See REORGANIZATION, Page 3)

**NCI Announces Creation Of New Branch, Lab In Chemotherapy Area**

The National Cancer Institute has announced the creation of a Human Tumor Cell Biology Branch, and a Laboratory of Molecular Pharmacology, and a number of staff changes and appointments in the Chemotherapy Area.

Research in the newly established Human Tumor Cell Biology Branch is being directed by Dr. Seymour Perry, Associate Scientific Director for Clinical Trials, NCI, as Branch chief.

Dr. C. Gordon Zubrod, Scientific Director for Chemotherapy, explained that Dr. Perry and his colleagues are investigating physiologic, cytogenetic and biochemical control mechanisms at the molecular level of human cells.

The dynamics of cell growth and characteristics of reproductive cytotoxics (see NEW BRANCH, Page 2)
NINDS Caretaker Wins 2 Awards for Improving Monkey Feed Stations

Suggestions which have improved the animal feeding stations and drinking fountains at the National Institute of Neurological Diseases and Stroke-supported rhesus monkey colonies on La Parguera, an island off the coast of Puerto Rico, have earned a cash award for Israel Cordero, an animal caretaker there.

He was awarded $55 each for two suggestions which modified and improved the monkeys' eating and drinking stations.

The free-ranging monkeys eat at modified hog feeders which feed food pellets to a trough or hopper where they are continuously available.

Suggestions Described

Mr. Cordero suggested installing a screen of wire mesh in the meter opening. This permits only individually sized pellets instead of large chunks, to pass into the hopper. Also, because of this suggestion, the meter opening requires less maintenance.

His other suggestion, to use 55-gallon drums with semi-circular openings to shield the water basins, helped to keep the water cleaner, helped to keep the water cleaner, and reduced maintenance problems.

NINDS supports four island colonies in Puerto Rico, with free-ranging rhesus monkeys, as part of its Laboratory of Perinatal Physiologic and Physiologic Research. Scientists there study and observe the monkeys in an environment closely approximating their laboratory animals who live in an essentially unnatural environment.

He then invites participants to discuss the problem and offer alternative solutions.

The seminars involve such bio-statistical techniques as research design, data analysis, and the communication process between consulting statistician and investigator.

The Training and Education Section, PMB, is providing technical assistance and administrative support for the seminars.
NIGMS Report Reviews Cell Behavior, Origin

A report, Cellular Aspects of Immune Reactions, was recently issued by the National Institute of General Medical Sciences.

The pamphlet, prepared by the NIH Anatomical Sciences Training Committee, presents knowledge on the human immunological systems and the role of body cells in recognizing, isolating, and eliminating foreign materials and pathogen agents.

The report reviews the origin and behavior of all cells in the immunological complex, including the myeloid, lymphoid and macrophage systems of the body.

Focuses on Rejection

It also focuses upon various immunological responses, such as the rejection of transplanted organs and tissues.

Particular attention is given to the activity of small lymphocytes most often implicated in the rejection of tissue and organ grafts.

Lymphocytes, however, are but one of several types of blood cells which appear to react aggressively with foreign materials introduced into the body.

Others are macrophages, neutrophils, eosinophils, mast cells and possibly basophils, so that many different interactions are now known to occur in the immune response.

The report describes the progress that has been made to elucidate these complex, interacting factors.

Single copies of the report may be obtained on request to the Information Office, NIGMS, Bethesda, Md. 20014.

Dr. Bertram Sacktor's Enzyme Discovery Possible Factor in Glucose Resorption

A Gerontology Research Center scientist, Dr. Bertram Sacktor, National Institute of Child Health and Human Development, has discovered the enzyme Trehalase in mammalian tissues.

Specifically, Dr. Sacktor found the enzyme in the kidney and small intestine.

Trehalase may act in concert with other enzymes also found in these locations, to convert glucose to trehalose and thence to glucose again.

This suggests that trehalase functions in an energy-dependent active transport of glucose from the glomerular filtrate and across the intestinal mucosa.

Trehalose is known to split hydrolytically the sugar trehalose into two glucose molecules in some plants and invertebrates.

Commonly found in insects, it is especially active in insect gut and flight muscle. Trehalose is also the major blood sugar of insects.

These and other facts led the NICHD scientist to suggest previously that, in insects, trehalose is a vehicle of carbohydrate transport, and that the enzyme trehalase functions in the mechanism of sugar transport.

Trehalase Activity Noted

Other research noted trehalase activity in mammalian (rat) intestine, presumably present as a digestive disaccharidase.

The finding of the intestinal trehalase assumed added significance in view of Dr. Sacktor's suggested role for the enzyme. This led him to search for the enzyme in other mammalian tissues to see if the enzyme might be involved in the transport of glucose in higher animals.

Trehalase activity was discovered only in mammalian kidney and small intestine, the two tissues able to accumulate glucose against a concentration gradient.

Trehalase activity was found in several species, including rabbit, mouse, monkey, and man.

Lively Musical Film Shows Safe, Sane Diet Program

Employee Health Service will present a Broadway-type musical film designed to encourage overweight viewers to undertake safe and effective programs of weight control.

The film is aimed at those who want to "look better, feel better, have their clothes look snappier, have more vigor, and live longer."

Original songs, such as "Starting My Diet Tomorrow," "Love and Goulash," and "Bruin is Doin' Just Fine," will be featured in the 21-minute color motion picture.

The film will be shown at the following locations: CC auditorium, on Tuesday, Jan. 14 at 11:30 a.m. and 12:30 p.m.; Barlow Hall, Jan. 15 at 12 noon and 1 p.m.; Westwood Bldg., Thursday, Jan. 16 at 1:30 and 2:15 p.m., and the Tower Bldg., Friday, Jan. 17 at 12 noon; 12:30, 1, 1:30 and 2 p.m.

Ava S. Dilworth Heads Intramural Research Branch

Ava S. Dilworth, R.N., of the Division of Nursing, Bureau of Health Professions Education and Manpower, has been appointed chief of the Intramural Research Branch. Mrs. Dilworth succeeds Ellwynne M. Vreeland, R.N., who recently retired.

In her new assignment, Mrs. Dilworth will undertake intramural research to improve the quality of nursing service.

Mrs. Dilworth has been with the Division of Nursing since 1955.

Dr. Aurbach and Potts Receive French Award For Hormone Research

Two NIH scientists were the first recipients of the Prix Andre-Lichtwitz, a new award created by the French National Institute of Health and Medical Research. They were given the prize for their research in phosphorus metabolism.

The researchers are Dr. Gerald D. Aurbach, chief of the Mineral Metabolism Section of the Metabolic Diseases Branch, National Institute of Arthritis and Metabolic Diseases, and Dr. John T. Potts, former chief of the Section on Polypeptide Hormones of the Laboratory of Molecular Diseases, National Heart Institute.

Prize Honors Dr. Lichtwitz

They shared the $1,000 prize established in honor of Dr. Andre Lichtwitz, a French scientist who died 3 years ago. Dr. Lichtwitz was the personal physician of President Charles de Gaulle.

The award is given to a scientist or team of investigators for outstanding studies on calcium and phosphorus metabolism in clinical or experimental biology, or in basic science.

Drs. Aurbach and Potts began their collaborative research on the chemistry of parathyroid hormone in 1962. Their findings led to the development of a sensitive radioimmunoassay which has been applied to determine factors that control secretion of the hormone.

In 1969 Dr. Aurbach reported on the first practicable method for extracting and purifying parathyroid hormone. It was the first successful isolation of the hormone in purified form.

Dr. Potts contributed to methods leading to the proof of the structure of an important region of the ribonuclease molecule. He is now an associate professor of Medicine at Harvard University, in charge of the Endocrine Unit at Massachusetts General Hospital.

Dr. Aurbach, Dr. Potts...
Joint NIAMD-NCCDC Symposium Discusses Uremic Diet Therapy

A symposium “Diet Therapy in Uremia” sponsored jointly by the Artificial Kidney-Chronic Uremia Program of the National Institute of Arthritis and Metabolic Diseases, and the Kidney Disease Control Program, National Center for Chronic Disease Control was held recently at the annual meeting of the American Dietetic Association in San Francisco.

Dr. Benjamin T. Burton, who heads NIAMD’s Artificial Kidney Program, talked on “Principles of Dietary Therapy in Chronic Uremia.” Dr. Burton is also NIAMD associate director for Program Analysis and Scientific Communication.

Dr. Davis S. Hathaway, NCCDC, discussed “Pathophysiology and Metabolic Derangements of End Stage Renal Disease.”

Other topics surveyed were the evaluations of special diets for chronic uremia, and the practical aspects of diet therapy in chronic renal disease from the standpoint of the dietitian.

The appointment of Dr. James Allen Scott as chief, Parasitology and Medical Entomology Branch, Extramural Programs, National Institute of Allergy and Infectious Diseases, has been announced by Dr. Dorland J. Davis, NIAID Director.

In his new position Dr. Scott will be responsible for the direction and development of the Branch’s programs.

Dr. Scott succeeds Dr. Calvin L. Gibson who recently transferred to the Office of the Director, NIH.

Dr. Scott has been assistant chief of the Branch since its establishment in 1965, and has served as a scientist-administrator in the extramural programs since 1962.

He received his B.A. and M.A. degrees from Wesleyan University, and his Sc.D. degree from the Johns Hopkins University School of Hygiene and Public Health. Before coming to NIH in 1962, he was professor of epidemiology and tropical medicine at the University of Texas School of Medicine.
ORGANIZATION OF NIH

Director's Advisory Committee

Associate Director for Ext. Res. & Training
Associate Director for Direct Research
Associate Director for Clinical Care Admin.

Director
Deputy Director
Deputy Director (Science)

Associate Director for Program Plan. & Eval.
Associate Director for Administration
Office of Information

Director
Research Institutes and Divisions

NCI
NHI
NIAMD
NIAID

NINDS
NICH
NIDR
NIGMS

NEI
DEHS
DBS
FIC

CC
DCRT

Bureau of Health
Professions Education and Manpower Training

Deputy Director for Institutional Development

Deputy Director for Health Manpower Development

Division of Education & Research Facilities

Division of Nursing

Division of Dental Health

Division of Physician Manpower

Division of Allied Health Manpower

Division of Health Manpower and Educational Services

Division of Research Resources

National Library of Medicine

Associate Director
Specialized Information Services

Lister Hill Biomedical Communications Center

Extramural Programs

Library Operations

Audio Visual Center

Reorganization

(Continued from Page 1)

Institutional Development—Division of Educational and Research Facilities, Division of Health Manpower Educational Services, and Division of Research Resources; and Health Manpower Development—Division of Nursing, Division of Dental Health, Division of Physician Manpower, and Division of Allied Health Manpower.

Within the new Bureau will be consolidated all construction grant functions of NIH (the Division of Educational and Research Facilities), including the present health research facilities functions of DRFR and the construction grant functions of NLM.

Additionally, the remainder of DRFR will be transferred to the Bureau in a newly-designed Division of Research Resources which, along with the other two Divisions under the Deputy Director for Institutional Development, unifies all units concerned with general support to institutions, including such programs as general research support grants, basic and special improvement grants, and student scholarships and loans.

The biomedical communications functions of the National Library of Medicine will continue to be directed by Dr. Martin M. Cummings, NLM Director. Organizationally he will be assisted in carrying out these functions by specialized offices, each headed by an Associate Director.

These include Specialized Information Services, the Lister Hill Biomedical Communications Center, Extramural Programs, Library and Microfilm Operations, and the National Audiovisual Center.

Although its construction grant functions are transferred to the Bureau of Health Professions Education and Manpower Training, the Library will continue to be responsible for advising the new Bureau on needs for medical library facilities.

The new organizational plan also reorganizes the Office of the Director, NIH, by:

Creating the new position of Deputy Director for Science who will be the focal point in the Office of the Director for dealing with day-to-day policy problems of the research Institutes and Divisions and for representing them in the overall policy councils of NIH. Dr. Robert W. Berliner, now Director of Laboratories and Clinics, will assume this position.

Redesignating the Associate Director for Extramural Programs—Dr. E. W. Lamont-Happers—as Associate Director for Extramural Research and Training.

Creating a new Associate Director for Direct Research (to be named), to whom the newly-establisshed Assistant Director for Collaborative Research (to be named) will report.

Redesignating the Director of Program Planning and Evaluation—Dr. Thomas J. Kennedy, Jr.—as Associate Director for Program Planning and Evaluation, and establishing the following principal units under him: Office of Program Analysis; Office of Resources Analysis, and Office of Legislative Analysis.

Redesignating the Executive Officer—Richard L. Segel—as Associate Director for Administration, and establishing these principal units under him: Office of Financial Management; Office of Personnel Management; Office of Management Policy and Review, and Office of Administrative Services.

Other specific changes would:

Place the Division of Research Grants under the Associate Director for Extramural Research and Training; transfer the grants management functions of DRG to the Associate Director for Administration and combine them in the newly-formed Office of Financial Management, and place the Division of Research Services under the Associate Director for Direct Research.

NIH research Divisions will include the Division of Biologies Standards, the Division of Environmental Health Sciences, the Fogarty International Center, the Division of Computer Research and Technology, and the Clinical Center.

(See OD CHART, Page 4)
Dr. Gunnar Ryge Named
DDH Scientific Director
Of Dental Health Center

Dr. Ryge has lectured at dental schools and societies throughout the United States.

Dr. Gunnar Ryge has been appointed Scientific Director of the Dental Health Center at San Francisco. The appointment was announced by Dr. Viron L. Diesen, Director, Division of Dental Health, Bureau of Health Professions Education and Manpower Training.

Since 1964, Dr. Ryge has served as chief of the Materials and Technology Branch of the Dental Health Center which is the Division's field center for applied research and training.

Background Cited

Previously, he was professor and chairman of the Department of Dental Materials at Marquette University.

Dr. Ryge was born in Copenhagen, Denmark, and received his dental degree from the Royal Danish Dental School. He became an instructor there, left to enter private practice, and returned to the dental school to become an associate professor.

He came to the United States in 1949 as a guest worker in the Dental Materials Section of the National Bureau of Standards. He joined Marquette University in 1950. Dr. Ryge has lectured at dental schools and societies throughout the United States.

Presently he is a lecturer in dentistry, University of California, San Francisco Medical Center. He is also clinical professor, Dental Materials, at the School of Dentistry, University of the Pacific.

In 1957 construction for teaching purposes at medical schools was, for the first time, greater than construction for research.

LECTURESHIP AWARD
(Continued from Page 1)

Over the years, it became a tradition to periodically invite as lecturers members of the NIH intramural staff who, in the words of Dr. Marston, would "remind us of the stature of our own staff and the quality of their research."

The establishment of the G. Burrells Mider Lectureship Award formalizes this tradition. Each NIH scientist invited to present the lectureship receives a special certificate in "recognition and appreciation of outstanding contributions to biomedical research."

Centered at the top of the certificate is a gold imprint of a bust of Dr. Mider surrounded by the words "The National Institutes of Health." Beneath the likeness are the words "The G. Burrells Mider Lectureship Award."

Tomkins Gives First Lecture

The first NIH scientist so honored was Dr. Gordon M. Tomkins, chief of NIAMD's Laboratory of Molecular Biology, who last month (Dec. 11) discussed "Control of Gene Activity in Higher Organisms."

A brilliant young researcher, Dr. Tomkins has won renown for his work on cholesterollower synthesis, the metabolism of steroid hormones, and the mechanism whereby hormones affect enzymes.

His investigations of the relationship between the structure and function of the enzyme glutamate dehydrogenase, for example, found that changes in the enzyme's structure could be induced through the interaction with various biologically active molecules, such as steroid hormones or nucleotides. This alteration changes the enzyme's ability to act as a catalyst in a metabolic reaction.

Provides Initial Proof

This finding was the first experimental proof that a hormone is able to directly affect the physical structure of an enzyme. Prior to this, it had been thought that hormones exerted their influence by participating in the metabolic reactions through oxidation or reduction.

For the past several years, Dr. Tomkins has been studying the effects of steroid hormones on mammalian cells in tissue culture, the basis of his discussion on "Control of Gene Activity in Higher Organisms," work that looks toward a newer theory of the mechanism of genetic control of protein synthesis.

In his lecture, Dr. Tomkins outlined his and his associates' work on genetic control mechanisms.

A single mammalian cell has about 5,000,000 genes, and each cell of an organism contains the same complement of genetic information. However, there are thousands of different cell types which comprise an individual, such as kidney, liver, brain, and blood cells.

The mechanism which allows these types of cells to differ from one another is the mechanism which prevents the expression of most, but allows the function of certain specific genes.

This process, called differentiation, is a basic mystery in the biology of complex organisms. To explain cellular differentiation, biologists have heretofore analogized from mechanisms which function in bacteria and bacterial viruses where the function is controlled by the attachment of specific protein molecules (repressors) to specific sites on the chromosome. These repressors regulate the formation of the immediate gene product, messenger RNA.

Dr. Tomkins has shown that in mammalian cells alternative genetic control mechanisms exist which modulate the synthesis of proteins (the ultimate gene products) by controlling the rate at which the genetic information encoded in the messenger RNA is translated into a protein.

2nd Type of Control Shown

Evidence for this second type of genetic control comes from his studies on the synthesis of a specific enzyme, tyrosine aminotransferase, in mammalian cells grown in tissue culture.

The formation of this protein is stimulated by adrenal steroids and from his experiments on this system, he has concluded that messenger RNA function is under hormonal control.

Other studies in the same system have indicated that there is also bacteria-like direct control of gene function, this latter mechanism, however, does not appear to be under hormonal influence.

At present, Dr. Tomkins and his group are trying to evaluate the role of messenger control in regulating the function of mammalian organisms and trying to understand the precise molecular mechanisms involved in this type of regulation.

Dr. Tomkins came to NIH in 1955 as a member of the staff of the NIAMD. He received his A.B. degree (cum laude) in 1945 from the University of California at Los Angeles, his M.D. (cum laude) from Harvard in 1949, and his Ph.D. in 1953 from the University of California at Berkeley.

His devotion to science is matched by a life-long association with music, specifically jazz. An accomplished musician, Dr. Tomkins plays a number of instruments, including the clarinet and saxophone, and, since his student years, has formed a number of jazz combos. He and his present combo have performed at jazz concerts at NIH, as well as at other functions here and in this area.

HONORS DR. MIDER

An exploration of the abnormal calcium metabolism which accompanies chronic kidney failure was the theme of a 2-day conference organized recently in Santa Barbara, Cal., by the National Institute of Arthritis and Metabolic Diseases' Artificial Kidney Program. This field has become increasingly important since the advent of artificial kidneys and kidney transplantation. Scientists from foreign countries and the United States who attended the conference sought to elucidate such phenomena as widespread calcification of soft tissues, dimineralization of the skeleton, and secondary hyperparathyroidism.

These complications are seen with increasing frequency in patients with chronic kidney failure who are being maintained with the aid of artificial kidneys, or even with kidney transplantation.

Papers were presented on problems related to renal osteodystrophy, disturbed divalent metabolism, and to their possible pathologies and interactions in chronic renal disease.

Emphasis was placed on the obscure and controversial facets of this particular field.

The conference, headed by Dr. Charles Kleeman, Director of the Divisions of Medicine, Cedars-Sinai Medical Center in Los Angeles, was cosponsored by the National Center for Chronic Disease Control. N I A M D ' s Artificial Kidney-Chronic Uremia Program will publish the proceedings.

Dr. Jack Masur, CC Director (left), presents the PHS Distinguished Service Medal and certificate to Dr. George Brecher for his work while serving as chief of the Hematology Service, Clinical Pathology Department, 1953-1966. Dr. Brecher is now professor of clinical pathology at the University of California and Laboratory Medicine, School of Medicine, University of California, San Francisco.
NIAID, Italian Scientists Work on Study To Isolate Antigens From Human Tissue

A collaborative study to determine antigen could be isolated from human scientists from Italy and the National Diseases.

Similar water-soluble transplantation antigens were successfully isolated from guinea pig tissue. This study showed that transplantation antigens induced accelerated rejection of donor skin grafts and elicited a delayed-hypersensitivity reaction in sensitized hosts.

For a similar study on human tissues using University of Utilization and isolation techniques, five spleens were obtained from patients in Italy who were undergoing therapeutic splenectomies.

After fragmenting the spleen, a single cell suspension was subjected to low frequency ultrasonic to liberate surface antigen.

To concentrate the antigen fraction it was subjected to Sephadex G-200 and electrophoretic separation on polyacrylamide gel.

Immunogenic activity was determined by giving intradermal antigen inoculations to patients who had been preimmunized, as well as normal controls.

Only preimmunized individuals showed distinct cutaneous hypersensitivity.

In vivo tests of the antigen fraction demonstrated that it inhibited the cytotoxic reaction of tissue typing antisera.

Further studies will be undertaken to determine the chemical and genetic basis of this immunogenically active antigen, and to investigate the possibility of inducing tolerance to it in a potential transplant patient.

Dr. Leonard D. Fenninger, Director of the Bureau of Health Professions Education and Manpower Training, has announced two new programs of financial aid to veterinary and nursing students.

Under the authorizing legislation—the Health Manpower Act of 1969—schools of veterinary medicine are now eligible to participate in the Health Professions Scholarship Program.

This eligibility will benefit students of exceptional financial need who are either enrolled as full-time students or accepted for enrollment and who require scholarship assistance to help them to become veterinarians.

Scholarships up to $2,500 a year may be awarded. Schools participating in the Health Professions Scholarship Program are responsible for determining the amount of an award.

Scholarship Grants Authorized

The act also authorizes the DHEW Secretary to make scholarship grants to students of exceptional financial need who are either enrolled as full-time students or accepted for enrollment in some 1,000 schools of nursing.

Scholarships up to $1,500 a year may be awarded. Schools participating in the Nursing Scholarship Program are responsible for determining the amount of an award.

The Nursing Scholarship Program replaces the Nursing Educational Opportunity Grants Program which will terminate at the close of the 1968-69 academic year.

Applications have been sent to veterinary medicine and nursing schools for use in making application for funds for the 1969-70 academic year.

These two programs will be administered by the Student Loan and Scholarship Branch of the Division of Health Manpower Educational Services.

Dr. Pitcairn served as director of the Pulmonary Function Laboratory, head of the Division of Chest Diseases, and assisted in the early development of the open heart surgery program.

His principal research interests have been the study of respiratory center sensitivity during pregnancy, and oxyhemoglobin dissociation characteristics of young and old human red blood cells.

Dr. Fenninger Announces Two Health Professions Student Aid Programs
Investigators Pinpoint Drugs in Body Cells By Electron Microscope, Autoradiography

A method for localizing drugs in body cells has been demonstrated by grantees of NIH. Using an electron microscope and a technique known as autoradiography, the investigators were able to pinpoint where commonly used drugs end up in the body.

Such information is an important key to understanding precisely how drugs work to combat disease and restore normal function.

Scientists at the Washington University School of Medicine, St. Louis, Mo., prepared tissue sections from the brain, kidney, liver, muscle, salivary gland, and other organs containing specific muscle disorders, such as the inherited Duchenne type and other types of muscular dystrophy. Hans U. Zellweger, a guest worker at the State University of Equatorial Africa; professor of Pediatrics and chairman of the Institute of General Medical Sciences. Pediatric Department at the American University of Beirut, Lebanon; professor and fellow of the Rockefeller Foundation.

He was general secretary of the Fifth International Congress of Pediatrics, Zurich, 1950. He has also been active in research of polio and various fields of pediatric neurology.

NIH Publications Discuss Graduate School Trends, Research by Foundations

Two publications in the NIH series, Resources for Medical Research, have recently been issued. The reports deal with aspects of biomedical research and education in scientific fields.


Medical Sciences Favorable

The report states that over 50 percent of NIH predoctoral fellowship support for selected science fields was awarded to graduate students in the basic medical sciences.

In order to meet future manpower requirements, the publication suggests a continuing expansion, not only in traditional fields, but also in newly emerging fields, such as biomedical engineering and molecular biology.

Copies of the report are available from the Resources Analysis Branch, Blgd. 31, Rm. 18-44, NIH, Bethesda, Md. 20014.

Report No. 15 is titled The Medical and Educational Activities of Foundations and Nonprofit Research Institutes. This publication analyzes the medical research of foundations supporting biomedical science and recipient nonprofit research institutes.

Highlights Listed

Some facts highlighted in this report indicate that:

- Foundations provide about $50 million a year for research in medicine and health, this is more than half of all foundation support for research.
- Foundation medical research funds equal those made by the American public through voluntary health agencies.
- Nonprofit research institutes are spending about $115 million annually on health research, approximately three fourths of their funds are from Federal agencies.

Copies of the report are available at 40 cents per copy from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Writers and editors may obtain single copies by writing to the Resources Analysis Branch, National Institutes of Health, Bethesda, Md. 20014.

International Conference On Rubella Immunization To Meet Here in Feb.

Scientists from all over the world will attend an International Conference on Rubella Immunization at the Clinical Center auditorium Feb. 18 to 20, 1969.

The National Institute of Allergy and Infectious Diseases, and the Division of Biologics Standards are sponsoring the meeting.

Dr. Saul Krugman, professor and chairman of the Department of Pediatrics at New York University School of Medicine, will be conference chairman. Dr. Krugman, a member of NIAID's Advisory Committee for Vaccine Development, has long conducted research on rubella, and with his colleagues, has conducted trials of experimental vaccines to control childhood diseases.

The conference will deal with all aspects of rubella: the disease, the virus which causes it, epidemiology, studies with experimental vaccines and human gamma globulin, and the production of vaccines and biologics control.

Members of the program committee for the conference, in addition to Dr. Krugman, will be Dr. Edwin H. Lonnette, California State Department of Public Health; Dr. Frederick Robbins, Case Western Reserve University; Dr. V. Charles Cockburn, World Health Organization; Dr. Thomas Weller, Harvard University; Dr. Bruce Dull, National Communicable Disease Center, Atlanta, Ga.; Drs. Harry M. Moyer, Jr., and Paul D. Parkman, DBS, and Drs. Daniel Mullally and Earl Beck of NIAID.