Endicott Appoints 2 NCI Scientists To Key Positions

Dr. Kenneth M. Endicott, NCI Director, last week announced the appointments of Dr. Carl G. Baker as Associate Director for Program, and Dr. C. Gordon Zubrod as Director of Intramural Research.

Dr. Baker, formerly NCI Assistant Director with responsibility for intramural nonclinical research, will work closely with Dr. Endicott in coordinating the major Institute programs and with the Institute's top extramural advisory committees on major problems and policy matters.

Dr. Zubrod, formerly NCI Clinical Director, has been active in research on use of drugs with cancer patients. In his new position he will assume direction of both clinical programs and with the Institute's (See APPOINTMENTS, Page 7)

Lindsay Announces Reorganized DRG

Dr. Dale R. Lindsay, Chief of the Division of Research Grants, has announced the recent reorganization of the Division into the Office of the Chief and eight branches.


The new Special Programs Review Branch, formerly the Center Grants Review Office, will review applications for clinical centers and for other types of multidisciplinary and multicategorical programs. It will be under the direction of Dr. Gordon Seger.

Branches Combine

The Research Fellowships Review Branch and the Training Office have been combined as the Career Development Review Branch under Dr. Stephen P. Huttchett, former Chief of the Fellowships Branch.

Dr. Fay Hempill, Assistant Chief, DRG, who has headed the Training Office, will now devote full time to his duties as Assistant Chief.

Functions of the former Research Grants Review Branch will be divided between a branch of that name, headed by Dr. J. Palmer (See REORGANIZATION, Page 2).

House Hearings to End This Week: $583 Million Requested for NIH

NIH Director Presents Foreign Currency Need

As requested by the Office of the Surgeon General, PHS, Dr. Shannon presented the Special Foreign Currency Program to the Subcommittee of the House Committee on Appropriations on March 29.

This program concerns the purchase of excess U.S.-owned foreign currencies to be used for the support of research and other scientific activities in seven countries where these currencies are available.

It will be carried out under Section 104(k) of P.L. 480 as amended (the Agricultural Trade Development and Assistance Act of 1954) and pertinent provisions of P.L. 86-610 (the International Health Research Act of 1960).

The total PHS request for FY 1962 to cover this program is $10,084,000. Of this, NIH would be allocated $5,717,000; the Bureau of State Services, $3,700,000; and the National Library of Medicine $667,000.

P.L. 480 funds are derived from the sale to foreign countries of surplus currencies.

Funds Designated

The NIH funds were designated for the following activities:

<table>
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Artists Sign Their Deeds With Dents

The Plant Safety Branch, OD, reports that there has been a sharp increase this year in the number of cars damaged while parked on the NIH parking lots.

According to Guard Office records, 20 cars were reported damaged in 1960, while nine such instances have been reported so far this year.

The complaint of one NIH employee, expressed in the following recent memo to PSB, points up the seriousness of this problem:

"I have been employed here for five years and during that period I have spent more than $40 a year repairing damages to my cars. These damages occurred between 8:30 a.m. and 5 p.m. during the work week at NIH.

"Recently I purchased another car. Three days after taking possession of said car, it had a crease in the left rear fender. Yesterday, upon my departure, I found a tail light smashed.

"On these occasions and previous occasions in which my cars have been damaged, there has not been any form of communication between the offender and myself.

"NIH is an institution of high caliber and I assume that the personnel employed here are of the same caliber. If they are, why should they not accept responsibility for their mistakes or misdeeds?

"I am sure that the drivers at NIH are covered by insurance. Therefore, why should they not try to rectify their driving faults?"

FSB calls attention to the fact that failure to report an accident to the Guard Office is a direct violation of NIH Station Rules. Furthermore, the State of Maryland requires that if an unattended vehicle is struck, the offending driver must leave his name and address on the damaged car.

The notation can easily be left on a slip of paper under the windshield wiper, and might well include the date and mention of the damage caused.

Dr. Shannon, Institute Director, and other immediate staff were completing testimony this week before the Subcommittee of the House Committee on Appropriations in support of the NIH budget request for Fiscal Year 1962.

The request is for $583 million, exclusive of $4.6 million for direct construction and $30 million for research facilities construction grants.

The NIH total is part of the Public Health Service request for $1.1 billion, which is included in the Administration's request for $4 billion for the Department of Health, Education, and Welfare.

Rep. John E. Fogarty of Rhode Island is Chairman of the House Subcommittee. The other members are Winfield K. Denton, Indiana; Fred Marshall, Minnesota; Melvin R. Laird, Wisconsin; and Robert H. Michel, Illinois.

Smack-and-Scoot

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<tr>
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NIH Reaches 3rd of Participation Goal
In First 2 Weeks of Health Campaign

Results of the first two weeks of the annual combined campaign of the Federal Service Joint Crusade and the National Health Agencies, launched here March 15, revealed NIH had attained one-third of its goal of 100 percent participation.

The campaign continues here until April 26.

The report issued March 29 by the Campaign Chairman, Dr. Justin M. Andrews, NIAID Director; and Co-chairman, Dr. Francis A. Arnold, NIDR Director, shows DBS, DGMS, and NIAID as the largest contributors at that time.

In commenting on the report, Dr. Andrews said, "The excellent showing made so far by several segments of our organization, notably DBS, DGMS, and NIAID, is most heartening. I am hopeful that those who have not yet responded to this appeal for help will do so, recognizing the humanitarian goals the NIH shares with the National Health Agencies and the Joint Crusade."

A breakdown of the report follows:

<table>
<thead>
<tr>
<th>Organization &amp; Employees</th>
<th>Percent of Participation J.C.</th>
<th>N.H.A.</th>
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<tbody>
<tr>
<td>DBS (205)</td>
<td>79</td>
<td>81</td>
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<tr>
<td>DGMS (103)</td>
<td>71</td>
<td>76</td>
</tr>
<tr>
<td>NIAID (346)</td>
<td>70</td>
<td>66</td>
</tr>
<tr>
<td>DRG (425)</td>
<td>52</td>
<td>54</td>
</tr>
<tr>
<td>NIDR (145)</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>NCI (900)</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>OD-OAM (811)</td>
<td>32</td>
<td>28</td>
</tr>
<tr>
<td>DRS (900)</td>
<td>30</td>
<td>36</td>
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<tr>
<td>NINDB (375)</td>
<td>25</td>
<td>25</td>
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<tr>
<td>CC (1,500)</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>NIMH (621)</td>
<td>21</td>
<td>21</td>
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<tr>
<td>NHI (450)</td>
<td>14</td>
<td>14</td>
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<tr>
<td>NIAMD (474)</td>
<td>13</td>
<td>12</td>
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<tr>
<td>Totals (7,255)</td>
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<td>32.9</td>
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Inquiries may be directed to the Referral Branch, and Dr. Saunders was an Assistant Branch Chief.

The Referral Branch will now assign all applications for funds to be awarded from research grant appropriations. The Review Branch will perform initial review of research grant applications in the 39 Study Sections.

Functions of the other four Branches will remain unchanged, according to the announcement.

REORGANIZATION

(Continued from Page 1)

Saunders, and a Research Grants Referral Branch headed by Dr. Berwin A. Cole.

Dr. Cole was formerly Chief of the Research Grants Review Branch, and Dr. Saunders was an Assistant Branch Chief.

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Dr. Henry K. Beye Named Director of MARU

Dr. Dr. Henry K. Beye, Head of the Parasitic Diseases Service of the Laboratory of Clinical Investigation, NIAID, has been named as Director of the Middle America Research Unit, Panama Canal Zone field station of the NIAID Laboratory of Tropical Virology.

As the Director of MARU, he will succeed Dr. Alexis Shelokov, Chief of the Laboratory of Tropical Virology, when Dr. Shelokov returns in July.

Dr. and Mrs. Beye left last week for Panama.

The Middle America Research Unit is jointly supported by NIH and the Walter Reed Army Institute of Research.

COSTEP Files Available

Files of students eligible for employment under COSTEP are available for review and selection in Bldg. 10, Rm. 2B-46.

All persons interested in making a selection are urged to do so as soon as possible. In order that these students may be notified of their pending appointments before finding employment elsewhere.
Trypsin Fragmentation Of Bovine Fibrinogen Gives Structural Clues

Presented at the 45th Annual Meeting of the Federation of American Societies for Experimental Biology, April 1961.

Chemical "dissection" of fibrinogen by a protein-digesting enzyme, trypsin, is yielding important information about fibrinogen's physico-chemical structure and molecular sites susceptible to chemical activity, report Dr. Elemer Mihaly and Janan Z. Godfrey of the National Heart Institute's Laboratory of Cellular Physiology and Metabolism. Their studies are part of a program of basic research aimed at, or eliciting the molecular composition and structure of various proteins and at correlating this molecular architecture with physiological function.

Fibrinogen, a plasma protein, is essential for blood coagulation: it is converted by thrombin into fibrin, and not normally found in the blood; whereas plasmin is a plasma component believed essential for maintaining blood fluidity.)

The scientists found that the clotting activity of fibrinogen treated with trypsin disappeared even before the large fragments were liberated, suggesting that the essential bonds in the fibrinogen molecule are split at a faster rate than the whole. The presence of new polio protein at two hours after infection in the cytoplasm. By three hours there had appeared a polio protein in the non-nucleolar part of the nucleus.

Selective Method Of Immunization Seen Advisable

Remarks by Dr. Joseph E. Smadel, Chief, Laboratory of Virology and Rickettsiology, Division of Biologies Standards, in discussion of a paper by Dr. Geoffrey Edwards at the Symposium on World Medicine at Yale University School of Medicine, March, 1961.

Dr. Edsall has given an excellent summary of the future role of immunization in world health. I do agree with his ideas on what immunization should contribute to the health of mankind. I would like to discuss for a few minutes some of the factors that affect cost and the benefits with immunization. I would like to assume their own discipline if it is to assume the role in world health that Dr. Edsall and all of us would hope for.

The future of immunization lies in epidemiology not in immunology; by this I mean that the epidemiologic approach, and it alone, will provide us with the necessary information to plan intelligent immunization programs which may fill the needs of persons in a given age group, living in a given socio-economic environment, in a given geographic region.

Soldiers Immunized

It may be possible, but it certainly is not logical or practical, to attempt to immunize all people against all pathogens. The older members of the groups here today (and I am one of them) will recall that only a few types of the pneumococcus are responsible for the majority of the cases of lobar pneumonia. Heffron showed several decades ago that types I to VIII accounted for 81 percent of the cases while the remaining seventy types covered only 19 percent. MacLeod and his colleagues demonstrated that pneumococcal pneumonia could be reduced in army camps by immunizing the inhabitants with specific polysaccharides from only a few types, provided that these corresponded with those circulating in the camp.

I might have chosen adenoviruses instead of pneumococci to illustrate (See IMMUNIZATION, Page 6) this it stops functioning, as does DNA metabolism, and the cells begin to die.

The study was reported by Dr. Hiltob B. Levy of the National Institutes of Health.
Tissue Antigen Indicated In Transplanted Tumors

Presented at the 45th Annual Meeting of the Federation of American Societies for Experimental Biology, April 1961.

Polyoma virus is a mouse virus recently discovered by Stewart and Eddy of the National Institutes of Health, and is capable of causing a variety of tumors when inoculated into newborn mice or hamsters. When similarly inoculated into adult animals, neo­ tumors could be produced but the animal suffers an inapparent infection followed by the development of antibodies against the virus. The tumors produced by inoculating virus into newborn animals, however, can be transplanted in series in adult animals made immune to the virus are ineffective.

It has been found that adult animals made immune to the virus are subsequently resistant to supporting the growth of the correspond­ing transplantable tumor. This resistance is relative and can be overcome by a large dose of trans­ planted tumor cells. Furthermore, it seems to be specific against only tumors originally produced by the polyoma virus. The resistance appears to reside in the cells of the virus-immune adult and is not based on antibodies against the virus itself which are in the blood.

New Tissue Present

All evidence to date points to the presence of a new tissue antigen being gained by tumor cells that differs from that present in normal mouse tissues. This differ­ ent antigen acts as a foreign substance and the normal immunological­ ly competent adult animal recognizes it. It is postulated that when virus causes tumors in newborn animals these young animals being immunologically immaturity do not recog­ nize the new antigen as foreign and thus become “tolerant” to it and allow the tumor to develop. When virus is inoculated into the adult animal, some cells are also transformed but the immunologically competent adult recognizes the new tumor antigen as foreign and rejects it. In the process of rejecting it so that no tumor develops, the mouse becomes sensitized to this new anti­ gen so when the transplanted tu­ mor is later inoculated it rejects it more efficiently.

This hypothesis therefore would explain why the same virus in­ jection in newborn animals results in tumors, but in adults is ineffective.

These studies were reported by Dr. Karl Habel of the National Insti­ tute of Allergy and Infectious Disease at the meeting of the American Association of Immunologists.

Norepinephrine Suggested as Modulator Of Sym pathetic Nervous System Transmission

Presented at the 45th Annual Meeting of the Federation of American Societies for Experimental Biology, April 1961.

The neurohormone, one of the body’s neurohormones, chemical substances whose release is triggered by nerve impulses and whose function is to bridge the “gaps” (synapses) between nerves at nerve junctions such as ganglia and between nerve endings and their effector organs. Because acetylcholine is believed to be the chemical transmitter at many of the body’s nerve junctions and nerve terminals, some sort of control mechanism for this neurohormone has often been postulated in attempts to explain how the body maintains its tight control over the activity of its nervous system. Recent studies by scien­ tists of the National Heart Institute’s Laboratory of Chemical Pharmacology suggest that norepinephrine may be one such mecha­ nism.

Transmission Intensified

The NHI investigators studied the physiological role of norepine­ phrine in sympathetic ganglia of the autonomic nervous system, which two opposing divisions (sympathetic and parasympathetic) to­ gether regulate bodily functions beyond conscious control. They found that nerve-to-nerve transmission across the ganglionic synapses was markedly intensified in ganglia nearly devoid of norepinephrine. Conversely, synaptic transmission was markedly depressed by high ganglionic levels of free norepinephrine.

Norepinephrine, one of the hor­ mones released from the adrenal glands in response to stress, ex­ ercise, or other factors calling for stepped-up metabolic activity, also functions as a neurohormone. It works as a neurotransmitter at nerve terminal and effectors organ in some sympathetic nerves. How­ ever, since acetylcholine is believed to handle nerve-to-nerve transmission in the sympathetic system the findings of others that sympa­ thetic ganglia also contain fairly large amounts of norepinephrine prompted the NHI scientists to wonder what it was doing in these neural junctions.

Accordingly, animal studies were undertaken to compare the transmission of graded electrical stimuli across sympathetic ganglia containing normal amounts of norepinephrine with transmission across these ganglia after their norepinephrine content had been altered by drugs.

Reserpine was used to deplete the ganglia of norepinephrine. This drug impairs norepinephrine stor­ age, and liberates the free amine to be rapidly destroyed by en­ zymes or else to diffuse away. Then the scientists applied electrical stimuli of graded strength to preganglionic nerve fibers and measured the strength (potential) of the resulting nerve impulses after they had crossed the ganglionic synapses into the postgang­ lionic nerve fibers.

They found that, with any given preganglionic stimulus, the potent­ ial of the postganglionic nerve impulse increased markedly when ganglionic norepinephrine fell below 15 percent of normal. This indi­ cation that norepinephrine deple­ tion had enhanced nerve-to-nerve transmission. Even very weak elec­ trical stimuli would now set off all of the ganglionic nerve cells and produce postganglionic impulses of maximum strength. Before norepinephrine depletion, such stimuli had caused so few nerve cells to fire that no measurable postgang­ lionic impulse was produced. Simi­ lar enhancement of synaptic trans­ mission was noted after drugs which block the action of norepine­ phrine were given.

Effects Determined

In a second series of experiments the scientists determined the effects on synaptic transmission of high ganglionic levels of free norepine­ phrine. They first administered a drug that blocks the action of monoamine oxidase, the enzyme chiefly responsible for inactivating norepinephrine. But before reserpine was used they then used reserpine to liber­ ate the ganglionic stores of the amine. Since the free norepine­ phrine could now be cleared only by passive diffusion, very high lev­ els persisted for a time in the ganglia. During this time, synap­ tic transmission of nerve impulses was markedly depressed. However, when the free amine had at last diffused away and the ganglia were again depleted of norepine­ phrine, transmission was again en­ hanced.

The studies indicate that norepinephrine as well as acetylcholine is involved in the norepinephrine-acetylcholine mechanism at ganglia. Both are apparently released by preganglionic nerve impulses, but acetylcholine acts as the trans­ mission across the nerve junctions while norepinephrine, in some un­ known way, modulates or “damps” its action. This might well be an important mechanism for buffering

NHI Investigators Study Dynamic Turnover Rate Of Rat Mitochondria

Presented at the 45th Annual Meeting of the Federation of American Societies for Experimental Biology, April 1961.

Mitochondria are the principal power plants of the cell. Here foodstuffs are converted into energy which is stored as molecules of adenosine triphosphate (ATP). These molecules serve as energy sources for all parts and functions of the cell. This conversion is an extremely complicated process in­ volving many steps and requiring many enzymes, or biological catal­ yst. In short, mitochondria perform in this minute cellular component.

Since cellular activity is so ob­viously dependent on mitochondrial function, any changes in mitochon­ dria could seriously affect the cell. Profound structural and func­ tional changes in mitochondria have been previously observed in senescent animals. This investigation is part of a pro­ gram to examine the cause of the morphological change, its metabolite con­ sequence and effect on the total func­tional capacity of the cell. The authors (Drs. M. J. Fletcher and D. R. Sanadi of the National Heart Institute) have tried to learn whether the mitochondria in a cell are really old or whether they are being continually broken down and replaced by new mitochondria as is known to happen with proteins.

The studies reported here reveal that half of the rat liver mitochon­ dria are lost and resynthesized as units every 10.3 days. The investi­ gators found no important differ­ ences in the half-lives of mitochon­ dria from different adult rats.

The experimental procedure in­ volves following the turnover rate of mitochondrial units every 10.3 days. The investi­ gators found no important differ­ ences in the half-lives of mitochon­ dria from different adult rats.

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The experimental procedure in­ volves following the turnover rate of mitochondrial units every 10.3 days. The investi­ gators found no important differ­ ences in the half-lives of mitochon­ dria from different adult rats.
This is the first of a series of picture stories on NIH field stations planned for publication in the NIH Record. It depicts buildings, staff, and activities of the National Institute of Allergy and Infectious Diseases’ Section on Epidemiology, located at Columbia, S. C. A part of the NIAID's Laboratory of Parasite Chemotherapy, the section works closely with the laboratories here and with the NIAID Section on Cytology in Chamblee, Ga., on inter-related aspects of malaria research. Left to right, top row: the Williams Building at the Carolina State Hospital, where the NIH laboratory occupies the ground floor in the right wing; and the staff of the Section of Epidemiology. Middle row: technicians working in the laboratories pick Anopheles albimanus pupae to put in mosquito stock cages for breeding, isolate hookworm larvae from charcoal culture with the Baermann apparatus, and remove a baby chick from a cage containing malaria-infected mosquitoes; a scientist applies blood serum to an electrophoresis apparatus to check for the effect of helminth infections on blood proteins. Bottom row: a medical biologist removes ovaries from a caterpillar to transfer them to slides for tissue culture; a tube of virus material is placed in a high speed centrifuge; and Dr. Geoffrey M. Jeffery and Dr. Martin D. Young (recently transferred to Bethesda) examine charts showing results of tests with a new hookworm drug.
my point on selection of appropriate antigens on the basis of epidemiologically proved needs. However, I choose the older term because I wished to emphasize that the problem is not new. Had I spoken of adenovirus I would have mentioned some of the information given yesterday by Dr. Francis— that among the 20-odd adenoviruses, only types 3, 4, and 7 are significant disease producers in recruits. Vaccine for recruits contained these types.

At the present time, many of those in preventive medicine look with dismay at the long lists of arboviruses, ECHO viruses, Reoviruses, and foamy gizmo viruses, and other groups of viruses just around the corner. They ask themselves how could the commercial houses ever produce enough vaccines to immunize any appreciable number of people against such a mob of agents? They also ask themselves why people would submit to the multiple immunizations, and of those who did, how long would it be before they ostracized their physicians as primitive witch doctors who still practiced pin-sticking voodooism?

Questions to Be Asked

Those interested in immunization must answer many questions related to the development and use of vaccines in the coming years. Some of these questions will be concerning how widely will the commercial houses ever produce enough vaccines to immunize any appreciable number of people against such a mob of agents? They also ask themselves why people would submit to the multiple immunizations, and of those who did, how long would it be before they ostracized their physicians as primitive witch doctors who still practiced pin-sticking voodooism?

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Seminar on Investments Scheduled for April

A two-session Advanced Seminar on Investments will be held here April 19 and 26, at 7:30 to 9:30 p.m., in the Clinical Center auditorium. The seminar is sponsored by RD&W.

Conducted by Boyd B. Sibert, an associate of Ferris & Company, the first session of the seminar will cover determination of investment objectives and the construction and management of the investment portfolio.

In the second session, Mr. Sibert will discuss the nature and source of information available for analysis, analyzing individual securities, and the elements in the purchase and sale of securities.

Those interested in attending the seminar should call the RD&W office, Ext. 3597.

SYMPOSIUM LEADERS MEET AT NIH

Pictured prior to the opening here last week of the first Symposium on Genetics Related to Dental Health were, seated, left to right: Drs. P. O. Pedersen, Dean, Royal Dental School, Copenhagen, Denmark; Francis A. Arnold, Jr., Director, NIDR; David E. Price, Deputy Director, NIH; and Einar Hals, Professor, Royal Dental School, Aarhus, Denmark. Standing: Drs. Lon W. Morrey, Editor, Journal of the American Dental Association, and Hans Grahnen, Associate Professor, Royal Dental School, Malmo, Sweden.

The seminar was sponsored by the Council on Dental Health and the NIH, and supported by a grant from NIDR.

Medical History Society Elects Officers April 20

The second meeting of the newly formed NIH medical historical society will be held in Wilson Hall, April 20 at 8 p.m.

The agenda will include election of officers, the presentation of a constitution for ratification, and choice of a name for the organization.

The guest speaker will be Dr. Jerry Stannard of the Institute of the History of Medicine, Johns Hopkins University. He will discuss "The Development of Greek Pharmacology."

Further information may be obtained from Morris Leikind, NINDB, Ext. 3545, or Dr. Peter Och, NCI, Ext. 2442.

Dr. Young Is Appointed NIAID Ass't Lab Chief

Dr. Martin D. Young was appointed Assistant Chief of the Laboratory of Parasite Chemotherapy, NIAID, effective April 3.

Prior to the new assignment, Dr. Young was Head of the Section on Epidemiology, LPC field station at Columbia, S.C. He will continue to oversee the work on malaria and other parasitic diseases.

Field Station Transfers

The Section on Cytology, field station of the Laboratory of Parasite Chemotherapy, NIAID, has moved from Memphis, Tenn., to the Communicable Disease Center, Blg. 30, Chamblee, Ga.

The Section is headed by Dr. Don E. Eyles. Mail should be addressed to P. O. Box 105, Chamblee.
4 U.S. Universities Receive International Center Grants

A program for International Centers for Medical Research and Training (ICMRT) has been established at four U.S. universities in cooperation with foreign medical institutions.

Dr. John M. Andrews, Director of the National Institute of Allergy and Infectious Diseases, recently announced that NIH research grant awards totaling $1.4 million during the current fiscal year were made to the University of California Hooper Foundation, Johns Hopkins University, Tulane University, and the University of Maryland to initiate the program authorized by P.L. 86-610. The law seeks to "advance international status of the health sciences through cooperative enterprises."

Gives 5-year Support

The grant awards provide continuing support, for five years, for full-scale programs reviewed after three years and periodically thereafter to evaluate progress, problems, and prospects prior to commitment of support for an additional five-year period.

This program is being administered by NIAID for the five other Institutes and the Division of General Medical Sciences which received funds in FY 1961 to support activities implementing the International Health Research Act.

The National Advisory Allergy and Infectious Diseases Council has been delegated the responsibility of reviewing and awarding the center grants.

An advisory committee has been established to develop program policy and to provide preliminary review of grant applications and continuing program evaluation. The Committee on International Centers, under the chairmanship of Dr. Colin MacLeod of New York University, was selected to represent medical health research interests on a global basis.

The U. S. universities and their overseas affiliates are:

- The University of California (Hooper Foundation) and the University of Malaya and Institute of Medical Research at Kuala Lumpur;
- Tulane University and Universidad del Valle, Cali, Colombia;
- Johns Hopkins University and India Institute of Hygiene, Cuttanta, India;
- University of Maryland and the Institute of Hygiene, Lahore, Pakistan.

7 Countries Participate

It is anticipated that the currencies will be available in Burma, Egypt, India, Israel, Pakistan, Poland, and Yugoslavia, and will, according to Dr. Shannon's statement, "contribute to the solution of health and medical problems characteristic of that particular country."

The statement continues, "In large part this will be a result of problems of infectious disease, problems related to nutrition, and problems which can be best investigated utilizing large and diverse population groups as the research subject."

Studies in epidemiology will cover disease patterns in relation to population characteristics, in order to delineate the causality and etiology of prevalent diseases. Diseases endemic in certain areas, which may be transported to other areas, will also be investigated.

New Drugs Sought

In addition, the funds will contribute toward the search for new biological and botanical sources of potential disease-fighting drugs.

A total of $3,707,000 was appropriated to NIH for Fiscal Year 1961 for the purchase of P.L. 480 funds. Prior to the inception of individual negotiations under this agreement, it was necessary to conduct discussions at the governmental level with each country.

Currently, NIH scientists are negotiating in Israel and Yugoslavia for research agreements in those countries.

Dr. Thomas D. Dublin, NHI, is working out arrangements in Israel for a study of the geographic pathology of cardiovascular disease in a stable, isolated community.

In the same country, Dr. Sidney Udenfriend, NHI, is collaborating in the establishment of research aimed at increasing the usefulness of heavy oxygen (O18) as a tool in metabolic studies.

Dr. Harold F. Dorn, NHI, is in charge of negotiations with Yugoslavia for an epidemiological study of heart disease in rural and industrial populations. Centralized health