

the

Record

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFAREMay 8, 1962
Volume XIV, No. 9PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH

Nirenberg Wins NAS Award for Protein Studies

In recognition of his studies of the molecular mechanisms for the biosynthesis of protein, Dr. Marshall W. Nirenberg of the Laboratory of Biochemistry and Metabolism, National Institute of Arthritis and Metabolic Diseases, has received the National Academy of Science's newly established Award in Molecular Biology.



Dr. Nirenberg

The presentation was made by Dr. Detlev W. Bronk, President of the Academy, in a Medals and Awards ceremony April 23, as a part of the Academy's 99th Annual Meeting in Washington, D.C. The award, providing a grant of \$5,000 to be used to advance the scientific program of the recipient, was established by the United States Steel Foundation.

Dr. James A. Shannon, NIH Director, was awarded the Academy's Public Welfare Medal "for emi-

(See NIRENBERG, Page 6)

3 NIH Staff Members Pioneer In Ghana Biomedical Research

Three NIH staff members were scheduled to leave their offices in Building 31 last week for new headquarters in Accra, Ghana. Dr. John H. Edgcomb, Gerald F. Meyer, and Frances C. Mottram plan to spend at least two years there helping to

Ownership Advantages Stressed in Bond Drive

The 1962 U. S. Savings Bond Drive was launched here May 1 with an announcement from this year's Campaign Chairman, Dr. Jack Masur, Director of the Clinical Center, in which he urged all NIH employees to participate in the payroll deduction plan provided for their convenience.

Early in the week key men from all the Institutes and Divisions, appointed by their Directors, attended a kickoff rally in the CC auditorium. Speakers explained the many advantages of U. S. Savings Bonds.

In addition to the personal gain

(See BOND DRIVE, Page 8)



Dr. Masur

OIR Opens Office In Rio de Janeiro This Summer

The Office of International Research, OD, has announced plans to establish an office in Rio de Janeiro, Brazil, July 1, to represent Public Health Service research interests in Latin America.

The Latin American Office is the second to be opened overseas. The other, the European Office, in Paris, France, has been in operation since December of last year.

Dr. Dieter Koch-Weser, Associ-

Consists of 6 Sections

Dr. Edgcomb is Director and Mr. Meyer is Administrative Officer of the Ghana Research Unit which initially will consist of six sections: Epidemiology, Pathology, Infectious Diseases, Biochemistry and Nutrition, Clinical Investigations, and Operations.

Miss Mottram will serve as senior technician in the Pathology Section, the first scientific component to be established.

The Unit's sanitary engineer, George Elmore, has been in Ghana since February.

The Republic of Ghana is providing clinical resources and laboratory facilities, and making housing available to personnel from the U.S.A.

Temporary headquarters and laboratories are being constructed on the grounds of Accra's 1,500-bed Korle Bu Hospital. Modern houses

(See GHANA, Page 5)



Mr. Maxcy



Dr. Dalmat

ate Professor of the Department of Medicine, Western Reserve University, will be Acting Chief of the Latin American Office.

Dr. Herbert T. Dalmat, Research Program Coordinator, Extramural Programs, NINDB, will be Assistant Chief, and Lawrence Maxcy, formerly Administrative Assistant in OIR, has been designated Administrative Officer.

Functions Described

The new office will (1) represent NIH in negotiations with Latin American institutions engaged in medical research; (2) collect information on medical research potential and needs in the Latin American countries; (3) advise NIH grantees in the Latin American area; and (4) assist NIH advisory groups by conducting site visits to institutions proposing research projects for NIH support.

The office will also be responsible for conducting negotiations with scientists and government officials of other nations on cooperative research agreements.

Such research projects would be supported by U.S.-owned foreign

(See RIO OFFICE, Page 2)

Street Signs Made by DRS Paint Shop Save Taxpayers Money, Aid Motorists

Those new eye-catching street signs now in evidence around the reservation are proving helpful not only to the motorist but to the taxpayer.

They provide another example of how ingenuity and planning can lead to increased effectiveness and a significant saving in Government expenditures.

To effect this saving, the new signs are being made here in the Plant Engineering Branch Paint Shop, DRS, for about one-third the purchase price of identical signs made commercially.

This project stemmed from a meeting attended by representatives of the Office of the Director and the Division of Research Services, called to conduct a survey

and make recommendations.

Since the NIH reservation had grown to town proportions, it needed street signs and improved directional signs, the group decided. It was pointed out that visitors driving on the reservation quickly became bewildered, not knowing just where they were or how to get where they wanted to go.

The survey determined that the highly legible green-and-white signs previously adopted by the District of Columbia, which also provide after-dark visibility were the most practical for NIH use.

Investigation by the Plant Engineering Branch disclosed that the cost of these signs, if commercial-

(See STREET SIGNS, Page 2)

NLM Holds Open House On Successive Sundays

The National Library of Medicine is holding Open House in its new building on the NIH reservation for the medical community of the Washington Metropolitan Area next Sunday and the following Sunday from 3 to 5 p.m.

Invitations have been issued to physicians, medical scientists, and medical faculty and students. The guests will be conducted on guided tours of the building.

the Record

Published bi-weekly at Bethesda, Md., by the Public Information Section, Office of Research Information, for the information of employees of the National Institutes of Health, principal research center of the Public Health Service, U. S. Department of Health, Education, and Welfare.

Editor E. K. Stabler

Staff Correspondents

Betty Slattery, NCI; Tony Anastasi, NHI; Kathryn Mains, NIAID; Mary Henley, NIAMD; Marie Norris, NIDR; Lillie Bailey, NIMH; Pat MacPherson, NINDB; Elsie Fahrendthold, CC; Faye Heil, DBS; Corinne Graves, DGMS; Dick Turlington, DRG; Jean Torgerson, DRS.

NEWS from PERSONNEL

Job Opportunities

NIH employees should pass the word to their friends and neighbors who may be interested in job openings currently available at NIH for high school graduates.

Numerous opportunities exist for those graduates who are seeking permanent employment. Clerical, stenographic, and technical positions in various laboratories and offices are available.

Last year approximately 650 high school graduates were employed, and it is anticipated that the need will increase as the programs continue to expand.

Candidates for positions must pass Civil Service examinations administered by the Board of Civil Service Examiners at NIH. Further information about the examination process and the exact nature of job opportunities available may be obtained from your Personnel Operations Officer or from the Recruitment and Placement Section, PMB, Ext. 2403.

Absentee Voting

Most states and territories permit Primary and General Election absentee voting. Generally speaking, each state has special registration and absentee voting procedures. This information is summarized in two booklets, "Absentee Voters Manual" and "Voting Information."

For individual state and territory absentee voting information, call the Employee Relations and Services Section, PMB, Bldg. 1, Rm. 21, Ext. 4851.

Employee Conduct

A copy of Secretary Ribicoff's reminder about the maintenance of the highest standards of ethical conduct is being distributed to all employees. It is to the interest of each employee to re-read HEW leaflet, "Employee Conduct," HEW

RIO OFFICE

(Continued from page 1)

currencies purchased by NIH in accordance with the provisions of the Agricultural Trade Development and Assistance Act of 1954 (P.L. 480). The P.L. 480 funds result from the sale of U.S. agricultural surplus abroad.

Born in Kassel, Germany, Dr. Koch-Weser received his M.D. degree from the University of Sao Paulo, Brazil, in 1943, and his M.S. and Ph.D. degrees from Northwestern University in 1950 and 1956, respectively.

He was a Research Fellow at the Hektoen Institute and has served on the faculty of the University of Chicago.

Serves in Guatemala

A member of the PHS Commissioned Corps since 1947, Dr. Dalmat served in Guatemala for six years with the Laboratory of Tropical Diseases, one of the forerunners of NIAID. He came to NIH in 1953 and has held his present position since 1960.

A native of New York City, he received his B.S. degree from the City College of New York in 1939, his M.S. degree from Iowa State College in 1941, and his Ph.D. degree from George Washington University in 1957.

Dr. Dalmat has been on the faculty of Cornell University and is a Visiting Instructor at the Naval Medical School.

Mr. Maxcy came to NIH in 1960 as a Management Intern Program trainee and has been with OIR since 1961. Born in Syracuse, N.Y., he received his B.A. degree from Syracuse University in 1957 and his M.P.A. degree from the university's Maxwell Graduate School in 1960.

391. This leaflet was initially distributed in October 1961 and is contained in the orientation brochure which is given to all new employees.

PHS Awards First Contract to Develop Experimental Respiratory Vaccines

The Public Health Service has announced the award of a first contract for development of experimental vaccines against respiratory infections—popularly called the common cold.

The contract signed between the newly created Board for Vaccine Development at the National Institute of Allergy and Infectious Diseases and Chas. Pfizer & Co., Inc., Terre Haute, Ind., calls for the

development of vaccines against a number of infectious agents which are known to be the major causes of respiratory diseases.

The one-year contract for \$211,000 is the first of a series that will be awarded to industrial research organizations and university and other medical centers.

The new program was created by the Public Health Service to make use of growing knowledge about the viruses that cause colds.

It is now possible to implicate known viruses in about 60 percent of the serious respiratory illnesses of hospitalized children, and it is these viruses that will receive immediate attention in the Vaccine Development Program.

Priorities Established

Priorities have been established under the overall program to make prototype vaccines, both live and killed, with respiratory syncytial virus; parainfluenza viruses 1, 2 and 3; PPLO-Eaton agent; and adenoviruses 1, 2, 3, 4, 5 and 7, in that order of priority.

These priorities have been chosen because RS viruses are believed to cause about 20 percent of these illnesses; parainfluenza viruses, 15 percent; PPLO-Eaton agent, 10 percent; and adenovirus, 10 percent.

In addition, the possibility of vaccine development against the enteroviruses and enterovirus-like agents incriminated in respiratory disease of adults will be explored.

STREET SIGNS

(Continued from page 1)

ly made, would be \$25 each, but with the purchase of a vacuum applicator sign-maker for \$350, they could be made here for \$6.05 each.

The first 19 signs made in the Paint Shop more than paid for the new equipment. Purchased commercially they would have cost \$475. By use of the new equipment, the cost to NIH was \$114.95, including NIH craft labor.

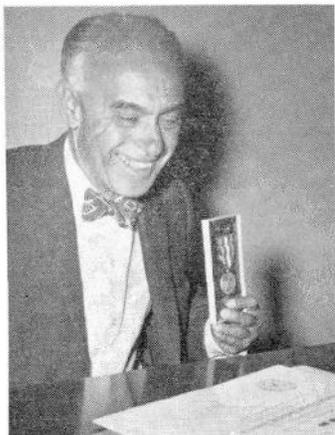
The signs are made of adhesive reflective sheeting applied on both sides of an 8" x 28" aluminum blank. A vacuum pump, utilizing atmospheric pressure, molds the sheeting to the surface of the blank, while infrared heat elements in the applicator lid melt the adhesive to make a firm bond. The signs are expected to last under all weather conditions for about five years.

The do-it-yourself method will be used not only for the making of street signs—56 in all—but for replacement and standardization of most signs on the reservation, including stop and directional signs and those designating parking lots and reserved parking areas.



Robert E. Margraf of the Plant Engineering Branch Paint Shop, DRS, inspects two new signs for Memorial Road before removing them from the shop's do-it-yourself sign-maker.—Photo by Sam Silverman.

PHS Honor Medal Is Awarded to Dr. Rosenthal



Dr. Sanford M. Rosenthal, holding his PHS Meritorious Service Medal, smiles as he reads the award certificate.—Photo by Jerry Hecht.

Dr. Sanford M. Rosenthal, former Chief of the Laboratory of Pharmacology and Toxicology, National Institute of Arthritis and Metabolic Diseases, was awarded the Public Health Service Meritorious Service Medal at a special ceremony in Building 1, April 25.

The award was presented by Dr. David E. Price, Deputy Director of NIH, who called attention to the "superior research contributions" made by Dr. Rosenthal during his distinguished career as a member of the PHS Commissioned Officer Corps. Dr. Price noted that this was only the second time this medal has been awarded.

Contributions Significant

The broad range of Dr. Rosenthal's studies has contributed significant information in many dissimilar fields of research, including findings on arsenic compounds, sulfaonamide drugs, liver function tests, therapy of burn shock, and biochemistry and physiology of amines.

With only slight modifications, the bromsulphalein test for liver function—developed by Dr. Rosenthal over 30 years ago—is still one of the more important diagnostic methods for determining liver activity.

Continues as Consultant

Since retiring from NIH last June, Dr. Rosenthal has continued his work with NIAMD as a special consultant in pharmacology.

He is also actively engaged in the extension of research studies on burn shock at the University of San Marcos in Lima, Peru. These studies are based on extensive investigations of burns and shock initiated by Dr. Rosenthal and his associates in 1942.

Hypotension Relation To Coronary Occlusion Seen in NHI Studies

In human coronary occlusion, the early fall in arterial pressure too often proceeds to general circulatory congestion and death in the acute stage of the heart attack. In such cases it may be useful to know if this is due solely to failure of the pumping muscle of the heart or also to inhibition of the nervous instructions to those portions of the blood vessel bed which help to maintain arterial pressure.

Coronary occlusion was found to cause hypotension indirectly by imbalancing autonomic nervous tone, as well as by direct injury to the heart muscle, in animal experiments conducted by Dr. LeRoy L. Costantin of the National Heart Institute's Laboratory of Cardiovascular Physiology. Dr. Costantin presented his findings at the recent Annual Meeting of the Federation of American Societies for Experimental Biology in Atlantic City.

Resistance Drops

Recording the resistance to flow in a main leg artery, and the level of activity in the fibers of the sympathetic nerve to the heart, he found that temporary occlusion of the coronary branches on the left side of the heart caused an abrupt drop in both the blood vessel resistance and the sympathetic nerve activity. Both responses to coronary occlusion were restored when the interrupted vagal impulses were restored.

The findings indicate that coronary occlusion stimulates vagal receptors in the heart which reflexly inhibit the sympathetic tone that helps to maintain arterial pressure.

Among the most striking of these earlier findings was the marked therapeutic value of sodium salts which demonstrated that 100 percent survival from otherwise fatal burns in laboratory animals could be accomplished with adequate saline therapy.

The importance of saline therapy in clinical burns is now borne out by the results of clinical tests conducted by Dr. Rosenthal in Lima. As a result of this work, the U. S. Office of Civil Defense Mobilization has recommended the oral use of saline solution as emergency treatment for burn shock in mass disasters where adequate plasma and medical care are not available.

Dr. Rosenthal is also engaged in extensive research on post-burn infections on spermine—a basic amine found in biological materials which he has shown to be destructive to the kidneys—and other related compounds.

Hypnosis Studies Associate Increase In FFA With Emotional Stresses

Recent studies made possible through the use of hypnosis indicate that various types of emotional stress, such as depression, fear and anger, are associated with an increase in the free fatty acids in the blood stream.

The studies, conducted by Dr. Peter Mueller, Dr. Jacob Fishman and Victor Loeffler, at the National Institute of Mental Health, were reported at the annual meeting of the American Psychosomatic Society in Rochester, N.Y.

While earlier studies have shown that anxiety stimulates an increase in the free fatty acids (FFA), this is the first time that a response in FFA has been observed in states of depression and anger, the investigators said.

Efforts of scientists to study hormonal and other physiological changes that occur with depression and anger have been hampered by the almost insurmountable difficulties of inducing these emotions in realistic experimental settings. With the use of hypnosis, the scientists said, it is possible to study emotion in a "pure" culture, without the situational complications which may distort findings.

In these studies, conducted on volunteers, it was possible to arouse emotions almost instantly in a controlled situation, and correlate FFA changes that occurred.

Easily Measured

FFA levels lend themselves to convenient and feasible measurement under these conditions. Since they change rapidly, there is ample magnitude of response (a 2-5-fold increase) and only a small blood sample is required.

The role of FFA in body metabolism has been the subject of considerable scientific interest in recent years. FFA is the form in which fat goes from the fat depots via the blood stream to the organs of the body that burn it.

The studies were conducted through a series of four sessions on 16 pre-trained volunteer subjects, rated according to relative hypnotic susceptibility. For all of the 10 who were able to distinguish varying degrees of sensory distortion under hypnosis, there were significant FFA increases in one or more emotional categories after onset of suggestion. Five subjects responded to fear. Four responded to anger. Four responded to depression. Three subjects had significant responses in two of the three emotions. All three of these had highest hypnotic susceptibility rating and were able to experience hallucinations.

Those patients who were not able to experience any sensory distortions had no FFA response to the induced emotions.

The 10 highly susceptible subjects without exception reported

undergoing intense emotions accompanied by associated fantasies or memories. The most susceptible subjects reported frequently that the emotion equalled anything experienced in the past.

This is the first time that it has been demonstrated that the ability to experience sensory distortion in hypnosis is correlated with the ability to respond physiologically to hypnotic suggestions of emotion.

Previous Studies Controversial

Previous psychosomatic studies with hypnosis have been controversial, the authors suggest, because investigators have not taken into consideration this crucial difference in the selection of subjects nor have they considered the ability of subjects to respond to some emotions but not to others.

It was of interest that close correlation between FFA rise and the intensity of the emotion was observed only in anger. Although FFA rise was induced in connection with other emotions, it was not in direct ratio to the intensity of the emotion experienced.

The investigators speculated that the component of anger in depression may contribute to the FFA rise observed in this emotional state.

The studies provide promising new leads for investigation of the psychosomatic disorders, and open the way for further research in the body changes associated with emotional states.

FAES Sponsors Symposia On Graduate Education

The Foundation for Advanced Education in the Sciences, Inc., will sponsor two symposia on Graduate Education in the Sciences, on successive Thursdays, May 10 and 17, at 8 p.m. in the CC auditorium.

The subject on May 10, "The Role of Government," will be discussed by Carl Kaysen, Deputy Special Assistant to the President for National Security Affairs; Hugh F. Loweth, Chief, Education and Science Branch, Labor and Welfare Division, Bureau of the Budget; and Hirst Sutton, Chief, Labor and Welfare Division, Bureau of the Budget.

On May 17, Dr. H. Stanley Bennett, Dean, Division Biological Sciences, School of Medicine, University of Chicago, will present "Universities and Their Problems."

Dr. DeWitt Stetten, Jr., Associate Director in Charge of Research, NIAMD, will moderate both sessions.

Streptococcus Pyogenes Cell Wall Synthesis Seen for First Time

Drs. Roger M. Cole and Jerome J. Hahn of the National Institute of Allergy and Infectious Diseases' Laboratory of Infectious Diseases have succeeded in labeling bacterial cell wall differentially with fluorescein, enabling them to distinguish portions of different relative age, and thus to observe growth directly. Their observations of the organism *S. pyogenes* appear in Science.

In the past, information concerning cell wall synthesis during cell division has been obtained by indirect and retrospective methods. These methods have established that, in general, a thickening appears along an equatorial circumference of the dividing cell, growing toward the center, or centripetally, to form an annular, or ring-like, cross-wall.

Verification Difficult

The mode of elongation of the peripheral wall of the cell is not subject to verification by indirect means, although some investigators, using darkfield and phase microscopy in addition, have claimed that cell wall growth occurs by a general insertion of new material throughout the wall.

The results of the current investigation suggest that cell wall synthesis in actively growing cultures of Group A streptococci usually occurs simultaneously at at least two sites per coccus, the various sites representing stages of successive divisions.

In addition, their findings indicate that cell wall growth in *S. pyogenes* is not by general insertion of new material throughout the cell wall but begins at the equator of the coccus and then extends both centripetally and peripherally.

The authors caution that their findings and interpretations apply only to *S. pyogenes* adding, however, that the methods they describe should be widely applicable.

Medical History Society To Meet Here May 23

The next meeting of the Washington Society for the History of Medicine will be held Wednesday, May 23, at 8 p.m. in Wilson Hall.

Following a short business meeting and election of officers, two papers will be presented, "Capitalizing on Coincidences: Some Incidents in the Development of Surgery," by Dr. Robert H. Wilkins, Surgery Branch, NCI; and "Harvey W. Wiley, M.D.: Crusader for Consumer Protection," by Dr. William L. Fox, Professor of History and Political Science, Montgomery County Junior College.

Sensitive New Test Charts Production Of Malaria Antibodies in Human Blood

A sensitive test which can chart the production in human blood of immunizing substances (antibodies) against malaria is being used with good preliminary results by NIH scientists.

They report that the test could prove helpful in the program of eradication of malaria, a parasitic disease which afflicts approximately 200 million people throughout the world and kills 2 million annually.

The blood test, a modification of the fluorescent antibody technique, was described in the March 30 issue of Science, weekly magazine of the American Association for the Advancement of Science.

Commenting on the published report, Dr. Sanford F. Kuvin of

the National Institute of Allergy and Infectious Diseases, pointed out that this is the first reliable blood test for investigation of antibody production in malaria infections.

Dr. Kuvin conducted research on the test in association with Dr. John E. Tobie and Charles B. Evans, Laboratory of Immunology, and Drs. G. Robert Coatney and Peter G. Contacos, Laboratory of Parasite Chemotherapy, NIAID.

Dr. Kuvin noted that the test might be employed to determine the number of people suffering from malaria who do not show obvious symptoms of the disease. Without such a determination, many human reservoirs of malaria go undetected.

Mechanism Uncertain

In the absence of a routine, sensitive test for antibody production in malaria it has not been known how currently used drugs alter the antibody response to the disease. Similarly, there has been no way of knowing how long the antibody-producing cells of the human body can maintain an adequate supply of antibodies when challenged by malaria infection.

In this modification of the fluorescent antibody technique, the antibody-containing blood serum of a malaria suspect is applied to a blood smear containing malaria parasites. If malaria antibody is present in the patient's serum, it will react with the malaria parasite.

This union of specific malaria antibody and parasite is detected by then adding an antibody directed against human serum which has been labeled with a special fluorescent dye. Together these form a fluorescent substance so that the parasite then glows a bright yellow color when stimulated by ultraviolet light. This is observed through a fluorescent microscope.

Volunteers Tested

Dr. Kuvin and his associates at the NIAID have now applied the technique to blood tests of nine normal human volunteers infected with *Plasmodium vivax* and *Plasmodium cynomolgi malaria*. Thus, they were able to demonstrate antibody approximately three weeks after infection, and found antibody still detectable in certain cases 325 days after infection.

On the basis of these observations, the scientists may begin studies on the relationship of antibody production to various types of anti-malarial drug treatment. They also plan investigations to determine whether or not different species of malaria share common antigens which stimulate the production of antibodies.

FSJC-NHA Campaign Ends; Participation Below 1961 Level

The sixth and final report on the Federal Service Joint Crusade and National Health Agencies Campaign for 1962 reveals that NIH participation decreased 9.1 and 8 percent, respectively, from last year, although NIH employment increased by 1,000 persons during the period.

Figures released by Dr. Seymour J. Kreshover, Associate Director of NIDR and Chairman of the 1962 campaign, show that 50.6 percent of the employees at NIH participated in the National Health Agency Campaign and 48.2 percent participated in the Federal Service Joint Crusade.

In a letter to Institute Directors and Division Chiefs, Dr. Kreshover said, "Although we failed to equal last year's percent of participation, we matched the results obtained in 1959 and 1960."

In commending Division chairmen and keymen, Dr. Kreshover said, "We want to take this means of expressing our appreciation to those in your areas who so willingly devoted their time and efforts in organizing and conducting this campaign."

A breakdown of the report follows:

Organization	Percent of Participation	
	N.H.A.	J.C.
NIDR	102.4	100.0
DGMS	77.8	77.8
DBS	69.0	66.7
DRS	67.0	63.5
OAM	58.9	49.7
NINDB	56.9	56.5
OD	56.9	56.0
DRG	55.5	55.9
NCI	53.8	50.6
NIAID	51.4	53.8
NHI	47.9	48.8
NIMH	46.2	46.5
NIAMD	39.8	41.2
CC	24.0	20.6
TOTALS	50.6	48.2

Dr. Shapiro Returns to Rand; Juenemann Is Acting Branch Chief

Dr. Norman Z. Shapiro, who came to NIH in 1959 to strengthen programming resources for use of electronic computation in support of intramural research, has resigned as Chief of the Computation and Data Processing Branch, DRS, to return to the Rand Corporation, Santa Monica, Calif.

Henry J. Juenemann, who was appointed Deputy Chief of the



Mr. Juenemann



Dr. Shapiro

Branch following transfer from U. S. Air Force Headquarters last December, has been named Acting Branch Chief.

The Computation and Data Processing Branch was established in 1960 from the Statistical Processing Section of the former Biometrics Branch.

Under Dr. Shapiro's leadership, the intensive preparatory work necessary for solving biomedical problems by large-scale computer processing was begun. This included inauguration of a recruitment program for mathematicians skilled as computer programmers and selection of a high-speed computer capable of processing scientific and administrative applications.

Ordered in 1960

The computer was ordered in November 1960 and delivered in September 1961. It began limited operations in February this year, after an installation and checkout period of several months during which programming methods were adapted to the new equipment.

Prior to his transfer to NIH, Mr. Juenemann had extensive experience in the management of data collection for the various computers operated for the Air Force.

A 1949 graduate of Georgetown University, he progressed from mathematician in the Air Force in 1950 to Chief of the Structures Section in 1960, receiving the Meritorious Civilian Service Award in 1955.

Benjamin H. Baker, the former Administrative Officer of the Branch, is Chief of the Operations Section, and Hermanus W. Vreenegeor, a senior mathematician with the Branch, is Chief of the Analysis and Programming Section.

Dr. Herman Succeeds Dr. Scantlebury as OIR Section Head

Dr. Samuel Herman, Program Coordinator for the Office of International Research, Office of the Director, has been named Head of OIR's Foreign Grants and Awards Section. His appointment was effective April 30.

Dr. Herman succeeds Dr. Ronald E. Scantlebury who has been named Assistant Science Advisor (Biomedical) in the Office of the Secretary of State.

Dr. Herman came to NIH in 1959 as Executive Secretary of the Radiation Study Section, DRG. He has also served as Director of DRG's Russian Scientific Translation Program.

He was a staff officer in the Division of Public Health Methods, PHS, from 1949 to 1951, and Chief of the Resources Planning Branch, Division of Dental Resources, from 1951 to 1954.

From 1955 to 1956 he served as Special Assistant to Dr. John W.



Dr. Scantlebury



Dr. Herman

Knutson, then Assistant Surgeon General and Chief Dental Officer of PHS. In 1956 he was detailed to the Office of Vocational Rehabilitation where he served until 1959 as Acting Chief, Division of Medical Services and Facilities.

A native of Boston, Mass., Dr. Herman received a B.A. degree from Harvard in 1940, a D.D.S. degree from Loyola in 1944, and M.P.H. and Ph.D. degrees from Yale in 1948 and 1950, respectively.

Dr. Scantlebury joined NIH in 1949 as Executive Secretary of the Physiology Study Section, Division of Research Grants. In 1951 he became Chief of DRG's Research Fellowship Branch, and in 1958 he was made Chief of the newly established Foreign Grants and Awards Section, OIR.

Before coming to NIH Dr. Scantlebury served on the faculties of Wayne State University in Detroit, and the University of Arkansas.

He has also served as Acting Executive Secretary to the Detroit Institute of Cancer Research, an affiliate of Wayne State University, and as Head of the Department of Applied Biology, Stanford Research Institute, Palo Alto, Calif.

A native of Hampton, Iowa, Dr. Scantlebury received a B.A. de-



First family to embark for the newly created Ghana Research Unit is that of the project's Administrative Officer, Gerald F. Meyer. Mr. Meyer is holding Bridget, three years old, while his wife, Brenda, holds one-year-old Siobhain.—Photos by Jerry Hecht.

GHANA

(Continued from page 1)

and apartments have been constructed of reinforced concrete and equipped with modern British-Tropical furniture.

"The housing appears to be entirely satisfactory," Mr. Meyer reports. Last year he visited Ghana and saw department stores, supermarkets, automobile showrooms, and drug stores in Accra.

"In general, shopping facilities are good," he said. "Almost everything one would need is available, although some articles such as clothing and shoes are more expensive than they are in the U.S.A."

Administered by NCI

The project is being administered by NCI as a direct extension of its intramural activities. Dr. Edgcomb and Mr. Meyer were members of the NCI staff before being appointed to the Ghana project.

Dr. Edgcomb was on the staff of NCI's Pathological Anatomy Branch from 1952 until his present appointment. A native of Ottawa, Ill., he received his M.D. degree from the University of Chicago. His family will join him in Ghana as soon as the school term closes for 11-year-old Julia and 9-year-old John.

gree from Cornell College, Mount Vernon, Iowa; an M.S. degree from Wayne State University, and a Ph.D. degree from the University of Michigan.

The Foreign Grants and Awards Section administers an International Postdoctoral Research Fellowship Program in which 41 countries are now participating.

In addition to these programs, the Foreign Grants and Awards Section is the administrative center for the Visiting Scientist Program.

Mr. Meyer was appointed an NIH management trainee in 1958 after graduating from the University of Notre Dame. He joined NCI in 1960 as a budget analyst. His wife, Brenda, and their daughters Bridget, three, and Siobhain, one, have accompanied him to Ghana.

Serves in Dacca

Mr. Elmore received a B.S. degree in Civil Engineering from Duke University and an M.S. degree in Sanitary Engineering from the University of North Carolina. He joined the NIH staff in 1958 and served in the Cholera Research Laboratory in Dacca, East Pakistan, in 1960. From September 1961 until his present assignment he was with the Bureau of State Services, Division of Radiological Health, in Rockville, Md.

Miss Mottram, a native of New York City, holds a B.S. degree from Columbia University. Before joining the Ghana Unit she spent 10 years on the staff of the Sloan-Kettering Institute.



Dr. John H. Edgcomb, Director of the NIH West Africa Research Unit—Ghana, and Frances Mottram, Senior Technician in the project's Pathology Section, discuss plans in their temporary office in Building 31.

Noted Visiting Scientist Investigates Synthesis, Use of Plasma Proteins

Dr. Arthur S. McFarlane, a leading British medical scientist, is participating in the NIH Visiting Scientist Program at the invitation of the National Cancer Institute.

As a guest worker in the Metabolism Service, he is conducting research on the bio-synthesis and use of labeled plasma proteins to obtain a more comprehensive understanding of body metabolism and its basic relationship to health and disease.



Dr. McFarlane

For a 6-month period, which began January 1, Dr. McFarlane is on leave of absence from the National Institute of Medical Research in London where he is Head of the Division of Biophysics.

Dr. McFarlane is best known for his contributions to plasma protein research. In 1933 he became the first person to describe the ultra-centrifugation of normal and pathological human serum proteins.

During World War II he discovered a method of removing lipids (fatty substances) from human plasma without denaturing the proteins. More recently he has improved methods of labeling plasma proteins with radiodine without destroying their native biological properties.

This visit marks Dr. McFarlane's fifth trip to the United States. He has been guest lecturer at the NCI on two occasions. On another occasion, in 1945, he came as an emissary of Great Britain to survey numerous arsenals and atomic laboratories where radioisotopes were being produced and used.

As a result of this visit, he organized the first supply and distribution of American-made isotopes for biological use in England soon after the war.

Dr. McFarlane's research program is an extension of specialized plasma protein studies, which he has been working on for the past eight years. His investigations are designed to develop and refine methods of diagnosis based on protein studies using iodine-131 and carbon-14.

Dr. McFarlane developed his interest in plasma proteins while he was a Beit Memorial Medical Research Fellow in Uppsala, Sweden. There he worked with Svedberg and was a contemporary of Tiselius, both Swedish Nobel Prize winners who made important advances in knowledge of proteins.

NIRENBERG

(Continued from page 1)

nence in the application of science to the public welfare" at an awards ceremony on April 24. (See the *NIH Record* of April 25.)

Dr. Nirenberg has won widespread recognition for his success in partially cracking the genetic code which lies at the heart of the systematic reproduction of all living matter. His work has illuminated the way information is coded into the nucleic acids and used to direct the incorporation of specific amino acids into proteins.

The genetic code, involving the two hereditary materials DNA and RNA (deoxyribonucleic acid and ribonucleic acid), provides the means for storing and transmitting genetic information. Understanding of this code is one of the most important basic objectives in biology.

Develops Directional System

The essence of Dr. Nirenberg's contribution has been the development of a protein-synthesizing system from bacteria which can be "directed" with samples of synthetic RNA. He has observed that particular RNA samples of known structure direct the system to produce protein material incorporating only one of all the available amino acids.

With one type of RNA, only phenylalanine is incorporated. With another, only proline is incorporated. Since the structure, or "code," of the RNA samples is known, it then becomes possible to relate this structural code to the specific amino acid utilized.

The work on the action of RNA was made possible in large part by the development of a cell-free protein-synthesizing system that remains stable. The one used by Dr. Nirenberg and Dr. J. Heinrich Matthaei, derived from microorganism *Escherichia coli*, has hitherto been extremely unstable, but they found that the addition of the reducing agent mercaptoethanol could stabilize it remarkably.

Chemicals Used

The system was provided with a full compliment of amino acids and a source of chemical energy (adenosine triphosphate continuously regenerated by secondary reactions), and then various types of RNA were added.

It was found that the incorporation of individual amino acids into protein was dependent upon the addition of particular RNA templates. These could be either naturally occurring RNA or synthetic preparations of known polyribonucleotide structure.

When polyuridylic acid, a synthetic RNA containing only one base, uracyl, was added, one and only one amino acid, phenylalanine,

Slip of Famous 2,500-Year-Old Tree To Be Planted on Library Grounds

An Oriental plane tree, "descended" from a famous tree on the Greek Island of Cos in the eastern Mediterranean Sea, will be planted on the grounds of the National Library of Medicine on Friday, May 11, at 11 a.m.

The tree, which is related to the sycamore, was grown from a slip of the legendary tree under which Hippocrates is purported to have instructed his pupils in the 5th century B.C. It was presented to the NLM by Alexis Liatis, Ambassador of the Government of Greece, at the Library's dedication last December.

Morris C. Leikind, Scientist Administrator in the Office of Research Accomplishments, DRG, will cast the first spadeful of earth at the ceremony.

It was Mr. Leikind who con-

ceived the idea of planting the tree on the NLM grounds as a symbol of the Library's role as custodian of medical history records:

An authority on the history of medicine and science, Mr. Leikind is President of the Washington Society for the History of Medicine, founded at NIH last year.

Others who will participate in the ceremony in the following order, are Dr. John B. Blake, Chief of the NLM's History of Medicine Division; Herbert Smith, a custodian at the Library and its oldest employee in length of service; William H. Kurth, Deputy Chief of the Library's Reference System and supervisor of the NLM move from its former quarters; Dr. Frank B. Rogers, Director of the Library; and Worth Daniels, Chairman of the NLM Board of Regents.

NLM UNLOADS 35,000 RARE BOOKS



Dr. John B. Blake, Chief of the History of Medicine Division of the National Library of Medicine, breaks the seal on one of the four moving vans that arrived here April 24 from Cleveland, Ohio, bringing the Library's Rare Book Collection of 35,000 volumes. Insured by Lloyd's of London for \$6 million, the trailer trucks were protected by armed guards of the Pinkerton Detective Agency. At left is William H. Kurth, Deputy Chief of the Library's Reference Services Division, who was in charge of the Library's entire book-moving operation. Men in center are employees of the moving company.—Photo by Jerry Hecht.

was incorporated.

Similarly, when another synthetic RNA, polycytidylic acid, containing only the base cytosine, was added, the sole amino acid incorporated was proline. Only "single-standard" RNA fibers were found to be active in the system.

In the achievement of these important advances, Dr. Nirenberg has had the close collaboration of Dr. Matthaei, a NATO post-doctoral fellow on his Institute staff.

Dr. Nirenberg presented a paper on "Characteristics of the Genetic Code" at a Symposium on Biological Coding conducted by the National Academy of Sciences on

Wednesday, April 25.

Dr. Nirenberg joined the NIAMD immediately after receiving a doctorate in biochemistry at the University of Michigan in 1957. He is a staff member of the Section on Metabolic Enzymes of the Laboratory of Biochemistry and Metabolism.

Washington, D.C., has the fourth highest active TB case rate and the third highest TB death rate among the 18 largest cities in the United States, according to the latest report from the U.S. Public Health Service.

Md. U. Dental Society Honors Dr. Stanley

Dr. Harold R. Stanley, Assistant Chief of the Clinical Investigations Branch of the National Institute of Dental Research is the first to receive an award for outstanding contribution to dentistry established by the Gorgas Odontological Society, honorary dental society of the University of Maryland School of Dentistry.

The presentation was made at the annual meeting of the society in Baltimore April 14.

Dr. Stanley was graduated from the dental school in 1948. He received an M.S. degree in pathology from the Georgetown University Graduate School after completing a dental internship at the Public Health Service Marine Hospital in Baltimore. He also served as a resident in oral pathology at the Armed Forces Institute of Pathology between 1951 and 1953.

He is an associate of the American Academy of Oral Pathology, a diplomate of the American Board of Oral Pathology, and a fellow of the American Academy of Oral Pathology.

The Gorgas Odontological Society was organized in 1916 as an honorary student dental society with scholarship as a basis for admission.

The Society was named after Dr. Ferdinand J. S. Gorgas, a pioneer in dental education, a teacher of many years' experience, and during his life a great contributor to dental literature.

TV Medical Council Meets Here Next Week

The Council on Medical Television of the Institute for Advancement of Medical Communication, will hold its Fourth Annual Meeting next Tuesday and Wednesday (May 15 and 16) in the Clinical Center auditorium.

Guest speakers at the meeting will be Representative John E. Fogarty of Rhode Island; Robert E. Lee, Federal Communications Commissioner; and Boisfeuillet Jones, Special Assistant to the DHEW Secretary for Health and Medical Affairs.

The meeting will consist of sessions on the use of two-way TV for group psychotherapy, the use of TV in endoscopy and radiology, and for students examinations.

Six medical schools will report on their use of television, including the Jacksonville, Fla., scrambled-image medical TV project; the South Carolina postgraduate TV network, and the Utah open-circuit teleclinics.

The meeting will be coordinated with the Navy Medical-Dental TV Workshop, also being held on May 15 and 16, at the National Naval Medical Center.

NIAMD Reorganization Involves New Branches, Extramural Programs

The National Institute of Arthritis and Metabolic Diseases has reorganized its extramural programs and named three separate branches: the Training, Research Grants, and Operations Branches.

These branches make Federal funds available to non-Federal research scientists in the U. S. and abroad, and provide support for the training programs that are needed to develop scientific talent.

The extramural programs are directed by Dr. John F. Sherman, Associate Director for Extramural Programs, NIAMD. The Deputy Chief is Dr. Edward P. Offutt.

Chief of the Training Branch is Dr. Marjorie Wilson who has been directing NIAMD's training grants and fellowships program since she came to the Institute in 1960. She is assisted by Dr. Morris T. Jones, Deputy Chief of the Training Branch.

Fields Are Diversified

The NIAMD now finances over 250 active training programs at universities and hospitals throughout the country. They cover training for academic careers in such fields as arthritis, diabetes, endocrine and metabolic disorders, hematology, orthopedics, gastroenterology, dermatology, pediatrics, nutrition and other related areas.

In addition, the Training Branch administers the Institute's extensive fellowship programs, including postdoctoral and special fellowships and research career awards.

Dr. Wilson received her M.D. from the University of Pittsburgh in 1949 and has been active in professional education since 1956. Prior to assuming her present position, she was Assistant Director of Education Service, Office of Research Education in Medicine, Veterans Administration.

Pratt Is Administrator

The Research Grants Branch, headed by Dr. James W. Pratt, administers the Institute's research project grants as well as program project grants.

These grants furnish support to research in medicine, biology, and other health-related fields.

Several thousand such grants from the NIAMD are now in effect, and approximately 1,800 applications for new ones are reviewed each year.

Dr. Pratt has been at the NIAMD since 1949 and has been associated with its extramural programs since 1959. He received his Ph.D. from Georgetown University in 1951. Dr. William C. Alford is Deputy Chief of the Re-

Electronic Stimulator Designed by DRS For Brain Mapping of Cerebral Cortex

A special-purpose electronic stimulator has been designed and built by the Instrument Engineering and Development Branch, Division of Research Services, for use by the Surgical Neurology Branch, National Institute of Neurological Diseases and Blindness.

The stimulator delivers 2.5 millisecond pulses at a 60 cps repetition rate and a constant current of up to two milliamperes, while the total external circuit resistance may vary between zero and 10,000 ohms.

The device is used during brain-mapping procedures on the cerebral cortex. The constant current feature compensates for variations in contact and tissue resistance and thus facilitates the establishment and maintenance of stimulus threshold.

A constant-current stimulator offers several advantages over the constant-voltage stimulators generally in use.

In most experiments involving excitable tissue, it is the current delivered to the preparation that is important. Excitation thresholds and gradation of response are frequently direct functions of stimulating currents. It is therefore an advantage to be able to control precisely the current delivered to a preparation.

The current delivered by a stimulator is directly related to its voltage output and to the external cir-

cuit resistance, which is usually made up of the tissue, electrode, and contact resistances. Some or all of these resistances will vary with time, temperature, or contact pressure, and tend to cause corresponding current changes.

In order to deliver a desired current to a preparation using a constant voltage stimulator, it becomes necessary to monitor the current output and continually readjust the voltage to compensate for these changes. This can be a time-consuming and inexact procedure. The constant-current stimulator delivers a predetermined current to a preparation fairly independent of the resistance in the external circuit.

The Instrument Engineering and Development Branch feels that constant-current stimulators will find many applications. They can be constructed in a number of configurations applicable to a variety of stimulation experiments. By using similar circuitry, it is also possible to adapt constant voltage stimulators to constant-current operation.

National Mental Health Week Stresses The Importance of Community Action

During National Mental Health Week, April 29-May 6, citizens in thousands of towns and cities throughout the country were alerted to the needs of the mentally ill and the means of helping them combat this health problem.

The theme of this year's observance — "Community Action for Mental Health" — emphasized the fact that mental health is no longer the exclusive concern of the specialists but is everyone's affair.

"Emphasis on community services has been given special attention in response to recommendations of the Joint Commission on Mental Illness and Health," stated Dr. Robert H. Felix, Director of the National Institute of Mental Health.

"Ultimately," he said, "action to improve the Nation's health and

search Grants Branch.

Chief of the new Operations Branch is Linden Neff who has been active in administration since he came to the NIH in 1956.

This branch is an administrative management branch and is involved in the management aspects of the extramural programs and staff.

Presently being developed in this branch is an automatic data-processing system for the storage and retrieval of all grant-related information.

welfare must take place in the communities, through the thousands of professional and voluntary organizations, churches, educational groups, trade unions, and many other groups interested in mental health."

Responsibility for the care and treatment of many people with mental illnesses, both mild and severe, has steadily been moving away from the mental institution into the community—into the outpatient clinics, the general hospital, the general practitioner's office, and the community at large. However, the available services in this field are still drastically inadequate to meet the needs of those individuals who will, at one time or another, need such assistance.

Mental Health Week was jointly sponsored for the 14th consecutive year by the National Institute of Mental Health and the National Association for Mental Health.

NAMH's 47 member organizations are located in nearly every state and work in close liaison with the state mental health and hospital authorities.

PHS to Exclude Profit Firms From Grants

Dr. Luther L. Terry, Surgeon General of the Public Health Service, has announced termination of the practice of awarding research grants to profit-making organizations. In the future, research performed by such organizations will be supported only through contracts for work undertaken at the initiative of the Service.

The action follows a study by the Intergovernmental Relations Subcommittee of the House Committee on Government Operations, which has been surveying grant management policies of the National Institutes of Health.

A relatively small number of grants are affected. Currently there are 48 grants to profit-making organizations, amounting to less than \$1.2 million, in an overall program of more than 15,000 research grants totaling \$400 million.

In each of the 48 cases, support will be either discontinued at the termination of the current grant or continued under contract.

The majority of grants are to universities and other non-profit institutions. Non-profit organizations are defined as those possessing an Internal Revenue Service tax exemption letter.

Hamsters Will Present 'Li'l Abner' May 23-27

The R&W Hamsters production of "Li'l Abner," the long-running Broadway musical comedy by Norman Panama and Melvin Frank, will be presented in the Clinical Center auditorium May 23-27.

The opening night performance (May 23) is for CC patients, their families and friends, without charge. The remaining performances are for NIH staff and the public. Tickets are \$1.50 each.

Show time is at 8:30 p.m., May 23 through 26, and the final performance on Sunday, May 27, is a matinee at 2 p.m.

Dr. Gerald Shean and Anita Ash have the leading roles of Li'l Abner and Daisy Mae and Sally Bossen and Stanley Hirsch play Mammy and Pappy Yokum.

The play is directed by Arnold Spurling, the producer is Ozzie Grabiner, and the choreographer is Jerry Osborne.

Less than three centuries ago, it was thought that victims of a certain kind of tuberculosis could be cured by having a king touch them. The sufferers paid a gold coin for this privilege, which went into the royal treasury.

Bess Furman Appointed Assistant to Ribicoff For Public Affairs

DHEW Secretary Abraham Ribicoff announced the appointment, April 25, of Bess Furman Armstrong as Assistant to the Secretary (for Public Affairs).

She succeeds Wallace Turner who resigned to accept a position on the San Francisco bureau of the New York Times. For the past year she has been assistant to Mr. Turner.

Mrs. Armstrong, who writes under the name of Bess Furman, has had 25 years of daily newspaper experience in the Nation's Capital—17 years in the Washington bureau of the New York Times and eight years in the Washington bureau of the Associated Press. Between those two positions, she served in Government during World War II as Assistant Chief of the magazine bureau of the Office of War Information.

Accomplishments Praised

In announcing the appointment, Secretary Ribicoff praised his new assistant's professional record and competence. "I consider myself and our Department fortunate to have the services of Bess Furman," he said. "This appointment is a good example of the Kennedy administration's policy of having qualified women in top positions in our Government."

Mrs. Armstrong is a sister of the late Lucile Furman, who at the time of her death in April 1961 was an information specialist in the NIMH Information Office here and a staff correspondent of the *NIH Record*.

A native of Danbury, Neb., Mrs. Armstrong was graduated from the Kearney (Neb.) State Teachers College. She came to Washington in 1929 from Omaha, where she had been for 10 years a reporter on the Omaha Bee-News.

Reports on First Ladies

In 1927 she was sent by the Bee-News to report the activities of Mrs. Calvin Coolidge at the Summer White House in South Dakota. She has reported from Washington on the activities of all Presidents' wives since. Much of her reporting has been in the health, education, and welfare fields. She retired from the New York Times in March 1961 to accept a post in HEW.

Under her by-line of Bess Furman she is author of two Washington books, "White House Profile" and "Washington By-Line." She is a Past President of the Women's National Press Club.

Mrs. Armstrong is the widow of Robert B. Armstrong, Jr., a former Washington correspondent of the St. Louis Globe Democrat and the

Heart Institute Presents New Exhibit With Movie at Federation Meeting



Delegates attending the recent annual meeting of the Federation of American Societies for Experimental Biology in Atlantic City view the National Heart Institute's new exhibit. Small movie screen, right, depicts recent advances in heart research.

The Heart Information Center, National Heart Institute, presented a new exhibit, including a short new film, at the 46th Annual Meeting of the Federation of American Societies for Experimental Biology in Atlantic City, April 14-18.

The exhibit, titled "Highlights of the National Heart Institute," will next be shown to the American College of Cardiology in Denver, May 29-June 2, and to the American Hospital Association in Chicago, September 17-20.

Depicted in the exhibit are the Institute programs for the conduct and support of research and related activities: research at the

Institute, support of research and training, epidemiology and biometry, and the Institute's structure.

Emphasis is placed on new trends and resources, such as primate research centers and cardiovascular research centers.

The movie, titled "Highlights of Heart Research," features recent advances in cardiovascular research.

Thus far this year, NHI has presented two other exhibits: "The Framingham Heart Study," at Las Vegas, Nev., and "Directions of Present Day Research in Gerontology," at the Chicago Medical Society scientific session.

Lab Refresher Courses Offered at CD Center

A series of 18 laboratory refresher training courses, varying in length from one to four weeks, will be presented by the Laboratory Branch of the Communicable Disease Center, Atlanta, Ga., during the period of September 10, 1962, through April 12, 1963.

The courses will deal primarily with laboratory methods in the study and diagnosis of various infectious diseases. In addition, eight unscheduled courses will be given by special arrangement.

Information and application forms may be obtained from the Laboratory Branch, Communicable Disease Center, U.S. Public Health Service, Atlanta 22, Ga.

Los Angeles Times, a reporter on the Washington Post, and a member of the public relations staff of the Interior Department. She is the mother of grown twin children. Robert Furman Armstrong is a senior at American University majoring in journalism and public relations. Ruth Eleanor Armstrong is on the Washington bureau of the Daily Oklahoman.

NIH Again Participant In Study-Work Institute For Science Teachers

Again this summer NIH will participate in the High School Science Teacher Study-Work Institute, conducted by American University each year since 1956, through a grant of the National Science Foundation.

The Institute is designed to give teachers an opportunity to gain new information, techniques, and experience that will enable them to teach in a more stimulating and effective manner.

The academic program, consisting of lectures and supervised laboratory studies at American University, will be coupled with actual experience in a research laboratory in the Washington area.

Folders Available Now

Fifteen or 20 secondary school physical science teachers will be available to NIH three days a week, June 27 through August 9, from approximately 10 a.m. to 5 p.m. Their folders are available now in the Clinical Center, Rm. 2-B-52, for review by scientists who wish to participate in the program.

NIH's responsibility is to provide an environment which will lend itself to achieving the purpose stated. However, the scientist is not expected to create an elaborate formal program for the teacher.

Instead, the teacher's responsibility is to render aid in carrying out research in progress. It is hoped, of course, that the experience will be as valuable as possible to both the preceptor and the teacher.

Other Agencies Participate

Other participating research organizations include: National Bureau of Standards, Harris Research Laboratory, U. S. Weather Bureau, and Walter Reed Army Institute of Research.

More detailed information about this Study-Work Institute may be obtained from Joseph Staton or Leah Ringel, CC Clinical and Professional Education Branch, Ext. 3381.

standpoint.

"It takes only \$3.75 withheld from your check each payday to guarantee that you'll save and save regularly," she explained. "That's important," she said, "because it's regularity that makes savings mount up."

Dr. Masur reminded the keymen that NIH employees are already performing an important service to the country in their day-to-day work, but added: "Here's a way to take an even bigger part in serving the country, so that Americans can enjoy the better health, longer life, and security we are all working for, planning for, and saving for."

BOND DRIVE

(Continued from page 1)

of 3½ percent from a safe investment, it was pointed out, the Government gets some of the dollars it must have for defense and other purposes without causing inflation. In turn, halting inflation helps to make your dollars buy more, while supporting the Nation's economy.

U. S. Savings Bonds are not subject to state and local taxes, and interest derived from them need not be reported as Federal income until they are cashed.

Bond investments are safe and dependable. The purchaser is sure of their earning power, and yet they are just like cash in the bank. They can be redeemed as quickly and easily as a personal check, and purchased with no personal effort. Through the payroll allotment plan, the bonds will arrive regularly and automatically.

Margaret Badger, CC Administrative Officer is Vice Chairman of the NIH Bond Drive. Experienced in helping to handle large sums of money, Miss Badger points out that the purchaser has everything to gain and absolutely nothing to lose from a purely "dollars and cents"