Cohen to Launch Bond Campaign at Rally Thursday

Thursday, May 5, is the day of the NIH-wide rally to launch this year’s U.S. Savings Bond Campaign. The Department’s Under Secretary, Wilbur Cohen, will head the program to be conducted in the Clinical Center auditorium at 10 a.m.

President Johnson has requested that Federal employees set an example for the rest of the Nation.

“It is not only patriotic but prudent,” he said. “I realize that all of us have many personal needs and responsibilities. Some will not be able to participate as fully in the payroll savings plan as others.

But I do believe that every Government employee can participate to some degree.”

An exceptionally interesting program has been planned in order.

(See BOND RALLY, Page 6)

New York City Introduces Mental Health Facility

Announcement of the award of a $1,350,000 construction grant, the first of more than 40 new comprehensive community mental health centers planned for New York City, was made recently by the Public Health Service.

The grant was given to the City of New York to share the cost of adding a 14-story mental health facility to Metropolitan Hospital.

The center will serve a population of about 200,000 New Yorkers in a crowded and low-income area that is a pocket of the city’s highest crime and delinquency, of drug addiction, unemployment and substandard housing.

One of the new services will be mental health “battalion aid stations” to operate in the hospital district’s congested neighborhoods, where professional personnel from the center will render “front line” services.

This will bring readily available mental health consultation directly into problem-breeding areas at the (See HEALTH FACILITY, Page 8)

DRG Passes Its Twentieth Anniversary; Staff Grows From 5 to Today’s 600

It began 20 years ago, with a staff of five.

Today, the Division of Research Grants of the NIH comprises nearly 600 employees and reviews thousands of applications each year for scientific merit.

As DRG celebrates its 20th anniversary, only a few current staff members can claim identification with the early days of its history.

On January 1, 1946, the then “Office of Research Grants” was established to administer 66 medical research contracts transferred from the Office of Scientific Research & Development, a World War II agency.

These 66 contracts, together with nine medical research grants being supported at that time by the National Cancer Institute, formed the nucleus of the multimillion dollar research program in existence today.

Announcement of the research grant program of the Public Health Service resulted in what was then considered a “flood” of applications for research support from universities.

Grants Skyrocket

From Fiscal Year 1946 funds, the National Institutes of Health awarded 80 research grants in a total amount of $780,000, as contrasted to the 15,000 research grants paid from 1965 Fiscal year funds in the total amount of $539 million.

The Division has had five chiefs since 1946: C. J. Van Slyke, David E. Price, Ernest M. Allen, Dale R. Lindsay, and the present chief, Eugene A. Confrey.

In addition to its coordination of research grant and fellowship activities, the Division administered a program of basic research grants until 1958, when the Division of General Medical Sciences (now the National Institute of General Medi-

(See ANNIVERSARY, Page 7)

C. J. Van Slyke, 1st NHI Director, Is Dead at 65

Dr. C. J. Van Slyke, retired Deputy Director of the National Institutes of Health, and Assistant Surgeon General, died on Tuesday, April 21 after a long illness. He was 65.

“Dr. Van,” as he was affectionately known at NIH, was in a real sense the father of the research and training grants program of the Public Health Service, and it was in recognition of this that he received the Albert Lasker Award in 1967.

Program Expands

When the grants program was initiated in 1946 under Dr. Van Slyke’s leadership, there were 40 research grants totaling less than $1 million. Today, research grants total about 15,000 at a dollar total of more than $500 million.

The program is still based upon

(See DR. VAN SYLKE, Page 7)

Pictured on the occasion of his 59th birthday celebration in Wilson Hall, Bldg. 1, is Dr. C. J. Van Slyke, then NIH Deputy Director (left), with Dr. Rollo E. Dyer, former NIH Director (center) and Dr. James A. Shannon, Director of NIH. Dr. Dyer was on hand for the Dyer Lecture.

(See DR. VAN SYLKE, Page 7)
NEWS FROM PERSONNEL

APPROVAL OF ANNUAL LEAVE

Employees are reminded of the requirement to apply in advance for approval of anticipated annual leave whenever possible. This allows supervisors to schedule leave in relation to workload requirements, staffing patterns, and other management considerations. At times a leave-approving officer may not be able to grant a request for annual leave, if the work of the department requires such action. However, rarely will this be necessary and, as far as practical, leave will be granted when requested by employee.

VOLUNTEER SERVICE

The Registry of Community Volunteer Service Opportunities is now available at the Personnel Management Branch, Bldg. 1, Rm. 31, for those NIH employees who wish information about what volunteer service opportunities exist in this area. The registry also gives information on the skills needed and whom to contact.

This is a valuable source of information for anyone who wishes to lend a hand to a need in the welfare and recreational activities in the Metropolitan Area.

PAYROLL NOTES

The Financial Management Branch says:

The new Federal tax withholding rate will be reflected in all paychecks issued May 3 for civilian employees. Any employee who did not file a new Form W-4 (Employee Withholding Exemption Certificate) will automatically be taxed at the single person rate based on the number of exemptions previously reported.

Employees who failed to file a new Form W-4 and wish to do so now can have their tax withholding adjusted effective with the pay period for which the new form W-4 is received.

County Income Tax

During the last session of the Maryland Legislature a law was passed permitting Maryland counties to assess a one percent income tax in 1966 in addition to the present State income tax. Montgomery County has already approved imposition of the tax. Should there be any payroll effect with regard to this tax, employees will be advised.

Reminder: See your timekeeper on all payroll matters.

Scientific Public Invited To NLM Lecture Today

Dr. Richard A. Hunter will deliver a lecture on the "insanity" of King George III today (May 3) at 4 p.m. at the National Library of Medicine. The scientific public is welcome to attend.

A long-debated subject, the illness of George III had a potent influence on English politics at the close of the 18th and beginning of the 19th century. Although his illness has been very well documented, diagnoses have varied widely.

Dr. Hunter is Physician in Psychological Medicine, the National Hospital, Queen Square, London, and Consultant Psychiatrist, Whittington and Friern Hospitals, London. He is currently lecturing in the United States.

An exhibit featuring some contemporary medical reports on George III's illness, as well as works on psychiatry of the period, will be on display in the lobby of the Library.

K. A. Anderson Assumes New Position at DRFR

Kenneth A. Anderson has been named Grants Management Officer for the Division of Research Facilities and Resources by Dr. Thomas J. Kennedy, Chief of the Division.

In his new position Mr. Anderson will guide the development and administration of the Division's extramural grants program which provides large-scale facilities and resources for institutions engaged in health-related research.

Mr. Anderson, who is a Certified Public Accountant, comes to the Division from the National Science Foundation where he served as Audit Director since 1963.

Name Boat, Win Prize From the Sailing Ass'n.

What is a sailboat doing in the patio of Building 31?

The R&W Sailing Association hopes that, as the spring breezes whip around their Flying Scot sailboat, its presence will intrigue NIH employees with visions of the joys of sailing.

Even if you are not a sailing buff, the Association invites you to enter their "Name the Boat" contest, which ends May 6. A $25 cash award will be given for the name selected.

Entries suggesting names for the sailboat should be sent to the R&W office, Bldg. 31, Rm. 1A18. The winner of the contest will be announced on Friday, May 13. Judges will be members of the R&W Executive Board and members of the Sailing Association.


headed by Dr. Robert M. Stephan, National Institute of Dental Research, who is the Commodore.

Dr. John Jacobs Named Advisor to the NIGMS

Dr. John E. Jacobs, Professor of Electrical Engineering and Executive Director of the Biomedical Engineering Center at Northwestern University, Evanston, Ill., has been appointed special advisor to the National Institute of General Medical Sciences.

Dr. Frederick L. Stone, Director of NIGMS, announced that Dr. Jacobs will advise his staff in planning research and research training programs in biomedical engineering and related areas.

Expansion Needed

Expansion of current programs in these areas is part of the Institute's efforts to meet demands arising from the recently authorized Heart Disease, Cancer, and Stroke Program.

Dr. Jacobs will be the liaison in this field between the National Institute of General Medical Sciences, the Office of the Director, NIH, and other Institutes.

He will be available for consultation on biomedical engineering and related programs in universities.

Novelist Speaks Tonight at CC on History of Science

Arthur Koestler, renowned novelist, will lecture on "Evolution and Revolution in the History of Science" tonight (May 3) at 8:30 p.m. in the Clinical Center auditorium.

The Foundation for Advancement of Education in the Sciences, Inc., is presenting the program.

NIH employees and their friends are invited to hear Mr. Koestler. There is no admission charge.

Seal and Warren Named Officers of D.C. Society Of Tropical Medicine

Dr. John R. Seal, Director of Intramural Research of the National Institute of Allergy and Infectious Diseases, has been elected President of the Washington Society of Tropical Medicine.

He succeeds Dr. Elvio Sadun of the Walter Reed Army Institute of Research (WRAIR). Dr. Seal was Vice President of the society until new officers were named April 6. He will serve a one-year term.

Also elected were Col. Edward Buescher of WRAIR, the new Vice President, and Dr. McWilson Warren of the NIAID Laboratory of Parasite Chemotherapy, who will serve as Secretary-Treasurer, succeeding Dr. George W. Luttermoser of the Division of Research Grants.

Dr. John Jacobs will advise his staff in planning research and research training programs in biomedical engineering and related areas.

From the Sailing Ass'n.


headed by Dr. Robert M. Stephan, National Institute of Dental Research, who is the Commodore.
Mr. McDougall

Mr. McDougall is responsible for the overall direction and guidance of the four branches that provide technical and administrative services to the Institute's scientific programs and to its communications and planning activities.

With the appointment of Mr. McDougall, the organizational structure of NICHD's Program Services is nearly completed.

The Extramural and Contract Management Branch, headed by Richard L. Hopkins, is responsible for the general management of the Institute's grants programs.

This includes the establishment of grants policies and procedures, the administrative and fiscal review of grant applications, and the management of research contracts.

Breakdown Given

The Facilities and Resources Branch, headed by Dr. Sarah H. Knutti, is responsible for developing and maintaining the Institute's research facilities, resources, and services.

This is done through agreements with other Government agencies by collaborative and contractual arrangements with non-Government research institutions, and through cooperation with DRFR, DRS, and DCRT.

Dr. Knutti is also responsible for surveying research facilities and resources on a nationwide basis.

The Program Statistics Branch, headed by Miss Lillian R. Freedman, collects and analyzes program statistics, and conducts statistical studies for use in program planning, development, and evaluation.

The fourth branch for which Mr. McDougall is responsible is the Epidemiology and Biometry Branch, soon to be activated.

This branch will collaborate with the scientific staff in planning and conducting epidemiologic and biometric studies. It will also conduct research in epidemiologic and biometric theory, techniques, and methods.

Mr. McDougall joined the staff of NICHD in 1963 as Chief of the Extramural Management Branch

Dr. Ichiji Tasaki to Head NIMH Neurobiology Lab

Dr. Ichiji Tasaki has been appointed Chief of the Laboratory of Neurobiology, National Institute of Mental Health. He was previously Acting Chief of the Laboratory.

In this position Dr. Tasaki directs the Laboratory's work of elucidating the physiological and behavioral processes that take place in the nervous system. If it is found that research interest in this area is concerned with the combination and application of various biochemical approaches to the analysis of nerve fibers cells.

At NIH since 1953, Dr. Tasaki served first with the National Institute of Neurological Diseases and Blindness. He joined the NIMH staff in 1961 as a neurophysiologist.

A native of Japan, Dr. Tasaki received his Doctor of Medicine degree from Keio University, Tokyo, in 1938.

He subsequently taught physics and physiology in Japan and in Berne, Switzerland.

In 1951, he was a visiting scientist in Cambridge, England, and later a research associate at the Central Institute for the Deaf, St. Louis, Mo., before coming to NIH.

Dr. Tasaki is a member of Sigma Xi, the Washington Academy of Sciences, the Academy of Neurology, and several other scientific societies.

Two NIAID Scientists in Belgium to Give Papers

Two scientists of the National Institute of Allergy and Infectious Diseases are participating this week in an international Colloquium on Proteides of Biological Fluids in Bruges, Belgium.

Dr. Arthur L. Schade of the Laboratory of Infectious Diseases is a member of the scientific committee for the 14th annual seminar which this year is devoted to researches on non-heme metalloproteins and on the control of protein synthesis.

He will present the introductory paper on "Biology and the Metalloproteins" and another on "Carbon Dioxide in the Iron Siderophilin Complex."

Dr. Richard M. Asofsky of the Laboratory of Germfree Research will present a paper on "Control of Immunoglobulin Synthesis in Mice" during the colloquium.

In addition to Dr. Shima the visiting survey team included Dr. Shotara Kusunose, Coordinating Chief, DRS; Howard M. Biggs, Chief, Research Facilities Planning Branch; Dr. Lester Goodman, Chief, Biomedical Engineering and Instrumentation Branch; R. Ross Holiday, Chief, Plant Engineering Branch, and Dr. Robert J. Byrne, Chief, Laboratory Aids Branch, all of DRS.

Visitors Listed

In addition to Dr. Shima the visiting survey team included Dr. Shotara Kusunose, Coordinating Chief, DRS; Howard M. Biggs, Chief, Research Facilities Planning Branch; Dr. Lester Goodman, Chief, Biomedical Engineering and Instrumentation Branch; R. Ross Holiday, Chief, Plant Engineering Branch, and Dr. Robert J. Byrne, Chief, Laboratory Aids Branch, all of DRS.

Mr. Mitsugu Ichinose, Scientific Attache, Economic Planning Bureau, Ministry of International Trade and Industry, and Mr. Mitsuo Jihinose, Assistant Chief, Secretariat Section, Science and Technology Agency. Others attending were Mr. Teruo Ichinose, Scientific Attache, Emp
ANNIVERSARY
(Continued from Page 1)

ical Sciences) was created.

There are interesting anecdotes from DRG's history, many concerning extraordinary applications. One such application requested the modest sum of $10 million with which to "cure all of the diseases in the world."

Another request was from a 10-year-old scientist who asked for money to build a rocket ship. The application was presented to the Health Council.

Boy Gets 'Grant'

The members felt that, although the proposed research did not fall within the scope of PHS programs, it did merit a grant. They passed the hat, and the Division was instructed to notify the applicant that a grant in the amount of $10 had been approved.

The Division began with a small staff and had to use primitive methods of preparing material for distribution, as compared to the present-day reproduction equipment.

The reproductive work—applications for research grants, minutes of meetings—was done on a hand-operated mimeograph machine, with able-bodied males on the staff taking turns in cranking the machine.

As the time passed, the Division recognized the need for placing the responsibility for the scientific evaluation of all research grant applications in the hands of groups of non-government scientists.

A plan for the establishment of study sections was presented to the National Advisory Health Council at its March meeting in 1946. The Council approved the plan, and by the end of the year, 21 groups had been formed. In an article published in the December 13, 1946 issue of Science, Dr. Van Slyke began with these words:

Van Slyke Quoted

"A large-scale, nation-wide, part-time program of support of scientific research in medical and related fields, guided by more than 250 leading scientists in 21 principal areas of medical research is needed for the functioning reality. The program, based on Public Health Service research grants, financed by public funds, supports research conducted without governmental control by individual scientists.

The Malaria Study Section was the first section established and had its first meeting at the National Institutes of Health in 1946.

The original charge to the study sections has not changed over the years: to provide critical review and advice on research proposals within the broad field of biomedical sciences, and to assess research needs in their respective areas in order to stimulate and encourage research where the emphasis is needed.

The need for policy and informational guidelines in operation of the grant program was recognized early by the Division. The first such statement was issued March 13, 1948.

In collaboration with the sponsor, the Institutes and Divisions of the Public Health Service, the Division continues to issue policy statements and operational guidelines.

As study sections were created, the Division recognized the need for full-time, qualified technical staff to prepare the applications for study section review. The first such position was appointed in November 1946, and the appointment of additional technical staff followed in rapid succession.

Time Brings Changes

Space for the growing Division has always been a problem. The Division was housed in Building 1 at NIH until January 1, 1948, when Building T-6 became its home. In 1961 it was moved to Building 31, and in June 1963 it moved to its present home in the Westwood Building.

Recent years have seen the scope of DRG's responsibilities broaden along several axes:

1. As a central technical unit, servicing all extramural components of the Public Health Service, NIH, RRS, NLM.
2. In the area of training grant, fellowship, and career development award coordination and review.
3. As the organization responsible for designing and maintaining a computerized central data system.
4. As a focus of activity for recruiting and training science administrators under the Grants Associates Program.
5. As a staff unit conducting experiments in grant administration procedures, such as the current pilot study designed to increase the role of institutions in project management.

Statistics seldom capture the viability of an organization, but these may indicate the magnitude and complexity of DRG's role.

The staff holds 109 advanced degrees, among them 76 doctorates; more than 57,000 application kits are distributed each year; the Division communicates with more than 1,500 grantee institutions in the United States; $80 of the leading biomedical scientists serve on DRG study sections and fellowship committees; 1,100 project site visits are conducted each year in the U.S.A. and abroad.

Future Charted

What of DRG's future? As Dr. Confrey views it:

"Our task will be to reinforce the traditional strengths of the Division, especially the most important value—respect for scientific excellence in the research PHS sponsors. At the same time, we shall have to consider carefully every proposed innovation, whether it pertains to methods of review, principles of project management, or other aspects of science administration. Given the caliber of staff that has served DRG throughout its history, the next 20 years will be productive, creative—and probably quite lively."

100 Attend Conference On Psychiatric Nursing

About 100 nurses from the NIH Clinical Center Nursing Department and nearby hospitals attended a recent clinical nursing conference conducted by the Psychiatric Nursing Service in the CC's 14th floor auditorium on "The 48-Hour Cycle of a Manic Depressive."

Participants were Mrs. Frances Benninghoven and Miss Barbara Harer, staff nurses; Mrs. Charlotte Hall, practical nurse; Donald Preston, nursing assistant, and Dr. William E. Bunney of NIMH.

Miss Arline Heath, Chief of the Psychiatric Nursing Service, welcomed the guests, and Mrs. Ruby D. Collins, Head Nurse of the CC Nursing Unit 3E, introduced the program.

The participants focused their attention on nursing care problems and the approaches to helping a typical manic depressive patient.

Presentations included a medical history of the patient and a report on her clinical course. Dr. Bunney discussed the correlation between biochemical data and the behavioral data collected by the nursing staff.

TSUKUBA
(Continued from Page 3)

bassy of Japan, Washington, D.C., and Mr. Takashi Shima, Consul, Consulate General of Japan, New York, N.Y. Mr. Tsuehikane was the group's interpreter.

After a luncheon for the visitors, Joseph S. Murtaugh, Chief, Office of Program Planning, NIH, spoke on the selection of research subjects and allocation of the research budget. A bus tour of the NIH reservation was later conducted to illustrate some of the discussions heard previously by the survey team.

Pictured during visit here is the 6-man team of Japanese officials, with consular representative from New York, and NIH administrators who discussed with the visitors plans for the research city of Tsukuba, to be completed by 1975 at a cost of $1.25 billion. From left: Hachiro Suda, Mitsugu Ibano, Dr. Hideo Shima, Mitsuki Manabe, Joseph S. Murtaugh, Chris A. Hansen, Dr. Heinz Specht, Shoichi Hoshimoto, Takashi Shima (Consul, N.Y.), and Shotoro Kusunose.—Photos by Thomas Joy.
Dr. L. S. Schanker Wins 1966 Abel Award for Drug Research at NHI

Dr. Lewis S. Schanker, Head of the Section on Biochemistry of Drug Action, Laboratory of Chemical Pharmacology, National Heart Institute, recently received the 1966 John J. Abel Prize of the American Society for Pharmacology and Experimental Therapeutics for his research dealing with the passage of drugs across body membranes.

The Abel Medal and accompanying honorarium of $1,000 were presented to Dr. Schanker on April 12 at the annual dinner of the society in Atlantic City in conjunction with the 56th Annual Meeting of the Federation of American Societies for Experimental Biology.

Citation Received

The medal and honorarium are sponsored by Eli Lilly and Company. Dr. Schanker was cited for his work on the gastrointestinal absorption of drugs, the excretion of drugs into bile, the permeability of various cells and tissues to drugs, and the passage of drugs across membranes of the central nervous system.

As a result of investigations accomplished during the past several years, Dr. Schanker and his co-workers showed that most drugs diffuse across the various body membranes at rates largely determined by two physical properties of drugs: their degree of ionization and the fat-solubility of their un-ionized form. Because cell membranes are fatty by nature, the more fat-soluble a compound is, the faster it penetrates the membrane.

In body fluids, most drugs exist as a mixture of ionized and un-ionized particles. The proportion of each kind of particle present is determined by the ionization constant of the drug and the acidity or alkalinity of the body fluid.

Ionization Important

The degree of ionization is important in these studies because only the un-ionized form of a drug is water-soluble.

Dr. Schanker was able to show that for rapid penetration of cells, a drug should be mostly un-ionized in body fluids, and that the un-ionized form of the drug should have a high fat solubility.

A graduate of the University of Kansas City, now the University of Missouri, he received the Bachelor of Science Degree "with distinction" in 1951 and was awarded the Lohn-Fink Medal for ranking Asian Tour by OIR Committee Reveals Multitude of Health Research Problems

Dr. Schanker

Large rats that consume 50 percent of available grain, malnourished children in a Pakistani village, monkeys that may transmit disease in the jungles of Malaysia . . .

These form a kaleidoscope of exotic scenes recalled by Philip Ross, Office of International Research, from a month's tour of West Pakistan, India, Malaysia, Thailand and Japan.

Heading the group which toured the Asian countries to review research achievements of American universities participating in the program for International Centers for Medical Research and Training, was Dr. Milo D. Leavitt Jr.

At the time of the trip he was Head of OIR's Special International Programs Section.

Committee Listed

Other members of the Committee for International Research were Dr. Nevin S. Schrader of the Massachusetts Institute of Technology, Dr. John M. Weir of the Rockefeller Foundation, and Dr. Henry W. Riecken of the National Science Foundation. Dr. Robert E. Olson of St. Louis University also accompanied them as a consultant.

Their purpose was to review medical research and first scholarship in his graduating class.

He took his Master's Degree in Pharmacology at Kansas City, then moved to the University of Wisconsin Medical School Pharmacology Department for his Ph.D., obtained in 1955.

In 1955 he was also commissioned in the U.S. Public Health Service and joined the staff of the Laboratory of Chemical Pharmacology at the National Heart Institute. Since 1959 he has been Head of the Section on Biochemistry of Drug Action.

Past winners of the Abel Prize include Dr. Eugene Braunwald, Chief of NIH's Cardiology Branch, and Dr. Parkhurst Shore, a former member of the same branch.

Dr. Schanker

This is Kot Kakka showing primitive drainage ditch in front of dwelling.

By Frances Davis

water buffalo's milk.

This is an example of the typical diet in the villages in Malaysia. The daily diet consists of rice, goat milk, dhal, and various vegetables.

Dr. Ross

The Lambeth secretariat of the United States-Japan Cooperative Medical Sciences Program.

Typical of the research sites visited was Kot Kakka, a mud hut village of 500 people 80 miles north of Lahore, West Pakistan. University of Maryland scientists are working on parasite control in this village, as well as on malaria, scrub typhus, ticks, chiggers and other parasites.

Water From Pond

In Kot Kakka drinking water is obtained from the same pond where the daily bath and the daily wash are done.

Diet of the villagers consists of unleavened bread, chapati (flour and ghee baked to a hard thin loaf), mustard greens, rice when in season, and yogurt made from water buffalo's milk.

Malnutrition of the children is quite common in the village, Dr. Ross said. Eighty percent of the inhabitants are infected with hookworm. The life cycle of the parasite is being studied in detail so that adequate control measures may be undertaken.

In Hyderbad the team visited the Asmanian General Hospital. They found a number of children between 1 and 5 years suffering from kwaishiiorkor, a disease resulting from a lack of protein in the diet.

Supplemental protein and rich foods usually cured the children, but many had relapses upon return home because the mothers could not be convinced that the disease was related to diet.

Singur Visited

While visiting with the Johns Hopkins researchers in Calcutta, India, the OIR group reviewed the research at the field station at Singur, 40 miles from the city. Here emphasis is placed on the ecology of small mammals such as the many rodents infesting the area.

The bandicoot rat, which averages 1 foot in length, is a severe menace to the already inadequate food supply in India. When OIR officials stopped to view the stor­ age of grain in the "godowns" (narrow, walled rooms) in many bandicoots were seen climbing over the uncovered piles of grain.

In Dalogacha, a mud hut vil-
NIAMD Mathematical Research Branch Seeks Solution of Biomedical Problems

By George J. Mannina

The growing importance of research on the mathematical and theoretical aspects of biological problems was reflected recently in elevation of the National Institute of Arthritis and Metabolic Diseases’ Office of Mathematical Research to the Mathematical Research Branch.

Although mathematical research has long been a scientific entity, with applications in virtually all fields of endeavor, it is only in the last decade or so that it has come into its own as a valued and essential tool of biomedical investigations, and it is now adding new dimensions to medical research.

In today’s modern research world, mathematical researchers are making vast strides not only in seeking solutions to specific biomedical problems but also in developing methodology and treatment.

Computers Aid Research

The advent of electronic computers has raised mathematical and theoretical research to new heights of sophistication, adding to the technology it brings to bear on biomedical investigations.

Dr. John Z. Hearon, Chief of the NIAMD Mathematical Research Branch, heads a staff of seven professional mathematicians and theoretical researchers who collaborate not only with Institute investigators but with other medical scientists here at NIH and abroad.

Although this close collaboration with biomedical investigators is vital, Dr. Hearon pointed out, it is, in fact, secondary since he and his staff operate independently, initiating projects which often develop into collaborative studies with biomedical scientists.

Playback Important

The importance of close association or interplay between the theoretician and the medical investigator is that once a collaborative project is begun is that each provides the other with a “playback” that enables them to correct and extend their work.

Interestingly enough, Dr. Hearon noted, the entire Branch staff has had primary training and experience in some biological area, such as neurology, biology or physics, thereby turning to mathematical research.

This training in the life sciences is an invaluable asset in mathematical research, he said, for it provides the biological background to deal knowingly with biomedical problems.

The purpose behind mathematical research is to develop mathematical and computational methodologies or formalisms—theoretical models—to test hypotheses about biological systems. These models can be applied to general biomedical problems or to specific investigations.

Application Cited

One illustration of an application is a collaborative effort designed to define the mechanisms of absorption of calcium by the human intestine. Mathematical analysis of the experimental results suggested that several physiological influences are involved in the absorption process. These studies also led to integration with other, more extensive, calcium metabolic investigations.

Other projects involve mathematical studies of dendritic neurons, development of a family of mathematical models for the transport, diffusion and consumption of metabolites in the blood-capillary-tissue complex, studies of visual responses, and studies to determine the mechanisms of renal concentration.

SAAM Is Significant

A particularly significant project is a computer program, known as Simulation Analysis and Modeling (SAAM), which simulates biological systems and then analyzes data in terms of the simulated systems.

SAAM is an attempt to formalize mathematical procedures so that any medical investigator, without mathematical experience but with a given set of facts or hypotheses, may apply it. The program has been used in biomedical research not only here at NIH but also at computer centers elsewhere in this country and abroad.

Lewiston, Maine, Gets Construction Grant

Approval of a $91,060 Federal construction grant for a community mental health center in Lewiston, Maine, was announced recently by the National Institute of Mental Health.

The first award to a New England mental health facility under the national mental health program, the grant represents 88 percent of the cost of construction.

The Child and Family Mental Health Center, planned by a private social service agency, will be built on land donated by St. Mary’s General Hospital. It will serve a population of 86,312, including residents of Lewiston, Auburn and 12 rural communities.

BOND RALLY

(Continued from Page 1)

that all employees may understand the advantages of the payroll savings plan and the importance of the program to the country.

Employees who are not now participating in the bond program are urged to do so. Those who are already buying bonds through the payroll savings plan are urged to increase their purchases wherever possible.

The program became more attractive Dec. 1, 1965, when the interest rate on savings bonds was increased from 3.75 to 4.15 percent, compounded semiannually, when held to maturity. This means that bonds purchased now will mature in 7 years.

Confrey Directs

The NIH drive is being directed by Dr. Eugene A. Confrey, Chief of the Division of Research Grants. Koymen have been appointed in each Institute and Division to promote the bond program individually. These keymen will explain how simple it is for employees to join the payroll savings plan.

Diabetes Literature Index Is Introduced

The National Institute of Arthritis and Metabolic Diseases has introduced a new monthly publication, Diabetes Literature Index, which is available on request to interested investigators and practitioners in the field of diabetes.

Each issue of the Index will provide bibliographic citations of diabetes-related articles appearing in current biomedical world literature. One cumulated index will be published each year.

This publication is the product of a comprehensive research project on automated or computerized scientific information storage and retrieval for which the Institute provided grant support.

Electronic Methods Developed

The project resulted in development of automated electronic methods on which much of the preparation of the Diabetes Literature Index is based, and in the creation of computerized, special information-gathering centers on diabetes located at the University of Minnesota, University of Rochester and Western Reserve University.

Diabetes Literature Index represents the first regularly scheduled monthly output of these centers. Cooperating in this endeavor is the National Library of Medicine, which through MEDLARS (Medical Literature Analysis and Retrieval System), is providing magnetic computer tapes on which the current world biomedical literature is indexed, and which are used for the selection of diabetes-related items.

Requests to receive the new periodical should be addressed to: Scientific Communications Office, Diabetes Literature Index, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Md. 20014.

Diabetes Literature Index

(Continued from Page 1)

Dr. Schmehl to Speak at N.Y. Institute Dedication

Dr. Francis L. Schmehl, Chief of the Health Research Facilities Branch of the Division of Research Facilities and Resources, will be principal speaker at the dedication of the Moses Research Institute at Montefiore Hospital in New York City, Thursday, May 5.

The building, named in honor of Henry L. Moses, an active supporter of the hospital until his death in 1961, will provide research facilities for work in such areas as psychiatry, anesthesiology, pediatrics and urology.

Grants Cited

Montefiore Hospital has been awarded approximately $1.56 million in matching funds from the Health Research Facilities Program for construction of the 13-story institute.

The grant was one of 1,349 totaling more than $378 million awarded to date under the HRF construction program. Since inception of this program in 1956, 403 institutions have been assisted in building research facilities.
ship and training programs that were precursors of present NIH facilities. His remarkable administrative ability was shown to advantage in still another area—that of construction—when, following the passage of the Public Health Service Facilities Act of 1936, Dr. Van Slyke recruited a small nucleus of staff and had an intensive program under way in less than 90 days.

Perhaps Dr. Van Slyke will be best remembered among his PHS associates and throughout the country for his sincere and warm friendship which inspired dedication best remembered among his PHS colleagues as precursors of present NIH facilities.

After two years with the Venereal Disease Division in Washington, Dr. Van Slyke was appointed Chief of the Office of Research Grants and Fellowships of NIH in 1946 to organize the first large-scale peacetime program for the support of scientific research in medical and related fields. In 1953 this office—renamed the Division of Research Grants and Efforts—received the Lasker Award for its “brilliant administrative achievement...of immeasurable value to public health.” Over the years it has served as a model for other research support efforts by other organizations.

Heads NIH in '48

In 1948 Dr. Van Slyke became the first Director of the National Heart Institute. In this post, he again demonstrated his remarkable skills in swiftly developing and administering soundly conceived, broadly based programs of research and training in the cardiovascular field.

In 1952 he became Associate Director, then Deputy Director of NIH, serving there with the rank of Assistant Surgeon General until his retirement.

Dr. Van Slyke received numerous awards in addition to memberships and honors tendered him by various professional and scientific societies and organizations.

His most recent honor, an honorary Doctor of Science degree from the University of Michigan, was conferred last December.

The citation concluded: “The University, the National Scientific Community, and, it is not too grandiose to say, mankind are beholden to him. We acclaim his foresight, his spirit, and his devotion to the public well-being as we tender him the degree Doctor of Science.”

Stewart Praises ‘Dr. Van’

The award was presented to Dr. Van Slyke at his home last January. On this occasion, Dr. William H. Stewart, Surgeon General of the Public Health Service said: “Dr. Van Slyke, as a career PHS officer, has not only made many great contributions to many programs of the Service, but he has also proved himself a thousand of his fellow workers by his dynamic and friendly spirit, his enthusiasm, and his unique ability to encourage everyone to do his very best in every job.”

Until his death, Dr. Van Slyke had lived at 6008 McKinley St., Bethesda. He is survived by his wife, the former Ann E. Andre of Minneapolis, whom he married in 1927; a son Roger, a daughter, Mrs. Charles R. Mitchell, and four grandchildren.

Funeral services were held last Tuesday at Fort Myer Chapel in Arlington, with interment in Arlington National Cemetery.

Mrs. Walter

Mrs. Rachel Walter, manager of the Bank of Bethesda's NIH facility since it opened 16 years ago, recently resigned to devote more time to family interests and hobbies. She has been succeeded by Mrs. Margareet Mathis.

Mrs. Walter believes that she can correctly call the names of at least 2,000 NIH employees. She attributes this ability to the fact that "so many wonderful people are here," and to a practice of consciously saying a person's name each time she sees him.

She first opened the doors of the bank's NIH branch in 1950. It then was sandwiched between the entrance doors to Wilson Hall, on the third floor of Building 1. The facility moved to the Clinical Center in 1953.

Earlier, as a cashier in the bank's Bethesda office, her most important experience was meeting her husband, Melvin S. Walter.

The Walter family moved to Arlington in 1953.

ASIAN TOUR

(Continued from Page 5)

R&W Hamsters' Lyrical 'Kiss Me Kate' Spoofs Shakespeare's Shrew May 4-7

What could transform gangsters into champions of the bard? The answer will be found in the R&W Hamsters' production of "Kiss Me Kate." The ingenious lyrics and music of Cole Porter and the boisterous fun of the Sam and Bella Swayescript unfold a unique spoof of "The Taming of the Shrew."

The shrew, played by Lillian Imber (NINDB) is also the leading actress in the "off-stage" counterpart of the Shakespearian character.

Dr. Jerry Shean (NIAMD) has previously been seen as "Li'l Abner" in 1964 and last year in "Anything Goes." His ability to project the tongue-in-cheek role of the leading man is outstanding.

Cast Is Lively

Jan Teti (DEFR) swings from the sultry songstress to the sweet Bianca with great flair.

The cast utilizes the talents of two visiting scientists and an NIH biochemist born in Austria.

Stephen H. Curry, here on a fellowship from Chelsea College, London, England, brings to his first stage role an advantageous back­ground of madrigal singing.

Ladislav Volicer, on a fellowship from the Czechoslovakian Academy of Science, Prague, lends a new meaning to a low-down hood.

Now a U.S. citizen, Dr. Anthony W. Schrecken brings continental charm to the play's angel.

Delray Green, the producer, is a commissioned officer with the Clini­cal Center Medical Records Department.

William Etheridge (DRS) designed and supervised the produc­tion of the scenery.

Lee Lawrence, the director, is a veteran of 250 Broadway produc­tions.

Prior to joining the PHS she was associate producer for television's Hallmark "Hall of Fame" and "Wide, Wide World."

The show will be presented May 4 for Clinical Center patients, and May 5-7 for NIH employees, their families and friends in the CC auditorium at 8:30 p.m.

Tickets for "Kiss Me Kate," priced at $1.50, are available at the R&W office and through R&W representatives.

committee traveled to thick jungles to study the research on "dengue fever," a virus disease associated with the monkeys in the jungles of Malaysia.

After a brief visit to discuss nutritional research with the Rocke­feller Foundation scientists in Bangkok, the team visited the NIH Pacific office in Tokyo to discuss the development of the U.S.-Japan Medical Sciences Program with the Japanese secretariat. They then headed back for the U.S.
NIAID Scientists to Give Papers at ASM Meeting

Nine scientists from three laboratories of the National Institute of Allergy and Infectious Diseases are presenting papers this week at the annual meeting of the American Society for Microbiology.

Six other NIAID scientists are also attending the sessions, May 1-5 in Los Angeles, Calif., and will participate in the discussions.

Investigators from the Laboratory of Infectious Diseases who will report on their research are Dr. Edwin H. Beachey, Dr. Malcolm David Hoggan, Dr. Andrew M. Lewis Jr., Dr. Robert H. Purcell, Dr. Roy Repaske and Dr. Norman L. Somerson.

Miss Martha H. Shacklefilet, NIAID microbiologist at the Middle America Research Unit, Panama Canal Zone, will present a paper, and two scientists of NIAID's Rocky Mountain Laboratory at Hamilton, Mont.—Drs. Robert K. Gerloff and David Tarmina—are also scheduled to present papers.

R&W Sets Up New Plan To Assist Survivors of Deceased NIH Personnel

One of the most critical needs of many families following a death is for a steadying hand and some sensitive and informed advice. One year after the death of two NIH personnel officers, most families then have the resources to pick up their family life with some degree of normalcy.

During the first crucial hours and days, however, outside assistance can be most helpful.

With this in mind, the NIH Recreation and Welfare Association has developed a program of assistance to survivors of deceased NIH civil service employees.

Resources Indicated

The R&W Counselor, Miss Nellie MacLeish, will contact the survivor to offer information about community resources available to assist with such problems as income management, child day-care or legal questions.

Temporary financial assistance is another feature of the program. I&D personnel officers will assist with the Survivor Assistance Plan by notifying the Counselor when an employee dies.

The Counselor is available at Stone House on Tuesdays and Thursdays to help employees with family and personal problems. Appointments may be made by calling Ext. 64180.

Owner May Claim Earring

A jade earring of some apparent value was found April 15 on Parking Lot 31D. The owner may obtain it by describing it in detail or by showing its mate to Mrs. Betty Argent, Bldg. 31, Rm. 9A34.

HEALTH FACILITY

(Continued from Page 1)

neighborhood level.

Special programs will also serve children, adolescents, and narcotic addicts. These will be among the hospital's full range of community mental health services that represent the new attack on mental and emotional illness.

The total cost of the new structure is $11,590,000. City and State funds are to cover $8,355,000 of the cost.

The mental health centers for New York City are among a total of 112 projected in a State plan for centers.

According to Dr. Stanley F. Yolles, Director of the National Institute of Mental Health, which administers the Federal program of aid to community mental health centers in cooperation with the PHS Division of Hospital and Medical Facilities, plans for mental health centers have been submitted by 32 States, and 14 grants for 15 centers in various parts of the country have been made to date.

County Needs Doctors For Health Programs

The Montgomery County Health Department reports a need of physicians to do part-time clinical work in both the Maternity and Child Health Programs.

Board-eligible pediatricians and obstetricians are preferred. U.S. citizenship is required.

The positions include work in health supervision clinics for all ages of children, management of referral cases such as seen in the Crippled Children's Program, school medical advisory service and consultation to the public health nurses in the area.

For further information, call or write to Ruth-Alice Asbed, M.D., Chief, Maternal and Child Health Division, Montgomery County Health Department, Jefferson and Perry Sts., Rockville, Md. 20850. Phone: 279-1627.

Ten students from Howard University recently visited the Division of Research Services on a tour arranged by Louis Heitlinger, former DRS engineer, now Assistant Professor, Electrical Engineering, at Howard. The group listens to an explanation of the heart-lung bypass machine used in open-heart surgery at NIH. From left: Dr. Lester Goodman, Chief, Biomedical Engineering and Instrumentation Branch, DRS; Mr. Heitlinger; Thomas Gatts, counselor for the student group; eight students, and Grant Riggle of BEIB. William Schuette (not shown), BEIB, escorted the group to the Neurology Operating Room Instrumentation System in the CC Surgical Wing.—Photo by Ralph Fernandez.

Dr. Woolley, Geneticist Of International Fame, Joins NIGMS Staff

Dr. George W. Woolley, internationally known geneticist, was recently appointed Head of the Biological Sciences Section, Research Grants Branch, National Institute of General Medical Sciences.

Dr. Woolley came to the Institute from the Sloan-Kettering Institute for Cancer Research where he was Chief of the Division of Tumor Biology.

Associated with Sloan-Kettering since 1948, it was at Sloan-Kettering Division, Graduate School of Medical Sciences, Cornell University.

Experience Cited

Before joining Sloan-Kettering, Dr. Woolley was Assistant Director and Scientific Administrator of the Roscoe B. Jackson Memorial Laboratory in Bar Harbor, Maine.

Dr. Woolley has served as an advisor for many organizations. In addition he was a consultant to the National Science Teachers Association, National Education Service, the National Cancer Institute, NIH, and has been a participant in several international congresses on genetics, cancer, endocrinology and hormonal steroids.

Osteoarthritis also will be of clinical interest to the new section. In addition, it will conduct studies on drug mechanisms and therapeutic evaluation of drugs used in treating these diseases.

Dr. Seegmiller's Section on Human Biochemical Genetics will conduct clinical investigations of genetically determined human diseases. Among these are gout, eburnosis, cystinuria and related conditions.

Noted in Field

Dr. Decker, a noted rheumatologist, was named Chief of the Arthritis and Rheumatism Branch last September, succeeding the late Dr. Joseph J. Bunim. He came to NIAID from the University of Washington School of Medicine in Seattle, where he headed the Division of Arthritis in the Department of Medicine.

Dr. Seegmiller, who joined the Institute in 1962, is a widely recognized authority on research and treatment of gout. He has contributed much to the understanding of uric acid metabolism in this disease. He has demonstrated the mechanism of action of acute attacks of gouty arthritis and that of colchicine in alleviating painful episodes in patients suffering from this metabolic disorder.

A Medical Director in the PHS Commissioned Corps, Dr. Seegmiller recently returned from a year's study abroad during which time he did research on inborn errors of metabolism and their biochemical and genetic basis.