

# the NIH Record

U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE

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NATIONAL INSTITUTES OF HEALTH  
PUBLIC HEALTH SERVICE

## Famous Scientists From 18 Nations Attend Symposium

Approximately 100 distinguished scientists from 17 foreign countries and the United States participated in the Second NIH International Symposium on Biomedical Research



Dr. Sherman



Dr. Terry

held February 28 through March 3 in Williamsburg, Va.

The broad theme of the 4-day symposium, sponsored by the NIH Office of International Research, centered on the structures and processes for the formulation and development of bioscience policy.

In particular, the delegates examined the implications that economic, political and social factors hold for biomedical science in relation

(See SYMPOSIUM, Page 4)

## Scientists Induce Multiple Brain Tumors In Hamsters With Schmidt-Ruppin Virus

Two National Cancer Institute investigators have found that intracerebral inoculations produce multiple, diffuse tumors, differing from other virus-induced brain tumors.

Since polyoma and SV-40 viruses have been shown to induce brain tumors in newborn hamsters, research was conducted to study the effect of a strain of chicken sarcoma virus (RSV), Schmidt-Ruppin strain, which crosses species lines and induces tumors in mammals.

### Viruses Isolated

The Schmidt-Ruppin virus was isolated from a chicken sarcoma and inoculated into the mid-portion of the right cerebral hemisphere of hamsters within a day of birth.

Neurological symptoms appeared

## New Scale Is Developed For Use in Measuring Psychotic Symptoms

Two scientists, one from the National Institute of Mental Health, have developed a new scale for measuring psychotic symptoms, called the Rockland-Pollin (RP) Scale after its developers.

The new RP Scale can be used repeatedly by psychiatrists after brief 30- to 60-minute interviews and provides a quantified profile which is an accurate reflection of clinical judgment and impressions.

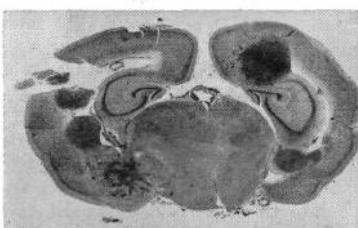
### Computers Used

The new scale is so arranged it can easily be processed by computers, and correlated with data from other disciplines, such as psychology, biochemistry and neurophysiology. It also focuses on the degree and nature of psychotic symptomatology.

Neurotic and psychosomatic symptoms are deliberately omitted because the investigators felt they are not validly comparable to psychotic phenomena and tend to obscure the assessment of the degree of "psychoticness."

The three principal categories in the scale are "general appear-

(See NEW SCALE, Page 8)



This micrograph of the coronal section of newborn hamster brain, enlarged about seven times, shows the multiple tumors (dark areas) produced by intracerebral inoculations of the Schmidt-Ruppin virus strain.

in 79 out of 82 animals after 18 to 56 days, varying with the titre of the inoculum.

Drowsiness, lateral posture of  
(See BRAIN TUMORS, Page 8)

## Perinatal Research Project Seeks Birth Defect Clues

By Jim Rice

"How is my baby, doctor?" This is the first important question for a new mother. To better the chances that the answer can be, "You have a fine, healthy baby," the Collaborative Perinatal Research Project was initiated in 1957 by the National Institute of Neurological Diseases and Blindness. Fourteen medical centers now participate.



Examinations are an old story to this baby, one of the infants at the University of Minnesota Child Development Study participating in the NINDB Collaborative Perinatal Project. From the time he was one minute old, this child has taken part in various tests.

## Employee Health Service To Show Narcotics Film

An educational film, "Narcotics: The Decision," will be presented next week by the Employee Health Service.

This 30-minute color film uses animation to show the workings of the human mind and follows the life of a young junkie from birth to addiction. It points out the potential stepping stones in the process of addiction—barbiturates, marijuana, heroin—and vividly sounds a warning.

The introduction will be presented by Dr. Carl Anderson, Chief of the Alcoholism and Drug Abuse Section, National Institute of Mental Health.

The film will be shown at the Clinical Center auditorium Wednesday, March 17, at 11:30 a.m. and 1 p.m.; on Thursday, March 18, at NBOC #2, conference room 113, at 1:30 p.m. and NBOC #1, conference room 202, at 2:30 p.m.; and on Friday, March 19, at the Westwood Building, conference room A, at 1 p.m., 1:45 p.m. and 2:30 p.m.

### 50,000 Mothers Studied

Today more than 50,000 mothers and 40,000 offspring are registered with the study. It is the most extensive prospective investigation ever made of the perinatal period—the time just before, during, and after birth.

The collaborative project records most information at the time observations are made, before anyone can know which mothers will have defective children. Most previous studies of birth events depended on memory of the mothers and on inadequate records.

The forms developed by the project ask questions such as: How old was the mother? What infections

(See PERINATAL, Page 6)

## Fatal Accidents Increase In 1964 to 104,000

Accidents, the Nation's leading killer of youth, caused approximately 104,000 deaths in 1964, according to the Division of Accident Prevention, Public Health Service.

Dr. Paul V. Joliet, Division Chief, said this compares with 101,000 accident fatalities in 1963. About 50 million persons in the United States yearly become victims of accidental injuries which, he said, either restrict normal activity for a day or more or require medical attention.

"All of the increase in fatalities was from motor vehicle accidents, which set a new high of about 48,000—5,000 more than occurred in 1963," Dr. Joliet added.

# the NIH Record

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## NEWS from PERSONNEL

### COSTEP SUMMER EMPLOYMENT

The Commissioned Officer Student Training and Extern Program, in effect since 1956 as a source for summer employment of students of medicine, dentistry, engineering, veterinary medicine, and nursing, has been expanded this year to include students of other health professions, as well as students in the biological, physical, and social sciences.

The files of students who have applied for 1965 summer employment will be available in early March in the Commissioned Officer Section, PMB, for use of individuals in those program areas with student positions available.

The COSTEP candidates are highly recommended and well qualified. Those interested in securing the services of a summer student through COSTEP are requested to call their I/D Personnel Officer for further information.

### RESTRICTIONS ON EMPLOYMENT

This year, as last, there is a restriction on the summer employment at NIH, or anywhere in DHEW, of children of any DHEW employees, including children of members of the Commissioned Corps of the Public Health Service.

This restriction applies to all types of appointments except the COSTEP program and appointments of eligibles under the Commission's Separated Career Employee program.

### MEETING FOR CO'S

On Wednesday, March 17, at 3 p.m. in the Clinical Center auditorium, Commissioned Corps Officers who are preparing to leave active duty within the next six

### NHI Film on Heart Research To Be Shown Again Today

The new National Heart Institute film "Heartbeat" will be shown again at 12 noon today (Friday, March 12) in the Clinical Center auditorium.

All NIH employees are invited to attend this second showing which is being held by popular request. The movie, which depicts heart research programs supported by NHI, was filmed in Peru, Lebanon, Uganda, Japan, East Pakistan and at NIH.

months will participate in a special meeting.

Information on how to effect inactivation with a minimum investment of time and effort will be covered at this meeting and necessary forms will be available. Officials will be on hand to answer questions and give instruction on procedures.

### TAX HELP FOR WESTWOOD

Since Wednesday, February 24, and continuing on subsequent Wednesdays until further notice, Robert Burbank will be in Room 12 of the Westwood Building from 8:30 a.m. to 1 p.m. to give income tax assistance to Westwood employees. Those desiring assistance may call the DRG Personnel Office, Ext. 577, for appointments.

Employees requiring assistance should bring with them all pertinent information and their tax returns, completed as far as possible.

### D.C. TAXES

At the request of the District of Columbia Government, the NIH is accelerating its efforts to assist employees in meeting their overdue D.C. tax obligations.

Employees concerned will be interviewed in PMB about their indebtedness and will be assisted in

## NIH Blood Insurance Proves Its Worth To the Bill Carrigans--and All of NIH

By Frank Smith

Here's a real-life story—and a typical one—which tells what blood insurance is all about.

William T. Carrigan, medical research program analyst in the Office of Program Planning, has been an NIH employee since 1945. His 9-year-old daughter, Bonnie, was born with a congenital heart abnormality known as pure pulmonary stenosis of the infundibular type—narrowness of the pulmonary artery causing increased pressure in the right ventricle and eventually

an enlarged heart prone to failure.

The difficulty was recognized by Bonnie's pediatrician just a few weeks after birth. Until recently, that recognition put limitations on Bonnie's activities and, in fact, implied a less-than-normal life span for her.

Now, as a result of successful open-heart surgery, Bonnie is blessed not only with her happy home in nearby Potomac, a younger sister and their pets (six cats and a Labrador retriever), but also with all the promises of a naturally full and vigorous life.

### Factors Interesting

Many factors surrounding this little girl's recent surgery would interest a good number of NIH employees:

- It was the famous Dr. Helen Taussig who diagnosed Bonnie's heart ailment;

- The surgery was performed by Dr. Alex Haller who trained at NIH as a clinical associate;

- The heart-lung machine was used during surgery at Johns Hopkins' new Children's Medical and Surgical Center in Baltimore.

Two other factors are especially significant for all NIH employees. They involve two phone calls: one from Mr. Carrigan to the Clinical Center Blood Bank saying when and where Bonnie needed blood; the other from the CC Blood Bank to the Red Cross saying, in effect, "See to it that she gets all the blood she needs."

### Task Made Easier

At a time of such vital importance to a father and mother, these simple phone calls obviated what could have been a very difficult and time-consuming task—finding at least 25 donors who had the right kind of blood.

But this vital need was answered totally without cost or hardship; for NIH employees had met an annual donation quota of 2,000 units of blood for Clinical Center patients, thus making blood available to them and their families, and to their fellow employees and their families whenever and wherever needed, regardless of the injury or illness requiring blood transfusion and regardless of the amount of blood needed.

To explain this service the word insurance seems inadequate; perhaps fraternity would be better. At any rate, the premiums are payable "not in gold but by the golden rule."



**Following successful heart surgery, Bonnie Carrigan visited her father's office here and received a watch, presented by Margaret Morris, his secretary, in behalf of his colleagues in the Office of Program Planning.—Photo by Ralph Fernandez.**

### DRG to Host March 17 Writer-Editor Seminar

The Division of Research Grants will be host to the Public Health Service's Write-Editor Seminar next Wednesday, March 17, at 1 p.m. in Conference Room A of the Westwood Building. The regular meetings are conducted to improve information operations.

Dr. E. A. Confrey, Chief of the Division of Research Grants, and members of his staff will discuss "PHS Extramural Programs: Relationship of Division of Research Grants to Institutes and Divisions."

Other DRG speakers will include Dr. Stephen P. Hatchett, Deputy Chief; Dr. J. Palmer Saunders, Associate Chief for Scientific Review and Development, and Alexander Adler, DRG Information Officer.

A special bus will provide transportation for information office staff from downtown. All PHS information personnel are invited to attend the meeting.

making the appropriate arrangements for payment. Supervisors of the employees involved also may be asked to assist in making the necessary arrangements.

## Jerome Cornfield Named Chief of Biometrics Research Branch, NHI

Dr. Ralph E. Knutti, Director of the National Heart Institute, recently announced the appointment of Jerome Cornfield as Chief of the Biometrics Research Branch. Mr. Cornfield has been Acting Branch Chief since May 1963, following the death of Dr. Harold F. Dorn.

His new responsibilities will be chiefly to provide direction, leadership and supervision in the development of new biometrical methods, with potential application to cardiovascular research and to the broader fields of biology, medicine and public health. Biometrics research is the application of statistical and mathematical methods to biological facts.

Mr. Cornfield's other functions will include directing the application of existing biometrical methods to the design and analysis of intramural laboratory experiments, and planning, developing and conducting epidemiological and statistical investigations of cardiovascular and related diseases.

### Other Duties Listed

He also will collaborate with intramural and extramural scientists in conducting and studying results of epidemiological investigations, field studies and clinical trials.

Born in New York City in 1912, Mr. Cornfield received a B.S. degree from New York University in 1933. He was a student at the Graduate Faculty of Political and Social Science at Columbia University in 1933-1934. From 1936 to 1938 he studied at the U.S. Department of Agriculture Graduate School.

Mr. Cornfield joined the Federal Government in 1935 as a Statistical Clerk (GS-2) with the U.S. Bureau of Labor Statistics. He participated in a number of studies for the bureau resulting in several publications and the development of improved statistical techniques.

In 1948 he was named Assistant Chief of the Biometrics Section, National Cancer Institute, where he made further contributions in statistical and mathematical studies related to cancer research.

From 1958 to 1960 he was Professor of Biostatistics at Johns Hopkins University School of Medicine. He joined NHI in 1960 as Assistant Chief of the Biometrics Research Branch.

Mr. Cornfield was Associate Editor of the Journal of the American Statistical Association from 1960 to 1964, and has been a consultant



**Mr. Cornfield**

## TV Ophthalmoscope Technique Explored As Aid in Identifying Stroke Tendencies

Examination of blood vessels in the human eye's retina by means of a television camera, which in turn feeds data to computers, may permit more accurate identification of stroke tendencies in patients, it was recently suggested here.

This was the conclusion of scientists who explored the use of television in eye examinations at a "Television Ophthalmoscopy Workshop" held here February 19 under NINDB sponsorship.

Participants from the electronic industry and various medical research disciplines debated the practicability of developing the TV technique as a research tool for eye examinations, such as measuring pressure of ophthalmic arteries (ophthalmodynamometry), arm-to-retina circulation time, and pulse transmission time (the time lag between heart beat and retinal artery pulsation).

### Provides Great Detail

Current studies by Institute scientists and grantees have shown that the TV ophthalmoscope technique can provide great detail in examining the choroid (the blood vessel network lying behind the retina). The method can also increase the objectivity with which physicians perform certain eye examinations.

Dr. J. Theodore Schwartz, Acting Chief of the Institute's Epidemiology Branch, in moderating the workshop, presented a brief view of some applications of television ophthalmoscopy.

He stated that the objective measurement of certain changes in blood circulation might provide a better method for identifying individuals with unrecognized stroke potential, and suggested that television ophthalmoscopy might offer such objective measurements.

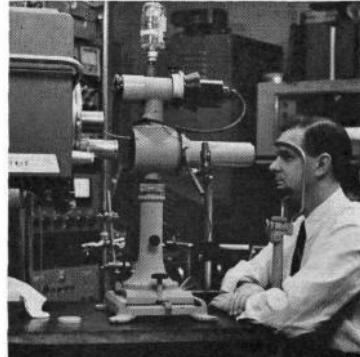
One procedure in particular—ophthalmodynamometry—seems promising. By measuring the blood

pressure of the eye vessels, physicians can detect obstructions in the carotid artery, a common cause of paralytic stroke.

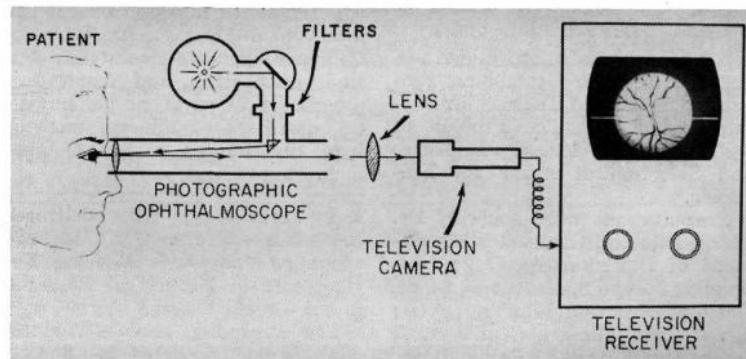
Since the image of the eye's retina is recorded as an electronic video signal in television ophthalmoscopy, this technique would provide an objective recording, and would permit investigators to employ direct computer analysis of the test results.

The video signal can be monitored, stored on tape, or fed directly into computers for automatic analysis.

Members of the workshop concluded that the present level of sophistication in television and computer technology would permit successful development of a practical TV ophthalmoscope.



A modified retinal camera, center, transmits a magnified view of the patient's retina to the television camera, at left. This television ophthalmoscopy system was used by Dr. Murray C. Brown and Willard Whitehouse at NIH to photograph the eye's retina.—Photo by Jerry Hecht.



The photographic ophthalmoscope beams light on the patient's eye and transmits the reflected image of the retina through a television camera to the TV screen. The retina seen on the TV set is a drawing which illustrates the magnification obtained.—Photo courtesy of Albert M. Potts, M.D., Univ. of Chicago, and Seymour S. West, Ph.D., Melpar, Inc.

to many prominent organizations and institutions including the American Cancer Society, the Social Security Administration, and

the Institute for Sex Research. He also has been a faculty member at American, Stanford, Michigan and Columbia universities.

## Yolles Cites Gains In Mental Health Planning by States

Federally supported State mental health planning has resulted not only in the States knowing more about their mental health needs and services but also in knowing more about many of their other resources, according to Dr. Stanley F. Yolles, Director of the National Institute of Mental Health.



**Dr. Yolles**

Speaking at a recent conference for leaders in mental health planning in Washington, D.C., Dr. Yolles said that the \$4.2 million 1963 appropriation for planning grants to the States established the framework for a new planning venture.

"This is a grass roots program," he said, "which will result in each community having the kinds of mental health services it needs, because the men and women who live in that community and who shape its environment and its destiny are making the recommendations and the decisions."

### 16,000 on Committees

Dr. Yolles said that of the estimated 25,000 people participating in the program, analysis shows that about 16,000 are serving on the 800 mental health planning committees now in existence throughout the Nation. And of that number, the large majority are civic-minded residents of the community in which they live.

"The accomplishments to date," he said, "indicate that the people involved in the planning make up a dynamic and yeasty group who have no intention of allowing the complexities of American society to defeat them."

"Nine States now have permanent mental health planning units, and 37 States expect to continue planning beyond the period of Federal financial support, which ends this June."

But the program hasn't finished anything, he pointed out.

"These planning committees are not ad hoc; they must continue, for mental health planning is not a one-shot deal," Dr. Yolles emphasized.

"Although we have now devised a method there are some social and psychological frontiers to conquer and a whole new set of problems to face," he concluded.

Earlier speakers at the 2-day conference included Sen. Lister Hill of Alabama and DHEW Secretary Anthony J. Celebrezze and Assistant Secretary Wilbur J. Cohen.

## SYMPOSIUM

(Continued from Page 1)

tion to overall national policies, and the interrelationships between biomedical and broader research policies.

The symposium was attended only by invited participants. Among these were 32 representatives of foreign countries and international organizations and 60 from the U.S., representing the Executive Offices of the White House, the Budget Bureau, the Departments of State, Defense, and Health, Education, and Welfare, including the Public Health Service and NIH, and several universities.

### Nations Represented

Foreign nations represented at the meeting were Sweden, Australia, Israel, Poland, Germany, Canada, Japan, Italy, England, France, Nigeria, Brazil, Pakistan, India, Switzerland, Belgium, and the U.A.R.

Invited guests were welcomed at a dinner meeting February 28 by Dr. Luther L. Terry, Surgeon General of the Public Health Service.

Dr. Charles W. Williams, Chief of OIR, presented symposium objectives to the assembled scientists,



**Dr. Kidd**



**Dr. MacLeod**

and symposium plans were discussed by Dr. Charles V. Kidd, former NIH Associate Director for International Activities and OIR Chief, now Executive Secretary of the Federal Council for Science and Technology, who acted as General Chairman of the symposium.

The first session on Monday, March 1, moderated by Dr. John T. Wilson, Deputy Director, National Science Foundation, dealt with "National Structures for Biomedical Research." Dr. Bror Rexed, Director, Anatomical Institute, University of Uppsala, Sweden, presented a background paper on "National Institutional Patterns for Biomedical Research."

Presentations on science policy structures in their countries were prepared for delivery by Dr. Sydney Sunderland, Dean, Faculty of Medicine, University of Melbourne, Australia; Dr. Moshe Prywes, Associate Dean, The Hebrew University Hadassah Medical School, Jerusalem, Israel; and Dr. Wladzimierz Kurylowicz, Chairman, Scientific Council, Ministry of Health and Social Welfare, Warsaw, Poland.

Dr. Robert P. Grant, Assistant



Construction of this addition to Building 29 (Division of Biologics Standards) is due to start March 15 and is scheduled for completion by December 1967, according to the Division of Research Services. It will be located just west of Building 29. Since the roadway west of Building 29 will be blocked as construction progresses, motorists will have to use Service Road West for access to parking lots in back of Building 29. DRS and the Plant Safety Branch will cooperate to facilitate the flow of traffic in this area.

Chief of the NIH European Office in Paris, offered the commentary. Open floor discussions were held at the end of each session.

The subject discussed at the afternoon session was "The Process of Allocation of National Resources Between Biomedical Research and Other National Goals." David Beckler, Assistant to the Director, U.S. Office of Science and Technology, was the moderator.

Principal speakers were Dr. Alvin Weinberg, Director, Oakridge National Laboratory, Tenn.; Dr. Joseph Auer, Secretary, Medical Research Council, Ottawa, Canada; Dr. Tomizawa Yoshida, Professor Emeritus, University of Tokyo, Japan; and Prof. Rene Fauvert, Faculty of Medicine, University of Paris, France.

Dr. Stevan Dedijer, Institute of Theoretical Physics, University of Lund, Sweden, provided the commentary.

### Sherman Is Moderator

Dr. John F. Sherman, NIH Associate Director for Extramural Programs, moderated Tuesday's morning session on "The Process of Determining National Priorities and Selection of Areas for Emphasis."

Presentations were made by Dr. Philip Handler, Chairman, Department of Biochemistry, Duke University; Joseph S. Murtaugh, Chief, Office of Program Planning, NIH; Dr. Alberto Parenti, Centro Studi Investimenti Sociali, Rome, Italy; and Sir Harry Melville, Secretary, Department of Scientific and Industrial Research, London.

Dr. Alexander King, Director for Scientific Affairs, Organization for Economic Cooperation and Development, Paris, commented.

Following a reception and dinner Tuesday evening, Dr. Sherman introduced Dr. Colin MacLeod, Deputy Director, U.S. Office of Science

### Dr. Whedon Appointed To Scientific Council Of Maryland Academy

Dr. G. Donald Whedon, Director of the National Institute of Arthritis and Metabolic Diseases, has been appointed to a 4-year term on the Scientific Council of the Maryland Academy of Sciences.

The appointments of Dr. Whedon and five other leading Maryland scientists to the scientific advisory board were announced recently by Allan C. Davis, Chairman of the Academy Board of Trustees.

During their 4-year terms the new members of the Scientific Council will advise the academy on scientific activities, particularly as to their scientific soundness, their relative importance, and their relation to the work of other organizations and institutions.

Dr. Whedon's medical research experience and interests include the metabolic and physiological aspects of convalescence and immobilization, metabolism and respiratory physiology in paralytic poliomyelitis, disorders of mineral metabolism, and human energy metabolism.

and Technology, who delivered the main address. Dr. MacLeod spoke on "Forces Influencing Development of Biomedical Research in the United States."

The concluding session Wednesday, March 3, devoted to "Special Problems of Biomedical Research Policy in Developing Countries," was moderated by Dr. James Watt, Director, Office of International Health, PHS.

Principal speakers at this session were Dr. J. C. Edozien, Dean, Faculty of Medicine, University of Ibadan, Nigeria; Brigadier M. S. Haque, Director General of Health, Ministry of Health, Labor and So-

## William Finks Is Named Grants Mgm't Officer For NIGMS Branch

Appointment of William R. Finks as Grants Management Officer for the Research Training Grants Branch, National Institute of General Medical Sciences, was announced last week by Dr. Frederick L. Stone, Institute Director.

In this newly created position Mr. Finks will be responsible for management evaluation and will serve as advisor to the program administrator of the 10 scientific offices in the Branch on financial and policy interpretation and changes as applicable to Institute research training grant programs. He will also direct the Grants Operations Section and the Trainee Management Unit.

### Basic Training Supported

The Research Training Grants Branch supports pre- and postdoctoral training in basic or fundamental biological and related sciences at non-profit institutions and universities all over the country.

Mr. Finks came to NIGMS from the Division of Research Facilities and Resources, where he served for the past 2½ years as Chief of the Grants Management Section, General Clinical Research Centers Branch.

Prior to joining NIH in July 1962, Mr. Finks was Executive Officer and Financial Officer for the World Federation of Neurology for over two years, with headquarters in Antwerp, Belgium. This was preceded by one year as Assistant to the Scientific Director of the Muscular Dystrophy Association of America. He later served there for a short time as Head of the Scientific Department.

### 22 Years in Military

Mr. Finks ended a military career of more than 22 years in the U.S. Army Medical Service Corps when he retired in 1957 as Lieutenant Colonel. During that time he held a variety of administrative and management assignments, most recently that of Senior Advisor to Army Reserve medical units in the State of New York.

cial Welfare, Pakistan; Dr. Ernani Braga, Executive Director, Federacao Pan-Americana de Associacoes de Faculdades de Medicina, Rio de Janeiro, Brazil; Dr. B. L. Taneja, Director, Indian Council of Medical Research, New Delhi, India; Dr. Simon Btesh, Director, Research Planning and Coordination, World Health Organization, Geneva, Switzerland; and Prof. A. Matveyev, Assistant Director General for Science, UNESCO, Paris.

Dr. Anthony M.-M. Payne, Chairman, Department of Epidemiology and Public Health, Yale University, provided the commentary.

## FAO, ICNND to Publish Food Composition Table For African Countries

The Interdepartmental Committee on Nutrition for National Development, in the Office of International Research, NIH, is preparing a food composition table for Africa,

in cooperation with the Food and Agriculture Organization of the United Nations.

The project also is supported by the Advanced Research Projects Agency of the Department of Defense.

**Dr. Leung** Dr. Woot-Tsuen Wu Leung, specialist on food composition, has the major responsibility for preparation of the table. She is currently on loan to the ICNND from the Department of Agriculture.

### Maynard Heads Project

Dr. L. A. Maynard, consultant to the ICNND and former Director of the Graduate School of Nutrition at Cornell University, is project leader for ICNND in this study.

Dr. Leung and Dr. Maynard visited FAO headquarters in Rome last June, where they reviewed and planned the collaborative project with officials and staff members of the Nutrition Division of FAO.

They are working in close collaboration with Dr. M. Autret, Director of the Nutrition Division, and Dr. K. K. P. N. Rao, Chief of the Food Consumption and Planning Branch.

Since Great Britain and France have made studies on African food composition, Dr. Leung conferred in November and December with British authorities on data available at the London School of Hygiene and Tropical Medicine, the National Institute for Medical Research, and various British laboratories.

### Gets Data in France

She also collected data on African foods from French authorities at the Laboratoires de Recherche du Service de Santé des Troupes de Marine at Marseilles, France.

Dr. Leung is scheduled to leave for Africa this summer to compile additional data on the nutritive value of African foods.

The food composition table will be published in English and French.

A similar cooperative study was completed in 1961 by the Institute of Nutrition of Central America and Panama and the ICNND. Data on over 700 different foods of South and Central American origin were compiled by Dr. Leung for the INCAP-ICNND Food Composition Tables for Use in Latin America.

The 145-page text was published

## Management Intern Program Helps Build Effective Administrative Staff at NIH

To maintain its complex programs of world-wide biomedical research, NIH requires a first-rate administrative staff to support its scientists.

To build such a staff for the future, the Management Intern Program was established in 1956 and has since come to be recognized throughout the Government for its excellence.

It is an entrance-level training program designed to produce a continuing supply of highly qualified, well trained administrative personnel with NIH-wide perspective.

### Program Accommodates 20

The program, directed by the NIH Administrative Training Committee, can accommodate up to 20 candidates each year. Recruitment is on a continuing basis so that a candidate may begin the program at any time during the year.

Candidates must have passed the Federal Service Entrance Examination and may or may not have taken the CSC Management Intern Examination. All candidates, however, must meet the high standards

set for abilities and potential established by the CSC examination for management interns.

Each NIH intern receives a year of training which consists of assignments in four administrative areas such as financial management, personnel, supply management, and office services, and one general administrative assignment in the office of an administrative officer.

### Interns Take Courses

The interns are encouraged to supplement this working experience by enrolling in graduate courses in political science or public administration given by the Civil Service Commission and nearby universities.

Graduates of the Intern Program are qualified for positions which may lead eventually to key administrative posts.

Currently 11 university graduates, averaging 26 years of age, are participating in the program. At the present time there are more than 40 former interns in responsible administrative positions throughout NIH.



Participants now enrolled in the NIH Management Intern Program include (front row, from left) Phillip Fry, Rhoda Abrams, Martha Briggs, Gerard Launais, and Thomas Brown. In back row are Terrence Sauvain, Nicholas Moriarty, Leroy Goldman, Peter Hendrickson, and Everett Bowden. The eleventh member of the group, not present for the photograph, is Richard Shine.

in both English and Spanish editions and, to date, about 13,000 copies have been distributed. It is being used extensively by nutrition workers in all of the countries of Latin America and by the personnel being sent abroad by U.S. governmental agencies—the Armed Forces, the Agency for International Development, the Foreign Agricultural Service, Food for Peace, the Peace Corps—and various private institutions, including their exchange educators.

The NIH Graduate School Program began on September 27, 1954.

## Dr. Chanock Discusses Mycoplasma Studies at NIAID Grand Rounds

Current information on the PPLO's (Mycoplasmas) which infect man was presented by Dr. Robert M. Chanock, Chief of the Respiratory Virus Unit of the Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, at the Institute's Grand Rounds on February 24.

**Dr. Chanock** Mycoplasma strains recovered from humans, only one, *M. pneumoniae*, has been shown conclusively to be a significant cause of disease in man.

It is probable, he said, that another strain, *M. hominis* type 1, contributes to respiratory and urogenital tract disease, but findings to date are inconclusive.

### Pathogenicity Undetermined

The pathogenicity of these Mycoplasmas—*M. hominis* type 2, *M. orale* types 1 and 2, *M. fermentans*, "T" strains—is as yet undetermined, he said, and *M. salivarium*, an organism ubiquitously present in the oropharynx of man, appears to be innocuous.

*M. pneumoniae* shows a marked predilection for persons in the 10-30 year age group, Dr. Chanock noted. This agent is responsible for lower respiratory infection the year round, he said, but its prevalence fluctuates widely from year to year.

In a military recruit population under study, *M. pneumoniae* was causally related to 67 percent of all pneumonias in 1959, 7 percent in 1963, 17 percent in 1964. Infection with this agent, though rarely fatal, is extremely debilitating, Dr. Chanock pointed out.

### Factors Complicate Study

Studies to identify, characterize and determine the pathogenic potential of the Mycoplasmas (the smallest free-living organisms known) are complicated by several factors, Dr. Chanock said.

These agents occur adventitiously *in vivo*, and frequently contaminate tissue culture systems. Some strains grow best in an aerobic environment; others thrive in either aerobic or anaerobic conditions, he said.

Dr. Chanock concluded with a discussion of methods employed in Mycoplasma studies. He stated that a newly developed procedure, the growth inhibition test, has proved very successful and offers great promise in future studies of these elusive organisms.

## Charlie Chaplin Films Next in R&W Series

A group of Charlie Chaplin comedies made in 1915—"The Tramp," "A Woman," "Police," and "The Bank"—will be shown this weekend by the Recreation and Welfare Association of NIH as part of its film classics series.

Movie time is 8 p.m. in the Clinical Center auditorium on Saturday and Sunday, March 13 and 14. NIH employees and guests are cordially invited to attend.

## PERINATAL

(Continued from Page 1)

did she have prior to and during pregnancy? What drugs did she receive and when? What was the method of delivery? How much did the infant weigh and what was its period of gestation?

Also: How did the newborn child rate as to muscle tone, reflexes, heart rate, respiration, skin color? What were the results of speech, hearing, psychological and neurological tests given later in childhood?

Project investigators aided by modern computers are beginning to analyze the meanings of facts being recorded on more than 8 million punch cards. While most of the children are not yet two years of age and may eventually be followed until at least 12, preliminary study of data has indicated, for example, that:

### Preliminary Indications

- Mothers who smoke have a higher percentage of lighter weight (under 5½ pounds) infants than do mothers who don't smoke.

- "Premature" mothers, 15 years of age or under, bear a higher percentage of babies with abnormalities than do more mature women.

- Older-age mothers—those over 40—also have a higher risk of giving birth to infants with neurological or psychological abnormalities.

- General anesthesia of the mother during Cesarean delivery appears to be related to poorer responses at birth of some Cesarean newborn.

- Breech delivery (observed in three percent of Study pregnancies) is frequently associated with older age of the mother or other factors which seem to predispose to this traumatic manner of birth.

- Incompetent cervix, a condition in which the infant may be released too soon from the mother's womb, remains a major high-risk factor in neurological damage and infant deaths.

- Loose loops of umbilical cord, as well as loops tight around the fetus, are associated with a higher percentage of abnormal babies.

### Virus May Persist

- The virus of German measles (rubella), acquired by the unborn child (fetus) from the mother, may persist in the fetus for a longer period of time than had been suspected. The virus is not necessarily prevented from doing damage to the fetus during the early months of pregnancy by antibodies circulating in the mother's blood.

When registration of patients ceases and the last of the study children is born in the summer of 1966, the work of testing the children at intervals, correlating data, analyzing the meanings of the findings, and publishing medical reports will only have begun.

## AF Band, Called 'Goodwill Ambassador,' Entertains Clinical Center Patients

"They are doing more good with their playing and courteous manner than could be done by a bundle of propaganda pamphlets or well-sounding words."

Thus editorialized a Berchtesgaden newspaper about the United States Air Force Band, which performed at the Clinical Center auditorium on Thursday, March 11, before CC patients, NIH personnel, their families and friends.

The CC Patient Activities Section staff took pride in presenting this "goodwill ambassador." Since its organization in 1942, the band has made an unprecedented 10 international tours in which 47 countries have been visited on five continents.

Somewhat always finding time to

stop off at the Clinical Center, the Air Force Band has the distinction of being the world's most traveled musical organization and has flown in excess of 6,000 hours, covering more than 1.5 million miles.

More importantly, the band has played in person to 25 million people from every walk of life, and of every creed, race, and political ideology.

### Develops Understanding

Because it has given them a first-hand insight into American culture, it is credited with having helped create a better understanding among the peoples of the world.

From Beirut to Bangkok, and from Bodo to Montevideo, the Air Force Band's tours have won a popular, official and critical acclaim.

Undoubtedly the NIH community will agree with an editorial observation of Bremerhaven's "Wesermuender Rundschau" that "it was a fortunate idea to make a musical organization the ambassador of a nation."

## Medicine-History Group Holds Meeting at NIH

The Washington Society for the History of Medicine met here Wednesday, March 10, at 8 p.m. in Wilson Hall on the third floor of Building 1.

The first American book to contain a passage on tobacco, Hernandez' Quattro Libros, was discussed by Dr. Peter Krivatsy of the History of Medicine Division, National Library of Medicine.

Dr. Harold D. Langley, Associate Professor of History at Catholic University, spoke on Professionalism and Protest: Medicine in the U. S. Navy, 1798-1860.

Visitors are welcome to attend meetings of the society.



In the nursery of a University of Minnesota hospital, one of the infants participating in the NINDB Collaborative Perinatal Study is tested for muscle tone of neck and shoulders. Results of tests such as this may provide clues to birth processes that lead to birth defects in some infants.—U. of Minnesota photos.

## Tula Brocard Appointed As Information Officer Of Dental Institute

Dr. Francis A. Arnold Jr., Director of the National Institute of Dental Research, recently announced the appointment of Tula S. Brocard as Information Officer of the Institute.

Mrs. Brocard replaces Mrs. Lillian A. Gluckman who transferred to the Bureau of State Services, PHS, as Information Officer for the Division of Dental Public Health and Resources. Mrs. Brocard joined the Public Health Service in 1947 and has since served primarily as Information Officer for the Division of Occupational Health, BSS.

### Begins Career in OPA

Mrs. Brocard began her public information career in 1944 as an information aide in the Office of Price Administration, Chicago, later serving as Radio Information Officer for the 7-state Midwest region and then as Field Officer, responsible for the evaluation of all regional information activities. She was transferred to the Washington, D.C. office of OPA in 1946, where she served for a year.

A native of Chicago, Mrs. Brocard majored in journalism at Northwestern University.

### Honors Cited

She has been specially honored for outstanding performance in connection with her public relations work for national professional conferences and for the commemoration of the 50th anniversary of the Division of Occupational Health.

Mrs. Brocard is a member of the Public Relations Society of America and the International Union for Health Education. She resides with her husband and two children in Rockville, Md.

nervous influence and the effect of digitalis was demonstrated. When normal neural pathways were intact, the direct effect of digitalis on the heart was masked through nervous influences."

Until this research, many scientists believed there was something different about the failing heart that allowed digitalis to work—and that it had no effect on the normal heart.

The \$1,000 award is given each year to one of 10 finalists selected from across the Nation. Each of the 10 finalists presents his paper before the American College of Cardiology. Scattered in the audience is a committee to pick the winner.



**Mrs. Brocard**

## R&W Hamsters Present 'Anything Goes' Apr. 28

For those at NIH who won't be able to take a cruise this Spring the R&W Hamsters are offering a substitute in the form of their annual spring musical. This year's show will be the ocean-going musical comedy "Anything Goes," written by Guy Bolton and P. G. Wodehouse with music by Cole Porter.

"It's full steam ahead," according to Pierre LaMarre, Director, who put the show into rehearsal on March 1. The "liner" will sail for Europe April 28 and arrive at its final performance on May 2 and, in between, it's "Anything Goes" in the Clinical Center auditorium.

In addition to Mr. LaMarre who will head the production of this year's Hamster extravaganza, others doing their part backstage include:

### Production Staff Listed

Jim Teets, Assistant to the Director; Gerald (Jerry) Atchison (NICHHD) and Brinson Conerly (NIMH), Co-Producers; Luis Garcia, Choreographer; Fred Woolston, Musical Director; Diane Smith (NINDB), Choral Director; Harold Miles (CC), Stage Manager; and Don Hamilton (CC), Assistant Stage Manager. Dan Rogers (NICHHD) is coordinator of publicity for the show.

NIH personnel interested in working on the production end of "Anything Goes" are still needed for stage crew, make-up, costumes, lighting, and publicity. Those interested in working in these areas should contact either Gerald Atchison, Ext. 64124, or Brinson Conerly, Ext. 63528, for further information.

Cast selections for "Anything Goes" will be announced shortly.

## DRS Offers Courses In Computer Training For NIH Researchers

The Division of Research Services' Computation and Data Processing Branch (CDPB) is now offering its 2-week computer training course for the 19th time and has tentatively scheduled another course for May 3.

The course, open to all research people at NIH, draws students from every area of medical research activity. Those interested in enrolling in the next course may contact Marvin B. Shapiro on Ext. 66244.

### Brushup Course Scheduled

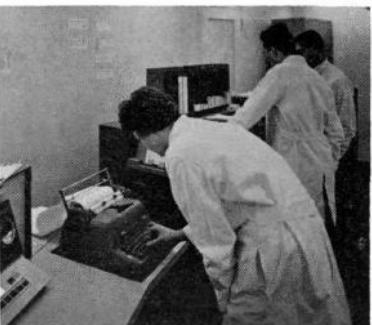
A week-long brushup course for those who have already completed the 2-week training will begin April 5.

In the course, which began Mar. 8, the students are taught fundamentals of digital computers and the use of a computer language called FORTRAN (F or mula Translation). It is a super language which can be interpreted and used by many different computers. Class homework includes writing short programs and running them on the training computer, an IBM 1620.

### Students Operate Computer

The students use a keypunch to prepare their FORTRAN instructions and data for input into the computer. They then follow a series of instructions for manually operating the machine. Finally, if no errors have been made, the correct answers are typed out on an electric typewriter attached to the computer.

Class problems are oriented to-



Rita Minker, instructor of the DRS Computation and Data Processing Branch's computer training course (left), hands out a homework assignment in classroom to students taking the course. In picture at right a participant inserts simple instructions into the IBM 1620 computer used solely for training.—Photos by Jerry Hecht.

ward the type encountered in research, such as evaluating formulas, tabulating epidemiological types of data, and fitting mathematical functions to experimental data. A problem of increasing complexity is assigned each day.

In addition to teaching a programming language, the purpose of the course is to give researchers a better idea of the types of problems suitable for computer solution and their relative difficulty.

### Communication Improved

The course has also served to improve communication between the scientists and the staff of the Computation and Data Processing Branch.

NIH formally established its first central computing facility in 1954. To support the broad range of research being conducted by the various Institutes, NIH maintains and operates two Honeywell 800 general purpose computers, one Honeywell 200, used in conjunction with the two larger ones, and an IBM 1620, used solely in the training course.

## NIAID Scientists Find Six New Rhinoviruses

In studies by scientists from the National Institute of Allergy and Infectious Diseases here and at Camp Lejeune, N. C., six new rhinoviruses were recovered from patients with mild upper respiratory tract disease.

Of these six strains, one strain, designated 58750, occurred frequently enough, and in widely separated geographic areas, to suggest that it may be one of the more common rhinoviruses.

### Infection Ratio Low

The scientists emphasize, however, that even the most commonly occurring rhinovirus serotype accounts for only a small proportion of all rhinovirus infections.

Rhinoviruses have been estimated to cause about 20 percent of upper respiratory illness. At present there is little information on the importance of individual serotypes in the production of minor respiratory illness.

Since rhinovirus 58750 was recovered more often from patients with respiratory illness than from control patients, the study suggested that this strain is associated with the illness.

### Characteristics Noted

Each of the six viruses met the biophysical characteristics of a rhinovirus and was shown to be antigenically distinct by neutralization tests and unrelated to 17 previously characterized rhinoviruses and 63 prototype enteroviruses. None of the rhinoviruses was pathogenic for suckling mice, nor did they hemagglutinate human, rat, or rhesus monkey erythrocytes.

The six rhinoviruses have been designated as 209, 1794, 56110, 56822, 58750, and 71560.

This investigation was reported in the American Journal of Epidemiology by M. A. Mufson, H. D. James Jr., L. W. Gauld, H. H. Bloom, and R. M. Chanock of NIAID, and R. Kawana, Department of Bacteriology, Iwate Medical College, Morioka, Japan.



Westinghouse Science Talent Search finalists and several NIH staff are pictured here February 26. Among the 18 who visited NIH to talk with leaders in their fields of interest (known as "Prime Time" reward), were two top winners, James A. Strauchen (front row, far right) and Helen Anita Greer (front row, third from right), both from New York. James, 16, who won a \$4,000 scholarship, explored on-going work here in hematology and blood diseases. Helen, also 16, who won a \$3,000 scholarship, got a close-up on microbiology studies. "Prime Time" is arranged here by CC Special Events staff and Science Service of Washington, D. C., which coordinates the competition for Science Clubs of America. The scholarship awards rounded out a 5-day all-expenses-paid Science Talent Institute in Washington for the 40 finalists, chosen from 2,900 qualified entrants.—Photo by Jerry Hecht.

## NIH Employees Organize New Group on Housing

Dr. Michael Mage, newly elected Chairman of the Housing Opportunities Group, has submitted the following notice for publication in the NIH Record:

"A new organization, the Housing Opportunities Group, has been formed by a group of NIH employees from the Clinical Center and seven of the Institutes. The purpose of the group is:

"To inform NIH employees of the opportunity to sell their homes on an open-occupancy basis, and to keep NIH employees accurately informed of available fair-housing opportunities."

Dr. Mage added that employees wishing to find or sell a home on an open-occupancy basis, or who wish to join the group, can obtain further information by phoning him, Ext. 65760; Lawrence D. Burke, Ext. 62170, or Dr. Harvey Mudd, Ext. 63528.

## Dr. Weiner Lectures on Blood Group Factors, Mode of Inheritance

Dr. Alexander S. Wiener, world authority on the genetics of blood groups, in a lecture at NIH on February 26 pointed out that the basic ideas in blood group investigations haven't changed a great deal but have crystallized and been refined over the years.

A member of the Department of Forensic Medicine, New York University School of Medicine, and of the Serological Laboratory of the Office of the Chief Medical Examiner of New York City, Dr. Wiener spoke on the subject of blood group factors, human and primate, and the mode of inheritance.

### Lecture Jointly Sponsored

His lecture was one of a series sponsored by the National Institute of General Medical Sciences and the Division of Research Facilities and Resources.

Dr. Wiener diagrammed two theories of the inheritance of blood groups. The simplest indicates that one gene produces one agglutinogen (antigen) on the surface of a red blood cell, which may be detected by one antibody.

This simple theory is still useful, depending on the vantage point from which it is viewed. It can be considered to be true to the same extent that in some situations the world appears flat, Dr. Wiener stated.

The more complex theory is that several genes produce one product or agglutinogen (antigen) which may be detected by multiple antibodies, and sometimes that one gene produces several antigens.

### Differences Emphasized

Dr. Wiener emphasized that in blood group studies, it is important to keep in mind the differences between intrinsic and extrinsic attributes. The intrinsic attribute is unchangeable, but the extrinsic attribute depends upon the presence of a system to test the particular attribute.

Here Dr. Wiener used an analogy of a photograph. A photograph, he said, is a record, but it is not the thing which is photographed. Antibodies are the testors or detectors or photographs, and thus are extrinsic.

The agglutinogens (antigens) are expressions of genes or of groups of genes, and it is the gene which is the intrinsic attribute of the humans or animals being studied.

A great deal of work has been done with chimpanzees because they are closer to humans than any of the other primates. The primates can also be typed by their saliva and urine, as well as blood.

During a question period, Dr.



**Thirst for good reading material is a chronic symptom of virtually every hospital patient. Satisfying that thirst exemplifies the many day-in-day-out services volunteered by the Red Cross Gray Ladies at the Clinical Center. They contact each new patient on arrival to record reading preferences; distribute 540 magazines each month; visit 19 wards each week with the book cart; and now even contact embassies to provide reading for patients from abroad. Here, representing the 10 Gray Ladies, each of whom gives one day a week to assist the Patient Library staff, Katherine Lewis (left) and Annabelle Hoge prepare for their daily rounds with the book cart.—Photo by Ralph Fernandez.**

## NEW SCALE

(Continued from Page 1)

ance and manner," "affect and mood," and "content of thought and thought processes."

Within each of 16 subdivisions, the subject is numerically rated—zero represents normality; larger numbers, whether negative or positive, represent increasing degrees of psychopathology (negative numbers connote hypo-normality; positive, hyper-normality).

Various tests have provided significant evidence for the validity and reliability of the scale.

There are a variety of uses for the scores obtained from the RP Scale. Most meaningful is the quantitative degree of psychosis, to compare patient to patient, and to compare different conditions of the same patient over time.

Besides using the scale during an interview, the psychiatrist can also score it from other sources, such as past history or reports of ward personnel.

It has also proved useful in quantifying data from experiments in which psychotomimetic drugs were administered to normal subjects.

The scale was described in Archives of General Psychiatry by its developers, Dr. William Pollin, Adult Psychiatry Branch, NIMH, and Dr. Lawrence Rockland, Georgetown University School of Medicine.

Wiener said that in his opinion the greatest lack in this field is knowledge basic and indispensable for successful organ transplants.

Now that there are primate centers available for research purposes, he believes investigations using the chimpanzee are the best future hope for accelerating knowledge to make transplantation increasingly effective.

## Gallon Club of Donors Gets 2 New Members

Two biological technicians recently became the first 1965 recipients of the Full Gallon NIH Blood Donor pin. The distinctive gold emblem is awarded by the Clinical Center Blood Bank to NIH employees in recognition of their faithful and continuous support of the blood donor program.

The most recent gallon donors are Donald L. Barber of the Endocrinology Branch, National Cancer Institute, and J. Sherman Mason, Jr., of the Laboratory of Experimental Pathology, National Institute of Arthritis and Metabolic Diseases.

Long-time contributors to the blood bank, Mr. Barber and Mr. Mason bring to a total of 30 the number of donors who have reached the full-gallon mark in helping patients at the Clinical Center.

## BRAIN TUMORS

(Continued from Page 1)

the head, paralysis of the hind limbs, general paralysis, and death followed progressively. Neither symptoms nor tumors developed in control hamsters inoculated without virus.

At autopsy, the brain tissue of the Schmidt-Ruppin inoculated animals was softer and more friable than normal and contained an increased volume of fluid.

Microscopic examination showed the presence of multiple, diffuse tumors deep within both halves of the cerebrum, only rarely involving the membranes that envelop and line the brain.

The tumors were composed of the branched cells and fibrillar strands of the neuroglia, the supporting tissue of the nervous system, leading to a diagnosis of glioma.

## PHS Issues Publications On FY '64 Grants for Research and Training

Two new PHS publications were prepared recently by the Data Processing Section, Statistics Analysis Branch, DRG, tabulating research and training grants awarded in Fiscal Year 1964.

Part I of Public Health Service Grants and Awards, Fiscal Year 1964 Funds, provides details on the nature, distribution, and individual amounts of 16,320 PHS research grants awarded during the year.

The funds total \$528,980,763 compared with a total of \$449,681,185 for 15,939 grants awarded during the previous fiscal year. Grants in FY 1964 were made to 1,241 institutions in the United States and 382 in 49 other countries.

Part II gives a detailed accounting, by State and institution, of the \$239,755,551 awarded in training grants, research fellowships, traineeships, and research career awards for advanced training in the medical and biological sciences.

### Latest in Series

These two publications are the latest ones issued in a series of five covering the various forms of financial assistance available from PHS.

Part IV, published earlier, contains a complete listing of formula and special project grants for health services.

Part III, listing grants for construction of research, hospital and related health facilities, and Part V, which summarizes the contents of the first four parts, will be published later.

Copies of the new booklets, Publication No. 1223, Parts I and II, may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20401, for \$1.50 and \$1.25, respectively.

A limited supply of free copies is available upon request from the Information Office, Division of Research Grants, Bethesda, Md. 20014.

The gliomas observed in these experiments differed from other virus-induced brain tumors. Polyoma virus-induced tumors are of mesenchymal origin, arise from the membranes covering the brain, and are localized at their surfaces.

SV-40-induced tumors involve the ependyma, the membrane which lines the brain cavities. The Bryan strain of RSV, which does not cross species lines to induce tumors in mammals, causes a tumor of the meningeal tissue in the chicken brain.

Dr. Giancarlo F. Rabotti and Wirtley A. Raine, of NCI's Laboratory of Viral Carcinogenesis, reported the study in *Nature*.