

the



Record

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

June 1, 1977
Vol. XXIX, No. 11

NATIONAL INSTITUTES OF HEALTH

Dr. Fratantoni Appointed Branch Chief in NHLBI Blood Diseases Division



Dr. Fratantoni came to NIH in 1972 as a senior staff physician with the Clinical Center Hematology Service. In 1974, he joined the NHLBI Division of Blood Diseases and Resources, becoming chief of that Division's Blood Diseases Branch.

Dr. Joseph C. Fratantoni has been appointed chief of the Blood Resources and Transplantation Branch in the National Heart, Lung, and Blood Institute's Division of Blood Diseases and Resources.

Duties Described

Dr. Fratantoni will plan and manage research grant and contract programs concerned with:

- improvement of technology relating to the acquisition, processing, storage, and distribution of whole blood and blood products to eliminate waste and minimize losses.

- increasing the safety of blood, plasma, or component therapy through development and evaluation of better methods of detecting or eliminating hepatitis virus or other contaminants.

- continued support of research on immunological and related problems limiting clinical use of organ and tissue transplants, and the development of improved methods of organ and tissue storage.

Background Noted

Dr. Fratantoni received his B.S. degree from Fordham University in 1959, his M.S. from Harvard

(See FRATANTONI, Page 7)

Task Force Recommends Compensation for Injury To Research Subjects

The final report of the HEW Secretary's Task Force on the Compensation of Injured Research Subjects has recently been released.

Commissioned in September 1974, the Task Force chaired by Dr. Seymour Perry, special assistant to the NIH Director, met 24 times during its existence. From these discussions the following recommendations (in summary) were made.

- Subjects injured in the course of HEW-sponsored research should be compensated.

- Compensation should be commensurate with the extent of the injury.

- Further, subjects participating in intramural research should receive compensation as provided by the Federal Employees Compen-

(See COMPENSATION, Page 7)

Grantees in California Splice Rat DNA From Insulin-Producing Cells Into Bacteria

Scientists at the University of California San Francisco have isolated DNA (the basic chemical of heredity) containing the rat gene for insulin. They have successfully put this gene into bacteria and copied it there in large quantities—one goal of the new recombinant DNA technology.

The research represents a collaboration between the laboratories of Drs. Howard M. Goodman and William Rutter in the UCSF department of biochemistry and biophysics.

NIH Supports Research

The work—partially supported by the National Cancer Institute and the National Institute of General Medical Sciences—was performed by Dr. Alex Ullrich, Dr. John Shine, Dr. John Chirgwin, Dr. Raymond Pictet, and Edmund Tischer.

Their findings will be reported in the journal, *Science*.

Although the UCSF research involved genes from rats, the group

explained that very similar techniques could be used to produce bacteria containing copies of the gene for human insulin.

It may soon become possible to grow insulin-producing bacteria in large quantities. Such bacteria could become a very important source of the life-saving hormone.

This work will make possible for the first time many kinds of experiments with insulin, the group declared. Insulin goes through many stages when it is manufactured by a cell in the pancreas: it begins as a longer protein, part of which is clipped off by enzymes to leave the final product.

By examining the insulin gene, the UCSF researchers have deduced the exact chemical composition of the original insulin protein in rats, including parts of the protein whose chemical structure had never before been determined.

The UCSF scientists have also studied "unexpressed" parts of the insulin gene—parts of the genetic material that do not directly code for the protein, but that are thought to play a role in the translation by DNA of substances into insulin.

Analyze Genes

This is the first time that unexpressed regions of the insulin gene have been analyzed accurately. The isolation of this part of the gene is a step toward the study of other unexpressed DNA sequences, especially sequences found on either side of the insulin gene within the chromosome.

These regions may contain genetic instructions that tell different cells when to start and stop making insulin, and whether or not to make the hormone at all.

The study of these DNA sequences may yield clues to some varieties of diabetes, in which insulin-producing cells in the pancreas do not function correctly.

Finally, and most importantly,

(See INSULIN DNA Page 5)

Drs. Adams and Rowberry Take NMAC Posts



Dr. Adams (l) discusses with Dr. Rowberry (r) the various audiovisual aids and workshops Dr. Adams has designed for instructional material development at NMAC in Atlanta. Dr. Rowberry, whose background is in dental education, will be continuing many of these functions as the new branch chief.

Dr. Myron J. Adams, Jr., has been appointed deputy director of the National Library of Medicine's National Medical Audiovisual Center in Atlanta, Ga. Dr. Stewart H. Rowberry will succeed Dr. Adams as chief of the Center's Materials Development Branch.

Dr. Adams has been associated with NMAC since 1971. A graduate of Harvard University in 1962, he received his M.D. from Vanderbilt University's School of Medicine

in 1966.

Dr. Adams became interested in teaching aspects of medical educa-

(See AUDIOVISUAL, Page 4)

the NIH Record

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health, Education, and Welfare, and circulated by request to interested writers and to investigators in the field of biomedical and related research. The content is reprintable without permission. Pictures are available on request.

The NIH Record reserves the right to make corrections, changes, or deletions in submitted copy in conformity with the policies of the paper and the Department of Health, Education, and Welfare.

NIH Record Office Bldg. 31, Rm. 2B-03. Phone 49-62125

Editor Frances W. Davis

Associate Editor Fay Leviero

Associate Editor Heather Banks

Staff Correspondents

ADA, Judy Fouche; CC, Susan Gerhold; DCRT, Frances Sarles; DRG, Sue Meadows; DRR, Jerry Gordon; DRS, Arthur F. Moore; FIC; George Presson; NCI, Dr. Robert M. Hadsell; NEI, Julian Morris; NHLBI, Bill Sanders; NIA, Ann Shalowitz; NIAID, Jeanne Winnick; NIAMDD, Pat Sheridan; NICHD, Tina McIntosh; NIDR, Sue Hannon; NIEHS, Elizabeth Y. James; NIGMS, Wanda Wardell; NIMH, Betty Zubovic; NINCDs, Jeannette Belliveau; NLM, Roger L. Gilkeson.

NIH Writers and Publications Win Awards of Local AMWA

Among those receiving honors May 26 in the annual competition of the Mid-Atlantic Chapter of the American Medical Writers Association were:

- Maya Pines, free-lance writer, for the booklet *The New Human Genetics*, published by NIGMS;

- Jane Collins, NIH, for a series of articles published in the *Journal of the American Medical Association*;

- Dr. Richard M. Krause, Director of NIAID, and Angela Martin, for the article "What You Should Know About Sexually Transmitted Ills," published in *Pharmacy Times*.

For the book, *Heartbeat: The Politics of Research*, free-lancer Natalie Davis Spingarn also received recognition.

Seven others also won awards.



Sylvia M. Bailey (l) receives a 30-year certificate from Dr. Robert Martin, chief of NIAMDD's Section on Microbial Genetics, while her daughter beams with pride. Mrs. Bailey, a laboratory technician, retired last month.

GWU Offers Courses After Working Hours

More than 60 college-level courses will be offered after working hours in 31 downtown Federal buildings in the District of Columbia this summer through the Federal After-Hours Education Program.

The College of General Studies, George Washington University, offers an opportunity for individuals to enroll in undergraduate and graduate courses leading to associate in arts, bachelor of general studies, bachelor of science in administration, and master of science in administration degrees. Individuals seeking self-improvement courses may enroll as non-degree students.

Courses to be offered include: accounting, business administration, economics, geography, psychology, speech and drama, and many others. Courses are also given which lead to a master of science in administration.

Register June 29

Registration for the summer semester will be held in Conference Rooms A, B, and D—just off the lobby—Department of Commerce Bldg., 14th St. and Constitution Ave., N.W., from 10 a.m. to 2:30 p.m. on Wednesday, June 29.

Tuition is \$78 per semester hour and all courses are 3 semester hours, compared with a cost of \$105 per semester hour for courses taken on campus.

For further information contact Robert W. Stewart, Jr., Field Representative, College of General Studies, George Washington University at 676-7018.

Energy Crisis Is Topic Of Women in Science



Ms. Rea, associate director for Program Management, Intramural Research, National Institute of Mental Health, discussed The Real Energy Crisis.

At the May 18 meeting of the Graduate Women in Science, Inc., Sigma Delta Epsilon, Omicron Chapter, the speaker was Hazel Rea.

"The real energy crisis is not the shortage of fuel for homes and industry, but the excess, pent-up supply of energy in man himself," she observed.

"As late as 1859, 94 percent of the energy used in industry was supplied by human and animal muscle power; today it is 1 percent.

"Because of our inability to adapt biologically, we are rapidly evolving into an overweight, hypertensive, depressed, suicidal, pill-popping, alcoholic, drug-addicted society.

"Modern living frustrates the normal fight-or-flight response to stress.

"One of the most serious problems facing us today is how to get a handle on this excess of energy and dissipate it harmlessly or mobilize it for useful work," she stated.

Persons interested in the organization's activities may call Naomi Hawkins, Ext. 64677.

1977-78 FAES Concert Series Tickets Available

The Foundation for Advanced Education in the Sciences is sponsoring eight concerts in its 1977-78 Chamber Music Series.

The concert dates are:
 Oct. 9—Melvin Kaplan and the New York Chamber Soloists
 Nov. 6—Gold and Fizdale
 Dec. 4—Jean Bernard Pommier
 Jan. 22—TASHI
 Feb. 5—James Buswell
 Mar. 12—Gerard Souza
 Apr. 9—Amadeus String Quartet with Raphael Hillyer

A second Gregor Piatigorsky Memorial Concert will be presented at a date to be announced.

The concerts will be held on Sun-

Payroll Data Integrated With Personnel; Phase II Takes Effect on June 6

Effective June 6, each servicing Personnel Office at NIH begins the implementation of TDCS Phase II—the integration of payroll data into the Department Personnel Data System.

Phase II is designed to allow personnel offices to be the controlling point for the input of payroll documents into the personnel data system.

Items Now Included

These documents include Federal, State, and local tax forms, allotments to financial organizations, charity authorizations, and address notice changes.

Later, U.S. savings bonds and employee leave data will be handled through personnel offices, although these documents are not included in the June 6 implementation.

In the past, any of the above forms initiated by an employee were processed through the NIH Payroll Liaison Office, and sent to the Division of Central Payroll in DHEW.

Under Phase II, the form will still originate with the employee, but must be processed through his/her personnel office where it will be entered into the Personnel Data System by the appropriate servicing Personnel Office.

Consequently, after June 6, when you have a pay problem, your contact for assistance is in your personnel office—including the Payroll Error Notice, a document used to identify payroll errors or changes such as Health Benefit changes, Within-Grade Increase changes, change in salary due to promotion, etc.

DFM Handles Time, Attendance

Problems relating to time and attendance will continue to be handled by the Division of Financial Management.

The implementation of Phase II is the culmination of a long-standing goal of HEW.

The Division of Personnel Management expects improved processing of pay documents and reduced payroll errors to result from the change.

days at 4 p.m. in the Masur Auditorium.

Since the Chamber Music Series was sold out last year, interested persons are urged to subscribe as soon as possible. Tickets, sold by subscription only, are \$32 for the season; half price for children under 17.

For further information, contact the FAES Office, Bldg. 10, Room B1-L-101, Ext. 65272.

TRAINING TIPS

The Training and Education Branch announces its Summer Training Program for Youth. Courses begin July 11 and will be scheduled through Aug. 19. Each student is eligible for 36 hours of training. Nomination forms MUST be in the personnel office by June 27.

In addition to the courses and the Summer Seminar Series listed below, an Individual Learning Center and a free tutorial program will be available to summer employees.

Summer Training Course Booklets will be available through each B/I/D program manager about the first week of June. Call your personnel office for further information.

The following courses will be offered:

- Advanced Laboratory Techniques
- Advanced Reading Techniques
- Animal Care and Handling
- Basic Laboratory Techniques
- Basic Reading Skills
- Capturing the Elusive Job
- Career Life Planning
- Clerical Procedures
- Creative Expression
- Driver Education
- Fork Lift Operation
- History and Philosophy of Science
- Human Relations
- Introduction to Computers
- Medical Terminology
- Personal Hygiene and Good Grooming
- Proofreading
- Refresher Typing
- Scientific Terminology
- Speech Communication
- T.V. Production
- Uses and Functions of the Library

Seminars, held from 10 a.m. to noon, will include:

- Going to College
- Scholarships and Financial Aid Are Available, Thursday, July

Savings Bond Campaign Called Success Halfway, But Participation Lags

The status of the 1977 U.S. Savings Bond Campaign at midpoint in mid-May was both good and bad.

On the plus side, new bond buyers had increased 50 percent over a like period in 1976, and the number who increased their allotment was 76 percent higher.

But, even with these impressive gains, NIH continues to have the smallest percentage of participation in the bond program of any HEW agency.

According to Sidney Gottlieb, coordinator of the NIH bond campaign, one complaint is that bonds are not a good investment. However, they are one of the best savings plans available. One needs capital (ready cash)—which bonds can provide when needed—to make that investment.

Another frequently cited excuse for not buying bonds is a lack of spare money. No one has spare money unless they start a savings plan. As little as \$3.75 every 2 weeks soon accumulates into a substantial amount.

Remember, it's never too late or too early to start a bond allotment. If you haven't signed up already, do so today.

A drawing for \$18.75 and \$10 gift certificates donated by the NIH Recreation and Welfare Association will take place late in June.

Anyone signed up as a new buyer or as a bond buyer who increased a current allotment may participate in the drawing. Raffle tickets are given out by the canvasser at the time of completing an application form HEW 357.

28, Bldg. 31, Conference Room 6
Career Day

- In Search of a Job, Monday, Aug. 15, 10 a.m., Bldg. 10, 14th Floor Auditorium.

Flexible Work Schedules Experiment Is Underway: NIH Participants Benefit

Flexitime—flexible working hours or FWH—is a system which allows full-time or part-time employees a certain amount of control in determining when they will begin and finish work, providing they are present during designated hours and maintain the 8-hour day and 40-hour week. Flexitime is a move toward job enrichment.

The program began at NIH in March 1975 when the Division of Management Policy initiated a pilot project. The test was evaluated in October of that year and the results were positive. Employees perceive flexitime as a benefit that contributes to their work satisfaction and results in improved production and work patterns.

Seven Volunteer

Subsequently, seven additional organizational components with 452 employees volunteered to participate in a flexitime test. Reactions of participants so far have been favorable.

Each of these tests will be evaluated after 6 months of operation to assess the impact of flexitime on employees and management.

Some advantages to users are: avoidance of rush-hour traffic; better use of leave time; convenient parking when flexing early; more time for family, social affairs, and community activities.

Advantages to the organization include: better employee morale; reduction in absenteeism and tardiness which makes for smoother operation of the office; possible increases in productivity and efficiency levels; service offices can be open longer hours.

Variations of flexitime and some commonly used models are:

Gliding Schedule: Employees may select an arrival time on a day-to-day basis without prior notification to the supervisor.

Modified Flexitime: Employees pre-select a starting time, but schedules may be modified with prior notification and approval 1 day in advance.

Flexitour: Employees select a starting time during a designated period; this becomes his/her permanent schedule until the next selection period.

Will Analyze Trials

The NIH Associate Director for Administration, Leon Schwartz, recently issued a memorandum advising that additional requests for flexitime experiments will not be approved until results of ongoing experiments have been analyzed (the first two are due in August).

However, Mr. Schwartz stated in his memo that organizations inter-

Flexitime Allows Variety In Trial at NLM Division

The National Library of Medicine's Bibliographic Services Division has begun a 1-year trial of flexible working hours for its staff of 52 members.

BSD employees index the journal literature for MEDLARS, manage the day-to-day operation of the on-line network, and perform special on-line searches of the data bases.

Core Time Required

In flexitime, the normal fixed times of arrival and departure are replaced by an 8-hour working day composed of "core time" and "flexible time." All employees must be present each day during core time—9:30-11:30 a.m. and 1:30-2:30 p.m.

The hours before and after the core time are flexible: employees may report for work as early as 6 a.m. All staff must work or otherwise account (by annual or sick leave) for an 8-hour day (not including the lunch period).

Attendance records are kept on a sign-in register to monitor the flexitime experiment.

First Months Results Vary

The first 2 months of flexitime in BSD show that 2 percent of the staff arrive between 6 and 7 a.m., 32 percent between 7 and 8, and 66 percent between 8 and 9:30.

However, there is a wide variation between the patterns established by the Index Section and the MEDLARS Management Section, the Division's two major components.

A Flexitime Committee has been established within BSD to monitor the progress of the experiment.

Interested in future applications may submit proposals to DMP so that the proposal can be put in proper form for consideration if the current tests are successful.

Consider Factors

Organizations considering flexitime should be aware that:

"... Flexitime is not a panacea for all management ills. It may, however, prove a useful, productive tool if these basic steps are followed:

ANALYZE this situation;
EDUCATE and **COMMUNICATE** with the workforce;

PLAN your program carefully (both management and employee involvement);

MONITOR the system to improve its application and correct problems;

EVALUATE results."

If you have questions concerning flexitime, please contact Sue Edwards, DMP, Ext. 62461, or Mildred Dougherty, DPM, Ext. 64973.

No wise man ever wished to be younger.—*Jonathan Swift*.



Personnel from the Shops Section, Plant Engineering Branch, DES, congratulate Archie Davis, Jr., of the Mechanical Shop, on his superior performance award. He directed the shop's activities through many crisis situations involving repairs to NIH utilities and facilities such as steam and chilled water piping systems, cold rooms, freezers, fans, and lab equipment. Mr. Davis was simultaneously honored on his retirement from NIH after 25 years of service, progressing from operating engineer's helper in 1952 to foreman in 1971.

NIAMDD Program Publishes Guidelines For Artificial Kidney Machine Evaluation

New guidelines for testing and evaluating the safety, performance, and human compatibility of artificial kidney machines have been developed by an interdisciplinary study group drawn from Government, industry, academic, and nonprofit research organizations.

The resulting publication, *Evaluation of Hemodialyzers and Dialysis Membranes*, was developed under sponsorship of the Artificial Kidney-Chronic Uremia Program—the component of the National Institute of Arthritis, Metabolism, and Digestive Diseases studying ways to improve devices and therapy to aid patients with end-stage kidney disease.

Treatments Are Thrice Weekly

At the present time, 32,000 patients afflicted with irreversible kidney failure, who would otherwise die, are being kept alive with the aid of thrice-weekly artificial kidney treatments. About 95 percent of the cost of this maintenance treatment is born by the Federal Government, primarily through Medicare.

Improvements in dialysis therapy to make the treatment briefer, more effective, and less costly are being pursued vigorously through the Artificial Kidney Program, and these developments should bring about significant human benefits and could result in substantial savings of Federal resources.

The new report is expected to aid considerably the efforts of clinicians, bioengineers, scientists, and manufacturers to improve current treatment of end-stage kidney disease.

The guidelines will also assist officials of the Food and Drug Administration in developing standards for the safety and effectiveness of dialysis equipment, required under the new Medical Device Amendments of 1976.

The new 231-page publication provides detailed guidelines for clinical, toxicological, physical, and

tute of Dental Research.

To become more involved with dental education, he transferred to the Dental Health Center in San Francisco.

He received an M.S. from the University of Iowa in educational testing and measurement, followed by an M.A. in audiovisual media, and a Ph.D. in educational psychology.

He then returned to the Dental Health Center, becoming Dental Education Officer. After the Center's closing in 1974, he joined the NMAC staff where he has been involved in AV workshops for health professionals as well as producing self-instructional units on topics ranging from clinical dentistry to educational methods and evaluation techniques.

chemical testing and quality control of artificial kidney devices, their components, and the water used in them for blood purification.

The book discusses the principles involved and gives detailed instructions for the various laboratory and clinical tests.

It also catalogs the characteristics of available dialyzers and membranes and includes a bibliography of scientific references.

Dr. Elias Klein of Gulf South Research Institute chaired the interdisciplinary group comprised of nephrologists, bioengineers, toxicologists, chemists, and physicists which produced this publication.

Copies are available from the Coordinator of the Artificial Kidney-Chronic Uremia Program, NIAMDD, Bldg. 31, Room 9A-07, NIH, Bethesda, Md. 20014.

Stroke Study Available In NINCDS Publication

The National Institute of Neurological and Communicative Disorders and Stroke is supporting a national epidemiological study of stroke, and has just published *Guidelines for Stroke Care*, designed as a reference handbook for health professionals.

Guidelines Present Summary

The guidelines present a summary of individual reports on stroke care including: special procedures and equipment, laboratory tests, medical and surgical management, and nursing care and rehabilitation.

The Joint Committee for Stroke Resources of the American Neurological Association prepared the handbook. Copies can be obtained from the Office of Scientific and Health Reports, NINCDS, Ext. 65751.

NINCDS is also supporting a national study to determine the incidence, prevalence, and cost of stroke. The study includes analysis of a national sample of stroke discharges from 124 general short-term hospitals in about 35 regions of the continental U.S.

A sample of 300 hospital records with discharge diagnoses of stroke will be abstracted by professional medical personnel. The data should provide national estimates (by age and sex) of the incidence and prevalence of hospitalized acute stroke patients.

It will also measure the functional status of these patients; and the economic impact of the disease for the individual, his family, and society.

NIH Visiting Scientists Program Participants

5/1—Dr. Seido Ohnishi, Japan, Environmental Mutagenesis Branch. Sponsor: Dr. Robert A. Voelker, NIEHS, Research Triangle Park, N.C.

5/1—Dr. Sandor Sipka, Hungary, Laboratory of Biophysical Chemistry. Sponsor: Dr. Koloman Laki, NIAMDD, Bg. 4, Rm. B112.

5/3—Dr. Hiroshi Handa, Japan, Laboratory of Experimental Pathology. Sponsor: Dr. Robert Friedman, NIAMDD, Bg. 4, Rm. 309.

Comes From India

5/5—Dr. Vazhiyil Venugopalan, India, Laboratory of Biochemistry. Sponsor: Dr. Thressa C. Stadtman, NHLBI, Bg. 3, Rm. 103.

5/9—Dr. John C. Murray, United Kingdom, Laboratory of Developmental Biology and Anomalies. Sponsor: Dr. George Martin, NIDR, Bg. 30, Rm. 416.

5/16—Dr. Angelo Fontana, Italy, Laboratory of Chemical Biology. Sponsor: Dr. Irwin Chaiken, NIAMDD, Bg. 10, Rm. 9N313.

Visits NINCDS

5/16—Dr. Yasuto Itoyama, Japan, Laboratory of Neuropathology and Neuroanatomical Sciences. Sponsor: Dr. Henry deF. Webster, NINCDS, Bg. 36, Rm. 4B22.

5/16—Dr. Ana Maria Ruspa, Italy, Laboratory of Tumor Cell Biology. Sponsor: Dr. Robert C. Gallo, NCI, Bg. 37, Rm. 6B04.

5/17—Dr. Angela Solano, Argentina, Reproduction Research Branch. Sponsor: Dr. Maria L. Dufau, NICHD, Bg. 10, Rm. 12N216.



Dr. Ruth L. Kirschstein, NIGMS Director, delivered the keynote address of the American Academy of Microbiology's annual meeting which was co-sponsored by the American Society for Microbiology. A member of the Society, Dr. Kirschstein emphasized NIGMS's long-standing role in support of high-quality research and training in basic biomedical sciences.

AUDIOVISUAL

(Continued from Page 1)

tion during his pediatric training at Johns Hopkins Hospital.

There he set up "clinical correlations sessions" in which residents met with small groups of first-year medical students, and showed them clinical examples of what the students were studying in their lectures.

He chose a career in academic medicine, wanted to learn more about teaching methods in medical education, and so he came to NMAC.

As medical advisor at NMAC, Dr. Adams was contributing author in the award-winning self-instructional series, *Introduction to Congenital Heart Disease*.

Designs Media Workshop

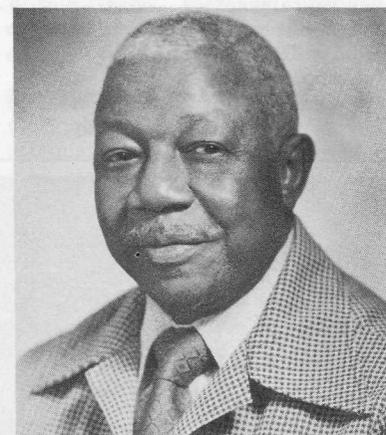
He also designed media production workshops for medical school faculty; these workshops have produced more than 30 self-instructional slide-tape units for national distribution.

As chief of the Materials Development Branch, he established procedures and specifications for instructional material development, and supervised 40 educational and production personnel.

In 1976 he received the NLM Regents Award for Scientific or Technical Achievement.

The new chief of the Materials Development Branch, Dr. Rowberry, was formerly assistant chief of the Center's Educational Research and Evaluation Branch, having joined NMAC in that capacity in 1974.

He received his D.D.S. from Northwestern University in 1957, and later worked at the NIH Clinical Center and the National Insti-



James Washington recently retired after 35 years service, having joined NIH in August 1941 when only two buildings were completed and four others were under construction. Mr. Washington was an animal caretaker in the Division of Animal Resources until 1959 when he joined the Laboratory of Neurobiology, NIMH, as a biological laboratory technician. Now he plans to work on his home in Lanham, Md. and to travel in the U.S. and Canada.

NIMH Study Includes Hyperactive, Enuretic, Or Depressed Children

A relatively new program in intramural research at the National Institute of Mental Health includes studies on hyperactive, enuretic, and depressed children, conducted through a collaboration between the Adult Psychiatry Branch and the Laboratory of Clinical Science under the respective directions of Dr. William E. Bunney, Jr., and Dr. Irwin Kopin.

Researchers Listed

Staff investigators directly responsible for these programs include Drs. Judith Rapoport, Gerald Brown, Mike Ebert, Leon Cytryn and Don McKnew.

Children between the ages of 5-12, who have hyperactive behavioral disorders, chronic enuresis (bedwetting), or continued appearance of loneliness, sadness, or sense of inadequacy are being studied at the Clinical Center.

The studies of hyperactive children are concerned with understanding the acute and chronic effects and side-effects of the medications used in these children by investigating the physiological changes that occur in relationship to the use of the medication.

Through such investigations it is hoped that further knowledge of the biological and behavioral aspects of these children, and the interaction thereof, can be attained.

Investigate Timing

Preliminary findings indicate that behavioral response is more related to the timing of the medication than to specific levels in the blood.

The studies of enuresis compare the sleep of enuretic and non-enuretic children and examine the sleep stages at which bedwetting occurs.

Medications in common use for the treatment of bedwetting are also being studied to discover the mechanism of their action and thus,

GWU Gives Class June 14 On Zero Based Budgeting

The George Washington University College of General Studies will offer a non-credit course in Zero Based Budgeting for personnel involved with the budget process or management-decision making.

The 1-day course will be held Tuesday, June 14 at the Marvin Center, Room 402, 21st and H Sts., N.W., Washington, D.C.

Reservations must be received not later than Thursday, June 9, as class size is limited. The course fee is \$70.

For further information, call 676-7061 or 676-7215.

New Pamphlet Discusses Low Birthweight Babies

One in every 13 babies born each year in the U.S. is born too soon, too small, or both. These tiny babies (less than 5½ lbs.)—low birth weight infants—account for 70 percent of all deaths in the first year of life.

Disadvantages Cited

Low birth weight is a serious disadvantage. These babies often have problems handling such vital life functions as breathing, metabolism, excretion, and control of body temperature.

A new pamphlet of the National Institute of Child Health and Human Development, *LITTLE BABIES: Born Too Soon—Born Too Small*, DHEW Publ. No. (NIH) 77-1079, describes

- the problems these babies face
 - measures physicians take to save them
 - what is known about the causes of low birth weight
 - research to prevent premature births and gain a fuller understanding of the problem.
- Mothers at risk often:
- are under 16 years of age
 - have previously given birth to a low birth weight infant
 - are undernourished
 - are suffering from a chronic condition (diabetes and certain infections)
 - smoke cigarettes
 - are alcoholics or addicted to narcotics
 - have not had regular prenatal care
 - have certain genetic disorders.

Single free copies are available on request to the NICHD Office of Research Reporting, Bldg. 31, Room 2A-34, NIH, Bethesda, Md. 20014.

possibly to understand more about the physiology of enuretic children.

Preliminary findings indicate that enuresis can take place at all sleep stages, and the efficacy of drug treatment for enuresis is being confirmed.

Studies of childhood depression primarily relate to the incidence of depression in the children of those parents who have been hospitalized at the CC for affective illness.

Studies Seek Prevention

Such studies might be important in terms of preventive and/or treatment measures. Currently, no children from the general population are being sought, as opposed to the above studies on hyperactive and enuretic children.

The poorest man would not part with health for money, but the richest would gladly part with all their money for health.—*Charles C. Colton*

INSULIN DNA

(Continued from Page 1)

this work is a major step towards the manufacture of human insulin in bacteria. Insulin is now processed from beef and pig pancreas glands.

Although slaughterhouses provide beef and pig pancreases as insulin sources, a shortage of the hormone is developing as the number of diabetics increases worldwide. Moreover, some diabetics develop an allergic reaction to beef and pig insulin.

Manufacturing human insulin in bacteria would solve these problems and in addition might make insulin available at a lower cost than it is now, they declared.

Research is still required before it will be possible to make proteins, like insulin, from recombinant DNA that has been added to bacteria.

Whether or not a gene within a cell will cause that cell to make protein depends on many factors, including the position and orientation of the DNA relative to special "control points"—sequences of DNA that tell the cell when to start and stop making protein.

But the first step—putting the gene into bacteria—has now been accomplished for insulin.

Observing that recombinant DNA research has been the subject of heated debate, Drs. Goodman and Rutter said: "These experiments with insulin really emphasize the benefits over the risks; they point out the possible practical application of recombinant DNA research."

Current safety requirements of the NIH Guidelines for Recombinant DNA Research specify that human genes of any kind can be put into recombinant DNA, and then into bacteria, only after the genes have been very carefully purified or in special high risk (P4) facilities.

But the technique used by the UCSF researchers involves copying DNA from messenger RNA, a form of genetic material more easily purified than DNA coming straight from a cell. This method points the way to the application of recombinant DNA technology to the human insulin gene, and possibly other human genes as well.

Scientists in the department of biochemistry and biophysics at UCSF have taken a leading role in recombinant DNA work.

With others at the Stanford Medical Center, they were the first to use special enzymes to link DNA from other species with DNA in bacteria.

This procedure has become the basic technique of recombinant DNA research.

Tula Brocard Retires; S. Lengel Is Appointed Info. Officer of NIDR



The daughter of a physician-writer, Mrs. Brocard combined an interest in medicine with an academic background in journalism in her PHS career.

After completing 12 years as information officer of the National Institute of Dental Research, Tula Brocard retired April 29 with 35 years' service in the Federal Government. Most of her career was in the Public Health Service, where she earlier served as information officer for the then Division of Occupational Health.

Recognition of her work has included receipt of the DHEW Superior Service Honor Award and two Superior Work Performance Awards. She is listed in *Foremost Women in Communications* and in *Who's Who of American Women*.

Mrs. Brocard has been a member of the Washington Press Club and the Public Relations Society of America.

Named to Post

Shellie Lengel has been appointed information officer of the National Institute of Dental Research replacing Mrs. Brocard.

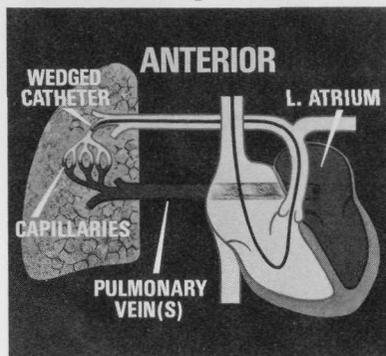
Mrs. Lengel has served in various information capacities of the Public Health Service, most recently as information officer and chief of the Office of Clinical Reports and Inquiries of the Clinical Center.

Montgomery County Crisis Center Seeks Volunteers

Passage Crisis Center, a 24-hour facility sponsored by the Montgomery County Health Department, needs volunteers to work shifts counseling people in crisis on the phones and in person.

Interested persons are asked to visit the Center at 8500 Colesville Rd., Silver Spring, Md. and fill out an application form for a screening interview. Call 589-8608 for further information.

Award-Winning Film Heart Catheterization Produced by NMAC



The film uses a montage of motion picture techniques: live action footage, limited and full animation, and oscilloscope tracings manipulated through aerial image cinematography. This sample graphic depicts the "wedge" position in Right Heart Catheterization.

Right Heart Catheterization, an instructional motion picture developed by the National Library of Medicine's National Medical Audiovisual Center in Atlanta, Ga., has received the National Society for Performance and Instruction's 1976-1977 Outstanding Research Effort award.

The motion picture, designed for students of basic cardiovascular physiology, was developed by a team of NMAC specialists: Dr. M. J. Oppenheimer, content; M. L. Brooke, Education; and R. W. Bell, production.

The film resulted from a research project designed to study the use of a motion medium to teach higher level processes—in this case, determining catheter location from blood pressure readings shown on an oscilloscope—and the withholding of self-assessment exercises until the conclusion of the content presentation.

The nomination paper for the NSPI describing the research

NHLBI Group Issues Report: Prevention, Control, Education in Respiratory Disease

The Report of the Task Force on Prevention, Control, and Education in Respiratory Disease (NIH 77-1248), published by the Division of Lung Diseases, National Heart, Lung, and Blood Institute, will be available this month.

The Task Force was convened to recommend a feasible, manageable program to prevent and control respiratory diseases through education of health professionals and the public.

Report Conclusions

Major conclusions and recommendations of the Report include:

- *Pulmonary Function Tests*—Assessment of pulmonary function by simple spirometry would, if used routinely, permit early identification of abnormalities associated with many respiratory diseases.

- *Environmental Hazards to the Lung*—Physicians, other health professionals, and the public should be made aware of avoidable environmental hazards and of steps to be taken to reduce or eliminate exposure.

- *Therapeutic Regimens*—Effective therapy is available for some of the respiratory diseases likely to be encountered by the practicing physician, particularly asthma, cystic fibrosis, and obstructive lung diseases in children.

- *Regionalized Approach to Therapy*—For acute conditions, where early diagnosis and intervention are critical to survival of

project was written by Miss Brooke and Dr. R. A. Lasco.

Right Heart Catheterization will be available about July in both 16mm motion picture and videotape formats: on short-term loan from the Materials Utilization Branch, NMAC (Annex), Atlanta, Ga. 30324; and for purchase from the Sales Branch, National Audiovisual Center (GSA), Washington, D.C. 20409.

the patient, physicians need to be informed about how to recognize and provide conservative treatment for the condition.

Where more sophisticated methods are necessary, facilities should be available for transfer of patients to regional medical centers, especially for management of infantile respiratory distress syndrome, and acute respiratory failure.

- *Education Strategies*—Many approaches have been successfully used in schools, communities, and groups, in promoting health-seeking behavior in children and adolescents, preventing smoking or changing smoking behavior, and increasing compliance with recommended therapeutic regimens.

Recommend to Others

Additional recommendations were made regarding physicians, patients, teaching staffs, and the general public.

Requests for copies of the Task Force Report may be addressed to the Division of Lung Diseases or to the Public Inquiries and Reports Branch, NHLBI, NIH, Bethesda, Md. 20014.

Memo Hoax Wins Apology

During the first week of May, an anonymous memorandum was distributed in the Clinical Center describing new parking regulations for B-Wing. The hoax was not published by Space Management as the memo indicated.

Soon afterwards the *Washington Star* published an excerpt in its Gobbledygook column.

The chief of the Parking and Traffic Control Section notified the newspaper that the memo by a prankster was a practical joke, and an editor's apology was received.

An Intensive Weekend Masters Program Being Offered by SIU

Southern Illinois University locally offers several programs leading to the master's degree:

- MBA with Health Care Management Concentration at National Naval Medical Center

- MBA at Bolling Air Force Base

- Public Administration at Bolling Air Force Base

Classes are presented in an intensive weekend seminar format. Seminars are taught every third weekend by regular SIU faculty.

Representatives from Southern

NIDR Study Shows Zinc Penetrates Skin

Animal studies, supported by the National Institute of Dental Research, indicate that topical applications of zinc penetrate the skin so readily that it may be possible to correct human deficiencies of this mineral by utilizing this simple method.

Diet Usually Supplies

Nutritionists at the University of California, Davis, note that although the diet usually supplies the body's requirement for zinc, blood levels of this element drop rapidly when patients are fed intravenously. It is known that too little zinc during pregnancy can cause congenital abnormalities in animals and may lead to taste and skin problems in man.

Extra zinc is needed to manage digestive and skin symptoms in victims of the human genetic disease, acrodermatitis enteropathica. Zinc is also used to promote wound healing and as a household remedy to soothe chapped or sunburned areas.

Concern for the problems of patients who cannot be fed by mouth or stomach tube led Dr. Lucille S. Hurley and Carl L. Keen, to test the amount of zinc that would enter the blood of pregnant rats via the skin.

They found that 24 hours on a zinc-deficient diet sharply reduced the plasma levels of zinc in all the animals. The animals were then treated with a chemical agent to remove the hair from a 3 x 4 cm area of the back.

An 8-hour exposure of the hair-free area to zinc chloride in oil at a concentration of 7,500 parts per million raised the amount of zinc in the blood to the same level as found in the control animals which were on a normal diet. A 24-hour exposure to the same zinc preparation increased the levels of zinc significantly.

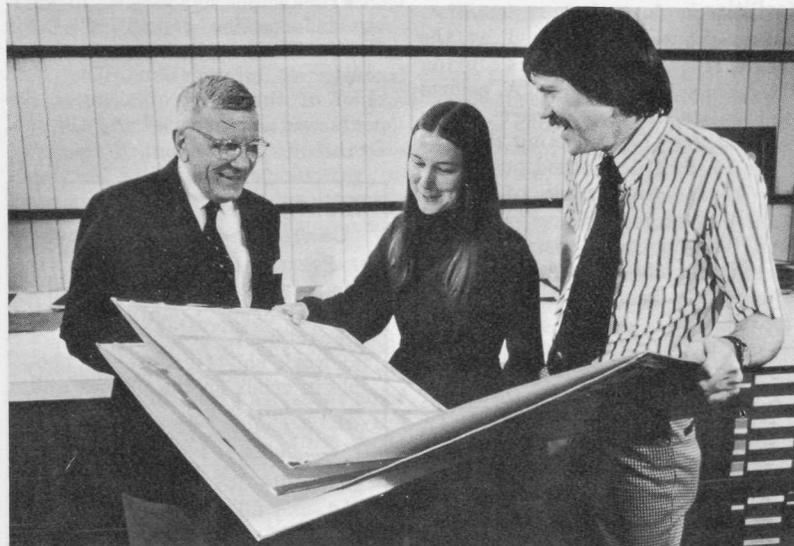
Human Study Needed

These findings, together with some of their observations of human serum levels, suggest that further research may show that zinc readily penetrates intact human skin. The scientists hope that enough zinc can thus enter the body to allow clinicians to treat cases of zinc deficiency with topical applications when patients can neither eat nor be fed by stomach tube.

This research, supported by an NIDR training grant, was reported in the *American Journal of Clinical Nutrition*, April 1977.

Illinois University, Edwardsville, will be at NIH on Tuesday, June 7 in Bldg. 31, Room B2C07. Briefing sessions will be held on the following schedule:

- MBA 11:30 a.m.-12:30 p.m.
- PA 12:30-1:30 p.m.



Dr. Oppenheimer, Miss Brooke, and Mr. Bell review the production plan (storyboard) for the motion picture Right Heart Catheterization.

International Leukemia Symposium Scheduled: Amsterdam in August

Scientists from 16 countries will present their latest research at the 8th International Symposium on Comparative Research on Leukemia and Related Diseases, Aug. 22-26, in Amsterdam, The Netherlands.

Approximately 100 leading scientists will report on molecular biology, immunology, epidemiology, and treatment approaches for leukemia and cancers in animals and man, including those that are virus-induced or virus-associated.

The Virus Cancer Program of the National Cancer Institute, and the Leukemia Society of America, Inc., N.Y., are the primary sponsors of the biennial meeting.

General chairman of the Symposium is Dr. Peter Bentvelzen, current vice-president of the International Association for Comparative Research on Leukemia and Related Diseases. Dr. Bentvelzen is affiliated with the Radiobiological Institute TNO, Rijswijk, The Netherlands.

Dr. David Yohn, Ohio State University Cancer Research Center, Columbus, is secretary-general of the Association and U.S. organizer of the meeting.

Framingham Heart Study's Dr. Kannel Talks June 22

Dr. William B. Kannel, medical director of the NHLBI-sponsored Framingham Heart Study since 1966, will be the keynote speaker at the 10th annual meeting of the Montgomery County Heart Association, June 22 at the Holiday Inn, Bethesda. His subject will be: Highlights of Recent Findings from the Framingham Heart Program.

For information and reservations call Mrs. Woods, 657-8878.

17 Members Appointed To National Commission On Digestive Diseases

Seventeen members have been appointed to the National Commission on Digestive Diseases.

In addition to the 17 public members, the Commission will include NIH Director Dr. Donald S. Fredrickson and the Directors of various NIH Institutes and other Federal agencies which are involved in digestive disease research.

The Commission will deal with a wide range of problems, including investigation into the incidence and duration of digestive diseases, the mortality rates resulting from such illness, and the social and economic impact of these disorders.

Digestive diseases are among the most common illnesses in the country, affecting more than 13 million Americans. Because they tend to be chronic, such diseases have an enormous economic impact in terms of direct medical costs and time lost from work.

Other duties of the Commission involve an evaluation of public and private facilities and resources for the diagnosis, prevention, treatment of, and research in such diseases, and identification of existing programs which are effective in improving the management of digestive diseases.

Following this study, the Commission will formulate a long-range plan for the use and organization of national resources to deal effectively with digestive diseases. The final report of the Commission will be presented to Congress.

Dr. Eugene D. Jacobson, associate dean of the College of Medicine, University of Cincinnati, will serve as chairman of the Commission.

Appointees Listed

Dr. Thomas P. Almy, Dartmouth Medical School; Dr. Frank P. Brooks, Hospital of the University of Pennsylvania; and Dr. Harold J. Fallon, Medical College of Virginia.

Dr. Richard G. Farmer, Cleveland Clinic Foundation; Dr. Herschel E. Griffin, University of Pittsburgh; William Hoptowitz, Tribal Councilman, Toppenish, Wash.; and the Honorable Thomas S. Lawson, Montgomery, Ala.

Dr. Carroll M. Leevy, Short Hills, N.J.; Dr. William P. Longmire, Jr., University of California, L.A.; Dr. Hans Popper, Mt. Sinai School of Medicine; Nancy I. M. Preuss, American Society for Medical Technology; and Louis J. Raffio, Weston, Mass.

Also, Dr. Paul Sherlock, Cornell University Medical School; The Honorable Robert Taft, Jr., Cincinnati, Ohio; Thelma K. Thiel, East Orange, N.J.; and Gail P. Velde, Hollywood, Calif.

Lister Hill Center's CTS Communications System Wants Ideas

The Lister Hill National Center for Biomedical Communications of the National Library of Medicine is interested in discussing better ways to fulfill the mission of the NIH and the information needs of researchers through the use of its biomedical communications network, using CTS, the Canadian-American Communication Technology Satellite.

The first station of the 6-station network became operational in March 1977. The network control center and a small broadcasting studio are located on "A" level of the National Library of Medicine, next to Billings Auditorium.

Studio Holds 20-30

The studio can be used for transmissions involving 20-30 participants, as was done for NIH Director Dr. Donald S. Fredrickson's recent telecast.

During the coming months other stations will be installed at the following locations: University of Washington, Seattle; University of Colorado, Denver; University of Kentucky, Lexington; Montana State University, Bozeman; and University of Alaska, Fairbanks. Two-way communication channels can be set up between any two of the six locations.

Experiments Proceed

Much of the satellite time for the next 4 months has already been set aside for experiments in continuing education for nurses and dietitians, and for the WAMI (Washington, Alaska, Montana and Idaho) work in distributed medical education. However, some satellite time is still available.

Potential users are invited to contact Dr. Harold Wooster, Ext. 64441, for further information.

COMPENSATION

(Continued from Page 1)

sation Act (F.E.C.A.). Subjects in extramural research should be assured by the research institution of equal (to F.E.C.A.) compensation for injury.

- Research which is PHS-regulated, but not PHS-sponsored, is not included in the recommendations.

In its deliberations, the Task Force gathered information on incidence and severity of research injuries, on legal and ethical aspects, and on the various compensation methods. Ethicists, economists, compensation experts, and clinical investigators submitted reports or testified for the Task Force.

HEW Secretary Joseph A. Cali-

FRATANTONI

(Continued from Page 1)

University in 1961, and his M.D. from Cornell University in 1965.

In 1971 he was appointed assistant professor of medicine at Georgetown University and director of the Georgetown Hospital Coagulation Laboratory.

Held Several Posts

He was also clinical associate professor of medicine and pharmacology at Georgetown University and associate professor of medicine at Uniformed Services University of Health Sciences.



Dr. James W. Prescott, health scientist administrator, Center for Research for Mothers and Children, National Institute of Child Health and Human Development, recently received the Maryland Psychological Association's Outstanding Contributions to Psychology Award for original theoretical and research contributions to a developmental neurobiological model of socialization.

NHLBI Seeks Volunteers For 12-Day Study Period

Volunteers are being accepted for a study that involves following a diet with standard amounts of salt for 12 days with the collection of urine on 4 days and of small blood samples on 2 days. Subjects may continue their usual work schedule.

Subjects must have normal blood pressure and must be taking no medications. They will be reimbursed at the usual rate for normal volunteers for the 2-week period.

Call Dr. David Horwitz, NHLBI, Ext. 62452 for details.

fano, Jr., has requested that the National Commission for the Protection of Human Subjects review the report. Deliberations on the subject have been recently initiated.

Single free copies of the report and its appendices are available from F. William Dommel, Jr., Office of Program Planning and Evaluation, Division of Resources Analysis, OD, NIH, Bldg. 31, Room 1B58, Bethesda, Md. 20014.



Kenneth E. Berrill (I) building engineer of the Plant Engineering Branch, receives a suggestion award from Ross Holliday, director of the Division of Engineering Services. Mr. Berrill proposed a change in ventilating systems applied to Bldgs. 29A, 36 and 37 estimated to save \$16,300 per year in utility costs.

Britain's Dr. Julian Knox Visits NLM This Month



Dr. Knox has recently been appointed chairman of the Council for Science and Society's commission on Health Technology Assessment.

Dr. Julian Knox, currently a Scholar-in-Residence at the National Library of Medicine, is undertaking a preliminary study of information resources for consumer members of Health Systems Agency Boards and neighborhood health centers, with special reference to health care technology and planning data.

Until recently Dr. Knox was the ranking staff member of the Community Health Council, Islington, London, and has published a collection of consumer oriented guides to health services planning and management.

Visited Yale, Georgetown

In 1972 and 1973 he was in the U.S., with visiting fellowships at Yale School of Medicine and the Georgetown University School of Business Studies. He undertook studies of consumer participation in various types of health care organizations.

He was formerly a member of the Tavistock Institute School of

National Commission for Protection of Human Subjects Releases Report on Psychosurgery

The *Report and Recommendations on Psychosurgery*, prepared by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, was released May 23.

The Commission, established in late 1974, was required to make recommendations with regard to research on human subjects generally, and on prisoners, the mentally infirm, psychosurgery, and the fetus.

Recommendations on fetal research and on research with prisoners have already been published.

Psychosurgery is brain surgery whose primary purpose is to control, change, or affect behavioral or emotional disorders.

Similar surgical treatments for the relief of movement disorders, such as epilepsy and Parkinson's Disease, are not psychosurgery.

Several Techniques Used

Psychosurgery may be done by traditional surgical methods, or by more sophisticated techniques using ultra-high frequency sound, laser beams, or electrical discharge from implanted microelectrodes.

The Commission's report reviews the history of psychosurgery and the public and legal controversy over the possible abuse of this medical procedure for political or social purposes.

The Commission describes its studies of the nature and extent of the use of psychosurgery in recent years, and of the effects of psychosurgery on individual patients.

The Commission also contracted

Family Psychiatry and Community Mental Health, an associate professor at the École Pratique des Hautes Études at the Sorbonne University, Paris, France, and Director of the Institute for Social Research in London.

Dr. Knox welcomes contact with NIH scholars and professionals during his stay. He can be reached at 338-5696 or through the office of the NLM deputy director, Ext. 66661.

- alphabetical list of grantee investigators.

The *Index* is available to Federal agencies and biomedical libraries by contacting the Research Documentation Section, Statistics and Analysis Branch, Division of Research Grants, Westwood Bldg., Room 3A03, Ext. 67543.

Single copies may be purchased by others from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 for \$21.75 domestic postpaid, or \$27.19 foreign postpaid.

Please refer to *Research Awards Index*, DHEW Publication No. (NIH) 77-200 (GPO stock no. 017-041-00124-6).

with the National Urban Coalition to organize a conference on human experimentation, including psychosurgery.

Finally, the Commission held a public hearing at which testimony was presented by physicians, legal counsel, and a member of the Congress.

In summary, the Commission's eight recommendations are:

- That until the safety and efficacy of any psychosurgical procedure has been demonstrated, it should be performed only with the approval of an Institutional Review Board specifically approved by HEW for reviewing psychosurgery.

- If a legally competent and consenting adult patient has been voluntarily admitted to a mental institution and is considered a candidate for psychosurgery, the Institutional Review Board can consider only those psychosurgical treatments approved by a National Psychosurgery Advisory Board.

Board Reviews

If the patient is a research subject, the Institutional Review Board must also determine that the research conforms to the provisions of the Commission's report on research with the mentally infirm.

- If the patient was involuntarily committed to a mental institution or to a prison, or is in the custody of a legal guardian, or is believed to be incapable of giving informed consent, any psychosurgery must be performed at an institution separate from any prison or mental hospital in which the patient is regularly confined.

Even then, the Institutional Review Board can permit the surgery to be performed only if the particular procedure has been approved by a National Psychosurgery Advisory Board, the patient's guardian has consented, and performance of the surgery has been approved by a Court.

- If the patient is a child, the consent of both parents or a guardian must be given, and the proposed procedure must have been approved by the National Psychosurgery Advisory Board specifically for children.

The approval of a Court and of an Institutional Review Board are again required. If the treatment involves research, the research must conform to the provisions of the Commission's report and recommendations on research with children.

- The Secretary of HEW should

Training and Employment Of Biomedical Scientists: New Survey Underway

NIH Director Dr. Donald S. Fredrickson announced May 25 that NIH is conducting a survey of employers and trainers of biomedical scientists to assess the current state of the employment market and the prospects for the future.

Academic institutions, industry, and Government agencies are being asked for information on staff positions which have been filled, are presently open, or are expected to become open during the year ending Sept. 30, 1977.

The resulting data will be analyzed by Westat Research Inc., the consulting firm assisting NIH in the survey.

Studied in 1975

In a similar study conducted by Westat in 1975, doctoral level biomedical scientists—as opposed to other scientific fields—were found to be in short supply.

Budgeted openings for qualified personnel in that year substantially exceeded the supply of eligible candidates entering the field. The shortage appeared to be greater for candidates with the M.D. degree.

The survey is being coordinated with the work of the Committee studying national needs for biomedical and behavioral research personnel at the National Academy of Sciences, a study requested by Congress.

gather data and information on the nature, extent and outcome of psychosurgery performed in the U.S.

- The Secretary should conduct and support research to evaluate the safety and efficacy of psychosurgery.

- The Secretary should impose sanctions, including the withholding of Federal funds, to insure compliance with these recommendations.

- The Congress should take additional action to assure that psychosurgery is performed in compliance with HEW regulations implementing these recommendations and that psychosurgery is not conducted or supported by Federal agencies unless these agencies are primarily concerned with health care or health research.

Under the terms of the National Research Act, the Secretary must seek public comment on these recommendations before either rejecting or implementing them in whole or in part. Either action must be completed within the next 180 days.

Copies of the text of the recommendations can be obtained from the Office for Protection from Research Risks, NIH, Bethesda, Md. 20014.

New Index Is Published on Research Awards

The 16th edition of the *Research Awards Index* (formerly the *Research Grants Index*) is now available. Published in two volumes, the *RAI* contains scientific and administrative data on more than 20,000 Public Health Service research grants and contracts.

The first volume contains 8,000 scientific subject headings under which appear identification numbers and titles of pertinent projects.

Volume II contains three parts:

- project identification data which includes the names of investigators, grantee addresses and project titles;
- the same information on research contracts; and