Dr. Joseph Perpich
To Leave in December

Dr. Joseph Perpich, who has served as NIH Associate Director for Program Planning and Evaluation since Feb. 15, 1976, recently announced that he plans to leave the NIH in mid-December.

He will become vice president for corporate planning and administration at the Genex Corporation, a recombinant DNA technology firm formed in July 1977, with headquarters in Rockville, Md. In addition to corporate planning, Dr. Perpich's duties will include human resources management, communications and public affairs, and legal and regulatory activities.

Dr. Perpich, trained in psychiatry and law, received his undergraduate and M.D. degrees from the University of Minnesota, and his J.D. from Georgetown University. His residency training in psychiatry took place at the Massachusetts General Hospital and at the National Institute of Mental Health.

He came to NIH after serving as a senior staff fellow in law and medicine at the Institute of Medicine of the National Academy of Sciences. There he worked directly for Dr. Donald Fredrickson, then president of the IOM, who upon becoming Director, NIH, recruited Dr. Perpich as an NIH Associate Director.

(See DR. PERPICH, Page 7)

NIH Grantees Hubel and Wiesel Share 1981 Nobel Prize With Mental Health Grantee

Drs. David H. Hubel and Torsten N. Wiesel, long-time NIH grantees at Harvard University, will share the 1981 Physiology or Medicine Nobel Prize with Dr. Richard W. Sperry of the California Institute of Technology, a grantee of the National Institute of Mental Health.

The two Harvard neurobiologists were awarded half of the $180,000 prize for their successful research in tracing the information process in the visual system. The major NIH research support comes from the National Eye Institute. Additional resource support is furnished at the New England Regional Primate Research Center, funded by the Division of Research Resources.

Dr. Sperry: ‘Split Brain’ Studies

Dr. Roger W. Sperry, a National Institute of Mental Health grantee for the past 23 years, was awarded the Nobel Prize in Physiology or Medicine on Oct. 9 for his discoveries concerning functional specialization of the cerebral hemispheres. He is a professor of psychobiology at the California Institute of Technology.

His innovative studies of the “split brain” have offered brain scientists an unprecedented research tool and opened the way to the Nobelist’s own study of mind-brain interaction. His discoveries have prompted a wave of research over the past two decades, useful in predicting psychological and behavioral responses to surgical interventions, stroke, brain injury and disease as well as in strategies for...

(See DR. SPERRY, Page 8)

Drs. Hubel and Wiesel: Visual System Process

Two long-time National Eye Institute and Division of Research Resources grantees who began their research in a basement laboratory at Johns Hopkins University more than 20 years ago have won the 1981

Former NIGMS Grantee Shares Nobel Chemistry

Dr. Roald Hoffman of Cornell University, a grantee of the National Institute of General Medical Sciences from 1966 to 1972, shared the 1981 Nobel Prize for Chemistry with Dr. Kenichi Fukui of Japan's Kyoto University. The two scientists were recognized for their work on the development of rules from quantum mechanics allowing chemists to predict the outcome of an entire class of chemical reactions.

(See NOBEL, Page 10)
Two NIH Scientists Awarded Cash Bonuses

Dr. Stadtman

Two NIH scientists who work in the Senior Executive Service were awarded cash bonuses for their outstanding performance by President Ronald Reagan during White House Rose Garden ceremonies on Oct. 14.

Dr. Earl R. Stadtman, chief of the Laboratory of Biochemistry, National Heart, Lung, and Blood Institute, was among 62 career Federal executives who received a one-time bonus of $20,000 as a “Distinguished Senior Executive” for his outstanding performance over the last year.

Dr. Jin H. Kinoshita, scientific director of the National Eye Institute, and chief of the Laboratory of Vision Research, was elected as a “Meritorious Executive.” A $10,000 stipend goes to each person, and can be awarded more than once to an individual in this category.

In conjunction with 1981 activities for the United Nation’s International Year of Disabled Persons, the Division of Equal Opportunity and the NIH Handicapped Employees Committee will present a closed-circuit TV film festival on Nov. 2, 4, and 6 at a number of locations on and off campus.

The following films will be shown at rotating starting times on Monday, Wednesday and Friday:

- **A Different Approach**—A 21-minute color film produced to promote the abilities of disabled persons.

- **Getting the Job Done**—A 15-minute color film produced by the National Technical Institute for the Deaf at the Rochester Institute of Technology views hearing impaired persons in the workforce.

- **First Encounters**—A 22-minute color film which presents a dramatic enactment of a disabled person’s job interview and a group discussion using disabled and non-disabled persons.

Video tapes of these films will be shown on closed-circuit TV at the following locations, and captions for the hearing impaired will also be aired.

**NIH CAMPUS**

Dates: Nov. 2, 4 and 6—from 11:30 a.m. to 1:30 p.m.—Bldg. 1, Wilson Hall; Bldg. 36A, Cluster Conf. Rm.; Bldg. 31, Rm. 2A-52.

**OFF CAMPUS**

Dates: Nov. 2, 4 and 6—from noon to 1:30 p.m.—Westwood Conf. Rm. D; Landow Bldg., Conf. Rm. A; Nov. 2—from 11:30 a.m. to 1:30 p.m.—Federal Bldg., Conf. Rm. B119; Nov. 6—from 11:30 a.m. to 1:30 p.m.—Landow Bldg., Conf. Rm. A.
Secretary Schweiker Inaugurates Research Initiative in Nutrition

A major Conference on the Assessment of Nutritional Status was held at NIH on Sept. 16-18, the first such conference to be cosponsored by the NIH Nutrition Coordinating Committee, CDC and FDA. Approximately 130 scientists representing academia, industry and government from the U.S., Canada, Egypt, England, and Jamaica participated. Emphasis was on currently available methodology.

The objective of the conference is to highlight the current state of the art in the assessment of nutritional status," said Dr. Artemis P. Simopoulos, chairman of the NIH Nutrition Coordinating Committee, who also chaired the meeting.

Many Factors Considered

"The ability of surveys to effectively identify population segments at risk, as well as trends in the nutritional status of the entire population and specific populations, will be considered," she said.

"Attention will also be given to the evaluation of the nutritional status of individuals, including infants and the elderly, hospitalized patients with malignant or cardiovascular diseases, surgical patients, and obese individuals undergoing weight loss."

In introducing the keynote speaker, HHS Secretary Richard S. Schweiker, Acting NIH Director Dr. Thomas E. Malone said, "We applaud and fully support the priority of the Secretary for prevention research, including nutrition. And we especially appreciate the unwavering support he has given to biomedical research and to the NIH in difficult budgetary times."

"I am delighted to bring to this forum on nutrition someone so knowledgeable about all public policy aspects of the problem."

Secretary Schweiker emphasized his long time interest in nutrition and health issues and his support of nutrition research efforts. In addition to the NIH, we'll build on our progress thus far," he told the conference.

Among their recommendations, the conference agreed that the methodology for the assessment of nutritional status is on a firm scientific base and is dependent on many disciplines. They further agreed that the emerging technology from other areas needs to be applied to nutritional epidemiology and to surveys on the assessment of nutritional status of populations. The proceedings of the conference will be published as a supplement in the March 1982 issue of the American Journal of Clinical Nutrition.

National President To Speak at FEPA

Dr. John McElhinney, president of the National Federal Executive Professional Association, will be the guest speaker at the NIH FEPA meeting to be held on Nov. 4 in Conf. Rm. 10, Bldg. 31 from noon to 1 p.m. Performance evaluations and "contracting out" will be among the major topics discussed by Dr. McElhinney who will also brief the members about the activities of the association. The meeting is open to all.

STEP Forum Series Begins

Dr. Jerome G. Green, director, Division of Extramural Affairs, NHLBI, will open the STEP Forum series with a presentation entitled Priorities and Percentiles: The Pursuit of Parity in Paying P.I.'s on Thursday, Nov. 12, from 2 to 4 p.m., in Bldg. 1, Wilson Hall.

The presentation and discussion to follow are open to all NIH employees. For further information, call Arlene Bowles, 496-1493.

The NIH Record

October 27, 1981
Daily Traffic Congestion on Rt. 270 Prompts NLM Secretary To Write Letter

This is a typical vanpool which holds up to 10 to 15 people. Under Maryland law, a vanpool is a non-profit commuter service which transports employees, including the driver, exclusively between their home and their place of business.

In a metropolitan area of 3 million people where mass transit doesn't always reach outlying suburbs, daily traffic congestion during rush hour can be a frustrating problem.

It was this mass of commuter congestion on Interstate 270 (towards Frederick, Md.) that prompted National Library of Medicine secretary Joseph Charuhas, who resides in Clarksburg, Md., to write to the Maryland Department of Transportation State Highway Administration.

Mr. Charuhas asked that office if there were future plans for easing the traffic congestion on Rt. 270 in terms of cloverleaf construction for existing inadequate entrance/exit ramps, or any other ways to effectively accommodate this area of newcomers and burgeoning development.

In 1980, average daily traffic going south on Rt. 270 beyond Rt. 121 (past Comus, Md.) was estimated to be 31,300 cars. By the time that same traffic arrived south of Montrose Rd., the number of cars had climbed to 122,700, an addition of 91,400 vehicles.

Thousands of Cars Exit

On the way to NIH via the Old Georgetown Rd. ramp off Rt. 270, 58,900 cars exited; 62,000 cars passed through the I-270 spur to Rt. 355 (Wisconsin Ave.), many of which were on their way to NIH. That's a total of 120,900 cars coming into Bethesda daily. Other cars took the spur to Democracy Blvd., Rt. 495 to Virginia, or Rt. 495 to Baltimore.

In response to Mr. Charuhas' letter, the Department of Transportation wrote: "This office and the State Highway Administration certainly recognize the growth that has and is planned for this corridor and its resultant demand for highway capacity. Unfortunately, the improvements needed are costly and require extensive study and environmental reviews. Nevertheless, the administration, in cooperation with Montgomery County, is doing the best it can under these circumstances."

Specifically, Eugene T. Camponeschi, district engineer, reported that Rt. 124/Montgomery Village interchange was recently approved for improvement, in addition to new ramps at Md. Rt. 117. The project is under the 1981 to 1986 Consolidated Transportation Program with stage construction scheduled to begin in fiscal year 1985.

Access to the Shady Grove Metro Station is an ongoing study not presently in the construction program, but in the future, interchange ramps and a parallel bridge for Shady Grove Rd. over I-270 are planned within the next few years.

The I-270 split north to Md. Rt. 121 is being studied for additional lane capacity and improved interchange configuration throughout the corridor, but no construction funds are available at this time.

The administration recently completed ramp adjustment and new signalization on Md. Rt. 28 east of I-270. Construction is planned for the summer of 1982 to extend the dualization of Rt. 28 from Hurley to Research Blvd.

Project Just Completed

A project on various safety features and total length has just been completed including grading, inlet adjustment, guardrail, etc., for I-270 from Tuckerman Lane to Md. Rt. 118. Md. Rt. 189 (Falls Rd.) is also being studied for a new interchange to improve access to the City of Rockville. No construction funds are currently allocated, but the project is high priority.

Mr. Camponeschi continued in his letter that, "without new revenues to meet these needs, the improvements will continue to be delayed."

One solution to traffic congestion is the use of a vanpool. "Get to work without working to get there" is the slogan for the county's vanpool program. NIH's vanpool program began in November 1979. It takes 12 people to make a vanpool, including a driver and backup; each van displaces about eight cars on the highway.

Riders share equally in the cost of operating and maintaining the van, which can be leased on a month-to-month basis. The driver rides free of charge, and can use the van for personal needs in the evenings and on weekends.

The NIH Record

Ridesharing

To learn more about available vanpool programs in other Maryland counties, call these ridesharing coordinators:

Anne Arundel County ... 841-6750, ext. 1888
Baltimore City .................. 396-3010
Baltimore County ............. 494-3495
Harford County .............. 897-2000, ext. 288
Howard County .............. 992-2016

Schizophrenia Is Subject Of Oct. 27 MFL Lecture

Tonight, Tuesday, Oct. 27, Dr. Daniel Van Kammen will speak on Schizophrenia at the next Medicine for the Layman lecture. Dr. Van Kammen is chief, Neuropsychopharmacology, Biological Psychiatry Branch, National Institute of Mental Health.

He will define this brain disorder and its symptoms, including incoherence and illogical thinking and speaking. He will also clarify some common misconceptions about schizophrenics. Dr. Van Kammen will explore advances in the treatment of this disorder, both through antipsychotic drugs and management of environmental factors.

No Lecture Nov. 3

There is no lecture on election day, Nov. 3, but the series will resume with Growth Disorders in Children Nov. 10. Dr. Barry Bercu, a pediatric endocrinologist for the National Institute of Child Health and Human Development, will discuss disorders from the perspective of what parents and pediatricians should be looking for in children develop.

Some growth disorders are treatable and children with them should be identified early. He will explain some exciting research being done on the endocrine deficiencies causing growth disorders.

The Medicine for the Layman lectures are held Tuesday evenings at 8 p.m. in the CC's Masur Auditorium. For more information, call 496-2563.

The NIH Record

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October 27, 1981
Computed Tomographic (CT) Scanning of the Brain is the subject of a consensus development conference to be held Nov. 4-6 in the Masur Auditorium.

CT scanning—an extraordinary technique combining X-ray equipment with a computer and television-type display—has revolutionized medical practice over the past 10 years, and opened new areas of biomedical research. The CT scan has become a most valuable and widely used tool for detecting and studying brain abnormalities.

The National Institute of Neurological and Communicative Disorders and Stroke and the National Cancer Institute are sponsoring the conference, with assistance from the NIH Office for Medical Applications of Research.

"CT scanning of the brain is an extremely important, rapidly evolving technology, but it has not yet reached its full potential," said conference organizer Dr. Michael D. Walker, Stroke and Trauma Program director. "The technology is here to stay. It's time to take stock of CT scanning as it is now, and to look ahead."

Conference participants hope to reach agreement on key questions including:

- What are the indications for employing CT scanning as a primary or secondary diagnostic tool for lesions of the brain? How much radiation is delivered during use of current CT scan equipment, and how is this dosage commonly expressed?
- To what extent has CT scanning influenced the management of intracranial disorders, such as malignancy, trauma, vascular anomalies, and cerebrovascular disease? And, what can be expected of future efforts in the development of CT scanning beyond its current diagnostic capabilities?
- "Recent improvements in CT scanning are allowing physicians to make greater use of the technology's exceptional diagnostic capability," said Dr. Walker. "The resolution and definition of CT images are better than ever, and so is the quality of the image.

"The CT scan's ability to discern disease becomes better as experience is gained. Each new generation of scanners is shown to be more productive, and now is a good time to reach consensus on how to get the fullest benefit from these advances."

The consensus conference will bring together biomedical research scientists, radiologists, radiation therapists, neurologists, neurosurgeons, practicing physicians, consumers, and other persons from relevant fields.

A series of experts will present their experiences and discuss key issues with the audience and panel members, and develop a consensus statement. Chaired by Dr. Fred Plum, chairman of the department of neurology, Cornell University Medical College, a panel will present its preliminary report.

As an organization accredited for continuing education, NIH has applied for Category 1 credit hours for this conference applicable towards the Physician's Award of the American Medical Association.

Technical information on the conference can be obtained from Dr. Walker, NINCDS, Fed. Bldg., Rm. 8A-08, 7550 Wisconsin Ave., Bethesda, Md. 20205; tel. (301) 496-2581. Administrative arrangements are being handled by Peter Murphy, Prospect Associates, 11325 Seven Locks Rd., Suite 220, Potomac, Md. 20854; tel. (301) 983-0535.

Dr. Marilyn Bach Awarded Brookings Fellowship

Dr. Marilyn L. Bach has been awarded a Brookings Fellowship in Science and Public Policy effective Oct. 31. Dr. Bach is special assistant to the director for program development, National Institute of Allergy and Infectious Diseases. As one of three selected in national competition, Dr. Bach will spend 1 year as a fellow-in-residence at Brookings Institution, Washington, D.C. The fellows will undertake a project of their own choosing in the area of science and public policy. Others selected were Drs. Melvin B. Gottlieb, and Gilbert S. Omenn.

For her project, Dr. Bach will study the interface between industry, academia, and government. She intends to analyze this interface, focusing on work in recombinant DNA, hybridomas, and vaccine development.

She will use case study analysis to identify Federal policy options for facilitating university-industry cooperation in biomedical research and examine its medical applications for the best public interest. Upon completion, a Brookings monograph will be produced.

Born in Lynn, Mass., Dr. Bach earned a Ph.D. in biochemistry from New York University School of Medicine. Early in her career, she worked with the University of Wisconsin's transplant program, where she was active in designing protocols for human kidney transplantation studies. During this period, from 1974 to 1977, she also served as a member of the NIAID Advisory Council.

She left the university in 1978 to become associate professor in the departments of laboratory medicine and pathology (Medical School) and the Center for Health Services Research (School of Public Health) at the University of Minnesota. The following year she joined NIH under the auspices of the Intergovernmental Personnel Act.

Assigned to NIH's Office for Medical Applications of Research, Dr. Bach initiated an overall plan to evaluate NIH consensus development. She joined NIAID in early 1980 where she was responsible for developing the Institute's annual research and evaluation plans.

Dr. Bach also contributed greatly in developing the Institutional Biosafety Chairperson's meeting in November 1980.
Magnuson Center Offers New Design, Care

NIH employees and guests had the opportunity to tour the new $100 million, 13-story modern biomedical research addition to the Warren Grant Magnuson Clinical Center of the National Institutes of Health after dedication ceremonies held on Oct. 22 in the Masur Auditorium.

The distinctly designed glass-enclosed building will be used as an Ambulatory Care Research Facility, and will provide an additional 685,000 square feet of space to the center. When the ACRF becomes fully operational, the CC will accommodate 250,000 outpatient visits annually.

The research complex is named for the former chairman of the subcommittee on Appropriations whose jurisdiction included funding for NIH. Senator Magnuson has been involved in supporting biomedical research at NIH since 1937. In January, a joint Congressional resolution was enacted naming the CC with the new wing after the former Washington senator.

The existing Clinical Center has served as NIH’s principal patient research facility since 1953. After all the floors of the new building are occupied, the old CC will undergo a 7-year renovation project.

ACRF construction began 4 years ago. The new building now provides new, modern quarters for a number of CC departments and space on 11 floors for institute laboratories and clinics. When completed there will be 230 laboratory modules with a combined area of 50,000 square feet. The ACRF will be occupied in stages, according to officials.

The first three top floors of the ACRF’s 13-story glass-enclosed tower will be the first to be occupied. The National Cancer Institute’s Medicine Branch is the first laboratory to occupy space.

Efficiency of design will permit the ACRF to greatly increase the CC’s capacity for outpatient care. The building’s layout brings together a number of related facilities in the hospital.

The Diagnostic Radiology and Nuclear Medicine Departments, which were six floors apart in the CC, will now occupy the entire west half of the ACRF’s first floor. “We will have easier access to their X-rays and they will have easier access to our scans,” says Dr. Gerald Johnston, chief of the Nuclear Medicine Department.

The ACRF will also accommodate innovative biomedical equipment. The Diagnostic Radiology Department, for example, will have facilities for nuclear magnetic resonance, a cross-sectional imaging technique that does not use radiation and can provide scientists with information on chemical composition as well as form.

The entire Clinical Pathology Department will be housed on one floor for the first time, making operations more centralized and efficient. Currently, it performs more than 2 million diagnostic tests each year.

Incoming patients will eventually be served on the first floor by an information desk, admissions, and a Clinical Research Services Center, where many routine diagnostic tests can be done. Nearby will be Nuclear Medicine and Diagnostic Radiology, and three patient elevators.

Other features of the ACRF include surgical facilities with eight new operating rooms with access from these rooms to new intensive care units in the adjoining Clinical Center wing.

To speed the delivery of material throughout the ACRF, three automated conveyor systems have been installed. One system operates with 28 carts that have the capacity to haul up to 1,000 pounds each. Another system will use tubes and a third uses 100 “tote boxes” or robot-like apparatuses that travel on an electrified track.

Provisions have been made for research animal care areas on each floor which are independent from laboratory and clinic space.

It is expected that by next spring, the ACRF lobby, visitors center, and a 220-seat amphitheater will be open. The main lobby occupies three stories of open space lit by skylights. A mezzanine, first floor balcony, and a cafeteria on the second floor overlook the visitors center on the ground floor.

Patient lounges in the outpatient clinics on each of the upper 11 floors have floor to ceiling windows that look out over Center Drive and the wooded area beyond. When interior decoration is completed, each floor will have its own distinctive color scheme.

These are just some of the new concepts in patient care and treatment that have been incorporated into a modern research complex that will offer improved means to better explore the yet unanswered questions about man and his diseases.

Sign Vandals Will Be Prosecuted

Since the spring, there has been a rash of 50 or more incidents where government parking signs have been torn down at different locations around NIH, according to the NIH Police Department.

Many incidents have occurred in the visitor parking lot in 16-E; the red area in 31-B; and in lot 10-I. “Many of these people think that because the sign is down they can park without being in violation,” said NIH Police Captain Howard S. Davenport.

He has assigned more police patrols to the areas where the sign vandalism has occurred. Under Federal statute, a person convicted of destroying or tampering with government property, or a posted sign valued at less than $100 can be fined $1,000 and/or receive 1 year in jail.

The NIH Police also emphasize that employees working buildings away from the campus must park only in authorized employee lots when visiting the reservation. In addition, vehicles must display a valid NIH Parking or Temporary Parking Permit. Offenders will be ticketed if they park in a visitor area.

For further explanation of the NIH parking regulations, consult page 254 in the NIH Telephone Directory.

Avoid Cigarettes

Cigarette smoking is the single most important preventable cause of illness and early death. It is especially risky for pregnant women and their unborn babies. Persons who stop smoking reduce their risk of getting heart disease and cancer. So, if you’re a cigarette smoker, think twice about lighting that next cigarette. If you choose to continue smoking, try decreasing the number of cigarettes you smoke and switching to a low tar and nicotine brand.—Health Style-PHS 81-50155.
During Dr. Perpich’s tenure as the official responsible for the agency’s planning, program analysis and legislative analysis functions, he also carried out a number of special assignments. One of the first of these was to mobilize the staff effort for the Director, NIH, in the development of Recombinant DNA Guidelines.

For the next 3 years, Dr. Perpich was the key person responsible for developing processes and maintaining the necessary staff support for the Director’s consideration of these guidelines and the many policy issues that went with them.

The Director’s Advisory Committee (for which Dr. Perpich served as executive secretary) provided the necessary public forum for airing of these controversial issues, and proceedings were fully documented in a series of reports published and distributed to all interested parties. For his work on recombinant DNA policy, Dr. Perpich received the NIH Director’s Award in June 1979.

Involved in Planning

As Associate Director, Dr. Perpich worked with all elements of NIH to develop and refine strengthened central planning processes, with carefully documented program reviews between individual Institute Directors and the Director, NIH—held on an annual or semiannual basis—providing the essential focus.

Through these processes, several new strategies for NIH support of health research were developed, including, as a first priority, the need to assure a floor of support for investigator-initiated research projects. A significant part of Dr. Perpich’s work was performed as executive secretary for several interagency or government-wide committees which Dr. Fredrickson chaired. Among such groups were the Health and Human Services Steering Committee, charged with the development of a strategy for support of all HHS health research; the Interagency Radiation Research and the Subcommittee on Medicine and Health of the Federal Coordinating Council on Science, Engineering, and Technology, a part of the President’s office.

Over the past 2 years, NIH has made growing use of the Director’s Advisory Committee as a public forum to examine Government-university relationships, especially in terms of cost and accountability issues; and, increasingly in the forefront, the need to improve cooperative arrangements in science among government, university, and industry partners.

He Identified Issues

As executive secretary for this committee, he was responsible for identifying the issues, developing the agendas, and guiding the staff work in documenting some of the options. The committee met most recently, Oct. 1 and 2, and will be providing reports and recommendations for consideration by the Director, NIH, the

People’s Drug Stores To Distribute Free NIA Aging Brochures to the Elderly

Beginning this month, People’s Drug Stores will be distributing and publishing a series of brochures on health topics of special interest to the elderly and their families. The series—Living with Aging—was written by the National Institute of Aging, and covers a broad range of subjects, such as: nutrition, high blood pressure, hypothermia, dental care, and the safe use of medicines.

This major health education campaign, which will be conducted in 500 stores in 14 states and the District of Columbia, will also include information and referral guides to local services and community resources. The health information pamphlets will be displayed in free literature racks.

In addition to offering free health promotion materials to the public, People’s Drug Stores will conduct an internal education program for its pharmacists, who will serve as in-store representatives for the Living With Aging campaign.

Pharmacists Will Assist

The pharmacists will learn which services are provided by local aging agencies such as those who sponsor nutrition programs for the elderly. They will also participate in continuing education seminars on the subject of special medication needs of the elderly. They are also being encouraged to serve voluntarily on local advisory panels on the aging or other outreach programs.

Dr. Robert N. Butler, NIA Director, praised People’s Drug Stores for providing a much-needed service to the public. He pointed to this effort as an example of the kind of private/public sector enterprise which will be needed increasingly in the future. “As the population grows older, the need for such authoritative health information will increase dramatically.”

John Rother, staff director for the Senate Select Committee on Aging, told those attending the U.S. Capitol press reception that launched the series, “the NIA is the world’s leading center on research into the aging process, and People’s Drug Stores serves approximately 10 million people nationwide. Living With Aging joins together the strength of both entities in a collective effort designed to provide quality health care for the elderly.”

DHHS officials who attended included U.S. Surgeon General-designate Dr. C. Everett Koop, Commissioner on Aging Dr. Lennie-Marie Tolliver, and Assistant Secretary for Human Development Services Dorcas Hardy. They commended People’s and NIA for their efforts in sponsoring such a program.

Also attending were a number of congressmen, senators, and congressional aides; members of the national press; and representatives of local and national organizations who serve the elderly.

The drug chain plans to continue the campaign for 6 months to a year, although wide public acceptance may lead to an extension of the program.

Assistant Secretary for Health, and the Secretary.

At the conclusion of the Oct. 2 meeting of the DAC, Dr. Thomas Malone, Acting NIH Director, in commenting on Dr. Perpich’s contribution to the NIH community, said, “He came along with Don Frederickson at just the right time. We have to remember Joe as the chief architect of the development of the recombinant DNA guidelines—and especially for injecting here at NIH a method for making a public record and bringing the public into the process.

“He has changed the planning process at NIH, so that the Director, NIH, now has at his disposal a tested system to interact with the Institutes in forward planning in ways that never occurred before. We will truly miss Joe Perpich.”
crippling symptoms of severe epilepsy, capacities of the brain's hemispheres was piqued by reports in the late 1930's and seemed to show no adverse aftereffects of the surgery in behavior or personality. Sperry recalled that his interest in the early 1940's that patients whose brain nerve fibers buried deep in the brain, now cerebral hemispheres. At the time, the function of this connector was largely unknown, with one prominent scientist facetiously suggesting that its only purpose was to keep the two halves of the brain from sagging.

Dr. Sperry and his colleagues initiated a series of laboratory studies on surgical sections of the corpus callosum of small animals. The scientists readily saw that, contrary to earlier reports, the disconnected halves of the brain had independent and distinct sensations, percepts, and learning experiences.

His first opportunity to study a human split brain was in 1961—observations of a war veteran whose brain had been injured by shell fragments and as a result suffered debilitating convulsive seizures until the callosum was cut. After the surgery, the patient appeared normal, as had been reported previously in the medical literature. But Dr. Sperry's study of the subject indicated "startling changes in his inner mental makeup," and led to two decades of intensive research on the right-brain, left-brain phenomenon.

That research challenged and ultimately disproved many prevailing notions about the brain's nerve circuitry and the roles and relationships of the cerebral hemispheres. "When we first launched our investigation into the functional role of brain connections, one of the first things we had to learn was how much we had to unlearn," the scientist noted.

"Unlearn," the scientist and his colleagues did, accumulating and reformulating information about the brain through a series of experiments designed to elucidate the specialized forms of intellect possessed by the respective halves of the brain.

Bits of the research findings quickly captured the public fancy in the late 1960's and early 1970's. "Left-brain," with its strengths in verbal expression and analytical reasoning, and "right-brain," mute, but noted for its special talent for comprehension of complex relationships and spatiotemporal information processing, became popular means of self-characterization.

But the research has much more serious and far-reaching clinical implications. "Dr. Sperry's demonstration that the left hemisphere contains the primary speech capacity while the right is involved with short-term memory are paramount to understanding brain function both normally and in abnormal states such as autism and Alzheimer's disease," NIMH Director Herbert Parades said.

A native of Hartford, Conn., Dr. Sperry received undergraduate degrees from Oberlin College and his doctorate from the University of Chicago. From 1942 to 1946 he was a research associate at Yerkes Laboratories, now known as the Yerkes Regional Primate Research Center, involved in surgical repair of nerve injuries.

He was on the faculty for 6 years at the University of Chicago as assistant professor of neuroradiology, worked briefly at NIH in the early 1950's and assumed his current position at Caltech in 1954. His research has been supported by NIMH since 1959.

Sirio J. Flores, New NIEHS Engineering Chief

Mr. Flores is a member of several engineering societies. He is also a licensed professional engineer, master plumber, and president and technical advisor of the Richmond County Master Plumbers Association.

Sirio J. Flores has joined the National Institute of Environmental Health Sciences as chief of the Office of Facilities Engineering. In this position, he will be responsible for operating, maintaining, and modifying all of NIEHS's administrative and laboratory facilities located in Research Triangle Park, N.C.

He will also be responsible for coordinating all engineering and other building operations for the Institute's new laboratory and office buildings situated on 509 acres.

Worked for VA

Mr. Flores comes to NIEHS from the Bronx Veterans Administration Medical Center where he was assistant chief of engineering. He is on the board of directors of the New York Society of Professional Engineers and chairman of the metropolitan section of the American Society of Mechanical Engineers.

He received his bachelor's degree in mechanical engineering from City College of New York and a master's in hospital administration from Wagner College, Staten Island, N.Y.

Dr. Goldberg Will Head Legislative Analysis

Dr. Michael I. Goldberg was recently named director, Division of Legislative Analysis, Office of Program Planning and Evaluation, OD. As director, he is directing a staff that tracks, analyzes, and reports on all bills in Congress that affect NIH.

Prior to coming to NIH, Dr. Goldberg served as associate commissioner for policy coordination at the U.S. Food and Drug Administration. Among his assignments was the chairmanship for the FDA working group on the regulation of recombinant DNA technology.

He also served as executive assistant to the commissioner of Food and Drugs, FDA, involved in regulatory policy making in the areas of food safety, personnel matters, and intra-agency reorganization.

Dr. Goldberg has also held the post of policy coordinator, and senior health policy specialist in the executive secretariat, Immediate Office of the Secretary, HHS.

He began his NIH career in 1975 as a scientist administrator in the genetics section, Office of the Director. In 1976, he was an acting assistant administrator in the genetics section.

He was an assistant commissioner for the commissioner of Food and Drugs, FDA, involved in regulatory policy making in the areas of food safety, personnel matters, and intra-agency reorganization.

Dr. Greene Wins Tennis Tournament

Dr. Warner Greene, NCI, won first place in the fall tennis tournament held on Oct. 11, defeating Dan Simas. The final score was 7-6, 6-2.

The NIH Tennis Club presented the two top players with gift certificates from Racquet and Jog in Bethesda.

A spring tournament is being planned which will include eight participants in each category.

October 27, 1981
Frederick Cancer Research Facility Dedicated

The National Cancer Institute's clinical oncology research unit at Frederick Memorial Hospital, Frederick, Md., was dedicated Oct. 7.

Health and Human Services, Frederick Cancer Research Facility and local officials attended the afternoon ceremony. Opened to patients in April 1981, the clinical unit is currently the only NCI facility dedicated solely to the clinical testing of biological response modifiers.

Biological response modifiers are substances that boost, direct, or restore many of the normal biological responses of the body and that also may fight cancer. These substances often exist naturally in the body, but some are made in the laboratory.

The Biological Response Modifiers Program is within the NCI Division of Cancer Treatment. Dr. Robert K. Oldham is associate director of this program that seeks to identify and promote the study of new biological materials to fight cancer.

The program employs 30 of the 141 NCI personnel at the FCRF and coordinates both laboratory and clinical studies for this area.

Among the substances currently undergoing testing or scheduled to be tested in the near future are: agents that influence the body's immune defense system against cancer; lymphokines, such as interferon, and cytokines that regulate a variety of cellular processes; factors made by the thymus gland to boost the development of immature immune cells; antibodies and cells with anticancer activity, such as monoclonal antibodies; and differentiation and maturation factors that help cancer cells revert to normal.

Substances are selected for clinical studies in humans after a screening program using cell culture techniques and animals has determined them to be potentially effective against cancer and of acceptable toxicity.

Visitors toured the new treatment center, including its 10-bed outpatient unit and the computerized tomography scanning suite.

In addition to the outpatient unit, there are four inpatient beds. Six nurses provide 24-hour coverage for the inpatient unit.

More than 50 patients have entered the first clinical studies designed to determine the maximum safe tolerated dose of human leukocyte interferon produced through recombinant DNA techniques.

Dr. Stephen A. Sherwin, chief, Clinical Investigations Section of the BRMP, has announced that clinical studies with lymphoblastoid interferon are under way and monoclonal antibody and lymphokines studies will begin soon.

Persons interested in more information regarding upcoming clinical studies may have their physician contact him at (301) 866-0022.

For more information, contact the Training Assistance Branch, DPM, 496-2146, or call the National Independent Study Center (FTS) 234-2224. One may also write NISC—Bldg. 20, Denver Federal Center, Denver, Colo. 80225.

The ceremony dedicating the new clinical unit featured an introduction by FCRF's director, Dr. Hanna (l). He watches as Drs. DeVita (c) and Oldham cut the ribbon.

NIH Service, Supply Fund Elects Two New Chairmen

The NIH service and supply fund was established in 1953 to pay for the various special services and supplies not necessarily provided through usual NIH budget programs.

In 1981, the overall NIH service and supply fund was $101 million for operational expenses. These expenses, once accrued, are charged directly to each NIH user for any service or supply.

Most of the NIH services provided under this fund are for intramural research on campus. Among several services provided are caretakers for large and small animals, computer programmers, terminal use, data processors, and instrument fabrication. Supplies include procurement and stock replenishment.

A large proportion of the service and supply fund is spent on salaries for service personnel employed by the support divisions—Clinical Center, Division of Research Grants, Division of Research Services, Division of Safety, Division of Administrative Services, and Division of Engineering Services.

Established Through Charter

In 1954, the Service and Supply Fund Advisory Board was established through charter to advise the NIH Associate Director for Administration, the Deputy Director for Science, and the Associate Director for Research Services on policy matters, operations, and financial problems affecting the NIH service and supply fund.

The NIH Associate Director for Administration appoints three scientists and three executive or administrative officers from the various NIH Institutes, Divisions, or the National Library of Medicine as members of the board. Another member is appointed from the Division of Financial Management in addition to an executive secretary.

During the September meeting, the board elected CharlesLesure, NIAID, as chairman, and Dr. David Johnson, NIADDK, as vice chairman. Their terms of service are for 1 year beginning Oct. 1.

During selection, according to NIH policy, board members are appointed according to their different user interest, so that they will provide maximum coverage of all service activity. Board members serve for a 2 1/2-year term, renewable once.

Anyone interested in serving as a board member or on one of the ad hoc committees may contact one of the present members: Dr. Richard Asofsky, NIAID, 496-6400; Dr. Johnson, NIADDK, 496-6796; Mr. Leasure, NIAID, 496-1521; Gerald Osborne, DFM, OD, 496-1451; Richard Striker, NHLBI, 496-3483; Dr. Theodore Colburn, NIMH, 496-4957; Dr. Earnest Plata, NC1, 8-935-7631; or Lloyd H. Fagg, DFM, 496-6871.

When no new thoughts fill the mind ... when no new horizons beckon ... when life is in the past, not in the future—you are on the way to uselessness.—Dr. Fredericks K. Stamm
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different types of cells relay different bits or features of an image. Certain cells, for example, are sensitive only to color or to size, others only to contrast, contour, movement, or spatial orientation.

These cells are organized into columns which represent increasingly complex stages in the visual process. Columns at the beginning of the process contain simpler cells than those at the later stages. Visual signals are transmitted through this hierarchy of cells in a carefully ordered manner. At the end of the process, the individual components are integrated into a single visual impression.

The process has been likened to syllable, word, and sentence construction. Certain brain cells pick up “letters” from the visual message that is received and then passed on by the retina. Other, more specialized cells construct “syllables” from the letters.

The syllables are read in turn by higher level cells which turn them into “words,” and then “sentences” are constructed by even more complex cell groups and sent to a higher center of the brain. There, the entire visual message, or image, is integrated and stored as memory.

Hubel’s and Wiesel’s elucidation of this visual process revealed that seeing is an astonishingly complex process. Until then, scientists knew that seeing actually takes place in the brain, but the process was assumed to be much less complicated, a simple point by point transfer of the visual image on the retina to an image projected onto the cortex of the brain.

In addition to shedding light on how the brain processes visual information, Hubel and Wiesel also found that visual cells require normal visual stimulation in infancy if they are to function properly later in life.

If a newborn has an eye disorder which distorts the image received or obscures it at this critical stage of development of the visual cells, the ability of these cells to pick up, transmit, and analyze visual impressions may forever be impaired.

Congenital cataract—which affects babies and children—may obscure sight, thereby partially or completely depriving an infant of normal visual stimulation. These findings already have influenced treatment of cataract and other blinding or vision-distorting conditions in children.

Congenital cataracts now are removed within 2 months after birth instead of at 6 to 24 months.

Strabismus (crossed eyes) and amblyopia (lazy eye) also are corrected as early as possible in an effort to prevent or reduce the amount of permanent visual impairment.

If the sight in one eye is obscured or distorted, the actual proportion of brain cells capable of responding to signals from that eye decreases and eventually it becomes impossible for that eye to see.

Drs. Wiesel and Hubel have conducted work as affiliated scientists at the Division of Research Resources-funded New England Regional Primate Research Center for the past 15 years. Their studies in the area of visual pathways have utilized both the cat, and macaque species of nonhuman primates.

Their early work in cats was later demonstrated in the primate, resulting in significant advantages and advances in their research. The primate studies have been crucial to the ultimate applications of solving human visual disorders, since, unlike the cat, nonhuman primates have binocular vision similar to man. ☐

Mrs. Bynum Is Director of NCI’s Extramural Activities

Barbara S. Bynum was recently appointed director of the NCI Division of Extramural Activities. Previously, she was assistant chief for special review in the Scientific Review Branch of the Division of Research Grants.

In her new capacity, Mrs. Bynum will be responsible for formulating major policies and procedures for the review and administration of all NCI grants and contracts.

When asked about her new appointment, Mrs. Bynum said, “I am most happy to return to NCI and very eager to take on the challenges implicit in these responsibilities.”

Her objective is “to have fully operational as soon as possible a mechanism for achieving uncompromised peer review of NCI contracts.”

She also plans to strengthen the role of the NCI Cooperative Minority Biomedical Program in identifying and assisting minority scientists who are competing for grant support, and “to coordinate programmatic concept reviews and the review of the many scientific areas requiring special emphasis through targeted extramural support.”

In 1972, following a year in the Management Intern Program, Mrs. Bynum joined DRG as a scientific grants program specialist. Since that time, she has had extensive experience as a health science administrator.

As chief of the Special Review Section, Mrs. Bynum was responsible for helping to accommodate the workloads of 50 regularly appointed study sections and committees by determining the need for and composition of additional committees, and by overseeing the assignment and conduct of ad hoc reviews by Special Study Sections.

Mrs. Bynum’s husband, Elward, is director of the NIGMS Minority Access Research Careers Program. ☐

Prominent NCI Researcher Dies Suddenly

Dr. Herbert J. Rapp, an internationally recognized immunologist and cancer researcher with the National Cancer Institute, died suddenly on Sept. 25. He was 58.

Dr. Rapp was born in Philadelphia, and graduated from high school in Ocean City, Md. He attended Johns Hopkins University, where he received his doctorate in 1955, and served as assistant professor of microbiology there until 1962, when he joined NCI. At the time of his death he was chief of the Laboratory of Immunobiology.

Dr. Rapp first achieved wide recognition for his pioneering mathematical and chemical work in analyzing the reaction sequence of the components of complement, which comprises an important immunological defense system in the blood.

His later work concerned the immunology and immunotherapy of animal cancers, particularly the use of bacterial products in curing animals. His novel approaches to this problem received worldwide attention, and was awarded the DHEW Superior Service Award in June 1973.

Survivors include his wife Marion, of Garrett Park, three daughters, and a son.

Expressions of sympathy may be made to the Herbert J. Rapp Memorial Fund, in care of Dr. E. Leonard, 3704 Kenilworth Drive, N. Chevy Chase, Md. 20815.

NIH Golfer’s ‘Hole Up’ for Winter; Elect Officers

The NIH Golf Association wound up its 1981 season with a banquet at the Diplomat Restaurant in Bethesda on Oct. 5. The 1982 season will tee off again in April. The new officers are Jean Russell, president; Toni Dunlap, secretary; Dorothy Viner, treasurer; and Jim Bona, scorer. ☐

Mrs. Bynum has been with NIH since 1956, when she began her career at NCI as a chemist in the Laboratory of Physiology. She has progressively held responsible positions at NIH.
FIC Scholars Arrive To Do Research, Lecture

Six Fogarty International Center scholars-in-residence have recently arrived at NIH. Drs. Susan Lowey, Keith Porter, Klaus Kuhn, and Henri J. Tagnon are new, and Drs. Samuel H. Barondes and Lars Svennerholm are returning for their second term.

Dr. Lowey, professor of biochemistry at Brandeis University in Boston, has made significant contributions to muscle research. Her classic paper on the physicochemical characterization of myosin fragments laid the groundwork for understanding the functional role of these segments in the intact myosin molecule; her subsequent work has concerned the role of myosin subunits in a broad range of muscle types.

One of the two founders of the Journal of Cell Biology, Dr. Porter has received numerous awards, including the national Merit of Science in 1977. Currently, he is professor of cell biology and principal investigator for the DDR Biotechnology Resources grant on the million volt electron microscope resource at the University of Colorado in Boulder. He has played a major role in the development of electron microscopy, the revival of cytology, and the crystallization of the multifocal discipline of cell biology.

Dr. Kuhn, professor of biochemistry at the Max Planck Institute of Biochemistry near Munich, Germany, is well known for his work on the biochemistry of collagen and connective tissue. While he is at NIH this year, Dr. Kuhn will continue his experimental work and will give lectures on the structure and function of interstitial and basement membrane collagen and on inherited collagen disease.

Dr. Tagnon transformed Belgium’s institute Jules Bordet into one of the outstanding European cancer research centers. A well-known oncologist and at present professor of medicine and oncology in the Medical Faculty of the Free University of Brussels, Dr. Tagnon has made major contributions to cancer chemotherapy both experimentally in animals and at the clinical level. During his term, he will be associated with the staff of the Division of Cancer Treatment, NCI.

The work of Dr. Barondes, professor of psychiatry at the University of California in San Diego, has ranged from behavioral studies on memory formation in rats to fundamental investigations of cell-cell contact using slime molds as a model. During the next 3 months, he will collaborate with NCI scientists and will deliver several lectures and seminars on current topics in neuroscience.

Professor of psychiatry and neurochemistry at Sweden’s University of Goteborg, Dr. Svennerholm is recognized as an authority on gangliosides in general and on gangliosides in particular.

From neurochemistry, he has extended his work to the role of gangliosides as cell surface receptors, which has led to important progress in the development of cholera vaccines. Some of Dr. Svennerholm’s time here will be spent preparing for a 1984 Nobel symposium on gangliosides.

The six FIC Scholars can be reached at Stone House: Dr. Lowey, 496-2087; Dr. Porter, 496-2077; Dr. Kuhn, 496-1147; Dr. Tagnon, 496-2091; Dr. Barondes, 496-2027; and Dr. Svennerholm, 496-2590.

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Frances Humphrey Howard Participates in Ceremony

Frances Humphrey Howard, special assistant to the associate director for extramural programs, National Library of Medicine, recently returned from a private trip to Norway where she met with two Norwegian scholars. While there, she represented the Humphrey family at a ceremony honoring her late brother, former Vice President of the U.S., Hubert H. Humphrey.

Mrs. Howard recently helped dedicate a memorial to her late brother in Kristiansand, Norway—home of their grandparents.

In Oslo, Mrs. Howard met with Dr. Ole K. Harlem, chief editor of the Journal of the Norwegian Medical Association and a former NLM fellow. At the University of Bergen, she consulted with Dr. Oystein Wendelbo, a 1980 NLM guest worker, whose medical career has largely been dedicated to the study and advancement of medical library services emphasizing medical information retrieval.

Dr. Carl D. Douglass, Director, Division of Research Grants, presented the NIH Merit Award to 3 DRG employees and one former employee at a recent honor awards ceremony in the Westwood Bldg. Honored for their contributions were (l to r): Robert Moore, Statistics and Analysis Br., Sandra Oliphant (formerly with the Administrative Br.), DHHS Patent Office, Emily Mitchell, Statistics and Analysis Br., and Dr. Adolphus Toliver, Scientific Review Br.
NINCDS Summer Students Enjoyed Job Variety

Approximately 60 high school, undergraduate, graduate, and medical students were employed this year in the summer program of the National Institute of Neurological and Communicative Disorders and Stroke.

They worked in a wide variety of positions, ranging from directly assisting scientists in the laboratory, to filling in as typists and file clerks, and other essential for keeping various labs and offices running smoothly.

All the summer students had high standards of work performance. Arnold Bullock, a junior biology major, Xavier University, examined neuropeptides in cultured embryonic mouse nerve cells in the Laboratory of Neurophysiology. A native Washingtonian, Arnold is planning a career in biomedical research after he receives his doctorate.

Judith Mosinger, a graduate student from Harvard University, spent the summer researching the retina. Combining many techniques of microscopy and histochemistry, she contributed to the Institute's efforts in localizing specific neurotransmitters.

Judy said she found the work stimulating, because, "the retina of the eye is a small piece of the brain. By studying the retina, maybe we can attain better understanding of the brain."

Mario Pacheco, a senior biology major, University of New Mexico, helped NINCDS scientists analyze the effects of different drug concentrations on brain tumor cells. Dr. Barry Smith, Mario's supervisor, urged him to write a paper on the image system used in analyzing the drug effects. Mario received a special achievement award for his work, and hopes to attend medical school. He hopes to go into either neurosurgery or primary care medicine.

Ms. Mosinger examined retinal tissue for antbody effects during her work here as a summer student.

LeRoy Penix, a second-year medical student, Johns Hopkins University School of Medicine, spent the summer in the Laboratory of Neuro-Otology studying the effects of various drugs on auditory nerve cells in experimental animals.

Janice Bridges, senior, Theodore Roosevelt High School, Washington, D.C., worked in the Laboratory of Neurophysiology, filing, typing, and answering phones. She hopes to major in communications at either Howard or Northwestern University.

This was the third summer that Henry Ching, a junior biology major from George Washington University, worked in an NINCDS laboratory. This summer, in the Laboratory of Neuropathology and Neuroanatomical Sciences, Henry prepared brain tissue slides for a study on the structure, composition, and function of cells.

Henry said, "The experience at NIH has been good because I got to see how professionals conduct their experiments and how they relate to each other. I was impressed with the enthusiasm that some of the scientists displayed—I think it's contagious."

A Summer Employees Seminar was held Aug. 3. Dr. Murray Goldstein, Acting NINCDS Director, began the seminar with a brief history and review of the Institute's mission, stressing that all of its biomedical sciences, neurobiology is one of the fastest growing. Drs. Roscoe Brady, chief, Developmental and Metabolic Neurology Branch, and Jeffrey Barker, chief, Laboratory of Neurophysiology, also addressed the group.

Levon Parker, NINCDS Equal Employment Opportunity officer described the 1981 summer program as a success. "The program is one of the most important means we have of bringing in and encouraging students in the life sciences, particularly students from minority groups."

Burn Conference Now Available

Each year approximately 75,000 people in the United States are severely burned. More and more of these people are surviving, hospital stays are being shortened, and lasting disabilities are decreasing, thanks to research and new technology that are rapidly being translated into improved patient care. Today people with burns over as much as 95 percent of the body's surface are being saved.

Nevertheless, approximately 10,000 people each year still die, making burn injury the third leading cause of accidental death in the United States.

To improve the prognosis for severely burned patients, research relevant to burn injury is being supported by the National Institute of General Medical Sciences.

Areas of special research emphasis—where much more needs to be known—include the cellular and molecular changes and organ dysfunctions caused by serious burns. Important advances in the development "artificial skin" promise to decrease postburn infections, the leading cause of death.

In November 1978, the Institute sponsored a consensus development conference on supportive therapy in burn care.

Dr. I. Y. Yannas, of MIT, examines artificial skin developed to cover large excised burn areas until enough of a patient's own skin can be obtained for this purpose.

Research areas included excisional surgery, metabolic changes, infection, fluid loss and smoke inhalation.

After this conference, a study was conducted to determine the impact of the conference findings on burn care in the United States. The study reported that most of the physicians in the burn centers sampled were aware of, and in agreement with, the findings of the conference and were incorporating these findings in their practice.

In October 1980, NIGMS sponsored a followup conference, presenting new developments in burn care research. Copies of the proceedings of this second conference, which were published as a supplement to the August 1981 Journal of Trauma, are now available from the NIGMS Office of Research Reports, Westwood Bldg., Rm. 9A-10; or call 496-7301.