Dr. Roscoe Brady Shares Honor With Nobelist Yalow

Dr. Roscoe O. Brady, chief of NINCDS's Developmental and Metabolic Neurology Branch, was recently named one of the first two honorary members of the American Society for Clinical Investigation.

His fellow honoree is Dr. Rosalyn S. Yalow, Nobel laureate and chairman of the department of clinical sciences at Montefiore Hospital and Medical Center in New York.

The society cited Dr. Brady as “a pioneer in applying biochemical techniques to the study of lipid storage diseases” which are caused by toxic accumulations of fatty substances in the organs and tissues of afflicted individuals.

The buildup of these compounds results from a genetically determined deficiency of enzymes that normally split the lipids apart. He was commended for his discovery of the specific enzyme deficiencies responsible for several of the lipid storage diseases. The society also noted his role in developing methods to diagnose patients, to identify carriers of the disorders, and to detect these conditions prenatally.

Dr. Brady's current research, also praised by the society, includes an extensive investigation of various approaches to treating lipid storage disorders, including strategies to replace the missing enzymes.

More Liver Transplants Recommended By NIADDK Consensus Development Panel

Liver transplantation is a useful therapy that deserves broader application for end-stage liver disease, an NIH Consensus Development Panel has concluded. However, the procedure “must be the object of comprehensive, coordinated, and ongoing evaluation in the years ahead,” the panel added.

The panel indicated that this evaluation can best be achieved by expanding technology to a limited number of transplant centers where the operation can be performed under optimal conditions.

The June 20-23 conference was sponsored by the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases and the NIH Office of Medical Applications of Research.

Key questions addressed at the conference were:
- Are there groups of patients for whom liver transplantation is an appropriate therapy?
- What is the outcome (current survival rates, complications) in different groups?
- What principles should determine the appropriate time for surgery?
- What skills, resources, and institutional support are needed for liver transplantation?
- What are the directions for future research?

The first human liver transplant was done in 1963 by a NIADDK grantee, Dr. Thomas E. Starzl at the University of Colorado, Denver. During the past 20 years, some 540 operations have been performed in four major medical centers in the U.S. and Western Europe.

Additional operations have been carried out in other parts of the world, including the People's Republic of China and, more recently, in several other American medical institutions.

The survival rate for liver transplant patients appears to have increased significantly in the past several years. This is probably due to a number of factors, including the use of the immunosuppressive drug Cyclosporin A which reduces the body's tendency to reject transplanted tissue.

The panel determined that appropriate candidates for transplantation include children and adults suffering from irreversible liver injury who have exhausted other medical and surgical treatments, and are approaching death.

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(See TRANSPLANTS, Page 9)
Camp Fantastic Fundraisers To Be Held July 18, 20, 21

R&W is holding several fundraisers during July to benefit Camp Fantastic, a summer camp for children undergoing treatment for cancer.

The camp will provide a safe and exciting environment for children who might not otherwise participate in a camping experience while sharing their adventures with other children with cancer.

The camp will be held during the last week of August in Front Royal, Va. Sixty percent of campers will be patients from the Pediatric Oncology Branch, National Cancer Institute.

How about participating in a race of "strange occurrences"? R&W is asking NIH employees to race against the clock, using coordination and skill; to carry bed pans; push beds while putting on and taking off a scrub suit along a predetermined route. The fun run will be held Monday, July 18. The entry fee is $5 per person. All monies will go to benefit Camp Fantastic. The winner will be honored as king or queen of NIH for a day. Among prizes awarded will be limousine service to and from work, a fresh barbeque chicken, unlimited cole slaw, potato salad, applesauce, rolls, and a soft drink.

For more information, call R&W Activities Desk, 496-6061.

Two NCI Publications Win Firsts in the 1983 Blue Pencil Contest

Two publications produced by the National Cancer Institute won first prizes in the 1983 Blue Pencil Publications Contest of the National Association of Government Communicators (NAGC).

Barbara Blumberg, of the Office of Cancer Communications, was awarded the prizes at the NAGC's annual banquet on June 16.

Young People With Cancer—A Handbook for Parents, written in cooperation with the National Candlelighters Foundation, won in the category of popular publications exceeding 16 pages with two or three colors. The 93-page book was cited as "a difficult job handled delicately, fully and clearly."

It explains many aspects of childhood cancer, including descriptions of the common childhood cancers, medical procedures and treatments the child may undergo, how to deal with a diagnosis of cancer, how to continue life as normally as possible, and sources of more information, support and assistance.

Help Yourself—Tips for Teenagers With Cancer, produced in cooperation with Adria Laboratories, Inc., won in the category of popular publications of more than 16 pages with four colors. This 36-page booklet was written to help teenagers cope with cancer.

The booklet covers such topics as reactions to diagnosis, relationships with family and friends, school attendance, and body image.

Applications for Apprentice Training Program Due July 11

Applications will be accepted through July 11 for the following apprenticeship positions: utility systems-repairer operator, electrician, and boiler plant operators.

To be eligible, employee must:

• Have been employed at NIH for 1 consecutive year immediately prior to close of business July 11, 1983;

• Have career or career-conditional status;

• Be in a permanent full-time position;

• Be in a nonprofessional job series (one grade interval)

The OD Personnel Office, Bldg. 31, Rm. 1C15, 496-6521, will supply applications and information. Complete and return an entire set of forms for each position for which you wish to apply. For information or questions call Cindy Savannah, 496-6521.

CORRECTION

Photo credit should have gone to Kathryn Hutcherson on page 3 of the June 21, 1983, issue of The NIH Record.

Diet Center Extends Summer Hours

The Diet Center is extending its summer hours (July and August) by adding more hours on Tuesdays and Thursdays: from 7:30 a.m. (instead of 9:30 a.m.) to 12:30 p.m.

Drop in on these free behavior modification sessions.

• DELPRO

*For new Delpro users.

To learn about these and other courses, contact the Development and Training Operations Branch, DPM, 496-6371.

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Model-Making Boiler Man Leaves Job, Not Hobby

George M. Pickrell has retired as supervisor of the boiler room after 38 years of government service of which 32 were with NIH. However, he has not retired from flying model airplanes which he has been doing for 43 years.

Mr. Pickrell came to NIH in 1951 as shift head of the boiler room even before the boilers were built and floors were in the building.

"I was here when the first fire was started in the boilers, and the fire hasn't gone out in 32 years," he says proudly.

According to Mr. Pickrell, there were no chairs in the plant when he first arrived and everyone had to stand up. There were about 20 people in the entire plant and now there are over 70.

The boiler room is open 24 hours a day, 364 days a year except for the 1 day it is closed down for repairs.

"I've been in the same job here for over 31 years, although it has continued to expand. I am still the oldest person in the plant," he says.

Mr. Pickrell believes in long-term involvement not only in his job but also with his hobby. For example, he has been flying model airplanes since he was 12 years old and, like his job, his hobby has expanded.

He has grown from flying simple wooden airplanes to building his own miniature aircraft.

These airplanes are called miniature aircraft because they are exact replicas of larger airplanes, scaled down to 1/4 size. "They fly and react just like a real airplane," he says. They fly via radio-control and can weigh up to 40 pounds.

Mr. Pickrell builds his own aircraft from scratch in his basement, including the chain-saw engine. He has four aircraft built at this time.

He has been flying in competition in the Capital area for the past 7 years. Recently, he won Best-of-Show at the Deep Creek Airport. Normally, he flies at the Montgomery County Model Airpark on Gude Drive in Gaithersburg.

On a part-time basis, Mr. Pickrell also assists Johns Hopkins Physics-Lab in building remote piloted vehicles.

He is also a pilot of regular sized airplanes and obtained his private license at the age of 18.

Born in Portsmouth, Va., he moved to Maryland in the 1940s. He plans to retire in this area and enjoy his family of two boys and one girl, build more aircraft, and take life easy.

Want To Be a Doctor, a Scientist?

How many students want to be a scientist or doctor? What does it take to become one?

Frank Jackson of the Developmental Therapeutics Program of the National Cancer Institute asked D.C. children these questions during recent programs at Hendley, Amidon, Langdon and Garfield Elementary Schools.

The visits were part of a pilot program sponsored by the NCI Equal Employment Office with guidance from the NCI Office of

Scientific Products Exhibit

To Be Held in Building 30

The Supply Operations Branch, OD-DAS, is sponsoring a scientific products exhibit workshop in Rm. 117, Bldg. 30, on July 7 from 9 a.m. until 2 p.m.

The program will be conducted by the Millipore Corp. and their subsidiaries, Continental Water Systems and Waters Associates. Latest products will be displayed and professional personnel will be available for consultation and advice. Scientific personnel are invited to attend.

Maryland U. Chancellor To Speak

At Black Cultural Committee Program

Dr. John B. Slaughter, chancellor of the University of Maryland, College Park, will be the guest speaker at the NIH Black Cultural Committee's first Summer Cultural Program on July 15 at noon in the Masur Auditorium.

He will speak on "Science and Education: Hope for Mankind." "This is an attempt on our part to continue the outreach process of NIH by giving the summer students/employees an opportunity to hear outside speakers," said O.H. Laster, chairperson of the Black Cultural Committee.

All NIH employees are invited to attend the program. For further information, contact Phil Brinson, 496-6121.

Cancer Communications.

The project is part of a community outreach program to acquaint elementary and secondary students with biomedical research. The program provides opportunities to reach young minds which may not have had personalized career guidance and lets the community know that NCI wants to make an investment in the future of its youth, said Maxine Richardson, EEO director.

This first phase of the project explains the mission of NCI and other Institutes at NIH to students in grades 4 through 6. Mr. Jackson led a discussion on health careers.

A hands-on exhibit displayed an artificial heart, teeth, a cell and publications from each Institute. The students related the artificial heart to the one received by the late Dr. Barney Clark.

Other programs are planned in the fall for junior and senior high schools on activities at NIH and information on health careers.
Vision in Vertebrates: Functions and Ills Reviewed at Science Writers’ Seminar

Advances in our understanding of the visual process—ranging from the level of the gene to that of the brain—were highlighted at a recent NIH Science Writers’ Seminar.

Dr. Joram Piatigorsky, chief, Laboratory of Molecular and Developmental Biology, NEI, served as moderator and also discussed the spatial and developmental distribution of the family of structural proteins of the lens known as crystallins. The dense packing of these proteins is responsible for the lens’ transparency.

Research by his laboratory and others has shown remarkably similar structure between two immunologically distinct classes of these proteins—the β and γ crystallins which are found in all vertebrates.

In collaboration with English researchers, Dr. Piatigorsky and his colleagues, Dr. George Inana and Barbara Norman, recently found that each of the four exons of a β-crystallin mouse gene encodes one of the four structural motifs of the protein, linking the gene structure with protein structure in this major mouse lens protein.

Dr. Piatigorsky and Charles King have shown that some exons in the crystallin genes may be used alternatively, providing a source of variation for protein structure among the crystallins.

Mice Have Deficiency

Studies by NEI scientists—Deborah Carper and Drs. Piatigorsky, Toshimichi Shinohara, and Jin Kinoshita—have shown that Phillly mice, a strain that develops a hereditary cataract approximately 4 weeks after birth, have a deficiency of functional messenger RNA for a major β-crystallin. This defect precedes the development of the cataract.

Progeny of normal and Phillly mice have intermediate levels of this protein and a delayed onset of the cataract. If this deficiency causes the membrane damage leading to the cataract, it could provide an experimental model for attempting to repair ocular disease by genetic engineering.

A survey of research on how the retina’s rods and cones convert photons of visible light into neural signals that the brain can use was presented by Dr. William Hagins, chief, membrane biophysics section, Laboratory of Chemical Physics, NIADDK.

He and Dr. John George of his laboratory have shown that cyclic nucleotides, in collaboration with the rest of the rod’s cellular machinery, cause calcium ions to accumulate within its photosensitive disks in the dark and be released in the light.

Their finding supports a current theory of light activation in which lights causes photochemical reactions to occur in rhodopsin—the light sensitive protein in the retinal rods—which in turn causes a series of biochemical steps, one of which involves the splitting of cyclic nucleotides. This then changes the level of calcium ions in the cytoplasm, shutting down the sodium channels, and eventually causing a change in the conductance of the plasma membrane which is transmitted along the cell to the neuron.

Dr. Gerald Chader, chief, Laboratory of Visual Behavior

Dr. Michael Goldberg, chief, section of neuro-ophthalmological mechanisms, Laboratory of Sensorimotor Research, NEI, discussed his work on the mechanisms by which the brain translates neural impulses generated in the retina into visual behavior such as eye movement and visual attention.

By studying the activity of single neurons in the brains of monkeys as they responded to spots of light in various fields, he and Drs. M. Catherine Bushnell and David Lee Robinson of the laboratory have been able to distinguish different patterns of activity in the posterior parietal cortex and the frontal eye fields, the parts of the brain thought to be related to the control of eye movement.

An electron micrograph of a mouse β-crystallin gene hybridized to its mRNA (A) or to its complementary DNA (B) shows the looping out of the non-coding introns (a,b,c). The gene has four exons. Each exon encodes one structural motif of the β-crystallin protein.

Vision Research, NEI, discussed his work on the role of cyclic GMP in normal photoreception and in animal models of retinitis pigmentosa, a hereditary disease which causes degeneration of the photoreceptor cells of the retina. This results in progressively impaired vision, and, ultimately, blindness.

He has identified the basic biochemical lesion in some animal forms of RP to be an abnormally low level of the enzyme phosphodiesterase (PDE) which leads to destructively high levels of the intracellular messenger cyclic GMP and retinal degeneration.

In one animal model, Dr. Chader has found that an activator of PDE—calmodulin—can raise the levels of this enzyme during the critical early developmental period. If the same biochemical lesion is found to exist in human forms of RP, use of such an activator and new techniques such as gene therapy could provide the first means for treating or preventing this disease.

Activity in the frontal eye fields was found to be specifically related to the process of making a visually guided eye movement. However, activity in the posterior parietal cortex was related to the process of general visual attention and not limited to any specific motor process.

Understanding of the physiology of attention in monkeys will enable scientists to study this phenomenon more carefully in humans. The hope is to develop rehabilitative strategies for patients with neuro-ophthalmological disorders such as stroke.

For every minute you are angry you lose sixty seconds of happiness.—Ralph Waldo Emerson

Dr. Jay R. Shapiro Joins Tufts Pratt Diagnostic Clinic

Dr. Jay R. Shapiro, former Clinical Center deputy director, is now chief of the Pratt Diagnostic Clinic at Tufts New England Medical Center, where he will be actively involved in the research on metabolic bone diseases.

Dr. Shapiro came to the CC in 1978 as associate director. He was appointed deputy director in 1981.

“After 10 years in hospital administration and many exciting challenges, I am looking forward to becoming more actively involved in research and patient care. I will be continuing the research in brittle bone diseases that was instituted here,” he said.

Hospital Unique

“It’s been a privilege to work with such wonderful and talented people at the CC. This hospital is unique because of its research mission, but at the same time it must provide excellent medical care on a daily basis,” Dr. Shapiro commented.

Involvement with the many aspects of research and medical care was what he found most challenging at the CC. “During the past 5 years, increasing emphasis has been placed on the CC as a 24-hour-a-day hospital. We have tried to provide all the services required, while continuing to carry out the CC’s original mission.”

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Dr. Shapiro
Dr. Vincent DeVita, NCI Director, Honored By Sloan-Kettering, Ohio State University

Dr. Vincent T. DeVita, Jr., Director, National Cancer Institute, has been recently honored by Ohio State University and the Memorial Sloan-Kettering Cancer Center.

He received an honorary doctor of science degree June 10 from Ohio State University at its spring commencement in recognition of his work in developing curative chemotherapy for Hodgkin's disease.

Others who received honorary degrees that day were Vice President George Bush (who was also the commencement speaker); Dr. Benjamin Bloom, professor of education at the University of Chicago; Dr. Frank Press, president of the National Academy of Sciences, and Christa Wolf, an East German author.

Dr. DeVita was presented with the Memorial Sloan-Kettering Award on May 19 at its Fourth Annual Academic Convocation in New York.

Benno C. Schmidt, chairman of the Boards of Overseers and Managers at Memorial Sloan-Kettering, presented the award to Dr. DeVita for his "distinguished record as investigator, clinician, and administrator."

The award cited Dr. DeVita for being "one of the world's pioneers in chemotherapy," and for his "commitment to excellence, to the vigorous support of basic science, to the expeditious exploration of opportunities to advance the care of patients with cancer and to the development of sound approaches to the prevention of cancer, (which) have all spelled an unprecedented era of accomplishment for the National Cancer Program."

Constance Bishop Retires From Administrative Career

Constance L. Bishop, deputy executive officer, National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases, retired May 27 after 39 years of government service.

As deputy executive officer, she advised the NIADDK executive officer in matters relating to the overall mission of the Institute and guided day-to-day administrative activities.

During her 22 years at the Institute, Ms. Bishop served in many capacities. She came to NIADDK in 1961 as a travel clerk. In 1962, she became a special assistant in the Office of the Director, and in 1964, was promoted to administrative assistant. In 1965, she became administrative officer and was made deputy executive officer in 1979.

She was born in Ancon, Canal Zone. Her father, a pipeline suction dredge engineer, helped build the Panama Canal. In 1941 she got a job with the Panama Canal Company, a branch of the Federal Government, as a student assistant at a salary of 40 cents per hour. After 17 years there in the administrative and personnel areas, she took a job in private industry. Two years later, she changed jobs and came to the United States.

Ms. Bishop planned to go into the Peace Corps but while vacationing in Washington, she visited NIH and decided to apply for a job. "At NIH you are doing something to help others; at other agencies you don't get that feeling," she said. She and her young daughter then moved bag and baggage to Maryland when she was hired.

She has received several awards. Among them are the NIH Superior Performance Award in 1965, a special cash award for preparation of an NIADDK Information Handbook in 1987, the NIH Director's Award for superior service in coordinating administrative functions for US-USSR cooperative research efforts in 1976, and a Special Achievement Award from the NIADDK Director in 1981.

"Connie Bishop is one of the most caring administrators I have ever worked with. She understands that the manager's role is to support the scientist," said L. Earl Laurence, NIADDK executive officer.

Ms. Bishop's retirement plans include travel to Europe and Hawaii and plenty of golf and tennis. She plans to stay in the area because she finds Washington a stimulating place to live.

In concurring with recent remarks made by Lewis Thomas, a famous scientist and author who views NIH as one of the Nation's greatest treasures, Ms. Bishop said: "I'm glad to have been a part of the NIH family."

July 5, 1983

The NIH Record
Keeping the Health in NIH

HEALTH AND SAFETY EXPO...

Members of the NIH/R&W Health Angels demonstrated various exercise stations included in the Wells Fargo Gamefield, located behind Bldg. 10 near South Dr.

Physical therapists of the Clinical Center Rehabilitation Dept. provided ways for preventing low back pain and, by means of a videotape, gave instant critiques on safe-lifting technique.

The NIH Fire Department gave NIH employees an opportunity to obtain hands-on experience in using fire extinguishers to fight various kinds of fire.

Secretary Heckler obtained an answer to her question on microwaves from Michael Levy, a health physicist in the Radiation Safety Branch, Division of Safety.

NIH employees were provided with a free oral screening by the NIDR Dental Clinic.

NIH researchers obtained information from the Division of Safety on the hazards associated with electrophoresis and new equipment that is available to prevent electrical hazards.
Appointed Director of NLM Lister Hill Center

Dr. Richard B. Friedman has been appointed director of the National Library of Medicine's Lister Hill National Center for Biomedical Communications, effective July 1. The appointment was announced by Dr. Martin M. Cummings, NLM Director.

The Lister Hill Center, a major component of the NLM since 1968, has a staff of about 1. The appointment was announced by Dr. Martin M. Cummings, NLM Director.

The center explores uses of computer, communications, and audiovisual technologies to improve the organization, dissemination, and utilization of biomedical information.

It also serves as the focal point within the Department of Health and Human Services for developing and coordinating biomedical communications systems and networks.

The center's six branches cover areas of communications engineering, computer science, information technology, audiovisual program development, health professionals application, training and consultation.

Dr. Friedman comes to NLM from the University of Wisconsin Medical School in Madison where, since 1981, he has served as head of the section of general medicine, department of medicine.

He joined the faculty of the University of Wisconsin School of Medicine in 1972, serving as medical director of the laboratory computing facility, an NIH-funded resource. He did research into developing computer-based simulations of the patient-physician encounter, subsequently completing his medical residency and serving as chief resident of medicine.

In 1978, he was granted a joint appointment as an associate professor in the department of medicine and human oncology. He was the founder and first director of the Center for Medical Computing at Wisconsin.

Dr. Friedman graduated from Princeton University in 1965, and received his M.D. from Cornell University Medical College in 1969 with research honors. After interning in medicine at New York Hospital, he came to NIH as a clinical associate for 2 years, and was chief, medical data processing, Clinical Pathology Department. While at NIH, he did research on automation in clinical pathology. He has authored over 50 publications in the area of computer applications to medicine.

He also served as principal investigator for the computer-based examination project of the National Board of Medical Examiners and American Board of Internal Medicine. This joint project of the two boards was to develop a computer-based simulation to test clinical competence.

In addition, Dr. Friedman conducted studies on the utility of an integrated automated cancer clinical protocol system in improving protocol compliance and developed a series of voice-response systems to aid handicapped individuals.

CORRECTION

Two errors were made in the June 7 story on savings bonds. Gretchen Jones is the NHLBI coordinator, Administrative Office, Office of the Director, NHLBI, and her room number is 31/9A46, phone 496-5931. The DRS coordinator is Catherine Cliford, Technical Information Specialist, 10/1/19, 496-2184. NIADDK regrets these errors.

WHO Global Biosafety Program Held at NIH During June

NIH's Division of Safety and the World Health Organization (WHO) Collaborating Centre for Applied Biosafety Programmes and Research hosted the WHO's First Global Biosafety Train-the-Trainer Workshop from June 6-10. Attending were 21 senior scientists representing 16 countries and the six WHO regions.

This first global biosafety train-the-trainer program was one of the major initiatives of the WHO Special Programme on Safety Measures in Microbiology, a program coordinated by Vinson Oviatt who has been assigned from the NIH Division of Safety to Geneva for the last 4 years.

The train-the-trainer program provided a forum for sharing and discussing ways of effectively communicating biosafety information to laboratory and clinical staff around the world. The program emphasized the importance of following good microbiological practice in preventing laboratory-acquired infections.

In addition, the program equipped the participants with a foundation in biosafety, including techniques for assessing biohazards and controlling or minimizing hazardous exposures.

As a result of the program, the participants will be initiating biosafety training programs for laboratory and clinical personnel at the WHO regional and local levels.

Participants and faculty attending in the First WHO Global Biosafety Train-the-trainer program included, seated left to right: Dr. Cyrus H. Simanjuntak (Indonesia), Dr. L. Muyenbe-Tamfum (Zaire), Dr. Toshikico Komatsu (Japan), Dr. Julio Garcia Moreno (Chile), Dr. Imam Zaghloul Imam (Egypt), David Payne (Switzerland), and Col. Dr. Abdul Hannan (Pakistan), Second row: Dr. Kirsten Staehr Johansen (Denmark), Dr. L. Muyenbe-Tamfum (Zaire), Dr. William S. Roderick (Division of Safety, NIH), Dr. Richard B. Friedman (NIH), Dr. Robert W. McKinney (DS, NIH), Har­ney W. Rogers (DS, NIH), Richard E. Shafl (DS, NIH), Manuel S. Barbeito (DS, NIH), Vinson R. Oviatt (WHO), Dr. Meinrad A. Koch (Germany). Missing were: Dr. R. Martinez-Silva (PAHO) and Warren V. Powell (DS, NIH).
The search for a specific treatment for sickle cell disease and related blood diseases was the subject of a recent workshop on "Development of Therapeutic Agents for Sickle Cell Disease." Sponsored by the NHLBI's Division of Blood Diseases and Resources, the meeting attracted approximately 150 scientists from across the U.S. and the Ivory Coast, Israel, Hungary, West Germany, France, England and Canada.

Therapeutic approaches discussed during the workshop included the use of drugs that affect fetal hemoglobin synthesis, that change the oxygen affinity of hemoglobin, that affect the aggregation of sickle hemoglobin by interfering with interaction, or that swell the sickle erythrocyte.

Although few of these compounds are at the stage of clinical trials, some are undergoing detailed laboratory study in hemoglobin solutions and in red cells, while others are ready for toxicological studies.

One goal of the workshop was to foster cooperation of university and government scientists with the pharmaceutical industry in developing drugs for the treatment of sickle cell disease.

This is especially important in view of the recently enacted Orphan Drug Act designed to facilitate drug research for "orphan" diseases (that is, diseases so relatively rare that it isn't profitable to develop drugs to treat them). In that respect, the workshop achieved its goal as indicated by attendance of representatives from the Commission on Drugs for Rare Diseases of the Pharmaceutical Manufacturers Association (PMA) and from Bristol-Myers, Burroughs-Wellcome, Hoechst, McNeil, Richter, Searle, Syntex and Upjohn.

Dr. Max F. Perutz, Nobel Laureate from the Laboratory of Molecular Biology, Cambridge, England, delivered the opening address on "The Use of X-ray Crystallography to Develop Drugs with Specific Biochemical Actions," with particular reference to his own current work on specific inhibitors of the gelation of sickle hemoglobin.

Over 50 additional papers were presented, mostly in poster format. A day of the workshop was devoted to discussing these posters and to a panel on the general problems of drug development in sickle cell disease. The coordination, evaluation, and funding of drug development studies were discussed throughout the workshop.

Dr. Marion Finkel of the Food and Drug Administration summarized the actions of her agency in conjunction with those of other agencies of DHHS and of the PMA in the Orphan Products Development Program.

Dr. Clarke Reid of DBDR summarized the research and development programs of the Sickle Cell Disease Branch. Other plenary lectures given by NIH intramural scientists included those by Dr. William A. Eaton and Dr. Alan Schechter of the NIADDK and Dr. Arthur Nienhuis of the NHLBI.

The workshop was organized by Dr. John I. Hercules of the Sickle Cell Disease Branch in conjunction with Drs. Eaton and Schechter, Dr. H. F. Franklin Bunn of Harvard University, and Dr. Lawrence Lessin of George Washington University.

NICHD's Dr. Hodgen Receives First SGI President's Scientific Achievement Award

Cited as a "devoted, young investigator who has distinguished himself with a productive and diverse research career."

NICHD's Dr. Gary D. Hodgen has received the first SGI President's Scientific Achievement Award of the Society for Gynecologic Investigation.

The award, to be presented each year to an outstanding young researcher, was announced recently at the society's 30th annual conference in Washington, D.C.

Dr. Hodgen was selected for his leadership as chief of NICHD's Pregnancy Research Branch which he has guided to national prominence through several significant research advances.

SGI also cited him for training more than twenty postdoctoral fellows, in both basic and clinical research, and for service on editorial boards of numerous journals.

Dr. Steven Larson Joins CC As Chief, Nuclear Medicine

Dr. Steven M. Larson joined the Clinical Center staff on July 1 as chief of the Nuclear Medicine Department.

Dr. Larson came to the CC from the Veterans Administration Medical Center in Seattle, Wash., where he headed the nuclear medicine section. He was also professor of medicine, Laboratory of Medicine and Radiology at the University of Washington School of Medicine.

He earned his M.D. degree from the University of Washington School of Medicine in 1968, and then served a year's internship and a year's residency in medicine at the Virginia Mason Hospital in Seattle.

From 1970 to 1972, he was a clinical associate in the CC's Department of Nuclear Medicine. He has also held positions at Johns Hopkins University in Baltimore, the University of Oregon Health Sciences Center in Portland, and the Veterans Administration Medical Center in Portland.

Dr. Riley Honored at Rutgers

Dr. Matilda White Riley, associate director for behavioral sciences research at the National Institute on Aging, recently received the honorary degree of doctor of humane letters from Rutgers University.

Dr. Riley was cited for her work in uncovering the unique links between the family, the process of growing up and growing old, and the relationship of the aging process to gender, race, and class.

Earlier in the month, she received an award for exceptionally distinguished achievement from the American Association for Public Opinion Research.

Dr. Riley chairs the NIH study group on health and behavior and is senior editor of the recently published volume Aging in Society: Selected Reviews of Recent Research.
vascular obstruction, and infection. With complications include renal dysfunction, and after the operation. Other postoperative with liver transplantation. Massive hemorrhage is the most serious problem during rejection, biliary tract complications, graft vascular obstruction, and infection. With complications include renal dysfunction, and after the operation. Other postoperative with liver transplantation. Massive hemorrhage is the most serious problem during rejection, biliary tract complications, graft vascular obstruction, and infection. With complications include renal dysfunction, and after the operation.

The panel noted: Severe complications frequently occur with liver transplantation. Massive hemorrhage is the most serious problem during and after the operation. Other postoperative complications include renal dysfunction, rejection, biliary tract complications, graft vascular obstruction, and infection. With growing medical and surgical expertise and improving technology, these complications can be expected to diminish.

The panel could not specify a single “best” time for transplant surgery. However, they said that such surgery should be reserved for patients in any of the following phases: when death is imminent, when irreversible damage to the central nervous system is inevitable, or when quality of life has deteriorated to unacceptable levels.

The panel stated that requirements for conducting a liver transplant program are so formidable that any institution embarking on this program must make a major commitment to its support. “Liver transplant patients are seriously ill before surgery” they said. “The transplant effort is prodigious, and the postoperative intensive care interval, averaging 2 weeks, is punctuated by complications and frequent need for reoperation.” In this context, a host of experts is needed to complement a qualified transplantation team.

On future research, one panel recommendation was the establishment of a registry or clearinghouse for the collection and evaluation of all available data on liver transplantation. Such a center would develop unified criteria for selection of transplant patients and for reporting and evaluating all data on outcome of the operation and the patient’s postoperative and long-term condition.

The panel also urged that high priority be given to studies of the procedure itself, such as improved preservation of the donor liver before transplantation and improved control of organ rejection. They asked that research into the broad areas of the cause, pathogenesis and natural course of chronic liver disease “be fostered and supported by all available means.”

The panel members included hepatologists, transplant surgeons, internists, pediatricians, biostatisticians, immunologists, ethicists and a public representative. It was chaired by Dr. Rudi Schmid, professor of medicine and dean, University of California, San Francisco.

Copies of the statement are available from the NIH Office of Medical Applications of Research, Shannon Bldg., Rm. 216, phone 496-1143, or the NIADDK Office of Health Research Reports, Bldg. 31, Rm. 9A04, phone 496-3583.

R&W Election Results for 1983-84
President: Agnes Richardson
Second Vice President: Leo Buscher
Corresponding Secretary: Rowena Ahern
Assistant Treasurer: Cindy Fox

Harvard Honors Dr. David Cogan, NEI Ophthalmology Chief; Names New Eye Pathology Laboratory Facility for Him

A new facility to house Harvard Medical School’s 115-year-old Eye Pathology Laboratory has been named in honor of Dr. David G. Cogan, chief of neuro-ophthalmology for the National Eye Institute. The new facility was dedicated at ceremonies held in Boston, Apr. 21 and 22.

Dr. Cogan attended the dedication where he was lauded for his excellence as a scholar, teacher, researcher, and clinician. He served as director of the Eye Pathology Laboratory from 1954 to 1956, director of the Howe Laboratory of Ophthalmology at Harvard from 1943 to 1973, and head of the department of ophthalmology at Harvard Medical School from 1962 to 1968.

He also held the Henry Willard Williams professorship of ophthalmology, Harvard Medical School, and was named Williams Professor Emeritus. He joined the NEI staff as a visiting scholar in 1973.

At the dedication ceremonies, Dr. Cogan’s scientific originality, curiosity, and perseverance were praised by colleagues who were David G. Cogan Fellows at the Howe Laboratory.

Among those fellows, now members of the NEI staff, are Dr. Carl Kupfer, Institute Director; Dr. Jiro Kinoshita, scientific director; Dr. Gerald J. Chader, chief, Laboratory of Vision Research; Dr. Tochiro Kuwabara, chief, section on experimental pathol­ogy, Laboratory of Vision Research; Dr. Henry N. Fukui, health scientist administrator and Cataract Program director; and Lorenzo Merola, Laboratory of Vision Research.

During the 2-day program, Dr. Cogan served as moderator for the Ophthalmic Pathology Symposium, and was speaker and guest of honor at an Ophthalmology Laboratory Research Conference.

The history of the new David G. Cogan Eye Pathology Laboratory and Dr. Cogan’s involvement in it were traced at the dedication ceremony.

The Eye Pathology Laboratory came into existence in 1868 when Dr. B. Joy Jeffries put a large pathology specimen cabinet in the main operating room of the hospital where he practiced medicine. He was named microscopist and curator of the Pathological Cabinet of the Massachusetts Charitable Eye and Ear Infirmary.

Today the David G. Cogan Eye Pathology Laboratory under the direction of Dr. Daniel M. Albert, a former NIH fellow, processes more than 2,000 specimens a year and ranks as one of the three busiest eye pathology laboratories in the country. Some of the slides and specimens date back to the 1860’s, providing a unique and extremely important resource in American eye pathology.

Several areas of Dr. Cogan’s research were cited during the ceremonies: work on the physiology and pathology of the cornea vascular changes in the retina, particularly in diabetes; the pathology of the optic nerve; the neurology of the ocular muscles; and the effect of radiation on the eye, particularly on the lens. He is an author of over 450 publications, and former chief editor of the Archives of Ophthalmology.

In addition, he has been honored with numerous awards and citations. Among these are the Proctor Medal, the Knapp Medal, the Warren Triennial Prize, the New England Ophthalmological Society Annual Prize, the Hektoen Silver Medal of the American Medical Association, the Howe Medal of the American Ophthalmological Society, the Howe Gold Medal of the University of Glasgow, the Research to Prevent Blindness Trustees Award, the Gonin Medal of the International Council of Ophthalmology, the first Derrick Vail Award the Johns Hopkins University Centennial Fellow Award, the first Castrojeroo Medal, and the Honorary Award of the Association for Research in Vision and Ophthalmology.

Congressman Major R. Owens (D), who represents the 12th Congressional District, Brooklyn, N.Y., in the U.S. Congress, visited the National Library of Medicine recently. Representative Owens is the first professional librarian to serve in Congress. He received his M.S. from Atlanta University, and before his election to the New York State Senate (1974-1982), was commissioner of New York City’s Community Development Agency and director of the Community Media Library Program at Columbia University. During his NLM visit and tour, Congressman Owens met with acting associate director for library operations Lois Ann Colaianni.
Self-Taught Photographer, Radiographer, Expert in Microtomy: Franklin Reed Retires From NCI’s Laboratory of Molecular Biology

Mr. Reed worked at the National Cancer Institute for 30 years—doing animal surgery, photography for publications, and autoradiography before retiring in May.

After 20 years as a farm laborer, Franklin Reed switched occupational gears and joined the National Cancer Institute in 1953.

First as a member of the Laboratory Aids Branch ("bull gang") for 6 months, then as an assistant to Dr. Seymour Wollman, Mr. Reed was given the opportunity to learn many new techniques needed for the problems being investigated.

"Dr. Wollman gave me every encouragement, and I couldn't have done so much without his support," he says about the man he assisted for 29 years.

"I was never turned away by anyone at NCI when I asked for help. If there was a new technology needed, I learned it," Mr. Reed says. Both NCI and visiting scientists began to ask him to teach them surgical techniques. "I tried to develop rapid procedures that produced as little shock to the animals as possible," he says.

Keeping up with the laboratory work also meant learning photography. "I took a home study course, and practiced in the laboratory darkroom. Things like that were just a necessity, once I was involved in the work. I didn't mention the course until it was over," he says.

By 1955 Mr. Reed had saved enough money from his NCI job to move his family from a rented farmhouse to a home he bought. He became a volunteer at the Montgomery County Fair art exhibit, where each of his four children contributed paintings to the exhibit. "My kids were always close, and I wanted them to know Daddy was there helping," he says. While still a farmhand, Mr. Reed had cut timber and helped construct the first fairground buildings in Gaithersburg.

Mr. Reed already has two projects he'll be working on full time during his retirement. One is cultivating the 2 1/4 acres of land he now owns in Mount Airy so it will feed him and his family. "I'm going to apply the best of the old agricultural techniques and the new biological ones for improving the soil. I try to keep up with agricultural research, and still subscribe to one journal," he says.

The other project is tracing his family tree—he's already traced it back to a great-great grandfather who lived in Virginia 150 years ago. "One of my daughters has a degree in anthropology. I really got started on the genealogy to help her," he says.

Dr. Frank Tietz of the NIH R&W Sailing Club and Michael Hart of the NIH R&W Basketball League, receive awards for their outstanding volunteer efforts in organizing and for contributing their time. Other winners, not pictured, were Dr. Henry Hennings, Basketball Club; Rick Hargett, Tennis Club; and Ernest Lunsford, Softball Club.

Dr. Aamodt

Dr. Roger L. Aamodt and Dr. Ai-Lien Wu have been selected to participate in the Grants Associates Program, a 1-year training program for health scientist administrators.

Dr. Aamodt

Dr. Aamodt attended the University of Utah where he worked on molecular biology and received his B.S. in 1966. His dissertation on radiation biology was completed at the University of Rochester in 1972.

He has worked in the Clinical Center’s Department of Nuclear Medicine since 1971 as chief of the whole body counter section. Before this he was employed in several places, including the department of radiological health for the University of Utah and Atomics International in Conoga Park, Calif.

Dr. Aamodt’s research in radiobiology includes 26 articles and 20 published abstracts as well as several presentations. His professional activities include selection as one of 25 advanced undergraduates in the U.S. to attend a special Space Biology Symposium, a special health physics fellowship with the U.S. Atomic Energy Commission and membership in Sigma XI.

Dr. Wu

The other appointee, Dr. Wu, was born in Taipei, Taiwan. She obtained her B.S. from the National Taiwan University in major plant pathology with an emphasis on microbial biochemistry and physiology. Her Ph.D. work at Columbia University’s Institute of Human Nutrition concerned major gastrointestinal physiology with an emphasis on lipid absorption.

Like Dr. Aamodt, Dr. Wu is not a newcomer to the Public Health Service field. She has been a chemist with the Food and Drug Administration since 1980. Some of her previous work experience includes employment as a research fellow with children’s service at Massachusetts General Hospital and a staff fellowship with NIAADD.

She has been awarded several honors including a fellowship in developmental medicine with Harvard Medical School, and is a member of many professional organizations and societies.

Drs. Aamodt and Wu Named To Grants Associates Program

The NIH Record

July 5, 1983
BEIB Expands Technical Aid on Scientific Equipment
To Egypt's Academy for Research and Technology

Technical assistance to the Egyptian Academy for Scientific Research and Technology by the Biomedical Engineering and Instrumentation Branch (BEIB) of the NIH Division of Research Services has entered a new phase.

The new program will strengthen Egypt's domestic training capability in repair and maintenance of scientific equipment, improve operations at selected Egyptian repair and maintenance centers, and help in the development of new centers.

The new activities continue joint efforts begun in 1980 and funded by the U.S. Agency for International Development.

Under the earlier agreement BEIB helped establish repair and maintenance centers at five universities. Staff training took place primarily at BEIB on the NIH campus.

The new project is designed to strengthen Egypt's technological self sufficiency and reduce dependence on foreign training. The project officer is Howard Metz, BEIB assistant chief for scientific equipment services. Mohamed Hassan Shaltoot is coordinator for the academy.

To strengthen Egypt's domestic training, BEIB is helping set up an instrumentation technology unit (ITU) in the academy's scientific instrumentation center. This ITU will offer courses in repair and maintenance and provide other Egyptian institutions with services, including technical, library, replacement parts and purchasing and assistance on more difficult repairs.

A revolving fund is being developed to continue the operations after BEIB's participation ends.

Initial ITU staffers have been picked, and six staff instructors have come to BEIB to develop courses and improve their own skills in repair and maintenance.

A group of three Egyptian engineers developed a course in applied electronics at BEIB during October-December 1982. A second group is now developing a course in "troubleshooting scientific equipment" with assistance from BEIB.

The course materials will be translated into Arabic for use at the ITU.

To strengthen the six existing repair and maintenance centers, personnel will get additional training at the new ITU. BEIB staff will continue to give guidance on program improvements and train university staff to repair and maintain more specialized equipment.

New maintenance and repair centers will be opened at Zagazig and Menoufia Universities with assistance from BEIB personnel. This help will include needs assessment, equipment, training, and management planning.

BEIB also provides assistance to the Egyptian Ministry of Health on development and operation of a pilot medical equipment maintenance center in Giza Governorate near Cairo. The Giza center is a model for additional centers the ministry plans to develop in other governorates throughout the country.

French Visual Research Award Open to American Scientists

A new French research award is available for scientists, including Americans, studying visual disorders.

The Académie Nationale de Médecine of France has created the Netter Award to be given to a researcher for outstanding work in progress in neurophysiologic, neuropathologic, or neurosurgical investigations leading to advances in the prevention and treatment of optic nerve and visual pathway disorders.

The award will consist of a cash grant in the sum of 20,000 French francs (about $2,500) to be presented annually to the selected candidate. Applications for the first award will be received from Nov. 15, 1983, through February 1984.

Interested applicants or their sponsors should submit the following:

- a request letter addressed to the President, Académie Nationale de Médecine, 16, rue Bonaparte, 75272 Paris Cedex, 06, France;
- two copies of a manuscript describing the nature of the work, results achieved, and significant potential developments;
- the paper preferably should be written in French, but if in English, it should be accompanied by a substantive resume in French;
- a curriculum vitae, including full name, address, and birthdate of the candidate.

Further inquiries may be addressed either to the Académie or to Dr. Robert Netter, 285 rue de Vaugerard, 75015 Paris, France.

NIH Bike Day Race Results

The NIH R&W Bicycle Commuter Club held races on June 8 as part of the NIH Health Expo.

Two races were run, one for experienced riders and one for novices. A total of 26 riders took part.

Results:

Experienced: Lou Mocca, Brian Aguilo and Peter Abcarrian.

Novice: Dwight Lin, John Cappelletti and Wendell Davis.

Prizewinners among women were Doreen Arion in the first race and Wendy Aarson in the second.

Winners received gift certificates and biking equipment.

For further information on the Bicycle Commuter Club call Dr. Carl Frasch, 496-1920, or George Russell, 496-1873.

I may disapprove of what you say, but will defend to the death your right to say it.—Voltaire

Four Egyptian engineers at the Biomedical Engineering and Instrumentation Branch, DRS, are sharpening their skills in troubleshooting scientific equipment and developing a course in that subject with help from BEIB staff, (l to r): Abbas Eldahawy, Lewis Cascio (BEIB), Usma Ali, Abd Elazziz Shakroon, Nelson Smith (BEIB), and Mahmoud Rakaha.

Dr. William T. Watson, chief of the small animal section of the Veterinary Resources Branch, DRS, has received the Distinguished Alumni Award of the Tuskegee Institute Veterinary Medical Alumni Association. He was presented the award during the institute's 1983 Veterinary Symposium. Dr. Watson received his D.V.M. degree from Tuskegee in 1965.
NICHD-Funded Scientist Develops Gene Test To Diagnose PKU in Unborn Children

Using genetic engineering techniques, scientists have developed a gene procedure to diagnose phenylketonuria (PKU) in unborn children as well as in healthy older siblings who may be carriers of the trait.

The new test was developed by Dr. Savio L.C. Woo of the Baylor College of Medicine in Houston, Tex., through research funded by the National Institute of Child Health and Human Development.

PKU is an inborn error of metabolism in which the affected person is unable to convert phenylalanine—a naturally occurring amino acid essential for normal growth—into tyrosine.

PKU can lead to severe mental retardation, behavioral problems, epilepsy, and other types of neurological impairment. With an incidence of 1 per 14,000 live births, PKU is one of the most common metabolic disorders which, if untreated, invariably requires lifelong institutional care. Most untreated PKU children develop an IQ of no more than 20.

PKU shows no symptoms at birth but if detected early through blood analysis, a special diet can prevent mental retardation.

PKU is found in most population groups but is rare in blacks and Ashkenazi Jews. Its heredity is recessive, that is, the disorder will not show up in the offspring unless both parents possess the trait. However, any PKU parent can pass the gene on to the children and make them carriers without knowing it.

With the help of recombinant DNA techniques, Dr. Woo and his research staff succeeded in cloning the gene for the human liver enzyme (phenylalanine hydroxylase) that—if absent or deficient—causes PKU.

He then used this cloned gene in testing fetal cells obtained from the amniotic fluid of pregnant women. Using gene mapping (identifying the type and place of specific genes on a chromosome), he compared the fetal genes to those in parents and normal volunteers.

The major benefit of Dr. Woo's research is that—in families that already have one or more children with PKU—the new test enables the physician to accurately determine whether the fetus of a subsequent pregnancy is affected by the disorder (25 percent chance), and whether older unaffected siblings are carriers (50 percent chance each) or are free of the PKU trait (25 percent chance).

At present, PKU is diagnosed in the infant by blood analysis after birth. This test has become standard procedure in most developed countries in the past 20 years. A drop of blood is taken from the infant's heel between 2 and 7 days after birth, following feedings containing protein.

Once diagnosed as having PKU, a newborn can be started immediately on a phenylalanine-restricted diet. NICHD-supported research has confirmed that children on the diet develop normally, both physically and mentally.

NICHD scientists believe the work of Dr. Woo and his colleagues—besides its predictive and diagnostic value—has greatly added to understanding of the PKU gene and may eventually lead to an in utero treatment of PKU by gene substitution.—Teneke Bodde

Dr. Susan Sieber Appointed Deputy Director, Division of Cancer Cause and Prevention, NCI

Dr. Susan M. Sieber has been named deputy director of the Division of Cancer Cause and Prevention, NCI. She had been a special assistant to the Division director, Dr. Richard Adamson, since April 1982.

Dr. Sieber received her Ph.D. in pharmacology in 1970 from George Washington University, and has been with the National Cancer Institute since 1971. She joined the Division of Cancer Treatment's Laboratory of Chemical Pharmacology as a staff fellow and became a pharmacologist in that laboratory in 1974. She headed its pharmacology and experimental therapeutics section from 1978 to 1982, and from 1980 to 1982 was also the acting laboratory chief.

Dr. Sieber's research has focused on chemical carcinogenesis in nonhuman primates, toxicity of anticancer agents, and biological and pharmacological aspects of the lymphatic system. She has authored or coauthored over 60 research papers.

A member of several professional societies, she also served on the editorial board of Cancer Treatment Reports, and is on the faculty of the NIH Graduate Program of the Foundation for Advanced Education in the Sciences.