

Dr. P. Leder, Geneticist, Will Deliver NIH Lecture

Dr. Philip Leder, John Emory Andrus professor of genetics, and chairman, department of genetics, Harvard Medical School, will deliver the NIH Lecture on "Misplacing Genes."

The lecture will be delivered on Monday, May 19, at 8:15 p.m. in the Clinical Center's Masur Auditorium.

The NIH Lectures were established in 1953 to recognize outstanding scientific accomplishments and to contribute to the vital interchange of scientific information. The lecture-ship is awarded by the NIH Director on the advice of the Scientific Directors.

In his talk on "Misplacing Genes," Dr. Leder will discuss the use of transgenic mice as a model for studying the action of oncogenes in both the development of cancer and in normal embryonic development. Transgenic mice are created by introducing foreign DNA sequences into the germ line genome. The transgenic system should prove to be an extremely useful tool for delineating the events and the genes that control normal and abnormal cell growth.

Dr. Leder was formerly at NIH, serving with both NCI and NICHD and as chief of the Laboratory of Molecular Genetics with the latter.

While at the NIH, Dr. Leder and his colleagues directed their efforts toward understanding the molecular processes involved in the transfer of genetic information from parent to offspring and from gene to functional product. His laboratory was among the first to synthesize segments of synthetic genes, an accomplishment which was of critical importance to the development of recombinant DNA technology. He is also a pioneer in mammalian gene research.

(See NIH LECTURE, Page 8)



Dr. James B. Wyngaarden, NIH Director (l), and Dr. Fotis C. Kafatos, Director of the Institute of Molecular Biology and Biotechnology (IMBB), Research Center of Crete, Greece, recently signed an agreement for research cooperation during a ceremony at Stone House. NCI, NHLBI, NIAID, NICHD, and NIEHS will collaborate with IMBB under the agreement.

The NIH Record

Two New NIH Agencies

National Ctr. for Nursing Research and Institute Of Arthritis, Musculoskeletal and Skin Diseases

National Nursing Center

Creation of the National Center for Nursing Research as the newest component of the National Institutes of Health, the Nation's largest biomedical research agency, has been announced by HHS Secretary Dr. Otis R. Bowen.

Dr. Doris H. Merritt, who has been research training and research resources officer at NIH and an assistant to the NIH Director since August 1978, has been appointed Acting Director of the new center.

Dr. Merritt, who worked at NIH from 1957 to 1961, served during 1961-1978 as a professor of pediatrics and dean for research and sponsored programs at Indiana University in Indianapolis. She received her bachelor's degree in 1944 from Hunter College, City University of New York; her M.D. in 1952 from the George Washington University School of Medicine in Washington, D.C. and did her internship and residency in pediatrics at the Duke University School of Medicine in North Carolina.

The NCNR, established by Public Law 99-158, will administer the nursing research effort sponsored by the Federal Government. Through a program of grants and awards, the NCNR will support nursing research and research training related to patient care, the promotion of health, the prevention of disease and mitigation of the effects of acute and chronic illnesses and disabilities.

In support of studies of nursing interventions, procedures, delivery methods and ethics of patient care, NCNR programs are expected to complement other biomedical research programs which are primarily concerned with causes and treatment of disease.

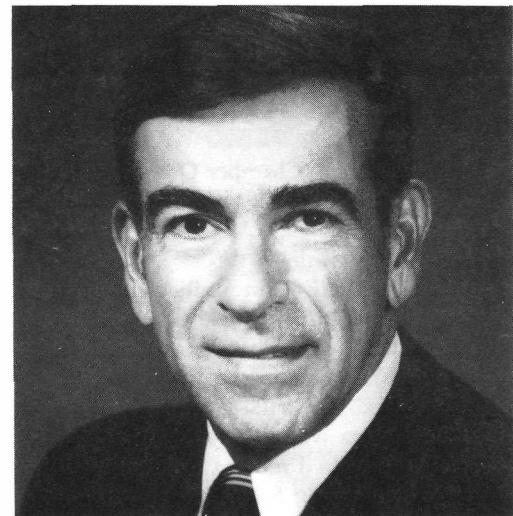
In announcing creation of the NCNR, Secretary Bowen recognized the substantial efforts of Sen. Orrin Hatch and Rep. Ed Madigan in authorizing its establishment.

He went on to note the long-term interest that HHS has maintained in the importance of nursing care and nursing research. The department established a center for nursing research in the Division of Nursing in the Health Resources and Services Administration in January 1985. That activity is being transferred to NIH to form the nucleus of the NCNR office.

Temporary offices will be in NIH Bldg. 38A on the agency's Bethesda, Md., campus. □



Dr. Merritt



Dr. Shulman

New Institute

A new National Institute of Arthritis and Musculoskeletal and Skin Diseases at the National Institutes of Health has been announced by HHS Secretary Dr. Otis R. Bowen.

Dr. Lawrence E. Shulman, director of the Division of Arthritis, Musculoskeletal and Skin Diseases, has been appointed Acting Director of the new Institute by Dr. James B. Wyngaarden, Director of NIH.

(See NEW INSTITUTE, Page 6)

TRAINING TIPS

The following courses are sponsored by the Division of Personnel Management, the NIH Training Center.

<i>Executive, Management, and Supervisory</i> 496-6371	<i>Course Starts</i>	<i>Deadline</i>
Introduction to Supervision	6/23	5/16
Performance Appraisal Counseling	6/11	6/2
Strategic Planning for Productive Results	6/18	5/9
Federal Budget Process	6/4	5/25
<i>Office Skills Career Development Program</i>	496-6371	
<i>Support Staff Training</i> 496-6211		
Introduction to Working at NIH	5/28	5/19
	6/25	6/16
Time and Attendance	5/28	5/19
	6/25	5/28
	7/23	6/25

Training & Development Services Program Orientation 496-6211

5/28

5/20

SHARE TRAINING. For complete NIH Training Center information sign on to WYLBUR and enter SHARE TRAINING. For first-time users enter:

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Adult Education Program ongoing, 496-6211.



CENTENNIAL

Down Memory Lane at NIH

President Franklin D. Roosevelt is shown in this week's historical photograph speaking at NIH.

Can you tell where on campus he is speaking and on what occasion and in what year? Clue: It is a significant event in the history of the National Institutes of Health.

Several NIHers called to tell us that T-6 was finally torn down in 1961, or was it 1962? That's right; no one could come up with the exact date but many recalled watching A and B wings of Bldg. 31 being built and moving into the new building in the early 1960s.

They're essentially correct.

To keep the record precise, the 1985 NIH Almanac says that construction of Bldg. 31 began in October 1959 and was completed in April 1962. But the building was first occupied by NIH on Oct. 31, 1961. Bldg. T-6 was razed in 1961 to make room for the parking lot for Bldg. 31 and Bldg. 15L was razed in 1962 to make room for Bldg. 31.

Thank You

We thank all those readers who have come forward with photos and stories and remind those we haven't heard from yet that we are still interested. Contact Susan Gerhold at 496-1776 or the Visitors Information Center, Bldg. 10, B1C218 both with answers and photos and story ideas. □

No matter how happily a woman may be married, it always pleases her to discover that there is a nice man who wishes that she were not.—H. L. Mencken

Uses of Personal Computers At Work To Be Demonstrated

Have you ever wondered how other NIH employees use personal computers in their work? There will be an opportunity, on both May 12 and 13, to see employees from several BIDs demonstrate specific applications using PC software.

This first NIH PC software fair is unique in that it is being run by, as well as for, NIH employees.

The fair will be held in the User Resource Center, Bldg. 31, Rm B2B47 from 10 a.m. to 3 p.m. on May 12 and 13.

The schedule for demonstrations of software applications is:

Monday, May 12, 10:00 a.m.—12:30 p.m.: Graphics, Statistics, and Telecommunications.

12:30 p.m.—3:00 p.m.: DisplayWrite3, Lotus 1-2-3, and dBASEIII.

Tuesday, May 13, 10:00 a.m.—12:30 p.m.: DisplayWrite3, Lotus 1-2-3, and dBASEIII.

12:30 p.m.—3:00 p.m. Graphics, Statistics, and Telecommunications.

All six software areas will be accessible from noon until 1 p.m.

The fair's sponsors are the User Resource Center, NIH Training Center (DPM), Personal Workstation Office (DCRT), and Records Management Branch (DMP) in cooperation with PC lead users, office technology coordinators, and NIH PC user groups. □

The NIH Record

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See the Birds

Come with R&W Friday, May 16 to see the Baltimore Orioles take on the Oakland A's in Memorial Stadium. Game ticket and transportation is \$14 per person. Buses will leave Bldg. 31C at 5:30 p.m., sharp.

Sign up at the R&W Activities Desk, Bldg. 31, Rm. B1W30. □

Local Photographer To Present Slide Show on China Tour

Ed Flynn, a local amateur photographer, will present a slide show on China, contrasting the country as he knew it as an American GI serving as an interpreter during World War II and on a visit of several months there last fall (40 years later). The show will be in conjunction with the next meeting of the NIH/R&W Camera Club on Tuesday, May 13, in Bldg. 31, Conf. Rm. 4, at 7:30 p.m. Visitors are welcome to attend.

Winners of the NIH-wide competition held in Wilson Hall on Apr. 8 were:

Black & White Prints:

- 1st—Bob Young—Spiral Staircase
2nd—Bob Young—Days End, Cozy Harbor
3rd—Richard Sloane—Misty Falls & Boulders

Color Prints:

- 1st—Joy Richmond—Chantilly
2nd—Holly Giesen—Nude
3rd—Joy Richmond—Violin and Music

Color Slides:

- 1st—Bob Young—San Diego Skyline
2nd—Tom Waldman—Frozen Creek
3rd—Joy Richmond—Monet's Bridge

Receiving honorable mention were:

- Joy Richmond—Church Steeple
Bob Young—New England Evening
B.J. Kendrick—Kayak
B.J. Kendrick—Paris Street
B. J. Kendrick—Diner
Francis Kendrick—Rain Trek
Richard Hess—Extras
Tom Waldmann—Skilift Workers
Richard Sloane—Triangles □

Help Available on Using dBASE III Software

If you use (or would like to use) the dBASE III software package and you have questions or have run into difficulties, expert help is available.

Beginners and experienced users can receive assistance from dBASE consultants, who also can oversee your hands-on practice at the User Resource Center, Bldg. 31, Rm. B2B47, 9 a.m. to noon on any Tuesday. No appointment is necessary to have your questions answered and learn how to:

- Benefit from dBASE's diverse capabilities
- Key into dBASE instructions
- Create reports and labels
- Upload/download to dBASE with Telios
- Search character strings
- Use word processing packages from dBASE
- Develop command files.

dBASE consultation sessions are sponsored by Personal Workstation Office, DCRT. □

Extramural Activities Orientation Scheduled for July 24–25

The Office of Health Scientist Administrator Development Programs will be presenting a 2-day orientation session entitled "Fundamentals of NIH Extramural Activities" on July 24–25. The meeting will be held in Bldg. 31, Conf. Rm. 6, starting at 8:30 a.m., with registration at 8 a.m. The course will cover an overview of extramural activities, grants, contracts, cooperative agreements, their review and scientific and fiscal management.

Participants will be limited to approximately 50 people. Priority will be given to those who are new to the extramural side of NIH at all grade levels. Consideration will also be given, on a space available basis, to intramural staff who are interested in NIH extramural activities.

Those interested are asked to submit a DHHS-350 form (Training, Nomination and Authorization) through their appropriate BID channels to the HSA Development Programs Office, (Bldg. 31, Rm. 1B62). PHS commissioned officers are asked to use this form also. Please be very specific in items 16 and 17. In item 10, please list your complete office address, **not** your home address; item 14—no cost; item 20 A(8), B(8), C(1) D(NA); item 21 (NA) and item 22 (9998). All other instructions are on the back of the DHHS-350. Deadline is June 30.

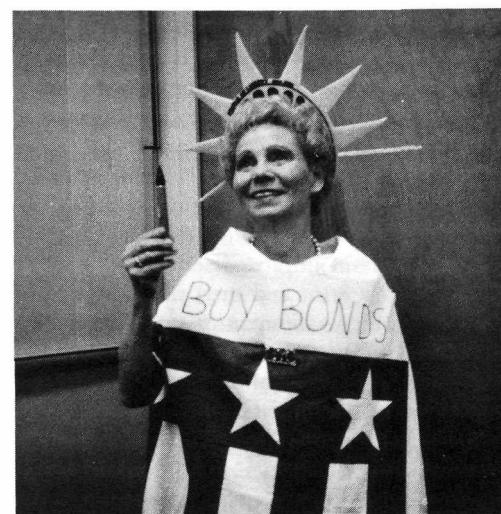
Any questions about this course may be directed to A. Robert Polcari, or Roberta Light at 496-1736, or Dr. Catherine Henley, NEI, at 496-5561. □

Statistics Teachers Needed By FAES Graduate School

The department of statistics of the FAES Graduate School at NIH is looking for statisticians with good communication skills to teach in its evening program.

Currently there is an opening, beginning Sept. 1986, for STAT 500, "Statistics for Biomedical Scientists," a two-semester course.

This is an introductory statistics course with heavy emphasis on statistical thinking offered to Ph.D.s, M.D.s, researchers and other professionals. Send curriculum vitae to Dr. John Bartko, FAES, Bldg. 10, Rm. 3N204. □



Could this be New York? No, this is Betty Morton, Savings Bond coordinator for the Division of Cancer Biology and Diagnosis, National Cancer Institute, portraying the Statue of Liberty. She donned the costume to promote bond sales.—Photo by Marilyn Berman



Learn to Kayak

An introduction to kayaking will be held on Sunday, May 18 through the R&W Association.

The class will cover basic paddling instruction, whitewater and flatwater techniques as well as safety measures. Cost is \$42 per person.

Meet at 9 a.m. at the parking lot across from Old Anglers Inn on MacArthur Boulevard. Wear a swim suit and tennis shoes. Bring lunch, and change of clothes.

The morning will be spent in the canal practicing paddling strokes, and the afternoon will be a short whitewater run down the Potomac, below Great Falls to just past the Cabin John Bridge.

Instruction, kayak, and safety equipment are provided. Children under 16 years of age must be accompanied by an adult.

Sign up at the R&W Activities Desk, Bldg. 31, Rm. B1W30. □

VISITING SCIENTISTS

- 3/10 Dr. David J. DeVries, Australia. Sponsor: Dr. John Kebabian, Experimental Therapeutics Branch, NINCDS, Bg. 10B, Rm. 5C114.
- 3/10 Dr. Richard Horuk, Canada. Sponsor: Dr. Martin Rodbell, Membrane Transport Workgroup, NIEHS, Research Triangle Park, N.C.
- 3/13 Dr. Nichola Hole, United Kingdom Sponsor: Dr. Rose Mage, Laboratory of Immunology, NIAID, Bg. 10, Rm. 11D05.
- 3/14 Dr. Timothy Robert Crook, United Kingdom. Sponsor: Dr. Rufus S. Day, Laboratory of Molecular Carcinogenesis, NCI, Bg. 37, Rm. 3C25.
- 3/15 Dr. Gurmel Singh Sidhu, India. Sponsor: Dr. Richard Hender, Laboratory of Cell Biology, NHLBI, Bg. 3, Rm. B1-06.
- 3/16 Dr. Lev Goldfarb, Stateless. Sponsor: Dr. C.D. Gajdusek, Laboratory of Central Nervous System Studies, NINCDS, Bg. 36, Rm. 5B25.
- 3/17 Dr. Seiichi Kitani, Japan. Sponsor: Dr. Reuben P. Siraganian, Laboratory of Microbiology and Immunology, NIDR, Bg. 10, Rm. 1A26.
- 3/17 Dr. Laurent Miribel, France. Sponsor: Dr. J. Frederick Mushinski, Laboratory of Genetics, NCI, Bg. 37, Rm. 2B21.
- 3/19 Dr. Lin Ze-yu, China. Sponsor: Dr. Bruce Paterson, Laboratory of Biochemistry, NCI, Bg. 37, Rm. 4A21.
- 3/19 Dr. Anastasios Raptis, Greece. Sponsor: Dr. Jan Wolff, Clinical Endocrinology Branch, NIADDK, Bg. 10, Rm. 8N308.
- 3/21 Dr. Gabor Polner, Hungary. Sponsor: Dr. David Lipman, Mathematical Research Branch, NIADDK, Bg. 31, Rm. 4B44.
- 3/21 Dr. Sergio Schinelli, Italy. Sponsor: Dr. Irwin Kopin, Office of the Director, NINCDS, Bg. 10, Rm. 5N214.
- 3/24 Dr. Tamihide Matsunaga, Japan. Sponsor: Dr. Frank Gonzalez, Laboratory of Molecular Carcinogenesis, NCI, Bg. 10, Rm. 6C208.
- 3/24 Dr. Paola Sacerdote, Italy. Sponsor: Dr. Candace Pert, Clinical Neurosciences Branch, NIMH, Bg. 10, Rm. 3N258.
- 3/24 Dr. Xu Shichen, China. Sponsor: Dr. Igor Klatzo, Laboratory of Neuropathology and Neuroanatomical Sciences, NINCDS, Bg. 36, Rm. 4D04.
- 3/26 Dr. Sumiyo Endo, Japan. Sponsor: Dr. Paul Nettesheim, Laboratory of Pulmonary Pathobiology, NIEHS, Research Triangle Park, N.C.
- 3/26 Dr. Sotirios A. Parashos, Greece. Sponsor: Dr. Thomas Chase, Experimental Therapeutics Branch, NINCDS, Bg. 10, Rm. 5C103.
- 3/26 Dr. Pann-Ghill Suh, Korea. Sponsor: Dr. P. Boon Chock, Laboratory of Biochemistry, NHLBI, Bg. 3, Rm. 202.
- 3/30 Dr. Daniel Aquilano, Argentina. Sponsor: Dr. Maria Dufau, Endocrinology and Reproduction Research Branch, NICHD, Bg. 10, Rm. 8C408.
- 3/30 Dr. Simone Beninati, Italy. Sponsor: Dr. J.E. Folk, Laboratory of Oral Biology and Physiology, NIDR, Bg. 30, Rm. 113.
- 3/31 Dr. Jerzy Palka, Poland. Sponsor: Dr. Beverly Peterkofsky, Laboratory of Biochemistry, NCI, Bg. 37, Rm. 4C15. □



Dr. Wayne Wray, a former grants associate, has been appointed health scientist administrator at NHLBI's Division of Extramural Affairs. While with the grants associates program, Dr. Wray proposed and developed changes in the NIH Guide for Grants and Contracts that will result in the publication's being issued more often and later being available online for computer access.

Cerebrovascular Disease Survey Report for 1985 Now Available From NINCDs

The *Cerebrovascular Survey Report 1985*, a summary of recent research advances and future research directions in the understanding of cerebrovascular disease, is now available from the National Institute of Neurological and Communicative Disorders and Stroke.

The report deals with such research areas as the effectiveness of computed tomography in the diagnosis of cerebrovascular disease, the relation of heart disease to stroke, and the role of prostaglandins in causing and in possible treatment of stroke. The publication also reviews the status of current research on the medical and surgical treatment of stroke, and includes extensive bibliographies for all topics covered.

Single copies of the *Cerebrovascular Survey Report 1985* can be obtained without charge from the Office of Scientific and Health Reports, NINCDS, Bldg. 31, Rm. 8A16, 9000 Rockville Pike, Bethesda, MD 20892; tel. (301) 496-5751. □

NIH Guide To Be Revamped in Format and Distribution

Major changes in the production and distribution of the *NIH Guide for Grants and Contracts* will be introduced starting this summer.

The monthly issue of the *Guide* and intermittent *Supplements* will be replaced by a weekly publication that will include policy notices, program announcements, requests for applications, requests for proposals, and other general information relating to NIH extramural programs. Once the new schedule is well established, NIH intends to make the information available on computer "online" to investigators, and institutional officials and agency staff.

The new publication will offer many advantages to applicants, awardees, and NIH. Among them: more frequent publication is expected to result in improved service from the contractors who print and mail the *Guide*. Readers will receive information on all research funding opportunities in one publication. NIH and other PHS program offices using the *Guide* will have more flexibility in publishing, since missing a deadline will entail only a week's delay.

Combining the *Guide* and *Supplements* will save an estimated \$500,000 per year; the more frequent mailing will be offset by the reduced size of each issue (16 pages). Subsequent conversion to online access will save an additional \$500,000 annually.

The new system was proposed and developed by Dr. Wayne Wray (currently a member of

NHLBI's review staff) while on a grants associate assignment in the Office of Extramural Research and Training. His proposal included development of procedures and schedules for electronic transmittal (via WYLBUR mail) of material for clearance and publication of text for the *Guide*.

Final documents will be available in early May and will be distributed widely to extramural and administrative offices. Questions may be directed to Dr. Wray at 496-7964 or the *Guide* editor, Mary Miers, at 496-5366. □

Toxicology Program Honored

The Society of Toxicology recently honored the National Library of Medicine's Toxicology Information Program (TIP) with a special commendation for its sustained high quality services. Dr. Henry M. Kissman, NLM associate director for specialized information services, was presented a silver plaque at their annual meeting in New Orleans.

TIP, a major responsibility of the Library's Division of Specialized Information Services, was established in 1967 in response to the 1966 President's Science Advisory Committee report, "Handling of Toxicological Information." The program's objectives are to create automated toxicology data banks and provide toxicology information and data services. □

NIADDK Names Dr. Steers Division Deputy Director

Dr. Edward Steers Jr., of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases was recently appointed deputy director of the Institute's Division of Intramural Research.

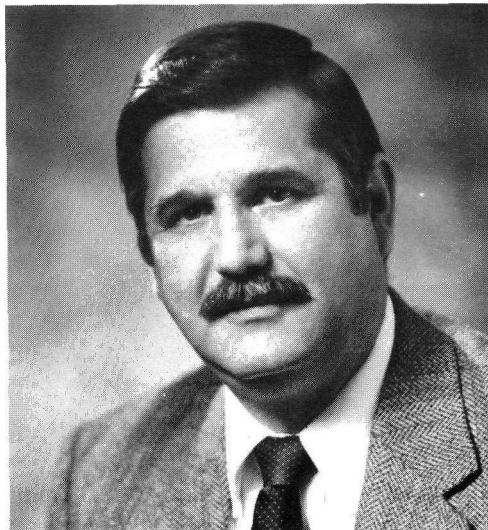
In his new position, Dr. Steers will serve as principal advisor to Dr. Jesse Roth, scientific director, in the daily operations of the intramural research program. For the past year Dr. Steers has been working with Dr. Roth on reorganizing the Division, including creation of new laboratories, selection of personnel, and establishing laboratory budgets.

In announcing the appointment, Dr. Roth said, "Dr. Steers's exceptional degree of leadership in organizational, scientific and personnel matters makes him the ideal advisor and leader in our intramural research program."

A native of Bethlehem, Pa., Dr. Steers received his A.B. degree in 1959 and his Ph.D. degree in 1963 from the University of Pennsylvania. From 1959 to 1963 he served as assistant instructor in biology at the College of General Studies, University of Pennsylvania. He also joined the U.S. Public Health Service at that time as a training fellow.

Dr. Steers began his research career in 1963 as a staff fellow in NIADDK's Laboratory of Chemical Biology. His early research focused on the isolation and characterization of the enzyme beta-galactosidase from *Escherichia coli*.

These studies, in collaboration with Dr. Christian B. Anfinsen, 1972 Nobel Prize winner, led to the purification and subsequent characterization of several forms of beta-galactosidase. Dr. Steers was also a major contributor in identifying and characterizing the variable surface antigen system in paramecia.



Dr. Steers

Collaborative research with Dr. V. T. Marchesi, formerly with the Laboratory of Experimental Pathology, NIADDK (now the Laboratory of Cell Biology and Genetics), led to the discovery and characterization of spectrin, a major structural protein associated with the erythrocyte (red blood cell) membrane.

Dr. Steers also serves as an adjunct professor in the department of biochemistry, School of Medicine, George Washington University, where he teaches courses in protein chemistry.

Among his special interests are the life and assassination of Abraham Lincoln. An invited lecturer on the subject of Lincoln, he has written on the different memorials to Lincoln in the District of Columbia as well as a booklet entitled, *The Escape and Capture of John Wilkes Booth*. □

Wm. Forsythe, NIEHS, Dies; Was Technician

William G. (Bill) Forsythe, 58, an engineering technician at the National Institute of Environmental Health Sciences since 1967, died Mar. 29 at Raleigh's Rex Hospital after a long illness.

Mr. Forsythe, a Cary resident, joined the Institute when it was newly established and was just beginning to develop a campus of laboratory and office buildings, and played a key role in adapting leased and prefabricated buildings to various needs.

Dr. Robert A. Goyer, NIEHS deputy director, said, "Few employees have served the Institute longer than Mr. Forsythe, or left so many landmarks of good work behind on our campuses. He was involved in many facility installations and modifications since the beginning."

One of his important contributions was the design and installation of the conference room facility at the Institute's north campus, which served as the major conference area during the years before completion of Bldg. 101, the NIEHS headquarters. This conference room is fitted with an audiovisual booth and a fully automated podium which were planned and installed under Mr. Forsythe's direction. The facility is still the main conference room on the NIEHS north campus.

Surviving are his wife, Laura J.; a son, Mark W.; a daughter, Mrs. Georgia Lee Gherlone of Sanford, N.C.; a brother, Ralph Forsythe of Lafayette, Ind.; and three grandchildren.

Biomedical Personnel Report Now Available from NAS

The 1985 Report of the Committee on National Needs for Biomedical and Behavioral Personnel is now available from that committee at the Institute of Medicine, National Academy of Sciences, 2101 Constitution Ave., NW., Washington, DC 20418, (202) 334-3186. (Publication IOM-85-06.)

Titled, "Personnel Needs and Training for Biomedical and Behavioral Research," it is the eighth such report of the committee prepared in accord with the National Research Service Awards Act of 1974.

In that act, the Congress asked the National Academy of Sciences to conduct a continuing study of the Nation's overall need for biomedical and behavioral research personnel and the kinds and extent of training that should be pro-

vided by the Federal agencies authorized to provide National Research Service Awards.

These agencies include the NIH; the Alcohol, Drug Abuse and Mental Health Administration; the Division of Nursing; Health Resources and Services Administration; and the National Center for Health Services Research.

The 1985 report was prepared under contract with NIH, and NIH and several other major medical organizations—including the American Medical Association, the American Dental Association, the National Research Council, the American Nursing Association and the National League for Nursing—provided data to go into the report. □

Eye Institute Researchers Receive Alcon Awards

Two National Eye Institute intramural scientists received \$35,000 each from the Alcon Research Institute, a foundation dedicated to vision research and funded by Alcon Laboratories Inc. Drs. Gerald J. Chader, chief of the Laboratory of Retinal Cell and Molecular Biology, and Peter F. Kador, head of the Section on Molecular Pharmacology in the Laboratory of Mechanisms of Ocular Diseases, were among the scientists receiving awards this year for their important contributions to vision research.

Since 1982 when the Alcon Research Institute first began presenting awards, NEI scientists have been among the recipients. In 1982, prizes were given to Drs. Jin H. Kinoshita, and Robert B. Nussenblatt; and in 1983 to Dr. Kinoshita. In 1985 Drs. Toichiro Kuwabara, and Joram Piatigorsky each won an Alcon Award. □

Minority College Grad and Med Students Attend NIAID's Eighth Annual Seminar



Students who attended the eighth annual NIAID seminar on biomedical research stand in front of Bldg. 5 with Dr. Gallin (last row, far l); Nita Lawson (last row, far r); Vince Thomas, acting NIAID-EEO officer, and Dr. Katherine Cook Jaouni (first row, l to r).

The 8th annual NIAID seminar, "An Introduction to Biomedical Research," was held recently at NIH to alert minority college juniors, graduating seniors, first-year graduate and medical students to opportunities in biomedical research at NIAID and in other areas at NIH.

Thirty-six students, recommended for selection by their deans and professors, participated in 2 days of activities. A series of lectures by members of the Institute's staff, interviews with NIAID scientists, and tours of the hospital and laboratory facilities on the campus were featured.

Dr. Philip S. Chen, NIH Associate Director for Intramural Affairs, addressed the students at the opening session, presenting an overview of NIH. Michael Goldrich, NIAID's executive officer, representing Dr. Anthony S. Fauci, In-

stitute Director, gave welcoming remarks and an NIAID overview, and Dr. John Gallin, director of NIAID's Intramural Research Program, described this program. Presentations were made by Institute scientists involved in research on parasitology, viral diseases, and immunology.

The last day's session featured a roundtable discussion on funding mechanisms in biomedical research.

Eight students who attended the conference were invited to return as summer fellows. They will spend 8 weeks training under the auspices of leading intramural scientists in NIAID's laboratories in either Bethesda or in Hamilton, Mont. Funds for the fellowships were donated by the CIBA-GEIGY fellowship program. □

NEI Grantee Wins Japan's Highest Physics Prize

Dr. Toyochi Tanaka, an internationally recognized physicist and vision researcher, has received Japan's highest award in physics research. He was awarded the 1985 Nishina Memorial Prize for his discovery of phase transitions and critical phenomena in polymer gels, an important area of research in soft state physics.

This work, which was supported by a grant from the National Eye Institute's Cataract Program, has made significant contributions to understanding of the physical and chemical basis of lens and cornea opacifications, as well as

the changes in vitreous humor that lead to retinal detachment.

The award is named for Yoshio Nishina, one of the founders of modern physics in Japan. It recognizes "exceptional scientific achievement in the field of nuclear physics and related areas," and confers a silver medal and a \$3,000 honorarium.

Dr. Tanaka is a professor of physics at the Massachusetts Institute of Technology, where he has been a member of the physics department since his postdoctoral days in 1975. He is a graduate of the University of Tokyo. □

NEW INSTITUTE

(Continued from Page 1)

Dr. Shulman came to NIH in 1976 from Johns Hopkins University School of Medicine where he headed the arthritis research and education programs as director of the connective tissue division. He received his undergraduate degree from Harvard University, and later both a Ph.D. degree in public health and M.D. degree from Yale University.

The new Institute is being established under provisions of the Health Research Extension Act of 1985, P.L. 99-158, passed Nov. 20, 1985.

It will conduct and support research and research training, health information and related programs in the fields of arthritis and musculoskeletal and skin diseases.

Arthritis afflicts 37 million people in the United States alone and results in an estimated \$25 billion in costs to the Nation each year. There are more than 100 different types of arthritis. About 7 million Americans suffer from rheumatoid arthritis, the most severely crippling of the rheumatic diseases. About 16 million people are afflicted with osteoarthritis, or degenerative joint disease, which is the most common form of arthritis.

Of the musculoskeletal diseases, an estimated 20 million people, primarily women, are victims of osteoporosis. About 1.5 million fractures attributable to osteoporosis occur each year in people 45 years of age or older.

In addition, more than 60 million people in the United States are estimated to have one or more skin diseases significant enough to see a physician. Psoriasis, acne, ichthyosis, epidermolysis bullosa and vitiligo contribute to the approximately \$2.6 billion cost of skin diseases annually.

Research in arthritis, musculoskeletal and skin diseases has been supported and conducted by the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases for the past 35 years. The NIADDK has been renamed the National Institute of Diabetes and Digestive and Kidney Diseases and directed by the Secretary to continue strong and visible support of research in diabetes and digestive and kidney diseases. □

Expectant Parents Sought

Expectant parents are needed for an NICHD study of the psychological aspects of becoming a parent. Wanted are families expecting their first child and who have had no previous pregnancy. Also wanted are expectant parents who have experienced a previous miscarriage or stillbirth or death of their infant in the first week of life within 2 years of the current pregnancy.

For further information call Dr. Susan Theut, 496-6832. □

NINCDS Scientists Say Post-polio Weakness Which Recurs Is Not Amyotrophic Lateral Sclerosis

A long-term study of polio survivors suffering from new muscle weakness has found that these patients do not develop amyotrophic lateral sclerosis (ALS) as suspected and that their disease, often called "post-polio syndrome," progresses very slowly.

"The news is good," says principal investigator and NINCDS scientist Dr. Marinos Dalakas. "These patients may become stable for years."

According to Dr. Dalakas, people with progressive post-poliomyleitis muscular atrophy (PPMA) experience an average muscle decline of only 1 percent a year. Plateaus during which the disease stabilizes can range from 1 to 10 years.

These findings are based on a system designed by Dr. Dalakas and his NINCDS colleagues that evaluates muscle strength over time. Muscle biopsies, spinal fluid analysis, and other tests of 27 patients provided evidence that postpolio syndrome is not ALS, a generally fatal neuromuscular disease.

The NINCDS study was published in the Apr. 10, *New England Journal of Medicine*.

Dr. Dalakas' patients are among an estimated 300,000 polio survivors in the United States. Some of these survivors develop frightening new symptoms many years after the polio attack. Symptoms range from relatively minor joint pain and fatigue to progressive muscle deterioration that in some patients may cause severe disability.

The NINCDS patients were initially admitted to the Clinical Center between 1960 and 1982 after complaining of new muscle weakness. They received a series of neurological and other tests, and returned for reevaluation 4 to 20 years later.

Patients who had the severest disability after their original bout of polio were most likely to be seriously affected by postpolio symptoms. Those who regained relatively good strength during recovery were not later significantly disabled by PPMA.

Results of several tests and clinical examinations led Dr. Dalakas to conclude that PPMA is not ALS. At both the initial and followup evaluation, patients did not show weakness in the respiratory muscles or in the bulbar muscles controlling the jaw, throat, or tongue. Weakness in these two types of muscles is a hallmark of ALS.

The scientists also detected abnormal protein bands in some patients' cerebrospinal fluid—a finding which is not associated with ALS.

"Protein bands generally suggest an antibody response within the central nervous system. Such bands are found in multiple sclerosis and



Dr. Marinos Dalakas converses with a post-polio patient.

other neurological diseases of immune origin. But we have not seen them in ALS; it's an important distinction," asserts Dr. Dalakas.

Muscle biopsies provided other clues that PPMA is not ALS. Dr. Dalakas found unexplained cell inflammation similar to what occurs in viral infections and polymyositis, an inflammatory muscle disease. The post-polio patients also had small wasted fibers scattered individually among the normal fibers that make up the muscle. In biopsies of the weakened muscles of ALS patients, these muscle fibers are found in groups.

Such groups of wasted muscle fibers, as seen in ALS, show scientists that the motor nerve cells controlling the muscle have died. According to Dr. Dalakas, the form and arrangement of the muscle fibers found in PPMA patients indicate that the motor nerve cells are still active but are not completely functional.

What causes this problem? Dr. Dalakas speculates that the answer may be found in the recovery process from the original attack of polio, a viral disease that can destroy nerve cells.

He suggests that as patients recover, many small sprouts grow from the message-transmitting axons of healthy nerve cells to take over the function of neurons killed by the virus. Years later, the motor neurons, which

Morning Sickness 'Good' For Pregnant Women

Morning sickness is often an unpleasant symptom in many pregnancies but women should be reassured by its presence. In a recent study, researchers reported that women who vomited during pregnancy were less likely to miscarry or deliver prematurely than were mothers who did not experience vomiting.

While research has yet to pinpoint what causes the condition, this new report found that certain epidemiological characteristics were more often associated with mothers who experienced vomiting.

Using records of 9,098 pregnancies, researchers from the NICHD and the NIAID, headed by Dr. Mark Klebanoff of NICHD, compared more than 20 physical and lifestyle characteristics among those who experienced vomiting and those who did not. The researchers looked at factors such as the women's age, race, number of pregnancies, smoking history, and education level to see if there were any differences or similarities between the two groups.

According to researchers' analyses, more than half of the women in the study reported vomiting by their third month of pregnancy. Vomiting was also more common among first-time mothers, women under 20, women with less than 12 years of education, nonsmokers, and women weighing more than 170 lbs.

The researchers also compared the number of miscarriages, premature births, and the birth weight of the infants born to the mothers who vomited and those who did not.

While researchers found no association between infant birth weight and the two groups of mothers, they did find that the mothers who vomited were more successful in carrying their pregnancies to term.

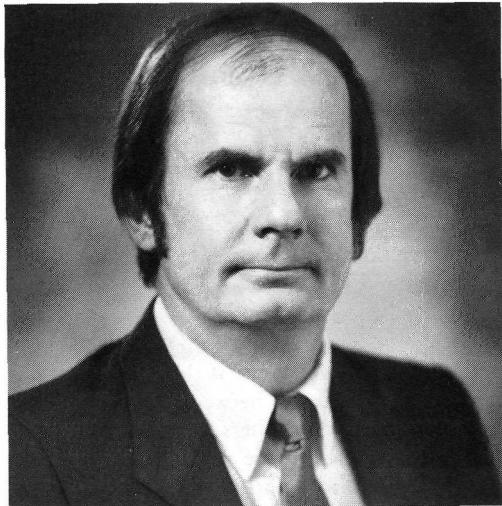
Some research suggests that hormonal changes in pregnancy may play a role in these differences, but more studies are needed before a verdict can be reached. □

have been functioning beyond their capacity to nurture these sprouts, become so weak they can no longer maintain them. As a result, many of the sprouts die, the muscle fibers they supply shrink, and the whole muscle becomes weaker.

If this theory is true, then a new experimental treatment for PPMA may be successful. Dr. Dalakas and his associates hope to test a drug that improves sprouting of the axon. Other studies already in progress are designed to identify the inflammatory cells visible in the patients' muscle biopsies and the protein bands found in the cerebrospinal fluid. The bands will be analyzed to see if they represent antibodies to the polio virus.—Diane Striar □

Dr. Kenner C. Rice Wins 1985 Hillebrand Prize

Dr. Kenner C. Rice, senior investigator, Laboratory of Chemistry, National Institute of Diabetes and Digestive and Kidney Diseases, received the 1985 Hillebrand Prize on Mar. 12 at the National Naval Medical Center Officers' Club in Bethesda, Md. The Hillebrand Prize, which includes a certificate and \$1,000, was in recognition of Dr. Rice's "synthesis of pharmacologically useful opium alkaloids."



Dr. Rice

The Hillebrand Prize was established in 1925 in memory of Dr. William F. Hillebrand, the first director of the National Bureau of Standards. It is the most important honor given each year by the Chemical Society of Washington and is awarded to members in recognition of original contributions to the science of chemistry.

In Dr. Rice's current position in the Section on Medicinal Chemistry of the Laboratory of Chemistry, his research focuses on the chemistry and mechanism of action of drugs that affect the central nervous system, especially narcotics and their antagonists (drugs that neutralize the effect of another drug).

He began studying the development of practical synthetic methods to produce opium alka-

loids and derivatives because of the severe worldwide shortage of opium used in the production of medical opiates, and the need for free access to the unnatural (mirror image) forms of these drugs as research tools. In his 1980 and 1981 papers, he announced accomplishment of this goal, which had been studied intensively, but unsuccessfully, by many workers for nearly 60 years since the chemical structures of the most important opium alkaloids (codeine, morphine, and thebaine) were first identified.

Dr. Rice has gained international recognition for the synthetic method, now known as the NIH opiate total synthesis, which allows the production of these alkaloids in any desired quantities. Also, the entire spectrum of opium-derived agonists (stimulative drugs), antagonists, their transformation products, and numerous analogs can be obtained using this procedure. He has obtained three patents and others are pending on this process, which now offers a source of medical opiates independent of foreign sources of opium.

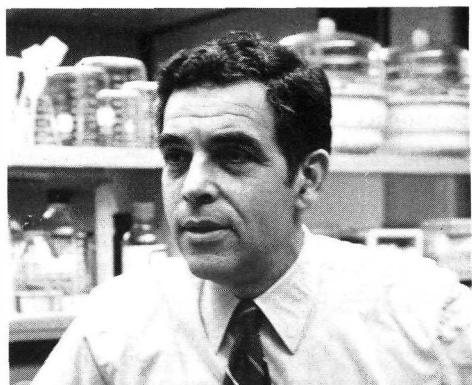
Another research interest of his is the synthesis of fluorinated narcotic antagonists that are used as probes in positron emission transaxial tomographic (PETT) scanning. PETT scanning allows real-time imaging of biochemical events in the living brain. The demonstration of regions of the brain that are most metabolically active during different mental processes or that contain high concentrations of a specific drug receptor can be performed with this method.

Dr. Rice joins 11 other distinguished scientists of NIDDK, 8 from the Laboratory of Chemistry, who have received the Hillebrand award. They are: Claude S. Hudson (1930), Raymond M. Hann (1944), Lyndon F. Small (1949), Bernard L. Horecker (1953), Bernard Witkop (1958), Leon A. Heppel (1959), Everette L. May and Nathan B. Eddy (1967), Elizabeth F. Neufeld (1974), John W. Daly (1977), and Donald M. Jerina (1979). —Clementine Sessions □

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NIH LECTURE

(Continued from Page 1)



Dr. Leder

His laboratory developed important new cloning techniques and determined the exact chemical composition of the beta globin major gene of the mouse; the first mammalian gene whose structure is completely known and an initial example of a discontinuous gene. His research into the genetic manufacture of antibodies has been described as "a series of stunning discoveries of how genes work." □



Dr. William W. Lawrence, employee counselor at the National Institute of Environmental Health Sciences, received the John L. Lennon Award from the North Carolina Association for Counseling and Development at their annual convention recently in Charlotte. The award is in memory of the late John L. Lennon, former dean of men at North Carolina Central University.

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