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National Institutes of Health

"Still The Second Best Thing About Payday"

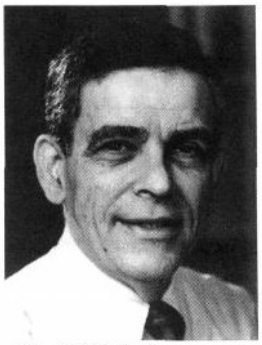
The NIH Record

Opens Research Festival 1994

NICHD Hosts Alumni Symposium Honoring Leder

The National Institute of Child Health and Human Development will honor Dr. Philip Leder and five other notable NICHD alumni at the 1994 Distinguished Alumni Symposium in Masur Auditorium, on Monday, Sept. 19, from 8:45 a.m. to noon. The opening event for this year's annual NIH Research Festival, the symposium is open to the public.

A pioneer in the field of molecular genetics research, Leder will discuss recent and important results from his laboratory in a talk entitled, "Limb Deformity: A Morphogenic Paradigm in the Mouse." The symposium, "Developmental Biology: Contributions of Basic Science to Human Biomedical Research," will culminate with the presentation of the 1994 Distinguished Alumnus Award to Leder by NICHD scientific director Dr. Arthur Levine.



Dr. Philip Leder

Over the course of his career, Leder has repeatedly led research efforts that have helped to advance the entire field of modern molecular genetics. While at NIH, he directed his efforts toward understanding the molecular processes involved in the transfer of genetic information from parent to offspring and from gene to functional product. His seminal work with DNA was critical to the development of recombinant DNA technology; Leder is internationally recognized as an early and continuing leader in the field. His invaluable contributions to other areas of molecular genetics include a major role in elucidating the genetic code, clarifying the generation of antibody diversity, and analyzing the structural organization of mammalian genes.

He is currently the John Emory Andrus professor of genetics and chairman of the department of genetics at Harvard Medical School, where he has been since 1980. He is also a senior investigator with the Howard Hughes Medical Institute, which he joined in 1986.

In 1962, after receiving his M.D. at Harvard Medical School and completing a residency in internal medicine at the University of Minnesota Hospitals, Leder renewed his affiliation with

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Strategies for Success

Workshop Teaches Students About Careers, Life

By Ruth Levy Guyer and Janet E. Joy

A linguistics major from Harvard who is about to apply to medical school and a high school junior interested in biomedical engineering might seem to occupy little common turf. But they, along with an undergraduate from the Pacific Islands, juniors from Amherst College, MIT, and Ohio University, a senior from CCNY who is thinking about an M.D.-Ph.D. program, a Smith College sophomore heading off to London for junior year abroad, a recent high school graduate about to begin her freshman year at Williams College, and about 100 other students came together to learn about factors that would be important to a successful scientific career.

Dr. Arlyn Garcia-Perez (l) of NHLBI was part of a panel that discussed balancing work and family obligations.

The students were attending the "Strategies for Success for Future Scientists" workshop that was held during the summer in the Cloister. The workshop was sponsored by the Office of Education and the Office of Research on Women's Health.

Each summer, NIH laboratories host students from colleges, universities, and medical schools across the country as well as from high schools that are within walking distance of the campus. This summer approximately 1,000 students were working on the campus.

"You need to understand your motivation for wanting to become a clinician or a scientist," cautioned Dr. Jarvis Reed. "Medicine and research are time-consuming; make sure you want to do this. Don't do it to fulfill the dreams of your parents or because your friend is doing it. Find out where your own enthusiasms lie." Reed said that, as a researcher-clinician, he finds research exciting because "when I run a Southern blot, I can see the result immediately. But," he added, "there is nothing more rewarding than a patient's appreciation for a cure or a prolonged life."

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Women's Equality Day

Reporter Shares White House Wit, Wisdom

By Anne Barber

Seventy-four years have passed since the signing of the 19th Amendment to the Constitution of the United States, which guaranteed women the right to vote. "That was just the beginning," said NIH's OEO Director Diane Armstrong at a ceremony held Aug. 26 to commemorate Women's Equality Day.

Helen Thomas

"Today, women are exercising their right to vote in record numbers and becoming politically active. There are now 48 women members of the U.S. House of Representatives, and 7 women members in the U.S. Senate. While these numbers represent impressive gain, women still constitute only 11 percent of the

(See THOMAS, Page 9)

Pereira-Smith To Give NIA's Mahoney Lecture

Dr. Olivia M. Pereira-Smith—a gerontologist, biomedical scientist, professor, author, and lecturer—will deliver the eighth annual Florence Mahoney Lecture on Aging, entitled "Molecular Genetic Studies of Cellular Aging: Implications for Aging and Cancer." Sponsored by the National Institute on Aging, the lecture will take place Thursday, Sept. 29 at 4 p.m. in the Clinical Center's 14th floor assembly hall.

Dr. Olivia Pereira-Smith

Pereira-Smith's contributions to aging research have focused on the genetic basis for the limited proliferation potential of human fibroblasts. She demonstrated the existence of multiple genes controlling the senescent phenotype by complementation studies between immortal cell lines, and is currently closing in on the location of one of these genes on human chromosome 4. With

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MAHONEY LECTURE
(Continued from Page 1)

her colleague Dr. James R. Smith, she collaborated in the identification of a gene on human chromosome 6 that codes for an inhibitor of replication. When this gene is expressed in senescent cells, DNA synthesis ceases, suggesting this may be the mechanism by which DNA synthesis is blocked in senescent fibroblasts.

At Baylor College of Medicine in Houston, Pereira-Smith is director of graduate studies at the Roy M. and Phyllis Gough Huffington Center on Aging and associate professor of molecular virology. In addition, she is codirector for basic science research in aging at the Veterans Administration Medical Center in Houston.

Pereira-Smith is this year's recipient (with James Smith) of both the Gerontological Society of America's Glenn Foundation Award and the Allied Signal Achievement Award in Aging. She also received the International Association of Gerontology's XIV International Congress Presidential Award for Biological Sciences (1989), and the Gerontological Society of America's Nathan Shock New Investigator Award (1987).

Her current professional activities include serving as associate editor in the biological sciences for the *Journal of Gerontology*, cochair for the 1995 Gordon research conference on the biology of aging, and ad hoc reviewer for NIH's molecular cytology study section. She is a member of the Gerontological Society of America, the American Society for Cell Biology, and the Tissue Culture Association.

Born in India, Pereira-Smith received her early training in microbiology at the University of Bombay. She earned her M.A. in physiology from the University of California at Berkeley (1975) and Ph.D. in the biomedical sciences from Worcester Polytechnic Institute in Massachusetts (1981).

The annual Mahoney Lecture recognizes the lifetime commitment to medical research by Florence Stephenson Mahoney. She is known for her dedicated efforts in shaping national health policy, particularly with respect to aging. A charter member of the National Advisory Council on Aging, she was instrumental in the establishment of NIA. ❑

Study Needs Lean Women

Healthy lean or very thin female volunteers ages 18-35 with regular menstrual cycles are needed for a study of the effects of fasting for 72 hours on reproductive hormone function. Volunteers must be on no medications including oral contraceptives, be nonsmokers, and be willing to spend 4 days as an inpatient on two occasions, 3 months apart. Women in the following categories will be studied: sedentary lifestyle, moderate runners (10-25 miles per week) and runners averaging more than 25 miles a week. Volunteers will be paid. Call Dr. Ruben Alvero, 6-9854. ❑

Travel to Mexico

The R&W is sponsoring a trip to Puerto Vallarta, Mexico, on Jan. 2-7. The $975-per-person price includes airfare from BWI airport, accommodations at the Fiesta Americana Resort, breakfast and dinner each day, water sports, swimming pool with swim-up bar, and live entertainment. Taxes are extra. Tours and excursion packages for parasailing, windsurfing, golf, scuba diving, deep sea fishing, and horseback riding are also available. For information, or to make reservations, call the R&W Activities Desk, 6-4600. ❑

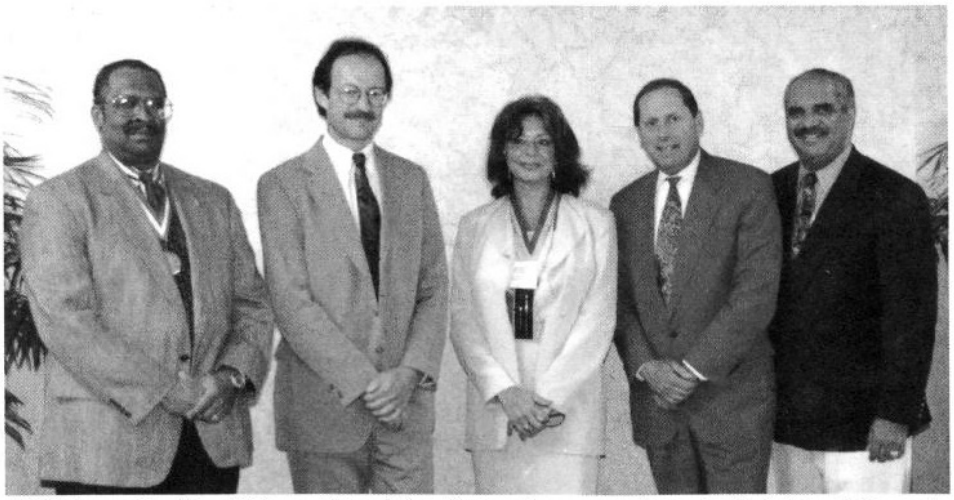
Depression Screening Day

National Depression Screening Day will be held on Thursday, Oct. 6 from 8 a.m. to 4 p.m. NIH employees and the public are invited to a free depression screening interview with a mental health professional. Participants will receive treatment referrals and information regarding depression. Additionally, information about treatment opportunities through NIMH depression research will be provided. Location is to be announced. For more information, employees should call Denise Juliano, 3-4140; members of the public should call Amy, 6-6827. Screening is sponsored by NIMH's Depression/Awareness Recognition and Treatment program. ❑

Structural Biology Group Meets

The NIH Postdoctoral Structural Biology Group has been formed to enable NIH postdoctoral fellows of diverse scientific backgrounds to become familiar with structural biology techniques and their applications. Participants will learn about basic principles of structural biology techniques, about new techniques and will have a chance to discuss problems in their work.

The group's monthly meetings will feature informal talks and time for discussion and social interaction. The first meeting will be held on Tuesday, Oct. 4 in Lipsett Amphitheater, Bldg. 10 from 3 to 5 p.m. For more information, contact Teresa Strzelecka, Laboratory of Chemical Physics, NIDDK, phone 6-2815, fax 6-0825 or email strzel@speck.niddk.nih.gov. ❑



NIH director Dr. Harold Varmus (second from l) was a keynote speaker at the 99th Annual Convention and Scientific Assembly of the National Medical Association held recently in Orlando. He was accompanied by Dr. William E. Paul (second from r), director of the Office of AIDS Research, who addressed an NMA town meeting on AIDS. During his visit, Varmus also met with NMA officers and trustees and representatives of historically Black medical schools. Dr. Vivian W. Pinn (c), NIH associate director for research on women's health and former president of NMA, and Dr. John Ruffin (not shown), NIH associate director for research on minority health, also attended. Also shown are Dr. Leonard Lawrence (l), immediate past president of NMA, and Dr. Purnell Kirkland (r), chairman of the NMA internal medicine section and vice speaker of the house of delegates.

The NIH Record

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NHLBI Reports Advance in Treating Cystic Fibrosis

By Diane Striar

In the first reported genetic correction of lung cells in cystic fibrosis (CF), scientists with the National Heart, Lung, and Blood Institute successfully transferred a normal CF gene into the cells lining a patient's lungs.

The 23-year-old patient experienced no adverse effects from the gene transfer nor did he derive any clinical benefit. This was expected since the purpose of the study was to evaluate the safety and effectiveness of the procedure.

A modified adenovirus (a cold virus) was used to deliver the cystic fibrosis transmembrane conductance regulator (CFTR) gene into the CF patient's lung cells. The healthy CFTR gene produced an essential protein that is defective in those with CF. The CFTR protein controls the flow of salt through the cells lining the airways. In CF patients, the defective CFTR protein causes a salt buildup, leading to abnormal mucus, infection, inflammation, and progressive lung damage.

"Although gene therapy for CF is still years away," said Dr. Claude Lenfant, NHLBI director, "this research provides another piece of a complicated puzzle. Several scientific teams across the country are attempting to solve this puzzle.

"Last October, a paper published in *Cell* described the successful use of gene therapy techniques to correct the defect in the cells lining the nose of three CF patients," he continued.

The successful gene transfer into the lungs was part of the first gene therapy study of CF, which began Apr. 17, 1993, at the Clinical Center. A preliminary report on the first four patients in the study appears in the September issue of *Nature Genetics*.

CF, an inherited incurable disease, affects one of every 3,000 babies born. Patients live an average of only 28 years.

All of the four patients in the study received a single dose of the CFTR gene therapy in the nose, followed 24-48 hours later by a single dose delivered to the lungs. Although sampling difficulties prevented detection of the healthy gene in all of the patients, gene transfer was clearly accomplished in the nose of one patient and in the lung in another patient.

The *Nature Genetics* paper describes the insensitivity of the methodology used to detect the gene-corrected cells and notes the difficulty in estimating the number of "corrected" cells. The CFTR protein could only be detected in a minority of cells.

One of the primary objectives of the study was to determine the safety of the gene therapy procedure. The scientists found no evidence in blood and tissue samples that the adenovirus had reproduced itself. None of the patients participating in the study had permanent adverse effects as a result of the therapy. However, one patient developed a short-term localized chest inflammation.

As expected, the genetic information transferred by the adenovirus was not long-lasting. Tissue samples obtained 10 or more days after gene therapy showed no evidence of the CFTR gene or protein. This was not surprising, according to the investigators, since current adenovirus vectors cannot permanently transfer the gene into the target cells lining the airways. For this reason, they conclude that this method of gene therapy would have to be administered repeatedly.

In animal studies, the vector causes the development of "neutralizing antibodies" that interfere with the expression of the gene. With repeated administration, animals develop an immunity to the virus. By contrast, the current human study found no increase in these neutralizing antibodies.

"This has significant implications for gene therapy with repeat vector administration," said Dr. Ronald Crystal, principal investigator and former chief of NHLBI's Pulmonary Division. "It means that the vector can be administered repeatedly and effectively to humans."

The *Nature Genetics* paper describes in detail the short-term reaction of the third patient who developed localized chest inflammation with symptoms of fever, headache, and low blood pressure. This syndrome was resolved within several days and the patient was discharged from the Clinical Center on schedule.

After an extensive study of the third patient's reaction, the scientists concluded that the adenovirus triggered in the lung the release of interleukin 6 (IL-6), a protein involved in cellular communication. The excess IL-6 was, in turn, responsible for at least some of the patient's symptoms. This patient had received a higher dose of the treatment than the previous two patients. "The fourth patient, who showed clear evidence of gene expression in the lungs, received a dose 1,000 times less than the patient who had the inflammatory reaction," said Crystal, who is currently chief, division of pulmonary and critical care medicine at the New York Hospital-Cornell Medical Center. "We've found a window in which we can safely administer the vector to the lung and express the normal gene without permanent damage to the lung."

He noted that there are strategies to suppress such inflammatory reactions such as using corticosteroids. According to Crystal, larger studies are needed to make definitive statements about the relationship between effectiveness and toxicity. ❑

Shannon Memorial Set, Sept. 23

There will be a memorial service in honor of Dr. James A. Shannon at 10 a.m. in Wilson Hall, Bldg. 1, on Friday, Sept. 23. NIH director from 1955 to 1968, Shannon oversaw the exponential growth period of the NIH. In the 13 years of his directorship, the NIH budget rose from $83 million to $1.4 billion. He was widely recognized in the scientific world for his original research in kidney function, chemotherapy, and malaria. Friends and former associates will make remarks at the service. All NIH'ers are invited to attend. ❑

NIDA Symposium Highlights 20 Years of Progress

The National Institute on Drug Abuse will sponsor a symposium, the "NIDA 20th Anniversary Celebration of Progress in Drug Abuse Research," at 9:30 a.m. on Thursday, Sept. 22 in Masur Auditorium, Bldg. 10. The full-day event will focus on NIDA's progress in bringing the power of science to bear on drug abuse and addiction. Presentations will be grouped into three sessions: the Neuroscience of Addiction, the Nature and Extent of Drug Addiction and Abuse, and Prevention and Treatment of Drug Problems.

A number of distinguished NIDA-supported scientists will showcase the important discoveries made in the broad scientific areas embraced by NIDA's research programs. Speakers represent fields of investigation including molecular biology, brain reward mechanisms, risk and protective factors in drug abuse and addiction, women's health, HIV/AIDS and drug abuse, and behavioral and pharmacological therapies. NIDA director Dr. Alan I. Leshner will open the symposium with introductory remarks. For more information on the symposium, call Jackie Downing at NIDA, 3-1056. ❑

EAP Video Series Begins

The NIH Employee Assistance Program's video workshop series "Work, Career, and Personal Growth," also known as "Tuesdays at the Little Theater," will begin Tuesday, Sept. 20 with "Stress Management for Professionals."

The series topics, dealing with stress, conflict and difficult people, are typical workplace issues faced by NIH'ers. Each workshop session has two parts. First, a video segment featuring an expert speaker is shown. Then staff from EAP lead a group discussion. While employees can get the most out of attending all of a topic's sessions, each session focuses on different aspects of the topic.

The lunch-time, drop-in format makes attending simple. The series is free and open to all employees without registration. The sessions are held on Tuesdays from noon to 1 p.m. in the Bldg. 10 Visitor Information Center's Little Theater. For more information call EAP, 6-3164.

EAP Video Series Schedule

Stress Management for Professionals—Sept. 20, 27 through Oct. 4 and 11.

Managing Job Stress—Nov. 1, 8, 15, 22, 29 and Dec. 13

Dealing with Conflict and Confrontation—Feb. 7, 14, 21, 28 and Mar. 7.

How to Listen Powerfully—Apr. 4, 11, 18, and 25.

How to Deal with Difficult People—June 6, 13, 20 and 27. ❑

RESEARCH FESTIVAL
(Continued from Page 1)

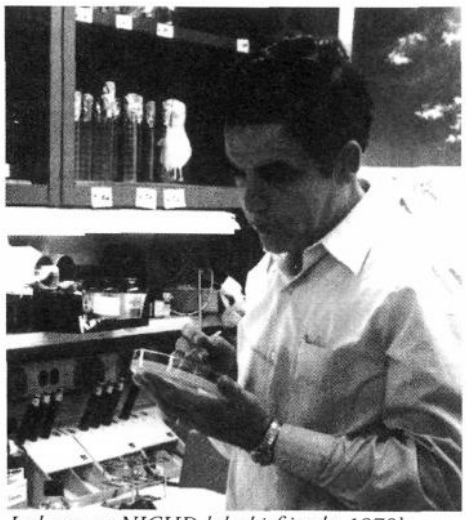
NIH, where he had once worked during his summers as an undergraduate student. This time, he returned as a research associate in the Laboratory of Biochemical Genetics at the National Heart Institute (now NHLBI). His early work with colleagues at NIH resulted in development of the ribosome-binding assay, which permitted the first systematic and clear determination of the genetic code. After spending 3 years in Bethesda, he left to spend a year as a visiting scientist at the Weizmann Institute in Rehovot, Israel. He would not stay away from NIH for long, however. He returned in 1966, this time to the National Cancer Institute's Laboratory of Biochemistry.

In 1969, Leder's scientific career brought him to NICHD, where he became head of the section on molecular genetics in the Laboratory of Molecular Genetics (LMG). He soon became chief of the LMG, a post he held from 1972 to 1980.

During his tenure as chief, he and his colleagues worked on a number of critical projects in molecular and developmental genetics. Among these were studies that resulted in the development of a new approach to the study of heritable blood disorders such as thalassemia. Leder and his laboratory also were among the first to synthesize segments of genes, an accomplishment that was of crucial importance to the development of recombinant DNA technology. In groundbreaking research, they cloned several different globin genes from the mouse, and determined the exact chemical makeup of one of them, the ß-globin major gene. At that time, this was the first and only mammalian gene whose structure was fully known. This research led to efforts by Leder and his lab to compare the expression of various globin genes in attempts to identify the "on/off" switches that regulate these genes. Through these and other experiments, he and his colleagues helped lay the groundwork to determine how messages that encode globin are processed within the mammalian cell.

Leder has made invaluable contributions to other areas of molecular genetics, as well. In his studies of the rearrangements of genes that direct antibody production, he discovered the specific ways in which the subunits of antibody genes are assembled, and how separate pieces of DNA are involved. He also demonstrated how some cancers can be caused by molecular mistakes that occur when DNA is reshuffled.

In June 1976, Leder was awarded the NIH Director's Award "for critical contributions to the unequivocal codon assignments in the *E. coli* system, contributions to the understanding of the components of protein synthesis, and for the purification and study of specific gene transcripts." This was but an early honor in a career marked by many awards in both the basic and clinical sciences. Leder has subsequently received the Association of American Medical Colleges Award for Distinguished Research in the Biomedical Sciences; the Harvey Prize in Human Health from the



Leder as an NICHD lab chief in the 1970's

Technion-Israel Institute of Technology; the American College of Physicians Award; the Richard Lounsberry Award of the National Academy of Sciences; the Bristol-Myers Award for Distinguished Achievement in Cancer Research; and the Albert Lasker Award. In 1989, he was awarded the National Medal of Science. An elected member of the National Academy of Sciences, the American Academy of Arts and Sciences, and the Institute of Medicine, he is the author of more than 250 scientific papers.

Today, he continues to add luster to his distinguished career. In recent years, his scientific investigations have furthered our understanding of the mechanism of oncogene action in human cancer. To investigators who are working to unravel the mysteries of mammalian development, his current work once again promises to "shift the paradigm," and Philip Leder himself continues to inspire his colleagues in the scientific community.

In addition to Leder, other distinguished NICHD alumni who will present talks at the symposium include:

● Dr. William W. Chin, who was a research associate from 1974 to 1976 in NICHD's Laboratory of Molecular Genetics, worked on the identification and characterization of "early" proteins in adenovirus infection. In 1976, he returned to Boston where he embarked on his career in endocrinology at Massachusetts General Hospital, later joining the faculty at Harvard Medical School in 1978. His initial research focused on the molecular biology of endocrine systems, including the regulation of thyrotropin (TSH) gene expression by thyroid hormones. Through this work, Chin became a leader in the molecular cloning of the cDNAs and the genes encoding the subunits of TSH. Currently professor of medicine at Harvard Medical School, an investigator with the Howard Hughes Medical Institute, and senior physician at Brigham and Women's Hospital, Chin is focusing on the molecular details of the interactions of thyroid hormone with its targets. He will talk about "Molecular Mechanisms of Thyroid Hormone Action."

● Dr. Gerald D. Fischbach was a staff fellow in the Behavioral Biology Branch, NICHD, from 1969 to 1973. Throughout his career, he has studied the formation and function of synapses, the junction between nerve cells and their targets through which information is transferred. He has studied the neuromuscular junction most extensively, and his current research focuses on the role of trophic factors that promote cell differentiation and survival. Fischbach is currently the Nathan Marsh Pusey professor of neurobiology at Harvard Medical School, and chairman of the neurobiology departments at Harvard Medical School and Massachusetts General Hospital, positions he assumed in 1990. He will discuss, "Synapse Formation: A Role for Receptor Tyrosine Kinases."

● Dr. Tasuku Honjo began to study immunoglobulin genes in 1973 as a visiting fellow and later a visiting associate in the Laboratory of Molecular Genetics, NICHD. After he returned to Japan, his work at Osaka University helped to elucidate the molecular mechanism of class switching. Since 1984, Honjo has been at Kyoto University, where his contributions have extended to various aspects of molecular immunology, including the organization of the human VH gene; the structure and function of IL-2R, IL-4, and IL-5; and the selection and autoimmunity of B cells. He is also interested in the development of the immune and nervous systems. Honjo is a professor in the department of medical chemistry, and director of the Center for Molecular Biology and Genetics. He will present his recent work on "RBP-Jk, A Transcriptional Regulator of Neurogenic Genes in the Drosophila PNS."

● Dr. Stuart H. Orkin spent 1973 to 1975 as a research associate in the Laboratory of Molecular Genetics, NICHD. Today, he is an associate in medicine (hematology and oncology) at Children's Hospital in Boston, Leland Fikes professor of pediatric medicine at Harvard Medical School, and an investigator with the Howard Hughes Medical Institute. He has numerous research interests, including the molecular biology and genetics of such human diseases as thalassemia; hemoglobin synthesis; the prenatal diagnosis of genetic disease; the molecular biology of coagulation; the molecular genetics and biochemistry of the phagocytic cell; and gene transfer and expression in hematopoietic cells. He will present a talk entitled, "Targeting Hematopoietic Development."

● Dr. Shirley Tilghman was a postdoctoral fellow in NICHD's Laboratory of Molecular Genetics from 1975 to 1977. While at the institute, she played a major role in cloning the first mammalian genes to be so isolated (i.e., two adult mouse ß-globin genes), and showed that the coding sequences in these genomic genes were not contiguous, but were interrupted by intervening sequences. Tilghman also established the mechanism of assembly of the mature messenger RNA by demonstrating that the ß-globin gene, but not its messenger RNA, contained the intervening sequences. In

later work, she cloned and analyzed the structure, and elucidated the regulation, of the alphafetoprotein and albumin genes. Currently the Howard A. Prior professor of the life sciences at Princeton University and an investigator with the Howard Hughes Medical Institute, Tilghman has recently broadened her research to include the analysis of the highly unusual H19 gene, which is regulated during embryogenesis in mice by parental imprinting. She will discuss her work on "Parental Imprinting in the Mouse."

Research Festival Set to Start

Forget Woodstock 2...Research Festival '94 is here! The annual intramural get-together kicks off Monday, Sept. 19 with NICHD's Distinguished Alumni Symposium titled "Developmental Biology: Contributions of Basic Science to Human Biomedical Research," in Masur Auditorium, Bldg. 10, from 8:45 a.m. to noon.

A special poster session runs on Monday afternoon from 1 to 4 under the Research Festival tents in parking lot 10D. During the poster session, free snacks and beverages will be served in the tents, courtesy of the Technical Sales Association.

The festival continues on Tuesday, Sept. 20, with two more symposia from 8:30 to 11 a.m.: "HIV Pathogenesis and Therapy," in Masur Auditorium, chaired by Drs. Anthony Fauci, NIAID, and Genoveffa Franchini, NCI; and "Apoptosis and the Cell Cycle," chaired by Drs. Mary Dasso, NICHD, and Michael Lenardo, NIAID, in Lipsett Amphitheater, Bldg. 10.

Tuesday afternoon features 19 workshops in various locations from 2:30 to 5.

Three more symposia run on Wednesday, Sept. 21, from 8:30 to 11 a.m.: "Genetic Predisposition to Diseases," chaired by Drs. Jeffrey Trent, NCHGR, and Christine Kozak, NIAID (Bldg. 10, Masur); "Imaging," chaired by Drs. Stephen Bacharach, CC, and Robert Balaban, NHLBI (Bldg. 10, Lipsett); and "DNA Repair," chaired by Drs. Vilhelm Bohr, NIA, and Eddie Reed, NCI (Bldg 38A, Lister Hill Auditorium).

Wednesday's schedule is also packed with 34 morning and afternoon workshop sessions, plus a special all-day computer workshop.

The festival concludes on Thursday, Sept. 22 and Friday, Sept. 23, with the Scientific Equipment Show, sponsored by the Technical Sales Association, presented under the tents in parking lot 10D.

For specific times and locations of events, consult the Research Festival program booklet, distributed desk-to-desk throughout NIH. (For cyberspace devotees, an on-line-searchable version of the program booklet will appear via the NIH Gopher Server under the NIH Campus Info menu item.)

For more information, call the NIH Visitor Information Center, 6-1776.

Festival Computing Workshops

DCRT and NLM will again cosponsor a special information technology workshop in Bldg. 12A on Wednesday, Sept. 21 as part of this year's NIH Research Festival activities. Exhibits and demonstrations featuring such attractions as sequence databases, sequence alignment and analysis, bibliographic retrieval, Mosaic, protein folding, and movies of molecular modeling and simulation will be presented throughout the day. Dr. Adrian Parsegian, DCRT, and Dr. John Wootton, NLM, are cochairing the all-day event.

In addition, a high performance computing workshop featuring six speakers discussing several issues relevant to protein folding studies, simulations of dynamics in water, molecular dynamics of the HIV-1 protease cleavage mechanism, and orientation determination in 3-D reconstructions, will be held from 2:30 to 5 p.m in Bldg. 12A, Rm. 3026. The workshop is cochaired by Dr. Bernard Brooks, DCRT, and Dr. Richard Pastor, CBER/FDA.

Dr. Benes Trus, DCRT, will be one of the speakers at the "Imaging" symposium in Lipsett Amphitheater, Bldg. 10, from 8:30 to 11 a.m. on Sept. 21. A complete schedule of workshop activities appears in the Research Festival brochure. ❑

Theodore W. Blakeney, Jr. was recognized by NIH deputy director for extramural research Dr. Wendy Baldwin recently for his service to the Extramural Associates Program. Blakeney served as acting director of the EA Program for over a year. Baldwin presented him with a cash award and her thanks for the support he provided to the Office of Extramural Research.

Chamber Players In Concert

The NIH Chamber Players announce their upcoming event schedule; dates, times and places are listed below.

Oct. 14	Border's Books and Music White Flint Mall, 7:30-9:30 p.m. An evening of string quartets
Oct. 26	Concert Masur Auditorium, Bldg. 10, noon String quartets of Mozart and Brahms
Dec. 20	Concert 14th Floor Assembly Hall, Bldg. 10, noon Piano trios of Beethoven and Rachmaninoff, featuring guest artist Maciej Piotrowski, Frederic Chopin Academy of Music, Warsaw, Poland, with Morton Raff and Suzanne Epstein

Performers for all string quartet programs are Morton Raff, violin; Grace Boeringer, violin; Jere Stern, viola; and Suzanne Epstein, cello. ❑

New 'Medicine for the Public' Lecture Series Begins Sept. 27

The 18th season of the Clinical Center's popular "Medicine for the Public" lecture series opens Sept. 27. Half a dozen talks—all free and open to the public—are planned for the fall. The lectures, given by distinguished NIH scientists, are held on Tuesday evenings at 7 in Masur Auditorium, Bldg. 10.

The first talk, "Schizophrenia: Out of the Shadows," will be given by Dr. David Pickar, chief of the Experimental Therapeutics Branch, NIMH. New drug therapies are yielding encouraging results in the treatment of this serious, debilitating disease, and innovative imaging techniques are helping investigators learn more about its causes and effects.

On Oct. 4, Dr. Harvey Alter, chief of the immunology section of the Clinical Center's department of transfusion medicine, will discuss "The Rise and Fall of Posttransfusion Hepatitis." He will explain how NIH research has contributed to the virtual elimination of blood-transmitted viral hepatitis and vastly increased the safety of our blood supply.

On Oct. 11, Dr. Frank Hamilton will present "Ulcers: Diagnosis and Treatment." He is director of the Gastrointestinal Disease Program, NIDDK, and will explain peptic ulcer disease, how it affects the body, and what factors influence ulcers.

Dr. Stephen Straus, chief of the Laboratory of Clinical Investigation, NIAID, will examine the causes of shingles (also called zoster) and recent advances in prevention and treatment in "Shingles: Another Pox on Us" on Oct. 18.

The use of viruses—normally thought of as disease causers—to cure disease through procedures such as gene therapy will be explained by Dr. Philip Murphy of NIAID's Laboratory of Host Diseases in his Oct. 25 lecture, "Viruses: The Good, the Bad, and the Ugly."

Wrapping up the series on Nov. 1 will be Dr. Francis Collins, director of the National Center for Human Genome Research. He will discuss "Reading Our Own Blueprint: The Human Genome Project."

For more information on topics or speakers, call 6-2563.

TMJ Sufferers Sought

The NIDR is seeking patients with temporomandibular joint disorder (TMJ) or jaw joint pain for participation in a study. For more information, contact the Pain Research Clinic, Bldg. 10, Rm. 3C407, phone 6-5483. ❑

Police Training Program Has New Boss

The NIH police training program has a new administrator. Gary Freeman, newly appointed training administrator for the Division of Security Operations, observes, "Most people don't realize the amount of training that NIH police officers are required to have."

Initially, every officer must successfully complete 8 weeks of basic police officer training at the Law Enforcement Training Center at Glynco, Ga. Then, according to Freeman, mandatory training requirements for each officer at NIH include an annual 40-hour in-service training program.

This training, offered four times a year, includes courses in officer survival, cultural sensitivity, sexual harassment, violence in the workplace, child abuse, ethics, defensive tactics, stress reduction and legal updates. These sessions are held at NIH, but outside federal and local police officers also attend.

The instructors are from NIH as well as other law enforcement agencies such as the Federal Bureau of Investigation, Montgomery County Police Department, U.S. State Department, U.S. Capitol Police, and the Maryland National Capital Park Police.

Firearms qualification is a mandatory 16 hours of training per year. While the Maryland Police and Correctional Training Commission requires once-a-year certification, NIH officers qualify twice a year. At the range, officers qualify with service revolvers and also attend classroom sessions that stress firearms policies and weapon safety.

The Police Branch recently acquired FATS, a computerized firearms training system that provides simulated exercises where an officer is required to make a decision and react to various real-life situations quickly. The system then evaluates the officers' reaction time and determines whether or not the proper decision was made in each circumstance. FATS training will be required twice a year in addition to the regular firearms training.

These are not the only training courses officers are required to attend, Freeman explains. In addition, the K-9, detective and motorcycle units also receive specialized training.

This year, officers have also attended approximately 20 specialized training courses that include: sex-related crimes, supervisors' workshops, EEO for supervisors, drug identification, continuing legal education, white collar crimes, and executive protection.

The division also receives videotapes weekly from the Law Enforcement Television Network on topics such as community policing, legal update, and the latest information concerning police issues. These tapes are shown at roll call training sessions and are shown at roll call training sessions and are

Ofc. Don Watson (c) of NIH serves as instructor for the defensive tactics class.

Officers must successfully complete 8 weeks of basic police officer training at the Law Enforcement Training Center at Glynco, Ga.

Gary Freeman, the newly appointed training administrator for the Division of Security Operations

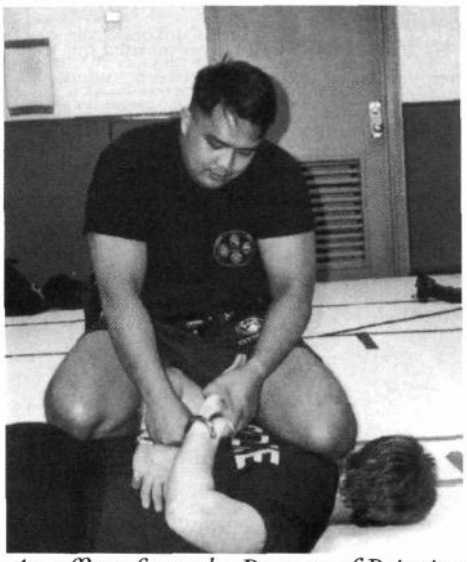
Kimberly Dean of Montgomery County's Detention Center teaches a class on cultural sensitivity during police in-service training.

Michael Dennis of Montgomery County's Human Relations Commission discusses sexual harassment.

Photos: Anne Barber

Members of an in-service training course offered recently at NIH

Cpl. Tom Hayden of NIH's Police Branch takes a turn at FATS, the computerized firearms training video.



An officer from the Bureau of Printing and Engraving handcuffs instructor Don Watson of NIH during defensive tactics class.

made available for officers to view while off duty.

All of this training is NIH's way of keeping up-to-date with the latest in law enforcement and to provide the NIH community with the best public safety program. ❑

NIEHS Minority Health Funding Expanded Through ORMH Deal

Funding for minority health programs at NIEHS has been increased $2.4 million through an expansion of the intra-agency agreement with the Office of Research on Minority Health signed in July. This brings the total funding to $7.4 million for fiscal year 1994, to address minority health concerns related to environmental health. Dr. John Ruffin, director of ORMH, and Dr. Kenneth Olden, director of NIEHS, signed the agreement.

A primary effort under the agreement addresses the determination, evaluation and treatment of lead-exposed children and pregnant women. Learning deficits have been identified in young children exposed *in utero* and postnatally through environmental dust, paints and vapors. Evaluation programs are both planned and ongoing. A clinical trial recently began on the chelating agent succimer for children exposed to environmental lead, to determine if learning deficits can be corrected in individuals with moderate body burdens of lead. Major university medical research centers are conducting the trial that is being coordinated at Harvard University.

Also under the agreement is a program of research grants addressing issues of environmental justice defined through a national environmental justice conference held in Alexandria last February. ❑

STEP Program Announces New Offerings for 1994-1995

The Staff Training in Extramural Programs (STEP) committee recently announced its continuing education activities for 1994-1995. STEP will offer five training modules during the coming year, each exploring a topic in depth for a day or longer.

The first module, "Research Training: The Young and the Restless," to be held Dec. 12-13, will take a critical look at the state of research training. This module will examine fundamental questions concerning the purpose of training grants from the perspectives of NIH, academia, and the trainee.

The second module, "Smile! You're on Candid Camera: Science and the Media," will be offered Jan. 9-10, 1995. It will provide participants with a greater understanding of the media's needs, viewpoints, and objectives in relation to biomedical research. The module will feature presentations by representatives from NIH, DHHS, and from local and national radio, television, and print media.

The third module, "Clinical Trials: The Next Generation," scheduled for Mar. 8-9, 1995, will address a wide range of issues involved in the conduct of clinical trials. The faculty will be drawn from pharmaceutical companies, academic institutions, and NIH staff involved in the design, funding, and management of clinical trials.

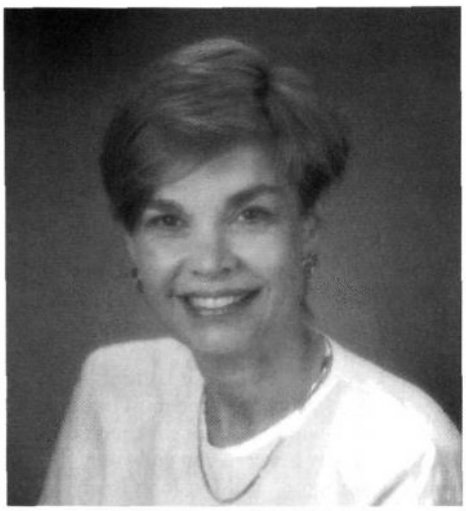
The fourth module, "NIH and Industry: Shotgun Weddings or Marriages Made in Heaven?" will explore the emerging complex relationship between NIH and industry Apr. 5-6, 1995. Through a series of panel discussions and case studies, this module will present various perspectives on the role of NIH-supported research in commercial product development and the risks and benefits that may accrue.

The final module, "From Pain to Gain: Recharge and Charge!" will be held May 3-5, 1995. This module is designed to help participants develop new skills to revitalize their approach to life at NIH. It will be presented by an outside trainer with expertise in facilitating interactive training activities.

Advance registration is required for participation in all STEP modules. Applications for the first two modules are due in the STEP office (Bldg. 31, Rm. 3B59, phone 6-1493) by Oct. 7. Applications for the other three modules are due Dec. 16. The application form NIH-2245 is available in the STEP catalog or from the STEP office.

In addition to the modules, STEP will again offer the afternoon Forum series. These programs are designed to provide a forum for the lively exchange of information on current issues of interest to the NIH extramural community. The programs are generally 2 hours long and do not require advance registration.

The topics selected for this year's Forums are: "Reinvention II—An Update," "The Federal Science Policy: Reports from the Field," "Computer Software Expo: Tools for Extramural Scientists," and "The Government Performance Results Act, The New Federal Report Card: Can NIH Pass?" Fliers with information on the dates, times, and locations of these forums will be distributed at a later date.



Susan Waldrop is this year's STEP chairperson.

STEP will also continue the popular Science for All series. These programs provide extramural staff at all levels with an excellent opportunity to learn about recent scientific advances and the science that relates to contemporary health issues.

The first program will focus on the problem of antibiotic resistance. The second program will provide an update on human gene therapy, and the third will present information on melanoma. As with the Forum series, advance registration is not required. Watch for fliers advertising the dates, times and locations of these programs.

The STEP training activities are developed by a committee of some 25 experienced NIH extramural staff. Susan Waldrop, chief of the Program Planning, Analysis, and Program Coordination Branch in the Division of Cancer Biology, Diagnosis, and Centers, NCI, has been appointed chairperson of the STEP committee. Dr. Ann Hagan, deputy chief of the Review Branch, NIDDK, is serving as vice-chair.

The STEP catalog contains more information about all of the STEP training activities, including the names of the committee members, and the application instructions and form. It is available in your personnel office, the STEP office, and in the following locations: Bldg. 31, Susan Waldrop, Rm. 3A11, 6-1458; Executive Plaza North, John Sogn, Rm. 501, 6-7815; Executive Plaza South, Maria Giovanni, Rm. 350, 6-0484; Federal, Paul Sheehy, Rm. 9C08, 6-9223; Gateway, Joe Ellis, Rm. 2N212, 6-1472; Parklawn, Edna Hardy-Hill, Rm. 3B06, 3-6470; Solar, Carole Heilman, Rm. 3B06, 6-5305; Westwood, Norka Ruiz Bravo, Rm. 918, 4-7762; 6100, Mary Ellen Colvin, Rm. 8A17G, 6-1303; Willco, Frances Cotter, Rm. 505, 3-1207; NIEHS, Anne Sassaman, (919) 541-7634. ❑

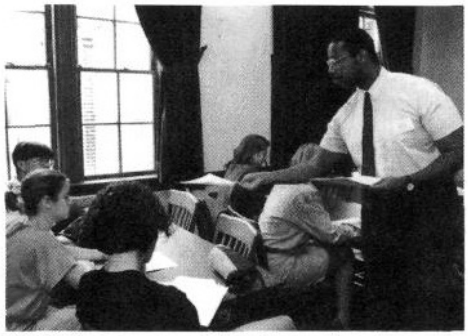
SUCCESS STRATEGIES DEFINED

(Continued from Page 1)

Students were interested in how to make decisions not only about their careers but also about their lives. How do I choose the right path? How can I tell where the dividing line is between being persistent (in applying for jobs or training opportunities) and being obnoxious? How do I choose the right time to marry? (One answer to that question, given by one of the speakers, was "When you meet the right person!") How do I pick an advisor?

The advisor issue seemed common to the discussions in all of the breakout sessions. Choosing the right advisor or "mentor" (from the Greek word for a wise and faithful counselor) is clearly one of the most important decisions for a budding scientist or physician. "If the chemistry between you and your mentor is not right," said Dr. John Brady, "things can be miserable. If it is right, this relationship can catapult your career."

The mentor not only teaches and guides students but, through actions or inactions, can promote a student's career or stymie it. Good mentors introduce their students to other scientists and offer them opportunities to coauthor papers and chapters in books. They seize opportunities for their students to give talks and suggest that their students fill in at meetings that the advisors cannot attend. Good mentors teach their students how to be productive, how to compete, and how to learn, and generally shepherd their students into the mainstream of science.



NCI's Dr. Jarvis Reed distributes a handout during a session on academic and career choices.

"Your mentor doesn't have to be someone like you," pointed out Dr. Arlyn Garcia-Perez, commenting on the paucity of role models for women and people from minority communities that are underrepresented in medicine and science. "Your mentor just has to be someone with an open mind or a mind that can be opened to helping you." The bottom line is that the mentor must have a vested interest in the student's career. "People do not typically propose to each other on the first date," observed Brady, and the choice of a mentor should not be made overnight but only after careful deliberation.

Students were alerted to the importance of the mentor's work ethic. If the mentor works 20 hours a day, it is likely that students in that lab will be expected to do the same. A mentor without a family may not be sympathetic to the schedule demands of a student with one. The styles and personalities of mentor and student should mesh.

"It is never too late either to choose a different mentor," said Garcia-Perez, "or to form a network with others who can help your career or who can help you find a new mentor." OE director Dr. Michael Fordis, who moderated the workshop, commented, "If you are in a difficult situation with respect to your relationship with your mentor, it is not entirely up to you to make it right." Student and mentor must both make the effort to communicate about their problems and differences.

Brady characterized the relationship of student and mentor as "a two-way street." Both have responsibilities. The advisor spends time training the student and money and resources for the training. In return, the student owes the mentor a commitment of time, effort, and an interest in the success of the project.

So, what helps a student succeed? Successful students were described as those who learn early to take the initiative to meet people, ask questions, participate in poster sessions, offer help to others who have less experience than they do (in other words, act as mentors themselves), and follow up on contacts and opportunities.

"Nothing supersedes excellence," said Dr. Sandra Smith-Gill, "but it's not enough." Visibility and networking are crucial for moving forward in science. (She suggested that one simple and cheap aid for linking people is the business card.) Networks are great for helping individuals advance and solve problems, and several speakers suggested that students might wish to form a network of their own. Smith-Gill cautioned that networks should have a positive agenda and be inclusive of all interested individuals to ensure that they solve more problems than they create.

Linda Skidmore advised students that they, like successful scientists, should adopt a "can-do attitude and a willingness to take risks." They should establish their goals and communicate effectively. Her handout listed these and other characteristics of successful scientists: knowledge of the discipline, self confidence, ability to establish clear goals, willingness to take risks, openness to change, a feeling of empowerment, and a commitment to helping others.

Several panelists spoke about differences in how science is done in different places. For example, university faculty members expect to divide their time between research and teaching. At NIH, some researchers run their laboratories like academic labs and cherish the opportunity to train students. But others may be at NIH precisely because they do not want to teach. Medical students were made aware that medical training at NIH is directed toward tertiary care, so training here provides unique opportunities for students interested in the care of patients who have rare and/or difficult-to-treat diseases. For students interested in primary care, NIH might not be the ideal place to train.

NCHGR's Dr. Mark Guyer pointed out that there can be a discrepancy between students' experiences when they train for research careers and their experiences when they eventually do science. "Training," he said, "is an individual activity in which one is taught to look at problems, ask questions, and develop methods for answering the questions. But in the laboratory, science is more often a cooperative enterprise." He noted that progress on many scientific problems is made through the interplay of several disciplines and cited his own field (human genome research) as one in which biology, ethics, physics, and informatics come together. "Science," he said, "is an intellectual activity that thrives from this synergy."

NCI's Dr. Sherry Mills (3rd from l) listens to query from student.

In the end, students heard about a range of strategies that could help them map out successful careers in science, including finding an appropriate balance between their professional and personal lives. "If you really want to do it, you can," said Dr. Sherry Mills. "You can make time for what you want, just as you made time and found resources to go to medical school" (or graduate school or college or to have children). For each student, the balance, the compromises, and the rewards will be different.

Although the focus of the workshop was on decisions and problems associated with careers in laboratory and clinical science and medicine, many of the same approaches could be applied to careers in teaching, writing, and the administration of science and medicine. It seems that the students were pleased with what they learned. In answer to the question "What would have made this workshop better?" on the post-session evaluation sheet, the most common response of students was that they wanted more of the same: "Having an all-day presentation instead of a half day" and "Having the opportunity to attend all of the sessions (instead of just two of them)." ❑

Christmas at Longwood Gardens

Reserve your seat now for a holiday tour of Longwood Gardens on Saturday, Dec. 10. Price is $53 per person and includes transportation, lunch, admission into gardens and guided tour, and a visit to Mushroom Farm. Depart Bldg. 31 at 7:30 a.m. Call R&W for more information, 6-4600. ❑

THOMAS
(Continued from Page 1)

House membership and 7 percent of the Senate. Obviously, more needs to be done to ensure a fairer representation of women, who now make up 51 percent of this country's population.

"In 1977," she continued, "the congressional caucus for women's issues was founded to promote women's economic, health, legal, and educational concerns. Its primary purpose is to promote legislation to improve the status of women and eliminate discrimination from federal programs and policies.

"While gains have been made, and advances for women are coming at an increased pace," Armstrong said, "much still needs to be done.

"While we celebrate the magnificent achievements and contributions of women who have gone before us, we must keep in mind that their efforts have provided only a foundation upon which we must continue to build."

Dr. Ruth Kirschstein, NIH deputy director, called Helen Thomas, the guest speaker for the occasion, "a stellar example of what women, who only 74 years ago were denied even the basic right to vote, have contributed to this country. She has overcome almost insurmountable obstacles to become one of America's most respected figures. She is, indisputably, at the top of her profession," continued Kirschstein, "a profession that was predominantly male when she took the challenge of competing in the rough, competitive world of journalism. Women like Helen Thomas have been instrumental in providing leadership, advice, and highly visible role models for their younger sisters."

Echoing that sentiment, Lucretia Coffer, NIH's Federal Women's Program manager, said the accomplishments of women since this monumental event 74 years ago have been enormous.

"At NIH in the field of science and technology, there are many women where there used to be solidly men. NIH is a fertile ground for young women who are interested in the field," said Coffer. "We can make NIH a model."

Thomas, Washington bureau chief for United Press International (UPI), has broken through many barriers once closed to women—the first woman officer of the National Press Club, the first woman president of the White House Correspondents Association, and the first woman member of the Gridiron Club, a 90-year-old institution.

A graduate of Wayne State University in Detroit, where she grew up, Thomas began her career as a copy girl for the old *Washington Daily News*. In 1943, she joined UPI and the Washington press corps. In November 1960, she began covering President-elect John F. Kennedy, following him to the White House in January 1961 as a member of the UPI team. It was during this first White House assignment that she began closing presidential press conferences with her signature, "Thank you, Mr. President," a custom that has continued to this day.

"I have always been outraged that the suffragettes had to fight to give us the rights we should have had at birth," said Thomas. "That was only one step in a journey of many miles that we have to go before we achieve equality.

"World War II was the turning point for women because every able-bodied man was sent off to war, and women stepped into their shoes to prove we can do the job."

Thomas then said, "I bring greetings to you from President Clinton." She had met with him a few days earlier and told him she would be coming to NIH to deliver a talk on Women's Equality Day. "I asked him if he thought a woman would be President someday. His answer: 'Absolutely. Someday and not too long in the future. Women are making big gains in the polls.'"

When giving her inside comments about the Presidents she has known and life at the White House, Thomas was very entertaining as well as informative.

"The White House overall is still on a shakedown cruise," she said. "The staff members are holdovers from the campaign and most don't understand that they hold this awesome power.

"The President is jubilant about the passage of the crime bill," she reported, "but, I'm afraid the health bill will go down the tube. When the Berlin Wall fell, we thought we would live happily ever after. As kids say, 'Not!'

"Clinton can take credit for the family and medical leave bill and the Brady bill, but the President should know as the press knows—you are only as good as your last story. Known more as, 'What have you done for me lately?'

"So many Presidents have mourned living in the goldfish bowl. The loss of privacy. But don't cry," she said, "it is the greatest honor to have the trust of the American people."

Thomas recalled that President Clinton knew back in 1963, when he shook President Kennedy's hand, he wanted to become President one day. "I shook President Kennedy's hand and I didn't think I would become President," she said. "I guess I lack that vision thing.

"Reporters don't actually run with the President," she said. "We ride in a van. Younger colleagues get invited to run with him, but I got invited to the dedication of the White House horse-shoe pit."

Thomas feels strongly that the President should be held accountable on a regular basis. "All roads lead to the Oval Office," she said. "The buck stops there.

"I consider it a great privilege to cover the White House," Thomas related. "I have a ringside seat to instant history."

Thomas said no President has ever liked the press, dating back to George Washington. She offered the following comments made by the White House about the press:

Clinton had this to say about reporters following his morning jogs: "They just want to see if I drop dead."

Kennedy was asked once by a woman reporter what he had done for women. He answered: "Obviously, not enough."

When asked by the press what she fed her new German shepherd, Jacqueline Kennedy responded, "Reporters."

Once, when Lyndon Johnson was admitted to Bethesda Naval Hospital, the psychiatric ward was converted into a press room. When asked what happened to the patients, Johnson responded, "We gave them all press cards."

Barbara Bush is alleged to have told Hillary Clinton: "Avoid the press like the plague."

Gerald Ford said: "If God had made the world in 6 days, on the 7th day he would have had to explain it to Helen Thomas."

Harry Truman said: "If you want a friend in Washington, get a dog."

Other anecdotes included one about Lillian Carter, who once said, "Sometimes when I look at my children, I wish I had remained a virgin." And Ronald Reagan, Thomas recalled, who while in office had the Iran-contra scandal, was shot at, had colon and skin cancer, still manages to say, "Those were the good old days."

"[ABC-TV reporter] Sam Donaldson used to be my partner in crime," confided Thomas. "We got the most hate mail.

"Eternal vigilance," she concluded, "is the price of liberty. We should keep an eye on the President, help people stay informed and keep democracy alive."

At the question-and-answer period following her talk, Thomas was asked what she considered the strongest asset for a woman. "Determination," she answered.

Asked who her favorite chief executive was, she responded, "President Kennedy. He was most inspired and had vision that reached for the stars."

Do you think a woman will ever become President and when? "Early in the next century."

Name your crucial attributes for a President? "Credibility, compassion, and wit."

In closing, Thomas said, "We [the press] are the only ones who have the privilege to question the President, except for town meetings held sometimes in other locations. So I will continue to ask my invariable question, 'Why?'"

After a standing ovation, Thomas was presented with a framed poster of the announcement of Women's Equality Day, featuring her photo and the White House. ❑

NLM Hours Have Changed

After Labor Day, the hours of the National Library of Medicine's main reading room changed. This year, the library will have evening hours only on Thursdays.

The regular hours (Labor Day to Memorial Day) are now as follows:

Main Reading Room—Mon., Tues., Wed., Fri.: 8:30 a.m. to 5 p.m.

Thurs.: 8:30 a.m. to 9 p.m. Saturday: 8:30 a.m. to 12:30 p.m.

History of Medicine Reading Room—Mon. through Fri.: 8:30 a.m. to 5 p.m. Both reading rooms are closed on Sunday. ❑

The NIH Life Sciences Education Connection

Schoolchildren across the nation will encounter more information on environmental health sciences in the coming school years thanks to seven new grants awarded by the National Institute of Environmental Health Sciences.

The grants correspond to needs and approaches suggested by a select group of K-12 teachers, scientists and science education program officials in the Environmental Health Sciences Forum held at NIEHS in December 1992.

The forum laid the groundwork for the development of a 1993 request for applications entitled "K-12 Environmental Health Sciences Education," directed at funding the development of environmental health sciences materials that could be infused into existing K-12 science curricula on a national basis.

The seven grants awarded are: "Eco Expert: Health Risks in Our Town," Texas Learning Technology Group, Austin; "Risky Business: Living in A Chemical World," University of Washington, Seattle; "Ozone: Will It Affect Me?," Washington University, St. Louis; "Enviromysteries," Maryland Public Television, Owings Mills, Md.; "My Health—My World," Baylor College of Medicine, Houston; "Environmental Health Science Action Packs," Pennsylvania State University, University Park, Pa.; and "Toxrap: Toxicology, Risk Assessment, and Air Pollution," University of Medicine and Dentistry of New Jersey, Piscataway, N.J.

Congratulations to Dr. Marian Johnson-Thompson, NIEHS director of institutional development and coordinator of the Environmental Health Sciences Education Forum, for the development and implementation of the NIEHS environmental health and science education grants program. ❑

Clinic Seeks Volunteer Physicians

Whitman-Walker Clinic in Washington, D.C., is seeking physicians to volunteer their services in the HIV or STD outpatient clinics, located in the Elizabeth Taylor Clinic on 14th and R Sts., NW. Off-street parking is available free of charge.

Physicians are asked to make a minimum commitment of one night a week. Four patients are scheduled in half-hour intervals during the weekday-evening hours. Flexible scheduling allows for duty travel and vacations.

Two orientation sessions may be required. Volunteer physicians fulfill clinical requirements for M.D. bonuses.

For more information, contact Dr. Roxanne Cox-Iyamu or Matthew McNamara, (202) 797-3576. ❑

ORWH's Judith LaRosa Relocates Career

By Ellyn Pollack

Friends and colleagues gathered in the Visitor Information Center recently to bid farewell to Dr. Judith LaRosa, deputy director of the Office of Research on Women's Health (ORWH). She and her husband are moving to New Orleans, where he will serve as chancellor of Tulane University School of Medicine and she will continue her work in women's health research.

The afternoon carried a bittersweet air as people recalled long-standing jokes and old times shared. Dr. Ruth Kirschstein, NIH deputy director, opened the program by presenting LaRosa with an Award of Merit for her contributions to women's health research.

Dr. Judith LaRosa

On the lighter side, O.W. "Jim" Sweat, director of the Division of Security Operations, made LaRosa an honorary NIH police officer in recognition of her hard work and dedication to the NIH Police community relations committee.

The formal program closed with a serenade of a customized version of "You Are My Sunshine" by members of the Staff Training in Extramural Programs committee.

"Dr. LaRosa's departure will be felt by many of us at NIH and in the women's health community," said Dr. Vivian Pinn, NIH associate director for research on women's health and director of ORWH. "She has made many valuable contributions to enhancing women's health research and the promotion of women in biomedical careers during her tenure at NIH. Her energy, dedication and sense of humor will be missed by many."

A 17-year NIH veteran, LaRosa joined ORWH in 1991 as the first deputy director of the office. "Perhaps the most important and exciting aspects of the Office of Research on Women's Health were to be present early in its creation and to be able to have a hand in 'making a difference' on a national level," LaRosa reflected. "These are opportunities that we at NIH possess and it provides an enormous sense of accomplishment to be part of that process.

"The other critical and marvelous aspect of this job has been the chance to work with scientists and administrators across the NIH to bring scientific rigor to women's health research, to assure that in the future women of all racial and ethnic groups will benefit from biomedical research."

During her ORWH tenure, LaRosa was instrumental in designing and implementing an NIH tracking system to monitor the inclusion of women in study populations; designing and managing the ORWH trans-NIH research portfolio of women's health research; and designing, implementing and evaluating office programs and activities, including career development programs.

"The hopes that we had to embed women's health research firmly within the scientific infrastructure are coming to fruition and this is probably the most exciting aspect of the evolution," LaRosa said.

Despite her contributions to women's health, LaRosa spent most of her NIH tenure with the National Heart, Lung, and Blood Institute. She joined NHLBI in 1976 as a public health advisor, then served as coordinator of the NHLBI workplace initiative and coordinator of the National Heart Attack Alert Program.

She received numerous awards and honors, including the NIH Director's Award, three Awards of Merit, two Performance Awards, and two Special Achievement Awards.

LaRosa plans to continue her work in women's health research and practice in New Orleans. She will collaborate with her new colleagues at the Tulane University School of Public Health and Tropical Medicine and at the Louisiana department of health and human resources.

"While I look forward to 'life outside' and understanding what it is like not to be at NIH, it will be exciting," LaRosa anticipates. "What will I miss? The wonderfully stimulating and delightful colleagues and friends gathered over 17 years of service."

Toastmasters Anniversary Set

The NIH R&W Toastmasters Club will celebrate its 25th anniversary on Thursday, Oct. 27 at Christ Lutheran Church, 8011 Old Georgetown Rd. Bring a dish. Reception and social hour begin at 5:30 p.m., followed by potluck dinner and entertainment. Admission is $2 at the door. For more information, call Gil Wright, (301) 330-5062, or Ann Russo, 6-5103. ❑

Healthy People Sought

The division of clinical pharmacology at the Uniformed Services University of the Health Sciences needs healthy males and females to participate in a study of the interaction between two FDA-approved drugs. Volunteers must be active duty, or dependent and DEERS eligible; they will be paid $400 for their participation. If interested, call the research nurse, (301) 295-3071. ❑

NIEHS Funds Two New Developmental Centers

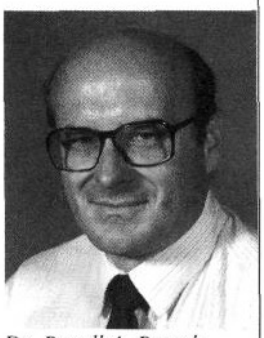
Columbia University and the University of Louisville join Tulane University Medical Center as Developmental Centers funded by NIEHS.

The Centers Program provides focused research efforts, brings together diverse scientific disciplines to solve environmental problems, and attracts and trains young investigators. Centers also answer questions from the public on environmental problems and help identify emerging problems in the environmental health field. The program funds 15 Environmental Health Sciences Centers and five Marine and Freshwater Biomedical Sciences Centers at universities throughout the United States.

Dr. Joseph Graziano

Developmental centers have two goals: to encourage research programs that study environmentally related health problems of economically disadvantaged and/or underserved populations, and to develop promising programs that may later be able to compete for an Environmental Health Sciences Center grant.

The Columbia center will study the major environmental health problems of socioeconomically disadvantaged populations, including the neurotoxicity and treatment of lead exposure, air pollution associated with asthma and other pulmonary disease, the effects of environmental factors on reproduction, and the contributions of environmental exposures to cancer. Center director is Dr. Joseph Graziano of the School of Public Health and Tropical Medicine.



Dr. Russell A. Prough

The University of Louisville will study biochemical, chemical, and molecular biomarkers to define exposure to human populations. It will focus on metabolism of acrylonite and vinyl chloride in rat and human liver cells; biomarkers of exposure involving hemoglobin and DNA adducts of acrylonite; and evaluation of the p53 tumor suppressor gene as a biomarker. A significant proportion of individuals exposed to these chemicals are socioeconomically disadvantaged and minority groups who live in the vicinity of several factories. Center director is Dr. Russell A. Prough, department of biochemistry, School of Medicine.

Gary Payne Retires After 33-Year Federal Career, 26 Spent at NIH

Gary Payne, a computer equipment specialist in the Standards and Specifications Branch, OA, retired recently after 33 years in government.

His federal career started in 1956 with the U.S. Air Force, where he served in high-security communications; his Air Force career lasted 5 years. In 1961, he started his civil service with East Coast Relay located at Ft. Detrick in Frederick, Md. He served there as a teletype repairman for 7 years before coming to NIH in 1968 as a medical equipment repairer in the Biomedical Engineering and Instrumentation Program.

Gary Payne

He spent 10 years in this position before transferring to the Standards and Specifications Branch in 1978. Payne advanced from equipment specialist (general) to computer equipment specialist.

Payne has been an avid bowler all of his adult life, and won the Maryland State Bowling Championship in 1962. He plans to continue the sport he loves during retirement.

Payne plans to stay in his native Frederick County with his wife Lynn and their children Caressa, Gary Jr., Lori and Colin. ❑

DCRT Sponsors Software Fair

DCRT is sponsoring a Statistical, Mathematical, and Graphics Software Fair on Tuesday, Oct. 11 in Bldg. 1, Wilson Hall from 10 a.m. to 3 p.m. Come and meet company representatives and see demonstrations of a wide range of software products.

The software demonstrated provides easy-to-use statistics, graphics, and mathematical modelling tools. Some of the products to be demonstrated include:

BMDP/DIAMOND	GraphPad Prism
Chaos Data Analyzer	Mocha
Data Muncher	PeakFit
DBMS/Copy	SigmaScan/Image
InStat	STATGRAPHICS Plus
SigmaStat	TableCurve 2D/3D
SPSS	HiQ
STATISTICA	Mathematica
STATlab	MLAB
STATMAN	MATLAB Neural Network Toolbox
TESTIMATE	InTend

Mark your calendar and plan to join your colleagues in an educational and informative event.

For more information, contact Alice Lausier, 4-3278 or send e-mail to LausierA@6100.dcrt.nih.gov. ❑

Postmenopausal Vols Sought

The Cardiology Branch, NHLBI, is seeking postmenopausal volunteers for a 1-day outpatient study of estrogen related to cardiovascular flow. Participants should not have any health problems or currently be taking any medicines or vitamins. Volunteers will be paid. Call Ruth Litzenberger, 6-8033, ext. 315. ❑

Herpes Study Seeks Women

Healthy women age 18 or older are sought to participate in a research study of an experimental vaccine for the prevention of genital herpes. Volunteers are needed who do not themselves have genital herpes, but who are in a stable relationship with a partner who is known to have the disease. Both partners will be screened to confirm eligibility. Participants will receive $250 for completion of the trial. For more confidential information, call 6-1836. ❑

Normal Volunteers Needed

Healthy volunteers are needed to participate in an NIMH sleep study. Volunteers must be able to spend several nights at NIH. Restrictions include no medications, no birth control pills, and no history of alcoholism, drug abuse, or psychiatric illness. Volunteers must also be nonsmokers. For more information, call Holly Giesen, 6-6981. ❑

Federal Tax Break Available

Many federal employees are currently eligible to receive the earned income tax credit available to families who earn less than $23,775 in 1994. Prior to passage of the Omnibus Reconciliation Act of 1993, employees could receive this credit in a lump sum by claiming it on their federal tax return. Under the new law, families who meet the financial qualifications and have one or more children can have the credit paid to them throughout the year in their biweekly paychecks. Families who meet the criteria could receive up to $100 of additional income per month.

If you believe that you qualify for the earned income credit and would like to take advantage of the new advance earned income credit payments, contact your ICD personnel office to request a form W-5, "Earned Income Credit Advance Payment Certificate." Be sure to return the completed form to your personnel office promptly so that the earned income credit can be added to your paycheck. If you want more information about the earned income credit program, contact the NIH payroll operations section, 6-5072, or call 1-800-829-3676 to order IRS Publication 596, *Earned Income Credit.* ❑

NINDS Honors Exceptional Summer Students

NINDS honored 65 of the students participating in its Summer Program in the Neurological Sciences at a recent awards ceremony.

This year marked the 10th anniversary of the ceremony and summer program, which was started in 1984 out of growing concern that America's supply of researchers in the field of neurology was waning. The trend was especially alarming to NINDS, whose efforts to conduct and support neurological research would be seriously hampered without a new generation of scientists. Realizing this need, NINDS decided to build a core of young researchers for the future, and thus, the summer program was established.

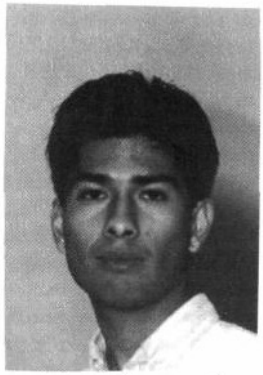
"We are on the threshold of the 21st century," said Richard Sherbert, NINDS executive officer, in opening remarks at the ceremony. "And our goal is to develop the neuroscientists of the 21st century."

Student Eunice Lau received a Letter of Commendation.

There are currently more than 600 "graduates" of the program who are now training for careers in biomedical research or academic medicine.

The program offers hands-on experience to hundreds of high school, undergraduate, graduate and medical school students each year. It provides an opportunity for students to participate in research projects that involve all aspects of the brain and nervous system.

"I feel like a child in a candy store," said Nina Robin, describing her experience in the program. "My interest is always piqued. I am honored to be a summer student at the NINDS." Robin, who has been in the program for 4 years, received an Exceptional Summer Student Award for her project, "Conscious and Unconscious Thought in Human Patients with Frontal Lobe Damage." This summer, she worked in the NINDS Medical Neurology Branch.



Summer student David Cerna, Jr., received an Exceptional Summer Student Award.

NINDS summer student Aundrea Oliver receives an Exceptional Summer Student Award from Richard Sherbert (l), NINDS executive officer. Oliver worked with Dr. Lawrence Mahan in the Laboratory of Neurochemistry.

The awards ceremony acknowledges students who have done exceptional work in the program. The students received letters of commendation or award packages that included a certificate and a textbook titled *Molecular Biology of the Cell*.—**Shannon Garnett** ❑

Fraternal Male Twin Pairs, Elderly Subjects Sought

NIMH needs male fraternal (nonidentical) twin pairs for a study of brain function. Twins must be between ages 18 and 30. Also needed are older normal female subjects between ages 60 and 69. Participants in either study must not be taking medications or have a history of major medical or psychiatric illness. Procedure involves mapping brain structure with magnetic resonance imaging (MRI) and with positron emission tomography (PET) while subjects perform various problem-solving tests. The PET scan involves exposure to an amount of radiation that is within both NIH and FDA guidelines. Volunteers will be paid. For information contact Brenda Kirkby, 2-3682 or Dr. Esposito, 2-3683. ❑

Single Parents Group Meets

Parents Without Partners provides single parents and their children with an opportunity for enhancing personal growth, self-confidence, and sensitivity toward others by offering an environment for support, friendship, and the exchange of parenting techniques. It will hold an informational meeting at NIH on Tuesday, Sept. 20, from noon to 1 p.m. in Bldg. 31, Rm. 7A24, sponsored by R&W. ❑

Normal Volunteers Needed

The section on functional brain imaging, NIMH, is seeking healthy volunteers for brain activation studies using PET and/or MRI. Volunteers should be right-handed and age 20-40. Some studies may require more than one visit. Subjects will be paid for participation. Contact Trina, 2-0416, or Jill, 2-0869, for information and scheduling. ❑

Toliver To Head MARC Program

Dr. Adolphus Toliver has been appointed director of the NIGMS Minority Access to Research Careers (MARC) Program.

He comes to NIGMS from the Division of Research Grants, where he served as a scientific review administrator for the biochemistry study section since 1975. While at DRG, Toliver was involved in efforts to recruit women and minorities to serve as NIH consultants, as well as in activities related to research training and science education. He also participated in many workshops and gave numerous speeches focusing on the NIH peer review process and on issues related to the underrepresentation of minority scientists in biomedical research. One such activity was serving on a national advisory committee for a series of radio programs entitled "Science Lives: Women and Minorities in the Sciences"; another was 6 years on the NIH Extramural Associates advisory board. Among his honors are two NIH Awards of Merit (1981 and 1992), the PHS Special Recognition Award (1993), the NIH Director's Award (1993), and the DRG Equal Employment Opportunity Special Achievement Award (1994).

Dr. Adolphus Toliver

Prior to joining DRG, Toliver was on the faculty of the department of biochemistry and biophysics at the University of California, Davis. He is the author of a number of scientific papers and has served as a reviewer of scientific papers for professional journals, and as a chairperson and/or scientific judge at both local and national scientific meetings, including the NIGMS Minority Programs Symposium.

He earned a B.S. in biology from Washington University in St. Louis, where he was elected to membership in Alpha Sigma Lambda, an honorary scholastic society. He received M.S. and Ph.D. degrees in molecular biology/biochemistry from Purdue University. In 1991, he was chosen as an "Old Master" by Purdue, an honor given to less than 40 of the university's more than 40,000 alumni.

As a graduate student at Purdue, Toliver did research supported by an NIH predoctoral fellowship. He continued his research at Kansas State University as an American Cancer Society postdoctoral fellow.

He is a member of the American Society for Cell Biology, the American Society for Biochemistry and Molecular Biology, Sigma Xi, and the Coalition for the Advancement of Blacks in Biomedical Sciences, which he helped found in 1986. ❑

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