June 14, 1988
Vol. XL No. 12
U.S. Department of Health and Human Services
National Institutes of Health

File Copy

The NIH Record

All Used NIH Funds

GM Honors Four Cancer Researchers

Four scientists who made breakthroughs in the diagnosis of cancer, prevention of cancer deaths, and understanding of how cancer develops, are the 1988 winners of the $390,000 General Motors Cancer Research Foundation Prizes, the largest awards in the field of cancer research.

Sam Shapiro and Dr. Philip Strax will receive the Charles F. Kettering Prize for the first and still most definitive study proving that breast cancer screening can save lives. Their work established the importance of early detection of breast cancer through screening. Ten to fifteen thousand American women's lives—and many more worldwide—could be saved with widespread use of regular breast cancer screening. Shapiro is professor emeritus of health policy and management at the Johns Hopkins School of Hygiene and Public Health. He was funded by NCI and NHLBI from 1962 through 1980. Strax is clinical professor of oncology and radiology at the University of Miami School of Medicine. He received several NCI grants between 1966 and 1984.

Dr. Alfred G. Knudson was named winner of the Charles S. Mott Prize for developing one of the most important theories in cancer research, which spurred much of today's genetic research. Long before anticancer genes were detected, Knudson predicted that they exist. He showed how their destruction or damage could result in certain rare hereditary childhood cancers and, probably, common cancers in adults. He is a senior member of the Institute of Cancer Research at Fox Chase Cancer Center. Since 1958 he has held numerous grants through NCI, DRR and NIAID.

Dr. Yasutomi Nishizuka was awarded the Alfred P. Sloan, Jr., Prize for his discovery of one important way signals promoting cancer are transmitted to cells. His studies also uncovered one of the main ways virtually all cells talk to each other and coordinate their activities. Nishizuka discovered a hitherto unknown protein (protein kinase C) in cells that plays a critical role in the transfer of cellular messages, and showed that tumor promoters act directly on this protein. He is professor and chairman of biochemistry at Kobe University School of Medicine and was funded by the Fogarty International Center in 1967 and 1968.

Each prize includes an award of $100,000 and $30,000 to cover expenses for a scientific conference or workshop. Shapiro and Strax will

(See GM AWARDS, Page 2)

Water spews from a 12-inch water main that was inadvertently cut June 3 by an excavation contractor behind Bldg. 6. Digging for Bldg. 6A, which will house NIH's new centralized animal facility, was delayed briefly while NIH engineers shut off the water supply and the pipeline was repaired.

President Reagan Rewards Administrator's Efforts

By Karen B. Leighty

One of the nation's highest civil service prizes, the Presidential Meritorious Executive Rank Award, was presented at a White House ceremony to Dr. John W. Diggs of the National Institute of Allergy and Infectious Diseases. The honor, conferred on May 31, carries with it a $10,000 cash award.

Diggs' selection was based on his outstanding leadership in administering medical research programs funded by NIAID. As director of its Extramural Research Program since 1982, he has had a crucial role in mobilizing the institute to deal with a national health crisis—acquired immunodeficiency syndrome (AIDS). Through his initiative and creativity, he has been able to accelerate the grant applications process, ultimately speeding the research needed to combat AIDS.

Of equal significance, however, have been his civic contributions. From the beginning of his career at NIH, Diggs has combined his administrative talents with his strong interest in providing equal access to the nation's biomedical research programs, especially for minority and women scientists.

Diggs has sustained this commitment in his present position and extended it to the community at large. Among his many activities, he is currently serving as chairman of the Environmental Protection Agency's Minority Fellowship Review Committee. In 1985, the governor of Maryland appointed him to the Montgomery College board of trustees; then in 1986, he was elected second vice-president of the board, and in 1987, first vice-president. Soon thereafter, the Montgomery County Board of Education appointed him to its com-

(See DIGGS, Page 2)

Cancer Drug Discovery For the 1990's

By Kate Ruddon

Faced with the challenge of developing better treatments for cancer, researchers are turning toward biological therapies—using natural immune system substances to trigger cell-mediated defenses—as one of the most promising new directions in cancer treatment research.

"The use of biological compounds, particularly in combination with classical chemotherapy, provides exciting new opportunities for improving cancer control," Dr. Bruce Chabner said at a recent meeting of the American Association for Cancer Research. "This combination will significantly enhance our ability to give patients higher doses of drugs, while preserving immune system function."

Discussing the future of drug development in a symposium on the status of cancer treatment, Chabner projected that, in addition to developing biological therapies, important research goals for the 1990s will include unlocking the mysteries of drug resistance, identifying new anticancer compounds from natural sources, and implementing new test systems to detect active drugs. Chabner is director of NCI's Division of Cancer Treatment.

Biological compounds—called biological response modifiers (BRMs)—have aroused great interest among scientists because of their unique ability to induce the patient's own defense mechanisms to respond to cancer and infections. Research has shown that BRMs can sometimes trigger a response where other methods of therapy have failed.

(See CANCER, Page 4)

GM AWARDS

(Continued from Page 1)

share the Kettering Prize. This is the tenth year that the prizes have been awarded.

The award winners will present a lecture in Masur Auditorium, Bldg. 10, on June 15 from 1:30 to 3:30 p.m. □

Healthy Folks Sought

Healthy men and women, ages 30 to 45, with 12–16 years of education are needed to participate in 6 hours of psychological testing. Volunteers and their immediate blood relatives must be free from a history of emotional disorders and drug or alcohol abuse. Volunteers will be compensated for their time. Call Kathleen O'Leary, Mondays, Wednesdays or Fridays, 496-4588. □

DCRT Explains How The Campus Can Connect

Computer connectivity has just become easier at NIH. The Division of Computer Research and Technology has released the DCRT Connectivity Report. Descriptions of DCRT policies, services, and recommendations contained in this report will prove useful to NIH managers and planners contemplating the difficult task of implementing effective communications between workstations, personal computers, word processors and the other computing devices available today.

Each section of the report is brief because the technical details are still evolving. Major areas covered in the report are telecommunications, campuswide connectivity, implementation of the NIH network backbone, and local area network (LAN) hardware and software. A DCRT contact point is given for each topic described in the report. Also included is a list of publications that contain additional detail, including definitions of many of the terms used in the report.

Computing at NIH is rapidly evolving, particularly with the introduction of personal computers. The effectiveness of computing devices can be substantially increased if efficient communications are established among workstations, midrange computers, and mainframe computing services. The myriad of choices in media types, topologies, network operating systems, and even standards for communicating between the different levels of computing have made selecting a network strategy an overwhelming task. DCRT will assist in this complex process by offering guidance and support for a number of products that will satisfy the needs of most users at NIH. The Connectivity Report is a part of this assistance.

To obtain copies of the report, call DCRT's Personal Workstation Office, 496-2282. □

DIGGS

(Continued from Page 1)

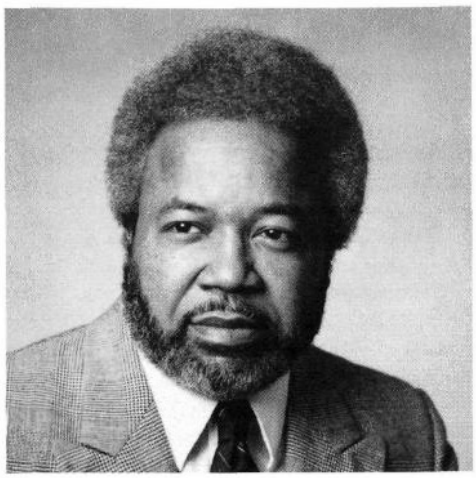
mission on excellence in teaching. The commission's 1987 report has received acclaim both locally and nationally.

. Diggs' interest in teaching first appeared when he was a biology major at Lane College, in Jackson, Tenn. Later, as a graduate student at Howard University, where he earned his M.S. degree in 1969 and his Ph.D. in 1972, Diggs pursued his biomedical interests as a research physiologist at Walter Reed Army Institute of Research.

In 1981, he became the first recipient of Howard's Distinguished Alumni Award, and his efforts have drawn commendations ever since. He joined the National Institute of Neurological and Communicative Disorders and Stroke in 1974 as a health-scientist administrator, and won the NINCDS Special Achievement Award in 1979. This was followed by the NIH Director's Award in 1985 and the Distinguished Senior Professional Award from the International Professional Management Association in 1986.

Fellow health professionals have applauded Diggs' ability to recruit young scientists from a wide range of backgrounds and draw them into biomedical research. Minority students have found a valued role model in the person of this creative and energetic research administrator. Most recently in this capacity, Diggs has responded to numerous requests to speak about the importance of education in preventing the spread of AIDS.

In his talks, he has used his knowledge, sensitivity, and practical experience to arouse the American black community, as well as international groups, to recognize the reality of AIDS. He says his message is a difficult one because many community leaders are busy addressing other important issues—they must be convinced that their lives could be touched by the disease. As a professional, Diggs enables scientists to fight disease; as a citizen, he is helping people protect themselves against it. □



Dr. John Diggs

NIH Computer Expo '88

NIH's Computer Expo '88 will be held on Thursday, June 16, at Wilson Hall, Bldg. 1–3rd floor. The 1-day showing of advanced office automation and graphics will begin at 9:30 a.m. and run until 2:30 p.m.

Vendors from all over the east coast will be demonstrating the latest in desktop publishing, presentation/reporting graphics, printers, OCR scanning, software applications, networking and much more.

More than 20 vendors will be on hand including IBM, MicroCorp, General Digital, Data Translation, E.L. Horn & Assoc., Syntellect, GTSI, etc.

All NIH personnel are invited to attend. There is no registration or cost and refreshments will be served. □

The NIH Record

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health and Human Services, and circulated to nonemployees by subscription only through the Government Printing Office. The content is reprintable without permission. Pictures may be available on request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through September 30, 1988.

NIH Record Office
Bldg. 31, Room 2B-03
Phone 496-2125

Editor
Richard McManus

Staff Writers
Anne Barber
Carla Garnett

Editorial Assistant
Marilyn Berman

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

Staff Correspondents:
CC, Ellyn Pollack
DCRT, Joan Ackerman
DRG, Sue Meadows
DRR, Michael Fluharty
DRS, Jim Doherty
FIC, Elizabeth Gillette
NCI, Patricia A. Newman
NEI, Claudia Feldman
NHLBI, Blair Gately
NIA, Claire McCullough
NIAID, Jeanne Winnick
NIAMS, Barbara Weldon
NIDDK, Eileen Corrigan
NICHD, James Hadley
NIDR, Mary Daum
NIEHS, Hugh J. Lee
NIGMS, Wanda Warddell
NCNR, Gerry Pollen
NINCDS, Carol Rowan
NLM, Roger L. Gilkeson

September Science Fest Will Explore Cell Signaling, Gene Activity, Nervous System Biology and Much, Much, More ...

Research Day, the day-long science festival set for Tuesday, Sept. 27, aims to foster crosstalk and community spirit among senior and postdoctoral scientists throughout the NIH. By offering scientists an organized but informal chance to discuss their newest research findings, the event also seeks to encourage new collaborations between institutes and to offer a view of intramural research to members of the NIH extramural staff. According to NICHD scientific director, Dr. Arthur Levine, who chairs this year's organizing committee, Research Day '88 will include 3 symposia, 19 workshops and 200 research posters by intramural scientists. An evening picnic featuring music by the band Razzmatazz will give Research Day goers a chance to schmooze and digest the day's activities.

Two morning symposia, entitled Cellular Signal Transduction (Chair: Dr. Douglas Lowy, NCI) and Gene Rearrangement and Expression (Chair: Dr. Alan Schechter, NIDDK) will run concurrently from 8 to 11:30 a.m. in the Masur and Lipsett auditoriums. From 1 to 3 p.m., a symposium on the Molecular and Cell Biology of the Nervous System (Chair: Dr. Monique Dubois-Dalcq, NINCDS) will take place in Masur Auditorium.

A poster session will run all day in the Research Day tent located in parking lot 10–I next to Bldg. 30. Poster presenters will be on hand from 11:30 a.m. to 1 p.m. The scientists who have so far agreed to present posters include Drs.: Sankar Adhya, NCI; Julian Ambrus, NIAID; French Anderson, NHLBI; Gilbert Ashwell, NIDDK; Bryan Brewer, NHLBI; Janice Chou, NICHD; Ronald Crystal, NHLBI; Gary Felsenfeld, NIDDK; Ernst Freese, NINCDS; John Gallin, NIAID; Curtis Harris, NCI; Paula Hoffman, NIAAA; David Klein, NICHD; Irvin Kopin, NINCDS; Robert Lazzarini, NINCDS; Dan Longo, NCI; George Martin, NIDR; John Minna, NCI; Nancy Nossal, NIDDK; Abner Notkins, NIDR; Keiko Ozato, NICHD; Takis Papas, NCI; Joram Piatigorsky, NEI; Richard Podolsky, NIAMS; Harvey Pollard, NIDDK; Steven Rosenberg, NCI; David Sacks, NCI; Alan Sher, NIAID; Allen Spiegel, NIDDK; Alfred Steinberg, NIAMS; Herbert Tabor, NIDDK; and Martha Vaughan, NHLBI.

There's room for many more, so investigators who wish to have their posters considered are invited to submit an abstract to Dr. Joel Moss, Bldg. 10, Rm. 5N307 (496-1254), by July 15.

Nineteen workshops will be held in various buildings around the campus from 1:30 to 5 p.m. Workshop topics and chairpersons are: *Clinical Research,* Drs. Lynn Loriaux (NICHD) and Samuel Broder (NCI); *Calcium and Protein Kinases,* Drs. Claude Klee (NCI) and K.–.P Huang (NICHD); *DNA Replication, Repair, and Mutagenesis,* Drs. Susan Gottesman (NCI) and Kathleen Dixon (NICHD); *Cell Motility, Contractility, and the Cytoskeleton,* Drs. Robert Adelstein (NHLBI) and Edward Korn (NHLBI); *Structure and Function of Macromolecules,* Drs. Jacob Maizel (NCI) and David Davies (NIDDK); *Recombination and Transposition,* Dr. Robert Weisberg (NICHD); *Transcriptional Response to the Environment,* Drs. Alan Hinnebusch (NICHD) and Carl Wu (NCI); *Developmental Biology,* Drs. Igor Dawid (NICHD) and Sandy Morse (NIAID); *Molecular Genetics of Human Disease,* Drs. Mark Israel (NCI) and Edward Ginps (NIMH); *Connective Tissue and Cell Matrices,* Dr. Lance Liotta (NCI); *Molecular Biology of Infectious Diseases,* Dr. Louis Miller (NIAID); *Intracellular Trafficking and Antigen Presentation,* Drs. Ronald Schwartz (NIAID) and Michael Gottesman (NCI); *Cellular Communication—Neuropeptides and Protein Growth Factors—Comparison and Contrasts,* Drs. William Paul (NIAID) and Harold Gainer (NINCDS); *HIV Science,* Drs. Genoveffa Franchini (NCI) and Scott Koenig (NIAID); *Receptor-Mediated Targeting,* Drs. Ira Pastan (NCI) and Thomas Waldmann (NCI); *Progress in Epidemiology and Population Genetics,* Drs. John Mulvihill (NCI) and Walter Rogan (NIEHS); *Genomic Analysis and Gene Transfer,* Dr. Stephen O'Brien (NCI); *Neurobiology of Behavior,* Drs. Steven Paul (NIMH) and Seymour Kety (NIMH); and *Evolutionary Biology,* Dr. Thomas Fanning (NCI).

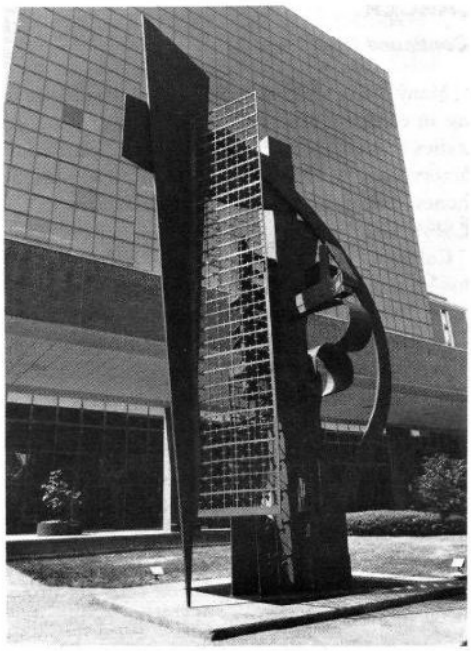
Many workshop speakers have already signed up. Other scientists who wish to have their work considered for inclusion in a workshop program should contact the appropriate workshop chairperson by July 15.

Advanced registration is not required for any of the Research Day events.

Research Day '88 Requests Poster, Workshop Proposals

The Research Day committee is inviting proposals for additional posters and workshop contributions. Investigators who wish to display a poster should submit an abstract to Dr. Joel Moss, Bldg. 10, Rm. 5N307 (496-1254), by July 15.

Scientists who wish to have their work considered for inclusion in a workshop program should contact the appropriate workshop chairperson (see list).



'Sky Horizon,' a sculpture by American artist Louise Nevelson, has been permanently loaned to NIH. Installed in front of the Clinical Center, the 30-foot high steel artwork was dedicated June 9 at a ceremony attended by NIH director Dr. James Wyngaarden. See coverage in the next issue of the Record.

Computer Network Upgraded

NIH recently became a full-privileged member of the BITNET network. This permits users with personal computers or terminals to send messages, mail and files instantly via electronic mail to individuals at all types of institutions in the U.S. and throughout the world.

Earlier restrictions allowed NIH to communicate only with academic institutions. Now, contacts are permitted with other government agencies, commercial research facilities, health departments, etc.

Even with the restrictions in place, NIH use of BITNET has grown rapidly to more than 16,000 uses per month. Although NIH joined BITNET in March 1986, the volume of use has more than tripled since the announcement of ENTER MAIL in February of this year. Mail going to and from BITNET addresses and even via gateways to other networks such as ARPANET, NSFNET, and CSNET is handled within ENTER MAIL.

For information on BITNET and ENTER MAIL, contact the computer center's technical information office, Bldg. 12A, Rm. 1017, 496-5431. The special mail consultants can be reached by calling 496-5525 between 8:30 a.m. and 1 p.m. □

CANCER

(Continued from Page 1)

Many BRMs are currently being studied for use in cancer therapy. These include antibodies, called monoclonal antibodies; growth factors such as interleukin-2 (IL-2); and hormones such as colony stimulating factors (CSFs).

Colony stimulating factors—hormones involved in controlling the production of blood elements in the bone marrow—currently offer one of the most exciting opportunities for improving therapy, Chabner said.

"We have found that CSFs can protect a patient's bone marrow from the side effects of drug and radiation therapy. This protective effect will allow physicians to escalate doses of therapy to achieve the maximum effectiveness without suppressing the bone marrow," he said.

Infection-fighting white blood cells are produced in the bone marrow. Damage to blood-forming tissue in the marrow is one of the major dose-limiting side effects of chemotherapy and radiation therapy.

Two colony stimulating factors (G-CSF—granulocyte colony stimulating factor and GM-CSF—granulocyte-macrophage colony stimulating factor) are currently being evaluated in clinical trials, and others with new sites of action are scheduled to enter clinical trials soon.

Another promising, but as yet little developed, strategy for cancer therapy is using monoclonal antibodies directed at tumor growth factors, said Chabner. Growth factors interact with specific receptors on a cell's surface to control growth. Monoclonal antibodies have been developed that bind to tumor growth factors (or the receptor sites for these growth factors), thus blocking growth factor effects and suppressing cancer cells' ability to proliferate. Monoclonal antibodies directed at tumor growth factors are just beginning to be tested in the treatment of human cancers.

Learning how cancer cells become resistant to drugs is another important research priority, Chabner reported. Understanding drug resistance will enable researchers to develop ways to block this inhibitory process and to identify drugs that can circumvent resistance.

Drug resistance is the single most important obstacle to the cure of patients with advanced cancer. Although many cancers, including Hodgkin's disease, non-Hodgkin's lymphoma, adult leukemia, testicular cancer, breast and ovarian cancers, and numerous childhood cancers, respond well initially to chemotherapy, in some cases, the tumors become resistant to drugs during the course of therapy. Other cancers such as colon, lung, stomach, kidney, and pancreas are inherently resistant to currently available drugs even before treatment begins.

"There are three major elements [of drug resistance] that we need to understand and characterize in order to overcome cells' anti-drug actions," Chabner said. "These are the drug transport system, gene amplification (production of multiple copies of genes) and the process of DNA repair."

Researchers have already characterized one important drug transport system, involving the cell membrane protein P-glycoprotein, or P–170. They have discovered that this protein, coded for by a multidrug resistance (the form of drug resistance that usually interferes with successful chemotherapy; it occurs when tumor cells become resistant not only to the anticancer drug used for treatment but also to a broad range of other unrelated—in structure or function—drugs to which they have never been exposed) gene known as MDR–1, acts as a drug efflux (or exit) pump, continually moving toxic drugs out of cancer cells.

With knowledge of this mechanism, researchers may be able to develop molecular probes to determine when this gene is expressed and when poor drug response is likely to occur. This information could lead to more rational selection of treatments for cancer patients, said Chabner.

Further, understanding the exit pump mechanism will help researchers find drugs that are not subject to the pump. It will also enable them to develop agents that interfere with the function of the pump, he said.

For example, he noted, because the membrane pump protein binds with drugs to move them out of the cell, researchers have been looking for agents that might block this process by competing for the protein binding site. They have found that verapamil, a drug with no anticancer effect, can displace cancer drugs from the carrier protein so that the drugs remain inside the cancer cell and destroy it. Scientists are searching for other ways to modify the drug transport system to potentiate the therapeutic effects of anticancer drugs.

Amplification of genes such as the MDR–1 gene appears to play a key role in drug resistance. Understanding how this amplification occurs is essential to unraveling the sequence of events involved when cells become resistant, Chabner reported.

Also, learning the mechanisms by which DNA, the genetic material in cells, is repaired following damage by drugs is crucial, he said.

Discussing new frontiers in drug discovery, he reported that one area that has shown great potential is the collection and screening of natural products—plants, bacteria, fungi, and marine organisms—for compounds with anticancer activity. Newly developed systematic screening techniques promise to allow for rapid, broadscale testing of naturally derived compounds.

He noted that the evolving understanding of drug resistance is having a major impact on strategies for identifying new anticancer drugs. For example, drug-resistant human cells carrying the resistance-related protein P–170 and expressing elevated levels of protein kinase C (a key enzyme in the process of tumor promotion) are being used in initial laboratory screening of compounds to identify agents active against drug-resistant cells. Using this screen, researchers have found several compounds—including bryostatin, the product of a common seaweed-like animal, and staurosporin, from a microorganism—that inhibit protein kinase C and have anticancer activity against drug-resistant tumor cells.

"These agents, and others of their type, have clear potential both in chemotherapy and in chemoprevention," Chabner said.

Chemoprevention explores the use of natural and synthetic agents to protect against cancer.

As scientists continue to gain better insight into the events involved in the development and progression of cancer and the resistance of cancer cells to therapy, new, effective strategies for treating this disease will continue to evolve, Chabner concluded. □

Dr. Robert R. Ruffolo, Jr., who was an NIGMS Pharmacology Research Associate Program fellow at NIH in 1977-78, has received the 1988 John Jacob Abel award in pharmacology from the American Society for Pharmacology and Experimental Therapeutics. Employed by SmithKline & French Laboratories, he was cited for his significant contributions in the fields of adrenergic receptors and cardiovascular pharmacology. Ruffolo's preceptor during his fellowship at NIH was Dr. Marshall Nirenberg of NHLBI.

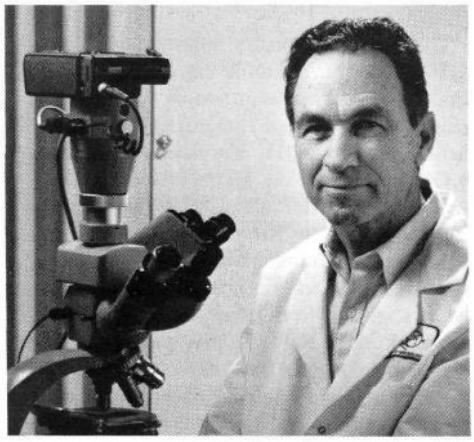
Gery Receives Interleukin 1 Award

By Joyce Doherty

Dr. Igal Gery, chief of the experimental immunology section, NEI, recently received the first International Monokine Workshop research award, sponsored by the Reticuloendothelial System Society. He was recognized for his 1971 discovery of interleukin 1 (IL-1), a natural protein in the body that promotes a variety of immune and hormonal activities.

Dr. Joost Oppenheim of NCI, who has collaborated with Gery says, "Dr. Gery's work with IL-1 changed the way scientists look at the immune system. In fact, results of his work have fused research in the immune and hormone systems, which not long ago were considered two discrete areas of study."

The discovery of IL-1 came about as a lucky accident. While working at Yale University, Gery and his collaborators were investigating the action of suppressor lymphocytes in laboratory cell cultures. Suppressor lymphocytes are the white blood cells that call off the immune response made by other white blood cells. When Gery added monocytes—another type of white blood cell—to a control culture of immature lymphocytes (thymocytes), he was surprised to find that the thymocytes proliferated markedly.



Dr. Igal Gery

Discovery of IL-1

In pursuing this phenomenon, Gery discovered that the monocytes released a protein, later called IL-1, that induced the proliferation. He also found that when the monocytes are damaged, they dramatically increase their production of IL-1. The IL-1 then activates processes such as wound healing or fever, suggesting that IL-1 is a major signal prompting the body to react to tissue damage or other bodily insults.

When describing the multiple properties of IL-1, Gery smiles, shakes his head and says, "It's a crazy protein. It is produced by just about every body cell and it affects almost every cell as well. Once it becomes active, it may act like an immune protein or it may act more like a hormone. IL-1 supports healing, but ironically, if unregulated, it also contributes to disease development."

Investigators have established that IL-1 influences activity in the nervous system; metabolism; circulation; and growth, inflammation, and breakdown of tissues. Some scientists believe that IL-1 is implicated in insulin-dependent diabetes, rheumatoid arthritis, and possibly plaque buildup in blood vessels. The list keeps growing.

For the past several years, Gery has been working in a different area of immunology, the inflammatory eye disease called uveitis. He and his collaborators have analyzed the mechanisms that cause autoimmune uveitis in some people. In this disease, the immune system mistakenly identifies certain eye proteins as antigens, or alien substances, and attacks the eye tissues, causing the blinding eye inflammation of uveitis. This type of uveitis frequently does not respond to standard treatment with anti-inflammatory drugs.

Two years ago, Gery's group developed an animal model to test whether a certain protein in the retina provokes an autoimmune reaction. The protein, interphotoreceptor retinoid-binding protein (IRBP), had been discovered a few years earlier by another NEI group headed by Dr. Gerald Chader. Gery found that IRBP does induce autoimmune uveitis in the animals and suspects that it may be involved in autoimmune uveitis in humans as well. The scientists have recently identified which small parts of the protein molecule interact with the immune cells.

Gery earned his Ph.D. in 1963 from Hebrew University in Jerusalem, where he returned periodically as a staff researcher. In addition to his work at Yale and NIH, he also has done immunological research at Roswell Park Memorial Institute, Buffalo; Queen's University, Kingston, Ontario; and Merck Institute for Therapeutic Research, Rahway, N.J.

He first came to NIH for 3 months as a visiting scientist at NIDR in 1976. He returned the following year as a visiting scientist in NEI, where he has remained. Gery became chief of the NEI experimental immunology section, Laboratory of Immunology, in 1982. He has published 160 scientific papers. □

Martin To Give Mider Lecture

Dr. George Martin, chief of NIDR's Laboratory of Developmental Biology and Anomalies, will deliver the 1988 G. Burroughs Mider Lecture on Wednesday, June 22. His lecture, "Basement Membranes: Key Determinants of Differentiation and Their Role in Cancer Metastasis," will be presented at 3 p.m. in the Clinical Center's Masur Auditorium as part of the NIH Lecture series.

Basement membranes are thin extracellular membranes that surround all blood vessels, glands, muscles, and nerves. In the embryo, basement membranes create barriers that allow cells to segregate and differentiate into specific tissues. In adults, these tough membranes provide the scaffolding that maintains normal tissue form during regeneration and growth. They also serve as molecular filters, preventing the passage of serum proteins.

Martin has been studying connective tissues since joining NIDR in 1959. In the mid-1970's, his laboratory discovered a mouse tumor that produces large quantities of basement membranes—a finding that facilitated research on the membranes by providing adequate supplies of the material.

Subsequent work on the tumor-derived basement membranes led to the isolation and characterization of the major components of basement membranes. One of these—laminin—is a polyfunctional protein that regulates the development and attachment of a variety of cells.

Lab Sequences Laminin

Just recently, scientists in Martin's laboratory completed the sequencing of laminin, the largest protein whose structure has been determined. Using this information, researchers have identified some of the sites in laminin that control its biological activity. These segments of the molecule have been synthesized and are being used in studies on normal and malignant cells.

Martin and his colleagues have devoted considerable effort to understanding the events involved in the spread of cancer. Basement membranes form barriers that prevent the passage of normal cells between tissues, but malignant cells are able to cross the membranes and invade healthy tissues. The NIDR scientists have identified compounds that inhibit the invasion process and prevent the formation of metastases in laboratory mice. These compounds could serve as prototypes for drugs to be used as adjuvants to surgery, radiation, and cytostatic drugs in controlling cancer.—Susan Johnson □

FIC Volunteer Program Receives County Award

By Elizabeth Gillette

The Fogarty International Center's Volunteer Services Program has received the Montgomery County special achievement award for "unselfish and devoted volunteer efforts." County executive Sidney Kramer presented the award plaque to Sandra Roberts, director of the Fogarty volunteer office, in a special ceremony recently at Strathmore Hall.

The award is a tangible measure of the success of the Volunteer Services Program since it began just one year ago. The program was set up to help foreign scientists of the NIH Visiting Program—who number more than 1,600 each year—settle into the community quickly and comfortably.

"Twenty-four volunteers now staff the office, and they each work between 4 and 16 hours a week," Roberts said in a recent interview. To date, they've donated 2,511 hours of work, given 456 in-person services, and responded to 430 phone queries.

"Our role is to see scientists and their families as often as necessary in the first weeks of their arrival in the United States, and foster self-help so they adapt to their new community to the point where our services are no longer needed," Roberts said.

On a recent afternoon, one newly arrived scientist was in the midst of an orientation conducted by a volunteer; a second scientist was asking a volunteer by phone whether the health insurance he would have as an NIH visiting scientist would cover the birth of a child; and a third scientist was getting help on U.S. taxes from a CPA who provides the service in the International Room under NIH contract.

"We provide all kinds of help," Roberts explained. "In the first weeks of scientists' arrival, their priority concerns apart from work are: housing, furniture, a car or other transportation, schools for children if their family has accompanied them, and recreational and cultural activities. Some scientists call us even before they arrive in this country," she said. "We immediately help them find a place to stay, both temporarily and permanently."

The office relies on NIH computerized housing availability lists, plus a card file of rental and bed-and-breakfast opportunities—compiled from those with room to rent who have phoned the office. Less expensive local hotels are often used temporarily.

Once visiting scientists' visas and official papers are in order (arranged by the FIC Foreign Scientists Assistance program) the scientists and their families are invited for an orientation.

Their need for concise information about NIH and the surrounding community is deftly handled in an hour-long session by a volunteer armed with maps and literature. Handouts include maps of NIH, Maryland, Washington, D.C., bus routes, the Metro system, and parks and recreation areas; a "Fogarty International Center New Arrivals Information Guide"; phone numbers of foreign embassies; personal health and finance information; plus a list of scientists from their country who are also working at NIH, so they may get in contact with colleagues from home if they wish.

Volunteers also explain how to secure a state driver's license; how to buy and insure a car in the U.S., or how to rent one; they also explain in detail Metro and bus routes. They provide general information on theater and concert performances, the Smithsonian museums, and Kennedy Center specially priced tickets (a benefit for Visiting Fellows). For parents, there is information on preschools, local schools, and international schools.

For scientists and families who may not be proficient in English, volunteers can conduct orientations in French, Spanish, German, Hungarian, Russian, Italian, or Polish; the office has access to speakers of Japanese and Chinese as necessary.

"Most of the time our clients don't know exactly what they need to know, so we tell them a little about many subjects," Roberts said. "We make sure they know about the National Library of Medicine as well as local libraries, for example.

"We encourage questions," she added. "One of our most valuable services is to enable scientists to ask, in a non-threatening environment, questions that would be inappropriate if asked elsewhere. It's like having a trusted friend available."

Roberts explained that many sponsors of foreign scientists within the various NIH institutes provide a tremendous amount of support, others only a minimum.

Volunteers currently include a number of retired men and women—including NIH employees, a psychologist, and a patent attorney; spouses of NIH visiting scientists; part-time workers; and high school students. Roberts finds volunteers through advertisement and word of mouth. A recruitment notice in a local newspaper's volunteer column brought many interested persons; the Montgomery County Volunteer Center and the county's Retired Service Volunteer Program refer people; and those already in the office bring referrals.

FIC volunteers gathered at a recent Stone House reception i Carl Kupfer, FIC acting director, presented certificat of a "bringing humanity to the NIH Visiting Program." Pictu Louis Wienckowski, Christina Orlandi, Liz Harrington, coordinator), Erika Zinsser; second row: Linda Motto, D man, Mary Lee Mannina; third row: Gail Museles, Judy Nottingham, Madeleine Wilkins, Arthur Dowell; fifth ro Mangerich, Carolyn Swearingen, Luba Ross; seventh row:

Roberts tries to place volunteers according to their expertise. One volunteer knowledgeable about computers works outside the International Room, giving individual tutoring sessions to Fogarty scholars-in-residence as well as staff.

"I look for people who are interested in providing service to others, who like researching information, and are patient," said Roberts. "It also helps if they have lived abroad or speak a second language, or have moved a lot and know what it's like to have to find their way in new surroundings."

Help to scientists also extends to their spouses and children. Under Roberts' supervision, the international women's group meets weekly, offering friendship, child care opportunities, and important communications networks for new arrivals. Recently, the group sponsored an evening of science and music, with a lecture on diseases of famous composers.

As to future projects, volunteers are taking information from a visiting scientist handbook

reception in recognition of National Volunteer Week. Dr. ficate of appreciation to each volunteer, and praised them for m." Pictured are (l to r) front row: Dr. Carl Kupfer, Dr. rrington, Akiko Sakaguchi, Sandy Roberts (FIC volunteer Mottin, Diana Nutt, Karen Fananapazir, Barbara Hoff- eles, Judy Oroszlan, Anita Bickel; fourth row: Liesl l; fifth row: Sylvia Kadish, Lisa Day; sixth row: Gens enth row: Barbara Laesch, Otto Wilkins.

and recording it onto cassette tapes in 7 languages; the tapes will be sent to scientists before they depart their native countries so they'll be better prepared once they arrive in the U.S. Another project involves contacting local community groups that can help foreign families settle into the area. One volunteer is a quilter who wants to create an international quilt sewn by the families of visiting scientists.

The volunteers are all trained by Roberts, who is the only paid employee in the office. The volunteer services office is in the International Room on the lower level of Bldg. 16A (the former caretaker's cottage next to Stone House); it is open 9 a.m–5 p.m, Monday through Friday.

The Volunteer Services Program can always use donations—of time, talent, and things, such as used furniture, household items, and small appliances. Notices of apartment and house rentals near the Bethesda campus are appreciated. Readers with something to offer should call Sandra Roberts, 496-7357. □

Japanese Invite Western Researchers To Apply for Fellowships in Japan

U.S. biomedical and behavioral scientists will have an opportunity to work in Japan under one of several new Japanese government research fellowship programs designed to encourage U.S. and West European scientists to study in Japanese laboratories.

These programs were initiated by the Japanese to provide greater opportunities for western scientists to work in Japan.

To introduce these programs to participating countries, Japanese officials invited representatives from 10 nations to Japan recently to tour some of the facilities that will be open to foreign scientists and meet Japanese science leaders. Dr. Philip S. Chen, NIH associate director for intramural affairs, represented NIH.

The visit was sponsored by the Science and Technology Agency of Japan. Participants included representatives of the U.S. Environmental Protection Agency, Department of State, National Bureau of Standards, Department of Energy, and NASA, as well as NIH.

The purpose of the visit was "to show foreigners the opportunities for postdoctoral scientists to study in Japan," Chen said. "We aren't sure how many foreign scientists would want to go to these labs," he commented, "primarily because of the language difficulties."

As part of the new programs, foreigners in Japan on fellowships will be encouraged to study Japanese after arrival there, with the sponsoring agency picking up the costs.

While in Tokyo and other cities, the visitors were briefed on programs established by the Japan Society for the Promotion of Science (JSPS), the Japanese Science and Technology Agency (STA), and the Agency of Industrial Science and Technology (AIST) of the Ministry of International Trade and Industry, MITI. Fellowship entrance requirements will be announced soon for the STA and AIST programs.

To date, the number of Japanese scientists working in the U.S. and Western Europe has far surpassed the numbers of foreign scientists working in Japan. Professionally, Chen explained, "it has been an advantage for Japanese to learn English, so the language barrier has not been so difficult for Japanese wishing to study in the U.S." English is the language spoken at most international scientific meetings in Japan.

Another factor in the willingness of Japanese scientists to study abroad is the Japanese tradition of "a job for life." There's a job to return to—unlike in most U.S. institutions, where the typical postdoctoral fellow must still look for the next job.

"If one can develop the concept that a year in Japan would be good for one's career, it should make things much easier," Chen said.

Under the JSPS program, NIH can nominate up to 5 U.S. health scientists each year for postdoctoral research fellowships. The JSPS program, which is being administered by the Fogarty International Center, will have an application receipt date of May 10 each year.

Applicants for the JSPS fellowships must meet several eligibility requirements: They must:

—Be a U.S. citizen or permanent U.S. resident;

—Hold a doctorate in one of the clinical, behavioral or biomedical sciences;

—Be 35 years or younger at the start of the fellowship tenure;

—Make prior arrangements with the Japanese host researcher as to a research plan.

Further information about the JSPS-sponsored program is available from the International Research and Awards Branch of the Fogarty International Center; phone 496-6688. Information and application kits are available between Dec. 1 and Apr. 30. All areas of biomedical and behavioral research can be supported as well as clinical research that does not involve patient care responsibilities.

Details about the 100 new fellowships available from the Science and Technology Agency will be announced in the near future. The Japanese hope that the first awards can be made in October 1988. □

Dr. James C. Cassatt has been named deputy director of the Biophysics and Physiological Sciences Program, NIGMS. Prior to his appointment, he served as chief of the program's biophysics section. Cassatt joined NIGMS in 1982 as a health scientist administrator in the Genetics Program.

Clinical Trials Will Test New Antimalarial Drug

By Clementine Sessoms

The search for new drugs to combat drug-resistant strains of the disease-causing stage of malaria parasites has led to the discovery of a new, potent drug called arteether (pronounced arte ether). The drug, derived from ginghaosu, an ingredient of the Chinese weed *Artemisia annua,* has proven effective both in vitro and in animal models.

"Arteether is showing promising results against cerebral malaria, an often fatal complication of the parasite *Plasmodium falciparum,*" said Dr. Arnold Brossi, leader of an international research team on the development of antimalarial drugs, which is sponsored by the World Health Organization, and deputy director of NIDDK's Laboratory of Analytical Chemistry. Preliminary data indicate that arteether is effective in killing the parasite at the blood stages without harming the host.

Malaria is a major health problem in developing countries, causing an estimated 1 million deaths per year in tropical Africa alone. With the advent of more and more drug-resistant strains of malaria parasites, standard drugs such as chloroquine and pyrimethamine are losing their effectiveness. Arteether belongs to a completely different class of antimalarial compounds, so the likelihood that drug-resistant strains of *P. falciparum* will develop is greatly diminished. Arteether's effectiveness has already been seen in strains of malaria parasites prevalent in Sierra Leone and Indochina. One drawback, however, is that pure crystals of arteether are soluble only in oil. So far, the drug must be given via intramuscular injections. Antimalarial drugs must stay in the blood for long periods to suppress the parasite.

Brossi, a medicinal chemist, has spent more than 30 years synthesizing and studying biologically active natural products and drugs for malaria treatment. He is now working on a chemically similar but more potent derivative of the Chinese antimalarial drug ginghaosu, which the body assimilates more easily than the natural drug. With the discovery of arteether, he is collaborating with scientists from the WHO, Walter Reed Army Medical Center, and the People's Republic of China, as well as other NIH scientists to develop effective and affordable malaria drugs derived from natural products that will benefit Third-World countries, where people are at greatest risk of getting malaria.

"Arteether is an excellent example of collaboration between academia, government, and private industry to develop cost-effective new

Dr. Arnold Brossi

drugs of special importance in Third-World countries. This new drug, which is effective against the parasite, is being prepared for human clinical trials," Brossi said. His work was reported in the *Journal of Medicinal Chemistry,* March 1988, Vol. 31, 645.

Brossi is a member of the Swiss Chemical Society, the American Chemical Society, and the American Society of Pharmacognosy. He is a member of the steering committee on malaria chemotherapy of the WHO in Geneva, Switzerland. He was recently elected honorary member of the Polish Chemical Society and is the recipient of the 1988 Charles Mentzer Prize give by the Societé de Chimié Therapeutique of France on April 22. □

Dr. Harald Löe (l), director of the National Institute of Dental Research and Dr. Donald A.B. Lindberg, director of the National Library of Medicine, admire the new exhibit in the NLM lobby, Bldg. 38, "A Century of American Dental Research: An Exhibit Commemorating the Fortieth Anniversary of the National Institute of Dental Research." The exhibit is open through Oct. 10.

Geneticist Receives Award

By Thomas Hawkins

Dr. Michael D. Shelby, a geneticist with the National Institute of Environmental Health Sciences in Research Triangle Park, N.C., received the Alexander Hollaender Award at the annual meeting of the Environmental Mutagen Society (EMS), recently in Charleston, S.C. Shelby was cited "for his contributions to the field of environmental mutagenesis, especially as relates to short-term tests for carcinogens and mutagenesis in germ cells, and for outstanding service to the Environmental Mutagen Society and the international scientific community."

Shelby has been head of the mammalian mutagenesis group in the Cellular and Genetic Toxicology Branch at NIEHS since 1980. He has served in various offices with the EMS since 1979, including serving as president in 1985 and 1986. He is the author of dozens of

Dr. Michael D. Shelby

scientific papers and technical reports, and has edited a number of scientific books.

His activities in the international scientific community have included serving as a councilor to the International Association of Environmental Mutagen Societies, as managing editor of the journal *Mutation Research,* and as a steering committee member for World Health Organization collaborative studies on short-term test methods development.

He is the recipient of the NIH Outstanding Performance Award, the American Statistical Association W.J. Youden Award in Interlaboratory Testing, and the NIH Special Achievement Award.

A native of Perkins, Okla., Shelby is a graduate of Central State University, Edmond, Okla., and received his Ph.D. from the University of Tennessee at Knoxville. □

Bond Drive Ends With Winners All 'Round

The savings bond drive ended May 14 and with it the savings bond contests. This year there were two contests and 21 contest winners. Names of the winners were drawn on May 27 by Dr. Arnold Pratt and Randy Schools, both featured in the baby picture contest, and Rob Crowley of the NIH Credit Union.

The winner of the baby picture contest was Irene Peyton of DEO. Her name was drawn from among the 70 correct entries. Irene won a $100 savings bond donated by the NIH Credit Union. Since she was also a member of the credit union, she also had $25 deposited into her savings account.

The correct answers to the baby picture contest are:

A 4 (John Mahoney, NIH associate director for administration),
B 3 (Randy Schools, general manager, NIH R&W),
C 5 (Dr. Arnold Pratt, director, DCRT),
D 2 (Dr. Anthony Fauci, director, NIAID),
E 1 (Dr. John Decker, director, CC).

If you have forgotten which beautiful baby is which, come to the *NIH Record* office, 31/2B03, or the Division of Computer Research and Development's information office, 12A/3027, to see the original contest page from the Apr. 19 issue of the *Record*.

All new bond enrollees and all who increased their bond deduction were eligible for another prize drawing. The $50 savings bond donated by Crestar Bank was won by Malissia Wimbish of NIDDK. R&W donated four $50 savings bonds, won by Karen Drayton of NINCDS, Warren Pope of NIEHS, Mia Huggins of DRG, and Gerald Payne of NHLBI.

Many tickets to local events were donated as prizes. K. W. Ruddy of NCI won two tickets to Roth's Theater. Christina Sax of NEI won two to the KB Theater. Two tickets to the Washington Ballet, sponsored by R&W, were won by Robert Willcoxon of NIGMS. Four tickets to one 1988–1989 Bullets game were won by Cheryl Holleran of NHLBI and four tickets to one Capitals game were won by Eva Baisey of NHLBI. Two tickets to a Capitals game and two tickets to a Bullets game were donated by R&W. The ice hockey tickets were won by Mary Busse of the Clinical Center and the basketball tickets by Mary Hyatt of OD. Kings Dominion tickets were won by Deborah Clancy of NIEHS.

Media Cybernetics, Inc., a local computer graphics and image processing company, donated three copies of its *Dr. Halo*, a PC graphics and drawing package. These were

Rob Crowley (l) of the NIH Federal Credit Union selects a prize-winning entry in the "Bond Babies" contest held recently as part of the U.S. Savings Bond drive. Looking on is Dr. Arnold Pratt, DCRT director, whose baby picture appeared in the contest.

won by Ned Wingfield of NIEHS, Patricia Reeves of NINCDS, and Kristin Westervelt of DRS.

A day trip for two to Atlantic City was won by Sally Stevens of NICHD. Gift certificates worth $25 and $15 from R&W were won by Mike May of ORS and Marie Anderson of the Clinical Center. The final prize, a box of Russell Stover candy, was won by Melissa Backus of NIA.

There were more winners than the 21 listed here. Everyone who bought bonds was a financial winner. □

Contract Managers' Association

The NIH-based Bethesda/Medical Chapter of the National Contract Management Association is now four years old. The chapter started with 40 members and has expanded to 102 members. It meets at lunchtime (11:30–1:00) the third Wednesday of each month in Bldg. 38A, Rm. B1N30B. Programs include speakers, workshops, and member discussions.

Newly elected officers for the 1988–89 year are as follows:

Michael J. Grady, president, Prospect Associates, Inc.; Sharon A. Miller, vice-president, NCI; Mary L. McGarvey, treasurer, NCI; Connie McClain, secretary, Prospect Associates; Curtis D. Tate, chapter director, NIH.

The chapter is seeking individuals interested in the contracting field, both from the government and private sector. Call Sharon Miller, 427-8888, for information. □

Camp Fantastic Barbecue

The 6th Annual Camp Fantastic Barbecue will be held on Tuesday, June 21 from 11:30 a.m. to 2 p.m. behind the Clinical Center (library entrance). (Raindate: June 22). For a donation of $5 you can enjoy a lunch catered by American Bar-B-Que, music by the band "Street Life," the antics of Tiptoe the clown, delicious Columbo Frozen Yogurt courtesy of Natural Nutrition Shoppes and Taylor Machine Co., and assorted candy courtesy of Frankford Candy. And if you are feeling lucky, purchase a raffle ticket for a chance to win one of the following prizes:

An evening at Woodfin Suites
Kings Dominion Tickets
Princess House Crystal
Shampoo, cut and style from House of Alexis
Financial analysis & planning from Equitable Financial Services
A trip to Atlantic City
Pizzas from Tack Room Pizza
Paraffin Hand Treatment from Echo Salon
. . . and more!

Proceeds will benefit Camp Fantastic, a special summer camp for children with cancer.

Tickets are on sale at the R&W activities desk and all R&W Gift Shops. They must be purchased in advance no later than Friday, June 17. For further information contact Kelly, 496-6061. □

Dr. M. Roy Schwarz, assistant executive vice president of medical education and science, American Medical Association, and clinical professor, University of Washington School of Medicine, has been appointed to the National Heart, Lung, and Blood Advisory Council. He will take part in the evaluation of the institute's cardiovascular, blood and lung diseases programs and will make recommendations to the institute director and NIH director concerning directions, goals and priorities of these programs. His term runs through October 1991.

Louis Cozart, NIEHS Foreman, Retires After 38 Years

By Thomas Hawkins

The National Institute of Environmental Health Sciences lost one of its earliest employees recently when Louis E. Cozart, foreman of the NIEHS warehouse, retired after 38 years of government service.

Cozart, a native of Creedmore, N.C., has been with the U.S. Government since his Army service during the Korean War, when he served with the Army Transportation Corps. Six months after leaving the Army, he resumed government service at the Veterans Administration Hospital in Durham, N.C., where he worked for 13 years.

His longest job tenure was with NIEHS, which he joined in May 1967, just after the institute was founded as the Division of Environmental Health Sciences in 1966. He started out with a very small staff, setting up the mail and messenger service. He was later advanced to Supply Operations, as a supply clerk.

Since the institute had only recently been established and was growing rapidly, every assignment involved developing new facilities and services. Cozart played key roles in laying out warehouse space, developing a motor pool, initiating inventory control, and establishing a property section at the institute.

The first warehouse at NIEHS was completed in January 1969, the same month the institute was elevated from division to institute status within NIH. Cozart assumed responsibility for staffing and supervising the new 10,000-square foot warehouse, and began his long working relationship with supply people at NIH who at that time provided the source for 98% of supplies used at NIEHS.

Cozart was promoted to foreman of warehousing. Under his supervision, the NIEHS operation expanded to three warehouses with 50,000-square feet capacity, 8 fulltime employees and 12 service vehicles.

"The institute depends on our supply services to support the scientists at the institute," Cozart said. He has devoted his career to making sure that warehouse services have supported institute needs in as efficient and timely a fashion as possible.

Also, he worked with scores of young people hired at the warehouse as stay-in-school employees, giving some their first job experience, encouraging them to stay in school, and training them in skills useful in their future careers. "My stay-in-schoolers have been some of my prime staff," he said.

Now that he has retired, Cozart looks forward to spending more time with his wife Betty. They look forward to working with church groups, both adults and young people, and doing some traveling.

Louis Cozart

In his work at the institute, Cozart supervised drivers who logged hundreds of thousands of miles—without any accidents—in government trucks, moving supplies between NIH's Bethesda campus, the Government Services Administration facilities in Atlanta, Ga., and the NIEHS campus in Research Triangle Park, N.C.

He smiled at the prospect of new retired status, and said, "I think I have a few more miles left to travel and venture." □

FAES Health Insurance Open Season Announced

FAES Health Insurance Program announces open season from July 1 to July 29, 1988. The program is open to: visiting fellows, full-time guest workers and full-time NIH employees who are not eligible for government plans. Open season is for those persons who did not enroll when first eligible and for current subscribers to change from low option Blue Cross/Blue Shield to high option or to choose CapitalCare, a health maintenance organization. Information about rates and benefits may be obtained from the FAES business office, Bldg. 10 Rm. B1C18. □

NICHD Seeks Volunteers

The National Institute of Child Health and Human Development is seeking healthy women between the ages of 25 and 40 to participate in a drug metabolism study. Appropriate compensation is available.

Interested persons should contact Dr. Robert Wehmann, 496-6437. □

Drafts Replace Cash at NIH

The Division of Financial Management has developed a cashier draft system (CDS) that will replace most cash transactions currently made by NIH cashiers in Bldgs. 10 and 31. It is planned that, eventually, *all* cash transactions will be replaced with drafts. Only Clinical Center patients will have the option of obtaining either cash or a draft.

The drafts will be drawn on the NIH Federal Credit Union (NIHFCU). The anticipated start date is July 5, 1988.

Some of the features and advantages of the draft system are:

- The drafts can be deposited or cashed at two NIHFCU campus locations in Bldgs. 13 and 31.
- The drafts can be exchanged for travelers' checks at the NIHFCU.
- The drafts are the *same* as any check and can be deposited or cashed at any financial institution.
- The ceiling on cashier transactions will be increased.
- Drafts are more efficient, secure, and provide a traceable document.
- Drafts are much safer than cash for cashiers, travelers, messengers, etc.
- Unused drafts can be voided and returned to the cashier for credit.
- Drafts will reduce the risk of holdup and theft.

In general, the drafts will be made payable to the person or company listed as the payee on the authorizing documents. In all types of transactions, the documentation and identification currently required by the NIH cashiers for cash will continue to be required for drafts, including any authorizations for messenger pickup.

Additionally, documents for which a draft is to be issued can simply be dropped off at a cashier location; the draft can be picked up later that day, or even the next day. Using this approach, there will be no waiting in line. When the draft is picked up, just show identification and be on your way.

Systems similar to the CDS have been tested at four pilot agencies. This pilot testing has determined that the issuance of third-party drafts is more advantageous than the traditional method of cash payment. As the upgrading of current systems can only improve the efficiency of cashier transactions, the Division of Financial Management expresses confidence that the cashier draft system will be a substantial benefit to the NIH community. □

TRAINING TIPS

The NIH Training Center of the Division of Personnel Management offers the following:

Courses and Programs	*Dates*
Management and Supervisory 496-6371	
Pragmatic Problem Solving	6/30
Effective Listening	6/27
Effective Presentation Skills	7/7
Interpersonal Relationships in the Work Environment	7/13
Networking: Silent Politics	9/1
Working With Difficult Employees	9/7
Report Writing	9/13
Conducting Effective Meetings	9/22
Dealing With Daily Conflicts	9/14
Working With Personal Differences: Advanced MBTI	9/27
Office Skills 496-6211	
Proofreading & Editing	7/11
Office Automation 496-6211	
Intro to Lotus 1-2-3 Macros	8/3
Adult Education 496-6211	
Training and Development Services 496-6211	

Personal Computer training is available through User Resource Center (URC) self study courses. There is no cost to NIH employees for these hands-on sessions.
The URC hours are:

Monday-Thursday	8:30 a.m. – 9:00 p.m.
Friday	8:30 a.m. – 4:30 p.m.
Saturday	9:00 a.m. – 3:00 p.m.

NOW AVAILABLE ON SHARE TRAINING
FY88 Training Center courses

Access Wylbur and enter SHARE TRAINING. First time users only, enter:
x fr &ags2ugL.@@share (setup) on file37

Electronic mail seminars will be held June 17, 21, and 30. To reserve a space, call 496-2339.

NIH Appoints Interpreter

Libby McKnight recently joined the staff of the Division of Equal Opportunity, Equal Opportunity Branch, as a full-time sign language interpreter. She will serve as interpreter for hearing impaired employees, visitors and patients at NIH, and will also provide training in sign language for interested employees and consultation for hearing impaired staff needing assistive devices.

McKnight comes to the Equal Opportunity staff after working as a full-time freelance interpreter in the Washington D.C. area for Sign Language Associates, Inc. Prior to that position she worked as a social worker with the deaf and hearing impaired at a local private non-profit agency, and at Maryland School for the Deaf, in Frederick. McKnight has also worked in rehabilitation and education during her career in deafness.

She first became interested in sign language during high school, with the encouragement

Libby McKnight

of some deaf people at her church and a classmate who had deaf parents. She maintained her interest through college and improved her skills in classes at the St. Louis County Hearing and Speech Center and during work experience at a day school program for the deaf. She credits the students and teachers at the Texas School for the Deaf with teaching her to "speak" and "read" American Sign Language.

McKnight says her goal in coming to work at NIH is to use her skills to facilitate communication between deaf and hearing people, not only through interpreting, but also through education and consultation. Procedures for requesting her services are available from the Division of Equal Opportunity, Handicap Program, Bldg. 31, Rm. 2B-40, 496-2906, voice or TDD. □

Seminar on Cancer Detection

"New Tests to Detect Cancer and Predict Its Spread" is the title of an NIH Science Writers Seminar to be held on Thursday, June 23 from 9 a.m. until noon in Masur Auditorium, Bldg. 10.

The moderator will be Dr. Lance Liotta, chief, Laboratory of Pathology, NCI. He will describe the clinical problem of invasion and metastasis.

"Diagnosing Leukemia: It's in the Genes" will be presented by Dr. Jeffrey Cossman, senior investigator in NCI's Laboratory of Pathology. He will discuss how scientists can now detect even one cancerous cell in patients who have diseases like leukemia.

Dr. Robert Callahan, chief, Oncogenetics Section, Laboratory of Tumor Immunology and Biology, NCI, will describe his research on gene mutations associated with breast cancer, and what they mean for a patient's survival.

Can genes inhibit cancer? Can we predict the course of cancer by studying these genes? Dr. Patricia Steeg, senior investigator in NCI's Laboratory of Pathology, will discuss her discovery of a new gene that is associated with low breast cancer aggresiveness.

Dr. George Martin, chief of NIDR's Laboratory of Developmental Biology and Anomalies, will speak on "Preventing the Spread of Cancer." He will describe a test developed in his laboratory that can be used to screen drugs for their ability to block the spread of cancer.

Science Writers Seminars, sponsored by the intramural scientists of NIH and the Division of Public Information, OD, are designed to provide reporters with background information on the various areas of research conducted at NIH. For more information, call Bobbi Bennett, 496-1766. □

Normal Volunteers Needed

The Laboratory of Psychology and Psychopathology, NIMH, is seeking women (ages 25–60) and men (ages 18–40) with 11 to 16 years of education, to participate in research which requires one to three, 2–4 hour sessions of neuropsychological testing. No painful procedures are employed; only EEG scalp electrodes are applied.

Volunteers will be paid.

If interested, call Ms. Wisniewski or Mr. Hunter, 496-7672 between 8:30 a.m. and noon, Monday through Friday. □

Rating The NIH Record

Survey Finds Newsletter Readership High

This past spring, a survey of *NIH Record* readership was conducted by the University of Maryland's Center for Research in Public Communication. Some 1,500 randomly selected employees (about 10 percent of the workforce) were asked to answer a four-page questionnaire about the *Record*. Half of those queried did respond; the overall verdict is that NIH'ers "love their newsletter," said Kathy Kelly, associate dean of the college of journalism at Maryland.

"Overall, the survey suggests that the *Record* has high rates of readership and is judged by its readers to be an important source of news and information," wrote Mark Levy, a journalism professor at Maryland who drafted the survey.

Key points in the survey included:

- More than three-quarters of NIH employees read almost every issue of the *Record*.
- The *Record* was ranked first among all NIH sources as the most important provider of job-related information.
- Reports on biomedical research were judged to be the most interesting stories, followed by reports on benefits/salaries and news about people who work at NIH.
- Almost all readers said *Record* stories on biomedical topics were easily understood.
- The average reader spent at least 30 minutes reading the last issue of the *Record* that he or she read.
- Reports on benefits/salaries were ranked as the most helpful stories in the *Record*, followed by stories on new rules and regulations, and upcoming events at NIH.
- More than a quarter of *Record* readers think the newsletter is more interesting than it was a year ago. Only 5.8 percent said it had become less interesting during that period. About two-thirds of respondents said the *Record* was personally no more or less interesting now than it was a year ago.

The survey sought to measure the degree to which eight different types of stories (for example, retirements/deaths, prizes/awards, people stories) were judged helpful and interesting to *Record* readers. About half the respondents were men and about half identified themselves as professionals.

Least interesting to *Record* readers were stories about new job appointees; least helpful stories were those dealing with prizes and awards.

Half of the respondents said they sometimes talk with people at work about things they have read in the *Record*. An additional 20.4 percent said they often or always talk about *Record* stories; slightly more (29 percent) say the *Record* rarely or never provides information that becomes a topic of conversation at work.

Interestingly, women (26.3 percent) are more likely than men (13.8 percent) to find "conversational grist" in the *Record*. NIH professionals (physicians, research scientists) are the least likely to talk about items from the *Record;* about 38 percent rarely or never talk about what they have read.

As might be expected, readership goes up somewhat as length of service at NIH increases. Type of job also has some impact on readership; 90.2 percent of self-described administrators read almost every issue, a figure that declines to 72.7 percent for clerical workers and 72.1 percent for physicians and scientists.

Embarrassingly, *Record* distribution received quite a poor evaluation. Even though the *Record* is mailed out on Tuesdays, only 6.4 percent of respondents who were aware of the publication schedule said they received their copy on that day. Some 37.5 percent said their *Record* came on Wednesdays, one-quarter said they received it on Thursdays, some 10.4 percent reported getting it on Friday and 20.7 percent said the *Record* came Monday or later. Many off-campus readers don't see the *Record* until a week after it has been published.

Other interesting tidbits from the survey include: slightly more women than men share their *Record* with family and friends; more women than men find "people" stories interesting; the more education a respondent has had, the lower his or her interest in stories about prizes and awards; the longer a respondent has worked at NIH, the greater his or her interest in reports about retirements and deaths of colleagues; generally speaking, interest in new-official stories and the perception of their helpfulness increased with higher GS ratings.

Perhaps the most fascinating part of the survey resulted from a question that was included at the behest of the *Record* staff—respondents were asked to say, in their own words, what they like and dislike about the *Record*. A sample of responses, both pro and con and in the respondents' own words, appears below. We can only say that we asked for it:

PRO:

"The Record *is terrific. Don't bother busy people with questionnaires."*

"My best source of information about NIH—it's a good rag!"

"In a word, I LOVE it! One reason I hate to retire is prospect of not getting it."

"It's not nearly as dry as it was a year ago—I think the new editor has done a very good job in trying to liven up the publication."

"The hard work of the staff shows through issue after issue."

"It helps make one feel a part of this very large busy community of researchers."

"The NIH Record *has enriched my life and helped me take better care of myself and my family."*

"I thoroughly enjoy the Record*! It has become more flexible in its reporting plus—it's nice to see some humor!!"*

CON:

"I believe the science content has dropped in importance to folksy stories that are not really news—I found the former Record *had more substance."*

"More attention on science and issues, less on people."

"I do not like to much science . . . to much of it is boring."

"In an era of shrinking budget, NIH Record *is a flagrant waste of $."*

"Some of the stories tell considerably less than the whole truth, in the interest of public relations . . . the result is that many of the employees here often laugh at the 'whitewash' of a story whose truth they already know."

"Too much sociological material."

"It's bland—but it's suppose to be bland."

"The use of vulgar or gross language is inexcusable and editors/writers who permit this should be summarily dismissed."

"Articles in research are 'puff pieces' designed solely to glorify NIH and the researcher."

MISCELLANEOUS:

"I had begun to lose interest, but now things are more real, hit closer to home, yet who can afford some of the courses? Our wages are cut, our promotions non-existent, and our costs are rising. The Record *helps us forget about it—except for courses. Sorry but that is how things are for many of us—so we self-study, keep alert and hope tomorrow will be better."*

"Dare you to (run a letters to the editor column)."

"I would like to see more stories about the secretaries of all these important men *at NIH."* □

U.S. GOVERNMENT PRINTING OFFICE 1988—201-769/60020