

The NIH Record

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Dr. P. Chen Designated NIH Associate Director

Dr. Philip S. Chen, Jr., NIH Assistant Director for Intramural Affairs, Office of the Director, from 1974 to 1983, has been redesignated NIH Associate Director for Intramural Affairs by Dr. James B. Wyngaarden, NIH Director. His appointment was effective July 28.

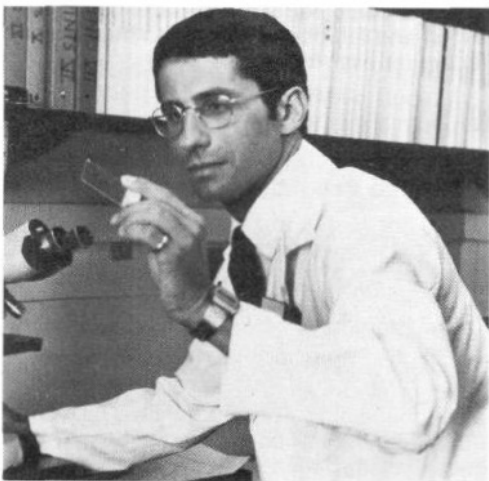
Dr. Chen provides policy and operational guidance within the NIH Director's staff regarding NIH intramural programs, the world's largest single biomedical research effort. He has delegated authority to approve personnel, procurement, outside activity, and other administrative matters relating to intramural programs, including appointments in the NIH Visiting Program.

He also serves as executive secretary of the Board of Scientific Directors, the principal intramural NIH policy-setting group, and is the OD/NIH or HHS representative on committees or task force groups dealing with scientific management issues impacting on intramural science or scientists. He recently chaired the Committee on Outside Work and is currently chairman of the NIH Committee on Pay of Scientists.

Dr. Chen is also responsible for indicating opportunities for minorities and women to participate in NIH intramural programs, assisting such individuals in making appropriate contacts at NIH. He played a major role in initiating the NIH Visiting Professor Program in which intramural scientists lecture and advise at minority institutions.

Dr. Chen first came to NIH in 1956 as a U.S. Public Health Service commissioned officer. He served in the Clinical Endocrinology

(See DR. CHEN, Page 5)



Dr. Fauci

Blood Test To Predict Certain Cancers Moved Closer By Discoveries At NICHD

A blood test that can predict whether a person is likely to develop lung cancer from smoking cigarettes? That can identify workers at increased risk of developing cancer from exposure to pollutants in an industrial factory? It sounds like wishful thinking, but work on such a test is under way at the National Institute of Child Health and Human Development.

Scientists there recently cloned part of a genetic system, called the *Ah* locus, that controls the body's ability to rid itself of certain foreign chemicals. Many of these chemicals—including several found in cigarette smoke—are known or suspected agents of cancer, birth defects, or drug toxicity.

The researchers now are trying to devise a test for determining a person's genetic make-up at the *Ah* locus. With this information, they may be able to predict whether the person would be likely to suffer harmful effects from the chemicals whose metabolism is controlled by the *Ah* locus.

Every day, we inhale or ingest more than 1,000—maybe more than 10,000—chemicals that are foreign to the body. Many of these chemicals would remain in the body for weeks or months if they were not broken down by drug-metabolizing enzymes.

The *Ah* locus controls the breakdown of a relatively small subset of foreign chemicals, many of which are combustion products. It does this by coding for a receptor protein that binds to the chemicals when they enter a cell. The receptor and chemical move into the cell nucleus where they trigger the production of a drug-metabolizing enzyme



Drs. Nebert (l) and Chen are working on a test that would identify persons at high risk of developing cancer or a toxic reaction following exposure to certain environmental contaminants.

called cytochrome P₁-450. This enzyme converts the chemical into an intermediate substance which then can be degraded by other enzymes into a harmless, easily excretable product.

Some of the intermediate substances formed during P₁-450 metabolism can cause cancer, birth defects, or toxic reactions if they accumulate faster than the cell can degrade them. People with high levels of P₁-450 are more likely to accumulate intermediates.

The level of P₁-450 produced in response to a foreign chemical is determined genetically, in much the same way as eye color. A high level of P₁-450 production, like brown eye color, is inherited as a dominant trait, while a low level of P₁-450 production, like blue eye color, is inherited as a recessive trait. Most people produce low levels of P₁-450, say the NICHD scientists.

Susceptibility to the harmful effects of certain foreign chemicals differs among individuals, depending on their inherited level of P₁-450 production. Dr. Daniel W. Nebert and his colleagues at the NICHD have been studying these differences in mice and humans for more than a decade.

They found that when pregnant mice were given benzpyrene, one of the chemicals metabolized by P₁-450, the offspring who produced high levels of P₁-450 had lower birth weights and a greater incidence of birth defects and prenatal death than did offspring who produced low levels of P₁-450. Other

(See BLOOD TEST, Page 7)

Dr. Anthony Fauci Wins Infectious Disease Award

Dr. Anthony S. Fauci, chief of the Laboratory of Immunoregulation of the National Institute of Allergy and Infectious Diseases, has been awarded the 1983 Squibb Award of the Infectious Diseases Society of America.

Sponsored by the Squibb Institute for Medical Research, this award "recognizes achievement in the investigation of infectious diseases." He will be presented a \$1,000 award and an engraved medal at the society's annual meeting in October in Las Vegas.

A leading immunologist, Dr. Fauci has pioneered studies on regulation of the human immune system and its relation to the body's defense against disease. His research has

(See DR. FAUCI, Page 11)

The NIH Record

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Training Tips

The following courses, sponsored by the Division of Personnel Management, are given in Bldg. 31.

Office Skills	Course Starts	Deadline
Time and Attendance	11/7	10/25
Executive, Management and Supervisory Planning for Prevention and Results	10/26	10/10
Behavioral Strategies for Supervisors and Managers	11/14	10/26
Dynamic Listening	11/17	11/1
Communications Skills		
Basic Employee Relations	11/1	10/4
Grant Information Workshop	11/15	
	or	
and FOI & Privacy Act	11/29	10/18
Qualification Analysis	11/7	10/7
The Supervisory Grade Evaluation Guide	11/21	10/12
DELPRO		
*(Delegated	10/24	10/11
Procurement)	11/28	11/14

*For new Delpro users only.

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

NIH Preschool Has Openings

The NIH Preschool Developmental Program is accepting applications for immediate and future vacancies.

NIH employees with children between 3 and 5 years old may obtain applications in Bldg. 35, Rm. 1B05.

For more information, call Sherrie Rudick, 496-5144. □



The National Institute of General Medical Sciences recently held its annual awards ceremony, honoring 22 staff members for superior work performance, special acts, and length of service. At the ceremony, Dr. Ruth L. Kirschstein (c), NIGMS Director, presented two NIGMS employees with NIH Merit Awards. Ruby J. Ross (l) was cited "for her consistent commitment and numerous contributions to NIGMS grant operations" and G. Earl Hodgkins "for his extraordinary efforts in program planning and fiscal operations."

Drs. Jacquez, Robbins Begin Scholarships-in-Residence

Two Fogarty International Center scholarships-in-residence recently arrived at NIH.

Dr. John A. Jacquez, professor of physiology in the school of medicine and professor of biostatistics in the School of Public Health, University of Michigan, is returning for his second term.

During his stay, he will be associated with the Laboratory of Mathematical Biology, NCI, and will organize a conference on mathematical modeling in biomedical research. The conference—which is scheduled for Jan. 23-25, 1984—will be dedicated to Mones Berman, chief of the Mathematical Biology Laboratory prior to his death in 1983.

Dr. Phillips W. Robbins, professor of biochemistry, Massachusetts Institute of Technology is beginning his Fogarty scholarship-in-residence.

Well-known for his work on complex polysaccharides, in particular, the role of lipopolysaccharides in the glycosylation of proteins and the processing of glycoproteins, he will be associated with the Laboratory of Biochemical Pharmacology, NIADDK.

During early work with Professor Fritz Lipmann, Dr. Robbins discovered the active form of sulfate, 3'-phosphoadenosine 5'-sulfate. His study of the enzymatic synthesis of the O-antigen of *Salmonella* led to the finding that a membrane-bound lipid carrier is required for complex carbohydrate synthesis.

Both Dr. Jacquez and Dr. Robbins will maintain offices in Bldg. 16 (Stone House), where they can be reached at 496-1213. □

Don't look back. Something might be gaining on you.—Satchel Paige □

Vending Machine Decision Rendered October 1

Effective Oct. 1, the NIH Recreation and Welfare Association will transfer responsibility for the operation of vending machines located in Bldgs. 10, 12, 12A, 12B, 13, 31, 36, 37, 38, 38A, Westwood, Westwood Annex, Federal and Landow to the Blind Industries and Services of Maryland (BISM).

Following several years of litigation between the NIH and BISM, it was determined by arbitration that BISM would receive the revenue from the vending machines located in these buildings. This decision was reached in accordance with the provisions of the Randolph-Sheppard Act and its subsequent amendments which govern the establishment and operation of vending machines and facilities managed by BISM.

As a result of this change in responsibility, machine malfunctions and requests for refunds will be handled in a different manner. Signs will be placed on each machine to inform the customer of the appropriate organization and telephone number to be contacted for assistance. □

Supply Operations Branch To Sponsor Scientific Products Exhibit Sept. 29

A scientific products exhibit, sponsored by the Supply Operations Branch, Division of Administrative Services, will be held Sept. 29 from 9 a.m. to 1 p.m. off the first floor lobby in Bldg. 37.

Scientific personnel are invited to see the latest products and consult with professionals at the exhibit. The program will be conducted by the Millipore Corporation and their subsidiaries, Continental Water Systems and Waters Associates. □

Patients Needed for NEI Study Of Senile Macular Degeneration

The Clinical Branch of the National Eye Institute is seeking patients who have early signs of senile macular degeneration (SMD) to participate in a study to determine whether a combination of medication and protective sunglasses can prevent progression of this eye disease or decrease its severity. Senile macular degeneration is the leading cause of severe visual loss among people age 65 and over.

The term macular degeneration refers to a group of diseases that cause deterioration of the macular region of the retina, the light-sensitive tissue at the back of the eye that transmits visual impulses via the optic nerve to the brain. Only people with the kind of macular degeneration associated with aging—senile macular degeneration—will be enrolled in the NEI study.

Another name for this eye disease is aging-related maculopathy.

Eligibility Requirements

To be eligible to participate in the study, people must be 50 to 85 years old and have poor central vision in one eye because of SMD, combined with only early signs of SMD in the other eye.

A total of 225 patients will be randomly assigned to receive a placebo or the medication. Patients in both groups will receive a capsule to be taken three times a day with meals. In addition, all patients will be asked to wear special yellow glasses which decrease the amount of ultraviolet or blue light reaching the retina. They will be instructed to wear them at all times outdoors during the day and inside when fluorescent or other bright lights are in use.

Participants will have an eye examination and receive a new supply of capsules every 4 months. There appears to be no known risk in wearing the special yellow glasses, although there will be a mild yellow brightening or discoloration to objects while wearing them. Risk from the medication used in the study is believed to be minimal, but participants will be carefully monitored to ensure that any possible adverse effects are detected early.

NEI has an annual budget of more than \$1 million for research on macular disease.

Study Results

One year ago, the Institute announced results from a national collaborative study of laser treatment for one type of senile macular degeneration. The study showed that treatment with a laser can dramatically reduce the risk of visual loss from the neovascular type of SMD, which is characterized by the formation of abnormal new blood vessels in the eye. Although people with this type of SMD are the ones most likely to go blind, they represent only a small portion of all those with SMD. Eighty to 95 percent suffer from the kind of macular degeneration associated with aging now under investigation at the NEI.

For additional information about the study, contact Dr. Monique Roy, Clinical Branch, Bldg. 10, Rm. 10N313, or call 496-5846. □

Six Expedited AIDS Grants by NIAID Will Fund Searches For Cause, Mode of Transmission, Immune Defects

Six new grants for the study of acquired immune deficiency syndrome (AIDS) have been awarded by the National Institute of Allergy and Infectious Diseases. Funding for the grants will come from a \$4.5 million fiscal year 1983 supplemental appropriation that Congress allotted NIAID for study of AIDS.

The review and award processes, which ordinarily require several months, were expedited because the investigators will be studying AIDS, the number one priority of the U.S. Public Health Service.

Patients with AIDS have defects in some parts of their immune system, leaving them vulnerable to a wide variety of opportunistic infections such as *Pneumocystis carinii* pneumonia, and/or unusual tumors such as Kaposi's sarcoma.

More than 2,000 cases have been reported, primarily among homosexual men, intravenous drug abusers, recent Haitian entrants to the United States, and hemophiliacs.

The six grantees are Drs. Murray B. Gardner, University of California, Davis; Norman L. Letvin, Harvard Medical School, Boston, Mass.; Victoria Monte-Wicher, New York State Department of Health, Albany; John L. Sullivan, University of Massachusetts, Worcester; Leonard Chess, Columbia University, New York, N.Y., and Sudhir Gupta, University of California, Irvine.

Within the last 2 years, a disease similar to AIDS has been observed in monkeys housed in two U.S. primate research centers. Two of the grantees, one at each center, will study this simian acquired immune deficiency syndrome (SAIDS).

Dr. Gardner will try to discover whether SAIDS is caused by a virus, another infectious agent, or some environmental factor. He will also explore how contagious the disease is by adding new rhesus monkeys to the cages of those with SAIDS.

A major goal of the project will be to find a way to reliably induce the disease so that a means of treatment and prevention can be sought. To do this, Dr. Gardner will inoculate the body fluids and tissues of animals with SAIDS into healthy monkeys and also into mice, which are easier and less expensive to work with than monkeys.

Dr. Letvin will study the immunological defect in monkeys with SAIDS and will try to isolate and identify a causative agent. He will also evaluate transmissibility of the disease by inoculating healthy monkeys with tissues from affected monkeys.

Dr. Monte-Wicher will try to clarify the mechanisms that make male homosexuals susceptible to AIDS. Working with rabbits, she will see if frequent enemas and intra-rectal administration of semen—both of which are often practiced by homosexual men—can cause a deficiency in the immune system. The rabbits will be examined for changes in their immune responses and for infections with bacteria, viruses, parasites, and fungi.

Another group of AIDS victims, hemophiliacs, are thought to get AIDS from an infectious agent present in the blood products they require in order to make their blood clot. One of these products is factor VIII, which is made from blood pooled from many donors.

Recent studies have shown that, apart from those with AIDS, many hemophiliacs receiving factor VIII have immune defects. Dr. Sullivan will study 240 hemophiliacs to determine if these immune defects are related to factor VIII and whether they are reversible.

Two grantees will be studying blood cells called lymphocytes, which play an important role in immunity. Drs. Chess and Gupta will analyze how various groups of lymphocytes work and interact normally and what goes awry in AIDS patients. □

Thai Dance Will Be Performed At Masur Auditorium, October 1

The Thai Culture and Performing Arts Association of Washington, D.C., in collaboration with the Thai Classical Dance School of Chicago, will hold a special performance of the "Khon," a classical dance, Oct. 1 at 8 p.m. at the Masur Auditorium, Bldg. 10.

The masked dance story is from the Ramakien, the Thai version of the great Indian epoch, "the Ramayana."

Tickets are available from the following after 6 p.m.: Chirada Becker, 576-5559; Sue Leiser, 589-1692; and Robert McDevitt, 946-4072. Tickets cost \$6 for adults and \$3 for children.

Proceeds will be donated to the NIH Patient Fund. The program is being sponsored by the NIH R&W Association and the Division of Equal Opportunity. □

Procrastination is the art of keeping up with yesterday.—Don Marquis. □



Officer Jon Pierce (l), a new addition to the NIH Police Department, receives recognition earned during his recent training at the Federal Law Enforcement Training Center in Georgia. William Fields (r), training director of the NIH Police Force, presents the letters to Officer Pierce. Officer Pierce received the highest mark in his training class of 96 percent and expert marksmanship in the practical pistol course.

Study Finds No Link Between the Pill and Pituitary Tumors

A new study has cleared oral contraceptives of a suspected risk: Women who take the pill have no increased chances of developing certain benign tumors of the pituitary gland. This is the conclusion of a multicenter project supported by the National Institute of Child Health and Human Development.

In the largest study performed on this subject, researchers in four medical centers in the U.S. and Canada evaluated more than 200 women with prolactinomas, a type of benign pituitary tumor. The findings are reported in the June 1983 issue of *Fertility and Sterility* by Dr. Leon Gordis of the Johns Hopkins University, by Dr. Robert Jaffe of the University of California at San Francisco, Dr. Charles March of the University of Southern California in Los Angeles, and Dr. John Tyson of the University of Manitoba in Winnipeg.

According to the new report, doctors have diagnosed greater numbers of pituitary tumors in recent years, especially in young women. Although the tumors are not malignant, they can enlarge significantly and have serious medical consequences. Also, the treatments themselves—surgery or chemotherapy—cause side effects.

Most of these pituitary tumors are prolactinomas, so called because they secrete the hormone prolactin. High levels of prolactin, a hormone that promotes milk production in breastfeeding women, can stop menstrual cycles (amenorrhea) and cause breast secretions (galactorrhea).

In the past, some researchers suspected a link between prolactinomas and the pill because the growing rates of the disorder seemed to parallel the rise in pill use. In addition, prolactinomas have developed in experimental animals given estrogens. However, the authors noted that it is possible that more prolactinomas are being diagnosed

simply because doctors are using new, more precise diagnostic methods—including more sensitive blood tests and radiologic techniques.

The present study was designed to examine the possibility that synthetic hormones in the pill might cause prolactinomas. The research group collected information on women with prolactinomas or possible symptoms of the disorder, such as high prolactin levels in their blood, amenorrhea, or galactorrhea.

They identified three groups of patients: 212 women with confirmed prolactinomas; 119 women with high prolactin levels and amenorrhea, galactorrhea, or both; and 205 women with no signs of pituitary abnormality except amenorrhea, galactorrhea, or both. The researchers then compared the medical and contraceptive histories of these women with equal numbers of healthy women.

The comparisons showed that women who have used oral contraceptives are no more likely than other women to develop prolactinomas, amenorrhea, or galactorrhea. Even women who used the pill a long time—5 years or more—had no increased chances of developing these disorders.

The authors reported that women with pituitary tumors, though no more likely to have taken oral contraceptives, were more likely to have had a history of infertility or menstrual problems. Use of the pill did not add to the chances of developing a prolactinoma in women who had menstrual problems before they started the pill. These findings confirm the results of previous smaller studies.

According to the researchers, future research should examine a question that this study was not designed to address—whether pill use can aggravate a preexisting prolactinoma. □

PCB Conferences Hosted By NIEHS, Japan, Finland

The National Institute of Environmental Health Sciences hosted one of three jointly planned conferences held worldwide on the potential effects of polychlorinated biphenyls (PCBs) and related persistent chemicals of the halogenated hydrocarbon family.

The conference, held at NIEHS Sept. 12 through 14, was sponsored by the Department of Health and Human Services Committee to Coordinate Environmental and Related Programs, chaired by Dr. David P. Rall, Director of NIEHS and of the National Toxicology Program within DHHS.

NIEHS scientists have participated in all three conferences which were planned to cover a broad spectrum of research on PCBs.

The first conference was held in Fukuoka, Japan in April and the third in Helsinki, Finland, 1 week after the conference in North Carolina.

"These conferences collectively have enabled us to focus a broad spectrum of international expertise on PCB questions," Dr. Rall said. "The conference in North Carolina included sessions on formation, disposal and transformation of PCBs; animal and tissue culture toxicology, and on evidence in cases

of human exposure and indicators of toxicity."

The proceedings of all three meetings are scheduled for publication in the NIEHS journal, *Environmental Health Perspectives*, Vol. 57, in the summer or fall of 1984.

PCBs, extremely stable chemicals and slow to disintegrate, were once widely used in insulating fluid on power line transformers and railroad locomotives. They became a public health concern when accidental human exposure and animal tests suggested these chemicals may have serious long-term health effects.

Illegal dumpings have further increased interest in health-related research. Though production and use are now tightly controlled or banned throughout the industrialized world, PCBs are almost universally present in human fat tissue and in the environment. □

'Amazing Grace' To Sail Oct. 14

Sail the Chesapeake on the "Amazing Grace," Sunday, Oct. 14 from 10:30 a.m. to 3:30 p.m. Drinks will be provided. Cost per person is \$22 and space is limited to 25. Sign up at the R&W Activities Desk. □

Visiting Scientist Program Participants

Sponsored by Fogarty International Center

7/26 **Dr. Satoru Shimizu**, Japan. Sponsor: Dr. Jurrien Dean, Laboratory of Chemical Biology, NIADDK, Bg. 10, Rm. 9N314.

7/29 **Dr. Takeo Hirata**, Japan. Sponsor: Dr. Ronald Crystal, Pulmonary Branch, NHLBI, Bg. 10, Rm. 6D06.

8/1 **Dr. Frederick Laigret**, France. Sponsor: Dr. Roy Repaske, Laboratory of Molecular Microbiology, NIAID, Bg. 5, Rm. B135.

8/1 **Dr. Seiji Momma**, Japan. Sponsor: Dr. Stanley Rapoport, NIA, Gerontology Research Center, Baltimore, MD.

8/1 **Dr. Kotoko Nakata**, Japan. Sponsor: Dr. Minoru Kanehisa, Laboratory of Mathematical Biology, NCI, Bg. 10, Rm. 4B56.

8/1 **Dr. Toshiomi Okuno**, Japan. Sponsor: Dr. F. Marilyn Bozeman, Division of Virology, Office of Biologics, Bg. 29A, Rm. 3D22.

8/1 **Dr. Osamu Shinohara**, Japan. Sponsor: Dr. Kevin Catt, Endocrinology and Reproduction Research Branch, NICHD, Bg. 10, Rm. 8C404.

8/1 **Dr. Atsuo Urisu**, Japan. Sponsor: Dr. Charles Manclark, Pertussis Branch, NCDB, Bg. 29, Rm. 418A.

8/1 **Dr. Hana Weintraub**, Israel. Sponsor: Dr. Peter Pentchev, Developmental and Metabolic Neurology Branch, NINCDS, Bg. 10, Rm. 3D11.

8/1 **Dr. Kan Xiu**, China. Sponsor: Elizabeth Chu, Laboratory of Pathology, NCI, Bg. 10, Rm. 2A15.

8/1 **Dr. Wang Yen-Nung**, China. Sponsor: Dr. Richard J. Wyatt, Adult Psychiatry Branch, NIMH, WAW Bg., Rm. 308. St. Elizabeths Hospital.

8/4 **Dr. Moussa Youdim**, Israel. Sponsor: Dr. Harvey Pollard, Laboratory of Cell Biology and Genetics, NIADDK, Bg. 4, Rm. 312.

8/5 **Dr. Kiyohiro Kito**, Japan. Sponsor: Dr. Igor Klatzo, Laboratory of Neuropathology and Neuroanatomical Sciences, NINCDS, Bg. 36, Rm. 4D04.

8/7 **Dr. Eliahu Heldman**, Israel. Sponsor: Dr. Harvey Pollard, Laboratory of Cell Biology and Genetics, NIADDK, Bg. 4, Rm. 312.

8/7 **Dr. Beatrice Macchi**, Italy. Sponsor: Dr. Robert Gallo, Laboratory of Tumor Cell Biology, NCI, Bg. 37, Rm. 6A09.

8/7 **Dr. Astrid Nehlig**, France. Sponsor: Dr. Louis Sokoloff, Laboratory of Cerebral Metabolism, NIMH, Bg. 36, Rm. 1A27.

8/7 **Dr. Nathan Sharon**, Israel. Sponsor: Dr. Jesse Roth, Diabetes Branch, NIADDK, Bg. 10, Rm. 8S243.

8/7 **Dr. Pierre E. Tambourin**, France. Sponsor: Dr. Douglas R. Lowy, Dermatology Branch, NCI, Bg. 37, Rm. 1B19.

8/8 **Dr. Chen Gou-Guang**, China. Sponsor: Dr. T. G. Smith, Laboratory of Neurophysiology, NINCDS, Bg. 36, Rm. 2C02.

8/8 **Dr. Zhou Xiao-Mei**, China. Sponsor: Dr. Peter Steinert, Dermatology Branch, NCI, Bg. 10, Rm. 12N260.

8/11 **Dr. Piotr Chomczynski**, Poland. Sponsor: Dr. Yale Topper, Laboratory of Biochemistry and Metabolism, Bg. 10, Rm. 9B18.

8/12 **Dr. Karin E. Hermansson**, Sweden. Sponsor: Dr. Kenneth Spring, Laboratory of Kidney and Electrolyte Metabolism, NHLBI, Bg. 10, Rm. 6N309.

8/15 **Dr. Branislava J. Mersulja**, Yugoslavia. Sponsor: Dr. Janet Passonneau, Laboratory of Neurochemistry, NINCDS, Bg. 36, Rm. 4D16.

8/15 **Dr. Gudmundur Georgsson**, Iceland. Sponsor: Dr. Henry deF. Webster, Laboratory of Neuropathology and Neuroanatomical Sciences, NINCDS, Bg. 36, Rm. 4B17.

8/16 **Dr. He Zhongxiao**, China. Sponsor: Dr. Lionel A. Poirier, Laboratory of Comparative Carcinogenesis, NCI: DCCP, Frederick, MD.

**Dr. Chen**

Branch of the National Heart Institute. In 1959, after a 3-year tour of duty, he became an assistant professor of radiation biology and biophysics and of pharmacology at the University of Rochester, School of Medicine and Dentistry. In 1954, he had received his Ph.D. in pharmacology from that university. His undergraduate degree in physics was earned at Clark University 4 years earlier.

He spent 1 year, 1966-1967, as a Guggenheim fellow in the Institute of Biological Chemistry, University of Copenhagen in Denmark. His first visit to Denmark was in 1954-1955 as a National Science Foundation postdoctoral fellow in that university's pharmacology institute.

In 1967, Dr. Chen returned to NIH as a grants associate, Division of Research Grants. The following year, he was named special assistant to the NIH Assistant Director for Program Planning and Evaluation. He has also served as chief, Special Projects Branch, OD (1970-1971), and chief, Analysis and Evaluation Branch and project clearance officer, NIH (1971-1972). Dr. Chen served as Acting Deputy Director for Science from June 1982 to March 1983.

He is a member of the Senior Executive Service and the American Physiological Society, the American Chemical Society, the Society of Sigma Xi, and the Radiation Research Society. He is also on the Board of Directors of the Foundation for Advanced Education in the Sciences. He received the NIH Director's Award in 1976 and the PHS Superior Service Award in 1978. □

AIDS Vigil Set for Oct. 8

A national vigil has been called to draw public attention to the medical and social aspects of the AIDS crisis. The vigil will be held on Oct. 8 in Washington, D.C., and is being organized by the National AIDS Vigil Commission, a broad coalition of Congresspersons of both parties, health care professionals, union activists, civil rights groups, consumer advocates and religious leaders. □

Many Stroke Survivors Face Depression According to NINCDS, NIMH Study

Of the estimated half million Americans who are victims of stroke each year, about two of every three survive. Many of those who survive become depressed—some only mildly, others to the point of despair.

In a recent study sponsored by the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) and the National Institute of Mental Health (NIMH), and performed at The Johns Hopkins University, clinical investigators examined 103 stroke survivors and observed their progress for 12 months.

A third of those who participated said they were initially depressed, and two-thirds of these patients were still depressed 8 months later, indicating that poststroke depression is not a phase from which every patient recovers quickly.

Using sophisticated techniques for determining where the stroke occurred in the brain and a questionnaire for estimating a patient's emotional state, Dr. Robert G. Robinson and colleagues found that another group of 48 patients whose strokes occurred on the left side of the brain were more likely to be depressed.

Moreover, Dr. Robinson's research team found that depression was more severe when the stroke occurred closer to the front of the left side of the brain.

A stroke survivor's darkest emotional period is most likely to occur between 6 months and 2 years after the stroke, regardless of the side of the brain on which the stroke occurred.

While many victims experience moderate depression, about half of the severely depressed survivors—according to results of several studies of stroke patients at The Johns Hopkins University—must cope with prolonged and pronounced sadness, loss of appetite and weight, loss of interest in everyday activities, sleep disturbances, anxiety, tension, interference with concentration, loss of energy, and sometimes thoughts of suicide.

Researchers are in the process of evaluating the effectiveness of tricyclic antidepressant drugs for these problems. A specific treatment for poststroke depression, however, remains one of the unmet needs of the stroke patient.

—Richard McManus □

Nine Summer Student Employees Get NINCDS Performance Awards

Nine students received summer employee performance awards at the National Institute of Neurological and Communicative Disorders and Stroke's Exceptional Summer Employee Award ceremony on Aug. 18.

Receiving certificates and congratulations from NINCDS Director Dr. Murray Goldstein were Charles W. Stirk, Marcelle Lewis, David Cho, Helen Garcia, Irene Stadnyk, Elizabeth E. Parks, Doanh Nguyen, David Patterson and Peter Mathers.

The students were assigned to various Institute laboratories, branches, and offices. As part of the ceremony, Students Stirk, Cho, Stadnyk, and Nguyen summarized the projects they had worked on during their summer assignments.

The NINCDS Summer Student Program is designed to encourage students to pursue

careers in biomedical research and academic medicine, especially basic and clinical neurosciences. Dr. Goldstein told the awardees that their contributions to NINCDS research program had been substantial and that he hoped to see them "come back as the next generation of our scientists."

The nine award winners were selected from 61 students in the Institute's 1983 summer program. Several other nominees will be given letters commending their performances.

Dr. Richard Irwin, laboratory director of the NINCDS Intramural Research Program, called the 1983 summer students "the highest quality group the Institute has ever had."

"We emphasize quality and this group has accomplished the most successful summer program yet," Dr. Irwin said.



The 1983 NINCDS Exceptional Summer Employee Award recipients are (l to r): David Cho, Charles W. Stirk, Doanh Nguyen, Irene Stadnyk, Elizabeth E. Parks, Marcelle Lewis and Helen Garcia. Not pictured: David Patterson, Peter Mathers.

Edith Messitte Retires After 31 Years at NIH

Edith Messitte says that when she came to the National Institutes of Health in 1953 she expected to work only a few years. Her husband, the late Judge Jesse B. Messitte, predicted she "would not last 3 months."

Events proved them both wrong. When Mrs. Messitte retired on Aug. 26, she had completed 31 years at NIH, 27 of which were spent in the National Institute of Neurological and Communicative Disorders and Stroke Information Office.

She first worked as secretary to Dr. Ralph Lloyd, director of the NIH Dental Clinic, until his reassignment downtown as Assistant Surgeon General.



Mrs. Messitte

At NINCDS Mrs. Messitte served under five Institute directors and four information officers. Initially she was secretary to the Institute's information officer who quickly spotted her talent for public relations. Soon thereafter she was picked for government-sponsored training in reporting and writing at American University and later was promoted to information specialist.

During her long tenure at the Institute, she did all the things an information specialist does—public inquiries, special reports, *Record* stories—but she did more.

According to coworkers, Mrs. Messitte always operated in a "can do" style. No photographers to be had—she could find one. Decorations budget for an Institute event running low—never mind, she knew where flowers were free. Fees for exhibit space out of sight—nonsense, she would negotiate.

Indeed, one of several awards she received while at NINCDS was for her skill in negotiating a contract which made it possible for the Institute to exhibit at the World Congress of Neurology in Japan.

From 1958 to 1973, Mrs. Messitte edited the "NINCDS Review," a publication to acquaint voluntary health agencies and professional societies with Institute efforts to combat neurological disorders. She also compiled and updated "Who's Who in NINDB," a publication which contained biographical sketches of the Institute's scientific and administrative staff.

According to NINCDS staff, her greatest contribution to the Institute was the warm and caring way in which she consistently dealt

Dr. John R. Seal Elected to Senior Membership In Institute of Medicine of National Academy of Sciences

Dr. John R. Seal, former deputy director of the National Institute of Allergy and Infectious Diseases, and—until his retirement this year—special assistant for disease prevention research, NIH Office of the Director, was recently elected to senior membership in the Institute of Medicine (IOM) of the National Academy of Sciences (NAS).

Considered both an honor and a duty, senior membership is restricted to people over 66 years of age, who are expected to participate in activities of the IOM which cover a broad range of health policy issues. Senior members are selected by NAS active members from among candidates nominated for their major contributions to health and medicine or to related fields.

Although membership in the IOM will not be effective until Jan. 1, 1984, Dr. Seal and other new members will be honored at a special session planned to precede the annual membership meeting in October in the District of Columbia.

A respected and highly honored scientist and administrator, he conducted research throughout the world in the prevention, treatment and epidemiology of a broad variety of infectious diseases.

Dr. Seal joined NIAID in 1965 following a long and productive medical career in the U.S. Navy. He served as director of NIAID's Intramural Research Program from 1965 to 1969 and as scientific director until his appointment as deputy director in 1975. He left the Institute in October 1981 to serve in NIH's



Dr. Seal

newly created program on disease prevention.

He has been honored by the Association of Military Surgeons—receiving the first Stitt Award for his outstanding contributions in the field of antibiotics and twice receiving the Founders Medal. He has also been awarded the Medal of Commendation of the Secretary of the Navy.

In addition, Dr. Seal was designated as a Meritorious Executive in the Senior Executive Service and also won the DHEW Superior and Distinguished Service Awards. □

National "Employ the Handicapped Week" To Be Celebrated At NIH, October 5-7

The week of Oct. 3 thru 7 will be recognized nationally as "Employ the Handicapped Week." At NIH a number of events will take place sponsored by the Division of Equal Opportunity and the Handicapped Employees Committee.

Videotapes that demonstrate the barriers facing the handicapped employee when seeking employment, and that review and discuss reasonable accommodations that can be provided to the handicapped employee will be shown throughout the week.

Programs are being planned for Oct. 5-7 at the Masur Auditorium, and ACRF Amphitheater during noon.

Information concerning these events will

be posted throughout NIH.

In the ACRF mezzanine and Bldg. 31 patio, demonstrations of adaptive equipment for the hearing, visual, and mobility impaired will be provided. In addition, publications and resource material to assist the handicapped employee will be displayed.

Plan to attend these programs and events. This is one way of becoming aware of how you as a manager or supervisor can reduce the barriers to employment of the physically and mentally handicapped at NIH.

For more information concerning NIH's Employ the Handicap Program, contact Joyce Pilcher, 496-3365 or George S. Yee, 496-2906. □

R&W Plans New York Theater Trip

R&W is sponsoring a 1-day theater tour to New York City on Wednesday, Nov. 9. The "Broadway Bound" trip includes continental breakfast, orchestra seats for *Cats* or another top Broadway show of your choice, time for sightseeing and shopping, dinner at a fine New York restaurant and an evening snack. Cost is \$109 per person. A \$50 deposit is required at time of booking with the balance due by Oct. 19. Buses will leave Bldg. 31C at 6:30 a.m. Sign up at the R&W Activities Center, Bldg. 31, Rm. B1W30. □

NHLBI Sponsors Conference On Heart Disease in Blacks

A Working Conference on Coronary Heart Disease in Black Populations, Sept. 29-30, at Heart House will be sponsored by the Behavioral Medicine Branch and the Preventive Cardiology Branch, Division of Heart and Vascular Diseases, NHLBI.

Opening remarks will be given by Dr. Claude Lenfant, NHLBI Director; Dr. Thomas Malone, Deputy Director, NIH; and Dr. Eliza Saunders, conference chairman.

This conference will bring together active biomedical and behavioral scientists with particular concerns or research relevant to the study of coronary heart disease among blacks. Major objectives of the meeting are to:

- review the current scientific knowledge regarding the epidemiology of coronary heart disease among black populations;
- review known and potential risk factors for coronary heart disease among blacks;
- prioritize future research hypotheses and appropriate research directions;
- assess the availability and appropriateness of research tools, methodologies and instrumentation necessary for recommended future research in coronary heart disease in black populations.

A review of current epidemiological evidence on coronary heart disease among blacks, the first conference objective, was carried out through the NIH cosponsored symposium "Coronary Heart Disease in Black Populations," held under the auspices of the Epidemiology Council of the American Heart Association on Mar. 5 in San Diego, California. The September working conference, building from the epidemiological studies presented at the San Diego meeting, will concentrate on clinical and behavioral research and set priorities for future studies in basic, clinical, and applied areas. The papers from both meetings along with recommendations of the working groups of the September conference will be published next year as a special supplement volume to the *American Heart Journal*.

For further information regarding the working conference, contact Dr. Katrina Johnson, Behavioral Medicine Branch, DHVD, NHLBI, on 496-9380. □

Israeli Folk Dancing Scheduled

Israeli Folk Dance with Ruthie Hartzman will include warmup, learning and practicing basic steps, as well as two-step, waltz and polka. There will be new and old dances starting with simpler ones and progressing to those with more involved movement.

Comfortable lightweight street clothes with sneakers or comfortable soft-soled shoes are recommended.

Cost for the course is \$12 for the 6-week session and \$16 for the 8-week session. Classes will be held in the Clinical Center 14th floor auditorium, Mondays at 8 p.m. for 2 hours, beginning on Oct. 3.

Sign up at the R&W Activities Desk in Bldg. 31. □

Dr. Richard E. Clark Named Chief, Cardiac Surgery

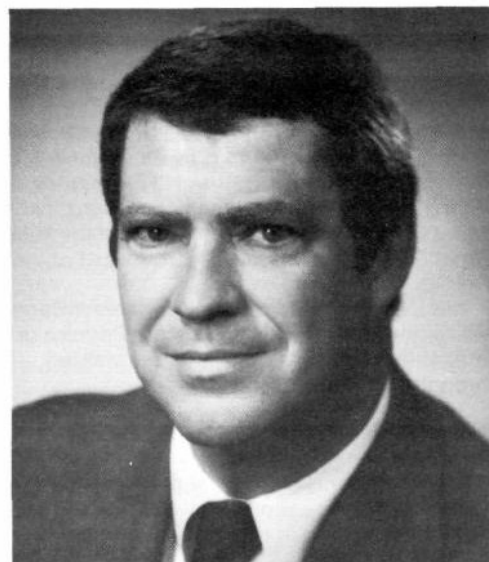
Dr. Richard E. Clark was recently named chief of the Cardiac Surgery Branch in the Division of Intramural Research, NHLBI. Previously, he was professor of surgery and biomedical engineering, division of cardiothoracic surgery in the Schools of Medicine and Engineering and Applied Science, Washington University, St. Louis, Mo.

Dr. Clark brings to the Institute an extensive background of research into the development of prosthetic heart valves and modification of biomaterials for use in the cardiovascular system. He also has carried out research into preservation of the myocardium and development of materials and devices for extracorporeal (outside body) circulation.

A native of Pittsburgh, he received his bachelor's degree in chemical engineering from Princeton University, and his M.D. from Cornell. He earned a master's degree in surgery and completed a 6-year internship and residency in thoracic and cardiovascular surgery at the University of Virginia Hospital, Charlottesville.

In addition to his position at Washington University, Dr. Clark held surgical appointments at Barnes and Allied Hospitals, Jewish Hospital and John Cochran VA Hospital in St. Louis. Prior to his move to St. Louis, he was the director of the Thoracic and Cardiovascular Surgical Research Laboratory at the National Naval Medical Institute in Bethesda.

His professional memberships include the Association for the Advancement of Medical Instrumentation, in which he was a member of the board of directors; the American Association for Thoracic Surgeons; the American



Dr. Clark

College of Cardiology; the American College of Chest Physicians; the American College of Surgeons; the Society for Thoracic Surgeons and the Society for Vascular Surgery, among others.

Dr. Clark serves on the editorial boards for a number of professional journals. He is the holder of a number of patents for prosthetic heart valves, biomaterials and an ultrasonic continuous wave particle monitor.

Outside the operating room, his interests include classic car restoration and auto racing. He is a member of the Vintage Sports Car Drivers Association and the Sports Car Club of America. Driving a Formula V racer, he captured second place in the Midwest SCCA Formula V Championships in 1979, and third place in 1977. Dr. Clark's other interests are skiing and photography. □

BLOOD TEST

(Continued from Page 1)

mice studies associated several types of cancer and drug toxicity with P₁-450 levels.

A growing list of cancers and toxic reactions in humans is thought to be associated with P₁-450 levels. People who produce high levels of P₁-450 may be more susceptible to lung cancer, laryngeal cancer, and oral cancer. Chemical toxicities thought to be linked to P₁-450 levels include fatal liver damage after taking zoxazolamine, a muscle relaxant no longer on the drug market; infertility among male and female cigarette smokers and early menopause in female smokers; and cataracts following large overdoses of acetaminophen.

In their experiments on mice, the NICHD researchers have noticed an association between the *Ah* locus and fertility, general fitness, and lifespan. It appears that animals who produce high levels of P₁-450 have more offspring, are healthier, and live longer than animals who produce low levels of the enzyme. The reason for this *paradoxical* association is unknown.

The *Ah* locus, which was discovered in 1971 by Dr. Nebert and his coworkers, is a multigene system that codes for P₁-450 as well as for the receptor protein that binds to certain foreign chemicals. In 1980, the NICHD scientists cloned the P₁-450 gene

from mice. Recently Dr. Yuan-Tsong Chen used the mouse clone to isolate and characterize the human P₁-450 gene.

The researchers now are trying to develop a sensitive, accurate test for determining the level of P₁-450 a person will produce in response to foreign chemicals. Unfortunately, the tests used in mice do not work equally well in humans. If they could measure P₁-450 production, say the scientists, they should be able to identify persons at high risk for developing cancer or suffering a toxic reaction following exposure to certain environmental contaminants, including cigarette smoke. □

NIH R&W Sailing Association To Meet

For those with a possible interest in sailing and in the NIH R&W Sailing Association, the Sept. 29th meeting will be of special value. It will feature videotapes of the Flying Scot daysailers, the type used by the association, including views and analyses of the 1982 championship races held off Massachusetts. The tapes will be shown at approximately 8 p.m. in Bldg. 30, Rm. 117, after a short business meeting. □

NIH Honor Awards Ceremony To Be Held Sept. 29

All employees are invited to attend the NIH Honor Awards Ceremony to be held Thursday, Sept. 29. The program will be held in the Masur Auditorium at 1:45 p.m. Dr. James B. Wyngaarden will present the NIH Director's Award, the Harvey J. Bullock, Jr. Award for Equal Opportunity Achievements and the NIH Equal Opportunity Achievement Award of the Year to various employees.

The U.S. Naval Academy Ceremonial Band will perform during the ceremony. Permission to attend the ceremony should be cleared through supervisors.

AWARDEES NAMES CORRECTED

Names of the recipients of the NIH's two highest equal opportunity awards were inadvertently switched in the last issue of the *Record*.

The awards and correct recipients follow:

Harvey J. Bullock Award



Ms. Laten

Evelyn Laten, secretary to the NIGMS Physiology and Biomedical Engineering Program, will receive the Harvey J. Bullock, Jr. Award for Equal Opportunity Achievement at the NIH Awards Ceremony, Sept. 29.

Ms. Laten is being cited for her continuous leadership in promoting equal opportunity at the NIGMS, NIH, PHS, and HHS levels. In 1972, as a member of the original NIGMS EEO Advisory Committee, she was instrumental in developing the committee's bylaws and the NIGMS's first affirmative action plan. As chairman of the NIGMS Training Committee, she has been responsible for setting up a variety of career development and training courses in the Westwood Bldg. for NIGMS support staff.

She has served as vice chairman of the NIH Committee on Handicapped Employees, PHS representative to the HHS Committee on Handicapped Employees, and secretary and chairman of the PHS Committee on the Handicapped.

In 1981, Ms. Laten received personal congratulations from the Assistant Secretary for Health for her report on PHS accomplishments in aiding handicapped employees. Most recently, she was an active member of the committee that planned an NIH meeting held in April 1983 on opportunities for handicapped employees.

The Harvey J. Bullock, Jr. Award is presented yearly by the NIH Director to an individual who has made significant contributions toward furthering equal opportunity goals for all NIH employees, established or strengthened communication between employees and management, increased man-

agement awareness of or sensitivity to the concerns and problems of NIH employees, or enhanced the upward mobility of NIH employees.

NIH Equal Opportunity Achievement Award



Ms. Chacos

Frances B. Chacos will receive the NIH Equal Opportunity Achievement Award for outstanding contributions to equal employment opportunity at the National Institute of Dental Research and NIH.

Ms. Chacos is known for her work with the handicapped, particularly the hearing impaired. She has encouraged and assisted the hearing impaired in planning and achieving career goals related both to the needs of the individual and the Federal service. Her ability to interpret sign language, and to listen have been a positive influence in encouraging the handicapped to reach their full potential at the NIDR and the NIH.

In addition to her studies in American Sign Language, at her own expense she has sought and gained professional training at the college level in work with "handicapped citizens." Through her efforts and expertise in this area, she was able to effect a negotiated "accommodation" at a local university for a handicapped employee of NIDR to pursue graduate course work in science.

Ms. Chacos acts as liaison between the NIDR EEO Office and the community through her membership in the Federally Employed Women's group and as first vice-president of the Kensington Chapter of the Business and Professional Women's Club. The two groups support many activities directed toward the useful and constructive solution of community problems. □

Singers, String Musicians Needed

The NIH Singers have just started rehearsals for their upcoming season. A joint concert with the NIH Chamber Orchestra featuring Brahms "Liebes Lieder Waltzes" is planned for Nov. 1.

There are still some openings in all voice parts, but time is running out. The Singers rehearse every Monday evening from 8-10 p.m. on the NIH campus.

Some basic musical experience is required, but everyone is encouraged to audition. The group also seeks musicians to augment the string section of the orchestra. To arrange an audition or obtain additional information, please contact Tony De Marinis at 496-6442. □

Everyone hears only what he understands.—Goethe □

NIH Scientists To Lecture On Genetics at Smithsonian

Several NIH medical research scientists will present lectures on the *Genetic Revolution in Medicine* at the Smithsonian Institution beginning Oct. 17.

The lectures will be held every Monday from 8-9:30 p.m. for 8 consecutive weeks. The lecture schedule is as follows:

Oct. 17—**Dr. Alan N. Schechter**, chief, Laboratory of Chemical Biology, NIADDK, *Medicine and Genetic Diseases: An Introduction*.

Oct. 24—**Dr. Dean H. Hamer**, senior staff fellow, cellular regulation section, Laboratory of Biochemistry, NCI: *The Structure and Expression of Genes*.

Oct. 31—**Dr. Arthur W. Nienhuis**, chief, Clinical Hematology Branch, NHLBI: *The Genetic Bases of Red Blood Cell Diseases*.

Nov. 7—**Dr. Thomas A. Waldmann**, chief, Metabolism Branch, NCI: *Genes and the Immune Response*.

Nov. 14—**Dr. George Khoury**, chief, Laboratory of Molecular Virology, NCI: *Oncogenes and Cancer*.

Nov. 21—**Dr. Roscoe O. Brady**, chief, Developmental and Metabolic Neurology Branch, NINCDS: *Inherited Metabolic Diseases: Biochemical Basis and Therapeutic Approaches*.

Nov. 28—**Dr. Elizabeth F. Neufeld**, chief, Biochemistry and Genetics Branch, NIADDK: *Treatment of Genetic Diseases: An Overview of Prospects and Ethical Issues*.

Dec. 12—**Drs. Schechter and Hammer**: *Laboratory Tour and Discussion of the Course*.

You may register for the entire course or individual lectures through the Smithsonian Resident Associates Program, 357-3030. □



Barbara Weldon, writer/editor, Office of Health Research Reports, NIADDK, was recently voted a special recognition award by the American Lupus Society "In appreciation of creating and perpetuating lupus awareness—1983." Lupus (also called systemic lupus erythematosus and SLE) is a serious, potentially fatal connective tissue disease afflicting more than 500,000 Americans. In its systemic form, it can involve the skin and joints and damage the tissue of the kidneys and other vital organs. In his letter to Ms. Weldon, Milton H. Abram II, society vice president, wrote, "Congratulations on the constant and continuous help ... you have so willingly given to all of us on behalf of lupus patients, who benefit in the long run."

Dr. Martin Cummings, NLM Director, To Retire Oct. 1

Dr. Martin M. Cummings, Director of the National Library of Medicine for 20 years, is retiring Oct. 1. He is the 18th Director in the Library's 165-year history. In the past two decades, Dr. Cummings broadened the Library's mission as a health information resource, guided its emergence as a leader in the computer age, and helped make it a major biomedical communications center.

Access to the Library's knowledge is today internationally available to health professionals in all fields within a matter of minutes. The world's largest medical collection—over 3,000,000 books, journals, technical reports, theses, microfilms, and pictorial and audiovisual materials, ranging from the 11th century to yesterday—is accessible wherever telephone services reach.

A graduate of Bucknell University, Dr. Cummings received his M.D. degree from Duke University School of Medicine. After completing his internship and residency at Boston Marine Hospital, he held positions at the Communicable Disease Center, Emory University School of Medicine, and the Veterans Administration Hospital in Atlanta, Ga.

In 1953 he became director of research services at the Veterans Administration Central Office in Washington, D.C., and special lecturer in microbiology at George Washington University School of Medicine. Six years later he accepted the position of chairman and professor, department of microbiology, Oklahoma University School of Medicine. In 1961 he returned to Washington as chief of the Office of International Research at NIH, and in 1964 assumed his duties as NLM Director.

MEDLARS, the Library's computerized reference storage and retrieval system, and Dr. Cummings arrived on the NLM scene almost



Dr. Cummings

simultaneously in the early 1960s. His predecessor, Dr. Frank B. Rogers, laid the groundwork for MEDLARS. Under Dr. Cummings' leadership, MEDLARS has been continually expanded and improved. Online searching (MEDLINE) was introduced in 1971.

Today, MEDLARS and its 6 million references are available for searching from terminals in some 2,500 institutions worldwide. Approximately 2.5 million searches will be conducted this year by members of NLM's online network.

Under Dr. Cummings' leadership, the Library's responsibilities have grown to include:

- A program of extramural grants to improve services and resources of the Nation's health science libraries. Approximately \$130 million has been awarded under the Medical Library Assistance Act to more than 1,000 U.S. medical libraries and to individuals for research, training, resources development, and publications.

- A Toxicology Information Program to create specialized information retrieval services

in the fields of toxicology, pharmacology, and environmental and industrial health. The program has developed such online services as TOXLINE and CHEMLINE and a reference center—the Toxicology Information Response Center.

- The National Medical Audiovisual Center, which was transferred to NLM in the 1960s and earlier this year merged with the Lister Hill Center. Audiovisual productions have become an integral part of NLM's collections, with printed catalogs and an online database devoted to them.

- The Lister Hill National Center for Biomedical Communication, the research and development component of the Library. The Lister Hill Center was instrumental in developing the Library's online retrieval services, and has conducted communications experiments using satellites, microwave and cable television, computer-assisted instruction, and other new technology. Today research continues with minicomputer systems, microprocessors, videodiscs, and other systems and technologies to advance information transfer.

A major achievement of Dr. Cummings was the planning and construction of the Lister Hill Center building. Its dedication in May 1980 capped a decade-long effort. This new facility houses state-of-the-art technology supporting NLM research and development, audiovisual, computer, laboratory, and conference activities. A rarity among major government construction projects, the center was built on time and under budget.

Much of Dr. Cummings' success in guiding the Library to its present eminence reflects his ability to elicit the best from the Library's Board of Regents, friends, advisors, Congress, officials throughout the Department, and from the Library's staff. Friends, colleagues and staff of the Library will honor Dr. Cummings at a farewell reception at NLM on Friday, Oct. 7. □

MIT Scientist Who Identified "Left-Handed Z-DNA" Will Deliver Second Annual Stetten Lecture

The National Institute of General Medical Sciences will sponsor the second annual DeWitt Stetten, Jr. Lecture, entitled "Left-Handed Z-DNA and the Regulation of Transcription," on Oct. 5 at 3:30 p.m. Z-DNA was identified in 1979 by Dr. Alexander Rich who will give the lecture which will be held in the Masur Auditorium, Clinical Center.

Z-DNA is a form of DNA (deoxyribonucleic acid, the central repository of genetic information) that is twisted in the opposite direction from the usual DNA spiral. While its detailed function is not fully known, Z-DNA may play a role in controlling gene expression.

Dr. Rich, Sedgwick Professor of Biophysics at the Massachusetts Institute of Technology, has long been a leader in the study of relationships between the structure and function of nucleic acids and proteins. In 1973, he and colleagues used X-ray crystallography to produce the first three-dimensional tracing of a specific nucleic acid, transfer RNA, a class of molecules involved in the process of protein synthesis.

His more recent work on Z-DNA led to a report this June in the journal *Nature* indicating that he and Dr. Alfred Nordheim had found

this form of DNA in the "enhancer" region of the SV40 tumor virus which grows in monkey cells. This region enhances transcription, the process by which the genetic information encoded in DNA is read.

The researchers were able to infer that similar Z-DNA structures may exist in more than 20 other tumor viruses. They speculate that a small zone of Z-DNA may be involved in the binding of RNA polymerase, the enzyme that reads DNA's genetic code. Z-DNA could thus act as a type of switch for controlling transcription. This work may give scientists their first insight into a function of Z-DNA and could help clarify the role of enhancer sequences in gene expression.

NIGMS established the Stetten Lecture last year to mark the institute's 20th anniversary. This event honors Dr. Stetten, who served as the NIGMS' third director, for his strong commitment to basic research and his special encouragement of fundamental studies in genetics.

NIGMS is regarded as the "basic science institute" of NIH because it focuses its grant support on fundamental, nondisease-targeted investigations in the biomedical sci-



Dr. Charlotte Berg (c), director, Patient Emergency Fund, receives checks from a recent fund raiser held by the Ober Travel Agency and the NIH Fraternal Order of Police. Presenting the checks were Karen Kolle (l), manager, Ober Travel Agency on NIH Campus, and Tommie Musgrove, treasurer, Fraternal Order of Police.

ences. Such basic research can contribute new information and concepts that may ultimately prove important to understanding human disease. NIGMS's programs encompass the cellular molecular basis of disease, genetics, pharmacology, physiology, biomedical engineering, and minority access to research careers. □

Lecture On Adolescent Risk-Taking Will Highlight NIH Commemoration of Child Health Day

Peers or parents—who has the greatest influence on adolescent risk-taking behavior?

This will be one of the issues discussed by Dr. Diana Baumrind in her talk "Why Adolescents Take Chances—Why They Do Not: Theory and Research" to be presented in Masur Auditorium on Monday, Oct. 3. The lecture is sponsored by the National Institute of Child Health and Human Development to commemorate national Child Health Day.

The lecture will start at 3:30 p.m. and NIH employees are urged to attend.

Dr. Baumrind holds that a "trusting parent-child relationship may prevent adolescents from seeking involvement in the more serious forms of risk-taking behavior. Yet," she says, "some parental practices may reduce risk-taking behavior at the cost of retarding normal adolescent development." And in some areas of risk-taking behavior, she has evidence that peer pressures may supplant parental values and desires.

A research psychologist at the Institute of Human Development, University of California at Berkeley, she is a noted investigator in the areas of family relations and adolescent development. She has authored numerous scientific papers and lectured extensively in these areas. She is currently writing a book, *Family Socialization and Developmental Competence in Middle Childhood*. She is a member of the Society for Research in Child Development and a fellow in the American Psychological Association.

Dr. Mortimer B. Lipsett, NICHD Director, says that he is pleased that in this year's proclamation of Child Health Day, President Reagan specifically mentioned the importance of encouraging "behavior that fosters good health."

Dr. Lipsett says that "NICHD has recog-

nized that understanding the determinants of behavior in children and adolescents is the key to solving some of the critical health problems in these groups.

"Accidents are the leading, single cause of death among young people," Dr. Lipsett says. "Drug and alcohol abuse and inappropriate sexual behaviors are also problems among adolescents. In addition, many health behaviors—such as cigarette smoking and eating habits—which have a profound effect on adult health and well-being have their origins during this period of development. Thus, research that contributes to our understanding of how to prevent or modify behaviors that threaten health has consequences that are far reaching."

Dr. Lipsett feels that selecting Dr. Baumrind and the topic of adolescent risk-taking behavior to mark Child Health Day emphasizes the Institute's commitment to promoting the relatively new area of behavioral pediatrics. This area of medicine integrates the behavioral, social, and biological determinants of disease and health.

NICHD supports research to identify the precursors and determinants of adolescent risk-taking behavior such as cigarette smoking, substance abuse, aggression, sexual behavior and adolescent childbearing.

In addition, the Institute has recently announced a new program to train professionals in both the behavioral and biomedical aspects of pediatrics. Support will be provided to physicians who desire additional training in the behavioral sciences and to behavioral scientists to train in the biomedical sciences.

NICHD hopes to develop a new cadre of professionals who will be especially well-prepared to conduct research in behavioral pediatrics. Both institutional and individual support is available under the program. □

Dr. Diane L. Lucas Selected As a Grants Associate

Dr. Diane L. Lucas has been selected as a participant in the NIH Grants Associates Program, a 1-year training program in health science administration.

Most recently Dr. Lucas worked for the department of hematology at Walter Reed Army Institute of Research as a research physiologist. Prior to this, she was a staff scientist with Hazleton Labs, a member of the board of directors with Telestrategies, a guest research scientist with the National Cancer Institute, and a junior scientist with the department of experimental pathology in Roswell Park Memorial Institute.

Her undergraduate work was done at Pennsylvania State University where she received her B.S. in microbiology with a minor in chemistry. She earned an M.S. at State University of New York at Buffalo and her Ph.D. at Georgetown University.

She is a member of the American Society for Cell Biology, American Society for Microbiology and the Reticuloendothelial Society. □



Dr. Lucas

NIH Camera Club Meets October 11

The NIH Camera Club will meet Tuesday, Oct. 11, in Bldg. 31, Conf. Rm. 4, at 7:30 p.m.

Dr. Ronald S. Goor, photographer and author of children's books, will speak and judge an open competition. All NIH employees and members of their families are welcome.

For more information about the NIH Camera Club, call Leroy Kerney, 496-3407, or Catherine Quigley, 496-3261. □

Dr. Sue Badman Named Office Chief at DRR

Dr. W. Sue Badman has been named the new chief of the Office of Program Planning and Evaluation in the NIH Division of Research Resources. She was previously chief, biomedical engineering and instrument development section, Physiology and Biomedical Engineering Program, National Institute of General Medical Sciences. Dr. Badman assumed her new position Sept. 4.



Dr. Badman

DRR is the NIH branch responsible for conceiving, developing, and ensuring the availability of resources essential to the conduct of human health research. The Division makes available a broad base of centers and institutional support required by NIH biomedical research activities and other research components of the Public Health Service.

DRR awards grants in five major areas: clinical research centers, biotechnology resources, laboratory animal sciences and primate research centers, biomedical research support, and minority and biomedical research support.

A native of Alton, Ill., Dr. Badman graduated from the University of Wisconsin in 1963 and received her doctorate in zoology and biochemistry from the University of Florida in 1968 where she began her career as a research associate. In 1969, she joined the faculty at Kalamazoo (Michigan) College as visiting lecturer.

In 1970, she became business manager for the Society for Developmental Biology, Inc., in Kalamazoo and continued as a lecturer at Kalamazoo College. She joined NIGMS in 1974 as administrator of the cellular and molecular-basis-of-disease program. She was promoted to chief, instrumentation section, of the Physiology and Biomedical Engineering Program in 1978, and in 1980 became chief of the biomedical engineering and instrument development section.

Dr. Badman is a member of the American Society for Cell Biology, the Society for Developmental Biology, and the Electron Microscopy Society of America. Her professional activities include past chairmanship of the Staff Training in Extramural Programs committee. Her areas of research interest include the study of cellular differentiation. □

Anti-Inflammatory Drugs Tested at NIDR Reduce Dental Pain More Than Usual Drugs

Patients given either ibuprofen or flurbiprofen—two nonsteroidal anti-inflammatory drugs—before having impacted third molars (wisdom teeth) removed report significantly less postoperative pain than patients receiving more commonly used analgesics.

This finding emerged from studies conducted by NIDR's Dr. Raymond A. Dionne and colleagues.

They tested the hypothesis that postoperative pain can be suppressed by preoperatively administering drugs capable of inhibiting the inflammatory response which normally follows surgical procedures.

Ibuprofen, more commonly known as Motrin, has been used for the relief of mild to moderate pain and in the treatment of rheumatoid arthritis.

Flurbiprofen is an investigational new drug that is structurally similar to ibuprofen and also is well-tolerated. This drug was chosen for the second study because previous reports had indicated that it might be more potent than ibuprofen.

Both ibuprofen and flurbiprofen are believed to be effective because they suppress the release of prostaglandins which mediate pain and inflammation.

Ibuprofen

The ibuprofen study was conducted by NIDR investigators in conjunction with researchers at the Medical College of Virginia and the University of Medicine and Dentistry of New Jersey.

One hundred and seven dental outpatients undergoing surgical removal of impacted third molars were randomly assigned to one of four treatment groups: placebo, ibuprofen, acetaminophen, or acetaminophen plus codeine.

The collaborative study was a double-blind clinical trial. All patients received local anesthesia and diazepam (valium) sedation prior to the surgery, plus the drug dose of their particular treatment group. Subjects also received a postoperative dose of pain medication 4 hours after the first dose and were kept at the clinic up to 8 hours.

Data on pain intensity following the first two drug doses were collected each hour by a research nurse. Patients rated their pain as "none," "slight," "moderate," or "severe," and also reported any side effects.

Results from the study indicate that ibuprofen significantly lessened pain in comparison to placebo, pretreatment with acetaminophen, or postoperative doses of acetaminophen plus codeine.

Flurbiprofen

The flurbiprofen study involved three groups of 20 patients. The upper and lower third molars on one side were removed at the first appointment, and molars on the opposite side of the mouth were extracted at the second appointment.

The first group of patients received either flurbiprofen or acetaminophen before and after surgery for the first set of extractions and the other drug (not used after first extraction)

for their second set of extractions 2 weeks later.

A second group of patients received either flurbiprofen before and after surgery or acetaminophen plus oxycodone postoperatively.

The third group received either flurbiprofen or acetaminophen plus oxycodone both before and after surgery.

Half the subjects received the standard drug at the first appointment and the experimental drug at the second appointment; the order was reversed for the other half of the subjects.

All patients were given diazepam and a local anesthetic prior to surgery.

Hourly observations of analgesic effects were made from 2 to 8 hours after the first drug dose was given. Pain was classified according to the same scale used in the ibuprofen study.

Three visual-verbal measurements of pain as reported by the subjects were used.

Overall Study Results

In all three phases of the study, patients reported significantly less postoperative pain with flurbiprofen and expressed a clear preference for this drug.

Pretreatment with flurbiprofen was superior to the maximum dose of acetaminophen that is routinely employed. A comparison of pretreatment with flurbiprofen to the standard treatment of postoperative administration of acetaminophen plus oxycodone (more commonly known as Percocet) also demonstrated the superiority of this anti-inflammatory agent.

Even preoperative administration of acetaminophen plus oxycodone did not suppress postoperative pain nearly as well as flurbiprofen.

Side effects reported by patients in both the ibuprofen and flurbiprofen studies were mild: headache, drowsiness, dizziness, and gastrointestinal upset. There were no differences among the treatment groups, except that more patients reported drowsiness in the acetaminophen-opiate groups.

The removal of impacted third molars is an excellent dental pain model for evaluating the effectiveness of analgesics because 95 percent of patients report moderate to severe pain within 4 hours after surgery.

In the NIDR studies, the highest mean pain rating on ibuprofen and flurbiprofen was equivalent to mild pain. These studies suggest that analgesic drugs that inhibit prostaglandin synthesis are more effective in suppressing postoperative pain than drugs that do not interfere with this pathway.

Ibuprofen and flurbiprofen both delay the start and suppress the intensity of postoperative pain to a greater extent than traditional oral analgesic therapy without an increase in side effects. □

There are two ways of meeting difficulties; you alter the difficulties, or you alter yourself to meet them.—Phyllis Bottome □

Projects To Apply Technology To Biomedicine Funded by DRR

Grants totaling approximately \$300,000 for pilot projects which will apply technology to biomedical research have been made to 14 investigators by the Division of Research Resources.

Awarded under the new Small Grants Program for Pilot Projects, the funded research involves feasibility studies of innovative and high-risk ideas relating high technology, engineering, instrumentation, physics, and computer science to biomedicine.

According to Dr. Suzanne S. Stimler, director of the DRR Biotechnology Resources Program, the purpose of the new granting mechanism is to allow examination of a new technology for its usefulness in biomedical research, develop significant changes in existing technology important to biomedical research, and translate scientific ideas into a basis for a future technology.

Recipients of the 1-year, nonrenewable awards must be engineers and other scientists who work on high technology projects in biomedicine. The program is open to both nonprofit and for-profit organizations. □

DR. FAUCI

(Continued from Page 1)

resulted in major advances in treatment of Wegener's granulomatosis, systemic necrotizing vasculitis, and idiopathic hypereosinophilic syndrome.

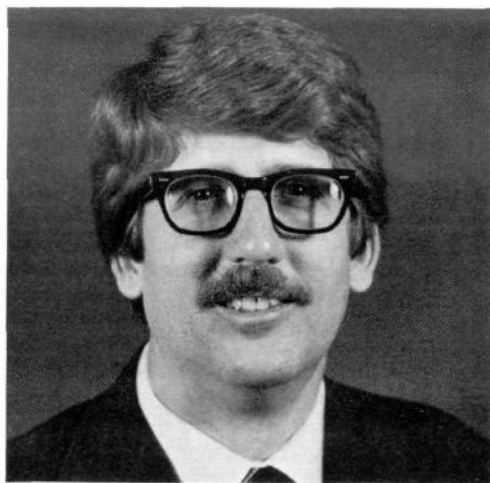
He heads NIAID's clinical research program on the body's immune system, as well as a broad research study on the newly recognized disease—acquired immune deficiency syndrome (AIDS). He and his colleagues are currently treating some AIDS patients at NIH in Bethesda.

Dr. Fauci is also the Institute's deputy clinical director, a consultant in infectious diseases at the National Naval Medical Center in Bethesda, and a commissioned officer in the U.S. Public Health Service.

In addition, he is a respected educator, having served as a visiting professor at Yale University School of Medicine, Tufts-New England Medical Center and the University of Michigan Medical Center. He was a visiting lecturer, as well, at the Scripps Clinic and Research Foundation, the College of Physicians of Philadelphia and Rush-Presbyterian-St. Luke's Medical Center.

A highly honored scientist, he has won numerous awards, including the Arthur S. Flemming Award in 1979 as an "outstanding young scientist working with the Federal government," the Public Health Service Meritorious Service Award, and Cornell University's Alfred Moritz Michaelis Prize for Efficiency in General Medicine. In 1980 he served as president of the American Federation for Clinical Research.

Dr. Fauci is a native of Brooklyn, N.Y., graduating cum laude from the College of the Holy Cross in 1962. He received his M.D. degree from Cornell University Medical College in 1966. □



Dr. Littleton

Dr. Preston Littleton Made NIDR Special Assistant

Dr. Preston A. Littleton, Jr., recently joined the National Institute of Dental Research as special assistant to the Director for manpower and training. Dr. Littleton, a PHS commissioned officer, came to NIDR from the Health Resources and Services Administration, Bureau of Health Care Delivery and Assistance in Rockville, Md.

In his new assignment, he will undertake a special study to assess the need for dental clinical researchers, identify the reasons for their declining numbers, and determine how future requirements can best be assured.

Although there is concern throughout the medical community about the availability of clinical scientists, Dr. Littleton says recent changes have occurred in the structure and finance of dental and postdoctoral education that make the problems even more acute in dental medicine.

He received his undergraduate training at Georgetown University and earned his dental degree from that university's College of Dentistry.

In 1968 Dr. Littleton joined the PHS Division of Dental Health, serving in several manpower and training positions. He subsequently attended the University of Iowa where he earned a master of science degree in community dentistry and a Ph.D. in education. From 1974 to 1978 he served as chief of the Division of Dentistry's Manpower Analysis Branch.

He is a member of the faculty of Georgetown University School of Dentistry and belongs to many professional societies. He has made over 45 presentations and authored or coauthored 29 papers pertaining to dental manpower and education. □

Shop With R&W in Reading, Pa.

R&W plans a shopping spree to Reading, Pa., Thursday, Oct. 13. Visit Vanity Fair, Moss Street and other factory outlets for bargains on lingerie, designer clothes, linens, arts and crafts, children's wear and more.

Buses will leave Bldg. 31C at 6:30 a.m. and return at 5 p.m. Cost for the trip is \$12.50 (bus only). Sign up at the R&W Activities Desk, Bldg. 31, Rm. B1W30. □

DRR Awards 91 Grants For Research Instruments

Ninety-one grants to colleges, universities, and research organizations totaling \$14 million for new, large, shared research instruments have been awarded by the Division of Research Resources under the Shared Instrumentation Grant Program.

Now entering its second year, the awards are designed to help NIH grantees cope with rapid technological advances in instrumentation and the rapid obsolescence of existing research equipment. The grants will aid grantee institutions in acquiring and updating expensive, shared-use instruments which generally are not available through other award programs.

The shared instrumentation grant is a subprogram of the DRR Biomedical Research Support Program.

The awards are made to institutions only, not individual scientists. The maximum amount awarded for FY 1983 is \$250,000 and is given for 1 year. Supplemental and renewal applications will not be accepted. The funds cannot be used for maintenance, support personnel, or service costs associated with the instrument.

Application for the new grant requires that institutions identify a major user group with multiple NIH peer-reviewed support. This group must demonstrate a clear need for the instrument.

With the award, institutions will acquire different state-of-the-art instruments used in biomedical research, such as cell sorters, electron microscopes, nuclear magnetic resonance spectrometers, and automated peptide synthesizer systems. □

Earn College Credit Through Examination

Wednesday, Oct. 26, will be the next date when NIH employees can participate in the College-Level Examination Program (CLEP)—a nationally recognized testing program—where individuals can receive college credit for knowledge they have obtained outside of school. Registration to take the test must be made by Thursday, Oct. 13.

Almost 30 different tests are available such as English composition, history, French, German, Spanish, psychology, economics, sociology, biology, chemistry, algebra, calculus, analytic geometry, FORTRAN, data processing, and accounting.

Further information about the CLEP tests can be obtained from the Career Education Center, Bldg. 31, Rm. B2B39, or by calling Carrol Daniels, 496-5025. □

CFC Race Deadline Extended

Registration for the 3-mile race which will kick off this year's Combined Federal Campaign has been extended to Sept. 30.

The registration deadline announced earlier was Sept. 16. The race will start at noon, Oct. 17.

Runners who want to compete can register at the R&W Activities Desk, Bldg. 31, Rm. B1W30. □

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